National Aeronautics and
Space Administration

Lyndon B. Johnson Space Center
White Sands Test Facility
P.O. Box 20
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ENTERED

September 13, 2012

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SEP 2012
NMED Hazardous Waste Bureau

Reply to Attn of: RE-12-124

New Mexico Environment Department
Attn: Mr. John E. Kieling, Chief
Hazardous Waste Bureau
2905 Rodeo Park Drive East, Building 1
Santa Fe, NM 87505

Subject: Response to NMED Disapproval - NASA White Sands Test Facility (WSTF) 600 Area Soil Vapor Extraction Pilot Test Investigation Report

NASA submitted the 600 Area Soil Vapor Extraction Pilot Test Investigation Report on June 14, 2012. NMED received the report on June 18, 2012 and issued a Disapproval with comments on August 28, 2012. NMED required a response to the Disapproval and a revised report by September 14, 2012. This submittal provides the required response and revised report. Enclosure 1 provides a table that discusses each numbered NMED comment, provides NASA's response, and details where all revisions have been made in the report. Enclosure 2 provides redline-strikeout and final versions of the report in PDF on CD-ROM. Enclosure 3 provides a bound printed copy of the revised report.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

If you have any questions or comments concerning this submittal, please contact Tim Davis of my staff at 575–524–5024.

for Radel Bunker-Farrah
Chief, Environmental Office

3 Enclosures

cc:
Mr. Dan Comeau
Hazardous Waste Bureau
New Mexico Environment Department
2905 Rodeo Park Drive East, Building 1
Santa Fe, NM 87505

NMED Comment Number	Specific Comment	NASA Response and Report Revision Detail
	NMED's primary focus is on constituent concentrations in groundwater in the vadose zone as the presence of contaminants may affect groundwater. NMED noted that the calculated criteria are based on USEPA's (2012) Regional Screening Levels for indoor air which assume a target risk level of 1E-6 for carcinogens. Since new Mexico evaluates carcinogenic contaminants at the 1E-5 risk level, the Permittee may want to reevaluate the criteria based on the higher risk level used by NMED.	the vadose zone beneath and near the 600 Area do not pose a threat to human health or the environment. NASA accepts NMED's comment and has revised the comparison of SVE pilot test data to the proposed regulatory criteria using 1E-5 health risk to be consistent with groundwater risk levels. The risk-based concentrations for carcinogenic constituents (TCE and PCE) increase by an order of magnitude. Risk-based concentrations for non-carcinogens do not change based on the use of a 1E-5 health risk. Tables 7.1 and 7.2 were revised to reflect the higher risk level used by NMED.
4	**Section 8.0 Recommendations, page 18:** **NMED Comment:** Constituent concentrations at and near the 600 Area Closure continue to exceed applicable risk-based standard in the perched and regional groundwater. Based on the data collected to date, it is clear that contaminants in the perched system will eventually migrate to the regional system. Subsurface conditions in the 600 Area will likely change in the future when the Permittee closes out the sewage lagoons located northeast and south-southwest of the 600 Area Closure. Until subsurface conditions in the 200 Area and between the 200 and 600 Areas are more clearly understood, NMED will not consider any permit modifications request that would preclude further investigation (including monitoring of soil gas and groundwater) of the 600 Area Closure.	NASA recognizes that groundwater in the vicinity of the 600 Area, both perched and regional, contains hazardous constituents at levels above established cleanup levels. The recommendation in the report for no further action applied only to the vadose zone, which NASA has proved does not present a risk to human health or the environment. Ongoing and planned groundwater investigations and corrective action continue to address the issue of contaminated groundwater. NASA agrees, however, that the presence of hazardous constituents in the groundwater will continue to influence concentrations of these constituents in the vadose zone. NASA recommends a short-term investigation to explore the viability of using an existing groundwater monitoring well or wells near the 600 Area Closure to extract and treat contaminated perched groundwater. One groundwater monitoring well is located within 20 feet of an existing

NMED Comment Number	Specific Comment	NASA Response and Report Revision Detail
		multiport soil vapor monitoring well, which could also allow an evaluation of any relationship between groundwater extraction and the vapor concentrations within the adjacent vadose zone. The Executive Summary and Section 8.0 of the report have been revised to reflect the clarification of vadose zone recommendations and the additional recommendation of perched groundwater extraction.
5	**Table 4.1 Field Data Collected During SVE Pilot Test at 600-SVE-1-40, page 22 and Table 4.2 Field Data Collected During SVE Pilot Test at 600-SVE-1-90, pages 23 and 24:** **NMED Comment:** Table 4.1 indicates that, prior to the start of testing at 600-SVE-1-40, a measured flow rate of 0.94 standard cubic feet per minute (SCFM) resulted in a vacuum of 0.009 inches of water. Similarly, Table 4.2 indicated a measured flow rate of 49.5 scfm and associated vacuum of 14.9 inches of water at 600-SVE-1-90 prior to the start of testing. Ordinarily, there would be no measureable flow rate (or vacuum) prior to the start of testing as was the case at 600-SVE-1-130 according to Table 4.3 (Field Data Collected During SVE Pilot Test at 600-SVE-1-130). Provide a brief discussion in the response to these comments concerning the source of vacuum and air flow in the affected sampling intervals. Revise the Report text, if appropriate.	The term "Prior to start of Test" is an inaccurate descriptor. The initial flow rate and vacuum measurements for each step of the test were collected at what the test conductors considered "time zero," or just as the test was initiated. Flow rate and vacuum were expected to be zero at ambient conditions, thus the intent of the initial readings was to determine the flow rate and vacuum at the time the SVE equipment was activated. Subsequent measurements were collected at 15-minute intervals as required. The measurements for flow rate and vacuum at 600-SVE-1-90 were collected slightly after the equipment was activated, rather than immediately before or just as the equipment was activated as was the case with 600-SVE-1-40 and 600-SVE-1-103, respectively. All measurements were collected within one minute of the start of the test. Tables 4.1, 4.2, and 4.3 were revised to indicate the measurements were collected at the start of the test rather than before the test.
6	**Table 4.1 Field Data Collected During SVE Pilot Test at 600-SVE-1-40, page 22 and Field Data Collected During SVE Pilot Test at 600-**	Temperature measurements collected at the SVE system influent were apparently affected by the ambient temperature. A

NMED Comment Number	Specific Comment	NASA Response and Report Revision Detail
	SVE-1-130, pages 25 and 26: **NMED Comment:** Over the course of testing, a temperature fluctuation of approximately 15 degrees Fahrenheit was reported at 600-SVE-1-40. Similarly, a temperature fluctuation of over 13 degrees Fahrenheit and over 31 degrees Fahrenheit was reported at 600-SVE-1-90 and 600-SVE-1-130, respectively. Provide a brief discussion in the Report concerning possible reason(s) for the fluctuations. For example the temperature probe reading were apparently affected by ambient air temperature variations or, review of the temperature compared to intake photo-ionization detector (PID) reading taken at approximately the same time indicates PID readings generally decreased during testing and some degree of short-circuiting may have occurred outside the borehole. Indicate whether the temperature fluctuation did or did not adversely affect the associated analytical data in the revised Report.	review of archived ambient temperature readings from a weather monitoring station located approximately eight miles south of WSTF indicates that the changes in temperature measurements at the SVE system were relatively consistent with changes in ambient temperatures throughout the test. The following temperatures ranges were observed during the SVE test periods. March 22, 2012: Low 65 °F (1124) High 75 °F (1647) March 23, 2012: Low 69 °F (1047) High 80 °F (1732) March 24, 2012: Low 44 °F (0732) High 79 °F (1417) NASA does not believe that short circuiting occurred within or outside of the borehole. During the test of each zone of 600-SVE-1, the other two zones of the well were monitored for induced vacuum. A short circuit within the borehole would have resulted in the presence of induced vacuum at one or both of the zones not being actively pumped. There was no evidence that the application of vacuum to a single zone of the well induced a vacuum in the other two zones, indicating that there was no intrawell short circuit. A short circuit outside of the SVE well elsewhere in the SVE system would have resulted in the dilution of concentrations of VOCs in the samples collected from the SVE system. Chemical analytical data from soil vapor samples collected during the test are consistent with soil analytical data from soil vapor samples collected from monitoring wells installed at similar depth at the Closure. NASA does not believe the temperature variations

NMED Comment Number	Specific Comment	NASA Response and Report Revision Detail
		observed in the SVE measurements had an adverse effect on the results of the test. Section 4.8 of the report was revised to include a discussion of temperature fluctuations and potential for short circuiting.
7	**Table 4.4, Field Data Collected at MSVM (Observation) Well, pages 27 through 32:** **NMED Comment:** NMED noted that the measurement dated and times summarized in this table are somewhat confusing. For example, according to the table for vapor monitoring well 600-SVE-1, measurements were started at 1125 on March 22, 2012 and concluded at 1650 that day. According to the table, only two measurements were taken (at 0855 and 0925) on March 23, 2012. The last entry of that portion of the table relists the 1125 measurement taken on March 22, 2012. The table that follows on page 27 for vapor monitoring well 600-SWG-2 indicates measurements were also taken at exactly the same times and dates as those taken from 600-SGW-1 except that the relisting of the 1125 measurement on March 22, 2012. The table (on page 29) shows single measurements were taken at 600-SGW-3 on March 25 through March 27, 2012. However, Section 3.2 of the Report (SVE Pilot Test) indicates all testing was conducted March 22 through March 24, 2012 by URS Corporation. Review the table listings making all necessary corrections and data rearrangements to ensure the accuracy of the data presented.	Results for the measurements collected on March 22, 2012 were inadvertently repeated in the table. Table 4.4 was revised to remove the repeated data. Dates and times for other measurements were compared to the field logbook entries and Table 4.4 was revised to reflect the appropriate dates and times that measurements were collected.

White Sands Test Facility 600 Area SVE Pilot Test Investigation Report Comment Resolutions

September 2012

NMED Comment Number	Specific Comment	NASA Response and Report Revision Detail
8	**Table 6.3, Mass Removal, page 35:** **NMED Comment:** The Time Pumped column of the table indicates the unit measurement is in minutes, this would indicate for example that the total pumping time la location 600-SVE-1-40 was limited to six minutes and 40 seconds. However, Table 4.1 (*Field Data Collected During SVE Pilot Test at 600-SVE-1-40*) indicated that testing on this interval began at 1200 on March 22, 2012 and that the time of completion of the third test step occurred at 1650 that same day, a period of nearly five hours. Review Table 6.3 and edit the unit of measurement for the Time Pumped column as appropriate.	The header information in Table 6.3 is incorrect. The pumping time presented in the table is in hours and minutes. Table 6.3 was revised to indicate that the time pumped is in hours and minutes (hours:minutes).
9	**Appendix C, Groundwater Analytical Data from 600-G, pages 2 and 3 of 9:** **NMED Comment:** The field parameter measurements (depth to water, turbidity, conductivity, and temperature) are listed in the Appendix table as having been collected on January 11, 2012. The laboratory analytical data that follows the field measurement data in the table indicates a sample collection date of April 10, 2012. Further, Report Table 6.1 (*Groundwater General Chemistry and COC Concentrations in 600-G-138*) indicates the field and analytical measurements at that location were collected in January and April of 2012. Review the data tables in the Appendix and edit the sample collection dates as needed.	Field parameter measurements (depth to water, turbidity, conductivity, and temperature) were obtained in both January and April 2012. The parameters for the April sampling event were inadvertently omitted from the report submitted in June 2012. The April parameter data has been added to Appendix C in the revised report. However, because these data tables are generated from a Microsoft Access database, the changes will not appear in the redline strikeout version of the report.

National Aeronautics and
Space Administration

600 Area Soil Vapor Extraction

Pilot Test Investigation Report

June 2012

Revised September 2012

NM8800019434
NASA Johnson Space Center White Sands Test Facility
12600 NASA Road Las Cruces, New Mexico 88012

NASA Johnson Space Center White Sands Test Facility

600 Area Soil Vapor Extraction Pilot Test Investigation Report

June 2012

Revised September 2012

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

for Radel Bunker-Farrah
Chief, NASA Environmental Office

9/12/12
Date

Executive Summary

This 600 Area Soil Vapor Extraction Pilot Test Investigation Report (Report) documents and summarizes the performance of a soil vapor extraction (SVE) pilot test at the WSTF 600 Area Closure (Closure). Following NASA's submittal of a revised 600 Area Closure Investigation Report and the related 200-600 Area Soil Gas and Groundwater Data Evaluation Report on March 30, 2011, NMED issued a Notice of Approval with Modifications on June 9, 2011. That document directed NASA to submit a Soil Vapor Extraction Pilot Study Work Plan for the Closure. The planned objective of the SVE pilot test was to determine the capabilities and optimal design for an SVE system at and surrounding the Closure. The pilot test was to generate the data required to determine if SVE can be used as a practical component of an interim remedy for the Closure.

NASA submitted the 600 Area Closure Soil Vapor Extraction Pilot Test Work Plan (SVEPTWP) on September 1, 2011. NMED approved the SVEPTWP with slight modifications on October 28, 2011. NASA drilled and installed the SVE pilot test well (600-SVE-1) and an additional perched groundwater monitoring well specified in the SVEPTWP in September and October 2011. NASA completed planning and coordination of the SVE pilot test in late 2011 and early 2012. In March 2012, NASA's SVE pilot test subcontractor, URS Corporation, mobilized to WSTF and performed the required SVE pilot test and field data collection activities with the support of on-site personnel. Soil vapor samples were collected from 600-SVE-1 and five adjacent multiport soil vapor monitoring (MSVM) wells during the SVE pilot test. NASA submitted these samples to an off-site analytical laboratory for analysis of VOCs by EPA Method TO-15 and performed data review and evaluation in April and May 2012.

A portable SVE unit was utilized to perform the required pilot test activities. The unit was attached to 600-SVE-1 and was utilized to "step test" each of the three screened intervals in the well at vacuum pressures equivalent to 15, 30, 50, 70, 90, and 120 inches of water. Each step in the test consisted of active pumping until the applied vacuum stabilized as well as the monitoring of various field parameters and sampling at 600-SVE-1 and MSVM wells. Sampling and monitoring activities included the measurement of flow rates, real-time VOC concentrations at the SVE well, real-time VOC concentrations at the SVE discharge, barometric pressure, and the concentrations of oxygen and carbon dioxide at 600-SVE-1. Induced vacuum was monitored at the associated MSVM wells, located between 76 and 340 ft from 600-SVE-1.

Field data collected during the SVE pilot test indicated that the SVE pilot test well had a relatively minor impact on the vadose zone beneath the Closure. The MSVM wells exhibited only minor responses to the vacuum applied to 600-SVE-1. At the top two zones of 600-SVE-1, NASA was unable to perform some of the later steps in the test because flow rates achieved at lower vacuum levels exceeded the ability of the available instrumentation to monitor the flow. PID readings of total ionizable volatile compounds at 600-SVE-1 and the discharge of the SVE system indicated that low levels of volatile organic compounds (VOCs) were extracted from the vadose zone and successfully treated by the granular activated carbon (GAC).

Analytical data from samples collected during the SVE pilot test were consistent with the results of previous investigations at the Closure. Concentrations of VOCs are less than or equal to concentrations that would be in equilibrium with the local groundwater. Further, concentrations of the VOCs, including the five primary contaminants of concern (COCs) for this investigation (TCE, PCE, chloroform, Freon 11, and Freon 113), were at least one order of magnitude less than the site-specific risk-based concentrations calculated using the EPA-approved Johnson and Ettinger subsurface vapor intrusion model. Although the development of these risk-based concentrations was not included in the SVEPTWP,

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NASA determined that accurate and consistent decisions related to vadose zone investigations at WSTF could not be made without established comparison values for soil vapor. NASA first performed a review of available literature and regulations to determine if potentially applicable cleanup standards already existed. When this evaluation did not identify applicable regulatory standards, NASA commissioned the development of site-specific criteria as described in the concurrently submitted *Development of Site-Specific Risk-Based Regulatory Criteria for Soil Vapor* (NASA, 2012a).

Based on a comprehensive review of the data from previous investigations and data generated during the SVE pilot test, NASA continues to believe VOC concentrations in the vadose zone beneath the Closure are already at levels that are protective of human health and the environment. Concentrations of COCs are below OSHA occupational exposure limits, residential indoor air screening levels for soil vapor intrusion, and calculated risk-based concentrations for indoor commercial workers. Therefore, NASA concludes that corrective action is not warranted for the low levels of VOCs in the vadose zone. The vadose zone beneath the Closure is not a continuing source of contamination in the groundwater. NASA recommends that no further investigations be performed on the soils beneath the 600 Area Closure, and further recommends that additional testing or corrective action not be conducted except to support ongoing and future groundwater remediation efforts. NASA also recommends a pilot scale project to determine if contaminated perched groundwater near the 600 Area Closure can be successfully extracted and treated.

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List of Acronyms

bgs	below ground surface
cfm	cubic feet per minute
CO_2	Carbon dioxide
COC	Contaminant of concern
CoC	Chain-of-custody
EPA	Environmental Protection Agency
ft	feet
GAC	Granular activated carbon
gpm	gallons per minute
HWB	Hazardous Waste Bureau
HWMU	Hazardous waste management unit
IDW	Investigation-derived waste
in-WC	inches of water column
JSC	Johnson Space Center
MSVM	Multiport soil vapor monitoring
NASA	National Aeronautics and Space Administration
NDMA	N-nitrosodimethylamine
NIOSH	National Institute for Occupational Safety and Health
NMED	New Mexico Environment Department
O_2	Oxygen
OSHA	Occupational Safety and Health Administration
PCC	Post-closure care
PCE	Tetrachloroethene
PID	Photoionization detector
PPE	Personal protective equipment
psi	pounds per square inch
PVC	Polyvinyl chloride
QA/QC	Quality assurance and quality control
RBC	Risk-based concentration
RCRA	Resource Conservation and Recovery Act
RFI	RCRA Facility Investigation
SAM	San Andres Mountains
scfm	standard cubic feet per minute
SSL	Soil screening level
SVE	Soil vapor extraction
SWMU	Solid waste management unit
TCE	Trichloroethene
TIVC	Total ionizable volatile compounds
TSI	TSI Incorporated
VOC	Volatile organic compounds
WSTF	White Sands Test Facility

1.0 Introduction

The National Aeronautics and Space Administration (NASA) Johnson Space Center (JSC) White Sands Test Facility (WSTF) is located in Dona Ana County, 18 miles northeast of Las Cruces, New Mexico and 65 miles north of El Paso, Texas. Figure 1.1 provides a WSTF location map. Access to the site is provided by a paved road, which intersects U.S. Highway 70 one mile west of Organ, New Mexico. The installation occupies over 60,000 acres along the western flank of the southern San Andres Mountains (SAM), one of the most prominent north-south trending ranges in southwestern New Mexico. The SAM represent a typical uplifted mountain block separated by broad intermontaine basins characteristic of the Basin and Range province of the southwestern United States. WSTF is located on the alluvial-covered pediment slope between the SAM to the east, and Jornada del Muerto Basin to the west.

WSTF's primary activities in support of the space program are:

- Development, qualification, refurbishment, and testing of spacecraft propulsion systems, subsystems, and ground support equipment.
- Investigation of flight hardware anomalies.
- Testing of materials and components.
- Performance of hazard and failure analyses.

Hazardous wastes are generated during the course of the testing and evaluation processes at WSTF. Many wastes were historically managed in surface impoundments within the WSTF industrial area, which contributed to groundwater contamination. There are five closed hazardous waste management units (HWMUs) at WSTF, including the 600 Area impoundments. The 600 Area HWMU was closed by NASA in August 1989 and was managed under the WSTF Post-closure Care (PCC) Permit between the time of closure and November 2009, when management of the HWMUs was incorporated into NASA's Hazardous Waste Permit (Permit [NMED, 2009]). Investigations continue in order to determine the extent of soil and groundwater contamination.

NASA developed and submitted the 600 Area Closure Investigation Work Plan (NASA, 2008) on July 2, 2008. After significant NMED input and revision, the final 600 Area Investigation Work Plan (600CIWP, NASA, 2009) was submitted on April 17, 2009. NMED approved the 600CIWP on May 6, 2009. To address anomalies encountered early in the field investigation, an addendum was submitted on October 14, 2009 via email and approved on October 27, 2009. NASA performed the investigation between September 2009 and January 2010 and submitted the initial 600 Area Closure Investigation Report (600CIR, NASA, 2010]) on August 30, 2010. NMED disapproved that report on December 10, 2010 (NMED, 2010). NASA submitted a revised investigation report on March 30, 2011 (NASA, 2011a), along with the related 200-600 Area Soil Gas and Groundwater Data Evaluation Report (NASA, 2011b).

NMED issued a Notice of Approval (NOA) with Modifications on June 9, 2011 (NMED, 2011a). That document directed NASA to develop and perform a soil vapor extraction pilot test. NASA submitted the 600 Area Closure Soil Vapor Extraction (SVE) Pilot Test Work Plan on September 1, 2011 (NASA, 2011c). The SVE Pilot Test Work Plan (SVEPTWP) addressed the development of a pilot test for soil SVE at the WSTF 600 Area Closure (Closure) located to the west of the 100 Area Administration buildings and was approved by NMED on October 28, 2011 (NMED, 2011b). Figure 1.2 provides a topographic map that shows the location of the Closure in relation to other relevant features at WSTF.

2.0 Background

A brief description of the site background is provided in this section. Detailed background information for WSTF and the Closure is provided in the 600CIWP (NASA, 2009a) and 600CIR (NASA, 2010a).

2.1 Operational History

In the mid-1960s, the 600 Area Surface Impoundments, commonly referred to as the salt or evaporation ponds, were designed to contain the saltwater backwash produced from regenerating the zeolite beds in the WSTF water softening plant located to the south. The impoundments received saltwater backwash from the water softening plant through an 8-in diameter pipeline from 1964 to 1984. From 1968 to 1986, 4,000 to 12,000 gallons of hazardous waste per week were transported by tanker truck from the 200 Area Clean Room and Chemistry Laboratory Tanks to the surface impoundments. White Sands Missile Range's High Energy Laser System Test Facility also contributed process waste from September 1983 to June 1984. Primary wastes generated during routine laboratory activities included several VOCs: trichloroethene (TCE); tetrachloroethene (PCE); Freon 11; Freon 21; and Freon 113. TCE and PCE are chlorinated solvents and the other compounds are chlorofluorocarbons. A comprehensive list of potential contaminants was provided in the 600CIWP (NASA, 2009a).

Material disposal into the impoundments ceased on June 13, 1986. The Closure Plan for the 600 Area impoundments was submitted by NASA in June 1988 and approved by NMED in September 1988. All residual fluids in the impoundments were removed in 1989. During closure, materials in the ponds were thoroughly mixed to facilitate exposure to wind and sun to reduce contaminant mass. Clean fill (clayey soil) was also added and the resulting mixture was analyzed for compaction/ permeability. The Closure was completed by NASA on August 8, 1989 and approved by NMED on November 1, 1989. The final closure report is provided in Appendix 1 of the 600CIWP (NASA, 2009a).

2.2 Contaminants of Concern

Although there were numerous contaminants of concern (COCs) during the initial investigation of the Closure, the concentrations of hazardous constituents in soil were, with two exceptions, below regulatory limits. Arsenic and thallium were detected at concentrations above the residential soil screening levels (SSLs) but below Construction Worker SSLs. Both metals were attributed to background concentrations within native WSTF soils. The remaining COCs included, but were not limited to: N-nitrosodimethylamine (NDMA); N-nitrodimethylamine; tetrachloroethene (PCE); trichloroethene (TCE); acrylonitrile; chloroform; tetrahydrofuran (THF); trichlorofluoromethane (Freon 11); dichlorofluoromethane (Freon 21); 1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113); 1,2-dichloro-1,1,2-trifluoroethane (Freon 123A).

On December 16, 2009 during the 600 Area Closure Investigation fieldwork, NMED determined that soil cuttings generated from boreholes met applicable standards and cleanup levels and approved the determination that investigation-derived waste (IDW) from the Closure be managed as non-hazardous waste (NMED, 2009c). On August 25, 2010 NMED approved the NASA request for IDW soil cuttings disposal as nonhazardous waste (NMED, 2010).

Following the installation of soil gas wells within investigation boreholes, NASA performed a technical evaluation of soil gas VOC concentrations using Occupational Safety and Health Administration (OSHA) and National Institute for Occupational Safety and Health (NIOSH) exposure limits. Based on that evaluation, NASA concluded that concentrations of VOCs beneath the Closure did not exceed any potentially applicable limits and that there was no continuing source of VOCs in soil gas (NASA, 2011a). NASA developed the SVEPTWP to comply with the NOA with Modifications (NMED, 2011a). NMED

specifically mentioned TCE, PCE, and chloroform as contaminants of interest. These three constituents, in addition to Freon 11 and Freon 113, comprise the primary potential COCs for the pilot test described in the SVEPTWP.

2.3 Deviations from NMED Directives

NMED's June 9, 2011 NOA with Modifications included specific requirements upon which an SVE pilot test was to be based. After careful consideration of those requirements, NASA recommended the following deviations from the SVE Pilot Test Work Plan. NMED reviewed these deviations, provided additional input, and approved them (NMED, 2011b).

2.3.1 Location of SVE Pilot Test Well

Based on geological conditions beneath the Closure, it was anticipated that the SVE well would have a radius of influence of approximately 100 ft or less. NMED specified that the SVE pilot test well "must be installed 75 to 100 feet due south of former boring 600-SB-8." The location specified by NMED places the SVE well less than 100 ft from one existing multiport soil gas monitoring well and potentially the second proposed perched groundwater monitoring well (600-H), which was only tentatively planned (and subsequently not installed). Additionally, the two likely piezometers within 100 ft of the NMED-proposed location are in the same direction from the well location. Other monitoring locations are greater than 100 ft from the proposed SVE well. Based on the limited opportunity for observation, an alternate location for the SVE well allowed for more thorough testing.

NASA located the SVE well approximately 76 ft west of existing multiport soil gas monitoring well 600-SGW-5 (Figure 2.1). This location placed the SVE well within 100 ft of existing multiport soil gas monitoring well 600-SGW-3, located 96 ft to the northwest, and perched groundwater monitoring well 600-G, located 66 ft to the east. This ensured the availability of at least three proximal piezometers that were expected to respond during the test. It also remained within a reasonable distance (150 ft) of multiport soil gas monitoring well 600-SGW-1, providing the potential for measuring the influence of the SVE well in three directions with two types of piezometers. Further, NASA's location placed the SVE well within the southeast Closure cell, which showed slightly higher concentrations of COCs during the 600 Closure Investigation (NASA, 2011a). This cell was also the primary point of discharge of contaminants to the impoundment via tankers and the Hazardous Waste Transmission Line.

2.3.2 Design of SVE Pilot Test Well

NMED stated that the SVE well "must be screened from the bedrock surface to approximately ten feet above the bedrock surface…" In order to generate more data, and to provide for more comprehensive understanding of the vadose zone beneath the Closure, NASA installed a set of three nested SVE wells with 10 ft screens in a single borehole. In addition to the screened interval immediately above the bedrock, NASA installed two additional screened intervals at intermediate locations in the alluvium under the Closure. A completion diagram of the SVE well is provided in Appendix A.

2.3.3 Duration of Steps in Pilot Test

NMED directed NASA to conduct step tests during the SVE pilot test. Each step of the test was to be performed at a specified vacuum pressure for four hours. An expert NASA SVE consultant suggested that, given the site's geology, it was likely that extraction characteristics would stabilize

within approximately one hour of the start of each step in the test. NASA planned to measure extraction pressures at regular intervals during each step of the test. Based on input received from the SVE consultant, NASA proposed to run each step of the test for two to four hours or until vacuum pressures measured at 15 minute intervals stabilized as indicated by three consecutive extraction vacuum pressure measurements within five percent of each other.

2.3.4 Selection of Observation Wells

NMED directed NASA to obtain pressure measurements from "… all of the 600 Area Closure soil gas observation wells." After careful consideration of the site's geology and expected SVE performance, it was concluded that the radius of influence of the SVE well was extremely unlikely to exceed 200 ft. Therefore, the two most distant soil gas wells, 600-SGW-6 and 600-SGW-7, were not included as piezometers in this plan. Piezometers 600-SGW-2 and 600-SGW-8, at distances of 322 ft and 340 ft from the SVE well, respectively, were selected to monitor for any unlikely responses at distances greater than 200 ft. In the event soil gas monitoring wells 600-SGW-2 and 600-SGW-8 had shown any response to vacuums applied to 600-SVE-1, wells 600-SGW-6 and 600-SGW-7 would have been added to the network of soil gas monitoring wells. This was not required during the pilot test. Figure 2.1 shows the locations of the observation wells.

2.3.5 Schedule for Performing Pilot Test

NMED directed NASA to complete the SVE pilot test and submit a report summarizing the results on or before December 30, 2011. NASA proposed to complete the SVE pilot test and submit a report no later than May 31, 2012. NASA also proposed to revise the schedule for submittal of the 200 Area Investigation Work Plan, and to defer further field work on the 300 and 400 Area investigations. These proposed schedule changes are summarized in a letter dated September 1, 2011 submitted concurrently with the SVEPTWP.

2.4 Deviations from the SVEPTWP

During planning and implementation of the SVE pilot test, minor deviations from the approved SVEPTWP were required. This section describes those deviations.

2.4.1 Vacuum Equipment Limitations

During performance of the field work for the pilot test, NASA observed that the measurable parameters for the instrument used to monitor air flow, temperature, and relative humidity (a TA440 by TSI Incorporated) were exceeded due to high flow regimes. Under these circumstances, the vacuum and consequently the flow rate were limited. At the 40- to 50-ft (12.19 to 15.24 m) screened interval of the SVE pilot test well (referred to as 600-SVE -1-40) the maximum vacuum achievable at a measurable flow rate was 67 inches of water column (in-WC) at approximately 218 standard cubic feet per minute (scfm). At the 90- to 100-ft (27.43 to 30.48 m) screened interval (referred to as 600-SVE-1-90) the maximum vacuum achievable at a measurable flow rate was 101 in-WC at approximately 200 scfm. NASA believes that the vacuum pressures specified by NMED were not achievable at the shallower intervals in 600-SVE-1 because of limitations resulting from the high porosity and permeability of the soils beneath and in the vicinity of the Closure. As demonstrated by the flow rates measured by the instrumentation, too much air was flowing through the soil to achieve the highest vacuum levels. The required vacuum levels are believed to have been achievable at greater depth because the soil pore space and permeability are lower due to differences in depositional geology, increased fine soil particles with depth, or increased compaction with depth.

2.4.2 In-situ Pressure Transducer

In accordance with the equipment list in the SVEPTWP, a down-hole pressure transducer was initially installed in the 40- to 50-ft screened interval in 600-SVE-1 at a depth of 45 ft to monitor pressure responses during the pilot test. Upon completion of testing the 50-ft interval and during reconfiguration of the vacuum system piping at 600-SVE -1, it was observed that the sonde had been sucked through the vacuum piping and was deposited in the separator tank of the SVE system, which is approximately 20 to 30 ft (horizontal distance) from 600-SVE -1. Use of the down-hole pressure sonde was discontinued for the remainder of the test.

3.0 Scope of Activities

In accordance with the 600 SVEPTWP (NASA, 2011c), the objective of this Report is to describe the activities associated with performing an SVE pilot test at the 600 Area Closure. The pilot test was required by NMED to determine the capabilities and optimal design for an SVE system at and surrounding the Closure. The objective of the pilot test was to generate the data required to determine if SVE can be used as a practical component of an interim remedy for the Closure. The scope of the pilot test was limited to the Closure and the underlying vadose zone. Activities performed during this project included the installation of an SVE well and additional perched groundwater monitoring well, performance of the required SVE pilot test, monitoring of physical parameters during the pilot test, collection of soil vapor samples, and evaluation of the field and analytical data collected or generated during the pilot test.

3.1 Well Installation

As required by the approved SVEPTWP, NASA installed one soil vapor extraction well, identified as 600-SVE-1, in the southeast cell of the Closure in September 2011. NASA also installed a groundwater monitoring, identified as 600-G-138, adjacent to the east corner of the Closure. Specific information related to drilling and installing these wells is provided in Section 4.2. Physical parameters were measured at the SVE well during the pilot test as indicated in the SVEPTWP.

3.2 SVE Pilot Test

NASA subcontracted URS Corporation (URS) to provide the equipment and personnel for performing the fieldwork for the SVE pilot test. The subcontractor-provided portable SVE unit (Figure 3.1) was mobilized to WSTF and used to perform the required pilot test activities as described in the SVEPTWP between March 22, 2012 and March 24, 2012. As shown in Figure 3.2, the unit was attached to each inner casing in nested well 600-SVE-1 and utilized to “step test” each of the three screened intervals at vacuum pressures equivalent to 15, 30, 50, 70, 90, and 120 in-WC. Throughout the test, the applied vacuum pressure was monitored at the SVE well at 15-minute intervals. Each step of the test was actively pumped until the vacuum pressure equilibrated as indicated by three consecutive measurements that were within five percent.

3.3 Monitoring and Sampling

Sampling and monitoring preceding and during the pilot test consisted of several activities, including the measurement of flow rates and applied vacuum pressures at the SVE well, measurement of induced vacuum pressures at piezometers, real-time measurements of total ionizable volatile compounds (TIVCs) at the SVE well and SVE system discharge, measurement of barometric pressure, measurement of percent oxygen (O_2), carbon dioxide (CO_2), temperature, and relative humidity at the SVE well, and the collection of samples from the SVE well and observation wells for the analysis of VOCs by EPA Method TO-15.

Six previously installed multiport soil vapor monitoring (MSVM) wells were selected to serve as observation wells for the pilot test. Collection of field data and soil vapor samples is described in more detail later in this report.

The SVEPTWP (NASA, 2011c) included the installation of a groundwater monitoring well near the east corner of the Closure to better characterize perched groundwater that was discovered during the 600 Area Investigation during the installation of well 600-SGW-5. This monitoring well, 600-G-138, has been sampled twice since its installation in September and October 2011 for standard WSTF COCs, including several VOCs, NDMA, bromacil, and several metals. The results of groundwater monitoring are presented in Section 6.2.

3.4 Data Evaluation

NASA environmental personnel reviewed and evaluated analytical data from soil vapor and groundwater samples collected during the SVE pilot test in accordance with established WSTF data review procedures. Data were evaluated to support the development of conclusions and recommendations offered in this report. Chemical analytical results were compared to those obtained during previous investigations at the Closure and to potentially applicable regulatory criteria.

3.5 IDW Management

While performing the activities specified in the approved SVEPTWP (NASA, 2011c), a variety of IDW was generated, including saturated and unsaturated soil cuttings, groundwater produced during development and sampling of the perched groundwater monitoring well, water collected in the vapor/water separator on the SVE pilot test unit, potentially contaminated debris (PPE, disposable equipment, plastic sheeting, etc.), used granular activated carbon (GAC), and decontamination solutions. These waste streams were managed as indicated below.

Unsaturated soil cuttings or cores were previously determined to be non-hazardous waste and were collected in bulk containers during drilling activities. Saturated soil cuttings or cores were managed under the 90-day provisions of 40 CFR 262.34 during the investigation field work. Upon completion of drilling activities, NASA submitted a request for a “contained-in determination” to NMED (NASA, 2011d). NMED approved the request on December 2, 2011 (NMED, 2011c) and the soil cuttings were spread on the ground surface to the north of the Closure in February 2012.

Groundwater produced during the development and sampling of 600-G-138 was transferred to a 90-day accumulation area near the investigation site and was disposed of in the 200 Area Evaporation Tank Unit within 90 days. During the SVE pilot test, vapor extracted from 600-SVE-1 was processed through a vapor/water separator and the condensate was recovered in a collection tank. At the end of the pilot test, the condensate was transferred to WSTF containers and the collection tank on the SVE unit was triple rinsed with potable water. The rinse water was collected in the container with the condensate and transported to the 200 Area Evaporation Tank Unit for disposal. Water used for equipment decontamination during the investigation was collected at the decontamination and transferred to the 200 Area Evaporation Tank Unit for disposal.

Contaminated debris was collected at the investigation site during the drilling and installation of 600-SVE-1 and 600-G-138. Upon receipt of the “contained-in determination” (NMED, 2011c), debris contaminated with soil cuttings or water was designated as non-hazardous and disposed of as solid waste. A small amount of petroleum-contaminated debris was managed as hazardous waste and shipped to Clean Harbors for disposal.

The GAC was removed from the SVE pilot test unit and stored in bulk containers before URS demobilized from WSTF. URS and NASA personnel determined that less than one percent of the GAC capacity was utilized during the SVE pilot test, thus it was not spent during the test. The GAC is stored at WSTF pending use for another project.

4.0 Field Investigation Results

4.1 Surface Conditions

Surface conditions at the Closure were described in detail in Section 3.2 of the 600CIWP (NASA, 2009), Section 2.1 of the 600 Area CIR (NASA, 2010a), and Section 4.1 of the revised 600 Area CIR (NASA, 2011a).

4.2 Drilling Activities

Six existing MSVM wells were utilized to monitor induced vacuum pressure and to collect soil vapor samples before, during, and after the pilot test. Specific information related to drilling these wells was provided in Section 4.2 of the revised 600 Area CIR (NASA, 2011a). In addition to previously installed wells, NASA drilled the SVE pilot test well (600-SVE-1) and an additional perched groundwater monitoring well (600-G-138).

4.2.1 Drilling Method

The coarse and unconsolidated nature of the alluvium overlying bedrock below the 600 Area Closure, with coarser gravel clasts up to several feet in diameter precluded the use of the standard hollow stem auger drilling method due to historically low sample recovery percentages (≤50%) experienced using this method and the high probability of auger refusal due to large cobbles prior to depths of 50 ft (15.24 m) bgs. A recent attempt to utilize a rotosonic drilling rig was performed during the WSTF 600 Area Closure Investigation fieldwork in October 2009 due to the high quality and recovery reported for soil sample cores. Although the quality of soil samples was superior relative to previous methods, rotosonic drilling was discontinued due to drilling conditions that were incompatible with the drilling method. Rotosonic drilling was determined not to be feasible with or without the addition of water during the drilling process, due to an inability to advance to depths beyond approximately 100 ft (30.48 m) bgs.

Following consideration of the geologic conditions and communication with prospective drilling subcontractors, the 600-SVE-1 and 600-G-138 boreholes were installed using a Stratex rotary drilling rig with air as the drilling fluid. This drilling method was determined to have the greatest probability for success in completing the required borehole to the target depth of bedrock at 150 ft (45.72 m) bgs while providing the best possible soil samples for geological and geotechnical analyses. A full sized rig was required due to the power requirements necessary to advance boreholes through the coarse alluvial formation to the target depth. Drawbacks in using the full-sized rig (approximately 45,000 lbs and dimensions of approximately 10 ft x 40 ft [3.05 m x 12.19 m]) were maneuverability and an increased potential for damage to the Closure. The risk was minimized through the use of 6 ft x 8 ft plastic mats that were used to underlay the rig and provide access to the drilling location.

4.2.2 Pilot Test Well 600-SVE-1

SVE pilot test borehole 600-SVE-1 was drilled on the 600 Area Closure through the footprint of the former southeast cell between October 2 and 8, 2011. The borehole was located approximately 70 ft (21.33 m) west of the most proximal observation well pair, consisting of multiport soil gas well 600-SGW-5 and perched groundwater monitoring well 600-G. Figure 2.1 provides the location of the borehole

in relation to the pilot test piezometers and other features on or near the Closure. The borehole encountered bedrock at 149 ft (45.41 m) bgs and had a total depth of 152 ft (46.33 m) bgs. A nested pilot test well was installed within the borehole between October 8 and 10, 2011.

The Stratex method utilized compressed air as the drilling lubricant to clean the borehole of cuttings during advancement of the drill stem and bit and the simultaneous advancement of a 12-inch (30.48 cm) diameter casing to prevent borehole collapse. Accordingly, cuttings were a mixed result of chips from the bottom of the borehole and above and did not accurately represent the specific depth of the drill bit. A generalized borehole lithologic log is presented in Appendix A.

Two soil geotechnical samples were collected using a custom sonic core barrel (referred to as the BLN Hammer by the project drilling subcontractor) driven by the rig's pneumatic drive head at 60 – 65 ft (18.29 to 19.81 m) bgs and 95 to 100 ft (28.95 to 30.48 m) bgs. A soil sample was not recovered at a depth corresponding to the deep sampling zone despite several attempts. Drilling conditions became more difficult with depth and the deep sampling attempts were only able to advance a few inches. The results of geotechnical sampling performed as part of this investigation are consistent with those from past investigations (see Section 3.3.6.3 and Table 4.3 of the revised 600 CIR, NASA, 2011a). Therefore, a detailed evaluation of the sample results was not performed. Complete laboratory results for the geotechnical samples are provided in Appendix B.

4.2.3 Monitoring Well 600-G-138

Conventional groundwater monitoring well 600-G-138 was drilled adjacent to the east corner of the 600 Area Closure just outside the footprint of the former southeast cell between September 29, 2011 and October 1, 2011. The borehole was located approximately 20 ft northwest of multiport soil gas well 600-SGW-5. These two wells form the most proximal observation well pair to well 600-SVE-1. Well 600-G-138 was installed to monitor between two and three feet of perched groundwater identified on the top of andesite bedrock at this location during the installation of well 600-SGW-5. Figure 2.1 provides the location of well 600-G-138 relative to other features at the Closure. The borehole encountered andesite bedrock at 146 ft (44.50 m) bgs and had a total depth of 148 ft (45.11 m) bgs. A conventional groundwater monitoring well was installed within the borehole on October 1, 2011.

The 600-G-138 borehole was installed using the same Stratex rotary drilling rig with air as the drilling fluid. The full sized rig was required due to the power requirements necessary to advance the borehole through the coarse alluvial formation to the target depth. Compressed air was used to clean the borehole of cuttings during advancement of the drill stem and bit and the simultaneous advancement of a 12-in (30.48 cm) diameter casing to prevent borehole collapse. Cuttings comprised a mixture of chips from the bottom of the borehole and above and did not accurately represent the specific depth of the drill bit. A generalized borehole lithologic log is presented in Appendix A.

No analytical soil samples were collected from well 600-G-138. Geotechnical and geochemical soil samples were collected from the adjacent 600-SGW-5 borehole during installation in November and December 2009.

4.3 Borehole Logging

The six MSVM wells that were used in the pilot test were drilled and installed during the 600 Area Closure Investigation. Specific information related to borehole logging was provided in Section 4.2 of the revised 600 Area CIR (NASA, 2011a).

Lithologic logging of the boreholes for 600-SVE-1 and 600-G-138 was conducted by the on-site geologist, using the two soil samples collected from soil cores and from cuttings generated from the rig cyclone on a minimum of 10-ft centers. The soil boring logs include general information (name, location, dates, depths, and drilling details), a Unified Soil Classification System (USCS) description, core depth intervals and recoveries, sample locations with identification, and a lithologic description using standard USCS criteria. Lithologic logging results are provided in the borehole lithologic logs (Appendix A).

4.4 Subsurface Conditions

Subsurface conditions at the Closure were described in detail in Section 3.3 of the 600CIWP (NASA, 2009), Section 4.4 of the 600 Area CIR (NASA, 2010), and Section 4.6 of the revised 600 Area CIR (NASA, 2011a).

4.5 Investigation Well Construction

Six existing MSVM wells were utilized to monitor induced vacuum pressure and to collect soil vapor samples before, during, and after the pilot test. Specific information related to the installation and construction of these MSVM wells was provided in Sections 4.2 and 4.3 of the revised 600 Area CIR (NASA, 2011a). Well construction details for the two additional wells installed for the SVE pilot test are provided in the following sections.

4.5.1 600-SVE-1

The initial proposed well construction for the SVE pilot test well was provided as Figure 6 in the SVEPPTWP (NASA, 2011c). An updated SVE well design was provided to NMED following completion of the borehole, but prior to installation of the well. Following NMED approval, the pilot test well was constructed using three individual nested 2-in schedule 80 PVC wells installed inside a 12-in (30.48 cm) casing. The well was screened using 10 ft (3.05 m) x 0.020-in slot screen at three locations in the alluvium: 40 – 50 ft (12.19 to 15.24 m) bgs; 90 – 100 ft (27.43 to 30.48 m) bgs; and, 130 – 140 ft (39.65 to 42.70 m) bgs as presented in the well completion diagram in Appendix A. The lowermost screened interval extended downward to approximately 9 ft (2.74 m) above bedrock at 149 (45.42 m) ft bgs.

Each nested well was installed through the over-ride casing. Annular materials were installed between the multi-port well and the boring through a 1.5-in diameter tremie pipe to prevent bridging. Annular materials consisted of 10/20 mesh graded Colorado silica sand pack to approximately two ft (0.61 m) above and below each of the three screened intervals. Bentonite seals comprising bentonite chips that were hydrated following emplacement were then installed on either sides of the screen sand pack and varied in thickness between 2.7 to 13.9 ft (0.82 to 4.24 m). Cement/bentonite slurry was then installed between the bentonite seals and from above the top sand pack to 3 ft (0.91 m) bgs. The remainder of the borehole was cemented to the surface using Portland Type II cement with 5% bentonite powder by volume. Following well and annular material installation, a six-inch (15.24 cm) diameter steel vault was installed to protect the nested well casing. A 4 ft x 4 ft (1.22 m x 1.22 m) cement pad that slopes away from the well was constructed at ground level on the top of the Closure. A brass cap was inserted into the concrete pad at each well. The well was then surveyed and the coordinates and elevation were recorded in the applicable well files. A well completion report was provided to NMED on January 27, 2012 (NASA, 2012b) and accepted by NMED on April 10, 2012 (NMED, 2012).

4.5.2 600-G-138

The initial proposed well construction for the SVE pilot test well was provided as Figure 5 in the SVEPPTWP (NASA, 2011c). An updated 600-G-138 well design was provided to NMED following

completion of the borehole, but prior to installation of the well. Following NMED approval, the well was constructed using 4-in (10.16m) schedule 80 PVC inside 12-in (30.48 cm) diameter casing. The well was screened using 10 ft (3.05 m) x 0.020-in (0.05 cm) slot screen located across the alluvium-andesite bedrock interface at 137.5 – 147.5 ft (41.91 to 44.95 m) bgs as presented in the well completion diagram in Appendix A. The well was installed through the over-ride casing. Annular materials were installed between the conventional well and the boring through a 1.5-inch diameter tremie pipe to prevent bridging. Annular materials consisted of 10/20 mesh graded Colorado silica sand pack from the bottom of the well to approximately five ft (1.54 m) above the screened interval. Finer grained 16/40 mesh graded Colorado silica sand was installed over a four ft (1.22 m) interval above the 10/20 sand pack. A bentonite seal comprising bentonite chips that were hydrated following emplacement were then installed above the 16/40 sand pack over a seven ft (2.13 m) interval, and cement/bentonite slurry was then installed above the bentonite seal to 3 ft (0.91 m) bgs. The remainder of the borehole was cemented to the surface using Portland Type II cement with 5% bentonite powder by volume. Following well and annular material installation, a six-inch (15.24 cm) diameter steel vault was installed to protect the nested well materials. A four ft x four ft (1.22 m x 1.22 m) cement pad that slopes away from the well was constructed at ground level on the top of the Closure. A brass cap was inserted into the concrete pad, and bollard posts were constructed around the wellhead to protect the well from any vehicular traffic. The well was then surveyed and the coordinates and elevation were recorded in the applicable well files. A well completion report was provided to NMED on January 27, 2012 (NASA, 2012b) and accepted by NMED on April 10, 2012 (NMED, 2012).

4.6 Groundwater Conditions

Groundwater conditions at the Closure were described in detail in Section 3.3 of the 600CIWP (NASA, 2009) and in Section 4.6 of the 600 Area CIR (NASA, 2010) and revised 600 Area CIR (NASA, 2011a).

4.7 Surface Air and Subsurface Vapor Conditions

Surface air was not characterized as part of this investigation. Subsurface geological conditions that influence vapor conditions were discussed in Section 3.3 of the 600CIWP (NASA, 2009), Section 4.4 of the 600 Area CIR (NASA, 2010), and Section 4.6 of the revised 600 Area CIR (NASA, 2011a). Subsurface vapor monitoring was conducted at the SVE well, which was installed as indicated in Section 4.5.1, and proximal MSVM wells, which were installed as indicated in Section 4.3 of the revised 600 Area CIR (NASA, 2011a). Field screening of the SVE well and the SVE system discharge was performed as indicated in Section 5.4 of the SVEPTWP (NASA, 2011c). Subsurface vapor conditions in the area of the Closure surrounding the SVE well were characterized by collecting soil gas samples from the six MSVM wells (observation wells) identified in the SVEPTWP. Subsurface air flow pathways and air flow regimes were not quantitatively characterized as part of this investigation.

4.8 Pilot Test Results

Pilot testing activities occurred from March 22, 2012 through March 24, 2012. Prior to testing, 600-SVE-1 and the six observation wells/vacuum piezometers were sampled for the analysis of VOCs by EPA Method TO-15 using standard WSTF procedures. On March 22, 2012 the SVE system was functional tested to ensure smooth operation. The system was operated for a short period of time with the PVC manifold “blanked/shut-in” to observe for leaks; none were detected.

The testing began with the 40- to 50-ft (12.19 to 15.24 m) interval (referred to as 600-SVE -1-40) on March 22, 2012. A vacuum of approximately 15 in-WC was then applied to 600-SVE -1-40 while the following parameters were measured and recorded: flowrate, temperature, photoionization detector (PID) readings (source), relative humidity, oxygen content, carbon dioxide content, atmospheric pressure,

vacuum and PID readings (SVE unit discharge). Vacuum readings were obtained and recorded for the observation wells as prescribed in the SVEPTWP. When monitored vacuum pressures reached equilibrium as indicated on the available instrumentation, the applied vacuum was increased to the next "step." This series of events was repeated until maximum vacuum was applied to 600-SVE-1-40. As described in Section 2.4.1, vacuum equipment limitations precluded the application of vacuum in excess of 67 in-WC at 600-SVE-1-40, at which point the measurement capability of the TSI velocity meter was exceeded, potentially due to turbulent flow in the piping. The applied vacuum was reduced and increased several times in order to maintain the flow rate within the TSI velocity meter's measurement range. After approximately one-half hour of variable vacuum, operations were concluded for the day.

On March 23, 2012 operations continued. The 50 in-WC vacuum "step" was repeated until stable. The vacuum was then increased toward the 70 in-WC vacuum "step". Again the measurement range of the TSI velocity meter was regularly exceeded. The "step" was stabilized and equilibrated at approximately 67 in-WC and a flow rate of approximately 218 scfm. Due to the constraints placed on the equipment because of the site geology, the test for this interval was concluded. Table 4.1 provides the field data collected during the stepped test of 600-SVE-1-40.

On March 23, 2012, the 90 to 100-ft (27.43 to 30.48 m) interval (referred to as 600-SVE -1-90) was tested. The initial vacuum "step", 15 in-WC, was started and each subsequent "step" was completed, through 90 in-WC. At the 120 in-WC "step", again the measurement capability of the TSI velocity meter was exceeded. The final "step" equilibrated for 600-SVE -1-90 was 101 in-WC at an approximate flow rate of 200 scfm. Due to the constraints placed on the equipment because of the site geology, the test for this interval was concluded. Table 4.2 provides the field data collected during the stepped test of 600-SVE-1-90.

On March 24, 2012, the 130 to 140-ft (39.65 to 42.70 m) interval (referred to as 600-SVE -1-130) was tested. The initial vacuum "step", 15 in-WC, was started and each subsequent "step" was completed through 120 in-WC. The final "step" equilibrated for 600-SVE -1-130 was 118.5 in-WC (98.75 percent of the nominal 120 in-WC) at an approximate flow rate of 72.2 scfm. Table 4.3 provides the field data collected during the stepped test of 600-SVE-1-130.

During each day of the pilot test, temperature readings (presented in Tables 4.1, 4.2, and 4.3) collected at the influent of the SVE system fluctuated similarly to the ambient temperature. A review of ambient temperature readings from a weather monitoring station approximately 8 miles south of WSTF indicates that the changes in temperature measurements at the SVE system were relatively consistent with changes in ambient temperatures throughout the test. It is therefore concluded that the ambient temperature affected the monitoring of soil vapor temperature in some manner. During the test of each zone of 600-SVE-1, the other two zones of the well were monitored for induced vacuum. A short circuit within the borehole would have resulted in the presence of induced vacuum at one or both of the zones not being actively pumped. There was no evidence that the application of vacuum to a single zone of the well induced a vacuum in the other two zones, indicating that there was no intrawell short circuit. A short circuit outside of the SVE well elsewhere in the SVE system would have resulted in the dilution of concentrations of VOCs in the samples collected from the SVE system. Chemical analytical data from soil vapor samples collected during the test are consistent with soil analytical data from soil vapor samples collected from monitoring wells installed at similar depth at the Closure. NASA does not believe the temperature variations observed in the SVE measurements had an adverse effect on the overall results of the test.

Throughout the pilot test, the MSVM wells used as observation wells were routinely monitored for induced vacuum. Table 4.4 provides the induced vacuum measurements collected during the pilot test at the observation wells.

5.0 Regulatory Criteria

Specific regulatory criteria for the remediation of soil gas are not provided in applicable New Mexico regulations or the Permit. Therefore it is not possible to conclusively determine whether concentrations of VOCs in the soil gas beneath the Closure exceed regulatory limits and require remedial action. This lack of regulatory criteria also limits NASA's ability to determine whether the SVE pilot test or subsequent SVE systems successfully achieve established remediation objectives. Following the 600 Area Investigation, the maximum concentration of selected soil gas VOCs (the contaminants showing the highest measured concentrations) was compared with OSHA or National Institute for Occupational Safety and Health (NIOSH) exposure limits for technical evaluation purposes. This comparison was presented in Table 7.9 of the 600 Area CIR (NASA, 2010). None of the maximum measured concentrations exceeded the most conservative OSHA or NIOSH limits, and all were between one to five orders of magnitude lower than the equivalent OSHA or NIOSH limit. In addition, preliminary assessment of indoor air concentrations was provided in Table 7.14 of the revised 600 Area CIR (NASA, 2011a). Estimated indoor air concentrations for all COCs were below the residential screening level, and for the majority of COCs were orders of magnitude below the residential screening level.

As described fully in the concurrently submitted *Development of Site-Specific Risk-Based Regulatory Criteria for Soil Vapor* (NASA, 2012a), NASA performed a comprehensive review of available literature and regulations to determine if soil vapor regulatory standards have been promulgated. Accepted regulatory criteria were not available, so NASA subcontracted Geosyntec Consultants, Inc. (Geosyntec) to determine if WSTF-specific regulatory criteria for soil vapor could be developed based on current guidance. Mr. Robert Ettinger of Geosyntec utilized the EPA-approved Johnson and Ettinger (J&E) model as a basis for the development of potential site-specific regulatory criteria for soil vapor at WSTF. Mr. Ettinger states that "…RBCs represent concentrations that are protective of human health based on the potential migration of VOCs from soil gas to indoor air (i.e., the vapor intrusion pathway) and provide a point of reference to screen data collected as part of site investigation activities. Note, however, that soil gas concentrations exceeding the RBCs do not necessarily indicate the site poses a human health risk or hazard, but are an indication that further evaluation or action may be warranted…" (Geosyntec, 2012). RBCs were calculated for a variety of WSTF COCs.

6.0 Site Contamination

6.1 Soil Sampling

Soil samples were collected at two locations in well 600-SVE-1 proximal to the position of the upper two screened zones for geotechnical testing. Attempts to collect a soil sample at depth corresponding to the lower screened zone were unsuccessful. Previous investigations have provided adequate chemical analytical data for soil beneath and surrounding the Closure, thus no additional analytical samples were collected as part of the pilot test. Soil analytical data were provided in Section 6.1 of the revised 600 Area CIR (NASA, 2011a).

6.2 Groundwater Sampling

Groundwater monitoring well 600-G-138 was installed prior to the SVE pilot test in order to better characterize perched groundwater that was first discovered during the 600 Area Closure Investigation (see Section 3.3.5 of the revised 600 Area CIR [NASA, 2011a]). Sampling was conducted at 600-G-138 in January and April 2012. Groundwater indicator parameters were measured during both sampling events. Samples were also collected for the analysis of a variety of WSTF COCs. Groundwater general chemistry and analytical results for the primary COCs presented in Section 2.2 are provided in Table 6.1. All

chemical analytical results for groundwater samples collected from 600-G-138 are provided in Appendix C.

In addition to the groundwater sampling performed at 600-G-138, groundwater data were collected and evaluated from other locations on or near the Closure during the 600 Area Closure Investigation. These data were presented in Sections 6.2 and 6.3 of the revised 600 Area CIR (NASA, 2011a). Additional groundwater monitoring data are also available in the WSTF Periodic Monitoring Report, submitted to NMED on a quarterly basis.

6.3 Subsurface Vapor Sampling

As indicated in the SVEPTWP (NASA, 2011c), two methods were used to characterize subsurface vapor conditions. Field screening was performed on the SVE well (source) and SVE system discharge. A portable field PID equipped with a 10.6eV lamp was used to field screen for TIVCs at the SVE well and SVE system discharge. PID readings ranged from zero parts per million (ppm) TIVC to 13.8 ppm TIVC in the SVE well. PID responses ranged from zero ppm to 0.5 ppm in the SVE discharge. The measurement of TIVC was addressed in Section 4.8. PID readings are presented in Table 4.1 through Table 4.3.

In addition to field screening, soil vapor sampling was performed at the SVE pilot test well and surrounding MSVM wells. The three zones of 600-SVE-1 were sampled during each step of the pilot test. Two of the MSVM wells, 600-SGW-3 and 600-SGW-5 (the most proximal wells to 600-SVE-1) were sampled before the SVE pilot test, after the test, and during the pumping at each of the three zones in 600-SVE-1. Sampling was performed at the remaining four MSVM wells before and after the SVE pilot test. Samples were collected in 1-liter Summa canisters and shipped to a contracted off-site laboratory for analysis of VOCs by EPA Method TO-15. The maximum concentrations of the primary COCs (see Section 2.2) for each sampling location are provided in Table 6.2. All the chemical analytical data from soil gas samples collected at the SVE pilot test well and MSVM wells during the pilot test are provided in Appendix D. The chemical analytical data from samples collected at 600-SVE-1 during the pilot test were used to calculate the mass of VOCs removed from the subsurface. Table 6.3 provides mass removal information.

7.0 Investigation Summary and Interpretation of Results

7.1 Investigation Summary

The objective of the 600 Area Soil Vapor Extraction Pilot Test was to determine the capabilities and optimal design for an SVE system at and surrounding the Closure. The pilot test was expected to generate the data required to determine if SVE can be used as a practical component of an interim remedy for the Closure, if required. The scope of the pilot test was limited to the Closure and the underlying vadose zone.

In order to accomplish the objectives of the pilot test, NASA performed the following major activities:

- Installed 600-SVE-1 and 600-G-138 to serve as the SVE pilot test well and an additional groundwater monitoring well, respectively.
- Performed SVE pilot test fieldwork in accordance with the approved SVEPTWP.
- Collected various field data to determine impact of SVE on the vadose zone beneath the Closure.
- Collected a comprehensive set of soil vapor samples for analysis of VOCs to quantitate the influence, if any, of SVE on subsurface VOC concentrations.

- Evaluated field data collected during the pilot test and chemical analytical data from soil vapor samples collected throughout the test.
- Determined risk-based concentrations of many COCs in soil vapor to which the concentrations measured during the investigation could be compared to determine if threats to human health or the environment are present.

Because this investigation was focused primarily on determining whether SVE could be a practical means of achieving remediation goals ("extraction of VOCs from the subsurface") (NMED, 2011a), the minimal groundwater and soil sampling results collected in association with the SVE pilot test were not evaluated as thoroughly as the field data and soil vapor results. A comprehensive evaluation of the groundwater and soils beneath and adjacent to the Closure was performed following the 600 Area Closure Investigation and was presented in the revised 600 CIR (NASA, 2011a). The results of soil and groundwater sampling performed in accordance with the SVEPTWP are consistent with those from previous sampling efforts.

7.2 Interpretations of SVE Pilot Test Field Data

Field data were collected from the SVE pilot test well and the MSVM wells during the SVE pilot test. These data were discussed and briefly evaluated in preceding sections. Interpretations of the data are presented in this section and are used to develop conclusions and recommendations presented later in the report.

7.2.1 Interpreting Radius of Influence Based on Vacuum Measurements

The primary objective of the SVE pilot test was to determine the capabilities and optimal design for an SVE treatment system at the Closure. An indicator of system capability is the radius of influence of the extraction well. Two key observations can be made from the field data presented in Table 4.1 through Table 4.4 relative to the radius of influence of the SVE well. First, the flow rate and applied vacuum in 600-SVE-1 stabilized rapidly, suggesting that extraction had only a localized impact on the surrounding geology. Second, the application of vacuum to the top and bottom zones (with depths f 40 and 130 ft bgs, respectively) of the SVE pilot test well had no measureable impact on the observation wells monitored during the test. Neither 600-SGW-3 nor 600-SGW-5, both of which are less than 100 ft from 600-SVE-1, responded reliably to the extraction from 600-SVE-1-40 or 600-SVE-1-130. During extraction testing of 600-SVE-1-90, a very minor induced vacuum was measured at a single zone at 600-SG-5 (the zone at 102.5 ft bgs). From these observations, it can be determined that the radius of influence of 600-SVE-1-90 may be up to 76 ft, while the radius of influence of 600-SVE-1-40 and 600-SVE-1-130 is less than 76 ft. Overall, the vacuum measurements collected during the test illustrate that the extraction of subsurface air at the flow rates and applied vacuum of the pilot test was unable to create a pressure gradient that would induce measureable movement of soil vapor at nearby observation wells. This suggests that the coalescent alluvial fan deposits beneath the Closure are not favorable for efficient application of SVE.

7.2.2 Interpreting TIVC Measurements and Treatment Suitability

The low TIVC measurements obtained at the SVE well and SVE system discharge suggest that SVE may not be an efficient method for removing the fairly low and highly diffused concentrations of VOCs in the vadose zone beneath the Closure. This is further supported by NASA's evaluation of the analytical data (see next section). However, the evaluation of PID readings at the SVE system discharge compared to those at the source does confirm that the GAC used in the pilot test is an effective method for removing VOCs from soil vapor. Confirmation of this treatment technology for VOCs in WSTF soil implies that the use of GAC could be appropriate at other locations where higher concentrations of VOCs in soil vapor are present.

7.3 Interpretations of SVE Pilot Test Analytical Data

Soil vapor samples were collected from the SVE pilot test well and the MSVM wells. Like field data, analytical data were presented and discussed in preceding sections. The data are interpreted in this section and used in conjunction with the field data to develop conclusions and recommendations presented later in the report.

7.3.1 Interpreting Analytical Data from the SVE Well

Of the five primary COCs monitored during the SVE pilot test, four were routinely detected in samples collected from the SVE pilot test well: chloroform; TCE; PCE, and Freon 113. Freon 11 was not detected reliably in the SVE well.

Figures 7.1, 7.2, 7.3, and 7.4 show that concentrations of chloroform, TCE, PCE, and Freon 113, respectively, stabilized quickly in the extracted vapor and tended to remain relatively consistent during the consecutive steps at the three zones of 600-SVE-1. In conjunction with the rapid stabilization of the flow rate and applied vacuum at these extraction zones, consistent VOC concentrations demonstrate that large volumes of soil vapor with low contaminant concentrations are accessible at these locations. This would be expected given the high porosity (typically 20 to 40% based on geotechnical analysis) of the vadose zone soils beneath the Closure and the substantial amount of time elapsed since the Closure was constructed during which diffusive transport of VOCs occurred.

The concentrations of TCE, PCE, and Freon 113 were lower in the shallow zone of 600-SVE-1, and tended to increase with depth (Figures 7.1, 7.2, and 7.4). The vertical concentrations of chloroform were irregular during the test (Figure 7.4). These vertical concentration profiles are consistent with the results of sampling performed during the 600 Area Investigation as described in Section 7.2.4 of the revised 600 Area CIR (NASA, 2011a) and support the previous conclusion that VOC concentrations in soil gas are the result of diffusive transport from perched or regional groundwater.

7.3.2 Interpreting Analytical Data from the MSVM Wells

Field data from the MSVM wells show that the extraction of soil vapor at 600-SVE-1 did not significantly influence the subsurface at the MSVM well locations, thus an exhaustive evaluation of chemical analytical results at these locations is not warranted. Observation wells 600-SGW-3 and 600-SGW-5, the nearest MSVM wells to the SVE pilot test well, were sampled regularly during the test. At each sampling depth in these wells, the concentrations of the primary COCs remained relatively consistent with respect to time. Chemical analytical data from soil vapor samples collected from the MSVM wells during the SVE pilot test are consistent with the results from sampling performed at MSVM wells during the 600 Area Investigation (NASA, 2011a). As seen in the SVE well, concentrations of COCs in the observation wells tended to increase with depth in the vadose zone.

7.4 Comparison of Results to Regulatory Criteria

Unlike groundwater and soils, there are no specific regulatory criteria for soil vapor in the Permit. NASA attempted to locate potentially applicable regulatory levels for soil vapor in other applicable jurisdictions, but was unsuccessful. As a result, a direct comparison of measured concentrations to federal or state cleanup standards cannot be performed. Recognizing this deficiency, NASA subcontracted the services of Geosyntec, a recognized expert in the field of soil vapor intrusion work, to assist with the development of values to which measured concentrations of COCs in soil vapor could be compared. NASA's concurrently submitted *Development of Site-Specific Risk-Based Regulatory Criteria for Soil Vapor* (NASA, 2012a) provides specific information on the related project to calculate potential regulatory

criteria for soil vapor. The calculated risk-based concentrations (RBCs) for the five primary COCs at varying soil depths are presented in Table 7.1. RBCs were calculated for multiple depths in order to provide risk-based levels to which depth-specific soil vapor sample results could be directly compared. A complete list of RBCs, including calculation methodology and supporting data used in the application of the J&E model, is provided in the companion document (NASA, 2012a). In the absence of established regulatory criteria to which measured concentrations in the vadose zone or extracted vapor can be compared, NASA believes that comparisons to calculated RBCs provide an ideal mechanism for determining if vadose zone contamination presents a risk to human health or the environment. Maximum concentrations of COCs detected during the SVE pilot test are compared to these RBCs in Table 7.2. None of the VOC concentrations measured during the SVE pilot test exceeded the RBCs for commercial workers. In fact, all but two of the 110 measured maximum concentrations of COCs are at least one order of magnitude below the corresponding RBC for a comparable depth.

Figures 7.5 through 7.8 compare measured concentrations of chloroform, TCE, PCE, and Freon 113, respectively, in the topmost zone of the SVE pilot test well (600-SVE-1-40) to the calculated indoor commercial worker RBCs for those COCs at a comparable depth. Freon 11 is not presented because most results were non-detect. Figures 7.9 through 7.11 compare measured concentrations of chloroform, TCE, and Freon 113, respectively, in the middle zone of the SVE pilot test well (600-SVE-1-90) to the calculated RBCs for those COCs at a comparable depth. PCE and Freon 11 are not presented because most results were non-detect. Figures 7.12 through 7.14 compare measured concentrations of chloroform, TCE, and Freon 113, respectively, in the lowermost zone of the SVE pilot test well (600-SVE-1-130) to calculated RBCs at a comparable depth. PCE and Freon 11 are not presented because most results were non-detect. The graphs presented in Figures 7.5 through 7.14 clearly demonstrate that soil vapor extracted from various depths in the vadose zone beneath the Closure are significantly below calculated risk-based concentrations. It is important to note that the vertical axes of these graphs (denoting concentrations) are logarithmic.

Soil vapor COC concentrations in samples collected from MSVM wells adjacent to 600-SVE-1 were also compared to calculated indoor commercial worker RBCs. Appendix E provides a series of graphs that compare the available measured concentrations of the primary COCs in MSVM wells 600-SGW-3 and 600-SGW-5 to calculated RBCs at comparable depths. In virtually every case the VOCs are at least one order of magnitude less than their comparable RBC, and in many cases the measured concentrations are several orders of magnitude lower than calculated RBCs, indicating no threat to human health or the environment from the relatively low levels of VOCs in the vadose zone beneath the Closure.

7.5 Conclusions

7.5.1 Conclusions from Previous Investigations

NASA completed a comprehensive investigation of the 600 Area Closure in 2009 and 2010 and provided the results of that investigation to NMED in the revised 600 Closure Investigation Report (NASA, 2011a). That investigation concluded that the vadose zone beneath the Closure was not a continuing source of contamination to the groundwater based on soil, soil vapor, and groundwater data. Concentrations of COCs in soil beneath the Closure were below risk-based cleanup levels specified in the Permit and were comparable to concentrations from samples collected outside the footprint of the Closure. Measured concentrations of COCs in soil vapor below the Closure were less than or equal to concentrations that would be in equilibrium with the local groundwater, thus the mass transport of primary COCs was interpreted to be from groundwater to soil gas (off-gassing). Measured soil gas concentrations were compared to regulatory levels for vapor intrusion in a residential setting and to OSHA exposure limits. Contaminant concentrations in soil gas below the Closure were below OSHA occupational exposure limits and residential indoor air screening levels. Based on the conclusions of that

investigation, NASA recommended that no further investigations or corrective action be performed at the Closure (NASA, 2011a). NASA believes that these conclusions and recommendations remain valid following the SVE pilot test.

7.5.2 Conclusions from SVE Pilot Test

NMED approved NASA's 600 Closure Investigation Report (NMED, 2011b), but also directed NASA to perform an SVE pilot test to determine if SVE could be used as a practical component of an interim remedy for the Closure. NASA completed the SVE pilot test in accordance with the NMED-approved SVEPTWP (NASA, 2011c). During the test, NASA collected a variety of field and chemical analytical data, both at the SVE pilot test well and from MSVM wells installed during the previous investigation.

Based on the collection and interpretation of SVE pilot test data, the following conclusions can be drawn regarding the performance of the SVE pilot system and the need for and applicability of SVE as a remediation strategy for the Closure.

- The lack of induced vacuum response in MSVM wells surrounding 600-SVE-1, in conjunction with the rapid stabilization of applied vacuum at 600-SVE-1, supports initial estimates of a relatively small radius of influence for a properly installed SVE. The observed radius of influence for the pilot test well was less than or equal to 76 ft, demonstrating the difficulty of creating a pressure gradient in the vadose zone beneath the Closure. The test was run at vacuums similar to those employed in commercial SVE systems, suggesting that a system capable of impacting the entire vadose zone beneath the Closure would be highly inefficient for the relatively small contaminant mass removal expected.
- Concentrations of COCs in the three zones of 600-SVE-1 remained low and relatively consistent over the various steps in the SVE pilot test, indicating that the results are representative of overall conditions in the vadose zone, where relatively low and diffuse concentrations of VOCs are present as a result of the underlying contaminated groundwater.
- The very low levels of TIVC (PID readings) observed at the SVE system discharge indicate that GAC is an effective treatment media for VOCs at the relatively low levels encountered in the vadose zone beneath the Closure, suggesting it would be suitable for use at other WSTF locations where higher vadose zone VOC concentrations may warrant treatment.

Additional conclusions are reached from the evaluation of the results of monitoring performed during the SVE pilot test at other locations in the vadose zone beneath the Closure and a consideration of the development of site-specific RBCs for soil vapor. These conclusions are presented below:

- Concentrations of COCs in soil vapor, including the five primary COCs identified in Section 2.2, are typically orders of magnitude less than the calculated risk-based concentrations developed to determine whether VOC concentrations pose a risk to human health or the environment. This holds true for all tested levels within the vadose zone.
- Measured soil gas concentrations of VOCs remain below OSHA occupational exposure limits and residential indoor air screening levels.
- Concentrations of COCs, including the five primary COCs identified in Section 2.2, in soil vapor beneath the Closure remain less than or equal to concentrations that would be in equilibrium with the local groundwater.

7.5.3 Overall Conclusions

A careful review of the results and conclusions of the 600 Area Closure Investigation and thorough evaluation of the data collected during the SVE pilot test continue to support NASA's overall conclusion that the soil vapor beneath the 600 Area Closure does not present a risk to human health or the environment. The concentrations of COCs in the vadose zone are less than currently available standards and calculated risk-based concentrations. The data indicate that SVE is not an appropriate or efficient corrective action for the vadose zone beneath the 600 Area Closure because of the relatively low levels of VOCs diffused throughout a large volume of highly porous soil. In general, NASA concludes that the vadose zone beneath the 600 Area Closure is not a continuing source of contamination to the groundwater and an extensive corrective action such as SVE is not required. Results from monitoring and sampling performed during the SVE pilot test support this conclusion.

8.0 Recommendations

NASA recommends that no further characterization of soil be performed for the vadose zone beneath the 600 Area Closure. Concentrations of VOCs in soil samples collected in the 600 Area Closure Investigation were below residential soil screening levels. Of all the COCs in the initial investigation, only two metals (arsenic and thallium) exceeded residential soil screening levels. These concentrations were attributed to the natural occurrence of these metals in WSTF soils. Analysis of soil samples indicated there was no continuing source of contamination in the soil beneath the closure (NASA 2011a).

NASA concludes that corrective action is not required for the vadose zone beneath and adjacent to the Closure, and recommends that no further investigations or testing be conducted to evaluate remedial action for the vadose zone below the 600 Area Closure. Concentrations of COCs in soil vapor, including the five primary COCs identified in Section 2.2 of this report, are typically orders of magnitude less than the calculated risk-based concentrations developed to determine whether VOC concentrations pose a risk to human health or the environment. Chemical analytical results of soil vapor samples collected during all sampling events to date indicate that there is no continuing source of contamination in the vadose zone.

Regional and perched groundwater beneath the Closure is contaminated with WSTF COCs. COCs detected in soil vapor below the Closure indicate that measured concentrations in soil gas are less than or equal to concentrations that would be in equilibrium with the local groundwater. Because of the presence of WSTF COCs in the perched and regional groundwater, additional soil vapor monitoring will be performed as necessary to support ongoing and planned groundwater monitoring and corrective action.

NASA further recommends that no risk assessment is required for the soil and soil vapor beneath the 600 Area Closure. The concentrations of COCs in the soil and soil vapor are below established cleanup levels and the conservative risk-based concentrations proposed as potential regulatory criteria for soil vapor. COC concentrations in the soil and soil vapor do not present a risk to human health or the environment.

Finally, NASA recommends that contaminated perched groundwater located near the 600 Area Closure be considered for extraction and treatment. NASA recommends the use of a non-dedicated pump to extract groundwater prior to transport to and treatment by the Mid-plume Interception and Treatment System as investigation-derived waste. Soil vapor in proximal soil vapor monitoring well(s) will be concurrently monitored to determine how the removal of contaminated perched groundwater influences concentrations of COCs in the soil vapor. NASA proposes to submit an abbreviated work plan describing the planned process in more detail by November 16, 2012.

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Tables

Table 4.1 Field Data Collected During SVE Pilot Test at 600-SVE-1-40

Date	Time	TIVC (ppm)	Flow rate (scfm)	Temperature (Deg. F)	Relative Humidity (%)	Oxygen (%)	Carbon Dioxide (%)	Atmospheric Pressure (in. H_2O)	Vacuum (in. H_2O)	TIVC (ppm) SVE System Discharge
At Start of Test										
03/22/12	1125	13.8	0.94	74.0	78.4	19.5	00.3	406.90	0.009	NA
Test Step #1										
03/22/12	1200	1.3	85.21	71.0	13.6	18.6	1.4	406.77	15.4	NA
03/22/12	1215	1.2	85.15	71.0	13.1	18.3	1.3	406.63	15.4	0.4
03/22/12	1230	1.4	83.85	71.7	13.3	18.4	1.0	406.63	15.3	NA
03/22/12	1245	1.4	84.21	71.0	14.0	18.2	1.0	406.49	15.3	0.5
Test Step #2										
03/22/12	1430	1.3	134.20	72.9	11.2	9.6	1.5	405.68	30.1	NA
03/22/12	1445	1.3	133.46	74.1	10.8	10.8	1.3	405.54	30.0	0.5
03/22/12	1500	1.4	133.93	75.4	11.2	10.4	1.3	405.54	30.2	NA
03/22/12	1515	1.2	134.17	76.5	9.3	18.4	0.8	405.41	30.2	0.5
Test Step #3										
03/22/12	1605	0.5	182.51	77.5	7.6	15.4	0.2	405.27	50.1	NA
03/22/12	1620	0.8	183.01	76.9	6.1	17.3	0.0	405.13	50.1	0.5
03/22/12	1635	0.4	185.21	77.2	7.4	17.4	0.0	405.13	50.1	NA
03/22/12	1650	N/A	185.21	77.2	7.6	16.4	1.3	405.00	50.2	0.4
Test Step #4										
03/23/12	0840	N/A	N/A	59.0	15.9	19.4	2.3	407.58	67.5	NA
03/23/12	0855	N/A	N/A	62.2	13.7	20.1	00.3	407.58	67.2	NA
03/23/12	0910	N/A	N/A	62.1	13.6	20.1	0.6	407.58	66.9	NA
03/23/12	0925	N/A	N/A	64.1	12.4	20.0	0.8	407.58	66.9	0.2

NA – Not available, measurement not taken

Table 4.2 Field Data Collected During SVE Pilot Test at 600-SVE-1-90

Date	Time	TIVC (ppm)	Flow rate (scfm)	Temperature (Deg. F)	Relative Humidity (%)	Oxygen (%)	Carbon Dioxide (%)	Atmospheric Pressure (in. H_2O)	Vacuum (in. H_2O)	TIVC (ppm) SVE System Discharge
At Start of Test										
03/23/12	1055	1.0	49.50	69.9	12.0	18.4	0.4	407.31	14.9	NA
Step Test #1										
03/23/12	1110	0.7	49.69	71.4	11.2	18.9	0.3	407.31	15.1	0.0
03/23/12	1125	0.1	49.68	71.8	10.8	18.0	0.5	407.17	15.1	NA
03/23/12	1140	0.3	49.62	73.0	9.8	19.5	0.2	407.17	15.1	0.0
03/23/12	1155	NA	NA	NA	NA	NA	NA	407.14	NA	NA
Step Test #2										
03/23/12	1230	0.4	83.33	75.5	8.9	17.8	0.8	407.04	29.6	NA
03/23/12	1245	0.5	83.70	75.2	8.1	18.2	0.9	406.90	29.4	0.0
03/23/12	1300	0.5	84.62	74.0	8.1	19.9	0.0	406.90	29.6	NA
03/23/12	1315	0.5	86.39	75.2	7.9	19.8	0.0	406.77	29.6	0.0
Step Test #3										
03/23/12	1335	0.4	122.74	75.8	7.6	19.7	0.1	406.77	49.5	NA
03/23/12	1350	0.8	121.69	74.8	8.1	19.7	0.1	406.63	49.5	0.0
03/23/12	1405	0.7	121.00	74.2	8.0	19.7	0.1	406.49	49.5	NA
03/23/12	1420	0.5	125.03	79.4	7.8	19.7	0.1	406.36	49.4	0.0
Step Test #4										
03/23/12	1440	0.2	155.83	76.5	7.2	19.8	0.0	406.09	70.1	NA
03/23/12	1455	0.5	159.77	77.5	6.9	19.6	0.0	405.95	70.2	0.0
03/23/12	1510	0.1	156.78	78.9	7.4	19.6	0.0	405.81	69.6	NA
03/23/12	1525	0.2	156.51	77.6	7.3	19.5	0.0	405.81	69.8	0.0

Table 4.2 Field Data Collected During SVE Pilot Test at 600-SVE-1-90

Date	Time	TIVC (ppm)	Flow rate (scfm)	Temperature (Deg. F)	Relative Humidity (%)	Oxygen (%)	Carbon Dioxide (%)	Atmospheric Pressure (in. H_2O)	Vacuum (in. H_2O)	TIVC (ppm) SVE System Discharge
Step Test #5										
03/23/12	1545	0.2	183.49	78.2	6.0	19.1	0.0	405.68	90.0	NA
03/23/12	1600	0.0	182.76	78.2	6.2	17.0	0.7	405.68	89.8	0.0
03/23/12	1615	0.2	188.18	80.4	6.0	16.4	0.4	405.54	89.8	NA
03/23/12	1630	0.0	184.48	78.5	6.1	16.9	0.2	405.54	89.5	0.0
Step Test #6										
03/23/12	1650	0.0	197.66	78.7	6.4	17.2	0.2	405.41	101.7	NA
03/23/12	1705	0.0	204.78	80.5	5.1	17.0	0.2	405.41	101.5	0.0
03/23/12	1720	0.1	198.33	79.6	5.1	16.9	0.2	405.41	101.2	NA
03/23/12	1735	0.0	201.12	83.7	4.7	17.1	0.2	405.27	101.5	0.0

NA – Not available, measurement not taken

Table 4.3 Field Data Collected During SVE Pilot Test at 600-SVE-1-130

Date	Time	TIVC (ppm)	Flow rate (scfm)	Temperature (Deg. F)	Relative Humidity (%)	Oxygen (%)	Carbon Dioxide (%)	Atmospheric Pressure (in. H_2O)	Vacuum (in. H_2O)	TIVC (ppm) SVE System Discharge
At Start of Test										
03/24/12	0740	0.7	0.00	49.9	76.3	20.2	0.1	407.04	0.0	0.1
Step Test #1										
03/24/12	0800	1.4	6.31	59.2	24.8	19.9	0.9	407.04	15.1	NA
03/24/12	0815	1.3	6.76	64.2	20.6	19.2	1.3	407.17	14.7	0.0
03/24/12	0830	1.2	6.64	66.9	19.7	18.2	1.0	407.31	14.6	NA
03/24/12	0845	1.1	7.42	62.5	21.7	18.1	1.0	407.31	14.6	0.0
Step Test #2										
03/24/12	0905	1.1	12.91	62.1	20.0	18.9	1.0	407.31	30.1	NA
03/24/12	0920	0.6	12.82	65.0	19.4	19.1	1.0	407.45	29.9	0.0
03/24/12	0935	1.0	12.87	65.8	18.9	18.9	1.0	407.45	30.1	NA
03/24/12	0950	0.9	13.05	67.5	16.7	18.9	0.7	407.31	29.8	0.0
Step Test #3										
03/24/12	1010	0.9	23.92	69.4	14.9	18.3	1.0	407.31	50.1	NA
03/24/12	1025	0.7	20.88	70.3	13.8	18.3	1.0	407.31	50.0	0.0
03/24/12	1040	0.7	21.66	70.8	13.8	18.6	0.9	407.31	50.0	NA
03/24/12	1055	0.8	21.85	74.0	11.6	18.6	0.9	407.17	50.0	0.0
Step Test #4										
03/24/12	1115	0.3	33.72	73.9	12.1	18.7	0.9	407.17	70.3	NA
03/24/12	1130	N/A	34.46	76.0	11.0	18.7	0.9	407.17	69.9	0.0
03/24/12	1145	N/A	34.79	74.7	10.0	18.7	0.9	407.04	70.0	NA
03/24/12	1200	0.5	36.50	76.7	9.6	18.2	0.9	406.90	69.7	NA

Table 4.3 Field Data Collected During SVE Pilot Test at 600-SVE-1-130

Date	Time	TIVC (ppm)	Flow rate (scfm)	Temperature (Deg. F)	Relative Humidity (%)	Oxygen (%)	Carbon Dioxide (%)	Atmospheric Pressure (in. H_2O)	Vacuum (in. H_2O)	TIVC (ppm) SVE System Discharge
Step Test #5										
03/24/12	1225	0.5	51.00	79.1	7.6	18.5	0.9	406.77	90.7	NA
03/24/12	1240	0.0	52.34	79.4	7.7	18.1	0.9	406.77	90.4	0.0
03/24/12	1255	0.0	52.20	78.1	7.6	18.4	0.9	406.77	89.8	NA
03/24/12	1310	0.4	53.44	80.0	6.8	18.2	0.9	406.63	89.5	0.0
Step Test #6										
03/24/12	1330	0.1	70.37	79.5	6.7	19.5	0.0	406.49	120.3	NA
03/24/12	1345	0.3	71.40	81.0	6.5	19.5	0.0	406.49	119.5	0.0
03/24/12	1400	0.2	72.72	81.6	6.9	19.4	0.0	406.36	119.1	NA
03/24/12	1415	0.3	72.20	81.3	6.9	19.2	0.0	406.22	118.5	0.0

NA – Not available, measurement not taken

Table 4.4 Field Data Collected at MSVM (Observation) Wells

Induced Vacuum in 600-SGW-1 (sample port depth provided in ft)				
Date	**Time**	**12.5 Vacuum (in. H_2O)**	**57.5 Vacuum (in. H_2O)**	**117.5 Vacuum (in. H_2O)**
Measurements While Testing 600-SVE-1-40				
03/22/12	1125	0.0	0.0	0.0
03/22/12	1225	0.0	0.0	0.0
03/22/12	1425	0.0	0.0	0.0
03/22/12	1515	0.0	0.0	0.0
03/22/12	1620	0.0	0.0	0.0
03/22/12	1650	0.0	0.0	0.0
03/23/12	0855	0.0	0.0	0.0
03/23/12	0925	0.0	0.0	0.0
Measurements While Testing 600-SVE-1-130				
03/24/12	0740	0.0	0.0	0.0
03/24/12	0815	0.0	0.0	0.0
03/24/12	0845	0.0	0.0	0.0
03/24/12	0920	0.0	0.0	0.0
03/24/12	0950	0.0	0.0	0.0
03/24/12	1025	0.0	0.0	0.0
03/24/12	1055	0.0	0.0	0.0
03/24/12	1130	0.0	0.0	0.0
03/24/12	1200	0.0	0.0	0.0
03/24/12	1240	0.0	0.0	0.0
03/24/12	1310	0.0	0.0	0.0
03/24/12	1345	0.0	0.0	0.0
03/24/12	1415	0.0	0.0	0.0

Induced Vacuum in 600-SGW-2 (sample port depth provided in ft)					
Date	**Time**	**12.5 Vacuum (in. H_2O)**	**47.5 Vacuum (in. H_2O)**	**107.5 Vacuum (in. H_2O)**	**150.0 Vacuum (in. H_2O)**
Measurements While Testing 600-SVE-1-40					
03/22/12	1125	0.0	0.0	0.0	0.0
03/22/12	1225	0.0	0.0	0.0	0.0
03/22/12	1425	0.0	0.0	0.0	0.0
03/22/12	1515	0.0	0.0	0.0	0.0

Table 4.4 Field Data Collected at MSVM (Observation) Wells

03/22/12	1620	0.0	0.0	0.0	0.0
03/22/12	1650	0.0	0.0	0.0	0.0
03/23/12	0855	0.0	0.0	0.0	0.0
03/23/12	0925	0.0	0.0	0.0	0.0
Measurements While Testing 600-SVE-1-130					
03/24/12	0740	0.0	0.0	0.0	0.0
03/24/12	0815	0.0	0.0	0.0	0.0
03/24/12	0845	0.0	0.0	0.0	0.0
03/24/12	0920	0.0	0.0	0.0	0.0
03/24/12	0950	0.0	0.0	0.0	0.0
03/24/12	1025	0.0	0.0	0.0	0.0
03/24/12	1055	0.0	0.0	0.0	0.0
03/24/12	1130	0.0	0.0	0.0	0.0
03/24/12	1200	0.0	0.0	0.0	0.0
03/24/12	1240	0.0	0.0	0.0	0.0
03/24/12	1310	0.0	0.0	0.0	0.0
03/24/12	1345	0.0	0.0	0.0	0.0
03/24/12	1415	0.0	0.0	0.0	0.0

Induced Vacuum in 600-SGW-3 (sample port depth provided in ft)					
Date	**Time**	**12.5 Vacuum (in. H_2O)**	**57.5 Vacuum (in. H_2O)**	**107.5 Vacuum (in. H_2O)**	**137.5 Vacuum (in. H_2O)**
Measurements While Testing 600-SVE-1-40					
03/22/12	1125	0.0	0.0	0.0	0.0
03/22/12	1215	0.0	0.0	0.0	0.0
03/22/12	1245	0.0	0.0	0.0	0.0
03/22/12	1445	0.0	0.0	0.0	0.0
03/22/12	1515	0.0	0.0	0.0	0.0
03/22/12	1620	0.0	0.0	0.0	0.0
03/22/12	1650	0.0	0.0	0.0	0.0
03/23/12	0855	0.0	0.5	0.0	0.0
03/23/12	0825	0.0	0.5	0.0	0.0
Measurements While Testing 600-SVE-1-90					
03/23/12	1030	0.0	0.0	0.0	0.0
03/23/12	1110	0.0	0.0	0.0	0.0
03/23/12	1140	0.0	0.0	0.0	0.0

Table 4.4 Field Data Collected at MSVM (Observation) Wells

03/23/12	1210	0.0	0.0	0.0	0.0
03/23/12	1245	0.0	0.0	0.0	0.0
03/23/12	1315	0.0	0.0	0.0	0.0
03/23/12	1350	0.0	0.0	0.0	0.0
03/23/12	1420	0.0	0.0	0.0	0.0
03/23/12	1455	0.0	0.0	0.0	0.0
03/23/12	1525	0.0	0.0	0.0	0.0
03/23/12	1600	0.0	0.0	0.0	0.0
03/23/12	1630	0.0	0.0	0.0	0.0
03/23/12	1705	0.0	0.0	0.0	0.0
03/23/12	1735	0.0	0.0	0.0	0.0
Measurements While Testing 600-SVE-1-130					
03/24/12	0740	0.0	0.0	0.0	0.0
03/24/12	0815	0.0	0.0	0.0	0.0
03/24/12	0845	0.0	0.0	0.0	0.0
03/24/12	0920	0.0	0.0	0.0	0.0
03/24/12	0950	0.0	0.0	0.0	0.0
03/24/12	1025	0.0	0.0	0.0	0.0
03/24/12	1055	0.0	0.0	0.0	0.0
03/24/12	1130	0.0	0.0	0.0	0.0
03/24/12	1200	0.0	0.0	0.0	0.0
03/24/12	1240	0.0	0.0	0.0	0.0
03/24/12	1310	0.0	0.0	0.0	0.0
03/24/12	1345	0.0	0.0	0.0	0.0
03/24/12	1415	0.0	0.0	0.0	0.0

Induced Vacuum in 600-SGW-4 (sample port depth provided in ft)					
Date	**Time**	**12.5 Vacuum (in. H_2O)**	**47.5 Vacuum (in. H_2O)**	**107.5 Vacuum (in. H_2O)**	**142.5 Vacuum (in. H_2O)**
Measurements While Testing 600-SVE-1-40					
03/22/12	1125	0.0	0.0	0.0	0.0
03/22/12	1215	0.0	0.0	0.0	0.0
03/22/12	1245	0.0	0.0	0.0	0.0
03/22/12	1515	0.0	0.0	0.0	0.0
03/22/12	1620	0.0	0.0	0.0	0.0
03/22/12	1650	0.0	0.0	0.0	0.0

Table 4.4 Field Data Collected at MSVM (Observation) Wells

03/23/12	0825	0.0	0.0	0.0	0.0
03/23/12	0855	0.0	0.0	0.0	0.0
Measurements While Testing 600-SVE-1-90					
03/23/12	1030	0.0	0.0	0.0	0.0
03/23/12	1110	0.0	0.0	0.0	0.0
03/23/12	1140	0.0	0.0	0.0	0.0
03/23/12	1215	0.0	0.0	0.0	0.0
03/23/12	1245	0.0	0.0	0.0	0.0
03/23/12	1315	0.0	0.0	0.0	0.0
03/23/12	1350	0.0	0.0	0.0	0.0
03/23/12	1420	0.0	0.0	0.0	0.0
03/23/12	1455	0.0	0.0	0.0	0.0
03/23/12	1525	0.0	0.0	0.0	0.0
03/23/12	1600	0.0	0.0	0.0	0.0
03/23/12	1630	0.0	0.0	0.0	0.0
03/23/12	1705	0.0	0.0	0.0	0.0
03/23/12	1735	0.0	0.0	0.0	0.0
Measurements While Testing 600-SVE-1-130					
03/24/12	0740	0.0	0.0	0.0	0.0
03/24/12	0815	0.0	0.0	0.0	0.0
03/24/12	0845	0.0	0.0	0.0	0.0
03/24/12	0920	0.0	0.0	0.0	0.0
03/24/12	0950	0.0	0.0	0.0	0.0
03/24/12	1025	0.0	0.0	0.0	0.0
03/24/12	1055	0.0	0.0	0.0	0.0
03/24/12	1130	0.0	0.0	0.0	0.0
03/24/12	1200	0.0	0.0	0.0	0.0
03/24/12	1240	0.0	0.0	0.0	0.0
03/24/12	1310	0.0	0.0	0.0	0.0
03/24/12	1345	0.0	0.0	0.0	0.0
03/24/12	1415	0.0	0.0	0.0	0.0

Induced Vacuum in 600-SGW-5 (sample port depth provided in ft)					
Date	**Time**	**7.5 Vacuum (in. H_2O)**	**52.5 Vacuum (in. H_2O)**	**102.5 Vacuum (in. H_2O)**	**137.5 Vacuum (in. H_2O)**
Measurements While Testing 600-SVE-1-40					

Table 4.4 Field Data Collected at MSVM (Observation) Wells

03/22/12	1125	0.0	0.0	0.0	0.0
03/22/12	1215	0.0	0.0	0.0	0.0
03/22/12	1245	0.0	0.0	0.0	0.0
03/22/12	1445	0.0	0.0	0.0	0.0
03/22/12	1515	0.0	0.0	0.0	0.0
03/22/12	1620	0.0	0.0	0.0	0.0
03/22/12	1650	0.0	0.0	0.0	0.0
03/23/12	0855	0.0	0.6	0.0	0.0
03/23/12	0825	0.0	0.6	0.0	0.0
Measurements While Testing 600-SVE-1-90					
03/23/12	1030	0.0	0.0	0.0	0.0
03/23/12	1110	0.0	0.0	0.0	0.0
03/23/12	1140	0.0	0.0	0.0	0.0
03/23/12	1210	0.0	0.0	0.0	0.0
03/23/12	1245	0.0	0.0	0.0	0.0
03/23/12	1315	0.0	0.0	0.0	0.0
03/23/12	1350	0.0	0.0	0.0	0.0
03/23/12	1420	0.0	0.0	0.0	0.0
03/23/12	1455	0.0	0.0	0.5	0.0
03/23/12	1525	0.0	0.0	0.6	0.0
03/23/12	1600	0.0	0.0	0.0	0.0
03/23/12	1630	0.0	0.0	0.0	0.0
03/23/12	1705	0.0	0.0	0.0	0.0
03/23/12	1735	0.0	0.0	0.0	0.0
Measurements While Testing 600-SVE-1-130					
03/24/12	0740	0.0	0.0	0.0	0.0
03/24/12	0815	0.0	0.0	0.0	0.0
03/24/12	0845	0.0	0.0	0.0	0.0
03/24/12	0920	0.0	0.0	0.0	0.0
03/24/12	0950	0.0	0.0	0.0	0.0
03/24/12	1025	0.0	0.0	0.0	0.0
03/24/12	1055	0.0	0.0	0.0	0.0
03/24/12	1130	0.0	0.0	0.0	0.0
03/24/12	1200	0.0	0.0	0.0	0.0
03/24/12	1240	0.0	0.0	0.0	0.0
03/24/12	1310	0.0	0.0	0.0	0.0

Table 4.4 Field Data Collected at MSVM (Observation) Wells

03/24/12	1345	0.0	0.0	0.0	0.0
03/24/12	1415	0.0	0.0	0.0	0.0

Induced Vacuum in 600-SGW-8 (sample port depth provided in ft)					
Date	**Time**	**7.5 Vacuum (in. H_2O)**	**52.5 Vacuum (in. H_2O)**	**102.5 Vacuum (in. H_2O)**	**150.5 Vacuum (in. H_2O)**
Measurements While Testing 600-SVE-1-40					
03/22/12	1125	0.0	0.0	0.0	0.0
03/22/12	1215	0.0	0.0	0.0	0.0
03/22/12	1245	0.0	0.0	0.0	0.0
03/22/12	1515	0.0	0.0	0.0	0.0
03/22/12	1620	0.0	0.0	0.0	0.0
03/22/12	1650	0.0	0.0	0.0	0.0
03/23/12	0825	0.0	0.0	0.0	0.0
03/23/12	0855	0.0	0.0	0.0	0.0
Measurements While Testing 600-SVE-1-90					
03/23/12	1030	0.0	0.0	0.0	0.0
03/23/12	1110	0.0	0.0	0.0	0.0
03/23/12	1140	0.0	0.0	0.0	0.0
03/23/12	1215	0.0	0.0	0.0	0.0
03/23/12	1245	0.0	0.0	0.0	0.0
03/23/12	1315	0.0	0.0	0.0	0.0
03/23/12	1350	0.0	0.0	0.0	0.0
03/23/12	1420	0.0	0.0	0.0	0.0
03/23/12	1455	0.0	0.0	0.0	0.0
03/23/12	1525	0.0	0.0	0.0	0.0
03/23/12	1600	0.0	0.0	0.0	0.0
03/23/12	1630	0.0	0.0	0.0	0.0
03/23/12	1705	0.0	0.0	0.0	0.0
03/23/12	1735	0.0	0.0	0.0	0.0
Measurements While Testing 600-SVE-1-130					
03/24/12	0740	0.0	0.0	0.0	0.0
03/24/12	0815	0.0	0.0	0.0	0.0
03/24/12	0845	0.0	0.0	0.0	0.0
03/24/12	0920	0.0	0.0	0.0	0.0
03/24/12	0950	0.0	0.0	0.0	0.0

Table 4.4 Field Data Collected at MSVM (Observation) Wells

03/24/12	1025	0.0	0.0	0.0	0.0
03/24/12	1055	0.0	0.0	0.0	0.0
03/24/12	1130	0.0	0.0	0.0	0.0
03/24/12	1200	0.0	0.0	0.0	0.0
03/24/12	1240	0.0	0.0	0.0	0.0
03/24/12	1310	0.0	0.0	0.0	0.0
03/24/12	1345	0.0	0.0	0.0	0.0
03/24/12	1415	0.0	0.0	0.0	0.0

Table 6.1 Groundwater General Chemistry and COC Concentrations in 600-G-138

CAS Number	Analyte/Measurement	January 2012 Result	April 2012 Result
NA	Temperature	20.4 °C	20.2 °C
NA	Conductivity	2380 µS/cm	2460 µS/cm
NA	pH	8.46	8.57
NA	Turbidity	9.17 NTU	46.1 NTU
67-66-3	Chloroform	0.62 µg/L	0.52 µg/L
79-01-6	Trichloroethene	110 µg/L	84 µg/L
127-18-4	Tetrachloroethene	ND	ND
76-13-1	Freon 113	51 µg/L	27 µg/L
75-69-4	Freon 11	0.59 µg/L	0.34 µg/L

NTU – Nephelometric Turbidity Units
ND – Non-detect

Table 6.2 Maximum Concentrations of Primary COCs in SVE Pilot Test Wells

Maximum Analyte Concentrations in 600-SVE-1 (top of screened interval provided in ft)				
		40	90	130
CAS Number	**Analyte**	**Conc. (µg/m^3)**	**Conc. (µg/m^3)**	**Conc. (µg/m^3)**
67-66-3	Chloroform	110	100	90
79-01-6	Trichloroethene	2,000	2,600	3,700
127-18-4	Tetrachloroethene	1,100	320	590
76-13-1	Freon 113	13,000	25,000	34,000
75-69-4	Freon 11	ND	ND	ND
Maximum Analyte Concentrations in 600-SGW-1 (sample port depth provided in ft)				
		12.5	57	117.5

Table 6.2 Maximum Concentrations of Primary COCs in SVE Pilot Test Wells

CAS Number	Analyte	Conc. (µg/m^3)	Conc. (µg/m^3)	Conc. (µg/m^3)	
67-66-3	Chloroform	ND	93	ND	
79-01-6	Trichloroethene	1,900	3,400	6,400	
127-18-4	Tetrachloroethene	ND	8.4	ND	
76-13-1	Freon 113	110,000	72,000	110,000	
75-69-4	Freon 11	ND	46	ND	
Maximum Analyte Concentrations in 600-SGW-2 (sample port depth provided in ft)					
		12.5	47.5	107.5	150
CAS Number	**Analyte**	**Conc. (µg/m^3)**	**Conc. (µg/m^3)**	**Conc. (µg/m^3)**	**Conc. (µg/m^3)**
67-66-3	Chloroform	ND	ND	ND	ND
79-01-6	Trichloroethene	970	5,700	8,500	9,300
127-18-4	Tetrachloroethene	ND	ND	ND	ND
76-13-1	Freon 113	49,000	140,000	280,000	280,000
75-69-4	Freon 11	ND	ND	ND	ND
Maximum Analyte Concentrations in 600-SGW-3 (sample port depth provided in ft)					
		12.5	57.5	107.5	137.5
CAS Number	**Analyte**	**Conc. (µg/m^3)**	**Conc. (µg/m^3)**	**Conc. (µg/m^3)**	**Conc. (µg/m^3)**
67-66-3	Chloroform	33	96	50	ND
79-01-6	Trichloroethene	400	1,300	1,000	3,700
127-18-4	Tetrachloroethene	ND	ND	220	ND
76-13-1	Freon 113	6,900	9,000	8,600	330,000
75-69-4	Freon 11	18	11	7.9	1,200
Maximum Analyte Concentrations in 600-SGW-4 (sample port depth provided in ft)					
		12.5	47.5	107.5	142.5
CAS Number	**Analyte**	**Conc. (µg/m^3)**	**Conc. (µg/m^3)**	**Conc. (µg/m^3)**	**Conc. (µg/m^3)**
67-66-3	Chloroform	ND	ND	ND	ND
79-01-6	Trichloroethene	360	580	620	2,000
127-18-4	Tetrachloroethene	ND	ND	ND	ND
76-13-1	Freon 113	11,000	9,200	9,600	320,000
75-69-4	Freon 11	ND	ND	ND	ND
Maximum Analyte Concentrations in 600-SGW-5 (sample port depth provided in ft)					
		7.5	52.5	102.5	137.5
CAS Number	**Analyte**	**Conc. (µg/m^3)**	**Conc. (µg/m^3)**	**Conc. (µg/m^3)**	**Conc. (µg/m^3)**
67-66-3	Chloroform	3.3	91	78	140
79-01-6	Trichloroethene	110	2,100	2,100	14,000
127-18-4	Tetrachloroethene	ND	ND	30	ND
76-13-1	Freon 113	3,400	12,000	16,000	400,000

Table 6.2 Maximum Concentrations of Primary COCs in SVE Pilot Test Wells

75-69-4	Freon 11	14	ND	ND	1,000

Maximum Analyte Concentrations in 600-SGW-8 (sample port depth provided in ft)					
		7.5	52.5	102.5	145.5
CAS Number	**Analyte**	**Conc. (µg/m^3)**	**Conc. (µg/m^3)**	**Conc. (µg/m^3)**	**Conc. (µg/m^3)**
67-66-3	Chloroform	0.30	0.49	ND	ND
79-01-6	Trichloroethene	17	5.2	1.3	ND
127-18-4	Tetrachloroethene	ND	ND	0.48	ND
76-13-1	Freon 113	260	210	110	15
75-69-4	Freon 11	2.0	3.8	3.8	8,500

ND – Non-detect

Table 6.3 Mass Removed

		Mass of COC Extracted (grams)				
Zone	**Time Pumped (hours:minutes)**	**TCE**	**PCE**	**Chloroform**	**Freon 11**	**Freon 113**
600-SVE-1-40	6:40	2.87	0.02	0.16	NA	20.13
600-SVE-1-90	6:56	4.08	0.03	0.16	NA	38.49
600-SVE-1-130	6:30	1.23	0.01	0.03	NA	12.12
	Total extracted (grams):	**8.17**	**0.06**	**0.34**	**NA**	**70.74**

NA – Not applicable because Freon 11 was not detected in the SVE well

Table 7.1 Commercial Worker Risk Based Concentrations for COCs at Various Depths

CAS Number	Analyte	RBC (µg/m3) 5 ft bgs	RBC (µg/m^3) 10 ft bgs	RBC (µg/m^3) 50 ft bgs	RBC (µg/m^3) 100 ft bgs	RBC (µg/m^3) 150 ft bgs
67-66-3	Chloroform	440	630	2,200	4,100	6,000
79-01-6	Trichloroethene	28,000	42,000	160,000	300,000	440,000
127-18-4	Tetrachloroethene	460,000	710,000	2.7E6	5.1E6	7.6E6
76-13-1	Freon 113	1.2E8	1.9E8	6.9E8	1.3E9	1.9E9
75-69-4	Freon 11	2.8E6	4.1E6	1.5E7	2.8E7	4.2E7

Table 7.2 Comparison of Maximum Soil Gas COC Concentrations to Commercial Worker RBCs

Maximum Analyte Concentrations in 600-SVE-1 (sample port depth and RBC comparison level provided in ft)

Sample Depths:		40 (50)		90 (100)		130 (150)	
CAS Number	**Analyte**	**Conc. (µg/m^3)**	**RBC (µg/m^3)**	**Conc. (µg/m^3)**	**RBC (µg/m^3)**	**Conc. (µg/m^3)**	**RBC (µg/m^3)**
67-66-3	Chloroform	110	2,200	100	4,100	90	6,000
79-01-6	Trichloroethene	2,000	160,000	2,600	300,000	3,700	440,000
127-18-4	Tetrachloroethene	1,100	2.7E6	320	5.1E6	590	7.6E6
76-13-1	Freon 113	13,000	6.9E8	25,000	1.3E9	34,000	1.9E9
75-69-4	Freon 11	ND	1.5E7	ND	2.8E7	ND	4.2E7

Maximum Analyte Concentrations in 600-SGW-1 (sample port depth and RBC comparison level provided in ft)

Sample Depths:		12.5 (10)		57 (50)		117.5 (100)	
CAS Number	**Analyte**	**Conc. (µg/m^3)**	**RBC (µg/m^3)**	**Conc. (µg/m^3)**	**RBC (µg/m^3)**	**Conc. (µg/m^3)**	**RBC (µg/m^3)**
67-66-3	Chloroform	ND	630	93	2,200	ND	4,100
79-01-6	Trichloroethene	1,900	42,000	3,400	160,000	6,400	300,000

Table 7.2 Comparison of Maximum Soil Gas COC Concentrations to Commercial Worker RBCs

127-18-4	Tetrachloroethene	ND	710,000	8.4	2.7E6	ND	5.1E6
76-13-1	Freon 113	110,000	1.9E8	72,000	6.9E8	110,000	1.3E9
75-69-4	Freon 11	ND	4.1E6	46	1.5E7	ND	2.8E7

Maximum Analyte Concentrations in 600-SGW-2 (sample port depth and RBC comparison level provided in ft)

Sample Depths:		12.5 (10)		47.5 (50)		107.5 (100)		150 (150)	
CAS Number	**Analyte**	**Conc. (µg/m^3)**	**RBC (µg/m^3)**	**Conc. (µg/m^3)**	**RBC (µg/m^3)**	**Conc. (µg/m^3)**	**RBC (µg/m^3)**	**Conc. (µg/m^3)**	**RBC (µg/m^3)**
67-66-3	Chloroform	ND	630	ND	2,200	ND	4,100	ND	6,000
79-01-6	Trichloroethene	970	42,000	5,700	160,000	8,500	300,000	9,300	440,000
127-18-4	Tetrachloroethene	ND	710,000	ND	2.7E6	ND	5.1E6	ND	7.6E6
76-13-1	Freon 113	49,000	1.9E8	140,000	6.9E8	280,000	1.3E9	280,000	1.9E9
75-69-4	Freon 11	ND	4.1E6	ND	1.5E7	ND	2.8E7	ND	4.2E7

Maximum Analyte Concentrations in 600-SGW-3 (sample port depth and RBC comparison level provided in ft)

Sample Depths:		12.5 (10)		47.5 (50)		107.5 (100)		150 (150)	
CAS Number	**Analyte**	**Conc. (µg/m^3)**	**RBC (µg/m^3)**	**Conc. (µg/m^3)**	**RBC (µg/m^3)**	**Conc. (µg/m^3)**	**RBC (µg/m^3)**	**Conc. (µg/m^3)**	**RBC (µg/m^3)**
67-66-3	Chloroform	33	630	96	2,200	50	4,100	ND	6,000
79-01-6	Trichloroethene	400	42,000	1,300	160,000	1,000	300,000	3,700	440,000
127-18-4	Tetrachloroethene	ND	710,000	ND	2.7E6	220	5.1E6	ND	7.6E6
76-13-1	Freon 113	6,900	1.9E8	9,000	6.9E8	8,600	1.3E9	330,000	1.9E9
75-69-4	Freon 11	18	4.1E6	11	1.5E7	7.9	2.8E7	1,200	4.2E7

Maximum Analyte Concentrations in 600-SGW-4 (sample port depth and RBC comparison level provided in ft)

Sample Depths:		12.5 (10)		47.5 (50)		107.5 (100)		142.5 (150)	
CAS Number	**Analyte**	**Conc. (µg/m^3)**	**RBC**	**Conc. (µg/m^3)**	**RBC**	**Conc. (µg/m^3)**	**RBC**	**Conc. (µg/m^3)**	**RBC**

Table 7.2 Comparison of Maximum Soil Gas COC Concentrations to Commercial Worker RBCs

67-66-3	Chloroform	ND	630	ND	2,200	ND	4,100	ND	6,000
79-01-6	Trichloroethene	360	42,000	580	160,000	620	300,000	2,000	440,000
127-18-4	Tetrachloroethene	ND	710,000	ND	2.7E6	ND	5.1E6	ND	7.6E6
76-13-1	Freon 113	11,000	1.9E8	9,200	6.9E8	9,600	1.3E9	320,000	1.9E9
75-69-4	Freon 11	ND	4.1E6	ND	1.5E7	ND	2.8E7	ND	4.2E7

Maximum Analyte Concentrations in 600-SGW-5 (sample port depth and RBC comparison level provided in ft)

Sample Depths:		7.5(5)		52.5 (50)		102.5 (100)		137.5 (150)	
CAS Number	**Analyte**	**Conc. (μg/m^3)**	**RBC (μg/m^3)**	**Conc. (μg/m^3)**	**RBC (μg/m^3)**	**Conc. (μg/m^3)**	**RBC (μg/m^3)**	**Conc. (μg/m^3)**	**RBC (μg/m^3)**
67-66-3	Chloroform	3.3	440	91	2,200	78	4,100	140	6,000
79-01-6	Trichloroethene	110	42,000	2,100	160,000	2,100	300,000	14,000	440,000
127-18-4	Tetrachloroethene	ND	710,000	ND	2.7E6	30	5.1E6	ND	7.6E6
76-13-1	Freon 113	3,400	1.2E7	12,000	6.9E8	16,000	1.3E9	400,000	1.9E9
75-69-4	Freon 11	14	2.8E6	ND	1.5E7	ND	2.8E7	1,000	4.2E7

Maximum Analyte Concentrations in 600-SGW-8 (sample port depth and RBC comparison level provided in ft)

Sample Depths:		7.5 (5)		52.5 (50)		102.5 (100)		145.5 (150)	
CAS Number	**Analyte**	**Conc. (μg/m^3)**	**RBC (μg/m^3)**	**Conc. (μg/m^3)**	**RBC (μg/m^3)**	**Conc. (μg/m^3)**	**RBC (μg/m^3)**	**Conc. (μg/m^3)**	**RBC (μg/m^3)**
67-66-3	Chloroform	0.30	440	0.49	2,200	ND	4,100	ND	6,000
79-01-6	Trichloroethene	17	42,000	5.2	160,000	1.3	300,000	ND	440,000
127-18-4	Tetrachloroethene	ND	710,000	ND	2.7E6	0.48	5.1E6	ND	7.6E6
76-13-1	Freon 113	260	1.2E8	210	6.9E8	110	1.3E9	15	1.9E9
75-69-4	Freon 11	2.0	2.8E6	3.8	1.5E7	3.8	2.8E7	8,500	4.2E7

ND – Non-detect

Figures

Figure 1.1 WSTF Location Map

(See figure on next page.)

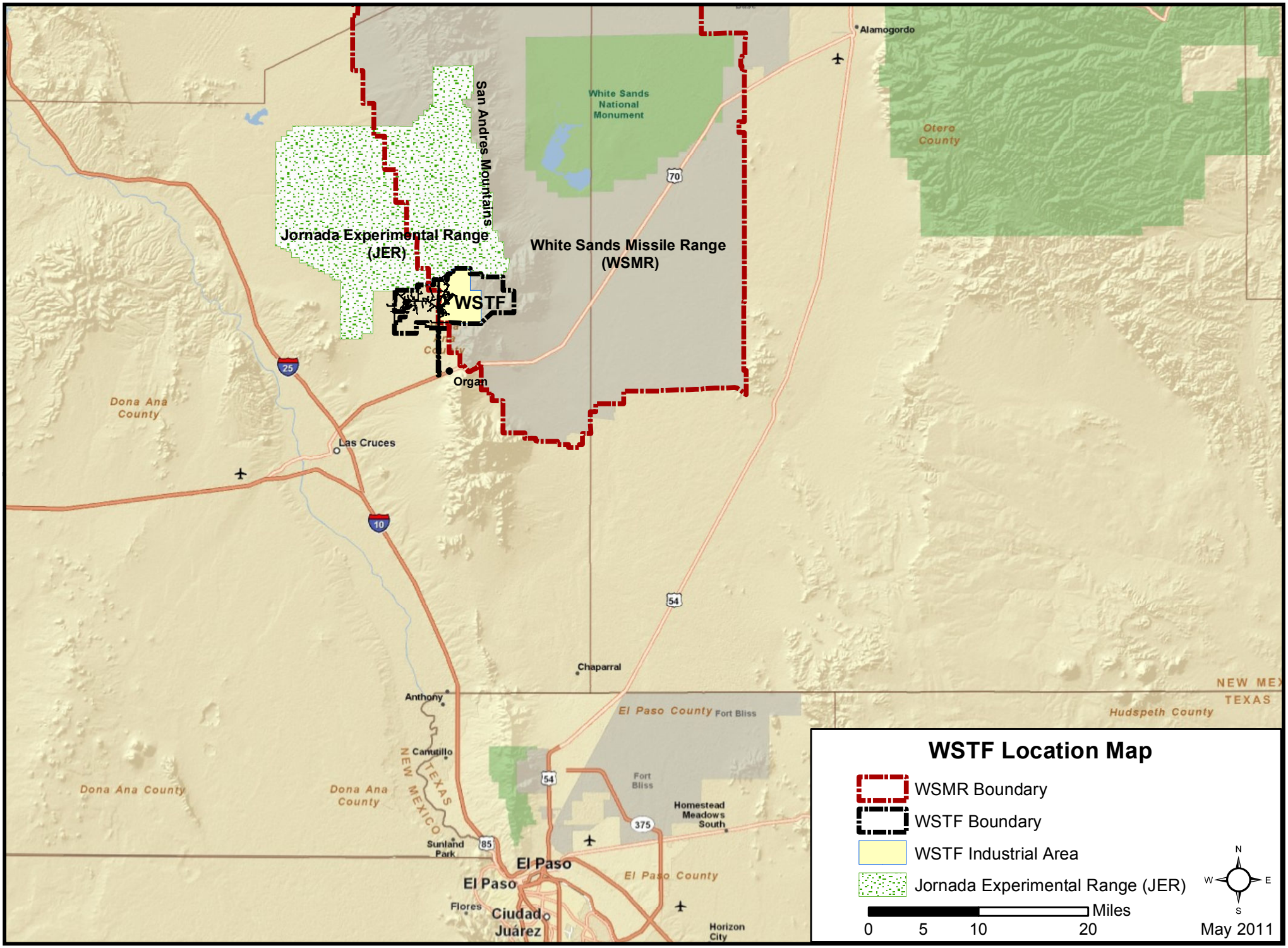

WSTF Location Map
WSMR Boundary
WSTF Boundary
WSTF Industrial Area
Jornada Experimental Range (JER)
Miles
0
5
10
20
May 2011
N
S
E
W
Jornada Experimental Range (JER)
San Andres Mountains
White Sands Missile Range (WSMR)
WSTF
White Sands National Monument
Alamogordo
Otero County
Organ
Las Cruces
Dona Ana County
Chaparral
Anthony
Canutillo
Sunland Park
El Paso
Ciudad Juárez
Flores
Horizon City
Homestead Meadows South
Fort Bliss
El Paso County
Hudspeth County
NEW MEXICO
TEXAS
70
25
10
54
85
375

Figure 1.2 Topographic Map of 100 and 600 Areas

(See figure on next page.)

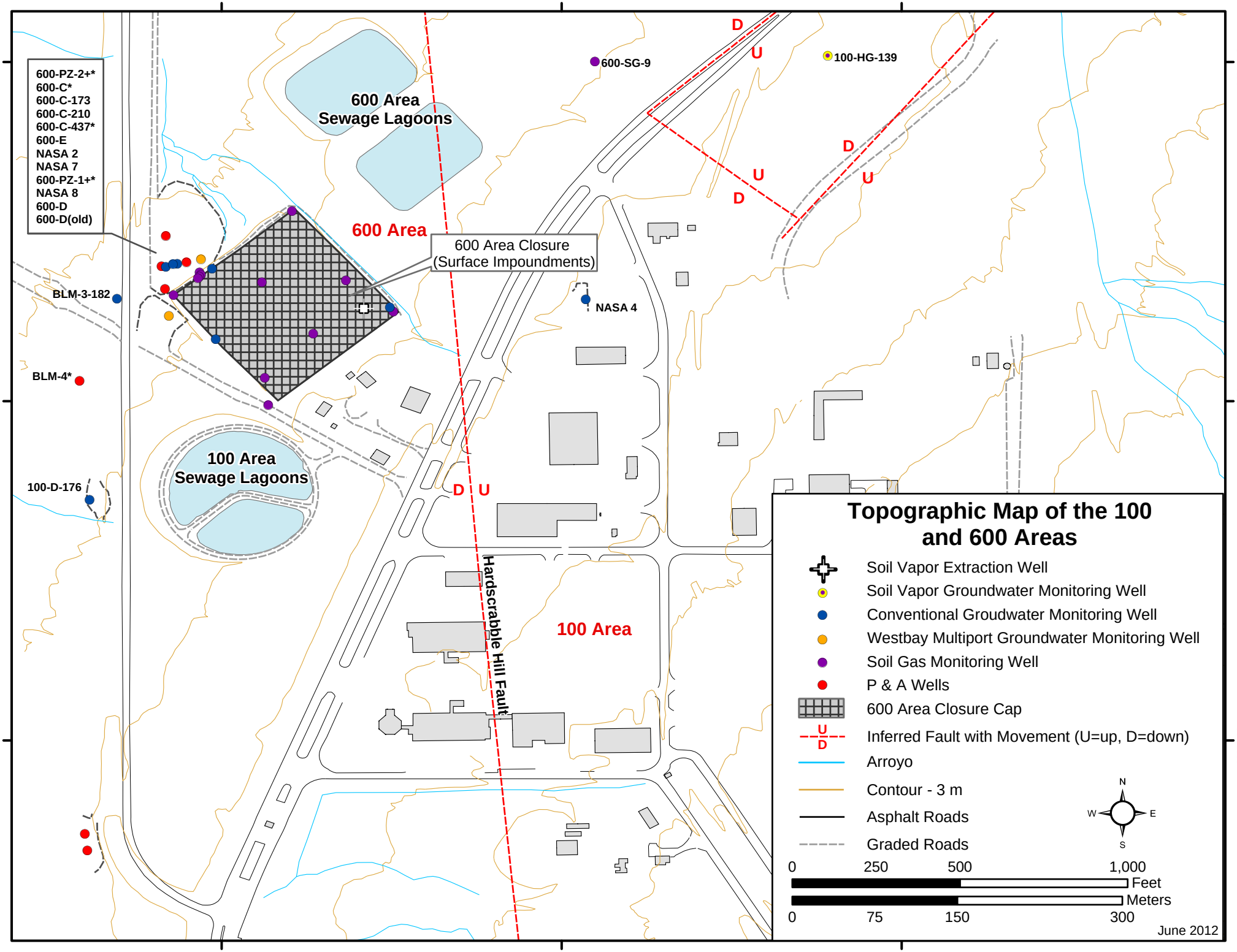

Topographic Map of the 100 and 600 Areas
Soil Vapor Extraction Well
Soil Vapor Groundwater Monitoring Well
Conventional Groudwater Monitoring Well
Westbay Multiport Groundwater Monitoring Well
Soil Gas Monitoring Well
P & A Wells
600 Area Closure Cap
Inferred Fault with Movement (U=up, D=down)
Arroyo
Contour - 3 m
Asphalt Roads
Graded Roads
0 250 500 1,000 Feet
0 75 150 300 Meters
June 2012
600 Area Sewage Lagoons
600 Area
600 Area Closure (Surface Impoundments)
100 Area Sewage Lagoons
100 Area
Hardscrabble Hill Fault
600-SG-9
100-HG-139
NASA 4
BLM-3-182
BLM-4*
100-D-176
600-PZ-2+*
600-C*
600-C-173
600-C-210
600-C-437*
600-E
NASA 2
NASA 7
600-PZ-1+*
NASA 8
600-D
600-D(old)
106°36'50"W
106°36'40"W
106°36'30"W
32°30'40"N
32°30'30"N
32°30'20"N

Figure 2.1 Map of 600 Area Closure

(See figure on next page.)

600 Closure Soil Boring 2009/2010
600 Area Soil Boring (1987)
600 Closure Soil Gas Well (1987)
Conventional Well
Perched Water Well
Multiport Well
MSVGM Well
P&A Well
600 Closure Soil Gas Well (2009/2010)
Soil Vapor Extraction Well
Former 600 Surface Impoundments
WSTF Steam Cleaning Pad
Overflow Pipe (Removed 1988)
Hazardous Waste Transmission Line (Abandoned 1988)

0 50 100 200 Feet
0 15 30 60 Meters

N W E S

May 2012

Figure 3.1 Photograph of URS Mobile SVE Unit

Figure 3.2 Photograph of SVE Wellhead Configuration

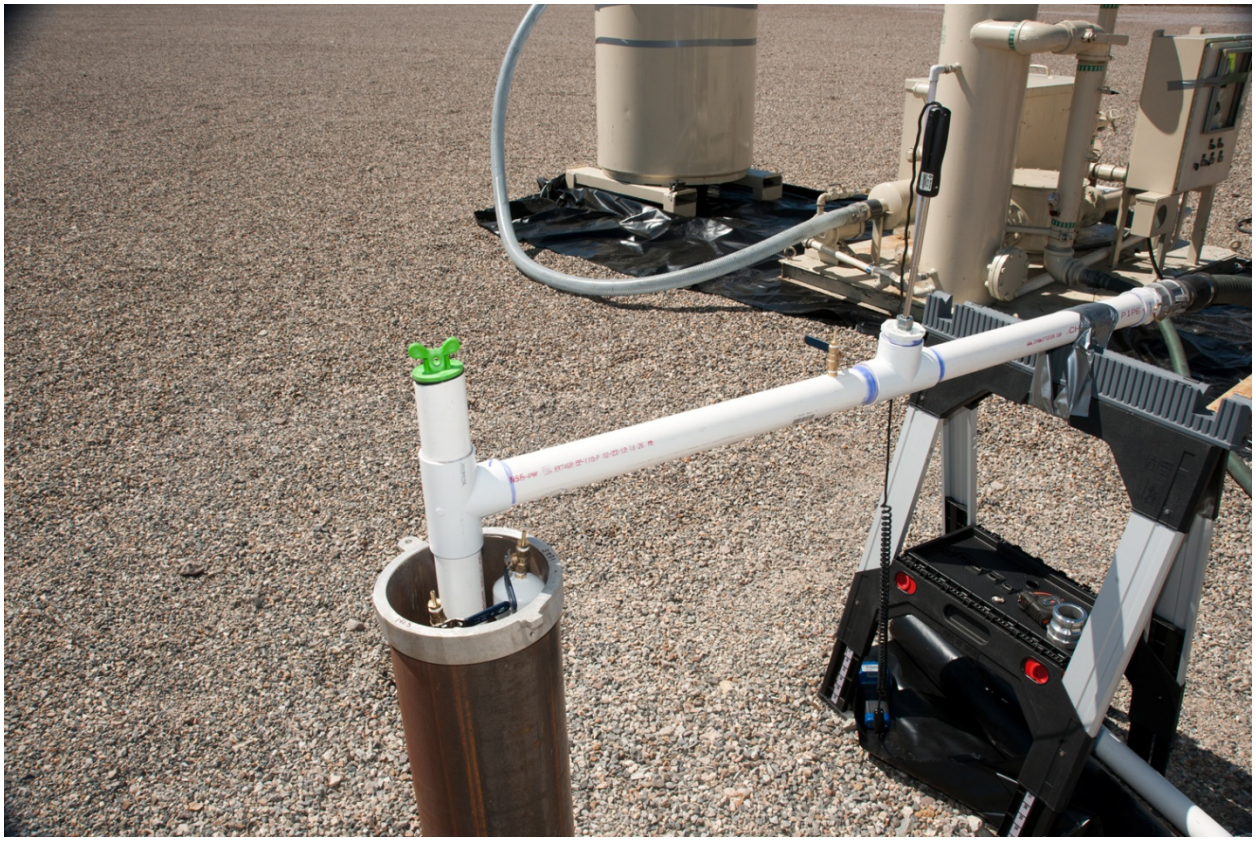


Figure 7.1 Vertical Concentration Profile of Chloroform in 600-SVE-1 during Pilot Test

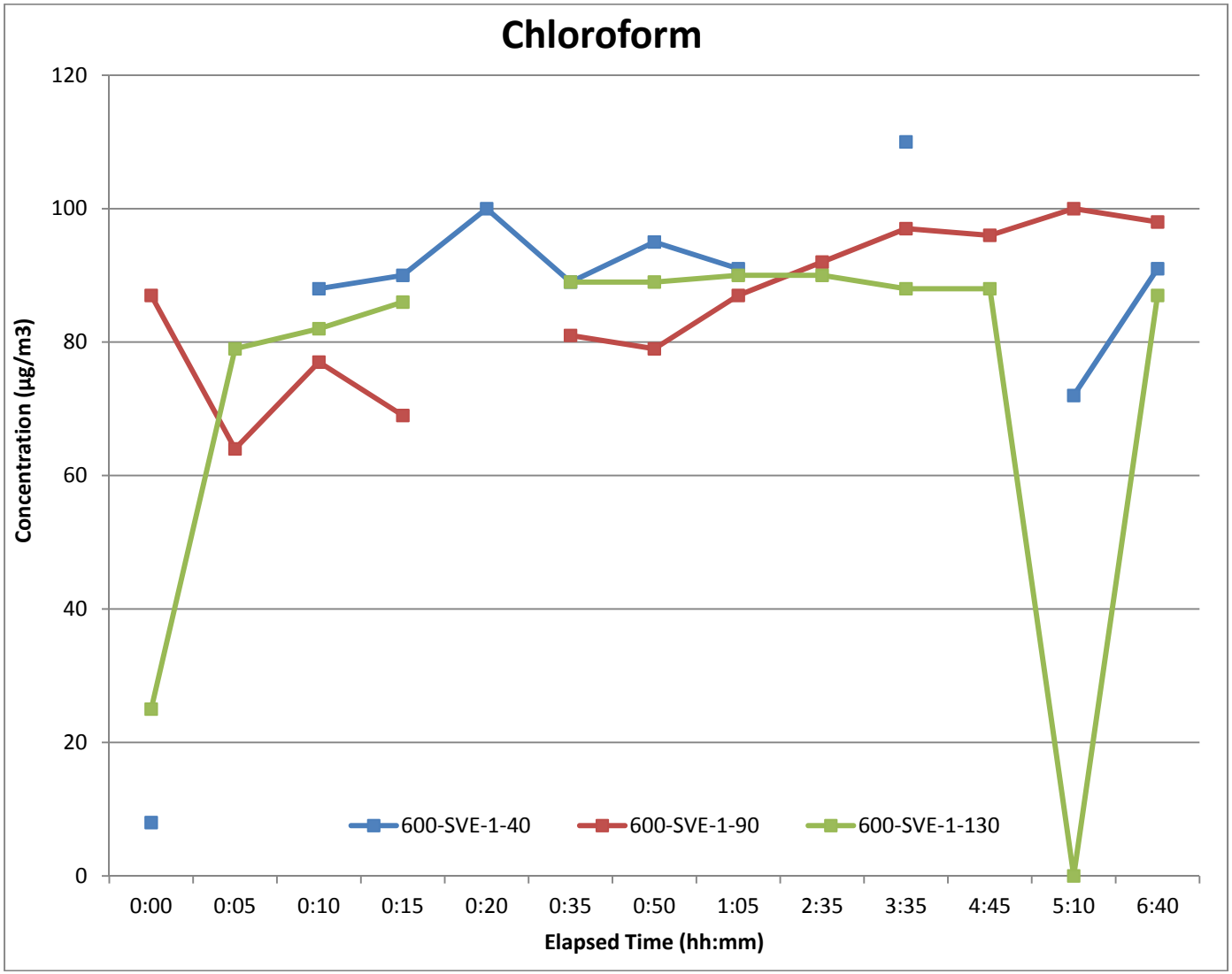


Figure 7.2 Vertical Concentration Profile of TCE in 600-SVE-1 during Pilot Test

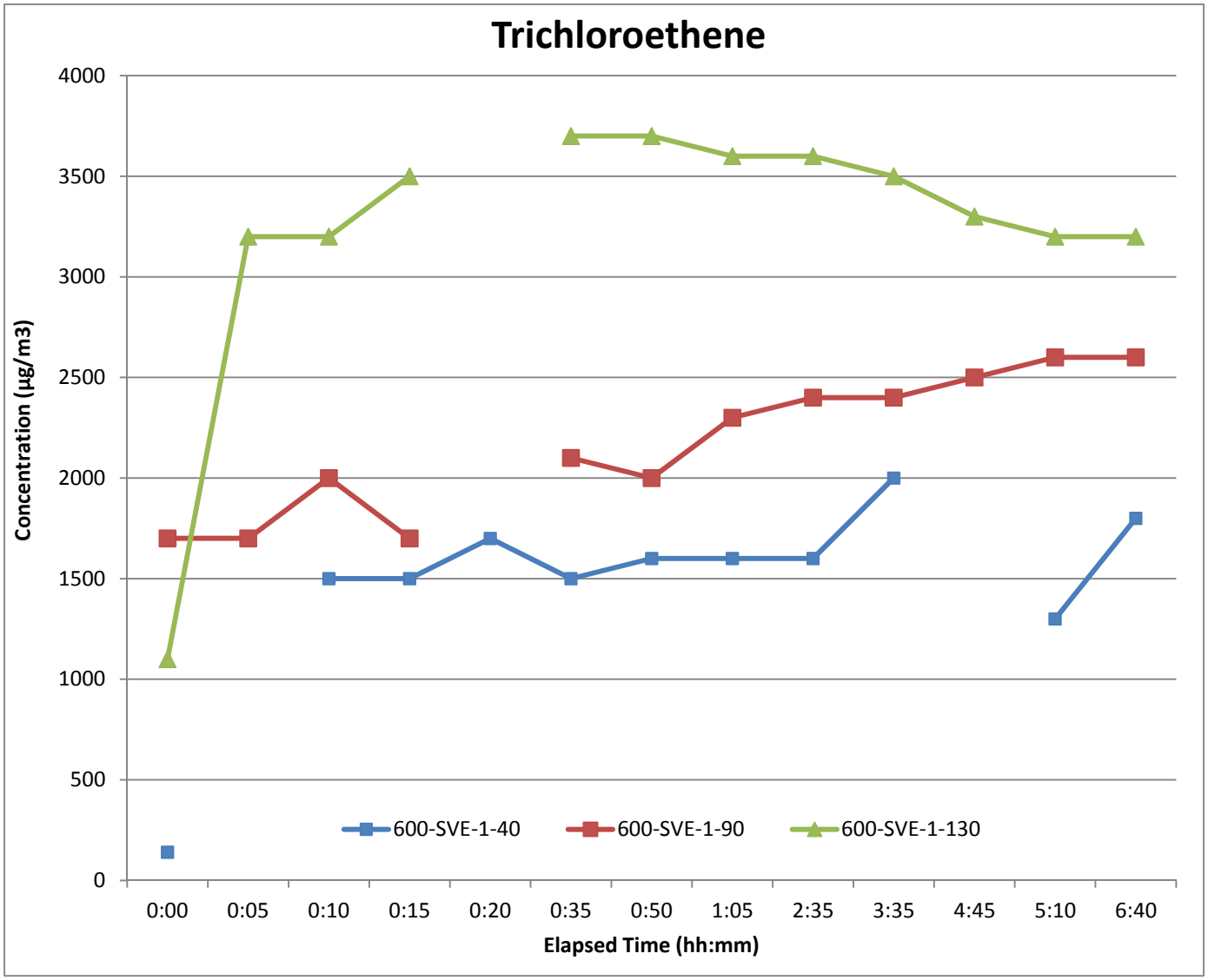


Figure 7.3 Vertical Concentration Profile of PCE in 600-SVE-1 during Pilot Test

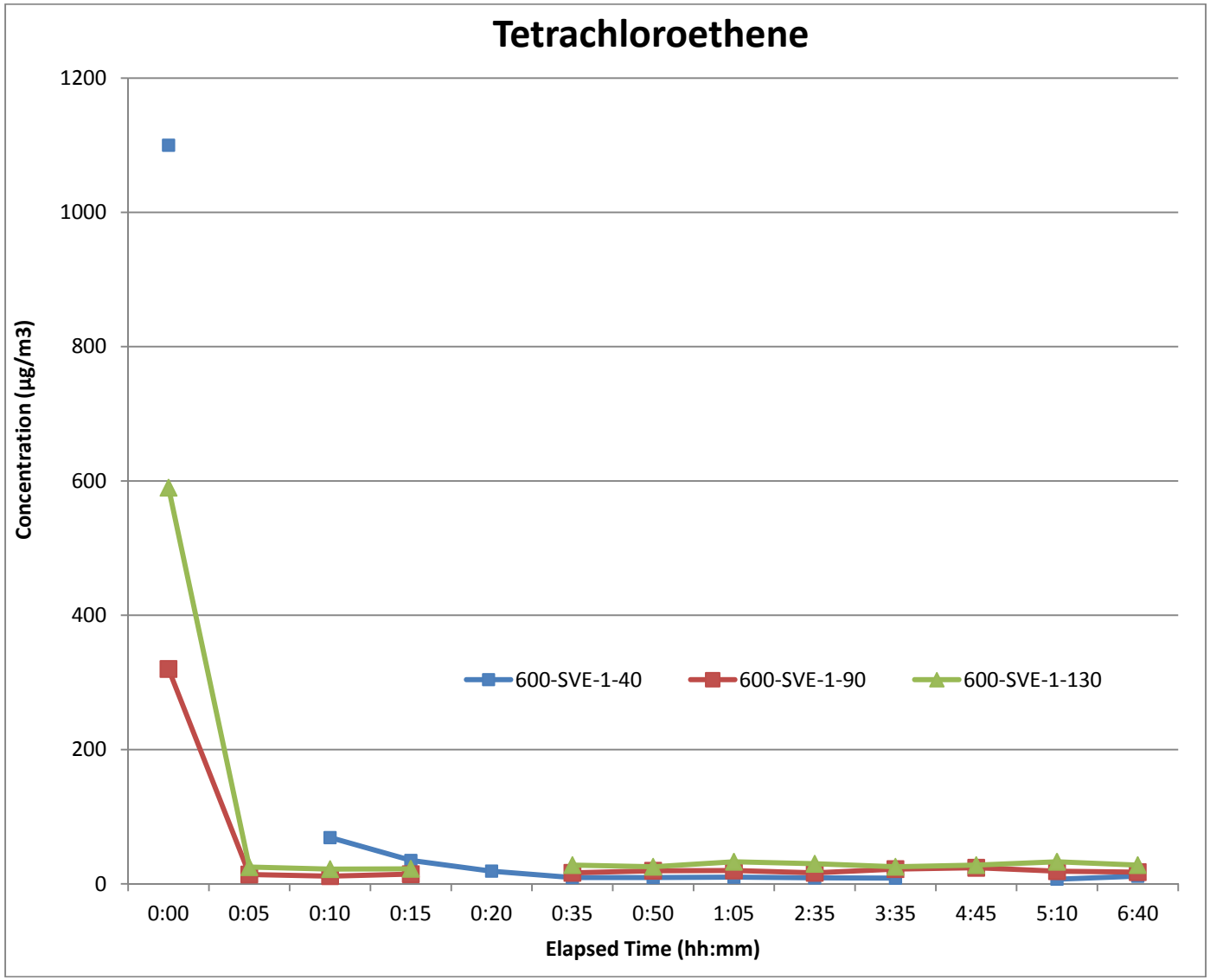


Figure 7.4 Vertical Concentration Profile of Freon 113 in 600-SVE-1 during Pilot Test

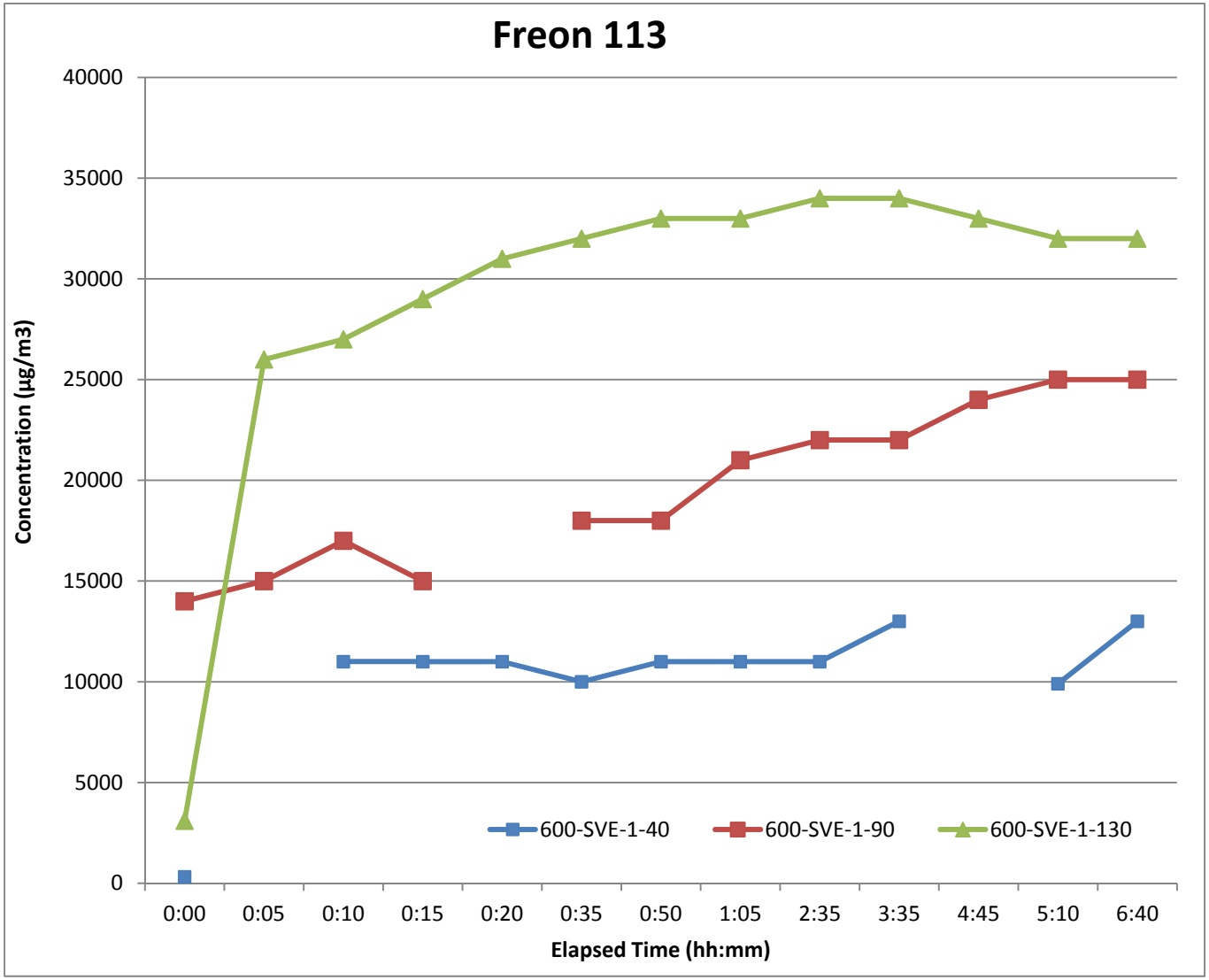


Figure 7.5 Comparison of Chloroform Concentrations in 600-SVE-1-40 to RBC

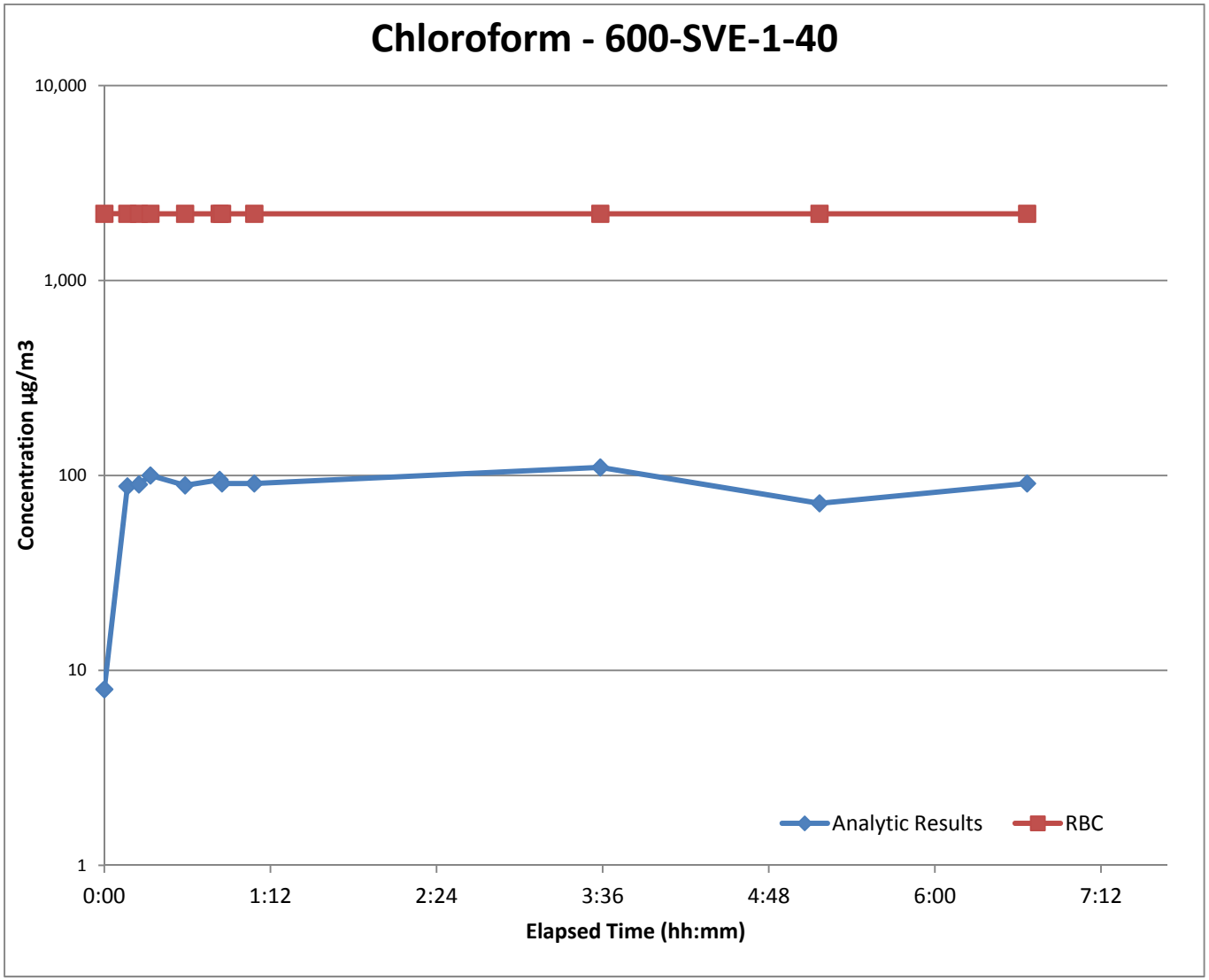


Figure 7.6 Comparison of TCE Concentrations in 600-SVE-1-40 to RBC

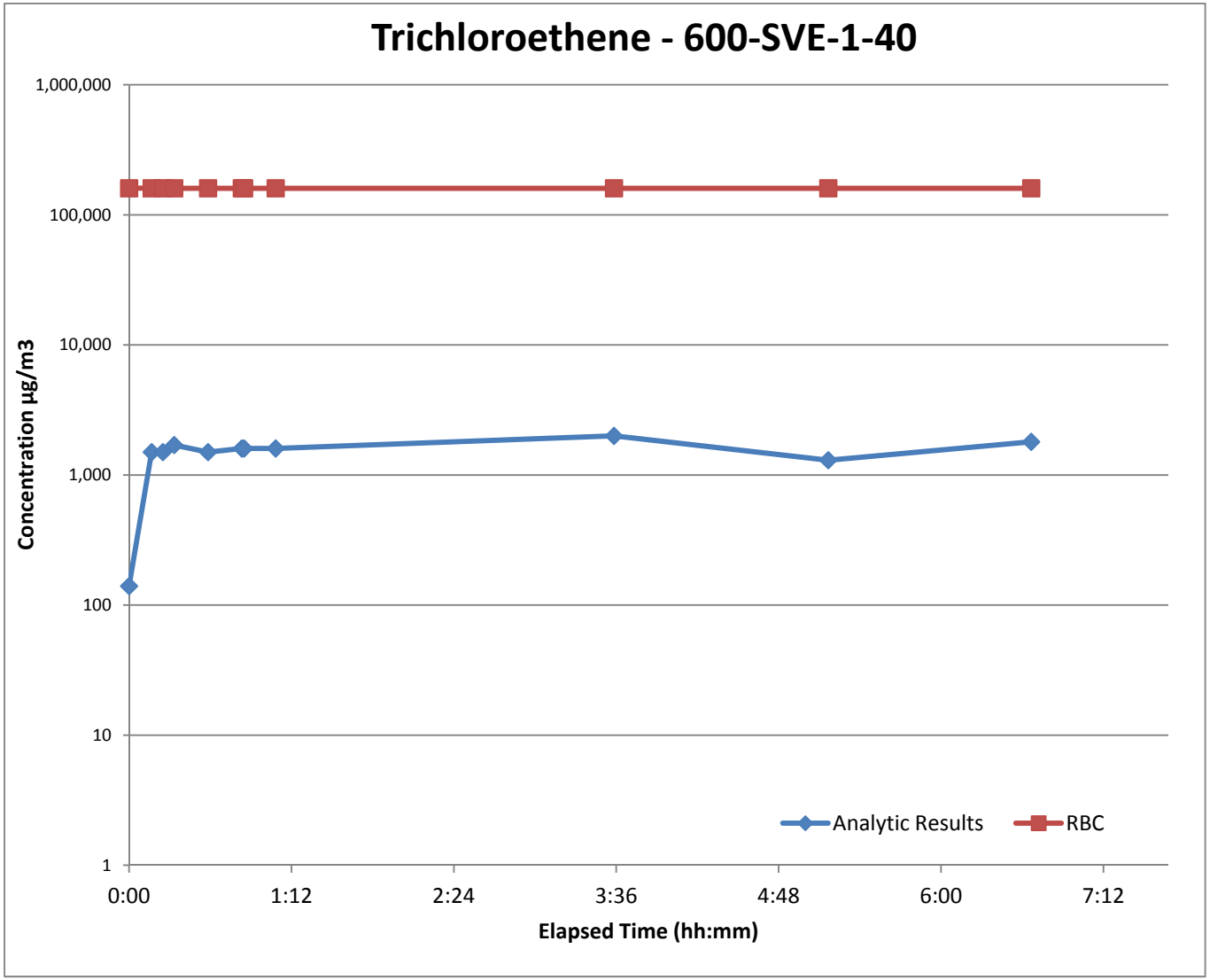


Figure 7.7 Comparison of PCE Concentrations in 600-SVE-1-40 to RBC

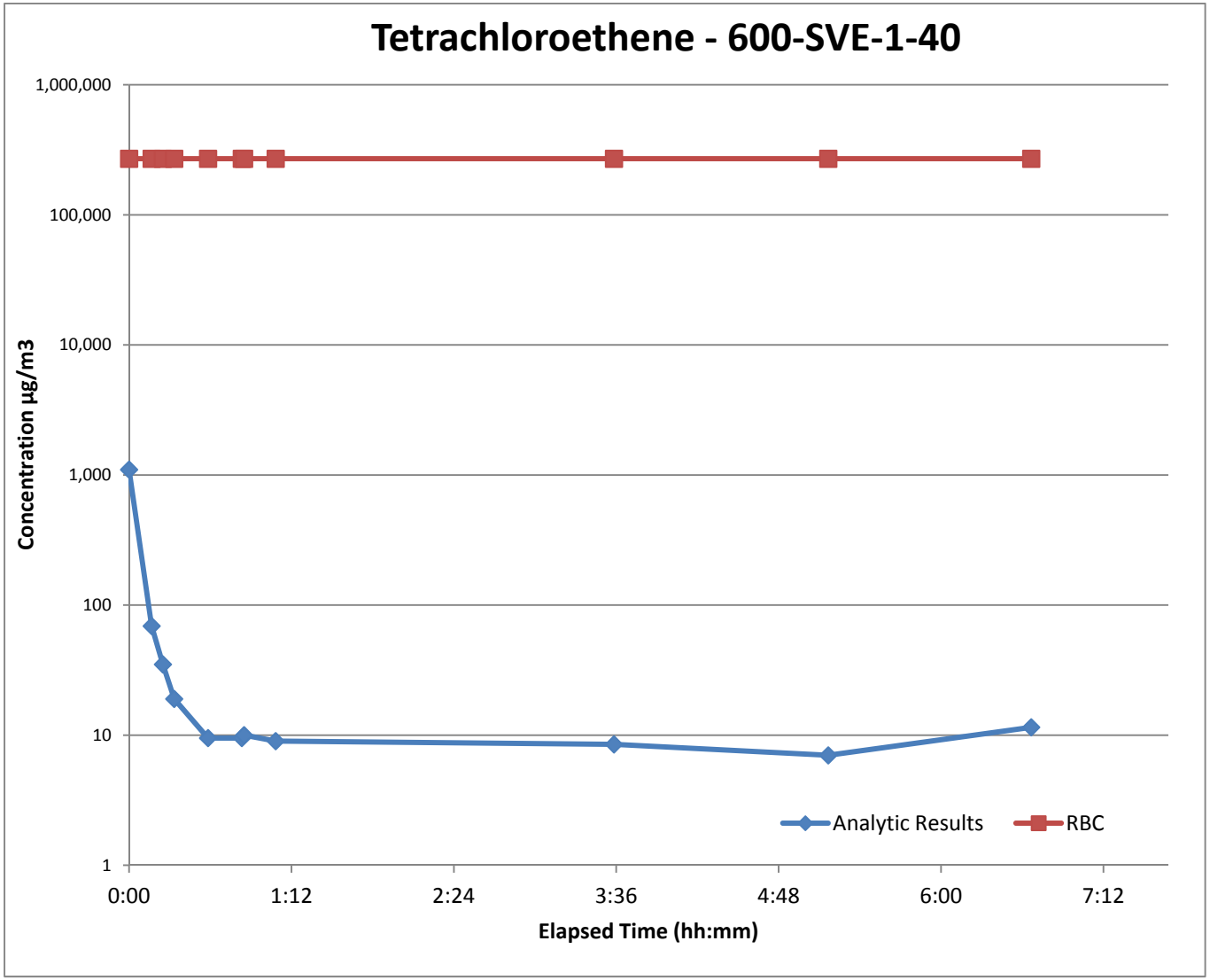


Figure 7.8 Comparison of Freon 113 Concentrations in 600-SVE-1-40 to RBC

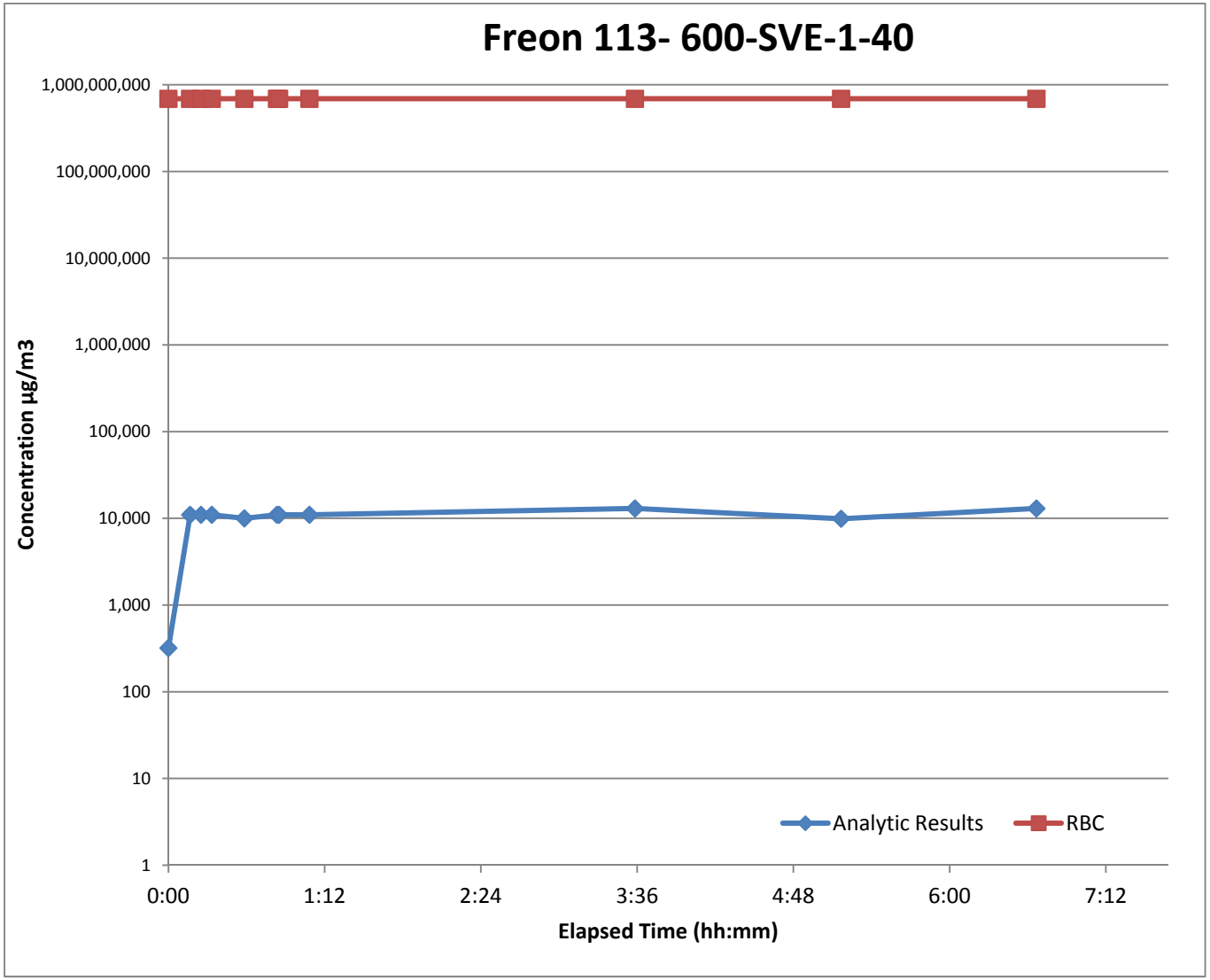


Figure 7.9 Comparison of Chloroform Concentrations in 600-SVE-1-90 to RBC

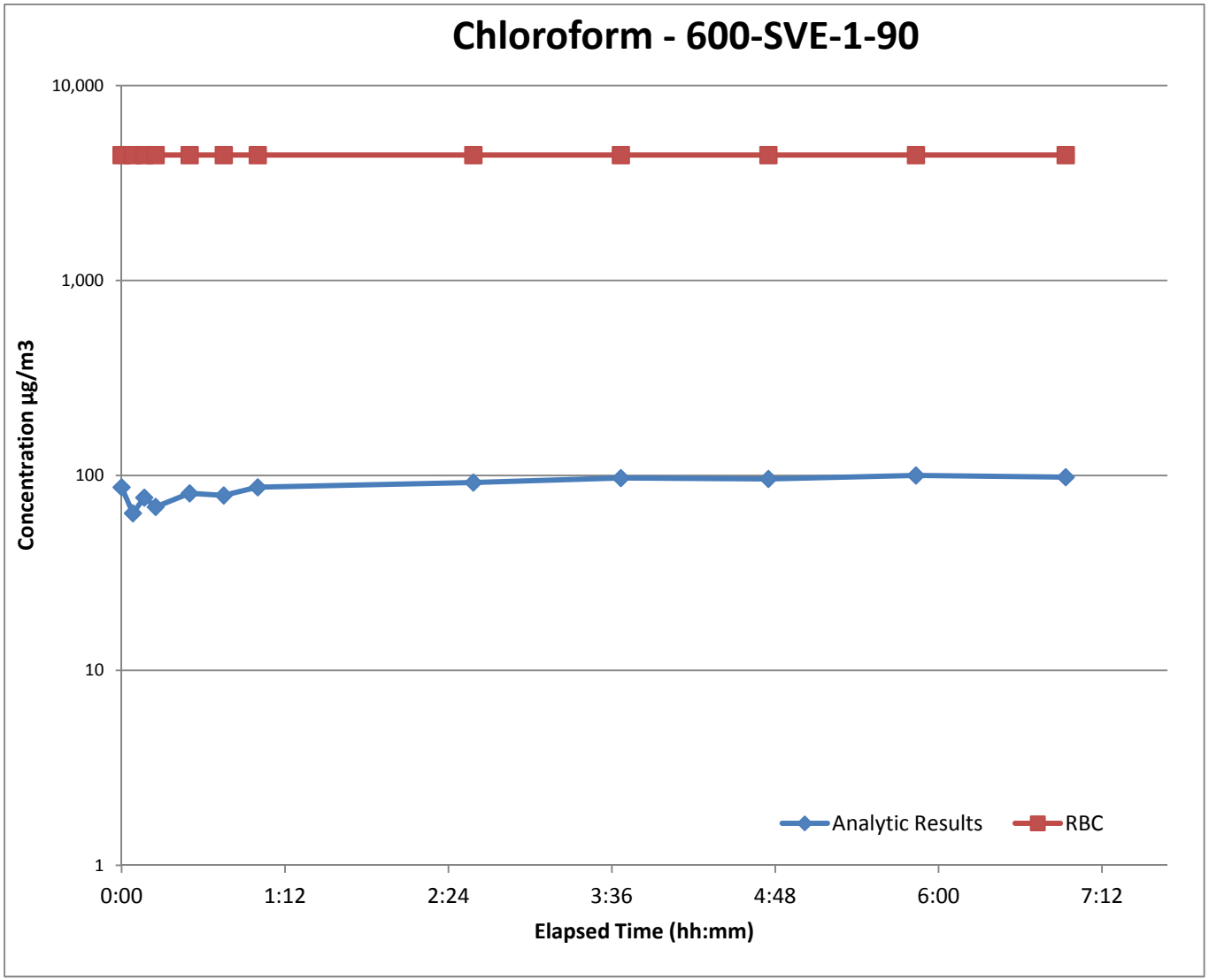


Figure 7.10 Comparison of TCE Concentrations in 600-SVE-1-90 to RBC

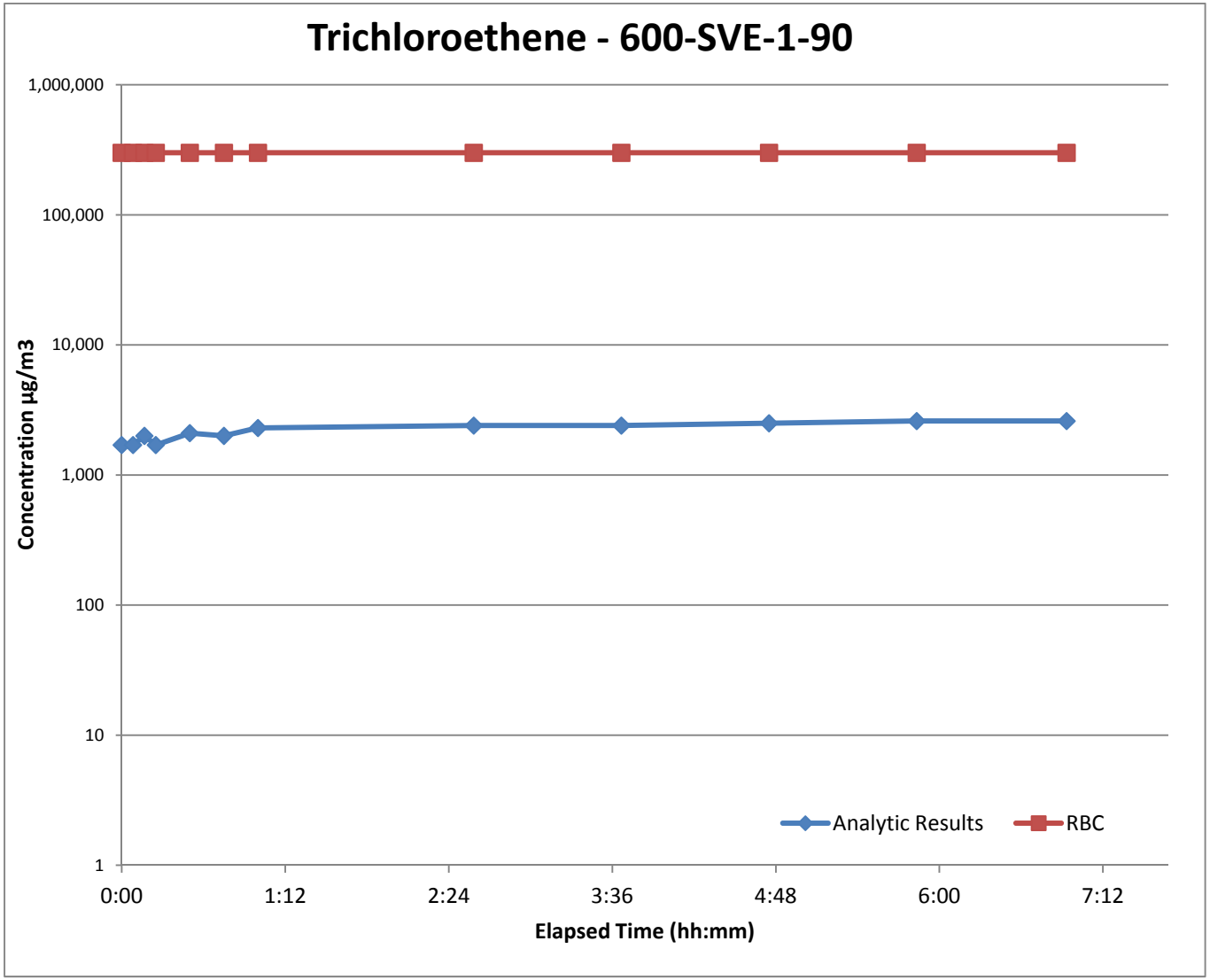


Figure 7.11 Comparison of Freon 113 Concentrations in 600-SVE-1-90 to RBC

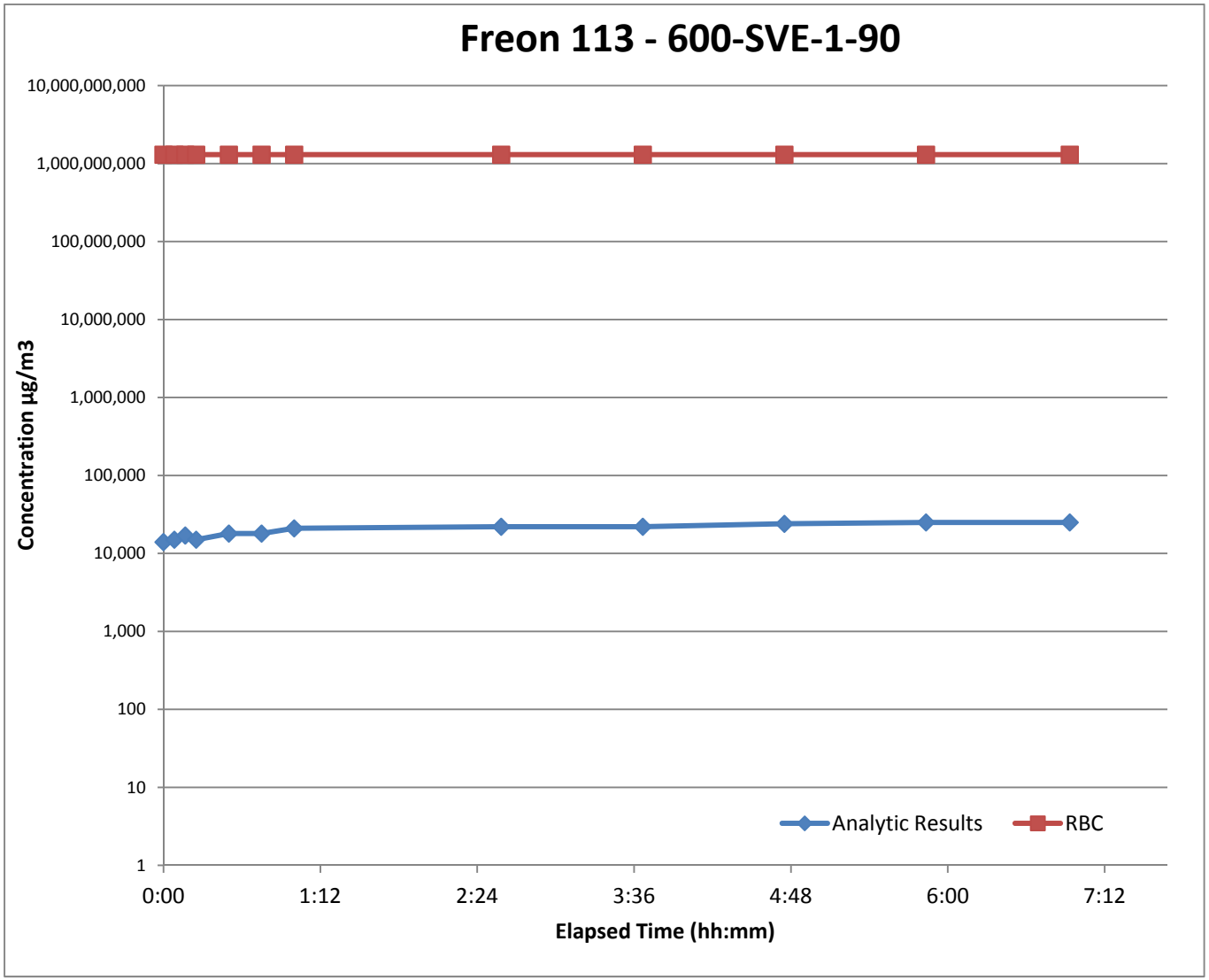


Figure 7.12 Comparison of Chloroform Concentrations in 600-SVE-1-130 to RBC

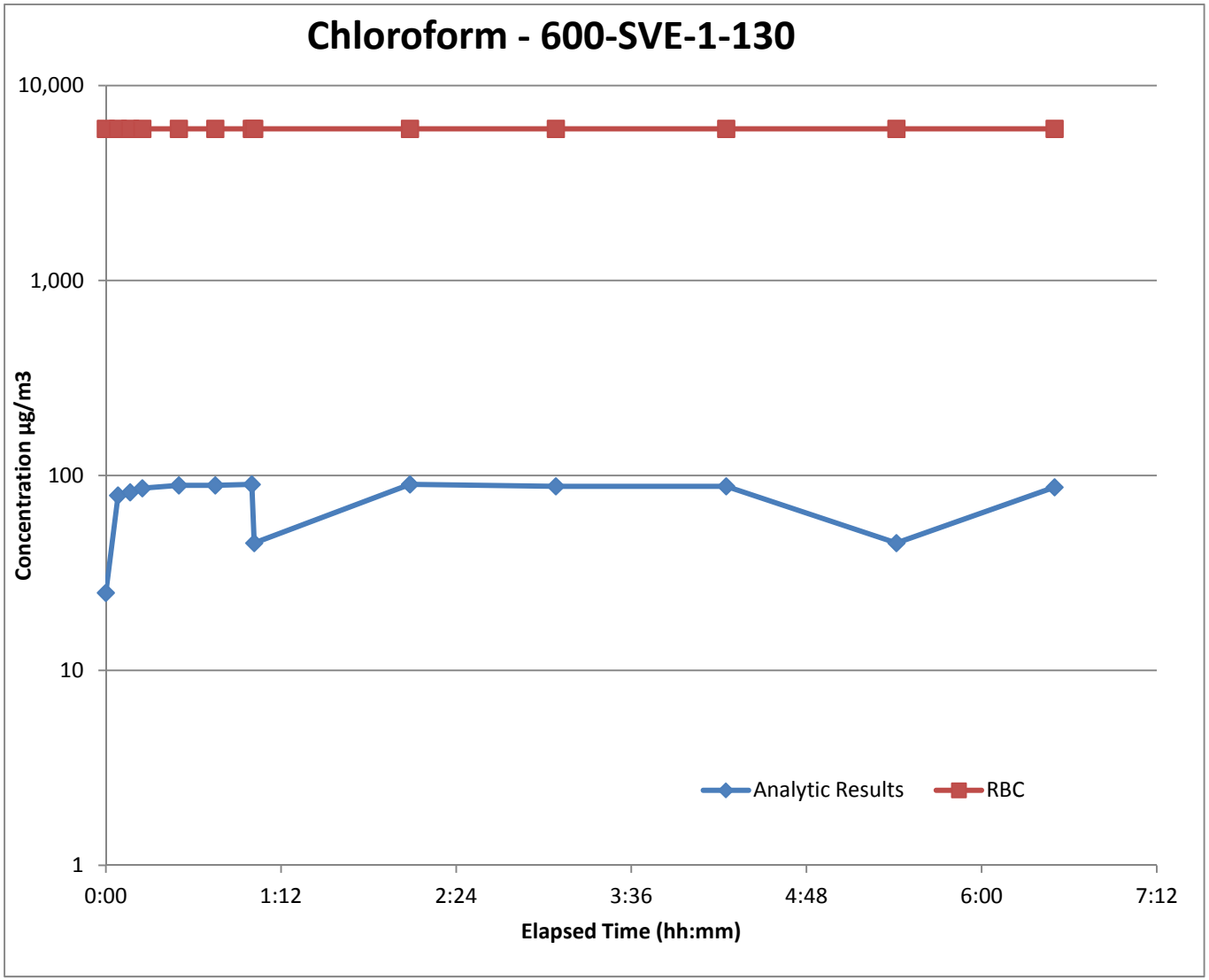


Figure 7.13 Comparison of TCE Concentrations in 600-SVE-1-130 to RBC

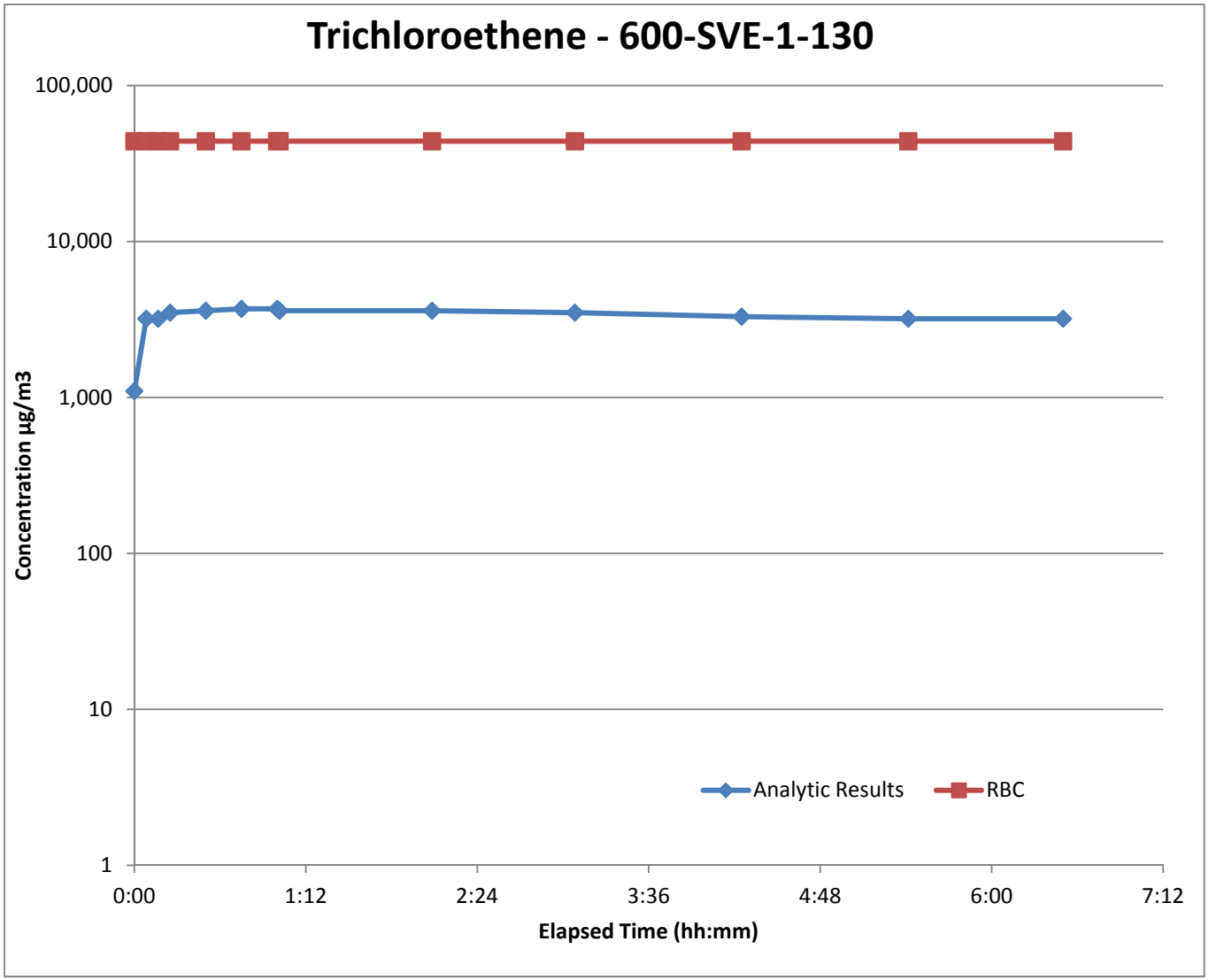
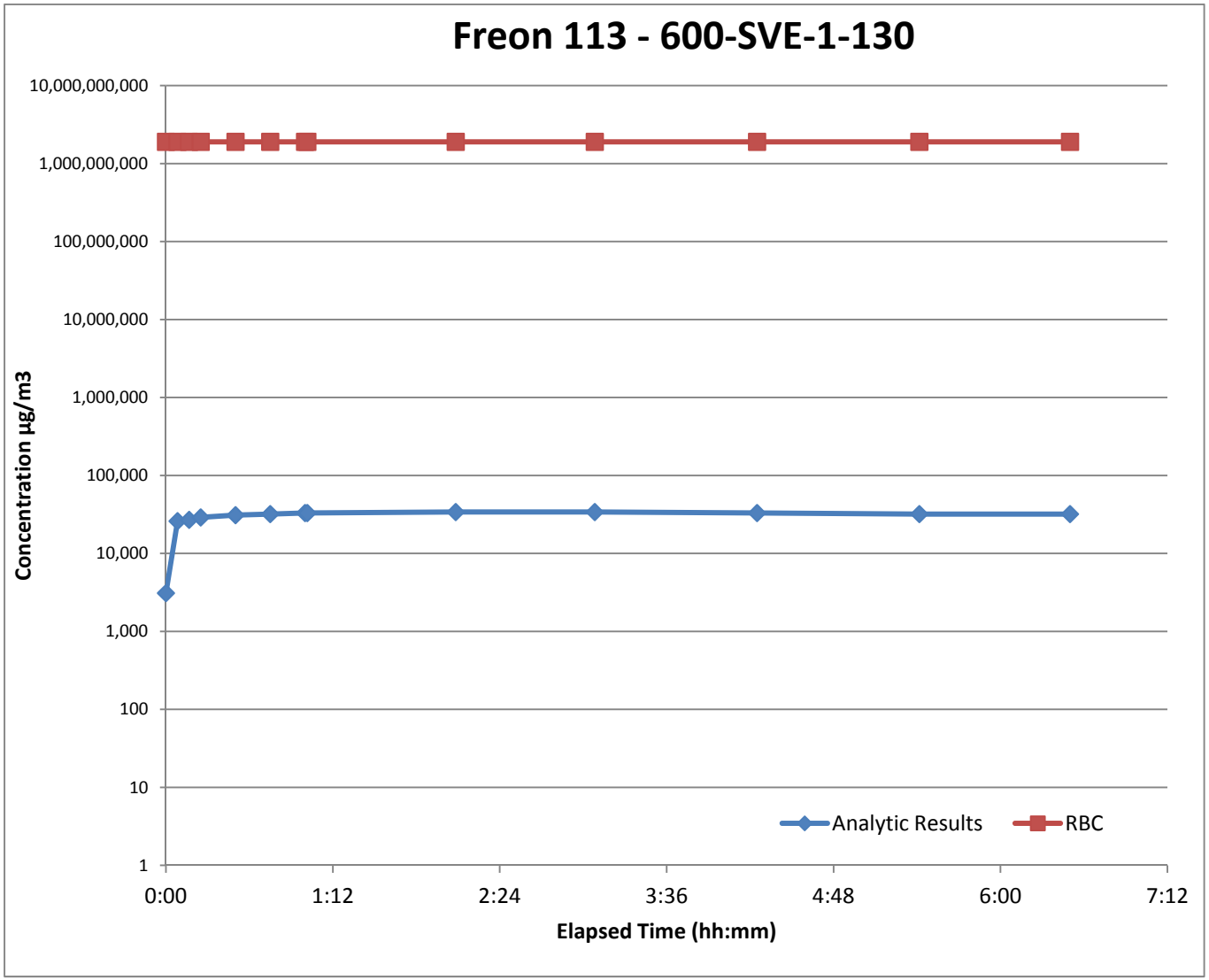


Figure 7.14 Comparison of Freon 113 Concentrations in 600-SVE-1-130 to RBC



Appendix A

Borehole Lithologic Logs and Completion Diagrams

(600-SVE-1 and 600-G-138)

BOREHOLE LITHOLOGIC LOG

JSC - White Sands Test Facility
Las Cruces, New Mexico, USA

Location ID: **600-SVE-1**

Site ID: **NASA-WSTF, Doña Ana County, NM**

Township and Range: **SW 1/4, NW 1/4, SW 1/4, Sec. 2, T21S, R3E**
NM State Plane Coordinates (NAD 83): **549114.72 N 1528593.37 E ***
Elevation (Brass Cap): **4762.04 ft (ground)***
Total Depth of Borehole (bgs): **152'**
Bedrock Type and Depth (bgs): **149'; Rhyolitic Tuff**
Drilling Method: **Stratex Casing Advance Air Rotary**
Drilling Contractor: **WDC Exploration & Wells**
Driller: **T. Valentine, L. Aylmer**
Sampling Method: **N/A**

Depth to Groundwater: **Water observed @ 152'**
Surface Casing Depth and Diameter: **10"**
Borehole Diameter: **12"**

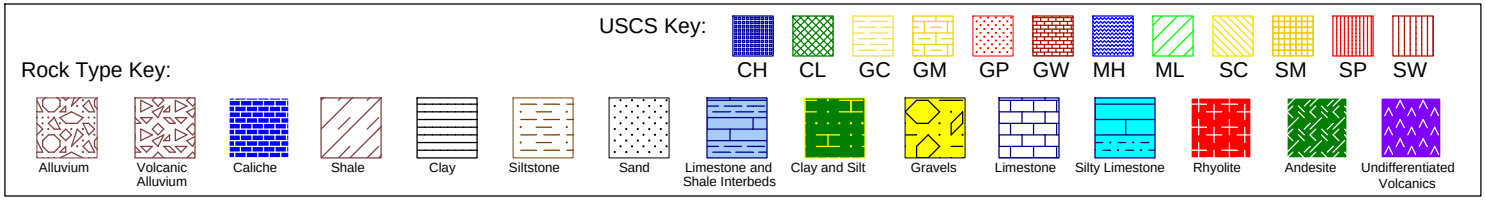
Field Representative(s): **Jim Lawrence**

Dates Drilling Started and Completed: **10/2/2011-10/11/2011**
Comments: ***survey data taken by WSTF personnel using GPS.**

USCS Key: CH CL GC GM GP GW MH ML SC SM SP SW

Rock Type Key: Alluvium, Volcanic Alluvium, Caliche, Shale, Clay, Siltstone, Sand, Limestone and Shale Interbeds, Clay and Silt, Gravels, Limestone, Silty Limestone, Rhyolite, Andesite, Undifferentiated Volcanics

Depth (bgs) feet meters	Lithology	Visual Percent 0 100	%	From	To	Sample I.D. Number	Sample Type	USCS	Lithology Description
0							Grab sample chips were collected every 10' (3.05 m) from cyclone for lithology descriptions.	Alluvial soils are primarily GM (silty gravel).	0'-7' (0-2.13 m) CLOSURE CAP (imported fill): 0'-2.5' (0-0.76 m) GRAVEL: angular to subrounded, fine to coarse mixture, limestone/volcanics (fill). 2.5'-6.5' (0.76-1.98 m) SAND: medium grained, subrounded to round, fine to coarse sand, light brown (7.5 YR 8/1). Well graded (fill). 6.5'-7' (1.98-2.13 m) CONCRETE. 7'-149' (2.13- 45.42 m) SANTA FE GROUP ALLUVIUM: Late Pliocene to Quaternary in age. Alluvium comprises a poorly to moderately cemented pebble to boulder conglomerate. Caliche horizons, clay lenses, and carbonate-cemented zones occur sporadically throughout the alluvial section. The unit is generally light gray (7.5 YR 7/1) to reddish yellow (7.5 YR 6/6) for unwashed chips. The alluvium is unconsolidated and comprises a silty sandy gravel with clasts supported in a matrix of sand, silt, and clay. Sorting is poor and clasts range from angular to subrounded. Clasts comprise 35-65% of the lithologic samples. Rock chips range between 0.05 and 0.6" (0.13-1.53 cm) in size. Larger clasts have been pulverized by the Stratex drilling method. Sedimentary clasts include light gray (N7) to gray (N4) micritic to fossiliferous limestone, brown (7.5 YR 5/3) siltstone, and reddish brown (5 YR 5/3) sandstone. Volcanic clasts comprise pinkish white (5 YR 8/2) rhyolite and white (5 YR 8/2) quartzite. Limestone is predominanat and forms 70% of the clast lithologies, followed by 20% siltstone and sandstone, and 10% volcanics.
10									
20									
30									
40									
50									
60			80% recovery	60'	65'	600-SVE-1 (60-65')	California split spoon		



Depth (bgs) feet / meters	Lithology	Visual Percent 0 100	%	From	To	Sample I.D. Number	Sample Type	USCS	Lithology Description
20 / 70								Alluvial soils are primarily GM (silty gravel).	
80 / 90			80% recovery	95'	100'	600-SVE-1 (95-100')	California split spoon		
30 / 100									
110 / 120									
130 / 40									149'-152' (45.4-46.3 m) RHYOLITE TUFF BEDROCK: pinkish white (5 YR 8/2) to white (5 YR 8/1), quartz phenocrysts, feldspar phenocrysts, and lithic fragments to 1/16" maximum length. Phenocrysts are suspended in an aphanitic matrix of rhyolitic composition. Larger lithic fragments or potentially xenoliths of limestone are visible up to >1/4" size in selected chips. Matrix locally clayey and chips are moderate to friable in hardness.
140 / 150									Water observed @ 152' when air turned on with rig. Total Depth (TD) = 152'

WELL COMPLETION DIAGRAM

SOIL VAPOR EXTRACTION (SVE) PILOT TEST WELL

JSC - White Sands Test Facility
Las Cruces, New Mexico, USA

Well ID: **600-SVE-1** Site ID: **NASA-WSTF, Doña Ana County, NM**

Township and Range: **SW 1/4, NW 1/4, SW 1/4, Sec. 2, T21S, R3E**
Site Coordinates (NAD 83): **549114.42' N 1528593.37' E ***
Elevation (Brass Cap): **4762.04' ***
Elevation (Top of Casing): **not measured**
Drilling Contractor: **WDC Exploration & Wells**
Driller: **L. Aylmer**
Total Depth of Borehole (bgs): **152' (46.33 m)**
Borehole Diameter: **9 5/8" Stratex Casing Air Advance = 12"**
Depth to Bedrock (bgs): **149' (45.41 m); Rhyolite**
Depth to Groundwater: **150.15' (45.76 m; measured 10/5/2011)**
Total Depth Surface Casing (bgs): **N/A**
Diameter and Type Surface Casing: **9 5/8" Drive Casing (removed as well was installed)**

Date(s) Well Installed: **10/5/2011-10/6/2011**
Field Representative(s): **Jim Lawrence, John Pearson, and Doug Whitmire**
Total Number of SVE Zones: **3**
SVE Port Installation Method: **Clustered PVC Casings in Borehole**
Diameter and Type Casing: **Nominal 2" (2.5" OD) Schedule 80 PVC**
SVE Screen(s)(bgs): **40'-50'; 90'-100'; and 130.1'-140.1'**
(12.19-15.24 m; 27.43-30.48 m; and 39.65-42.70 m)
Comments: ***Survey data taken by WSTF personnel using GPS**

Casing
2" (2.5" OD) Schedule 80 PVC

Screen
2" (2.5" OD) Schedule 80 PVC

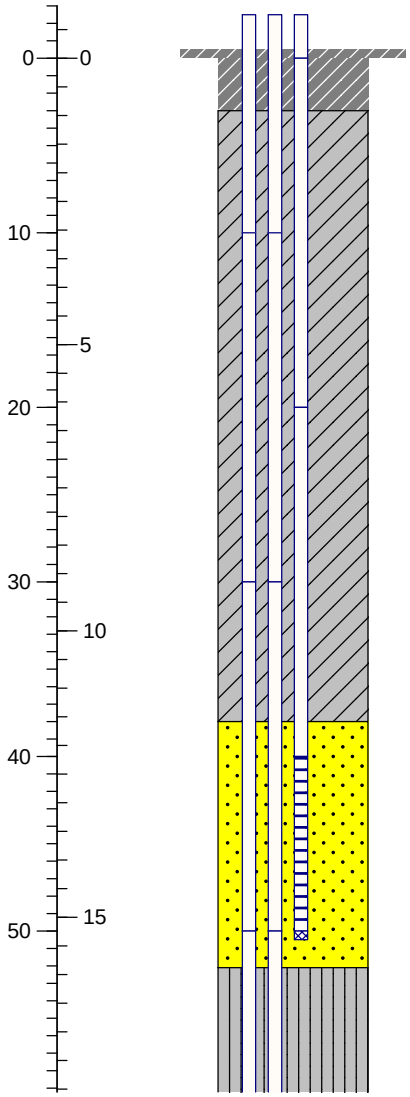
Surface Casing
N/A

End Cap
2" (2.5" OD) Schedule 80 PVC

Explanation:

10/20 Sand Cement Mix
Water Level
Cement
Alluvium
Slough
Cement with 5% Bentonite
Bentonite Seal
10/20 Sand

Feet/Meters



Well Descriptions
All depths listed are bgs (unless noted)

Soil Vapor Extraction (SVE) Casings Stick-Up = ~2.75' (0.84 m)

Well completed with 6" x 6' steel well protector with locking cap, ~4' x 4' concrete well pad, and barrier posts above ground surface.

Top of Nominal 2" (2.5" OD) Schedule 80 PVC 0.020"-Slot Screen = 40' (12.19 m)

Bottom of Nominal 2" (2.5" OD) Schedule 80 PVC 0.020"-Slot Screen = 50' (15.24 m)

Annular/Borehole Descriptions
All depths listed are bgs

Top of Cement = 0'

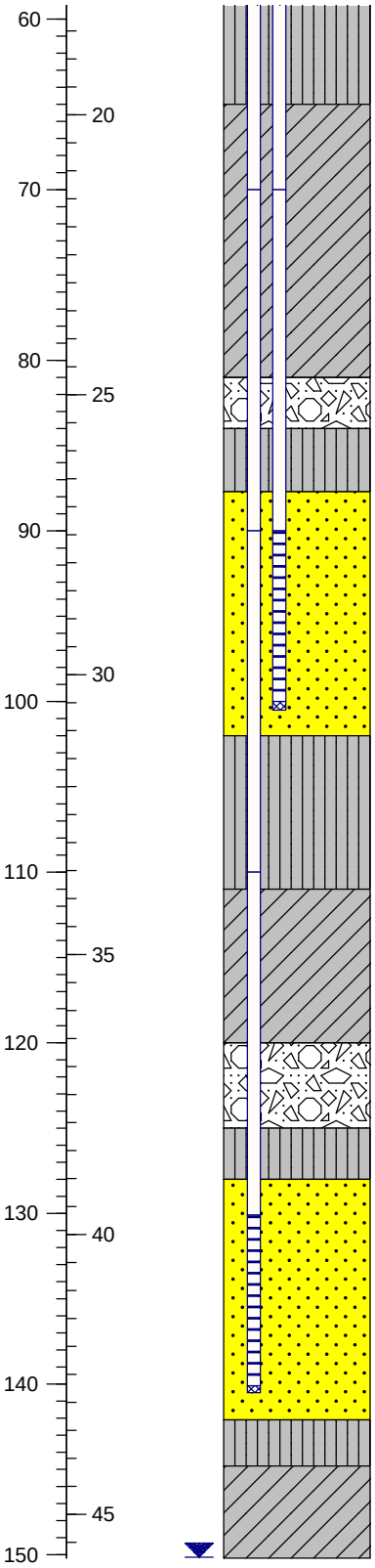
Top of Cement (Portland Type I/II with 5% bentonite) = 3' (0.91 m)

Top of 10/20 Sand = 38' (11.58 m)

Top of Bentonite = 52.1' (15.88 m)

Casing **2" (2.5" OD) Schedule 80 PVC**	Surface Casing **N/A**	**Casing Explanation:**	
Screen **2" (2.5" OD) Schedule 80 PVC**	End Cap **2" (2.5" OD) Schedule 80 PVC**	10/20 Sand Cement Mix Water Level	Cement Alluvium Slough Cement with 5% Bentonite Bentonite Seal 10/20 Sand

Feet/Meters



Well Descriptions All depths listed are bgs (unless noted)	**Annular/Borehole Descriptions** All depths listed are bgs
	Top of Cement (Portland Type I/II with 5% bentonite) = 65' (19.81 m)
	Top of Slough = 81' (24.69 m)
	Top of Bentonite = 84' (25.60 m)
	Top of 10/20 Sand = 87.7' (26.73 m)
Top of Nominal 2" (2.5" OD) Schedule 80 PVC 0.020"-Slot Screen = 90' (27.43 m)	
Bottom of Nominal 2" (2.5" OD) Schedule 80 PVC 0.020"-Slot Screen = 100' (30.48 m)	
	Top of Bentonite = 102' (31.09 m)
	Top of Cement (Portland Type I/II with 5% bentonite) = 111' (33.83 m)
	Top of Slough = 120' (36.57 m)
	Top of Bentonite = 125' (38.10 m)
	Top of 10/20 Sand = 128' (39.01 m)
Top of Nominal 2" (2.5" OD) Schedule 80 PVC 0.020"-Slot Screen = 130.1' (39.65 m)	
Bottom of Nominal 2" (2.5" OD) Schedule 80 PVC 0.020"-Slot Screen = 140.1' (42.70 m)	
	Top of Bentonite = 142.1' (43.31 m)
	Top of Cement (Portland Type I/II with 5% bentonite) = 144.8' (44.13 m)
Groundwater During Drilling (First Occurrence) = 150.15' (45.76; measured 10/5/2011 during drilling bgs)	
	12" Borehole TD = 152' (46.33 m)

BOREHOLE LITHOLOGIC LOG

JSC - White Sands Test Facility
Las Cruces, New Mexico, USA

Location ID: **600-G-138**

Site ID: **NASA-WSTF, Doña Ana County, NM**

Township and Range: **SW 1/4, NW 1/4, SW 1/4, Sec. 2, T21S, R3E**
NM State Plane Coordinates (NAD 83): **549124.48 N 1528671.11 E**
Elevation (Brass Cap): **4759.43 ft.**
Total Depth of Borehole (bgs): **148'**
Bedrock Type and Depth (bgs): **146'; Andesite**
Drilling Method: **Stratex Casing Advance Air Rotary**
Drilling Contractor: **WDC Exploration & Wells**
Driller: **Roger Langley**
Sampling Method: **N/A**

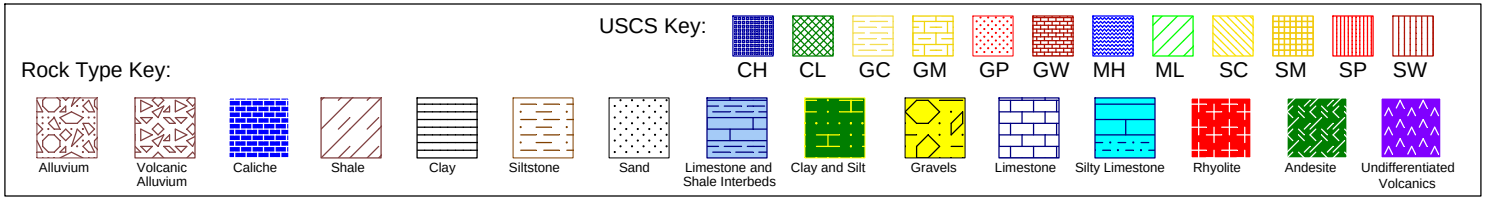
Depth to Groundwater: **142.45' (measured 10/1/2011 bgs)**
Surface Casing Depth and Diameter: **9 5/8" Drive Casing**
Borehole Diameter: **9 5/8" Stratex Casing - makes a 12" bore-hole (per M. Green, WDC drilling supervisor)**
Field Representative(s): **John Roland**

Dates Drilling Started and Completed: **9/29/2011-9/30/2011**
Comments: **The drive casing was removed as the well was installed.**

USCS Key: CH CL GC GM GP GW MH ML SC SM SP SW

Rock Type Key: Alluvium, Volcanic Alluvium, Caliche, Shale, Clay, Siltstone, Sand, Limestone and Shale Interbeds, Clay and Silt, Gravels, Limestone, Silty Limestone, Rhyolite, Andesite, Undifferentiated Volcanics

Depth (bgs) feet / meters	Lithology	Visual Percent (0 – 100)	%	From	To	Sample I.D. Number	Sample Type	USCS	Lithology Description
0 / 0						No analytical samples were collected for this borehole.			0 - 146' (0 - 44.5 m) SANTA FE GROUP ALLUVIUM: Late Pliocene to Quaternary in age. The alluvium comprises a poorly to moderately cemented pebble to boulder conglomerate. Caliche horizons, clay lenses and carbonate-cemented zones occur sporadically throughout the alluvial section. The unit is generally pinkish white (5 YR 6/3) to light reddish brown (2.5 YR 5/4) for unwashed chips. The alluvium is unconsolidated and comprises a silty, sandy gravel with clasts supported within a matrix of sand and silt. Sorting is poor. Clasts range from angular to subrounded and comprise 30-70% of the lithologic samples. Rock chips range between 0.05 to 1.1 inches (0.13-2.79 cm) in size. Larger clasts have been pulverized by the Stratex drilling method. Sedimentary clasts include light gray (N7) to gray (N4)) micritic to fossiliferous limestone, yellowish red (5 YR 5/6) siltstone and mudstone, reddish brown (5YR 5/4) sandstone, and medium gray chert (N5). Igneous clasts include pinkish white (5 YR 6/3) rhyolite and quartzite. Limestone predominates and accounts for 70% of the clast lithology, siltstone and mudstone 20%, and volcanic clasts 10%.
				~7' (2.13 m)			grab	GM	
10				~17' (5.18 m)			grab	GM/GC	
20				~27' (8.23 m)			grab	GC	
30 / 10				~38' (11.58 m)			grab	SW	
40				~48' (14.63 m)			grab	GM/GC	
50				~57' (17.37 m)			grab	GM/GC	
60									



Depth (bgs) feet / meters	Lithology	Visual Percent (0 – 100)	%	From	To	Sample I.D. Number	Sample Type	USCS	Lithology Description
20 / 70				~67' (20.42 m)		No analytical samples were collected for this borehole.	grab	GM/GC	
80				~77' (23.47 m)			grab	GM/GC	
90				~87' (26.52 m)			grab	GM	
30 / 100				~97' (29.56 m)			grab	GM	
110				~108' (32.92 m)			grab	GM	
120				~117' (35.66 m)			grab	GM	
130 / 40				~127' (38.71 m)			grab	GM	
140				~137' (41.76 m)			grab	GM	146' - 148' (44.5 - 45.1 m) ANDESITE: Dark reddish brown (5 YR 2.5/2) to black (5 YR 2.5/1), showing microporphyritic texture with plagioclase microphenocrysts to 1/16" in size. Irregular indurated chips with no visible fractures.
								bedrock	Total Depth (TD) = 148' (45.1 m)

WELL COMPLETION DIAGRAM

Perched Groundwater Monitoring

JSC - White Sands Test Facility
Las Cruces, New Mexico, USA

Well ID: **600-G-138**

Site ID: **NASA-WSTF, Doña Ana County, NM**

Township and Range: **SW 1/4, NW 1/4, SW 1/4, Sec. 2, T21S, R3E**
NM State Plane Coordinates (NAD 83): **549126.20' N 1528671.29' E**
Elevation (Brass Cap): **4759.43'**
Elevation (Top of Casing): **4761.41'**
Drilling Contractor: **WDC Exploration & Wells**
Driller: **T. Valentine**
Total Depth of Borehole (bgs): **148' (45.11 m)**
Borehole Diameter: **9 5/8" Stratex Casing Air Advance = 12"**
Depth to Bedrock (bgs): **146' (44.50 m); andesite**
Depth to Groundwater: **142.45' (43.42 m; measured 10/1/2011 bgs)**
Total Depth Surface Casing (bgs): **N/A**
Diameter and Type Surface Casing: **9 5/8" Drive Casing (removed as well was installed)**

Date(s) Well Installed: **10/1/2011**
Date(s) Well Developed: **10/19/2001**
Field Representative(s): **John Roland**
Total Depth Well Casing (bgs): **148' (45.11 m)**
Type of Casing: **Schedule 80 PVC**
Diameter Well Casing: **Nominal 4" (4.5" OD)**
Groundwater Screened Zone (bgs): **137.5'-147.5' (41.91-44.96 m)**
Comments: **The well measures groundwater perched on the bedrock surface, not the regional groundwater within bedrock.**

Explanation:

Surface Casing
N/A

Conventional Casing
4.5" OD Schedule 80 PVC

Conventional Screen
4.5" OD Schedule 80 PVC
0.020"

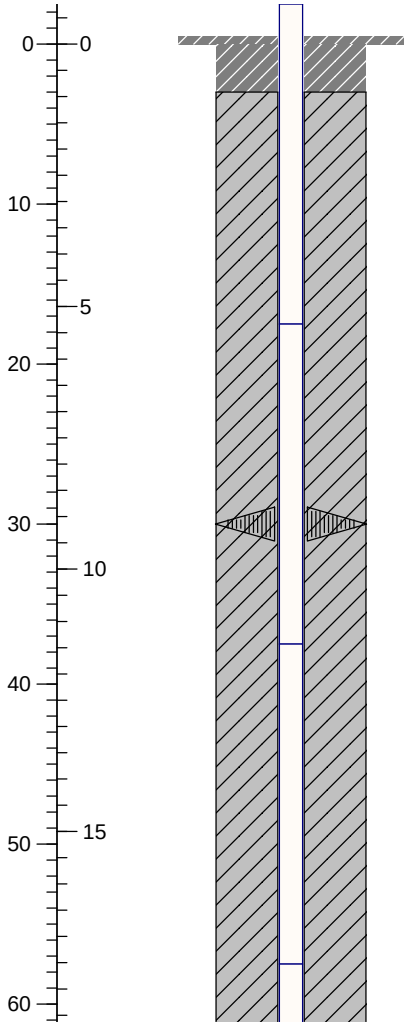
Conventional End Cap
4.5" OD Schedule 80 PVC

Bolted Steel Centralizers
Cage Type

Water Table

Cement
Cement (5% Bentonite)
Bentonite Seal
10/20 Sand/ Bentonite Mix
Slough
1/8 Gravel
8/20-16/40 Sand Mix
4/8 Sand
6/9 Sand
8/12 Sand
8/20 Sand
10/20 Sand
16/40 Sand
20/40 Sand
30/70 Sand

Feet/Meters



Well Descriptions
All depths listed are bgs (unless noted)

Conventional Well Stick-Up = ~3' (0.91 m)

This well monitors perched (above the bedrock) groundwater under the 600 Area Closure.

Well completed with 6" x 6' steel well protector with locking cap, ~4' x 4' concrete well pad, and barrier posts above ground surface.

Steel bolt-on centralizer ~30' (9.14 m)

Annular/Borehole Descriptions
All depths listed are bgs

Top of Cement = 0'

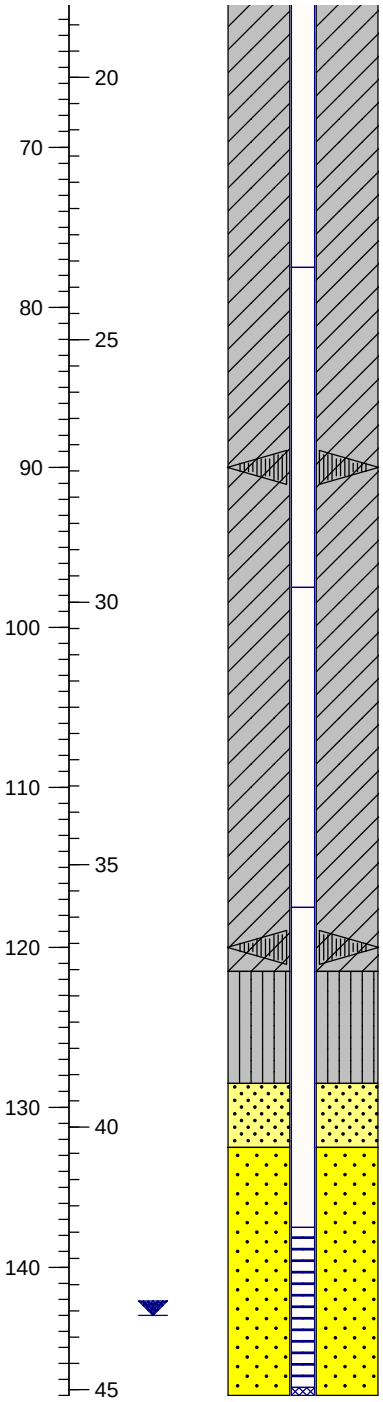
Top of Cement (Portland Type I/II with 5% bentonite) = 3' (0.91 m)

Casing Explanation:

- Surface Casing — **9 5/8" Drive Casing (removed as well was installed)**
- Conventional Casing — **4.5" OD Schedule 80 PVC**
- Conventional Screen — **4.5" OD Schedule 80 PVC 0.020"**
- Conventional End Cap — **4.5" OD Schedule 80 PVC**
- **Bolted Steel Centralizers Cage Type**
- Water Table

Cement	1/8 Gravel	8/20 Sand
Cement (5% Bentonite)	8/20-16/40 Sand Mix	10/20 Sand
Bentonite Seal	4/8 Sand	16/40 Sand
10/20 Sand/ Bentonite Mix	6/9 Sand	20/40 Sand
Slough	8/12 Sand	30/70 Sand

Feet/Meters



Well Descriptions
All depths listed are bgs (unless noted)

Steel bolt-on centralizer ~90' (27.43 m)

Steel bolt-on centralizer ~120' (36.57 m)

Top of Nominal 4" (4.5" OD) Schedule 80 PVC 0.020"-Slot Screen = 137.5' (41.91 m)

*Groundwater During Drilling (First Occurrence) = 142.45' (43.42 m; measured 10/1/2011 bgs)

Water Table = 143' (43.58 m; measured 10/25/2011 bgs at first sampling)

Bottom of Nominal 4" (4.5" OD) Schedule 80 PVC 0.020"-Slot Screen = 147.5' (44.96 m)

PVC cap contains a 1/4" diameter weep hole (to accommodate dry periods)

Nominal 4" (4.5" OD) Schedule 80 PVC Casing TD = 148' (45.11 m)

Annular/Borehole Descriptions
All depths listed are bgs

Top of Bentonite = 121.5' (37.03 m)

Top of 16/40 Sand = 128.5' (39.16 m)

*Groundwater was not present during drilling, but seeped in overnight.

Top of 10/20 Sand = 132.5' (40.38 m)

12" Borehole TD = 148' (45.11 m) drilled with 9 5/8" Stratex Casing Advance Air Rotary method

Appendix B

Results of Geotechnical Samples from 600-SVE-1

Laboratory Report for NASA WSTF Environmental Department

PO# ECO 0000001

December 19, 2011

Daniel B. Stephens & Associates, Inc.

5840 Osuna Road NE • Albuquerque, New Mexico 87109

December 19, 2011

Geoff Giles
NASA WSTF Environmental Department
12600 NASA Road
Las Cruces, NM 88012
(575) 524-5352

Re: DBS&A Laboratory Report for NASA WSTF Environmental Department PO# ECO 0000001

Dear Mr. Giles:

Enclosed is the final report for the NASA WSTF Environmental Department PO# ECO 0000001 samples. Please review this report and provide any comments as samples will be held for a maximum of 30 days. After 30 days samples will be returned or disposed of in an appropriate manner.

All testing results were evaluated subjectively for consistency and reasonableness, and the results appear to be reasonably representative of the material tested. However, DBS&A does not assume any responsibility for interpretations or analyses based on the data enclosed, nor can we guarantee that these data are fully representative of the undisturbed materials at the field site. We recommend that careful evaluation of these laboratory results be made for your particular application.

The testing utilized to generate the enclosed final report employs methods that are standard for the industry. The results do not constitute a professional opinion by DBS&A, nor can the results affect any professional or expert opinions rendered with respect thereto by DBS&A. You have acknowledged that all the testing undertaken by us, and the final report provided, constitutes mere test results using standardized methods, and cannot be used to disqualify DBS&A from rendering any professional or expert opinion, having waived any claim of conflict of interest by DBS&A.

We are pleased to provide this service to NASA WSTF Environmental Department and look forward to future laboratory testing on other projects. If you have any questions about the enclosed data, please do not hesitate to call.

Sincerely,

DANIEL B. STEPHENS & ASSOCIATES, INC.
SOIL TESTING & RESEARCH LABORATORY

Celina Sessa
Assistant Laboratory Manager
Enclosure

Daniel B. Stephens & Associates, Inc.
Soil Testing & Research Laboratory
5840 Osuna Rd. NE
Albuquerque, NM 87109
505-889-7752
FAX 505-889-0258

Summaries

Summary of Tests Performed

Laboratory Sample Number	Initial Soil Properties[1]			Saturated Hydraulic Conductivity[2]			Moisture Characteristics[3]								Particle Size[4]			Specific Gravity[5]		Air Perm-eability	Atterberg Limits	Proctor Compaction
	G	VM	VD	CH	FH	FW	HC	PP	FP	DPP	RH	EP	WHC	K_{unsat}	DS	WS	H	F	C			
600-SVE-1 (60-65')	X	X		X			X	X		X	X			X		X	X	X	X		X	
600-SVE-1 (95-100')	X	X		X			X			X	X			X		X	X	X	X		X	

[1] G = Gravimetric Moisture Content, VM = Volume Measurement Method, VD = Volume Displacement Method

[2] CH = Constant Head Rigid Wall, FH = Falling Head Rigid Wall, FW = Falling Head Rising Tail Flexible Wall

[3] HC = Hanging Column, PP = Pressure Plate, FP = Filter Paper, DPP = Dew Point Potentiometer, RH = Relative Humidity Box, EP = Effective Porosity, WHC = Water Holding Capacity, Kunsat = Calculated Unsaturated Hydraulic Conductivity

[4] DS = Dry Sieve, WS = Wet Sieve, H = Hydrometer

[5] F = Fine (<4.75mm), C = Coarse (>4.75mm)

Notes

Sample Preparation:
Two samples arrived on October 24, 2011. Sample 600-SVE-1 (60'-65') arrived in a 2/3-full 1-gallon bag and a 4.5" x 23" pvc tube wrapped in heavy plastic and sealed with tape. The material in the pvc tube was used for all analyses for this sample. Sample 600-SVE-1 (95'-100') arrived in two 2/3-full 1-gallon bags, one labeled 'top' and the other labeled 'bottom'. The material labeled 'bottom' was used for all analyses for this sample. Both samples were subjected to saturated hydraulic conductivity, moisture retention testing, particle size analysis (PSA), Atterberg limits and specific gravity testing.

A subsample was obtained by cutting the pvc tube for sample 600-SVE-1 (60'-65') to a length of 2.25". The prepared sub-sample was then subjected to saturated hydraulic conductivity and moisture retention testing. Separate subsamples were prepared for PSA, Atterberg limits and specific gravity testing.

Sample 600-SVE-1 (95'-100') was remolded in a 6" diameter ring at the 'as received' moisture content using a moderate compactive effort, based on the preparation technician's judgment and experience with compaction testing. The sample received saturated hydraulic conductivity, moisture retention testing, Atterberg limits and specific gravity testing. To meet the minimum requirement for diameter to particle ratio, material larger than 3/4" (19.0 mm) was removed from sample 600-SVE-1 (95'-100'), and the material passing the 3/4" sieve was used to prepare subsamples for saturated hydraulic conductivity, moisture retention testing and Atterberg limits. Oversize correction calculations were applied to the measured values for this sample. Following completion of the above tests, all previously tested material was combined to perform PSA testing.

Percent Saturation at Saturation:
Sample 600-SVE-1 (95'-100') was calculated to be greater than 105% saturated at the saturated stage of testing. Potential causes for high saturation values can include: underestimating the saturated sample volume, and/or the presence of salt that is going into solution and therefore lowering the dry weight.

General Notes:
Volume changes occurred for both samples during the hanging column and pressure plate portion of the analysis. The reported volumetric moisture contents are adjusted for volume changes, where applicable. Due to the irregularities formed on the sample surfaces during settling or swelling, volume measurements obtained after the initial reading should be considered estimates.

Summary of Sample Preparation/Volume Changes

	Initial Sample Data[1]			Volume Change Post Saturation[2]				Volume Change Post Drying Curve[3]			
Sample Number	Moisture Content (%, g/g)	Dry Bulk Density (g/cm^3)	Dry Bulk Density (pcf)	Dry Bulk Density (g/cm^3)	Dry Bulk Density (pcf)	% Volume Change (%)	% of Initial Density (%)	Dry Bulk Density (g/cm^3)	Dry Bulk Density (pcf)	% Volume Change (%)	% of Initial Density (%)
600-SVE-1 (60-65')	14.0	1.67	104.1	1.60	99.9	+4.20%	96.0%	1.64	102.4	+1.61%	98.4%

[1]Initial Sample Data: The 'as received' dry bulk density and moisture content.

[2]Volume Change Post Saturation: Volume change measurements were obtained after saturated hydraulic conductivity testing.

[3]Volume Change Post Drying Curve: Volume change measurements were obtained throughout hanging column and pressure plate testing. The 'Volume Change Post Drying Curve' values represent the final sample dimensions after the last pressure plate point.

Notes:

"+" indicates sample swelling, "-" indicates sample settling, and "---" indicates no volume change occurred.

Summary of Sample Preparation/Volume Changes

	Target Remold Parameters[1]			Actual Remold Data				Volume Change Post Saturation[2]				Volume Change Post Drying Curve[3]			
Sample Number	Moist. Cont. (%, g/g)	Dry Bulk Density (g/cm^3)	Dry Bulk Density (pcf)	Moist. Cont. (%, g/g)	Dry Bulk Density (g/cm^3)	Dry Bulk Density (pcf)	% of Target Density (%)	Dry Bulk Density (g/cm^3)	Dry Bulk Density (pcf)	% Volume Change (%)	% of Actual Density (%)	Dry Bulk Density (g/cm^3)	Dry Bulk Density (pcf)	% Volume Change (%)	% of Actual Density (%)
600-SVE-1 (95-100')	0.9	'moderate'		1.7	2.11	131.8	NA	2.11	131.8	---	100.0%	2.29	143.0	-7.85%	108.5%

[1]Target Remold Parameters: Provided by the client: Remold to the 'as received' moisture content using moderate compactive effort.

[2]Volume Change Post Saturation: Volume change measurements were obtained after saturated hydraulic conductivity testing.

[3]Volume Change Post Drying Curve: Volume change measurements were obtained throughout hanging column and pressure plate testing. The 'Volume Change Post Drying Curve' values represent the final sample dimensions after the last pressure plate point.

Notes:

"+" indicates sample swelling, "-" indicates sample settling, and "---" indicates no volume change occurred.

NA = Not applicable

Summary of Initial Moisture Content, Dry Bulk Density Wet Bulk Density and Calculated Porosity

Sample Number	Moisture Content: As Received, Gravimetric (%, g/g)	Moisture Content: As Received, Volumetric (%, cm^3/cm^3)	Moisture Content: Remolded, Gravimetric (%, g/g)	Moisture Content: Remolded, Volumetric (%, cm^3/cm^3)	Dry Bulk Density (g/cm^3)	Wet Bulk Density (g/cm^3)	Calculated Porosity (%)
600-SVE-1 (60-65')	14.0	23.3	---	---	1.67	1.90	38.8
600-SVE-1 (95-100')	0.9	NA	1.7	3.5	2.11	2.15	22.4

NA = Not analyzed

--- = This sample was not remolded

Summary of Saturated Hydraulic Conductivity Tests

Sample Number	K_{sat} (cm/sec)	Oversize Corrected K_{sat} (cm/sec)	Method of Analysis	
			Constant Head	Falling Head
600-SVE-1 (60-65')	4.0E-03	NA	X	
600-SVE-1 (95-100')	1.6E-02	1.1E-02	X	

--- = Oversize correction is unnecessary since coarse fraction < 5% of composite mass
NR = Not requested
NA = Not applicable

Summary of Moisture Characteristics of the Initial Drainage Curve

Sample Number	Pressure Head (-cm water)	Moisture Content (%, cm^3/cm^3)
600-SVE-1 (60-65')	0	39.5 ‡‡
	6	39.5 ‡‡
	20	38.2 ‡‡
	77	35.4 ‡‡
	337	28.9 ‡‡
	18866	9.9 ‡‡
	39160	8.0 ‡‡
	171122	4.9 ‡‡
	318076	3.9 ‡‡
	857025	2.9 ‡‡
600-SVE-1 (95-100')	0	25.6
	5	23.3
	11	21.8
	49	20.4 ‡‡
	192	18.0 ‡‡
	15399	3.6 ‡‡
	52622	2.2 ‡‡
	159701	1.7 ‡‡
	857025	0.9 ‡‡

‡‡ Volume adjustments are applicable at this matric potential (see data sheet for this sample).

Summary of Calculated Unsaturated Hydraulic Properties

Sample Number	α (cm^{-1})	N (dimensionless)	θ_r (% vol)	θ_s (% vol)	Oversize Corrected θ_r (% vol)	Oversize Corrected θ_s (% vol)
600-SVE-1 (60-65')	0.0072	1.2862	0.00	39.25	NA	NA
600-SVE-1 (95-100')	0.0094	1.3635	0.00	23.49	0.00	16.76

--- = Oversize correction is unnecessary since coarse fraction < 5% of composite mass

NR = Not requested

NA = Not applicable

Summary of Particle Size Characteristics

Sample Number	d_{10} (mm)	d_{50} (mm)	d_{60} (mm)	C_u	C_c	Method	ASTM Classification	USDA Classification
600-SVE-1 (60-65')	0.0013	0.045	0.11	85	0.40	WS/H	Sandy lean clay s(CL)	Loam † (Est)
600-SVE-1 (95-100')	0.12	9.8	15	125	4.1	WS/H	Poorly-graded gravel with silt and sand (GP-GM)s	Sandy Loam †

d_{50} = Median particle diameter

Est = Reported values for d_{10}, C_u, C_c, and soil classification are estimates, since extrapolation was required to obtain the d_{10} diameter

$$C_u = \frac{d_{60}}{d_{10}}$$

$$C_c = \frac{(d_{30})^2}{(d_{10})(d_{60})}$$

DS = Dry sieve

H = Hydrometer

WS = Wet sieve

† Greater than 10% of sample is coarse material

Percent Gravel, Sand, Silt and Clay*

Sample Number	% Gravel (>4.75mm)	% Sand (<4.75mm, >0.075mm)	% Silt (<0.075mm, >0.002mm)	% Clay (<0.002mm)
600-SVE-1 (60-65')	8.0	35.3	41.7	15.0
600-SVE-1 (95-100')	63.3	27.9	6.1	2.8

*USCS classification does not classify clay fraction based on particle size. USDA definition of clay (<0.002mm) used in this table.

Summary of Atterberg Tests

Sample Number	Liquid Limit	Plastic Limit	Plasticity Index	Classification
600-SVE-1 (60-65')	35	22	13	CL
600-SVE-1 (95-100')	20	17	3	ML

--- = Soil requires visual-manual classification due to non-plasticity

Summary of Specific Gravity Tests

	Test Sample			Oversize Material			Bulk Sample
Sample Number	Specific Gravity	Particle Size	% of Bulk Sample	Specific Gravity	Particle Size	% of Bulk Sample	Specific Gravity**
600-SVE-1 (60-65')	2.73	<4.75mm	92.0%	---	>4.75mm	8.0%	2.73
600-SVE-1 (95-100')	2.73	<3/4"	65.8%	2.74	>3/4"	34.2%	2.73

--- = Unnecessary since specified fraction <5% of composite mass

* = Based on specific gravity of material <4.75mm

** = Weighted average

NA = Not analyzed

Initial Properties

Summary of Initial Moisture Content, Dry Bulk Density Wet Bulk Density and Calculated Porosity

Sample Number	Moisture Content: As Received, Gravimetric (%, g/g)	Moisture Content: As Received, Volumetric (%, cm^3/cm^3)	Moisture Content: Remolded, Gravimetric (%, g/g)	Moisture Content: Remolded, Volumetric (%, cm^3/cm^3)	Dry Bulk Density (g/cm^3)	Wet Bulk Density (g/cm^3)	Calculated Porosity (%)
600-SVE-1 (60-65')	14.0	23.3	---	---	1.67	1.90	38.8
600-SVE-1 (95-100')	0.9	NA	1.7	3.5	2.11	2.15	22.4

NA = Not analyzed

--- = This sample was not remolded

Data for Initial Moisture Content, Bulk Density, Porosity, and Percent Saturation

Job Name: NASA
Job Number: LB11.0218.00
Sample Number: 600-SVE-1 (60-65')
PO Number: ECO 0000001
Date Received: 10/24/2011

	As Received	Remolded
Test Date:	25-Oct-11	---
Field weight of sample* (g)*:*	1051.70	
Tare weight, ring (g)*:*	246.80	
Tare weight, pan/plate (g)*:*	0.00	
Tare weight, other (g)*:*	0.00	
Dry weight of sample (g)*:*	706.24	
Sample volume (cm^3)*:*	423.57	
Measured particle density (g/cm^3)*:*	2.73	
Gravimetric Moisture Content (% g/g)*:*	14.0	
Volumetric Moisture Content (% vol)*:*	23.3	
Dry bulk density (g/cm^3)*:*	1.67	
Wet bulk density (g/cm^3)*:*	1.90	
Calculated Porosity (% vol)*:*	38.8	
Percent Saturation:	60.0	

Laboratory analysis by: K. Wright
Data entered by: C. Sessa
Checked by: J. Hines

Comments:

* Weight including tares
NA = Not analyzed
--- = This sample was not remolded

Data for Initial Moisture Content, Bulk Density, Porosity, and Percent Saturation

Job Name: NASA
Job Number: LB11.0218.00
Sample Number: 600-SVE-1 (95-100')
PO Number: ECO 0000001
Date Received: 10/24/2011

	As Received	Remolded
Test Date:	28-Oct-11	1-Nov-11
Field weight of sample* (g):	1426.70	2831.20
Tare weight, ring (g):	0.00	160.85
Tare weight, pan/plate (g):	407.59	0.00
Tare weight, other (g):	0.00	0.00
Dry weight of sample (g):	1009.91	2626.34
Sample volume (cm^3):	NA	1243.90
Measured particle density (g/cm^3):	2.72	2.72
Gravimetric Moisture Content (% g/g):	0.9	1.7
Volumetric Moisture Content (% vol):	NA	3.5
Dry bulk density (g/cm^3):	NA	2.11
Wet bulk density (g/cm^3):	NA	2.15
Calculated Porosity (% vol):	NA	22.4
Percent Saturation:	NA	15.8
Laboratory analysis by:	K. Wright	K. Wright
Data entered by:	C. Sessa	C. Sessa
Checked by:	J. Hines	J. Hines

Comments:

* Weight including tares
NA = Not analyzed
--- = This sample was not remolded

Saturated Hydraulic Conductivity

Summary of Saturated Hydraulic Conductivity Tests

Sample Number	K_{sat} (cm/sec)	Oversize Corrected K_{sat} (cm/sec)	Method of Analysis	
			Constant Head	Falling Head
600-SVE-1 (60-65')	4.0E-03	NA	X	
600-SVE-1 (95-100')	1.6E-02	1.1E-02	X	

--- = Oversize correction is unnecessary since coarse fraction < 5% of composite mass
NR = Not requested
NA = Not applicable

Saturated Hydraulic Conductivity
Constant Head Method

Job name:	NASA	*Type of water used:*	TAP
Job number:	LB11.0218.00	*Collection vessel tare* (g):	10.94
Sample number:	600-SVE-1 (60-65')	*Sample length* (cm):	5.79
PO Number:	ECO 0000001	*Sample diameter* (cm):	9.65
Date Received:	10/24/2011	*Sample x-sectional area* (cm^2):	73.17

Date	Time	Temp (°C)	Head (cm)	Q + Tare (g)	Q (cm^3)	Elapsed time (sec)	Ksat (cm/sec)	Ksat @ 20°C (cm/sec)
Test # 1:								
27-Oct-11	8:45:09	21.0	1.9	22.36	11.4	117	4.1E-03	4.0E-03
27-Oct-11	8:47:06							
Test # 2:								
27-Oct-11	9:09:48	21.0	1.7	22.21	11.3	128	4.1E-03	4.0E-03
27-Oct-11	9:11:56							
Test # 3:								
27-Oct-11	9:35:25	21.5	1.5	22.69	11.8	153	4.1E-03	3.9E-03
27-Oct-11	9:37:58							

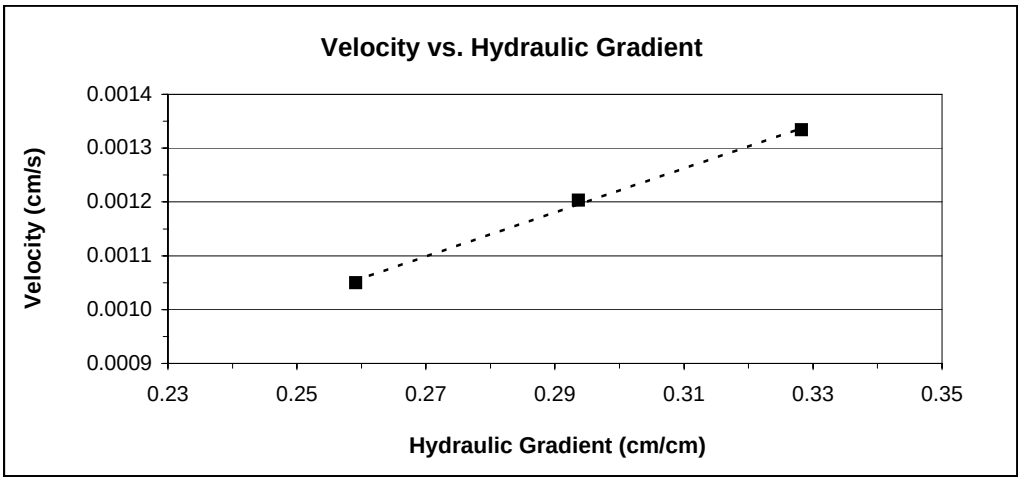
***Average Ksat* (cm/sec):** **4.0E-03**

***Oversize Corrected Ksat* (cm/sec):** **NA**

Comments:

--- = Oversize correction is unnecessary since coarse fraction < 5% of composite mass

NA = Not applicable



Laboratory analysis by: K. Wright

Data entered by: K. Wright

Checked by: J. Hines

Saturated Hydraulic Conductivity
Constant Head Method

Job name:	NASA	*Type of water used:*	TAP
Job number:	LB11.0218.00	*Collection vessel tare* (g)*:*	10.18
Sample number:	600-SVE-1 (95-100')	*Sample length* (cm)*:*	7.00
PO Number:	ECO 0000001	*Sample diameter* (cm)*:*	15.05
Date Received:	10/24/2011	*Sample x-sectional area* (cm^2)*:*	177.78

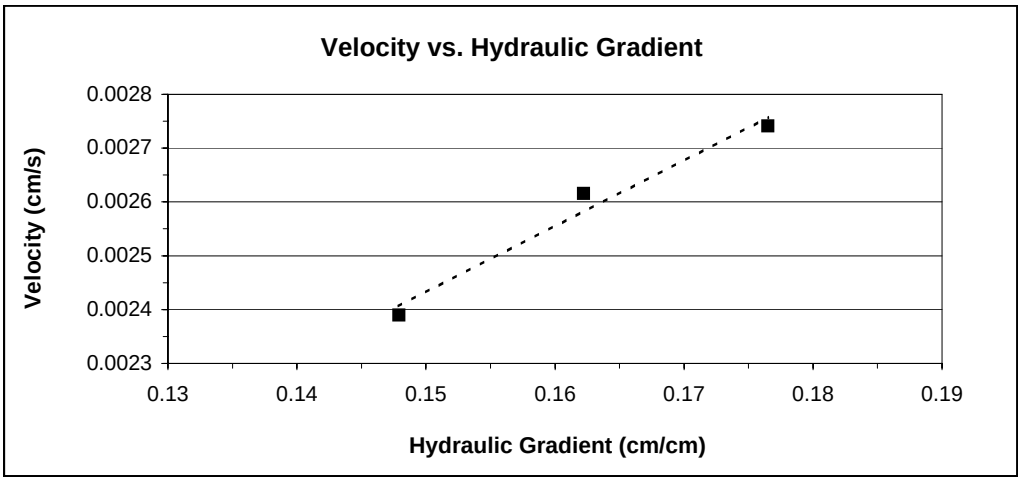
Date	Time	Temp (°C)	Head (cm)	Q + Tare (g)	Q (cm^3)	Elapsed time (sec)	Ksat (cm/sec)	Ksat @ 20°C (cm/sec)
Test # 1:								
3-Nov-11	9:17:20	20.5	1.2	39.42	29.2	60	1.6E-02	1.6E-02
3-Nov-11	9:18:20							
Test # 2:								
3-Nov-11	9:45:00	20.5	1.1	38.08	27.9	60	1.7E-02	1.6E-02
3-Nov-11	9:46:00							
Test # 3:								
3-Nov-11	10:23:00	20.5	1	35.67	25.5	60	1.7E-02	1.7E-02
3-Nov-11	10:24:00							

Average Ksat* (cm/sec)*: **1.6E-02**

Oversize Corrected Ksat* (cm/sec)*: **1.1E-02**

Comments:

--- = Oversize correction is unnecessary since coarse fraction < 5% of composite mass



Laboratory analysis by: K. Wright
Data entered by: K. Wright
Checked by: J. Hines

Oversize Correction Data Sheet

Job Name: NASA
Job Number: LB11.0218.00
Sample Number: 600-SVE-1 (95-100')
PO Number: ECO 0000001
Date Received: 10/24/2011

Split (3/4", 3/8", #4): 3/4
Calculated Porosity of Fines (% vol)*:* 22.4

	Coarse Fraction*	Fines Fraction	Composite
Subsample Mass (g)*:*	1944.45	3735.38	5679.83
Bulk Density (g/cm^3)*:*	2.74	2.11	2.29
Volume of Solids (cm^3)*:*	710.77	1372.67	2083.45
Volume of Voids (cm^3)*:*	0.00	396.50	396.50
Total Volume (cm^3)*:*	710.77	1769.17	2479.94
Volumetric Fraction (%)*:*	28.66	71.34	100.00
Mass Fraction (%)*:*	34.23	65.77	100.00
Ksat (cm/sec)*:*	NM	1.6E-02	1.1E-02

* = Porosity and moisture content of coarse fraction assumed to be zero.
--- = Oversize correction is unnecessary since coarse fraction < 5% of composite mass
NM = Not measured

Laboratory analysis by: K. Wright
Data entered by: K. Wright
Checked by: J. Hines

Moisture Retention Characteristics

Summary of Moisture Characteristics of the Initial Drainage Curve

Sample Number	Pressure Head (-cm water)	Moisture Content (%, cm^3/cm^3)
600-SVE-1 (60-65')	0	39.5 ‡‡
	6	39.5 ‡‡
	20	38.2 ‡‡
	77	35.4 ‡‡
	337	28.9 ‡‡
	18866	9.9 ‡‡
	39160	8.0 ‡‡
	171122	4.9 ‡‡
	318076	3.9 ‡‡
	857025	2.9 ‡‡
600-SVE-1 (95-100')	0	25.6
	5	23.3
	11	21.8
	49	20.4 ‡‡
	192	18.0 ‡‡
	15399	3.6 ‡‡
	52622	2.2 ‡‡
	159701	1.7 ‡‡
	857025	0.9 ‡‡

‡‡ Volume adjustments are applicable at this matric potential (see data sheet for this sample).

Summary of Calculated Unsaturated Hydraulic Properties

Sample Number	α (cm^{-1})	N (dimensionless)	θ_r (% vol)	θ_s (% vol)	Oversize Corrected θ_r (% vol)	Oversize Corrected θ_s (% vol)
600-SVE-1 (60-65')	0.0072	1.2862	0.00	39.25	NA	NA
600-SVE-1 (95-100')	0.0094	1.3635	0.00	23.49	0.00	16.76

--- = Oversize correction is unnecessary since coarse fraction < 5% of composite mass

NR = Not requested

NA = Not applicable

Moisture Retention Data

Hanging Column / Pressure Plate

(Soil-Water Characteristic Curve)

Job Name: NASA
Job Number: LB11.0218.00
Sample Number: 600-SVE-1 (60-65')
PO Number: ECO 0000001
Date Received: 10/24/2011

Dry wt. of sample (g): 706.24
Tare wt., ring (g): 246.80
Tare wt., screen & clamp (g): 47.28
Initial sample volume (cm^3): 423.57
Initial dry bulk density (g/cm^3): 1.67
Measured particle density (g/cm^3): 2.73
Initial calculated total porosity (%): 38.83

	Date	Time	Weight* (g)	Matric Potential (-cm water)	Moisture Content † (% vol)	
Hanging column:	27-Oct-11	12:30	1174.71	0	39.51	‡‡
	3-Nov-11	11:00	1174.42	6.0	39.47	‡‡
	10-Nov-11	8:50	1168.84	20.0	38.23	‡‡
	18-Nov-11	13:50	1156.05	77.0	35.41	‡‡
Pressure plate:	28-Nov-11	8:00	1124.77	337	28.92	‡‡

Volume Adjusted Data [1]

	Matric Potential (-cm water)	Adjusted Volume (cm^3)	% Volume Change [2] (%)	Adjusted Density (g/cm^3)	Adjusted Calculated Porosity (%)
Hanging column:	0.0	441.35	+4.20%	1.60	41.29
	6.0	441.13	+4.15%	1.60	41.27
	20.0	440.84	+4.08%	1.60	41.23
	77.0	439.82	+3.83%	1.61	41.09
Pressure plate:	337	430.38	+1.61%	1.64	39.80

Comments:

[1] Applicable if the sample experienced volume changes during testing. 'Volume Adjusted' values represent each of the volume change measurements obtained after saturated hydraulic conductivity testing and throughout hanging column/pressure plate testing. "---" indicates no volume changes occurred.

[2] Represents percent volume change from original sample volume. A '+' denotes measured sample swelling, a '-' denotes measured sample settling, and '---' denotes no volume change occurred.

* Weight including tares

† Assumed density of water is 1.0 g/cm^3

‡‡ Volume adjustments are applicable at this matric potential (see comment #1). Changes in volume, if applicable, are estimated based on obtainable measurements of changes in sample length and diameter.

Technician Notes:

Laboratory analysis by: K. Wright
Data entered by: C. Sessa
Checked by: J. Hines

Moisture Retention Data

Dew Point Potentiometer / Relative Humidity Box

(Soil-Water Characteristic Curve)

Sample Number: 600-SVE-1 (60-65')

Initial sample bulk density (g/cm^3)*:* 1.67

Fraction of bulk sample used (<2.00mm fraction) (%): 87.37

Dry weight of dew point potentiometer sample* (g)*:* 150.02

Tare weight, jar (g)*:* 113.80

	Date	Time	Weight* (g)	Water Potential (-cm water)	Moisture Content † (% vol)	
Dew point potentiometer:	8-Dec-11	14:10	152.53	18866	9.94	‡‡
	8-Dec-11	13:45	152.03	39160	7.96	‡‡
	8-Dec-11	12:35	151.27	171122	4.95	‡‡
	8-Dec-11	10:35	151.00	318076	3.88	‡‡

Volume Adjusted Data [1]

	Water Potential (-cm water)	Adjusted Volume (cm^3)	% Volume Change [2] (%)	Adjusted Density (g/cm^3)	Adjusted Calc. Porosity (%)
Dew point potentiometer:	18866	430.38	+1.61%	1.64	39.80
	39160	430.38	+1.61%	1.64	39.80
	171122	430.38	+1.61%	1.64	39.80
	318076	430.38	+1.61%	1.64	39.80

Dry weight of relative humidity box sample* (g)*:* 80.29

Tare weight (g)*:* 42.10

	Date	Time	Weight* (g)	Water Potential (-cm water)	Moisture Content † (% vol)	
Relative humidity box:	12-Dec-11	13:20	81.07	857025	2.93	‡‡

Volume Adjusted Data [1]

	Water Potential (-cm water)	Adjusted Volume (cm^3)	% Volume Change [2] (%)	Adjusted Density (g/cm^3)	Adjusted Calc. Porosity (%)
Relative humidity box:	857025	430.38	+1.61%	1.64	39.80

Comments:

[1] Applicable if the sample experienced volume changes during testing. 'Volume Adjusted' values represent the volume change measurements obtained after the last hanging column or pressure plate point. "---" indicates no volume changes occurred.

[2] Represents percent volume change from original sample volume. A '+' denotes measured sample swelling, a '-' denotes measured sample settling, and '---' denotes no volume change occurred.

* Weight including tares

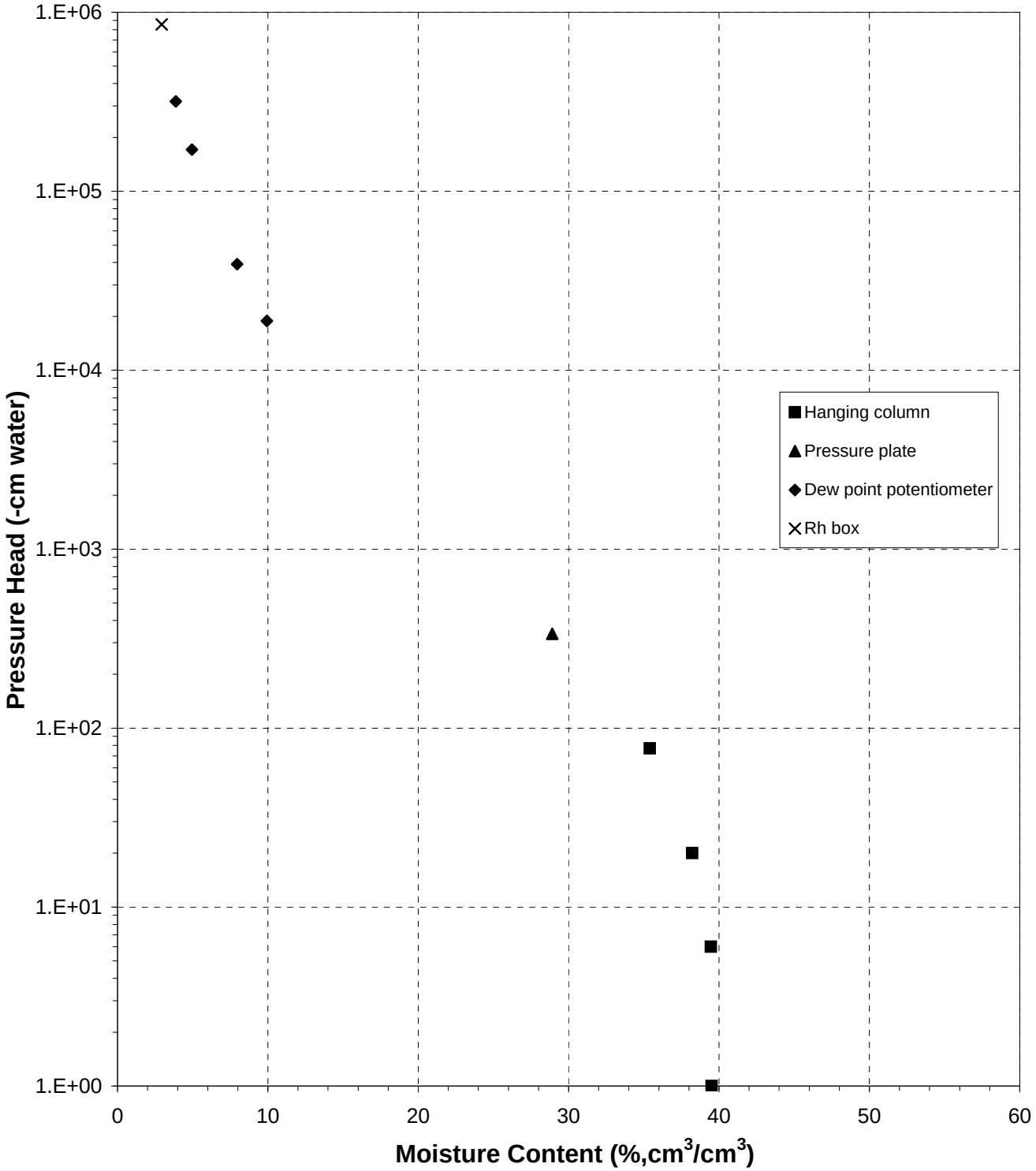
† Adjusted for >2.00mm (#10 sieve) material not used in DPP/RH testing. Assumed moisture content of material >2.00mm is zero, and assumed density of water is 1.0 g/cm^3.

‡‡ Volume adjustments are applicable at this matric potential (see comment #1). Changes in volume, if applicable, are estimated based on obtainable measurements of changes in sample length and diameter.

Laboratory analysis by: D. O'Dowd/K. Wright
Data entered by: C. Sessa
Checked by: J. Hines

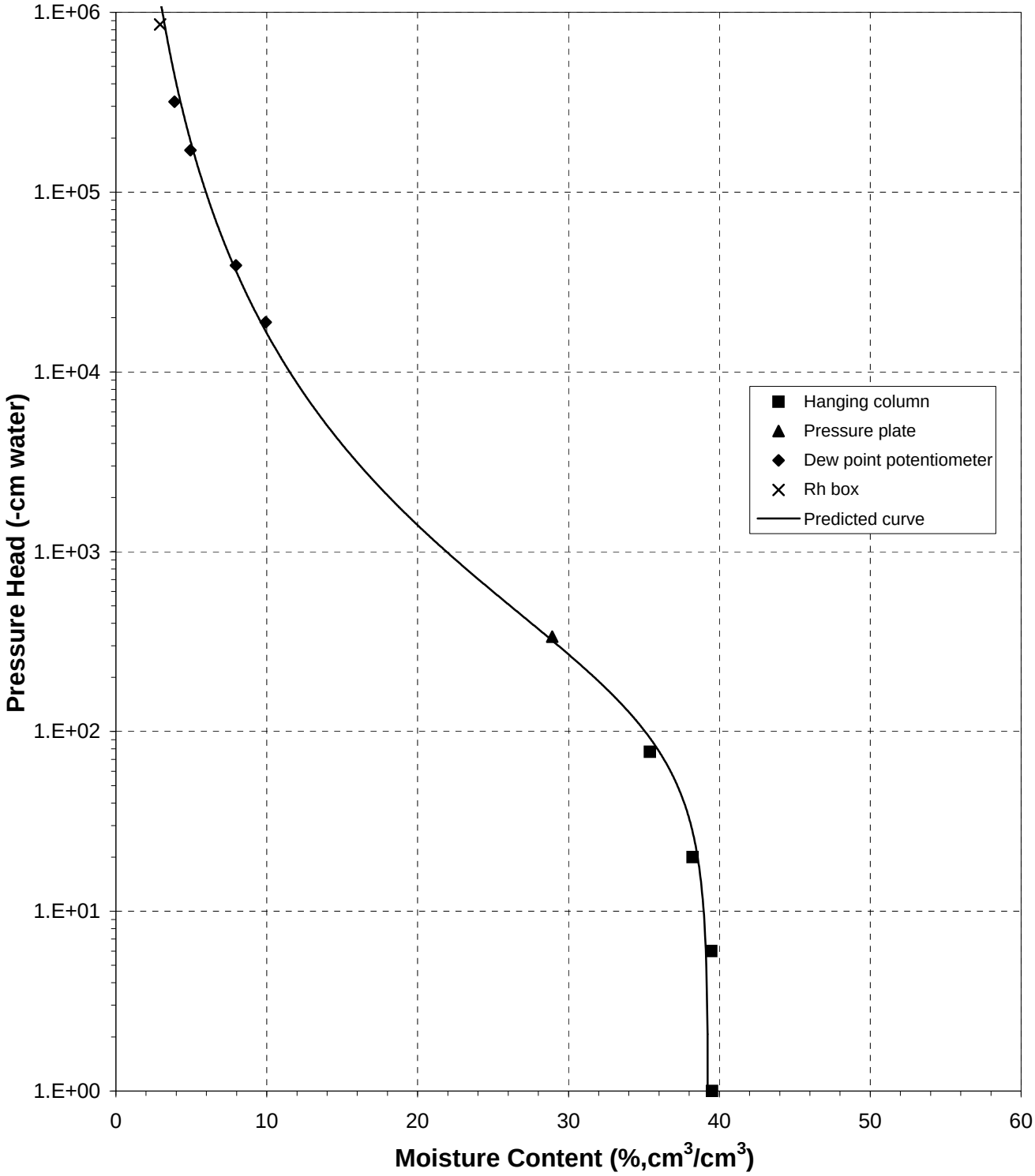
Water Retention Data Points

Sample Number: 600-SVE-1 (60-65')



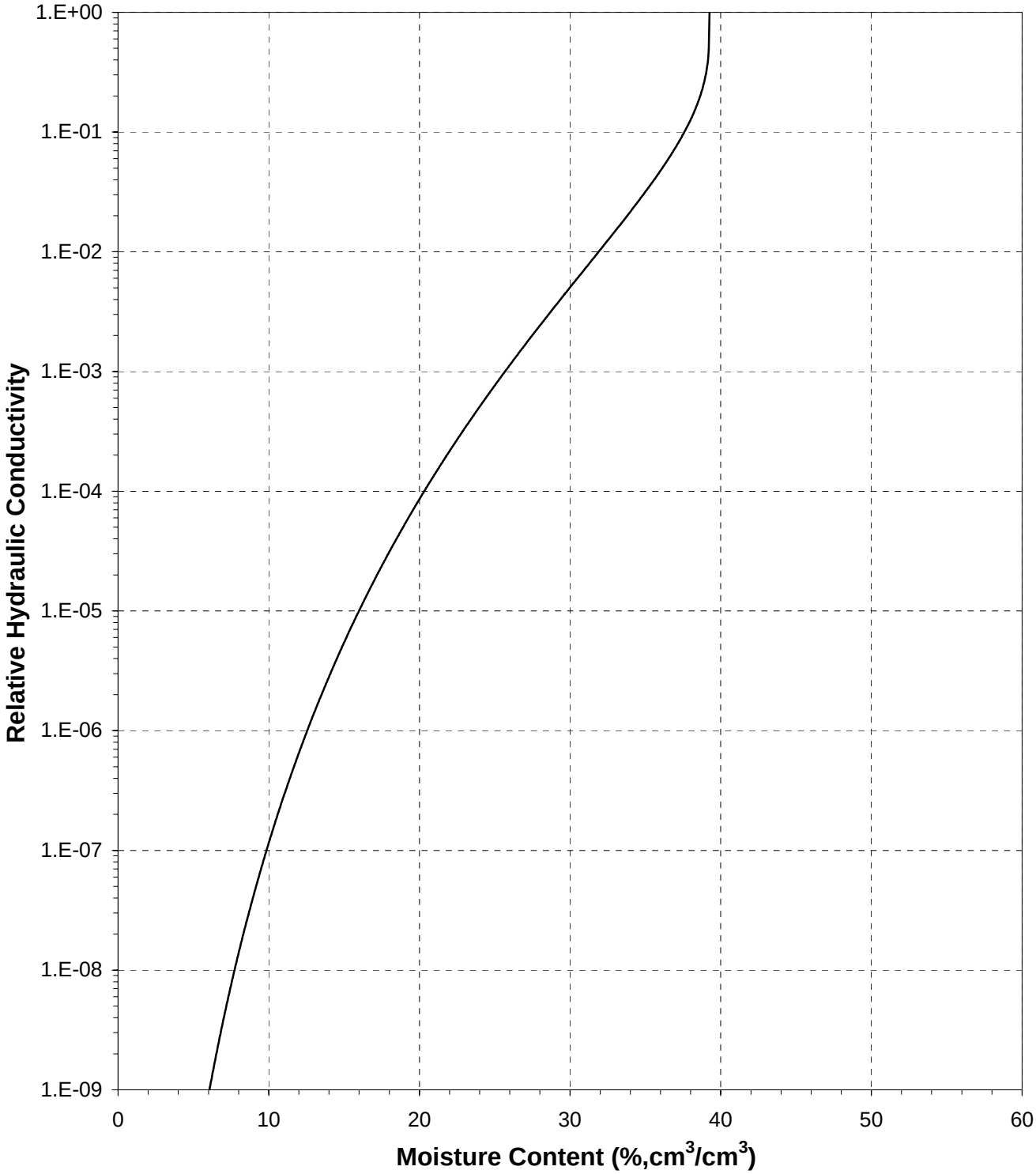
Predicted Water Retention Curve and Data Points

Sample Number: 600-SVE-1 (60-65')



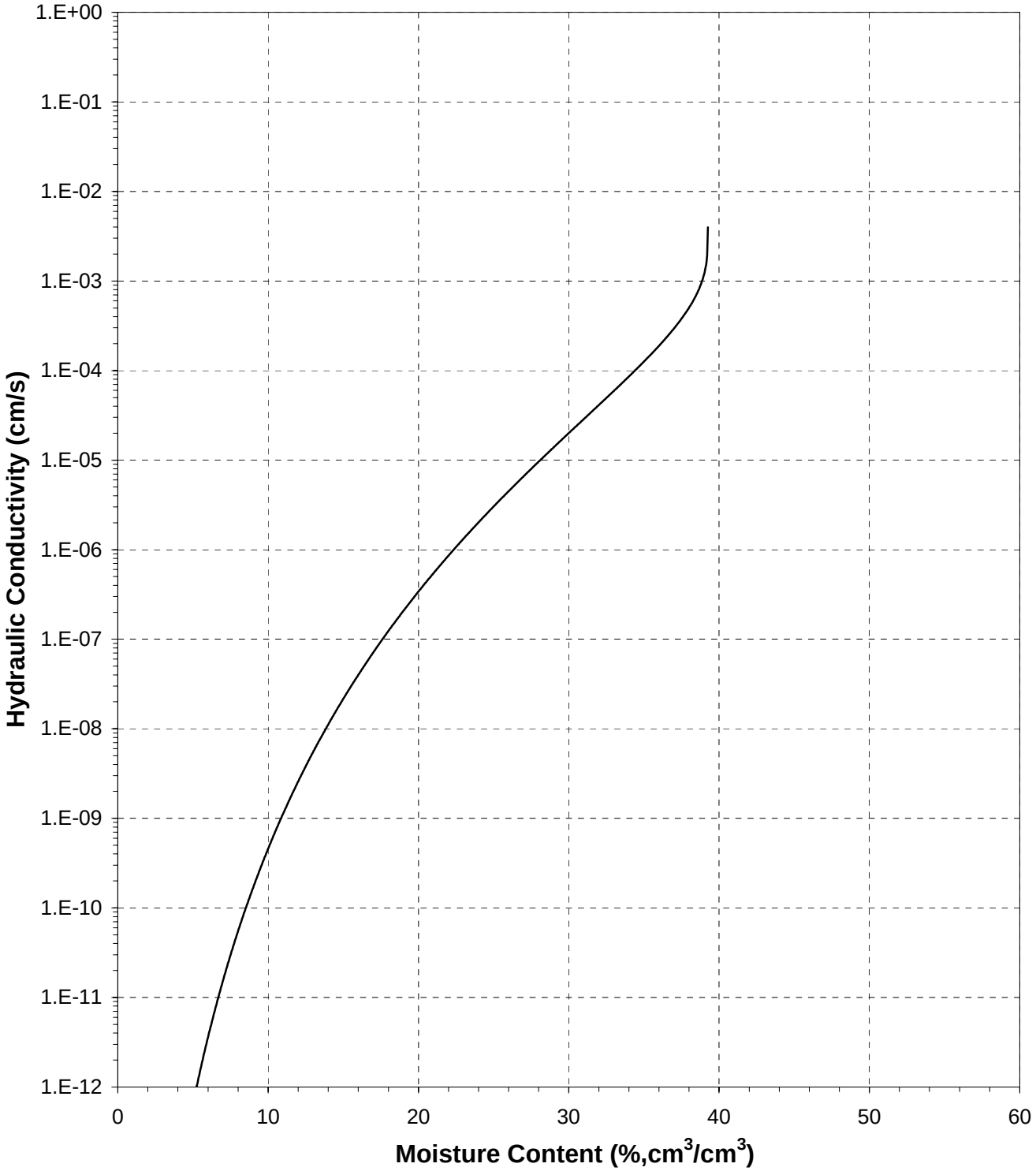
Plot of Relative Hydraulic Conductivity vs Moisture Content

Sample Number: 600-SVE-1 (60-65')



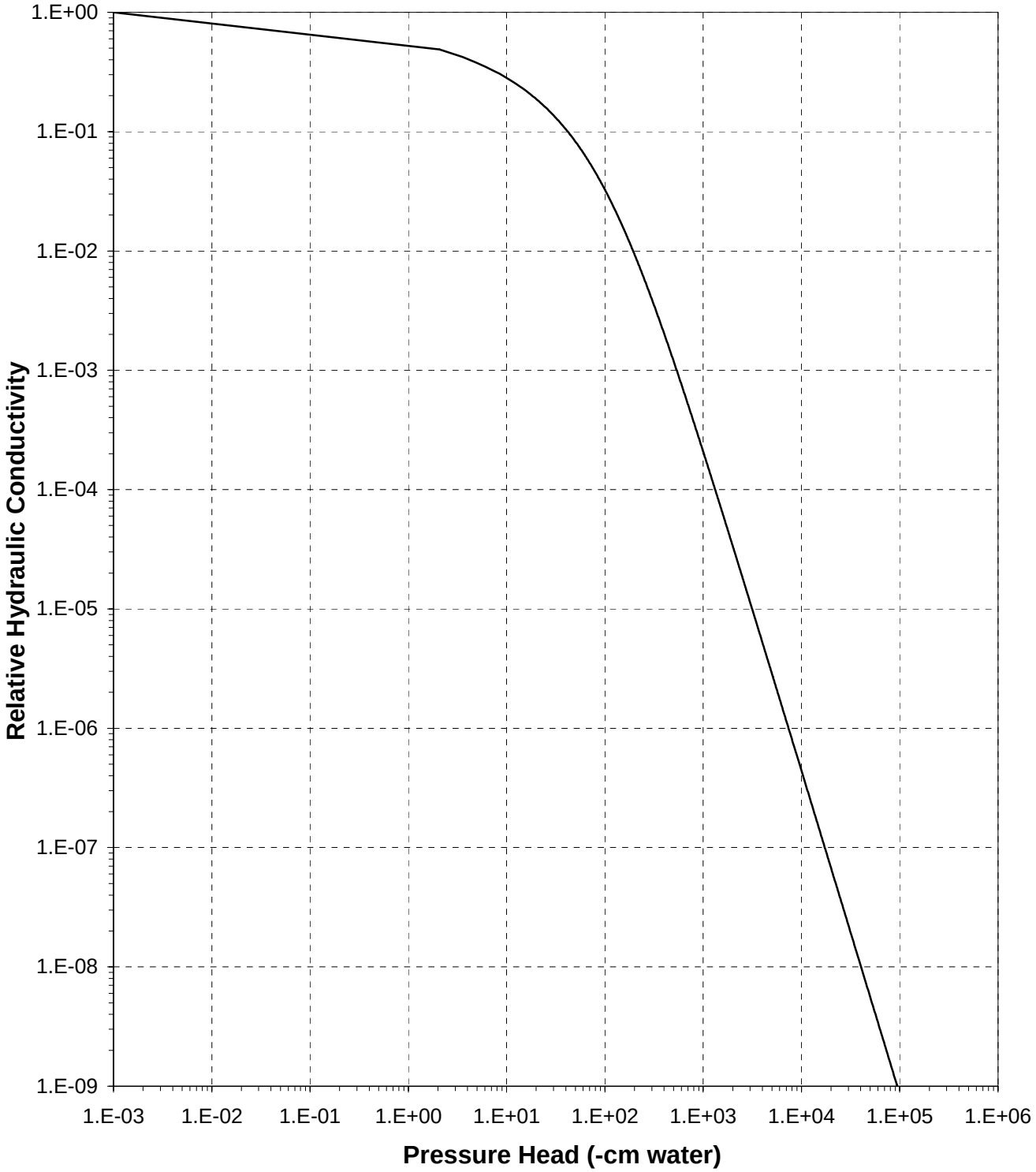
Plot of Hydraulic Conductivity vs Moisture Content

Sample Number: 600-SVE-1 (60-65')



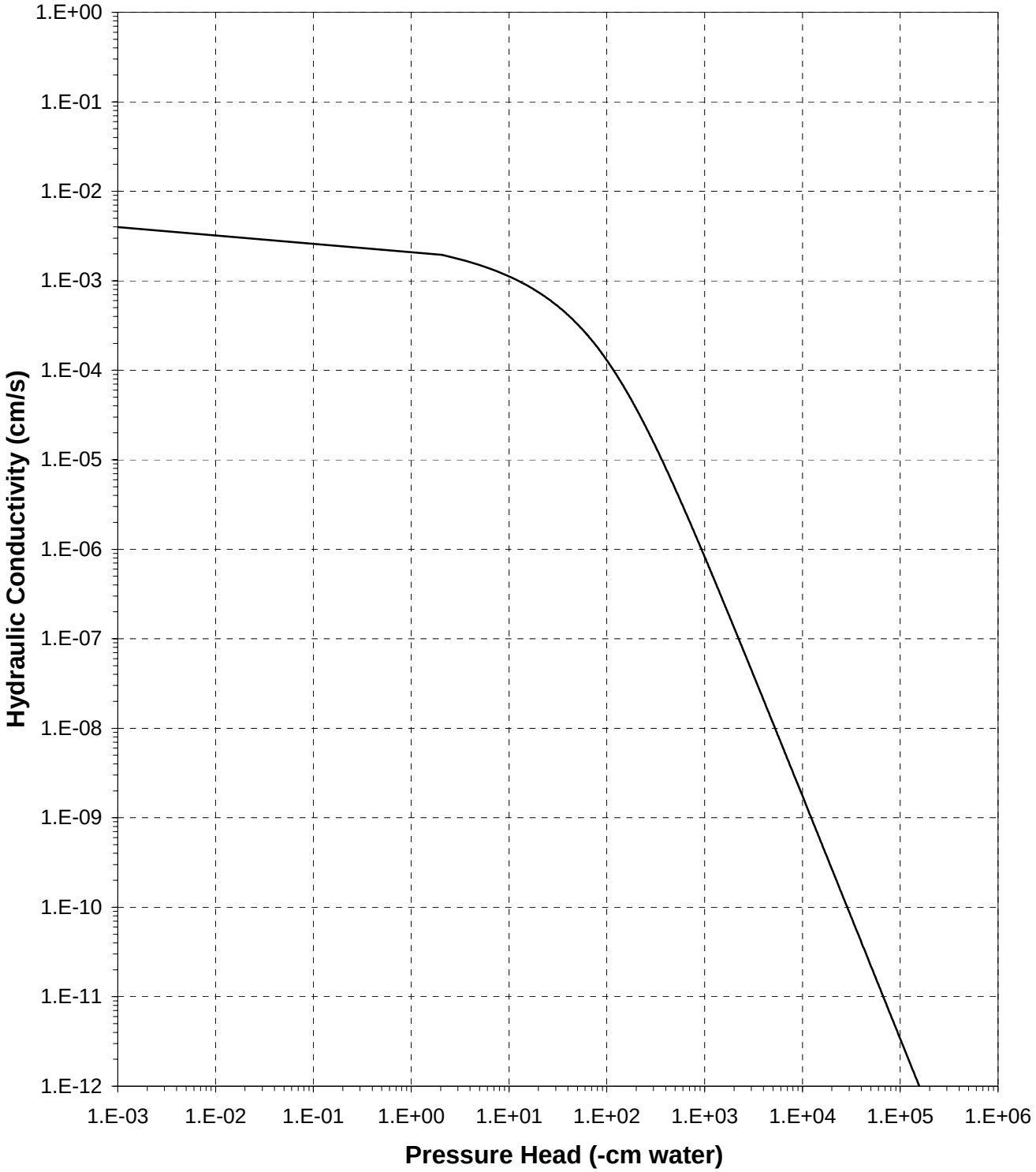
Plot of Relative Hydraulic Conductivity vs Pressure Head

Sample Number: 600-SVE-1 (60-65')



Plot of Hydraulic Conductivity vs Pressure Head

Sample Number: 600-SVE-1 (60-65')



Moisture Retention Data

Hanging Column / Pressure Plate

(Soil-Water Characteristic Curve)

Job Name: NASA
Job Number: LB11.0218.00
Sample Number: 600-SVE-1 (95-100')
PO Number: ECO 0000001
Date Received: 10/24/2011

Dry wt. of sample (g): 2626.34
Tare wt., ring (g): 160.85
Tare wt., screen & clamp (g): 51.37
Initial sample volume (cm^3): 1243.90
Initial dry bulk density (g/cm^3): 2.11
Measured particle density (g/cm^3): 2.72
Initial calculated total porosity (%): 22.41

	Date	Time	Weight* (g)	Matric Potential (-cm water)	Moisture Content† (% vol)	
Hanging column:	3-Nov-11	10:45	3157.31	0	25.63	
	10-Nov-11	8:40	3128.25	5.0	23.29	
	18-Nov-11	13:45	3109.67	11.0	21.80	
	28-Nov-11	10:05	3085.30	49.0	20.40	‡‡
	5-Dec-11	8:15	3045.19	192.0	18.03	‡‡

Volume Adjusted Data [1]

	Matric Potential (-cm water)	Adjusted Volume (cm^3)	% Volume Change [2] (%)	Adjusted Density (g/cm^3)	Adjusted Calculated Porosity (%)
Hanging column:	0.0	---	---	---	---
	5.0	---	---	---	---
	11.0	---	---	---	---
	49.0	1209.24	-2.79%	2.17	20.19
	192.0	1146.30	-7.85%	2.29	15.81

Comments:

[1] Applicable if the sample experienced volume changes during testing. 'Volume Adjusted' values represent each of the volume change measurements obtained after saturated hydraulic conductivity testing and throughout hanging column/pressure plate testing. "---" indicates no volume changes occurred.

[2] Represents percent volume change from original sample volume. A '+' denotes measured sample swelling, a '-' denotes measured sample settling, and '---' denotes no volume change occurred.

* Weight including tares

† Assumed density of water is 1.0 g/cm^3

‡‡ Volume adjustments are applicable at this matric potential (see comment #1). Changes in volume, if applicable, are estimated based on obtainable measurements of changes in sample length and diameter.

Technician Notes:

Laboratory analysis by: K. Wright
Data entered by: C. Sessa
Checked by: J. Hines

Moisture Retention Data

Dew Point Potentiometer / Relative Humidity Box

(Soil-Water Characteristic Curve)

Sample Number: 600-SVE-1 (95-100')

Initial sample bulk density (g/cm^3)*:* 2.11
Fraction of test sample used (<2.00mm fraction) (%): 40.03

Dry weight of dew point potentiometer sample* (g)*:* 162.18
Tare weight, jar (g)*:* 117.46

	Date	Time	Weight* (g)	Water Potential (-cm water)	Moisture Content† (% vol)	
Dew point potentiometer:	8-Dec-11	15:01	163.95	15399	3.63	‡‡
	8-Dec-11	10:55	163.23	52622	2.15	‡‡
	8-Dec-11	12:50	163.00	159701	1.68	‡‡

Volume Adjusted Data [1]

	Water Potential (-cm water)	Adjusted Volume (cm^3)	% Volume Change [2] (%)	Adjusted Density (g/cm^3)	Adjusted Calc. Porosity (%)
Dew point potentiometer:	15399	1146.30	-7.85%	2.29	15.81
	52622	1146.30	-7.85%	2.29	15.81
	159701	1146.30	-7.85%	2.29	15.81

Dry weight of relative humidity box sample* (g)*:* 90.70
Tare weight (g)*:* 42.91

	Date	Time	Weight* (g)	Water Potential (-cm water)	Moisture Content† (% vol)	
Relative humidity box:	12-Dec-11	13:20	91.19	857025	0.94	‡‡

Volume Adjusted Data [1]

	Water Potential (-cm water)	Adjusted Volume (cm^3)	% Volume Change [2] (%)	Adjusted Density (g/cm^3)	Adjusted Calc. Porosity (%)
Relative humidity box:	857025	1146.30	-7.85%	2.29	15.81

Comments:

[1] Applicable if the sample experienced volume changes during testing. 'Volume Adjusted' values represent the volume change measurements obtained after the last hanging column or pressure plate point. "---" indicates no volume changes occurred.

[2] Represents percent volume change from original sample volume. A '+' denotes measured sample swelling, a '-' denotes measured sample settling, and '---' denotes no volume change occurred.

* Weight including tares

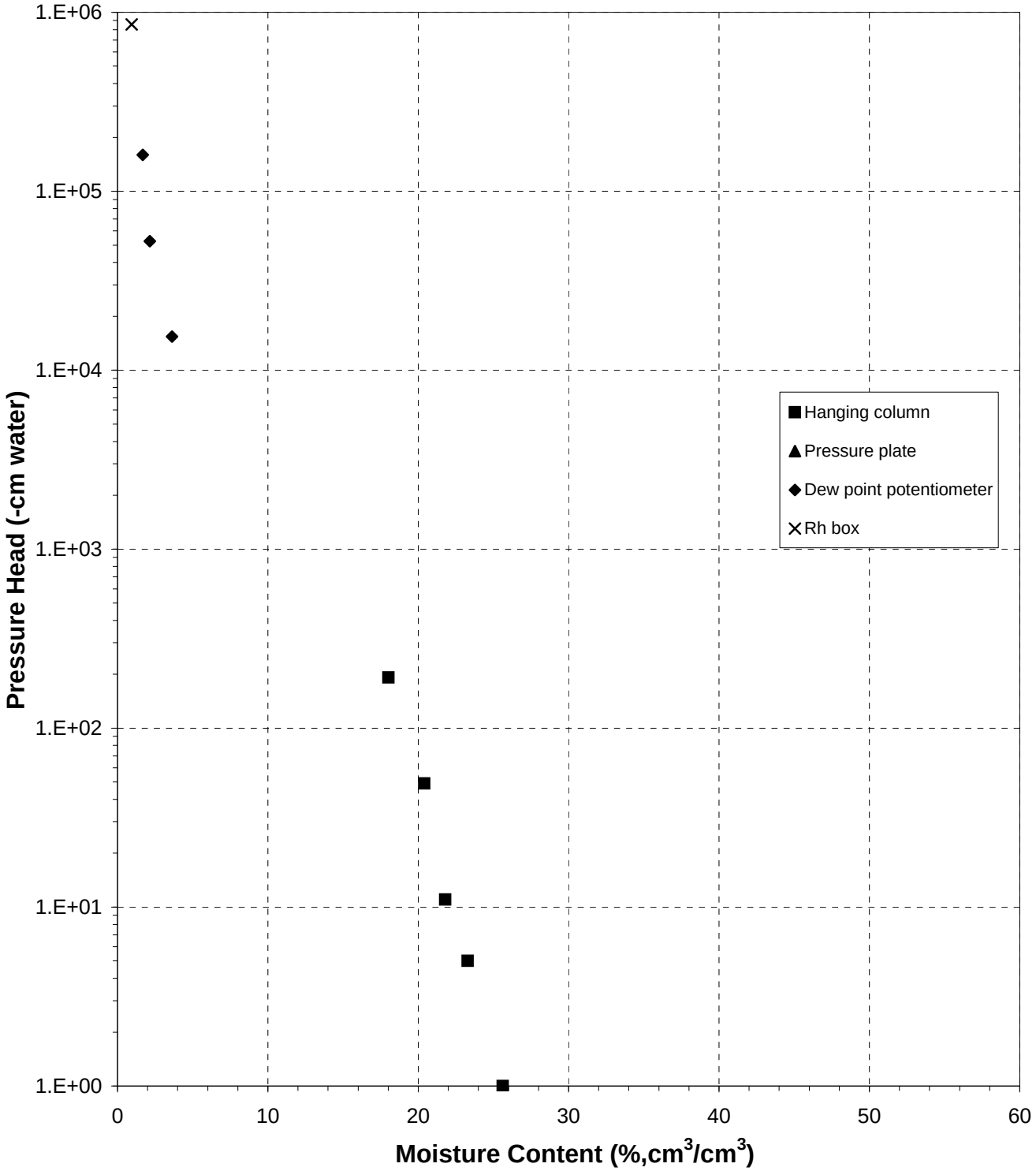
† Adjusted for >2.00mm (#10 sieve) material not used in DPP/RH testing. Assumed moisture content of material >2.00mm is zero, and assumed density of water is 1.0 g/cm^3.

‡‡ Volume adjustments are applicable at this matric potential (see comment #1). Changes in volume, if applicable, are estimated based on obtainable measurements of changes in sample length and diameter.

Laboratory analysis by: D. O'Dowd/K. Wright
Data entered by: C. Sessa
Checked by: J. Hines

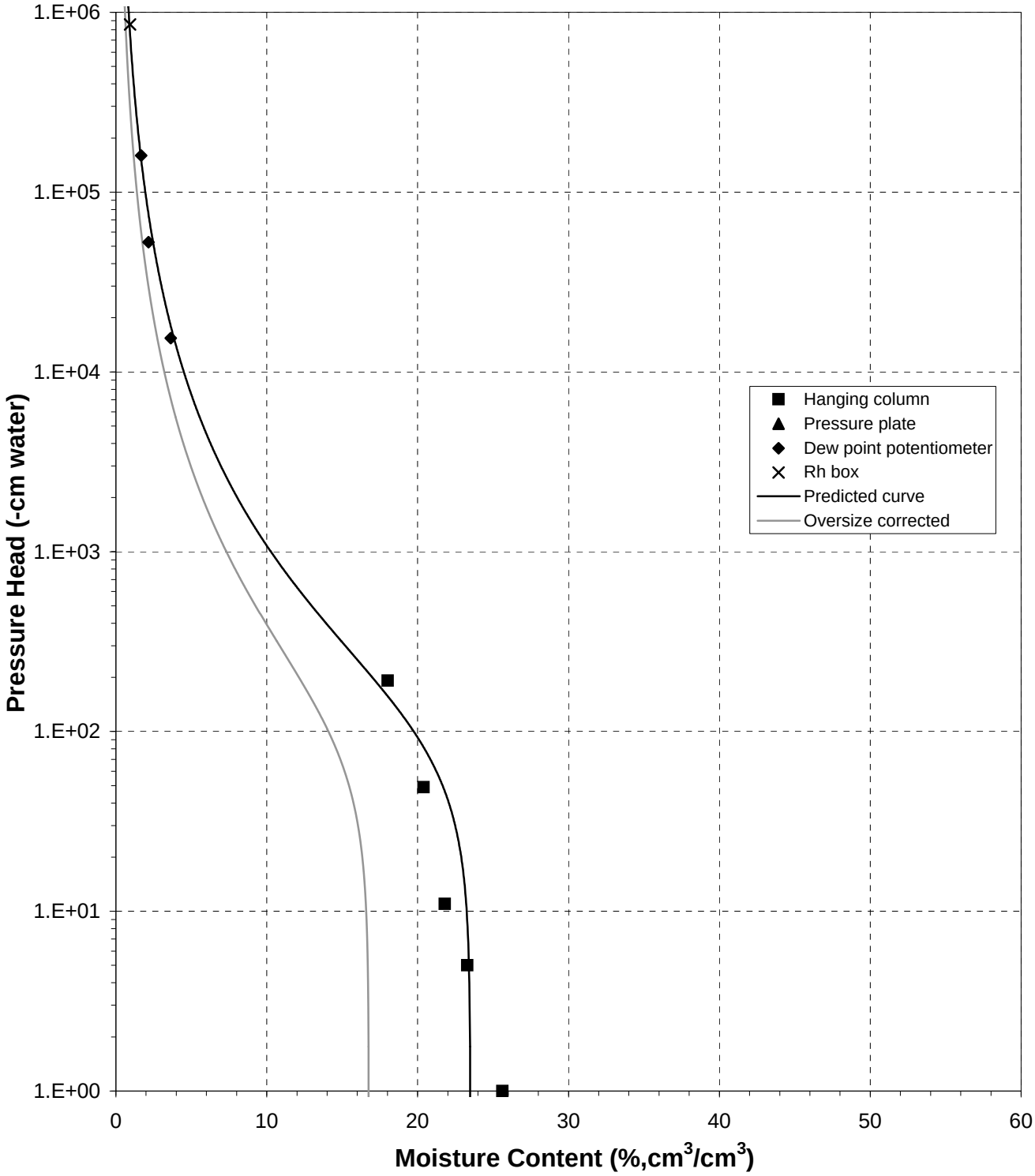
Water Retention Data Points

Sample Number: 600-SVE-1 (95-100')



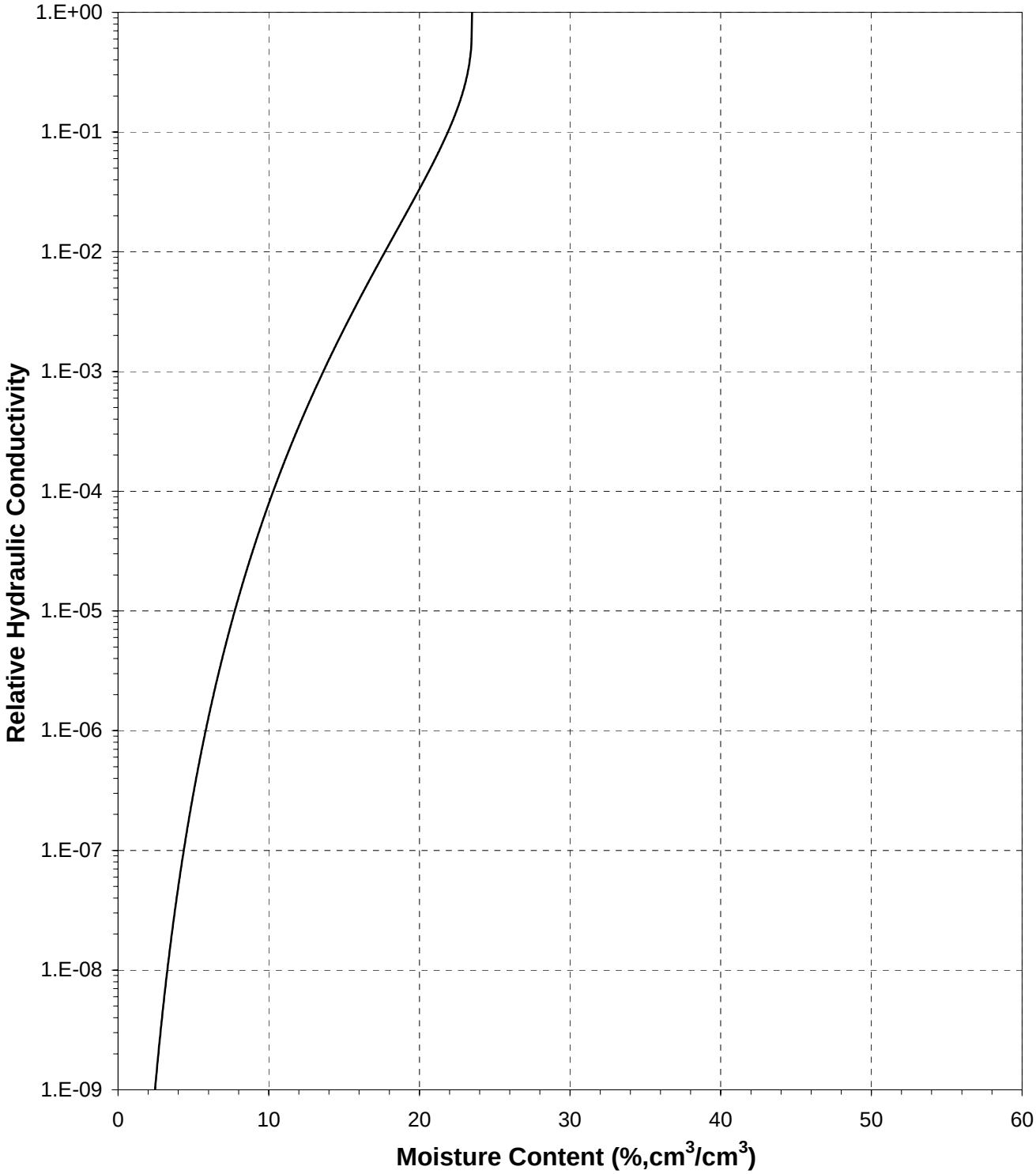
Predicted Water Retention Curve and Data Points

Sample Number: 600-SVE-1 (95-100')



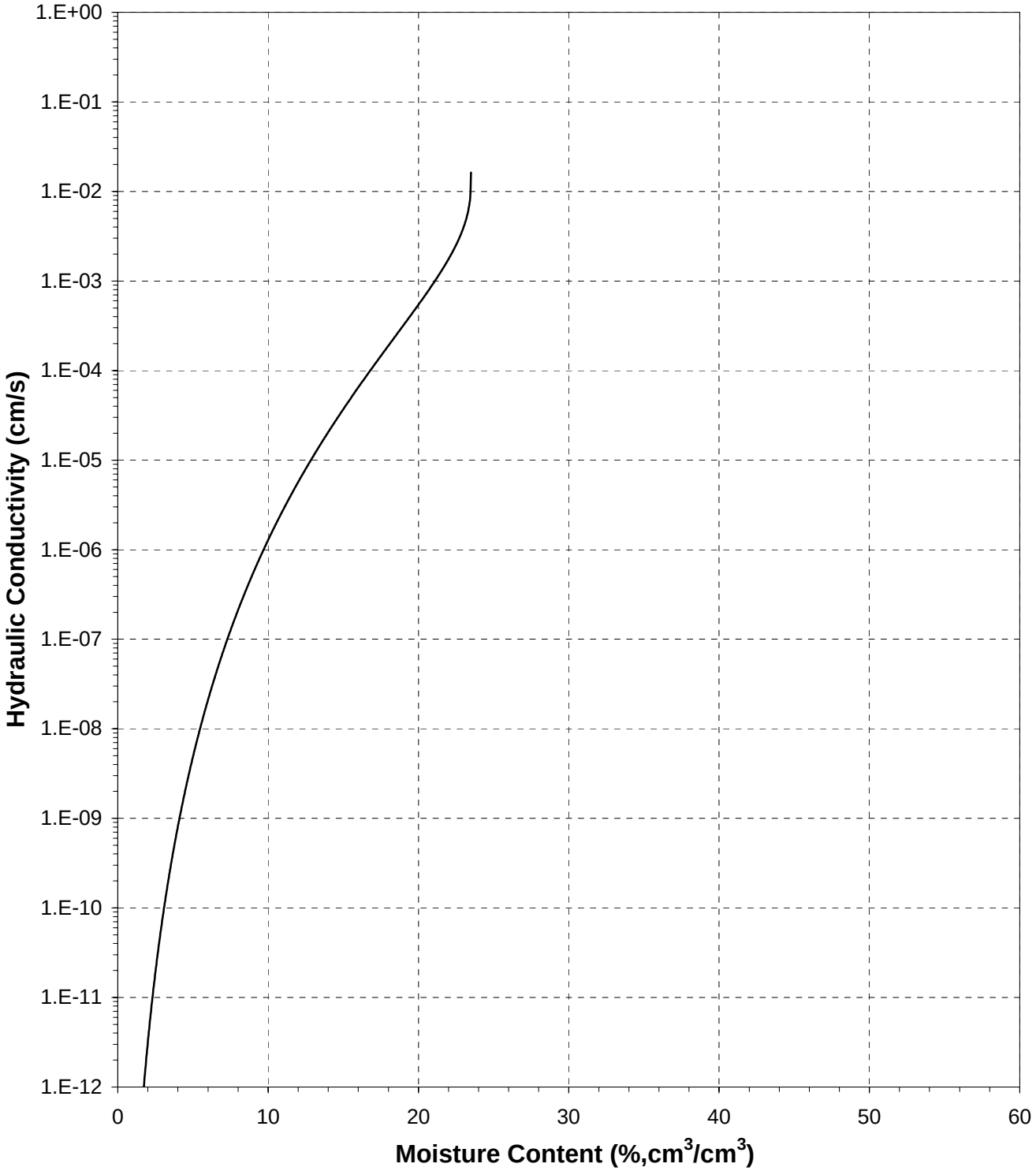
Plot of Relative Hydraulic Conductivity vs Moisture Content

Sample Number: 600-SVE-1 (95-100')



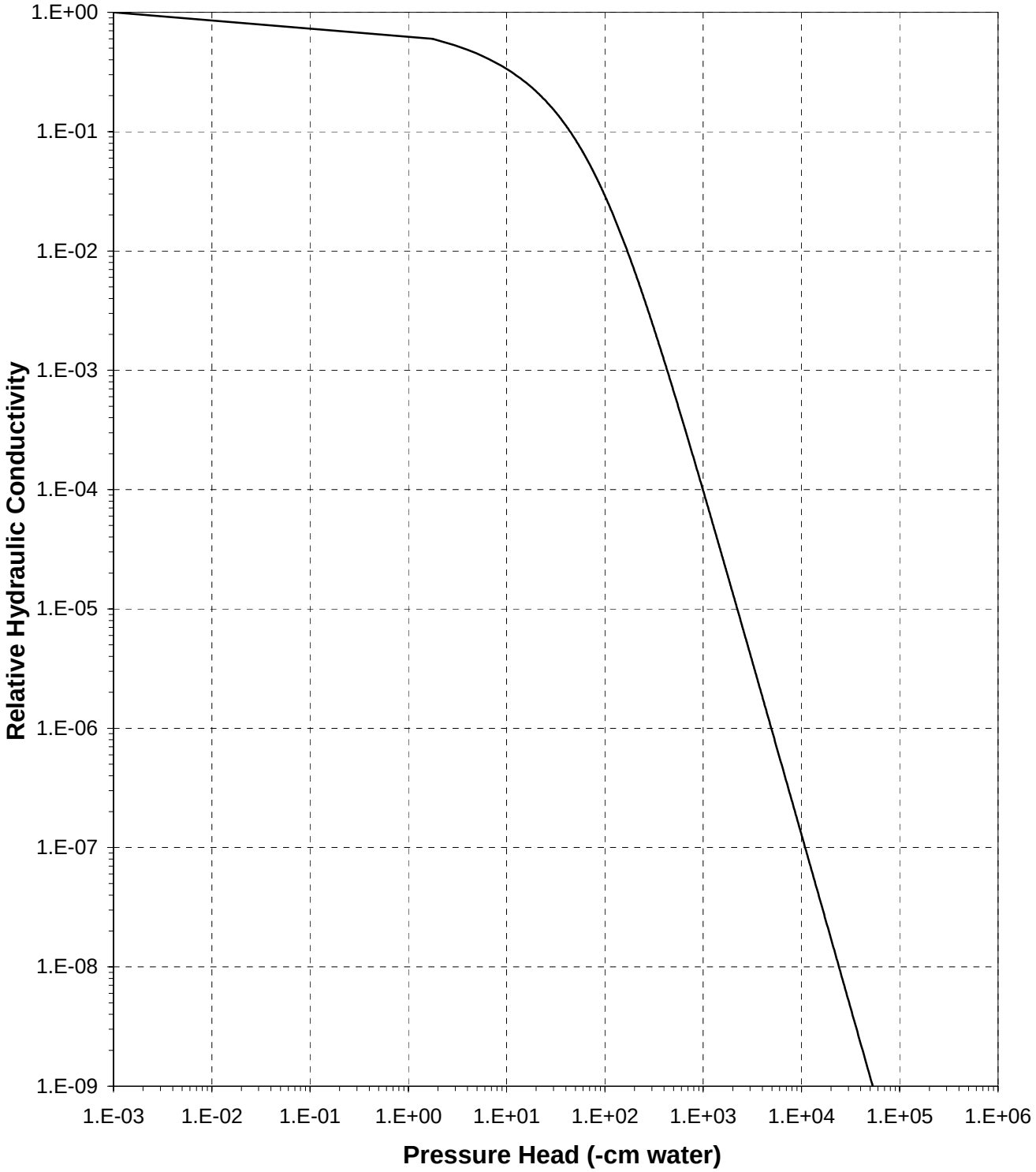
Plot of Hydraulic Conductivity vs Moisture Content

Sample Number: 600-SVE-1 (95-100')



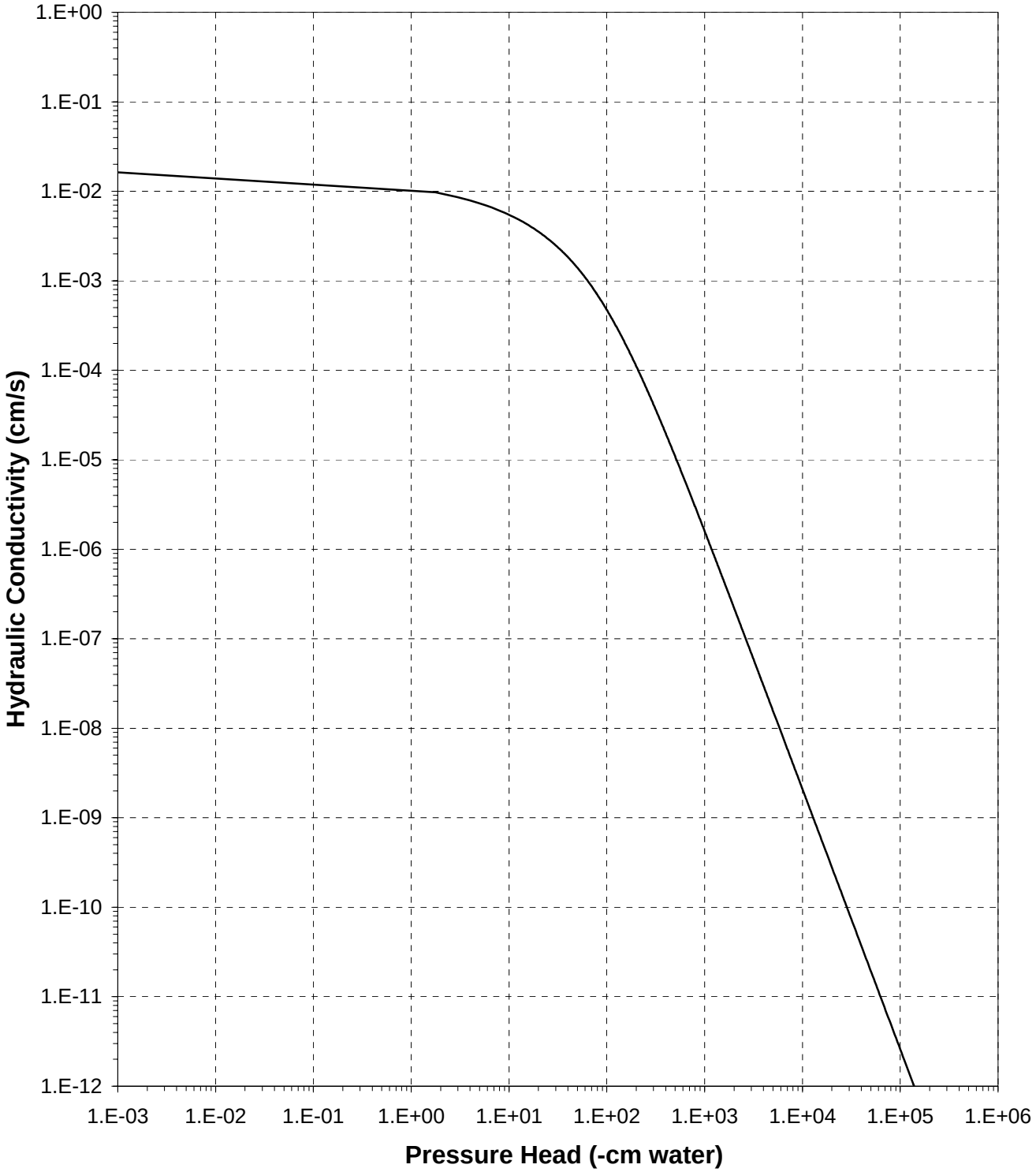
Plot of Relative Hydraulic Conductivity vs Pressure Head

Sample Number: 600-SVE-1 (95-100')



Plot of Hydraulic Conductivity vs Pressure Head

Sample Number: 600-SVE-1 (95-100')



Oversize Correction Data Sheet

Job Name: NASA
Job Number: LB11.0218.00
Sample Number: 600-SVE-1 (95-100')
PO Number: ECO 0000001
Date Received: 10/24/2011

Split (3/4", 3/8", #4): 3/4

	Coarse Fraction*	Fines Fraction**	Composite
Subsample Mass (g):	1944.45	3735.38	5679.83
Mass Fraction (%):	34.23	65.77	100.00
Initial Sample θ_i			
Bulk Density (g/cm^3):	2.74	2.11	2.29
Calculated Porosity (% vol):	0.00	22.41	22.41
Volume of Solids (cm^3):	710.77	1372.67	2083.45
Volume of Voids (cm^3):	0.00	396.50	396.50
Total Volume (cm^3):	710.77	1769.17	2479.94
Volumetric Fraction (%):	28.66	71.34	100.00
Initial Moisture Content (% vol):	0.00	3.54	2.52
Saturated Sample θ_s			
Bulk Density (g/cm^3):	2.74	2.11	2.29
Calculated Porosity (% vol):	0.00	22.41	22.41
Volume of Solids (cm^3):	710.77	1372.67	2083.45
Volume of Voids (cm^3):	0.00	396.50	396.50
Total Volume (cm^3):	710.77	1769.17	2479.94
Volumetric Fraction (%):	28.66	71.34	100.00
Saturated Moisture Content (% vol):	0.00	23.49	16.76
Residual Sample θ_r			
Bulk Density (g/cm^3):	2.74	2.29	2.43
Calculated Porosity (% vol):	0.00	15.81	15.81
Volume of Solids (cm^3):	710.77	1372.67	2083.45
Volume of Voids (cm^3):	0.00	257.68	257.68
Total Volume (cm^3):	710.77	1630.36	2341.13
Volumetric Fraction (%):	30.36	69.64	100.00
Residual Moisture Content (% vol):	0.00	0.00	0.00
Ksat (cm/sec):	NM	1.6E-02	1.1E-02

* = Porosity and moisture content of coarse fraction assumed to be zero.
** = Volume adjusted, if applicable. See notes on Moisture Retention Data pages.
NM = Not measured

Laboratory analysis by: K. Wright
Data entered by: C. Sessa
Checked by: J. Hines

Particle Size Analysis

Summary of Particle Size Characteristics

Sample Number	d_{10} (mm)	d_{50} (mm)	d_{60} (mm)	C_u	C_c	Method	ASTM Classification	USDA Classification
600-SVE-1 (60-65')	0.0013	0.045	0.11	85	0.40	WS/H	Sandy lean clay s(CL)	Loam † (Est)
600-SVE-1 (95-100')	0.12	9.8	15	125	4.1	WS/H	Poorly-graded gravel with silt and sand (GP-GM)s	Sandy Loam †

d_{50} = Median particle diameter

Est = Reported values for d_{10}, C_u, C_c, and soil classification are estimates, since extrapolation was required to obtain the d_{10} diameter

$$C_u = \frac{d_{60}}{d_{10}}$$

$$C_c = \frac{(d_{30})^2}{(d_{10})(d_{60})}$$

DS = Dry sieve

H = Hydrometer

WS = Wet sieve

† Greater than 10% of sample is coarse material

Percent Gravel, Sand, Silt and Clay*

Sample Number	% Gravel (>4.75mm)	% Sand (<4.75mm, >0.075mm)	% Silt (<0.075mm, >0.002mm)	% Clay (<0.002mm)
600-SVE-1 (60-65')	8.0	35.3	41.7	15.0
600-SVE-1 (95-100')	63.3	27.9	6.1	2.8

*USCS classification does not classify clay fraction based on particle size. USDA definition of clay (<0.002mm) used in this table.

Particle Size Analysis
Wet Sieve Data (#10 Split)

Job Name: NASA
Job Number: LB11.0218.00
Sample Number: 600-SVE-1 (60-65')
PO Number: ECO 0000001
Date Received: 10/24/2011
Test Date: 13-Dec-11

Initial Dry Weight of Sample (g): 495.34
Weight Passing #10 (g): 432.76
Weight Retained #10 (g): 62.58
Weight of Hydrometer Sample (g): 48.62
Calculated Weight of Sieve Sample (g): 55.65

Shape: Angular
Hardness: Soft

Test Fraction	Sieve Number	Diameter (mm)	Wt. Retained	Cum Wt. Retained	Wt. Passing	% Passing
+10						
	3"	75	0.00	0.00	495.34	100.00
	2"	50	0.00	0.00	495.34	100.00
	1.5"	38.1	0.00	0.00	495.34	100.00
	1"	25	0.00	0.00	495.34	100.00
	3/4"	19.0	0.00	0.00	495.34	100.00
	3/8"	9.5	21.81	21.81	473.53	95.60
	4	4.75	18.03	39.84	455.50	91.96
	10	2.00	22.74	62.58	432.76	87.37
-10			(Based on calculated sieve wt.)			
	20	0.85	2.38	9.41	46.24	83.09
	40	0.425	3.68	13.09	42.56	76.48
	60	0.250	3.74	16.83	38.82	69.76
	140	0.106	5.38	22.21	33.44	60.09
	200	0.075	1.92	24.13	31.52	56.64
	dry pan		0.45	24.58	31.07	
	wet pan			31.07	0.00	

d_{10} (mm): 0.0013
d_{16} (mm): 0.0022
d_{30} (mm): 0.0076
d_{50} (mm): 0.045
d_{60} (mm): 0.11
d_{84} (mm): 1.0

Median Particle Diameter --d_{50} (mm): 0.045
Uniformity Coefficient, Cu --$[d_{60}/d_{10}]$ (mm): 85
Coefficient of Curvature, Cc --$[(d_{30})^2/(d_{10}*d_{60})]$ (mm): 0.40
Mean Particle Diameter --$[(d_{16}+d_{50}+d_{84})/3]$ (mm): 0.35

Note: Reported values for d_{10}, C_u, C_c, and soil classification are estimates, since extrapolation was required to obtain the d_{10} diameter

Classification of fines: CL

ASTM Soil Classification: Sandy lean clay s(CL)
USDA Soil Classification: Loam †

† Greater than 10% of sample is coarse material

Laboratory analysis by: K. Wright
Data entered by: J. Hines
Checked by: C. Sessa

Daniel B. Stephens & Associates, Inc.

Particle Size Analysis
Hydrometer Data

Job Name: NASA
Job Number: LB11.0218.00
Sample Number: 600-SVE-1 (60-65')
PO Number: ECO 0000001
Date Received: 10/24/2011

Test Date: 8-Dec-11
Start Time: 9:00

Type of Water Used: DISTILLED
Reaction with H_2O_2*:* NA
Dispersant:* $(NaPO_3)_6$
Measured particle density: 2.73

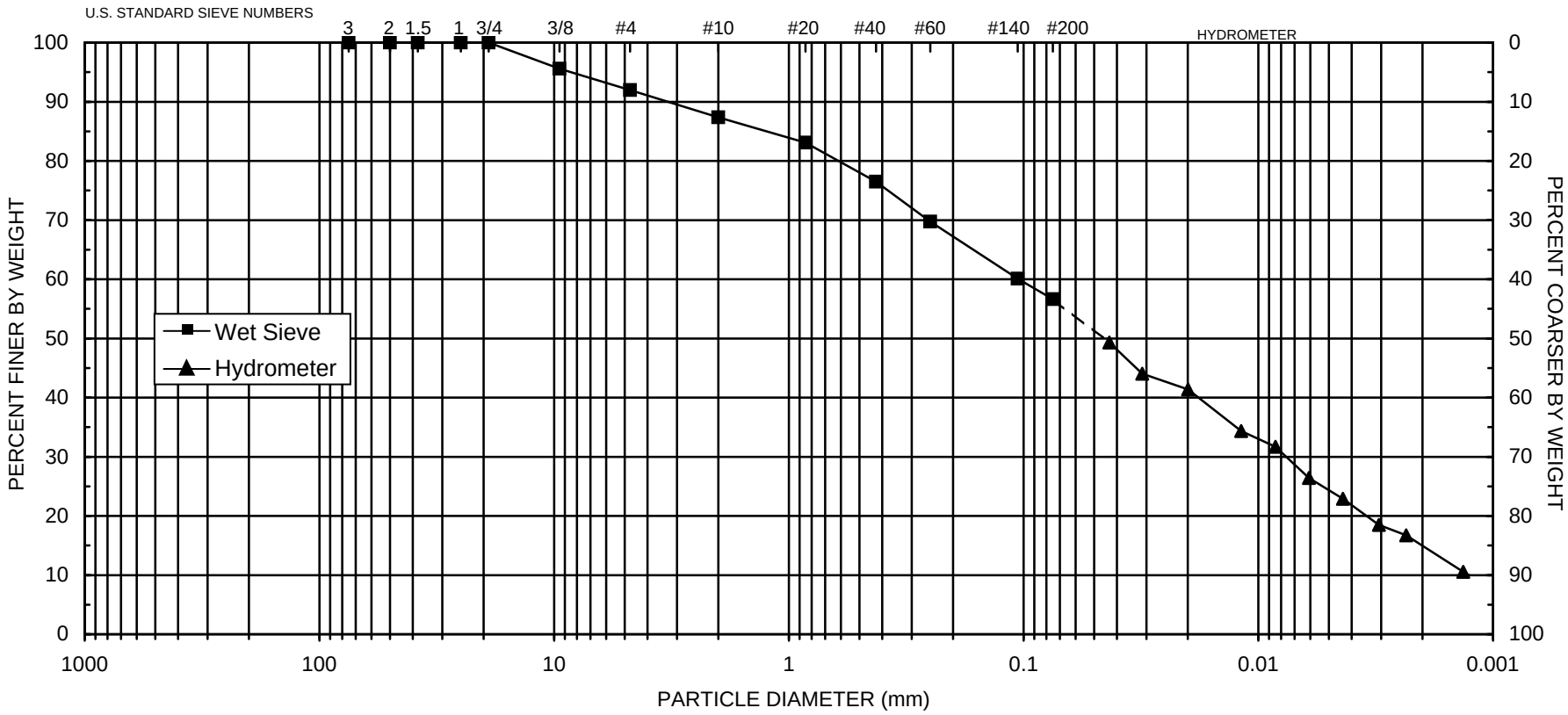
Initial Wt. (g)*:* 48.62
Total Sample Wt. (g)*:* 495.34
Wt. Passing #10 (g): 432.76

Date	Time (min)	Temp (°C)	R (g/L)	R_L (g/L)	R_{corr} (g/L)	L (cm)	D (mm)	P (%)	% Finer
8-Dec-11	1	20.1	35.0	7.0	28.0	10.6	0.04318	56.4	49.3
	2	20.1	32.0	7.0	25.0	11.1	0.03123	50.4	44.0
	5	20.2	30.5	7.0	23.5	11.3	0.01995	47.4	41.4
	15	20.3	26.5	7.0	19.5	12.0	0.01183	39.3	34.3
	30	20.3	25.0	7.0	18.0	12.2	0.00845	36.3	31.7
	60	20.4	22.0	7.0	15.0	12.7	0.00609	30.2	26.4
	120	20.5	20.0	7.0	13.0	13.0	0.00436	26.2	22.9
	250	20.8	17.0	6.5	10.5	13.5	0.00306	21.2	18.5
	426	21.5	15.5	6.0	9.5	13.8	0.00235	19.1	16.7
9-Dec-11	1380	20.5	13.0	7.0	6.0	14.2	0.00134	12.1	10.6

Comments:

* Dispersion device: mechanically operated stirring device

Laboratory analysis by: K. Wright
Data entered by: J. Hines
Checked by: C. Sessa



UNIFIED	COBBLES	GRAVEL		SAND			SILT OR CLAY			
		Coarse	Fine	Coarse	Medium	Fine				
USDA	COBBLES	GRAVEL		SAND				SILT		CLAY
				Very coarse	Coarse	Medium	Fine	Very fine		

d_{10} = **0.0013**	d_{30} = **0.0076**	d_{50} = **0.045**	d_{60} = **0.11**	C_u = **85**	C_c = **0.40**

SAMPLE NUMBER	DATE RECEIVED	ASTM CLASSIFICATION	USDA CLASSIFICATION
600-SVE-1 (60-65')	**10/24/2011**	**Sandy lean clay s(CL)**	**Loam** †

† Greater than 10% of sample is coarse material

Note: Reported values for d_{10}, C_u, C_c, and ASTM classification are estimates, since extrapolation was required to obtain the d_{10} diameter

Daniel B. Stephens & Associates, Inc.

Particle Size Analysis
Wet Sieve Data (#10 Split)

Job Name: NASA
Job Number: LB11.0218.00
Sample Number: 600-SVE-1 (95-100')
PO Number: ECO 0000001
Date Received: 10/24/2011

Test Date: 13-Dec-11

Initial Dry Weight of Sample (g): 5679.83
Weight Passing #10 (g): 1495.28
Weight Retained #10 (g): 4184.55
Weight of Hydrometer Sample (g): 73.27
Calculated Weight of Sieve Sample (g): 278.32

Shape: Angular
Hardness: Soft

Test Fraction	Sieve Number	Diameter (mm)	Wt. Retained	Cum Wt. Retained	Wt. Passing	% Passing
+10						
	3"	75	573.01	573.01	5106.82	89.91
	2"	50	449.46	1022.47	4657.36	82.00
	1.5"	38.1	94.64	1117.11	4562.72	80.33
	1"	25	415.49	1532.60	4147.23	73.02
	3/4"	19.0	411.85	1944.45	3735.38	65.77
	3/8"	9.5	940.85	2885.30	2794.53	49.20
	4	4.75	711.46	3596.76	2083.07	36.67
	10	2.00	587.79	4184.55	1495.28	26.33
-10			(Based on calculated sieve wt.)			
	20	0.85	16.82	221.87	56.45	20.28
	40	0.425	13.66	235.53	42.79	15.37
	60	0.250	7.73	243.26	35.06	12.60
	140	0.106	8.33	251.59	26.73	9.60
	200	0.075	2.20	253.79	24.53	8.81
	dry pan		0.30	254.09	24.23	
	wet pan			24.23	0.00	

d_{10} (mm): 0.12
d_{16} (mm): 0.46
d_{30} (mm): 2.7
d_{50} (mm): 9.8
d_{60} (mm): 15
d_{84} (mm): 55

Median Particle Diameter --d_{50} (mm): 9.8
Uniformity Coefficient, Cu --$[d_{60}/d_{10}]$ (mm): 125
Coefficient of Curvature, Cc --$[(d_{30})^2/(d_{10}*d_{60})]$ (mm): 4.1
Mean Particle Diameter --$[(d_{16}+d_{50}+d_{84})/3]$ (mm): 22

Classification of fines: ML

ASTM Soil Classification: Poorly-graded gravel with silt and sand (GP-GM)s
USDA Soil Classification: Sandy Loam †

† Greater than 10% of sample is coarse material

Laboratory analysis by: K. Wright
Data entered by: J. Hines
Checked by: C. Sessa

Particle Size Analysis
Hydrometer Data

Job Name: NASA
Job Number: LB11.0218.00
Sample Number: 600-SVE-1 (95-100')
PO Number: ECO 0000001
Date Received: 10/24/2011

Test Date: 8-Dec-11
Start Time: 9:06

Type of Water Used: DISTILLED
Reaction with H_2O_2*:* NA
Dispersant:* $(NaPO_3)_6$
Measured particle density: 2.72

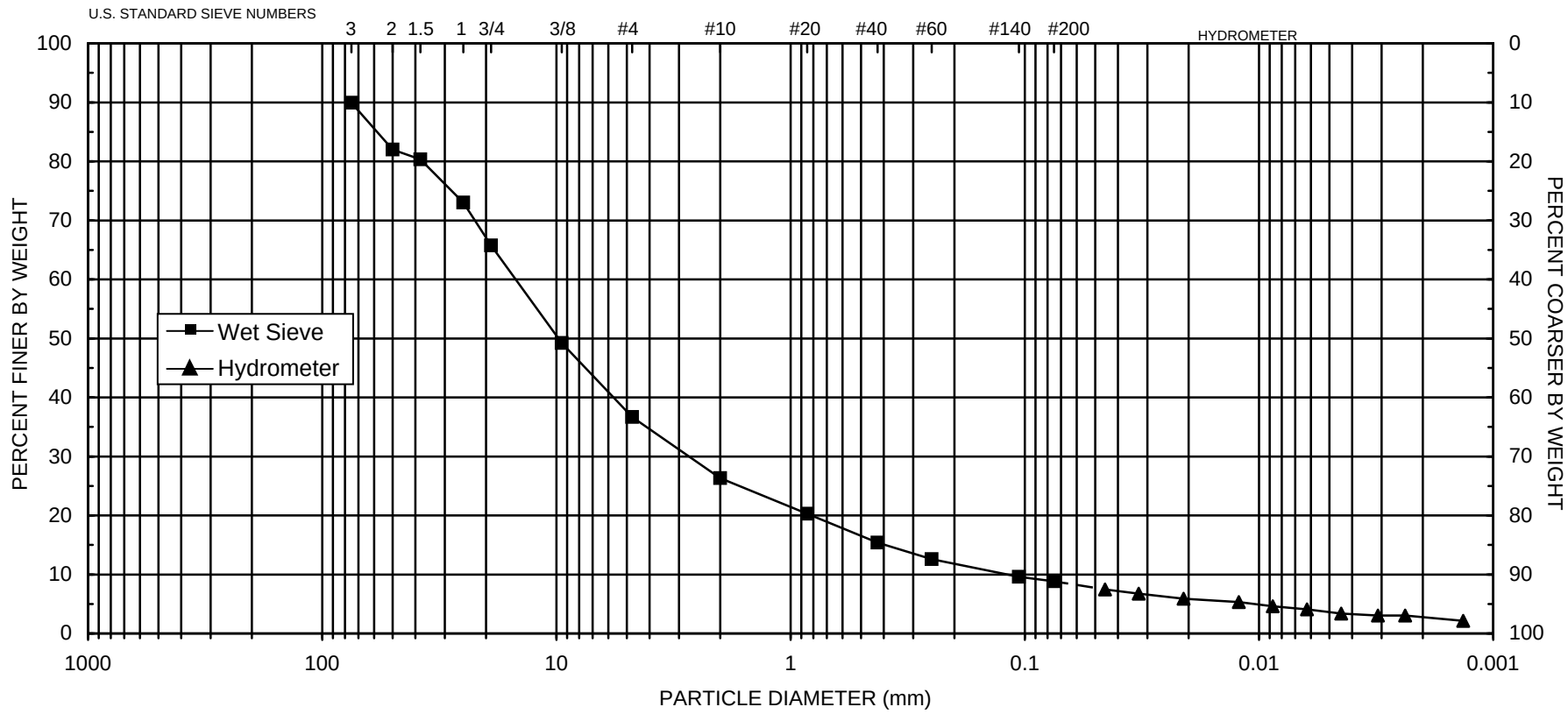
Initial Wt. (g)*:* 73.27
Total Sample Wt. (g)*:* 5679.83
Wt. Passing #10 (g): 1495.28

Date	Time (min)	Temp (°C)	R (g/L)	R_L (g/L)	R_{corr} (g/L)	L (cm)	D (mm)	P (%)	% Finer
8-Dec-11	1	20.2	28.0	7.0	21.0	11.7	0.04548	28.4	7.5
	2	20.2	26.0	7.0	19.0	12.0	0.03261	25.7	6.8
	5	20.2	23.5	7.0	16.5	12.4	0.02097	22.3	5.9
	15	20.3	22.0	7.0	15.0	12.7	0.01221	20.3	5.3
	30	20.3	20.0	7.0	13.0	13.0	0.00875	17.6	4.6
	60	20.4	18.5	7.0	11.5	13.3	0.00624	15.5	4.1
	120	20.5	16.5	7.0	9.5	13.6	0.00446	12.8	3.4
	250	20.8	15.0	6.5	8.5	13.8	0.00310	11.5	3.0
	421	21.5	14.5	6.0	8.5	13.9	0.00238	11.5	3.0
9-Dec-11	1375	20.5	13.0	7.0	6.0	14.2	0.00134	8.1	2.1

Comments:

* Dispersion device: mechanically operated stirring device

Laboratory analysis by: K. Wright
Data entered by: J. Hines
Checked by: C. Sessa



UNIFIED	COBBLES	GRAVEL		SAND			SILT OR CLAY				
		Coarse	Fine	Coarse	Medium	Fine					
USDA	COBBLES	GRAVEL		SAND					SILT	CLAY	
				Very coarse	Coarse	Medium	Fine	Very fine			

d_{10} = **0.12**	d_{30} = **2.7**	d_{50} = **9.8**	d_{60} = **15**	C_u = **125**	C_c = **4.1**

SAMPLE NUMBER	DATE RECEIVED	ASTM CLASSIFICATION	USDA CLASSIFICATION
600-SVE-1 (95-100')	**10/24/2011**	**Poorly-graded gravel with silt and sand (GP-GM)s**	**Sandy Loam** †

† Greater than 10% of sample is coarse material

Daniel B. Stephens & Associates, Inc.

Atterberg Limits/
Identification of Fines

Summary of Atterberg Tests

Sample Number	Liquid Limit	Plastic Limit	Plasticity Index	Classification
600-SVE-1 (60-65')	35	22	13	CL
600-SVE-1 (95-100')	20	17	3	ML

--- = Soil requires visual-manual classification due to non-plasticity

Atterberg Limits

Job Name: NASA
Job Number: LB11.0218.00
Sample Number: 600-SVE-1 (60-65')
PO Number: ECO 0000001
Date Received: 10/24/2011

Test Date: 8-Dec-11

Liquid Limit

	Trial 1	Trial 2	Trial 3
Number of drops:	35	25	19
Pan number:	LL1	LL2	LL3
Weight of pan plus moist soil (g):	123.30	127.14	128.07
Weight of pan plus dry soil (g)	120.82	124.52	125.37
Weight of pan (g):	113.31	116.95	117.85
Gravimetric moisture content (% g/g):	33.02	34.61	35.90

Liquid Limit: 35

Plastic Limit

	Trial 1	Trial 2
Pan number:	PL1	PL2
Weight of pan plus moist soil (g):	120.41	122.59
Weight of pan plus dry soil (g)	119.57	121.72
Weight of pan (g):	115.72	117.70
Gravimetric moisture content (% g/g):	21.82	21.64

Plastic Limit: 22

Results

Percent of Sample Retained on #40 Sieve: See Sieve

Liquid Limit: 35
Plastic Limit: 22
Plasticity Index: 13

Classification: CL

Comments:

--- = Soil requires visual-manual classification due to non-plasticity
* = 1-point method requested by client

Laboratory analysis by: D. O'Dowd
Data entered by: D. O'Dowd
Checked by: J. Hines

Atterberg Limits

Job Name: NASA
Job Number: LB11.0218.00
Sample Number: 600-SVE-1 (95-100')
PO Number: ECO 0000001
Date Received: 10/24/2011

Test Date: 8-Dec-11

Liquid Limit

	Trial 1	Trial 2	Trial 3
Number of drops:	33	25	17
Pan number:	LL1	LL2	LL3
Weight of pan plus moist soil (g):	124.62	131.28	128.15
Weight of pan plus dry soil (g)	122.65	128.60	126.32
Weight of pan (g):	112.65	115.31	117.83
Gravimetric moisture content (% g/g):	19.70	20.17	21.55
Liquid Limit:	20		

Plastic Limit

	Trial 1	Trial 2
Pan number:	PL1	PL2
Weight of pan plus moist soil (g):	124.99	124.30
Weight of pan plus dry soil (g)	123.60	122.62
Weight of pan (g):	115.31	112.59
Gravimetric moisture content (% g/g):	16.77	16.75
Plastic Limit:	17	

Results

Percent of Sample Retained on #40 Sieve: See Sieve

Liquid Limit: 20
Plastic Limit: 17
Plasticity Index: 3

Classification: ML

Comments:

--- = Soil requires visual-manual classification due to non-plasticity
* = 1-point method requested by client

Laboratory analysis by: D. O'Dowd
Data entered by: D. O'Dowd
Checked by: J. Hines

Specific Gravity

Summary of Specific Gravity Tests

	Test Sample			Oversize Material			Bulk Sample
Sample Number	Specific Gravity	Particle Size	% of Bulk Sample	Specific Gravity	Particle Size	% of Bulk Sample	Specific Gravity**
600-SVE-1 (60-65')	2.73	<4.75mm	92.0%	---	>4.75mm	8.0%	2.73
600-SVE-1 (95-100')	2.73	<3/4"	65.8%	2.74	>3/4"	34.2%	2.73

--- = Unnecessary since specified fraction <5% of composite mass

* = Based on specific gravity of material <4.75mm

** = Weighted average

NA = Not analyzed

Data for Specific Gravity of Test Sample: 600-SVE-1 (60-65')

Job Name: NASA
Job Number: LB11.0218.00
Sample Number: 600-SVE-1 (60-65')
PO Number: ECO 0000001
Date Received: 10/24/2011

ASTM D854 (<4.75mm Fraction)

Test Date:	8-Dec-11	
Percent of Test Sample (% g/g):	91.96	
Percent of Bulk Sample (% g/g):	91.96	
	Trial 1	*Trial 2*
Weight of pycnometer filled w/air (g):	102.79	94.23
Weight of pycnometer filled w/soil (g):	153.41	144.49
Weight of pycnometer filled w/soil & water (g):	384.31	375.37
Weight of pycnometer filled w/water (g):	352.16	343.52
Specific Gravity (g/g):	2.74	2.73
Observed temperature (°C):	20.40	20.40
Density of water at observed temperature (g/cm^3):	0.9981	0.9981
Correction factor, K:	0.9999	0.9999
Specific Gravity at 20°C (g/g):	2.74	2.73
Average Specific Gravity (g/g):	2.74	
Average Particle Density (g/cm^3):	2.73	

ASTM C127 (>4.75mm) Fraction

Test Date:	7-Dec-11
Percent of Test Sample (% g/g):	8.04
Percent of Bulk Sample (% g/g):	8.04
Tare Weight (g):	0.0
Saturated Surface Dry (SSD) mass in Air & Tare (g):	32.6
Saturated Apparent mass in Water & Tare (g):	20.0
Oven Dry (OD) mass in Air & Tare (g):	31.9
SSD Specific Gravity (g/g):	2.59
Apparent Specific Gravity (g/g):	2.68
OD Specific Gravity (g/g):	2.53
Percent Absorption (%):	2.1
Observed Temperature (°C):	20.0
Density of water at observed temperature (g/m^3):	0.9982
Correction Factor, K:	1.0000
Specific Gravity (Apparent), Corrected to 20° C:	2.68
Particle Density (Apparent), Corrected to 20° C (g/cm^3):	2.68

Specific Gravity (Apparent) of Test Sample*:	**2.73**	** Weighted Average*
Particle Density (Apparent) of Test Sample (g/cm^3)*:	2.73	

Laboratory analysis by: K. Wright
Data entered by: J. Hines
Checked by: J. Hines

Data for Specific Gravity of Test Sample: 600-SVE-1 (95-100')

Job Name: NASA
Job Number: LB11.0218.00
Sample Number: 600-SVE-1 (95-100')
PO Number: ECO 0000001
Date Received: 10/24/2011

ASTM D854 (<4.75mm Fraction)

Test Date:	7-Dec-11	
Percent of Test Sample (% g/g):	55.77	
Percent of Bulk Sample (% g/g):	36.67	
	Trial 1	*Trial 2*
Weight of pycnometer filled w/air (g):	95.11	107.67
Weight of pycnometer filled w/soil (g):	146.46	160.15
Weight of pycnometer filled w/soil & water (g):	376.85	390.18
Weight of pycnometer filled w/water (g):	344.36	356.88
Specific Gravity (g/g):	2.72	2.74
Observed temperature (°C):	20.40	20.40
Density of water at observed temperature (g/cm^3):	0.9981	0.9981
Correction factor, K:	0.9999	0.9999
Specific Gravity at 20°C (g/g):	2.72	2.74
Average Specific Gravity (g/g):	2.73	
Average Particle Density (g/cm^3):	2.72	

ASTM C127 (>4.75mm to <3/4") Fraction

Test Date:	13-Dec-11
Percent of Test Sample (% g/g):	44.23
Percent of Bulk Sample (% g/g):	29.09
Tare Weight (g):	0.0
Saturated Surface Dry (SSD) mass in Air & Tare (g):	168.64
Saturated Apparent mass in Water & Tare (g):	105.16
Oven Dry (OD) mass in Air & Tare (g):	166.23
SSD Specific Gravity (g/g):	2.66
Apparent Specific Gravity (g/g):	2.72
OD Specific Gravity (g/g):	2.62
Percent Absorption (%):	1.4
Observed Temperature (°C):	20.0
Density of water at observed temperature (g/m^3):	0.9982
Correction Factor, K:	1.0000
Specific Gravity (Apparent), Corrected to 20° C:	2.72
Particle Density (Apparent), Corrected to 20° C (g/cm^3):	2.72

***Specific Gravity (Apparent) of Test Sample* (<3/4" fraction)*:** **2.73** ** Weighted Average*

Particle Density (Apparent) of Test Sample (g/cm^3)* (<3/4" fraction): 2.72

Laboratory analysis by: K. Wright
Data entered by: C. Sessa
Checked by: J. Hines

Data for Specific Gravity of Oversized Material for Sample: 600-SVE-1 (95-100')

Job Name: NASA
Job Number: LB11.0218.00
Sample Number: 600-SVE-1 (95-100')
PO Number: ECO 0000001
Date Received: 10/24/2011

Test Date: 13-Dec-11

ASTM C127	**Fraction >3/4"**
Percent of Oversized Sample (% g/g):	100.00
Percent of Bulk Sample (% g/g):	34.23
Tare Weight (g):	0.0
Saturated Surface Dry (SSD) mass in Air & Tare (g):	159.24
Saturated Apparent mass in Water & Tare (g):	100.45
Oven Dry (OD) mass in Air & Tare (g):	158.16
SSD Specific Gravity (g/g):	2.71
Apparent Specific Gravity (g/g):	2.74
OD Specific Gravity (g/g):	2.69
Percent Absorption (%):	0.7
Observed Temperature (°C):	20.0
Density of water at observed temperature (g/m^3):	0.9982
Correction Factor, K:	1.0000
Specific Gravity (Apparent), Corrected to 20° C:	2.74
Particle Density (Apparent), Corrected to 20° C (g/cm^3)*:*	2.74

***Specific Gravity (Apparent) of Oversized Material* (>3/4" fraction):** **2.74** ** Weighted Average*

Particle Density (Apparent) of Oversized Material (g/cm^3)* (>3/4" fraction): 2.74

Laboratory analysis by: D. O'Dowd
Data entered by: C. Sessa
Checked by: J. Hines

Laboratory Tests and Methods

Tests and Methods

Dry Bulk Density:	ASTM D7263
Moisture Content:	ASTM D7263
Calculated Porosity:	ASTM D7263
Saturated Hydraulic Conductivity:	
Constant Head: (Rigid Wall)	ASTM D 2434 (modified apparatus)
Hanging Column Method:	ASTM D6836 (modified apparatus)
Pressure Plate Method:	ASTM D6836 (modified apparatus)
Water Potential (Dewpoint Potentiometer) Method:	ASTM D6836
Relative Humidity (Box) Method:	Campbell, G. and G. Gee. 1986. Water Potential: Miscellaneous Methods. Chp. 25, pp. 631-632, in A. Klute (ed.), Methods of Soil Analysis. Part 1. American Society of Agronomy, Madison, WI; Karathanasis & Hajek. 1982. Quantitative Evaluation of Water Adsorption on Soil Clays. SSA Journal 46:1321-1325
Moisture Retention Characteristics & Calculated Unsaturated Hydraulic Conductivity:	ASTM D6836; van Genuchten, M.T. 1980. A closed-form equation for predicting the hydraulic conductivity of unsaturated soils. SSSAJ 44:892-898; van Genuchten, M.T., F.J. Leij, and S.R. Yates. 1991. The RETC code for quantifying the hydraulic functions of unsaturated soils. Robert S. Kerr Environmental Research Laboratory, Office of Research and Development, U.S. Environmental Protection Agency, Ada, Oklahoma. EPA/600/2091/065. December 1991
Specific Gravity Fine	ASTM D854
Specific Gravity Coarse	ASTM C127
Particle Size Analysis:	ASTM D422
USCS (ASTM) Classification:	ASTM D422, ASTM D2487
USDA Classification:	ASTM D422, USDA Soil Textural Triangle
Atterberg Limits:	ASTM D4318
Coarse Fraction (Gravel) Correction (calc):	ASTM D4718; Bouwer, H. and Rice, R.C. 1984. Hydraulic Properties of Stony Vadose Zones. Groundwater Vol. 22, No. 6

WSTF CHAIN OF CUSTODY RECORD

Date 10-21-11

Page 1 of 1

Laboratory / PO # ECO 0000001

Return Address for Analytical Reports:

NASA / WSTF
P.O. Box 20
Las Cruces, NM 88004
Attn: ☐ Lori Minnick ☒ Other J. ROLAND
(575) 524-5119 (575) 524-_____

Special Instructions

Please return coolers and contents of coolers as soon as possible.

Return Address:

NASA / WSTF
Building 120 / Route 70
Las Cruces, NM 88012
Attn: Lori Minnick

Sample No.	Well ID.	# of Containers	Sample Type (Aqueous)	Halogenated Volatile Organics Ice/No Headspace (40 ml Vial) ( )	Volatile Organics Ice/No Headspace (40 ml Vial) ( )	Nitrosamines Ice (1 L Glass Bottle) ( )	RCRA Metals (As, Ba, Cd, Cr, Pb, Hg, Se and Ag) Ice/HNO_3 (500 ml Poly)	PARTICLE SIZE	SPECIFIC GRAVITY	UNSATURATED HYDRAULIC COND.	ATTERBERG LIMITS	Comments
	600-SVE-1							X	X	X	X	60-65'
	"							X	X	X	X	95-100'
	"							X	X	X	X	95-100'
	"							X	X	X	X	TUBE

Relinquished By:	Date/Time:	Accepted By:	Date/Time:
Lori Minnick	10-21-11 / 0900 HRS.	Crystal Kraus	10/24/11 1000

WSTF – 381B (02/00)

Appendix C
Groundwater Analytical Data from 600-G

Analytical Results for Sampling Events at 600-G-138

Event Date	Analysis Method	Sample	Constituent	Result	Units	Quant Limit	Det Limit	Extract Efficiency	QA Flag
1/11/2012	PARAMS	1201111300B	Temperature	20.4	ºC	NA	NA		
1/11/2012	PARAMS	1201111300B	Conductivity	2380	µS/cm	NA	NA		
1/11/2012	PARAMS	1201111300B	Turbidity	9.17	NTU	NA	NA		
1/11/2012	PARAMS	1201111300B	DTW	145.36	ft	NA	NA		
1/11/2012	PARAMS	1201111300B	pH	8.46	NA	NA	NA		
1/11/2012	8260C	1201111310B	Dichlorodifluoromethane (CFC 12)	ND	ug/L	1.0	0.56		
1/11/2012	8260C	1201111310B	Propionitrile	ND	ug/L	5.0	1.3		
1/11/2012	8260C	1201111310B	Methylcyclohexane	ND	ug/L	10	0.25		
1/11/2012	8260C	1201111310B	Methyl tert-Butyl Ether	ND	ug/L	10	0.20		
1/11/2012	8260C	1201111310B	Methyl Methacrylate	ND	ug/L	2.0	0.36		
1/11/2012	8260C	1201111310B	Methacrylonitrile	ND	ug/L	5.0	0.38		
1/11/2012	8260C	1201111310B	Iodomethane	ND	ug/L	5.0	0.39		
1/11/2012	8260C	1201111310B	Ethylbenzene	ND	ug/L	1.0	0.20		
1/11/2012	8260C	1201111310B	Ethyl Methacrylate	ND	ug/L	2.0	0.26		
1/11/2012	8260C	1201111310B	Styrene	ND	ug/L	1.0	0.20		
1/11/2012	8260C	1201111310B	Dichlorofluoromethane (CFC 21)	ND	ug/L	1.0	0.24		
1/11/2012	8260C	1201111310B	Trichloroethene (TCE)	110	ug/L	1.0	0.23		
1/11/2012	8260C	1201111310B	Dibromomethane	ND	ug/L	1.0	0.25		
1/11/2012	8260C	1201111310B	Dibromochloromethane	ND	ug/L	1.0	0.20		
1/11/2012	8260C	1201111310B	Cyclohexane	ND	ug/L	10	0.24		
1/11/2012	8260C	1201111310B	Dichloromethane	ND	ug/L	1.0	0.22		
1/11/2012	8260C	1201111310B	m,p-Xylenes	ND	ug/L	2.0	0.20		
1/11/2012	8260C	1201111310B	Toluene-d8	105	%	NA	NA		
1/11/2012	8260C	1201111310B	Dibromofluoromethane	106	%	NA	NA		
1/11/2012	8260C	1201111310B	4-Bromofluorobenzene	107	%	NA	NA		
1/11/2012	8260C	1201111310B	1,2-Dichloro-1,1,2-trifluoroethane (CFC 123a)	1	ug/L	1.0	0.35		
1/11/2012	8260C	1201111310B	trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	0.54		
1/11/2012	8260C	1201111310B	trans-1,3-Dichloropropene	ND	ug/L	1.0	0.20		
1/11/2012	8260C	1201111310B	Tetrahydrofuran (THF)	ND	ug/L	5.0	0.66		
1/11/2012	8260C	1201111310B	o-Xylene	ND	ug/L	1.0	0.20		
1/11/2012	8260C	1201111310B	Tetrachloroethene (PCE)	ND	ug/L	1.0	0.20		
1/11/2012	8260C	1201111310B	cis-1,3-Dichloropropene	ND	ug/L	1.0	0.20		
1/11/2012	8260C	1201111310B	cis-1,2-Dichloroethene	ND	ug/L	1.0	0.20		
1/11/2012	8260C	1201111310B	Vinyl Acetate	ND	ug/L	5.0	0.62		
1/11/2012	8260C	1201111310B	Trichlorofluoromethane (CFC 11)	0.59	ug/L	1.0	0.20		J

1/11/2012	8260C	1201111310B	Toluene	ND	ug/L	1.0	0.20		
1/11/2012	8260C	1201111310B	Chloromethane	ND	ug/L	2.0	0.24		
1/11/2012	8260C	1201111310B	trans-1,2-Dichloroethene	ND	ug/L	1.0	0.20		
1/11/2012	8260C	1201111310B	1,1-Dichloroethene	0.87	ug/L	1.0	0.29		J
1/11/2012	8260C	1201111310B	2,2-Dichloro-1,1,1-trifluoroethane (CFC 123)	ND	ug/L	1.0	0.27		
1/11/2012	8260C	1201111310B	Chloroform	0.62	ug/L	1.0	0.22		J
1/11/2012	8260C	1201111310B	1,4-Dioxane	ND	ug/L	100	13		
1/11/2012	8260C	1201111310B	1,2-Dichloropropane	ND	ug/L	1.0	0.28		
1/11/2012	8260C	1201111310B	1,2-Dichloroethane	ND	ug/L	1.0	0.20		
1/11/2012	8260C	1201111310B	1,2-Dibromoethane	ND	ug/L	1.0	0.20		
1/11/2012	8260C	1201111310B	2-Chloro-1,3-butadiene	ND	ug/L	1.0	0.20		
1/11/2012	8260C	1201111310B	1,2,3-Trichloropropane	ND	ug/L	1.0	0.46		
1/11/2012	8260C	1201111310B	2-Butanone (MEK)	ND	ug/L	5.0	0.51		
1/11/2012	8260C	1201111310B	1,1-Dichloroethane (1,1-DCA)	ND	ug/L	1.0	0.20		
1/11/2012	8260C	1201111310B	1,1,2-Trichloro-1,2,2-Trifluoroethane	51	ug/L	1.0	0.31		
1/11/2012	8260C	1201111310B	1,1,2-Trichloroethane	ND	ug/L	1.0	0.23		
1/11/2012	8260C	1201111310B	1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.20		
1/11/2012	8260C	1201111310B	1,1,1-Trichloroethane (TCA)	ND	ug/L	1.0	0.23		
1/11/2012	8260C	1201111310B	Vinyl Chloride	ND	ug/L	1.0	0.23		
1/11/2012	8260C	1201111310B	1,2-Dibromo-3-chloropropane (DBCP)	ND	ug/L	2.0	0.38		
1/11/2012	8260C	1201111310B	Benzene	ND	ug/L	1.0	0.21		
1/11/2012	8260C	1201111310B	Chloroethane	ND	ug/L	2.0	0.31		
1/11/2012	8260C	1201111310B	Chlorobenzene	ND	ug/L	1.0	0.20		
1/11/2012	8260C	1201111310B	Carbon Tetrachloride	ND	ug/L	1.0	0.27		
1/11/2012	8260C	1201111310B	Carbon Disulfide	ND	ug/L	1.0	0.20		
1/11/2012	8260C	1201111310B	Bromomethane	ND	ug/L	2.0	0.31		
1/11/2012	8260C	1201111310B	1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.20		
1/11/2012	8260C	1201111310B	Bromodichloromethane	ND	ug/L	1.0	0.20		
1/11/2012	8260C	1201111310B	2-Hexanone	ND	ug/L	5.0	0.35		
1/11/2012	8260C	1201111310B	Acrylonitrile	ND	ug/L	5.0	1.4		
1/11/2012	8260C	1201111310B	Acrolein	ND	ug/L	10	0.76		
1/11/2012	8260C	1201111310B	Acetonitrile	ND	ug/L	25	3.7		
1/11/2012	8260C	1201111310B	Acetone	ND	ug/L	10	0.98		
1/11/2012	8260C	1201111310B	4-Methyl-2-pentanone	ND	ug/L	5.0	0.27		
1/11/2012	8260C	1201111310B	3-Chloro-1-propene (Allyl Chloride)	ND	ug/L	2.0	0.29		
1/11/2012	8260C	1201111310B	2-Propanol	ND	ug/L	50	9.8		
1/11/2012	8260C	1201111310B	2-Methyl-1-propanol (Isobutyl Alcohol)	ND	ug/L	100	5.9		
1/11/2012	8260C	1201111310B	Bromoform	ND	ug/L	1.0	0.27		
1/11/2012	M-607	1201111311B	N-Nitroso-di-n-propylamine	82	%	NA	NA		
1/11/2012	TAP 01-040	1201111311B	N-Nitrosodimethylamine	ND	ug/L	0.0094	0.005	42	
1/11/2012	TAP 01-040	1201111311B	N-Nitrodimethylamine	ND	ug/L	0.0094	0.005	71	
1/11/2012	TAP 01-040	1201111311B	Bromacil	26.73	ug/L	0.0094	0.005	107	

1/11/2012	PARAMS	1201111320B	DTW	145.40	ft	NA	NA	
1/11/2012	PARAMS	1201111320B	Temperature	20.2	ºC	NA	NA	
1/11/2012	PARAMS	1201111320B	pH	8.57	NA	NA	NA	
1/11/2012	PARAMS	1201111320B	Turbidity	46.1	NTU	NA	NA	
1/11/2012	PARAMS	1201111320B	Conductivity	2460	µS/cm	NA	NA	
4/10/2012	PARAMS	1204100945	pH	8.78	NA	NA	NA	
4/10/2012	PARAMS	1204100945	Temperature	25.0	ºC	NA	NA	
4/10/2012	PARAMS	1204100945	Conductivity	2210	µS/cm	NA	NA	
4/10/2012	PARAMS	1204100945	Turbidity	44.6	NTU	NA	NA	
4/10/2012	8260C	1204101315	Ethyl Methacrylate	ND	ug/L	2.0	0.26	
4/10/2012	8260C	1204101315	Tetrachloroethene (PCE)	ND	ug/L	1.0	0.20	
4/10/2012	8260C	1204101315	Styrene	ND	ug/L	1.0	0.20	
4/10/2012	8260C	1204101315	Propionitrile	ND	ug/L	5.0	1.3	
4/10/2012	8260C	1204101315	Methylcyclohexane	ND	ug/L	10	0.25	
4/10/2012	8260C	1204101315	Methyl tert-Butyl Ether	ND	ug/L	10	0.20	
4/10/2012	8260C	1204101315	Methyl Methacrylate	ND	ug/L	2.0	0.36	
4/10/2012	8260C	1204101315	Methacrylonitrile	ND	ug/L	5.0	0.38	
4/10/2012	8260C	1204101315	Tetrahydrofuran (THF)	ND	ug/L	5.0	0.66	
4/10/2012	8260C	1204101315	Ethylbenzene	ND	ug/L	1.0	0.20	
4/10/2012	8260C	1204101315	Vinyl Chloride	ND	ug/L	1.0	0.23	
4/10/2012	8260C	1204101315	Dichloromethane	ND	ug/L	1.0	0.22	
4/10/2012	8260C	1204101315	Dichlorofluoromethane (CFC 21)	ND	ug/L	1.0	0.24	
4/10/2012	8260C	1204101315	Dichlorodifluoromethane (CFC 12)	ND	ug/L	1.0	0.56	
4/10/2012	8260C	1204101315	Dibromomethane	ND	ug/L	1.0	0.25	
4/10/2012	8260C	1204101315	Dibromochloromethane	ND	ug/L	1.0	0.20	
4/10/2012	8260C	1204101315	Iodomethane	ND	ug/L	5.0	0.39	
4/10/2012	8260C	1204101315	trans-1,2-Dichloroethene	ND	ug/L	1.0	0.20	
4/10/2012	8260C	1204101315	Cyclohexane	ND	ug/L	10	0.24	
4/10/2012	8260C	1204101315	Toluene-d8	103	%	NA	NA	
4/10/2012	8260C	1204101315	Dibromofluoromethane	95	%	NA	NA	
4/10/2012	8260C	1204101315	4-Bromofluorobenzene	95	%	NA	NA	
4/10/2012	8260C	1204101315	1,1,1-Trichloroethane (TCA)	ND	ug/L	1.0	0.23	
4/10/2012	8260C	1204101315	1,2-Dichloro-1,1,2-trifluoroethane (CFC 123a)	0.82	ug/L	1.0	0.35	J
4/10/2012	8260C	1204101315	Trichlorofluoromethane (CFC 11)	0.34	ug/L	1.0	0.20	J
4/10/2012	8260C	1204101315	trans-1,3-Dichloropropene	ND	ug/L	1.0	0.20	
4/10/2012	8260C	1204101315	Toluene	ND	ug/L	1.0	0.20	
4/10/2012	8260C	1204101315	o-Xylene	ND	ug/L	1.0	0.20	
4/10/2012	8260C	1204101315	m,p-Xylenes	ND	ug/L	2.0	0.20	
4/10/2012	8260C	1204101315	cis-1,3-Dichloropropene	ND	ug/L	1.0	0.20	
4/10/2012	8260C	1204101315	cis-1,2-Dichloroethene	ND	ug/L	1.0	0.20	
4/10/2012	8260C	1204101315	Vinyl Acetate	ND	ug/L	5.0	0.62	
4/10/2012	8260C	1204101315	Trichloroethene (TCE)	84	ug/L	1.0	0.23	

4/10/2012	8260C	1204101315	trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	0.54		
4/10/2012	8260C	1204101315	1,2-Dibromo-3-chloropropane (DBCP)	ND	ug/L	2.0	0.38		
4/10/2012	8260C	1204101315	2-Hexanone	ND	ug/L	5.0	0.35		
4/10/2012	8260C	1204101315	2-Chloro-1,3-butadiene	ND	ug/L	1.0	0.20		
4/10/2012	8260C	1204101315	2-Butanone (MEK)	ND	ug/L	5.0	0.51		
4/10/2012	8260C	1204101315	2,2-Dichloro-1,1,1-trifluoroethane (CFC 123)	ND	ug/L	1.0	0.27		
4/10/2012	8260C	1204101315	1,4-Dioxane	ND	ug/L	100	13		
4/10/2012	8260C	1204101315	1,2-Dichloropropane	ND	ug/L	1.0	0.28		
4/10/2012	8260C	1204101315	2-Methyl-1-propanol (Isobutyl Alcohol)	ND	ug/L	100	5.9		
4/10/2012	8260C	1204101315	1,2-Dibromoethane	ND	ug/L	1.0	0.20		
4/10/2012	8260C	1204101315	1,2,3-Trichloropropane	ND	ug/L	1.0	0.46		
4/10/2012	8260C	1204101315	Chloromethane	ND	ug/L	2.0	0.24		
4/10/2012	8260C	1204101315	1,1-Dichloroethene	ND	ug/L	1.0	0.29		
4/10/2012	8260C	1204101315	1,1,2-Trichloroethane	ND	ug/L	1.0	0.23		
4/10/2012	8260C	1204101315	1,1,2-Trichloro-1,2,2-Trifluoroethane	27	ug/L	1.0	0.31		
4/10/2012	8260C	1204101315	1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.20		
4/10/2012	8260C	1204101315	1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.20		
4/10/2012	8260C	1204101315	1,2-Dichloroethane	ND	ug/L	1.0	0.20		
4/10/2012	8260C	1204101315	Bromodichloromethane	ND	ug/L	1.0	0.20		
4/10/2012	8260C	1204101315	Chloroform	0.52	ug/L	1.0	0.22		J
4/10/2012	8260C	1204101315	1,1-Dichloroethane (1,1-DCA)	ND	ug/L	1.0	0.20		
4/10/2012	8260C	1204101315	Chloroethane	ND	ug/L	2.0	0.31		
4/10/2012	8260C	1204101315	Chlorobenzene	ND	ug/L	1.0	0.20		
4/10/2012	8260C	1204101315	Carbon Tetrachloride	ND	ug/L	1.0	0.27		
4/10/2012	8260C	1204101315	Carbon Disulfide	ND	ug/L	1.0	0.20		
4/10/2012	8260C	1204101315	2-Propanol	ND	ug/L	50	9.8		
4/10/2012	8260C	1204101315	Bromoform	ND	ug/L	1.0	0.27		
4/10/2012	8260C	1204101315	Benzene	ND	ug/L	1.0	0.21		
4/10/2012	8260C	1204101315	Acrylonitrile	ND	ug/L	5.0	1.4		
4/10/2012	8260C	1204101315	Acrolein	ND	ug/L	10	0.76		
4/10/2012	8260C	1204101315	Acetonitrile	ND	ug/L	25	3.7		
4/10/2012	8260C	1204101315	Acetone	ND	ug/L	10	0.98		
4/10/2012	8260C	1204101315	4-Methyl-2-pentanone	ND	ug/L	5.0	0.27		
4/10/2012	8260C	1204101315	3-Chloro-1-propene (Allyl Chloride)	ND	ug/L	2.0	0.29		
4/10/2012	8260C	1204101315	Bromomethane	ND	ug/L	2.0	0.31		
4/10/2012	TAP 01-040	1204101317	Bromacil	24	ug/L	0.038	0.019	100	D
4/10/2012	M-607	1204101317	N-Nitroso-di-n-propylamine	19	%	NA	NA		
4/10/2012	TAP 01-040	1204101317	N-Nitrosodimethylamine	ND	ug/L	0.038	0.019	75	
4/10/2012	TAP 01-040	1204101317	N-Nitrodimethylamine	ND	ug/L	0.038	0.019	112	
4/10/2012	8270D	1204101320	Dibenz(a,h)anthracene	ND	ug/L	0.045	0.045		
4/10/2012	8270D	1204101320	1,3,5-Trinitrobenzene	ND	ug/L	9.4	1.3		
4/10/2012	8270D	1204101320	1,2-Diphenylhydrazine	ND	ug/L	9.4	1.0		

4/10/2012	8270D	1204101320	1,2-Dichlorobenzene	ND	ug/L	9.4	1.5	
4/10/2012	8270D	1204101320	1,2,4-Trichlorobenzene	ND	ug/L	9.4	1.0	
4/10/2012	8270D	1204101320	1,2,4,5-Tetrachlorobenzene	ND	ug/L	9.4	1.1	
4/10/2012	8270D	1204101320	p-Terphenyl-d14	64	%	NA	NA	
4/10/2012	8270D	1204101320	Nitrobenzene-d5	66	%	NA	NA	
4/10/2012	8270D	1204101320	2-Fluorobiphenyl	63	%	NA	NA	
4/10/2012	8270D	1204101320	Acenaphthylene	ND	ug/L	0.076	0.076	
4/10/2012	8270D	1204101320	Hexachlorobenzene	ND	ug/L	0.035	0.035	
4/10/2012	8270D	1204101320	Chrysene	ND	ug/L	0.029	0.029	
4/10/2012	8270D	1204101320	Bis(2-ethylhexyl) Phthalate	ND	ug/L	0.50	0.23	
4/10/2012	8270D	1204101320	Benzo(k)fluoranthene	ND	ug/L	0.029	0.029	
4/10/2012	8270D	1204101320	Benzo(b)fluoranthene	ND	ug/L	0.026	0.026	A
4/10/2012	8270D	1204101320	Benzo(a)pyrene	ND	ug/L	0.042	0.042	
4/10/2012	8270D	1204101320	Benz(a)anthracene	ND	ug/L	0.041	0.041	
4/10/2012	8270D	1204101320	1,4-Dichlorobenzene	ND	ug/L	9.4	1.3	
4/10/2012	8270D	1204101320	Indeno(1,2,3-cd)pyrene	ND	ug/L	0.049	0.049	
4/10/2012	8270D	1204101320	Hexachloropropene	ND	ug/L	9.4	1.5	
4/10/2012	8270D	1204101320	Dibenzofuran	ND	ug/L	9.4	1.0	
4/10/2012	8270D	1204101320	N-Nitrosomorpholine	ND	ug/L	9.4	1.4	
4/10/2012	8270D	1204101320	N-Nitrosomethylethylamine	ND	ug/L	9.4	1.2	
4/10/2012	8270D	1204101320	N-Nitrosodiphenylamine	ND	ug/L	9.4	1.2	
4/10/2012	8270D	1204101320	N-Nitrosodimethylamine	ND	ug/L	9.4	1.0	
4/10/2012	8270D	1204101320	N-Nitrosodiethylamine	ND	ug/L	9.4	1.1	
4/10/2012	8270D	1204101320	N-Nitroso-N-Dipropylamine	ND	ug/L	9.4	1.6	
4/10/2012	8270D	1204101320	Methyl Parathion	ND	ug/L	9.4	1.1	
4/10/2012	8270D	1204101320	Methyl Methanesulfonate	ND	ug/L	9.4	1.0	
4/10/2012	8270D	1204101320	Methapyrilene	ND	ug/L	47	36	
4/10/2012	8270D	1204101320	Isosafrole	ND	ug/L	9.4	1.1	
4/10/2012	8270D	1204101320	N-Nitrosopyrrolidine	ND	ug/L	9.4	1.6	
4/10/2012	8270D	1204101320	Isodrin	ND	ug/L	9.4	1.0	
4/10/2012	8270D	1204101320	Naphthalene	ND	ug/L	9.4	1.1	
4/10/2012	8270D	1204101320	Hexachlorophene	ND	ug/L	470	370	
4/10/2012	8270D	1204101320	Hexachloroethane	ND	ug/L	9.4	1.3	
4/10/2012	8270D	1204101320	Hexachlorocyclopentadiene	ND	ug/L	9.4	2.0	
4/10/2012	8270D	1204101320	Hexachlorobutadiene	ND	ug/L	9.4	1.3	
4/10/2012	8270D	1204101320	Fluorene	ND	ug/L	9.4	1.1	
4/10/2012	8270D	1204101320	Fluoranthene	ND	ug/L	9.4	1.0	
4/10/2012	8270D	1204101320	Ethyl Methanesulfonate	ND	ug/L	9.4	1.3	
4/10/2012	8270D	1204101320	Disulfoton	ND	ug/L	9.4	1.5	
4/10/2012	8270D	1204101320	Diphenylamine	ND	ug/L	9.4	NA	*
4/10/2012	8270D	1204101320	Dimethyl Phthalate	ND	ug/L	9.4	0.65	
4/10/2012	8270D	1204101320	Dimethoate	ND	ug/L	47	12	
4/10/2012	8270D	1204101320	Diethyl Phthalate	ND	ug/L	9.4	1.0	

4/10/2012	8270D	1204101320	Isophorone	ND	ug/L	9.4	1.4		
4/10/2012	8270D	1204101320	Pyridine	ND	ug/L	47	19		
4/10/2012	8270D	1204101320	Bromacil	8	ug/L	NA	NA		TIC
4/10/2012	8270D	1204101320	p-Terphenyl-d14	87	%	NA	NA		
4/10/2012	8270D	1204101320	Phenol-d6	27	%	NA	NA		
4/10/2012	8270D	1204101320	Nitrobenzene-d5	80	%	NA	NA		
4/10/2012	8270D	1204101320	2-Fluorophenol	42	%	NA	NA		
4/10/2012	8270D	1204101320	2-Fluorobiphenyl	77	%	NA	NA		
4/10/2012	8270D	1204101320	2,4,6-Tribromophenol	82	%	NA	NA		
4/10/2012	8270D	1204101320	p-Dimethylaminoazobenzene	ND	ug/L	9.4	1.0		
4/10/2012	8270D	1204101320	o-Toluidine	ND	ug/L	9.4	1.2		
4/10/2012	8270D	1204101320	a,a-Dimethylphenethylamine	ND	ug/L	47	NA		*
4/10/2012	8270D	1204101320	Thionazin	ND	ug/L	9.4	1.8		
4/10/2012	8270D	1204101320	N-Nitrosopiperidine	ND	ug/L	9.4	1.6		
4/10/2012	8270D	1204101320	Safrole	ND	ug/L	9.4	1.3		
4/10/2012	8270D	1204101320	Parathion	ND	ug/L	9.4	1.0		
4/10/2012	8270D	1204101320	Pyrene	ND	ug/L	9.4	1.0		
4/10/2012	8270D	1204101320	Pronamide	ND	ug/L	9.4	1.1		
4/10/2012	8270D	1204101320	Phorate	ND	ug/L	9.4	1.4		
4/10/2012	8270D	1204101320	Phenol	ND	ug/L	9.4	1.0		
4/10/2012	8270D	1204101320	Phenanthrene	ND	ug/L	9.4	1.0		
4/10/2012	8270D	1204101320	Phenacetin	ND	ug/L	9.4	1.3		
4/10/2012	8270D	1204101320	Pentachloronitrobenzene (PCNB)	ND	ug/L	9.4	1.0		
4/10/2012	8270D	1204101320	1,3-Dichlorobenzene	ND	ug/L	9.4	1.3		
4/10/2012	8270D	1204101320	Pentachlorobenzene	ND	ug/L	9.4	1.2		
4/10/2012	8270D	1204101320	1,3-Dinitrobenzene	ND	ug/L	9.4	1.1		
4/10/2012	8270D	1204101320	O,O,O-Triethyl Phosphorothioate	ND	ug/L	9.4	1.5		
4/10/2012	8270D	1204101320	Nitrobenzene	ND	ug/L	9.4	1.3		
4/10/2012	8270D	1204101320	Sulfotep	ND	ug/L	9.4	1.7		
4/10/2012	8270D	1204101320	2,4-Dinitrotoluene	ND	ug/L	9.4	1.2		
4/10/2012	8270D	1204101320	3- and 4-Methylphenol Coelution	ND	ug/L	9.4	1.5		
4/10/2012	8270D	1204101320	3,3'-Dimethylbenzidine	ND	ug/L	47	37		
4/10/2012	8270D	1204101320	3,3'-Dichlorobenzidine	ND	ug/L	9.4	1.5		
4/10/2012	8270D	1204101320	2-Picoline	ND	ug/L	9.4	3.0		
4/10/2012	8270D	1204101320	2-Nitrophenol	ND	ug/L	9.4	1.2		
4/10/2012	8270D	1204101320	2-Naphthylamine	ND	ug/L	47	12		
4/10/2012	8270D	1204101320	2-Methylnaphthalene	ND	ug/L	9.4	1.0		
4/10/2012	8270D	1204101320	2-Methyl-5-nitroaniline (5-Nitro-o-toluidine)	ND	ug/L	9.4	1.8		
4/10/2012	8270D	1204101320	2-Chlorophenol	ND	ug/L	9.4	1.3		
4/10/2012	8270D	1204101320	2-Chloronaphthalene	ND	ug/L	9.4	1.0		
4/10/2012	8270D	1204101320	2-Acetylaminofluorene	ND	ug/L	9.4	1.0		
4/10/2012	8270D	1204101320	3-Methylcholanthrene	ND	ug/L	9.4	1.0		
4/10/2012	8270D	1204101320	2,6-Dichlorophenol	ND	ug/L	9.4	1.4		

4/10/2012	8270D	1204101320	2-Nitroaniline	ND	ug/L	47	14	
4/10/2012	8270D	1204101320	2,4-Dinitrophenol	ND	ug/L	47	34	
4/10/2012	8270D	1204101320	2,4-Dimethylphenol	ND	ug/L	9.4	1.6	
4/10/2012	8270D	1204101320	2,4-Dichlorophenol	ND	ug/L	9.4	1.0	
4/10/2012	8270D	1204101320	2,4,6-Trichlorophenol	ND	ug/L	9.4	1.1	
4/10/2012	8270D	1204101320	2,4,5-Trichlorophenol	ND	ug/L	9.4	1.2	
4/10/2012	8270D	1204101320	2,3,4,6-Tetrachlorophenol	ND	ug/L	9.4	1.8	
4/10/2012	8270D	1204101320	1-Naphthylamine	ND	ug/L	47	19	
4/10/2012	8270D	1204101320	1-Methylnaphthalene	ND	ug/L	9.4	1.2	
4/10/2012	8270D	1204101320	1,4-Phenylenediamine	ND	ug/L	47	NA	*
4/10/2012	8270D	1204101320	1,4-Naphthoquinone	ND	ug/L	47	35	
4/10/2012	8270D	1204101320	Diallate	ND	ug/L	9.4	1.0	
4/10/2012	8270D	1204101320	Pentachloroethane	ND	ug/L	9.4	1.3	
4/10/2012	8270D	1204101320	2,6-Dinitrotoluene	ND	ug/L	9.4	1.3	
4/10/2012	8270D	1204101320	Benzo(g,h,i)perylene	ND	ug/L	9.4	1.0	
4/10/2012	8270D	1204101320	Di-n-octyl Phthalate	ND	ug/L	9.4	1.1	
4/10/2012	8270D	1204101320	Di-n-butyl Phthalate	ND	ug/L	9.4	1.0	
4/10/2012	8270D	1204101320	Chlorobenzilate	ND	ug/L	9.4	1.0	
4/10/2012	8270D	1204101320	Butyl Benzyl Phthalate	ND	ug/L	9.4	1.0	
4/10/2012	8270D	1204101320	Bis(2-chloroethyl) Ether	ND	ug/L	9.4	1.3	
4/10/2012	8270D	1204101320	Bis(2-chloroethoxy)methane	ND	ug/L	9.4	1.0	
4/10/2012	8270D	1204101320	2-Methylphenol	ND	ug/L	9.4	1.0	
4/10/2012	8270D	1204101320	Benzyl Alcohol	ND	ug/L	9.4	1.1	
4/10/2012	8270D	1204101320	3-Nitroaniline	ND	ug/L	47	12	
4/10/2012	8270D	1204101320	Benzidine	ND	ug/L	94	53	
4/10/2012	8270D	1204101320	Aramite, Total	ND	ug/L	47	13	
4/10/2012	8270D	1204101320	Anthracene	ND	ug/L	9.4	1.0	
4/10/2012	8270D	1204101320	Aniline	ND	ug/L	9.4	1.3	
4/10/2012	8270D	1204101320	Acetophenone	ND	ug/L	9.4	2.1	
4/10/2012	8270D	1204101320	p-Chloroaniline	ND	ug/L	9.4	1.6	
4/10/2012	8270D	1204101320	4-Aminobiphenyl	ND	ug/L	47	9.6	
4/10/2012	8270D	1204101320	2,2'-Oxybis(1-chloropropane)	ND	ug/L	9.4	1.4	
4/10/2012	8270D	1204101320	Acenaphthylene	ND	ug/L	9.4	1.0	
4/10/2012	8270D	1204101320	4,6-Dinitro-2-methylphenol	ND	ug/L	47	22	
4/10/2012	8270D	1204101320	4-Chloro-3-methylphenol	ND	ug/L	9.4	1.0	
4/10/2012	8270D	1204101320	4-Chlorophenyl Phenyl Ether	ND	ug/L	9.4	1.0	
4/10/2012	8270D	1204101320	4-Nitroaniline	ND	ug/L	47	11	
4/10/2012	8270D	1204101320	4-Nitrophenol	ND	ug/L	47	9.4	
4/10/2012	8270D	1204101320	4-Nitroquinoline N-Oxide	ND	ug/L	47	38	
4/10/2012	8270D	1204101320	7,12-Dimethylbenz(a)anthracene	ND	ug/L	9.4	1.4	
4/10/2012	8270D	1204101320	Acenaphthene	ND	ug/L	9.4	1.2	
4/10/2012	8270D	1204101320	4-Bromophenyl Phenyl Ether	ND	ug/L	9.4	1.0	

4/10/2012	SW6010	1204101321	CALCIUM	250	MG/L	0.5	0.06	
4/10/2012	SW6010	1204101321	ALUMINUM	4.8	MG/L	0.1	0.026	
4/10/2012	SW7470	1204101321	MERCURY	ND	MG/L	0.0002	0.00006	
4/10/2012	SW6010	1204101321	CHROMIUM	0.015	MG/L	0.01	0.0006	
4/10/2012	SW6010	1204101321	SELENIUM	0.018	MG/L	0.005	0.0032	
4/10/2012	SW6010	1204101321	VANADIUM	0.0075	MG/L	0.01	0.0015	J
4/10/2012	SW6010	1204101321	BERYLLIUM	ND	MG/L	0.004	0.00018	
4/10/2012	SW6010	1204101321	MAGNESIUM	120	MG/L	0.5	0.06	
4/10/2012	SW6010	1204101321	MANGANESE	0.12	MG/L	0.01	0.0003	
4/10/2012	SW6010	1204101321	POTASSIUM	6.6	MG/L	1	0.09	
4/10/2012	SW6010	1204101321	MOLYBDENUM	0.0069	MG/L	0.01	0.0015	J
4/10/2012	SW6010	1204101321	LEAD	0.0024	MG/L	0.003	0.0009	J
4/10/2012	SW6010	1204101321	CADMIUM	ND	MG/L	0.005	0.0003	
4/10/2012	SW6010	1204101321	STRONTIUM	6	MG/L	0.01	0.0009	
4/10/2012	SW6010	1204101321	ZINC	0.036	MG/L	0.02	0.0015	
4/10/2012	SW6010	1204101321	ARSENIC	ND	MG/L	0.005	0.0015	
4/10/2012	SW6010	1204101321	BORON	0.58	MG/L	0.1	0.012	
4/10/2012	SW6020	1204101321	ANTIMONY	0.00018	MG/L	0.0003	0.00009	J
4/10/2012	SW6020	1204101321	THALLIUM	0.0001	MG/L	0.0002	0.00006	J
4/10/2012	SW6010	1204101321	IRON	4.3	MG/L	0.1	0.015	
4/10/2012	SW6010	1204101321	BARIUM	0.13	MG/L	0.01	0.0014	
4/10/2012	SW6010	1204101321	COBALT	0.001	MG/L	0.01	0.0006	J
4/10/2012	SW6010	1204101321	COPPER	0.011	MG/L	0.01	0.0006	
4/10/2012	SW6010	1204101321	NICKEL	0.0069	MG/L	0.02	0.0006	J
4/10/2012	SW6010	1204101321	SILVER	ND	MG/L	0.01	0.0012	
4/10/2012	SW6010	1204101321	SODIUM	130	MG/L	0.5	0.09	
4/10/2012	SW6010	1204101321	TIN	ND	MG/L	0.05	0.003	
4/10/2012	EPA300.0	1204101323	SULFATE	500	MG/L	20	6	
4/10/2012	EPA300.0	1204101323	CHLORIDE	310	MG/L	4	1.2	
4/10/2012	EPA160.1	1204101323	TOTAL DISSOLVED SOLIDS	1600	MG/L	40	NA	
4/10/2012	SM2320B	1204101323	CARBONATE AS CaCO3	ND	MG/L	20	NA	
4/10/2012	SM2320B	1204101323	TOTAL ALKALINITY AS CaCO3	210	MG/L	20	NA	
4/10/2012	SM2320B	1204101323	BICARBONATE AS CaCO3	210	MG/L	20	NA	
4/10/2012	EPA300.0	1204101323	FLUORIDE	1	MG/L	0.2	0.06	
4/10/2012	SW6010	1204101324	CADMIUM	ND	MG/L	0.005	0.0003	
4/10/2012	SW6010	1204101324	CALCIUM	260	MG/L	0.5	0.06	
4/10/2012	SW6010	1204101324	ALUMINUM	4.3	MG/L	0.1	0.026	
4/10/2012	SW6010	1204101324	CHROMIUM	0.013	MG/L	0.01	0.0006	
4/10/2012	SW6010	1204101324	SELENIUM	0.019	MG/L	0.005	0.0032	
4/10/2012	SW6010	1204101324	MOLYBDENUM	0.0073	MG/L	0.01	0.0015	J
4/10/2012	SW6010	1204101324	BERYLLIUM	ND	MG/L	0.004	0.00018	
4/10/2012	SW6010	1204101324	LEAD	0.0036	MG/L	0.003	0.0009	

4/10/2012	SW6010	1204101324	MAGNESIUM	120	MG/L	0.5	0.06	
4/10/2012	SW6010	1204101324	MANGANESE	0.12	MG/L	0.01	0.0003	
4/10/2012	SW6010	1204101324	POTASSIUM	6.5	MG/L	1	0.09	
4/10/2012	SW6010	1204101324	STRONTIUM	6	MG/L	0.01	0.0009	
4/10/2012	SW6010	1204101324	ARSENIC	0.0043	MG/L	0.005	0.0015	J RB
4/10/2012	SW6010	1204101324	VANADIUM	0.007	MG/L	0.01	0.0015	J
4/10/2012	SW6010	1204101324	TIN	ND	MG/L	0.05	0.003	
4/10/2012	SW7470	1204101324	MERCURY	ND	MG/L	0.0002	0.00006	
4/10/2012	SW6010	1204101324	BORON	0.58	MG/L	0.1	0.012	
4/10/2012	SW6020	1204101324	THALLIUM	0.00008	MG/L	0.0002	0.00006	J
4/10/2012	SW6010	1204101324	SODIUM	130	MG/L	0.5	0.09	
4/10/2012	SW6010	1204101324	IRON	3.8	MG/L	0.1	0.015	
4/10/2012	SW6010	1204101324	ZINC	0.032	MG/L	0.02	0.0015	
4/10/2012	SW6010	1204101324	BARIUM	0.11	MG/L	0.01	0.0014	
4/10/2012	SW6010	1204101324	COBALT	0.00063	MG/L	0.01	0.0006	J
4/10/2012	SW6010	1204101324	COPPER	0.01	MG/L	0.01	0.0006	
4/10/2012	SW6010	1204101324	NICKEL	0.0053	MG/L	0.02	0.0006	J
4/10/2012	SW6010	1204101324	SILVER	ND	MG/L	0.01	0.0012	
4/10/2012	SW6020	1204101324	ANTIMONY	0.00012	MG/L	0.0003	0.00009	J
4/10/2012	EPA 331.0	1204101325	Perchlorate	2.68	ug/L	0.4	0.1	
4/10/2012	EPA353.2	1204101326	NITRATE/NITRITE AS N	12	MG/L	0.1	0.03	
4/10/2012	PARAMS	1204101327	Conductivity	2250	µS/cm	NA	NA	
4/10/2012	PARAMS	1204101327	pH	8.12	NA	NA	NA	
4/10/2012	PARAMS	1204101327	Temperature	25.5	ºC	NA	NA	

Appendix D
Soil Gas Analytical Data

Soil Gas Results

Borehole	600-SGW-1	Depth (ft)	12.5	Depth (m)	3.81	Event Date	3/22/2012

Sample	1203220937	Sample Type	Soil Gas	Analysis Method	TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	612	310	98	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	612	310	98	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	612	310	98	
75-34-3	1,1-Dichloroethane	ND	ug/m3	612	310	100	
75-35-4	1,1-Dichloroethene	ND	ug/m3	612	310	100	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	612	310	150	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	612	310	98	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	612	310	92	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	612	310	100	
107-06-2	1,2-Dichloroethane	ND	ug/m3	612	310	120	
78-87-5	1,2-Dichloropropane	ND	ug/m3	612	310	100	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	612	310	100	
106-99-0	1,3-Butadiene	ND	ug/m3	612	310	130	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	612	310	100	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	612	310	98	
123-91-1	1,4-Dioxane	ND	ug/m3	612	310	100	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	612	310	100	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	612	3100	140	
591-78-6	2-Hexanone	ND	ug/m3	612	310	110	
67-63-0	2-Propanol	ND	ug/m3	612	610	240	
107-05-1	3-Chloropropene	ND	ug/m3	612	310	98	
622-96-8	4-Ethyltoluene	ND	ug/m3	612	310	100	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	612	310	86	
67-64-1	Acetone	ND	ug/m3	612	3100	540	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	612	310	92	
71-43-2	Benzene	ND	ug/m3	612	310	86	
75-27-4	Bromodichloromethane	ND	ug/m3	612	310	98	
75-25-2	Bromoform	ND	ug/m3	612	310	86	
74-83-9	Bromomethane	ND	ug/m3	612	310	120	
75-15-0	Carbon Disulfide	ND	ug/m3	612	3100	92	
56-23-5	Carbon Tetrachloride	ND	ug/m3	612	310	98	
108-90-7	Chlorobenzene	ND	ug/m3	612	310	98	
75-00-3	Chloroethane	ND	ug/m3	612	310	120	
67-66-3	Chloroform	ND	ug/m3	612	310	120	
74-87-3	Chloromethane	ND	ug/m3	612	310	120	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	612	310	110	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	612	310	86	
98-82-8	Cumene	ND	ug/m3	612	310	92	
110-82-7	Cyclohexane	ND	ug/m3	612	610	200	
124-48-1	Dibromochloromethane	ND	ug/m3	612	310	86	

64-17-5	Ethanol	ND	ug/m3	612	3100	980	
100-41-4	Ethyl Benzene	ND	ug/m3	612	310	92	
75-69-4	Freon 11	ND	ug/m3	612	310	98	
76-13-1	Freon 113	59000	ug/m3	612	310	98	
76-14-2	Freon 114	ND	ug/m3	612	310	100	
75-71-8	Freon 12	ND	ug/m3	612	310	110	
306-83-2	Freon 123	ND	ug/m3	612	310	150	
354-23-4	Freon 123a	19000	ug/m3	612	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	612	310	140	
142-82-5	Heptane	ND	ug/m3	612	310	98	
87-68-3	Hexachlorobutadiene	ND	ug/m3	612	310	110	
110-54-3	Hexane	ND	ug/m3	612	310	100	
179601-23-	m,p-Xylene	ND	ug/m3	612	610	180	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	612	310	92	
75-09-2	Methylene Chloride	110	ug/m3	612	310	92	J
95-47-6	o-Xylene	ND	ug/m3	612	310	86	
103-65-1	Propylbenzene	ND	ug/m3	612	310	92	
100-42-5	Styrene	ND	ug/m3	612	310	92	
127-18-4	Tetrachloroethene	ND	ug/m3	612	310	86	
109-99-9	Tetrahydrofuran	ND	ug/m3	612	310	130	
108-88-3	Toluene	ND	ug/m3	612	310	98	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	612	310	100	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	612	310	98	
79-01-6	Trichloroethene	1900	ug/m3	612	310	92	
75-01-4	Vinyl Chloride	ND	ug/m3	612	310	120	

Sample 1203241532 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	1185	590	190	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	1185	590	190	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	1185	590	190	
75-34-3	1,1-Dichloroethane	ND	ug/m3	1185	590	200	
75-35-4	1,1-Dichloroethene	ND	ug/m3	1185	590	200	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	1185	590	280	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	1185	590	190	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	1185	590	180	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	1185	590	200	
107-06-2	1,2-Dichloroethane	ND	ug/m3	1185	590	230	
78-87-5	1,2-Dichloropropane	ND	ug/m3	1185	590	200	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	1185	590	200	
106-99-0	1,3-Butadiene	ND	ug/m3	1185	590	250	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	1185	590	200	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	1185	590	190	
123-91-1	1,4-Dioxane	ND	ug/m3	1185	590	200	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	1185	590	200	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	1185	5900	270	

591-78-6	2-Hexanone	ND	ug/m3	1185	590	210	
67-63-0	2-Propanol	ND	ug/m3	1185	1200	470	
107-05-1	3-Chloropropene	ND	ug/m3	1185	590	190	
622-96-8	4-Ethyltoluene	ND	ug/m3	1185	590	200	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	1185	590	170	
67-64-1	Acetone	ND	ug/m3	1185	5900	1000	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	1185	590	180	
71-43-2	Benzene	ND	ug/m3	1185	590	170	
75-27-4	Bromodichloromethane	ND	ug/m3	1185	590	190	
75-25-2	Bromoform	ND	ug/m3	1185	590	170	
74-83-9	Bromomethane	ND	ug/m3	1185	590	230	
75-15-0	Carbon Disulfide	ND	ug/m3	1185	5900	180	
56-23-5	Carbon Tetrachloride	ND	ug/m3	1185	590	190	
108-90-7	Chlorobenzene	ND	ug/m3	1185	590	190	
75-00-3	Chloroethane	ND	ug/m3	1185	590	230	
67-66-3	Chloroform	ND	ug/m3	1185	590	230	
74-87-3	Chloromethane	ND	ug/m3	1185	590	230	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	1185	590	210	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	1185	590	170	
98-82-8	Cumene	ND	ug/m3	1185	590	180	
110-82-7	Cyclohexane	ND	ug/m3	1185	1200	390	
124-48-1	Dibromochloromethane	ND	ug/m3	1185	590	170	
64-17-5	Ethanol	ND	ug/m3	1185	5900	1900	
100-41-4	Ethyl Benzene	ND	ug/m3	1185	590	180	
75-69-4	Freon 11	ND	ug/m3	1185	590	190	
76-13-1	Freon 113	110000	ug/m3	1185	590	190	
76-14-2	Freon 114	ND	ug/m3	1185	590	200	
75-71-8	Freon 12	ND	ug/m3	1185	590	210	
306-83-2	Freon 123	ND	ug/m3	1185	590	280	
354-23-4	Freon 123a	84000	ug/m3	1185	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	1185	590	270	
142-82-5	Heptane	ND	ug/m3	1185	590	190	
87-68-3	Hexachlorobutadiene	ND	ug/m3	1185	590	210	
110-54-3	Hexane	ND	ug/m3	1185	590	200	
179601-23-	m,p-Xylene	ND	ug/m3	1185	1200	340	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	1185	590	180	
75-09-2	Methylene Chloride	210	ug/m3	1185	590	180	J
95-47-6	o-Xylene	ND	ug/m3	1185	590	170	
103-65-1	Propylbenzene	ND	ug/m3	1185	590	180	
100-42-5	Styrene	ND	ug/m3	1185	590	180	
127-18-4	Tetrachloroethene	ND	ug/m3	1185	590	170	
109-99-9	Tetrahydrofuran	ND	ug/m3	1185	590	260	
108-88-3	Toluene	ND	ug/m3	1185	590	190	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	1185	590	200	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	1185	590	190	
79-01-6	Trichloroethene	1700	ug/m3	1185	590	180	

75-01-4	Vinyl Chloride	ND	ug/m3	1185	590	230

Borehole	600-SGW-1	Depth (ft)	57	Depth (m)	17.37	Event Date	3/22/2012

Sample	1203220941	Sample Type	Soil Gas	Analysis Method	TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	15	ug/m3	54	27	8.6	J
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	54	27	8.6	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	54	27	8.6	
75-34-3	1,1-Dichloroethane	19	ug/m3	54	27	9.2	J
75-35-4	1,1-Dichloroethene	57	ug/m3	54	27	9.2	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	54	27	13	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	54	27	8.6	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	54	27	8.1	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	54	27	9.2	
107-06-2	1,2-Dichloroethane	ND	ug/m3	54	27	10	
78-87-5	1,2-Dichloropropane	ND	ug/m3	54	27	9.2	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	54	27	9.2	
106-99-0	1,3-Butadiene	ND	ug/m3	54	27	11	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	54	27	9.2	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	54	27	8.6	
123-91-1	1,4-Dioxane	ND	ug/m3	54	27	9.2	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	54	27	9.2	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	54	270	12	
591-78-6	2-Hexanone	ND	ug/m3	54	27	9.7	
67-63-0	2-Propanol	ND	ug/m3	54	54	22	
107-05-1	3-Chloropropene	ND	ug/m3	54	27	8.6	
622-96-8	4-Ethyltoluene	ND	ug/m3	54	27	9.2	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	54	27	7.6	
67-64-1	Acetone	ND	ug/m3	54	270	48	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	54	27	8.1	
71-43-2	Benzene	ND	ug/m3	54	27	7.6	
75-27-4	Bromodichloromethane	ND	ug/m3	54	27	8.6	
75-25-2	Bromoform	ND	ug/m3	54	27	7.6	
74-83-9	Bromomethane	ND	ug/m3	54	27	10	
75-15-0	Carbon Disulfide	ND	ug/m3	54	270	8.1	
56-23-5	Carbon Tetrachloride	ND	ug/m3	54	27	8.6	
108-90-7	Chlorobenzene	ND	ug/m3	54	27	8.6	
75-00-3	Chloroethane	ND	ug/m3	54	27	10	
67-66-3	Chloroform	93	ug/m3	54	27	10	
74-87-3	Chloromethane	ND	ug/m3	54	27	10	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	54	27	9.7	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	54	27	7.6	
98-82-8	Cumene	ND	ug/m3	54	27	8.1	
110-82-7	Cyclohexane	ND	ug/m3	54	54	18	
124-48-1	Dibromochloromethane	ND	ug/m3	54	27	7.6	
64-17-5	Ethanol	ND	ug/m3	54	270	86	

100-41-4	Ethyl Benzene	ND	ug/m3	54	27	8.1	
75-69-4	Freon 11	46	ug/m3	54	27	8.6	
76-13-1	Freon 113	65000	ug/m3	1620	810	260	D
76-14-2	Freon 114	ND	ug/m3	54	27	9.2	
75-71-8	Freon 12	ND	ug/m3	54	27	9.7	
306-83-2	Freon 123	23	ug/m3	54	27	13	J
NA	Freon 123a	24000	ug/m3	54	NA	NA	TIC
75-43-4	Freon 21	22	ug/m3	54	27	12	J
142-82-5	Heptane	ND	ug/m3	54	27	8.6	
87-68-3	Hexachlorobutadiene	ND	ug/m3	54	27	9.7	
110-54-3	Hexane	ND	ug/m3	54	27	9.2	
179601-23-	m,p-Xylene	ND	ug/m3	54	54	16	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	54	27	8.1	
75-09-2	Methylene Chloride	21	ug/m3	54	27	8.1	J
95-47-6	o-Xylene	ND	ug/m3	54	27	7.6	
103-65-1	Propylbenzene	ND	ug/m3	54	27	8.1	
100-42-5	Styrene	ND	ug/m3	54	27	8.1	
127-18-4	Tetrachloroethene	8.4	ug/m3	54	27	7.6	J
109-99-9	Tetrahydrofuran	ND	ug/m3	54	27	12	
108-88-3	Toluene	ND	ug/m3	54	27	8.6	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	54	27	9.2	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	54	27	8.6	
79-01-6	Trichloroethene	3400	ug/m3	54	27	8.1	
75-01-4	Vinyl Chloride	ND	ug/m3	54	27	10	

Sample 1203241536 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	844	420	140	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	844	420	140	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	844	420	140	
75-34-3	1,1-Dichloroethane	ND	ug/m3	844	420	140	
75-35-4	1,1-Dichloroethene	ND	ug/m3	844	420	140	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	844	420	200	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	844	420	140	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	844	420	130	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	844	420	140	
107-06-2	1,2-Dichloroethane	ND	ug/m3	844	420	160	
78-87-5	1,2-Dichloropropane	ND	ug/m3	844	420	140	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	844	420	140	
106-99-0	1,3-Butadiene	ND	ug/m3	844	420	180	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	844	420	140	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	844	420	140	
123-91-1	1,4-Dioxane	ND	ug/m3	844	420	140	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	844	420	140	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	844	4200	190	
591-78-6	2-Hexanone	ND	ug/m3	844	420	150	

67-63-0	2-Propanol	ND	ug/m3	844	840	340	
107-05-1	3-Chloropropene	ND	ug/m3	844	420	140	
622-96-8	4-Ethyltoluene	ND	ug/m3	844	420	140	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	844	420	120	
67-64-1	Acetone	ND	ug/m3	844	4200	740	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	844	420	130	
71-43-2	Benzene	ND	ug/m3	844	420	120	
75-27-4	Bromodichloromethane	ND	ug/m3	844	420	140	
75-25-2	Bromoform	ND	ug/m3	844	420	120	
74-83-9	Bromomethane	ND	ug/m3	844	420	160	
75-15-0	Carbon Disulfide	ND	ug/m3	844	4200	130	
56-23-5	Carbon Tetrachloride	ND	ug/m3	844	420	140	
108-90-7	Chlorobenzene	ND	ug/m3	844	420	140	
75-00-3	Chloroethane	ND	ug/m3	844	420	160	
67-66-3	Chloroform	ND	ug/m3	844	420	160	
74-87-3	Chloromethane	ND	ug/m3	844	420	160	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	844	420	150	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	844	420	120	
98-82-8	Cumene	ND	ug/m3	844	420	130	
110-82-7	Cyclohexane	ND	ug/m3	844	840	280	
124-48-1	Dibromochloromethane	ND	ug/m3	844	420	120	
64-17-5	Ethanol	ND	ug/m3	844	4200	1400	
100-41-4	Ethyl Benzene	ND	ug/m3	844	420	130	
75-69-4	Freon 11	ND	ug/m3	844	420	140	
76-13-1	Freon 113	72000	ug/m3	844	420	140	
76-14-2	Freon 114	ND	ug/m3	844	420	140	
75-71-8	Freon 12	ND	ug/m3	844	420	150	
306-83-2	Freon 123	ND	ug/m3	844	420	200	
354-23-4	Freon 123a	30000	ug/m3	844	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	844	420	190	
142-82-5	Heptane	ND	ug/m3	844	420	140	
87-68-3	Hexachlorobutadiene	ND	ug/m3	844	420	150	
110-54-3	Hexane	ND	ug/m3	844	420	140	
179601-23-	m,p-Xylene	ND	ug/m3	844	840	240	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	844	420	130	
75-09-2	Methylene Chloride	150	ug/m3	844	420	130	J
95-47-6	o-Xylene	ND	ug/m3	844	420	120	
103-65-1	Propylbenzene	ND	ug/m3	844	420	130	
100-42-5	Styrene	ND	ug/m3	844	420	130	
127-18-4	Tetrachloroethene	ND	ug/m3	844	420	120	
109-99-9	Tetrahydrofuran	ND	ug/m3	844	420	190	
108-88-3	Toluene	ND	ug/m3	844	420	140	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	844	420	140	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	844	420	140	
79-01-6	Trichloroethene	3100	ug/m3	844	420	130	
75-01-4	Vinyl Chloride	ND	ug/m3	844	420	160	

Borehole	600-SGW-1	Depth (ft)	117.5	Depth (m)	35.81	Event Date	3/22/2012

Sample	1203220947	Sample Type	Soil Gas	Analysis Method	TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	805	400	130	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	805	400	130	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	805	400	130	
75-34-3	1,1-Dichloroethane	ND	ug/m3	805	400	140	
75-35-4	1,1-Dichloroethene	ND	ug/m3	805	400	140	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	805	400	190	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	805	400	130	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	805	400	120	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	805	400	140	
107-06-2	1,2-Dichloroethane	ND	ug/m3	805	400	150	
78-87-5	1,2-Dichloropropane	ND	ug/m3	805	400	140	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	805	400	140	
106-99-0	1,3-Butadiene	ND	ug/m3	805	400	170	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	805	400	140	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	805	400	130	
123-91-1	1,4-Dioxane	ND	ug/m3	805	400	140	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	805	400	140	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	805	4000	190	
591-78-6	2-Hexanone	ND	ug/m3	805	400	140	
67-63-0	2-Propanol	ND	ug/m3	805	810	320	
107-05-1	3-Chloropropene	ND	ug/m3	805	400	130	
622-96-8	4-Ethyltoluene	ND	ug/m3	805	400	140	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	805	400	110	
67-64-1	Acetone	ND	ug/m3	805	4000	710	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	805	400	120	
71-43-2	Benzene	ND	ug/m3	805	400	110	
75-27-4	Bromodichloromethane	ND	ug/m3	805	400	130	
75-25-2	Bromoform	ND	ug/m3	805	400	110	
74-83-9	Bromomethane	ND	ug/m3	805	400	150	
75-15-0	Carbon Disulfide	ND	ug/m3	805	4000	120	
56-23-5	Carbon Tetrachloride	ND	ug/m3	805	400	130	
108-90-7	Chlorobenzene	ND	ug/m3	805	400	130	
75-00-3	Chloroethane	ND	ug/m3	805	400	150	
67-66-3	Chloroform	ND	ug/m3	805	400	150	
74-87-3	Chloromethane	ND	ug/m3	805	400	150	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	805	400	140	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	805	400	110	
98-82-8	Cumene	ND	ug/m3	805	400	120	
110-82-7	Cyclohexane	ND	ug/m3	805	810	270	
124-48-1	Dibromochloromethane	ND	ug/m3	805	400	110	
64-17-5	Ethanol	ND	ug/m3	805	4000	1300	

100-41-4	Ethyl Benzene	ND	ug/m3	805	400	120	
75-69-4	Freon 11	ND	ug/m3	805	400	130	
76-13-1	Freon 113	74000	ug/m3	805	400	130	
76-14-2	Freon 114	ND	ug/m3	805	400	140	
75-71-8	Freon 12	ND	ug/m3	805	400	140	
306-83-2	Freon 123	ND	ug/m3	805	400	190	
NA	Freon 123a	ND	ug/m3	805	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	805	400	190	
142-82-5	Heptane	ND	ug/m3	805	400	130	
87-68-3	Hexachlorobutadiene	ND	ug/m3	805	400	140	
110-54-3	Hexane	ND	ug/m3	805	400	140	
179601-23-	m,p-Xylene	ND	ug/m3	805	810	230	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	805	400	120	
75-09-2	Methylene Chloride	180	ug/m3	805	400	120	J
95-47-6	o-Xylene	ND	ug/m3	805	400	110	
103-65-1	Propylbenzene	ND	ug/m3	805	400	120	
100-42-5	Styrene	ND	ug/m3	805	400	120	
127-18-4	Tetrachloroethene	ND	ug/m3	805	400	110	
109-99-9	Tetrahydrofuran	ND	ug/m3	805	400	180	
108-88-3	Toluene	ND	ug/m3	805	400	130	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	805	400	140	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	805	400	130	
79-01-6	Trichloroethene	5300	ug/m3	805	400	120	
75-01-4	Vinyl Chloride	ND	ug/m3	805	400	150	

Sample 1203241545 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	1195	600	190	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	1195	600	190	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	1195	600	190	
75-34-3	1,1-Dichloroethane	ND	ug/m3	1195	600	200	
75-35-4	1,1-Dichloroethene	ND	ug/m3	1195	600	200	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	1195	600	290	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	1195	600	190	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	1195	600	180	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	1195	600	200	
107-06-2	1,2-Dichloroethane	ND	ug/m3	1195	600	230	
78-87-5	1,2-Dichloropropane	ND	ug/m3	1195	600	200	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	1195	600	200	
106-99-0	1,3-Butadiene	ND	ug/m3	1195	600	250	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	1195	600	200	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	1195	600	190	
123-91-1	1,4-Dioxane	ND	ug/m3	1195	600	200	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	1195	600	200	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	1195	6000	270	
591-78-6	2-Hexanone	ND	ug/m3	1195	600	220	

67-63-0	2-Propanol	ND	ug/m3	1195	1200	480	
107-05-1	3-Chloropropene	ND	ug/m3	1195	600	190	
622-96-8	4-Ethyltoluene	ND	ug/m3	1195	600	200	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	1195	600	170	
67-64-1	Acetone	ND	ug/m3	1195	6000	1100	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	1195	600	180	
71-43-2	Benzene	ND	ug/m3	1195	600	170	
75-27-4	Bromodichloromethane	ND	ug/m3	1195	600	190	
75-25-2	Bromoform	ND	ug/m3	1195	600	170	
74-83-9	Bromomethane	ND	ug/m3	1195	600	230	
75-15-0	Carbon Disulfide	ND	ug/m3	1195	6000	180	
56-23-5	Carbon Tetrachloride	ND	ug/m3	1195	600	190	
108-90-7	Chlorobenzene	ND	ug/m3	1195	600	190	
75-00-3	Chloroethane	ND	ug/m3	1195	600	230	
67-66-3	Chloroform	ND	ug/m3	1195	600	230	
74-87-3	Chloromethane	ND	ug/m3	1195	600	230	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	1195	600	220	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	1195	600	170	
98-82-8	Cumene	ND	ug/m3	1195	600	180	
110-82-7	Cyclohexane	ND	ug/m3	1195	1200	390	
124-48-1	Dibromochloromethane	ND	ug/m3	1195	600	170	
64-17-5	Ethanol	ND	ug/m3	1195	6000	1900	
100-41-4	Ethyl Benzene	ND	ug/m3	1195	600	180	
75-69-4	Freon 11	ND	ug/m3	1195	600	190	
76-13-1	Freon 113	110000	ug/m3	1195	600	190	
76-14-2	Freon 114	ND	ug/m3	1195	600	200	
75-71-8	Freon 12	ND	ug/m3	1195	600	220	
306-83-2	Freon 123	ND	ug/m3	1195	600	290	
354-23-4	Freon 123a	ND	ug/m3	1195	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	1195	600	270	
142-82-5	Heptane	ND	ug/m3	1195	600	190	
87-68-3	Hexachlorobutadiene	ND	ug/m3	1195	600	220	
110-54-3	Hexane	ND	ug/m3	1195	600	200	
179601-23-	m,p-Xylene	ND	ug/m3	1195	1200	350	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	1195	600	180	
75-09-2	Methylene Chloride	250	ug/m3	1195	600	180	J
95-47-6	o-Xylene	ND	ug/m3	1195	600	170	
103-65-1	Propylbenzene	ND	ug/m3	1195	600	180	
100-42-5	Styrene	ND	ug/m3	1195	600	180	
127-18-4	Tetrachloroethene	ND	ug/m3	1195	600	170	
109-99-9	Tetrahydrofuran	ND	ug/m3	1195	600	260	
108-88-3	Toluene	ND	ug/m3	1195	600	190	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	1195	600	200	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	1195	600	190	
79-01-6	Trichloroethene	6400	ug/m3	1195	600	180	
75-01-4	Vinyl Chloride	ND	ug/m3	1195	600	230	

Sample **1203241546** **Sample Type** **Soil Gas-D** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	220	ug/m3	1195	600	190	J
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	1195	600	190	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	1195	600	190	
75-34-3	1,1-Dichloroethane	ND	ug/m3	1195	600	200	
75-35-4	1,1-Dichloroethene	ND	ug/m3	1195	600	200	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	1195	600	290	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	1195	600	190	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	1195	600	180	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	1195	600	200	
107-06-2	1,2-Dichloroethane	ND	ug/m3	1195	600	230	
78-87-5	1,2-Dichloropropane	ND	ug/m3	1195	600	200	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	1195	600	200	
106-99-0	1,3-Butadiene	ND	ug/m3	1195	600	250	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	1195	600	200	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	1195	600	190	
123-91-1	1,4-Dioxane	ND	ug/m3	1195	600	200	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	1195	600	200	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	1195	6000	270	
591-78-6	2-Hexanone	ND	ug/m3	1195	600	220	
67-63-0	2-Propanol	ND	ug/m3	1195	1200	480	
107-05-1	3-Chloropropene	ND	ug/m3	1195	600	190	
622-96-8	4-Ethyltoluene	ND	ug/m3	1195	600	200	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	1195	600	170	
67-64-1	Acetone	ND	ug/m3	1195	6000	1100	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	1195	600	180	
71-43-2	Benzene	ND	ug/m3	1195	600	170	
75-27-4	Bromodichloromethane	ND	ug/m3	1195	600	190	
75-25-2	Bromoform	ND	ug/m3	1195	600	170	
74-83-9	Bromomethane	ND	ug/m3	1195	600	230	
75-15-0	Carbon Disulfide	ND	ug/m3	1195	6000	180	
56-23-5	Carbon Tetrachloride	ND	ug/m3	1195	600	190	
108-90-7	Chlorobenzene	ND	ug/m3	1195	600	190	
75-00-3	Chloroethane	ND	ug/m3	1195	600	230	
67-66-3	Chloroform	ND	ug/m3	1195	600	230	
74-87-3	Chloromethane	ND	ug/m3	1195	600	230	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	1195	600	220	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	1195	600	170	
98-82-8	Cumene	ND	ug/m3	1195	600	180	
110-82-7	Cyclohexane	ND	ug/m3	1195	1200	390	
124-48-1	Dibromochloromethane	ND	ug/m3	1195	600	170	
64-17-5	Ethanol	ND	ug/m3	1195	6000	1900	
100-41-4	Ethyl Benzene	ND	ug/m3	1195	600	180	
75-69-4	Freon 11	ND	ug/m3	1195	600	190	

76-13-1	Freon 113	100000	ug/m3	1195	600	190	
76-14-2	Freon 114	ND	ug/m3	1195	600	200	
75-71-8	Freon 12	ND	ug/m3	1195	600	220	
306-83-2	Freon 123	ND	ug/m3	1195	600	290	
354-23-4	Freon 123a	ND	ug/m3	1195	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	1195	600	270	
142-82-5	Heptane	ND	ug/m3	1195	600	190	
87-68-3	Hexachlorobutadiene	ND	ug/m3	1195	600	220	
110-54-3	Hexane	ND	ug/m3	1195	600	200	
179601-23-	m,p-Xylene	ND	ug/m3	1195	1200	350	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	1195	600	180	
75-09-2	Methylene Chloride	220	ug/m3	1195	600	180	J
95-47-6	o-Xylene	ND	ug/m3	1195	600	170	
103-65-1	Propylbenzene	ND	ug/m3	1195	600	180	
100-42-5	Styrene	ND	ug/m3	1195	600	180	
127-18-4	Tetrachloroethene	ND	ug/m3	1195	600	170	
109-99-9	Tetrahydrofuran	ND	ug/m3	1195	600	260	
108-88-3	Toluene	ND	ug/m3	1195	600	190	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	1195	600	200	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	1195	600	190	
79-01-6	Trichloroethene	5700	ug/m3	1195	600	180	
75-01-4	Vinyl Chloride	ND	ug/m3	1195	600	230	

Borehole	600-SGW-2	Depth (ft)	12.5	Depth (m)	3.81	Event Date	3/22/2012

Sample	1203220948	Sample Type	Soil Gas	Analysis Method	TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	506.67	250	81	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	506.67	250	81	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	506.67	250	81	
75-34-3	1,1-Dichloroethane	ND	ug/m3	506.67	250	86	
75-35-4	1,1-Dichloroethene	ND	ug/m3	506.67	250	86	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	506.67	250	120	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	506.67	250	81	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	506.67	250	76	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	506.67	250	86	
107-06-2	1,2-Dichloroethane	ND	ug/m3	506.67	250	96	
78-87-5	1,2-Dichloropropane	ND	ug/m3	506.67	250	86	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	506.67	250	86	
106-99-0	1,3-Butadiene	ND	ug/m3	506.67	250	110	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	506.67	250	86	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	506.67	250	81	
123-91-1	1,4-Dioxane	ND	ug/m3	506.67	250	86	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	506.67	250	86	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	506.67	2500	120	
591-78-6	2-Hexanone	ND	ug/m3	506.67	250	91	
67-63-0	2-Propanol	ND	ug/m3	506.67	510	200	
107-05-1	3-Chloropropene	ND	ug/m3	506.67	250	81	
622-96-8	4-Ethyltoluene	ND	ug/m3	506.67	250	86	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	506.67	250	71	
67-64-1	Acetone	ND	ug/m3	506.67	2500	450	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	506.67	250	76	
71-43-2	Benzene	ND	ug/m3	506.67	250	71	
75-27-4	Bromodichloromethane	ND	ug/m3	506.67	250	81	
75-25-2	Bromoform	ND	ug/m3	506.67	250	71	
74-83-9	Bromomethane	ND	ug/m3	506.67	250	96	
75-15-0	Carbon Disulfide	ND	ug/m3	506.67	2500	76	
56-23-5	Carbon Tetrachloride	ND	ug/m3	506.67	250	81	
108-90-7	Chlorobenzene	ND	ug/m3	506.67	250	81	
75-00-3	Chloroethane	ND	ug/m3	506.67	250	96	
67-66-3	Chloroform	ND	ug/m3	506.67	250	96	
74-87-3	Chloromethane	ND	ug/m3	506.67	250	96	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	506.67	250	91	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	506.67	250	71	
98-82-8	Cumene	ND	ug/m3	506.67	250	76	
110-82-7	Cyclohexane	ND	ug/m3	506.67	510	170	
124-48-1	Dibromochloromethane	ND	ug/m3	506.67	250	71	
64-17-5	Ethanol	ND	ug/m3	506.67	2500	810	

100-41-4	Ethyl Benzene	ND	ug/m3	506.67	250	76	
75-69-4	Freon 11	ND	ug/m3	506.67	250	81	
76-13-1	Freon 113	38000	ug/m3	506.67	250	81	
76-14-2	Freon 114	ND	ug/m3	506.67	250	86	
75-71-8	Freon 12	ND	ug/m3	506.67	250	91	
306-83-2	Freon 123	ND	ug/m3	506.67	250	120	
NA	Freon 123a	1400	ug/m3	506.67	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	506.67	250	120	
142-82-5	Heptane	ND	ug/m3	506.67	250	81	
87-68-3	Hexachlorobutadiene	ND	ug/m3	506.67	250	91	
110-54-3	Hexane	ND	ug/m3	506.67	250	86	
179601-23-	m,p-Xylene	ND	ug/m3	506.67	510	150	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	506.67	250	76	
75-09-2	Methylene Chloride	86	ug/m3	506.67	250	76	J
95-47-6	o-Xylene	ND	ug/m3	506.67	250	71	
103-65-1	Propylbenzene	ND	ug/m3	506.67	250	76	
100-42-5	Styrene	ND	ug/m3	506.67	250	76	
127-18-4	Tetrachloroethene	ND	ug/m3	506.67	250	71	
109-99-9	Tetrahydrofuran	ND	ug/m3	506.67	250	110	
108-88-3	Toluene	ND	ug/m3	506.67	250	81	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	506.67	250	86	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	506.67	250	81	
79-01-6	Trichloroethene	970	ug/m3	506.67	250	76	
75-01-4	Vinyl Chloride	ND	ug/m3	506.67	250	96	

Sample 1203241512 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	596	300	95	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	596	300	95	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	596	300	95	
75-34-3	1,1-Dichloroethane	ND	ug/m3	596	300	100	
75-35-4	1,1-Dichloroethene	ND	ug/m3	596	300	100	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	596	300	140	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	596	300	95	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	596	300	89	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	596	300	100	
107-06-2	1,2-Dichloroethane	ND	ug/m3	596	300	110	
78-87-5	1,2-Dichloropropane	ND	ug/m3	596	300	100	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	596	300	100	
106-99-0	1,3-Butadiene	ND	ug/m3	596	300	130	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	596	300	100	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	596	300	95	
123-91-1	1,4-Dioxane	ND	ug/m3	596	300	100	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	596	300	100	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	596	3000	140	
591-78-6	2-Hexanone	ND	ug/m3	596	300	110	

67-63-0	2-Propanol	ND	ug/m3	596	600	240	
107-05-1	3-Chloropropene	ND	ug/m3	596	300	95	
622-96-8	4-Ethyltoluene	ND	ug/m3	596	300	100	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	596	300	83	
67-64-1	Acetone	ND	ug/m3	596	3000	520	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	596	300	89	
71-43-2	Benzene	ND	ug/m3	596	300	83	
75-27-4	Bromodichloromethane	ND	ug/m3	596	300	95	
75-25-2	Bromoform	ND	ug/m3	596	300	83	
74-83-9	Bromomethane	ND	ug/m3	596	300	110	
75-15-0	Carbon Disulfide	ND	ug/m3	596	3000	89	
56-23-5	Carbon Tetrachloride	ND	ug/m3	596	300	95	
108-90-7	Chlorobenzene	ND	ug/m3	596	300	95	
75-00-3	Chloroethane	ND	ug/m3	596	300	110	
67-66-3	Chloroform	ND	ug/m3	596	300	110	
74-87-3	Chloromethane	ND	ug/m3	596	300	110	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	596	300	110	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	596	300	83	
98-82-8	Cumene	ND	ug/m3	596	300	89	
110-82-7	Cyclohexane	ND	ug/m3	596	600	200	
124-48-1	Dibromochloromethane	ND	ug/m3	596	300	83	
64-17-5	Ethanol	ND	ug/m3	596	3000	950	
100-41-4	Ethyl Benzene	ND	ug/m3	596	300	89	
75-69-4	Freon 11	ND	ug/m3	596	300	95	
76-13-1	Freon 113	49000	ug/m3	596	300	95	
76-14-2	Freon 114	ND	ug/m3	596	300	100	
75-71-8	Freon 12	ND	ug/m3	596	300	110	
306-83-2	Freon 123	ND	ug/m3	596	300	140	
354-23-4	Freon 123a	ND	ug/m3	596	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	596	300	140	
142-82-5	Heptane	ND	ug/m3	596	300	95	
87-68-3	Hexachlorobutadiene	ND	ug/m3	596	300	110	
110-54-3	Hexane	ND	ug/m3	596	300	100	
179601-23-	m,p-Xylene	ND	ug/m3	596	600	170	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	596	300	89	
75-09-2	Methylene Chloride	100	ug/m3	596	300	89	J
95-47-6	o-Xylene	ND	ug/m3	596	300	83	
103-65-1	Propylbenzene	ND	ug/m3	596	300	89	
100-42-5	Styrene	ND	ug/m3	596	300	89	
127-18-4	Tetrachloroethene	ND	ug/m3	596	300	83	
109-99-9	Tetrahydrofuran	ND	ug/m3	596	300	130	
108-88-3	Toluene	ND	ug/m3	596	300	95	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	596	300	100	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	596	300	95	
79-01-6	Trichloroethene	700	ug/m3	596	300	89	
75-01-4	Vinyl Chloride	ND	ug/m3	596	300	110	

Borehole	600-SGW-2	Depth (ft)	47.5	Depth (m)	14.48	Event Date	3/22/2012

Sample	1203220952	Sample Type	Soil Gas	Analysis Method	TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	1660	830	270	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	1660	830	270	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	1660	830	270	
75-34-3	1,1-Dichloroethane	ND	ug/m3	1660	830	280	
75-35-4	1,1-Dichloroethene	ND	ug/m3	1660	830	280	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	1660	830	400	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	1660	830	270	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	1660	830	250	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	1660	830	280	
107-06-2	1,2-Dichloroethane	ND	ug/m3	1660	830	320	
78-87-5	1,2-Dichloropropane	ND	ug/m3	1660	830	280	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	1660	830	280	
106-99-0	1,3-Butadiene	ND	ug/m3	1660	830	350	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	1660	830	280	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	1660	830	270	
123-91-1	1,4-Dioxane	ND	ug/m3	1660	830	280	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	1660	830	280	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	1660	8300	380	
591-78-6	2-Hexanone	ND	ug/m3	1660	830	300	
67-63-0	2-Propanol	ND	ug/m3	1660	1700	660	
107-05-1	3-Chloropropene	ND	ug/m3	1660	830	270	
622-96-8	4-Ethyltoluene	ND	ug/m3	1660	830	280	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	1660	830	230	
67-64-1	Acetone	ND	ug/m3	1660	8300	1500	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	1660	830	250	
71-43-2	Benzene	ND	ug/m3	1660	830	230	
75-27-4	Bromodichloromethane	ND	ug/m3	1660	830	270	
75-25-2	Bromoform	ND	ug/m3	1660	830	230	
74-83-9	Bromomethane	ND	ug/m3	1660	830	320	
75-15-0	Carbon Disulfide	ND	ug/m3	1660	8300	250	
56-23-5	Carbon Tetrachloride	ND	ug/m3	1660	830	270	
108-90-7	Chlorobenzene	ND	ug/m3	1660	830	270	
75-00-3	Chloroethane	ND	ug/m3	1660	830	320	
67-66-3	Chloroform	ND	ug/m3	1660	830	320	
74-87-3	Chloromethane	ND	ug/m3	1660	830	320	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	1660	830	300	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	1660	830	230	
98-82-8	Cumene	ND	ug/m3	1660	830	250	
110-82-7	Cyclohexane	ND	ug/m3	1660	1700	550	
124-48-1	Dibromochloromethane	ND	ug/m3	1660	830	230	
64-17-5	Ethanol	ND	ug/m3	1660	8300	2700	

100-41-4	Ethyl Benzene	ND	ug/m3	1660	830	250	
75-69-4	Freon 11	ND	ug/m3	1660	830	270	
76-13-1	Freon 113	120000	ug/m3	1660	830	270	
76-14-2	Freon 114	ND	ug/m3	1660	830	280	
75-71-8	Freon 12	ND	ug/m3	1660	830	300	
306-83-2	Freon 123	ND	ug/m3	1660	830	400	
NA	Freon 123a	ND	ug/m3	1660	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	1660	830	380	
142-82-5	Heptane	ND	ug/m3	1660	830	270	
87-68-3	Hexachlorobutadiene	ND	ug/m3	1660	830	300	
110-54-3	Hexane	ND	ug/m3	1660	830	280	
179601-23-	m,p-Xylene	ND	ug/m3	1660	1700	480	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	1660	830	250	
75-09-2	Methylene Chloride	290	ug/m3	1660	830	250	J
95-47-6	o-Xylene	ND	ug/m3	1660	830	230	
103-65-1	Propylbenzene	ND	ug/m3	1660	830	250	
100-42-5	Styrene	ND	ug/m3	1660	830	250	
127-18-4	Tetrachloroethene	ND	ug/m3	1660	830	230	
109-99-9	Tetrahydrofuran	ND	ug/m3	1660	830	370	
108-88-3	Toluene	ND	ug/m3	1660	830	270	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	1660	830	280	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	1660	830	270	
79-01-6	Trichloroethene	5700	ug/m3	1660	830	250	
75-01-4	Vinyl Chloride	ND	ug/m3	1660	830	320	

Sample 1203241516 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	1812.5	910	290	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	1812.5	910	290	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	1812.5	910	290	
75-34-3	1,1-Dichloroethane	ND	ug/m3	1812.5	910	310	
75-35-4	1,1-Dichloroethene	ND	ug/m3	1812.5	910	310	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	1812.5	910	440	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	1812.5	910	290	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	1812.5	910	270	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	1812.5	910	310	
107-06-2	1,2-Dichloroethane	ND	ug/m3	1812.5	910	340	
78-87-5	1,2-Dichloropropane	ND	ug/m3	1812.5	910	310	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	1812.5	910	310	
106-99-0	1,3-Butadiene	ND	ug/m3	1812.5	910	380	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	1812.5	910	310	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	1812.5	910	290	
123-91-1	1,4-Dioxane	ND	ug/m3	1812.5	910	310	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	1812.5	910	310	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	1812.5	9100	420	
591-78-6	2-Hexanone	ND	ug/m3	1812.5	910	330	

67-63-0	2-Propanol	ND	ug/m3	1812.5	1800	730	
107-05-1	3-Chloropropene	ND	ug/m3	1812.5	910	290	
622-96-8	4-Ethyltoluene	ND	ug/m3	1812.5	910	310	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	1812.5	910	250	
67-64-1	Acetone	ND	ug/m3	1812.5	9100	1600	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	1812.5	910	270	
71-43-2	Benzene	ND	ug/m3	1812.5	910	250	
75-27-4	Bromodichloromethane	ND	ug/m3	1812.5	910	290	
75-25-2	Bromoform	ND	ug/m3	1812.5	910	250	
74-83-9	Bromomethane	ND	ug/m3	1812.5	910	340	
75-15-0	Carbon Disulfide	ND	ug/m3	1812.5	9100	270	
56-23-5	Carbon Tetrachloride	ND	ug/m3	1812.5	910	290	
108-90-7	Chlorobenzene	ND	ug/m3	1812.5	910	290	
75-00-3	Chloroethane	ND	ug/m3	1812.5	910	340	
67-66-3	Chloroform	ND	ug/m3	1812.5	910	340	
74-87-3	Chloromethane	ND	ug/m3	1812.5	910	340	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	1812.5	910	330	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	1812.5	910	250	
98-82-8	Cumene	ND	ug/m3	1812.5	910	270	
110-82-7	Cyclohexane	ND	ug/m3	1812.5	1800	600	
124-48-1	Dibromochloromethane	ND	ug/m3	1812.5	910	250	
64-17-5	Ethanol	ND	ug/m3	1812.5	9100	2900	
100-41-4	Ethyl Benzene	ND	ug/m3	1812.5	910	270	
75-69-4	Freon 11	ND	ug/m3	1812.5	910	290	
76-13-1	Freon 113	140000	ug/m3	1812.5	910	290	
76-14-2	Freon 114	ND	ug/m3	1812.5	910	310	
75-71-8	Freon 12	ND	ug/m3	1812.5	910	330	
306-83-2	Freon 123	ND	ug/m3	1812.5	910	440	
354-23-4	Freon 123a	ND	ug/m3	1812.5	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	1812.5	910	420	
142-82-5	Heptane	ND	ug/m3	1812.5	910	290	
87-68-3	Hexachlorobutadiene	ND	ug/m3	1812.5	910	330	
110-54-3	Hexane	ND	ug/m3	1812.5	910	310	
179601-23-	m,p-Xylene	ND	ug/m3	1812.5	1800	530	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	1812.5	910	270	
75-09-2	Methylene Chloride	300	ug/m3	1812.5	910	270	J
95-47-6	o-Xylene	ND	ug/m3	1812.5	910	250	
103-65-1	Propylbenzene	ND	ug/m3	1812.5	910	270	
100-42-5	Styrene	ND	ug/m3	1812.5	910	270	
127-18-4	Tetrachloroethene	ND	ug/m3	1812.5	910	250	
109-99-9	Tetrahydrofuran	ND	ug/m3	1812.5	910	400	
108-88-3	Toluene	ND	ug/m3	1812.5	910	290	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	1812.5	910	310	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	1812.5	910	290	
79-01-6	Trichloroethene	4500	ug/m3	1812.5	910	270	
75-01-4	Vinyl Chloride	ND	ug/m3	1812.5	910	340	

Borehole	600-SGW-2	Depth (ft)	107.5	Depth (m)	32.76	Event Date	3/22/2012

Sample	1203220958	Sample Type	Soil Gas	Analysis Method	TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	2633.33	1300	420	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	2633.33	1300	420	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	2633.33	1300	420	
75-34-3	1,1-Dichloroethane	ND	ug/m3	2633.33	1300	450	
75-35-4	1,1-Dichloroethene	ND	ug/m3	2633.33	1300	450	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	2633.33	1300	630	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	2633.33	1300	420	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	2633.33	1300	400	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	2633.33	1300	450	
107-06-2	1,2-Dichloroethane	ND	ug/m3	2633.33	1300	500	
78-87-5	1,2-Dichloropropane	ND	ug/m3	2633.33	1300	450	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	2633.33	1300	450	
106-99-0	1,3-Butadiene	ND	ug/m3	2633.33	1300	550	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	2633.33	1300	450	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	2633.33	1300	420	
123-91-1	1,4-Dioxane	ND	ug/m3	2633.33	1300	450	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	2633.33	1300	450	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	2633.33	13000	610	
591-78-6	2-Hexanone	ND	ug/m3	2633.33	1300	470	
67-63-0	2-Propanol	ND	ug/m3	2633.33	2600	1100	
107-05-1	3-Chloropropene	ND	ug/m3	2633.33	1300	420	
622-96-8	4-Ethyltoluene	ND	ug/m3	2633.33	1300	450	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	2633.33	1300	370	
67-64-1	Acetone	ND	ug/m3	2633.33	13000	2300	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	2633.33	1300	400	
71-43-2	Benzene	ND	ug/m3	2633.33	1300	370	
75-27-4	Bromodichloromethane	ND	ug/m3	2633.33	1300	420	
75-25-2	Bromoform	ND	ug/m3	2633.33	1300	370	
74-83-9	Bromomethane	ND	ug/m3	2633.33	1300	500	
75-15-0	Carbon Disulfide	ND	ug/m3	2633.33	13000	400	
56-23-5	Carbon Tetrachloride	ND	ug/m3	2633.33	1300	420	
108-90-7	Chlorobenzene	ND	ug/m3	2633.33	1300	420	
75-00-3	Chloroethane	ND	ug/m3	2633.33	1300	500	
67-66-3	Chloroform	ND	ug/m3	2633.33	1300	500	
74-87-3	Chloromethane	ND	ug/m3	2633.33	1300	500	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	2633.33	1300	470	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	2633.33	1300	370	
98-82-8	Cumene	ND	ug/m3	2633.33	1300	400	
110-82-7	Cyclohexane	ND	ug/m3	2633.33	2600	870	
124-48-1	Dibromochloromethane	ND	ug/m3	2633.33	1300	370	
64-17-5	Ethanol	ND	ug/m3	2633.33	13000	4200	

100-41-4	Ethyl Benzene	ND	ug/m3	2633.33	1300	400	
75-69-4	Freon 11	ND	ug/m3	2633.33	1300	420	
76-13-1	Freon 113	250000	ug/m3	2633.33	1300	420	
76-14-2	Freon 114	ND	ug/m3	2633.33	1300	450	
75-71-8	Freon 12	ND	ug/m3	2633.33	1300	470	
306-83-2	Freon 123	ND	ug/m3	2633.33	1300	630	
NA	Freon 123a	ND	ug/m3	2633.33	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	2633.33	1300	610	
142-82-5	Heptane	ND	ug/m3	2633.33	1300	420	
87-68-3	Hexachlorobutadiene	ND	ug/m3	2633.33	1300	470	
110-54-3	Hexane	ND	ug/m3	2633.33	1300	450	
179601-23-	m,p-Xylene	ND	ug/m3	2633.33	2600	760	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	2633.33	1300	400	
75-09-2	Methylene Chloride	450	ug/m3	2633.33	1300	400	J
95-47-6	o-Xylene	ND	ug/m3	2633.33	1300	370	
103-65-1	Propylbenzene	ND	ug/m3	2633.33	1300	400	
100-42-5	Styrene	ND	ug/m3	2633.33	1300	400	
127-18-4	Tetrachloroethene	ND	ug/m3	2633.33	1300	370	
109-99-9	Tetrahydrofuran	ND	ug/m3	2633.33	1300	580	
108-88-3	Toluene	ND	ug/m3	2633.33	1300	420	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	2633.33	1300	450	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	2633.33	1300	420	
79-01-6	Trichloroethene	8500	ug/m3	2633.33	1300	400	
75-01-4	Vinyl Chloride	ND	ug/m3	2633.33	1300	500	

Sample 1203241522 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	2833.33	1400	450	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	2833.33	1400	450	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	2833.33	1400	450	
75-34-3	1,1-Dichloroethane	ND	ug/m3	2833.33	1400	480	
75-35-4	1,1-Dichloroethene	ND	ug/m3	2833.33	1400	480	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	2833.33	1400	680	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	2833.33	1400	450	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	2833.33	1400	430	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	2833.33	1400	480	
107-06-2	1,2-Dichloroethane	ND	ug/m3	2833.33	1400	540	
78-87-5	1,2-Dichloropropane	ND	ug/m3	2833.33	1400	480	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	2833.33	1400	480	
106-99-0	1,3-Butadiene	ND	ug/m3	2833.33	1400	600	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	2833.33	1400	480	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	2833.33	1400	450	
123-91-1	1,4-Dioxane	ND	ug/m3	2833.33	1400	480	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	2833.33	1400	480	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	2833.33	14000	650	
591-78-6	2-Hexanone	ND	ug/m3	2833.33	1400	510	

67-63-0	2-Propanol	ND	ug/m3	2833.33	2800	1100	
107-05-1	3-Chloropropene	ND	ug/m3	2833.33	1400	450	
622-96-8	4-Ethyltoluene	ND	ug/m3	2833.33	1400	480	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	2833.33	1400	400	
67-64-1	Acetone	ND	ug/m3	2833.33	14000	2500	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	2833.33	1400	430	
71-43-2	Benzene	ND	ug/m3	2833.33	1400	400	
75-27-4	Bromodichloromethane	ND	ug/m3	2833.33	1400	450	
75-25-2	Bromoform	ND	ug/m3	2833.33	1400	400	
74-83-9	Bromomethane	ND	ug/m3	2833.33	1400	540	
75-15-0	Carbon Disulfide	ND	ug/m3	2833.33	14000	430	
56-23-5	Carbon Tetrachloride	ND	ug/m3	2833.33	1400	450	
108-90-7	Chlorobenzene	ND	ug/m3	2833.33	1400	450	
75-00-3	Chloroethane	ND	ug/m3	2833.33	1400	540	
67-66-3	Chloroform	ND	ug/m3	2833.33	1400	540	
74-87-3	Chloromethane	ND	ug/m3	2833.33	1400	540	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	2833.33	1400	510	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	2833.33	1400	400	
98-82-8	Cumene	ND	ug/m3	2833.33	1400	430	
110-82-7	Cyclohexane	ND	ug/m3	2833.33	2800	940	
124-48-1	Dibromochloromethane	ND	ug/m3	2833.33	1400	400	
64-17-5	Ethanol	ND	ug/m3	2833.33	14000	4500	
100-41-4	Ethyl Benzene	ND	ug/m3	2833.33	1400	430	
75-69-4	Freon 11	ND	ug/m3	2833.33	1400	450	
76-13-1	Freon 113	280000	ug/m3	2833.33	1400	450	
76-14-2	Freon 114	ND	ug/m3	2833.33	1400	480	
75-71-8	Freon 12	ND	ug/m3	2833.33	1400	510	
306-83-2	Freon 123	ND	ug/m3	2833.33	1400	680	
354-23-4	Freon 123a	ND	ug/m3	2833.33	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	2833.33	1400	650	
142-82-5	Heptane	ND	ug/m3	2833.33	1400	450	
87-68-3	Hexachlorobutadiene	ND	ug/m3	2833.33	1400	510	
110-54-3	Hexane	ND	ug/m3	2833.33	1400	480	
179601-23-	m,p-Xylene	ND	ug/m3	2833.33	2800	820	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	2833.33	1400	430	
75-09-2	Methylene Chloride	480	ug/m3	2833.33	1400	430	J
95-47-6	o-Xylene	ND	ug/m3	2833.33	1400	400	
103-65-1	Propylbenzene	ND	ug/m3	2833.33	1400	430	
100-42-5	Styrene	ND	ug/m3	2833.33	1400	430	
127-18-4	Tetrachloroethene	ND	ug/m3	2833.33	1400	400	
109-99-9	Tetrahydrofuran	ND	ug/m3	2833.33	1400	620	
108-88-3	Toluene	ND	ug/m3	2833.33	1400	450	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	2833.33	1400	480	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	2833.33	1400	450	
79-01-6	Trichloroethene	6700	ug/m3	2833.33	1400	430	
75-01-4	Vinyl Chloride	ND	ug/m3	2833.33	1400	540	

Borehole	600-SGW-2	Depth (ft)	150	Depth (m)	45.72	Event Date	3/22/2012

Sample	1203221007	Sample Type	Soil Gas	Analysis Method	TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	3140	1600	500	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	3140	1600	500	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	3140	1600	500	
75-34-3	1,1-Dichloroethane	ND	ug/m3	3140	1600	530	
75-35-4	1,1-Dichloroethene	ND	ug/m3	3140	1600	530	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	3140	1600	750	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	3140	1600	500	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	3140	1600	470	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	3140	1600	530	
107-06-2	1,2-Dichloroethane	ND	ug/m3	3140	1600	600	
78-87-5	1,2-Dichloropropane	ND	ug/m3	3140	1600	530	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	3140	1600	530	
106-99-0	1,3-Butadiene	ND	ug/m3	3140	1600	660	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	3140	1600	530	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	3140	1600	500	
123-91-1	1,4-Dioxane	ND	ug/m3	3140	1600	530	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	3140	1600	530	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	3140	16000	720	
591-78-6	2-Hexanone	ND	ug/m3	3140	1600	570	
67-63-0	2-Propanol	ND	ug/m3	3140	3100	1300	
107-05-1	3-Chloropropene	ND	ug/m3	3140	1600	500	
622-96-8	4-Ethyltoluene	ND	ug/m3	3140	1600	530	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	3140	1600	440	
67-64-1	Acetone	ND	ug/m3	3140	16000	2800	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	3140	1600	470	
71-43-2	Benzene	ND	ug/m3	3140	1600	440	
75-27-4	Bromodichloromethane	ND	ug/m3	3140	1600	500	
75-25-2	Bromoform	ND	ug/m3	3140	1600	440	
74-83-9	Bromomethane	ND	ug/m3	3140	1600	600	
75-15-0	Carbon Disulfide	ND	ug/m3	3140	16000	470	
56-23-5	Carbon Tetrachloride	ND	ug/m3	3140	1600	500	
108-90-7	Chlorobenzene	ND	ug/m3	3140	1600	500	
75-00-3	Chloroethane	ND	ug/m3	3140	1600	600	
67-66-3	Chloroform	ND	ug/m3	3140	1600	600	
74-87-3	Chloromethane	ND	ug/m3	3140	1600	600	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	3140	1600	570	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	3140	1600	440	
98-82-8	Cumene	ND	ug/m3	3140	1600	470	
110-82-7	Cyclohexane	ND	ug/m3	3140	3100	1000	
124-48-1	Dibromochloromethane	ND	ug/m3	3140	1600	440	
64-17-5	Ethanol	ND	ug/m3	3140	16000	5000	

100-41-4	Ethyl Benzene	ND	ug/m3	3140	1600	470	
75-69-4	Freon 11	ND	ug/m3	3140	1600	500	
76-13-1	Freon 113	280000	ug/m3	3140	1600	500	
76-14-2	Freon 114	ND	ug/m3	3140	1600	530	
75-71-8	Freon 12	ND	ug/m3	3140	1600	570	
306-83-2	Freon 123	ND	ug/m3	3140	1600	750	
NA	Freon 123a	ND	ug/m3	3140	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	3140	1600	720	
142-82-5	Heptane	ND	ug/m3	3140	1600	500	
87-68-3	Hexachlorobutadiene	ND	ug/m3	3140	1600	570	
110-54-3	Hexane	ND	ug/m3	3140	1600	530	
179601-23-	m,p-Xylene	ND	ug/m3	3140	3100	910	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	3140	1600	470	
75-09-2	Methylene Chloride	550	ug/m3	3140	1600	470	J
95-47-6	o-Xylene	ND	ug/m3	3140	1600	440	
103-65-1	Propylbenzene	ND	ug/m3	3140	1600	470	
100-42-5	Styrene	ND	ug/m3	3140	1600	470	
127-18-4	Tetrachloroethene	ND	ug/m3	3140	1600	440	
109-99-9	Tetrahydrofuran	ND	ug/m3	3140	1600	690	
108-88-3	Toluene	ND	ug/m3	3140	1600	500	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	3140	1600	530	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	3140	1600	500	
79-01-6	Trichloroethene	9300	ug/m3	3140	1600	470	
75-01-4	Vinyl Chloride	ND	ug/m3	3140	1600	600	

Sample 1203241531 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	3720	1900	600	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	3720	1900	600	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	3720	1900	600	
75-34-3	1,1-Dichloroethane	ND	ug/m3	3720	1900	630	
75-35-4	1,1-Dichloroethene	ND	ug/m3	3720	1900	630	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	3720	1900	890	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	3720	1900	600	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	3720	1900	560	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	3720	1900	630	
107-06-2	1,2-Dichloroethane	ND	ug/m3	3720	1900	710	
78-87-5	1,2-Dichloropropane	ND	ug/m3	3720	1900	630	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	3720	1900	630	
106-99-0	1,3-Butadiene	ND	ug/m3	3720	1900	780	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	3720	1900	630	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	3720	1900	600	
123-91-1	1,4-Dioxane	ND	ug/m3	3720	1900	630	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	3720	1900	630	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	3720	19000	860	
591-78-6	2-Hexanone	ND	ug/m3	3720	1900	670	

67-63-0	2-Propanol	ND	ug/m3	3720	3700	1500	
107-05-1	3-Chloropropene	ND	ug/m3	3720	1900	600	
622-96-8	4-Ethyltoluene	ND	ug/m3	3720	1900	630	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	3720	1900	520	
67-64-1	Acetone	ND	ug/m3	3720	19000	3300	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	3720	1900	560	
71-43-2	Benzene	ND	ug/m3	3720	1900	520	
75-27-4	Bromodichloromethane	ND	ug/m3	3720	1900	600	
75-25-2	Bromoform	ND	ug/m3	3720	1900	520	
74-83-9	Bromomethane	ND	ug/m3	3720	1900	710	
75-15-0	Carbon Disulfide	ND	ug/m3	3720	19000	560	
56-23-5	Carbon Tetrachloride	ND	ug/m3	3720	1900	600	
108-90-7	Chlorobenzene	ND	ug/m3	3720	1900	600	
75-00-3	Chloroethane	ND	ug/m3	3720	1900	710	
67-66-3	Chloroform	ND	ug/m3	3720	1900	710	
74-87-3	Chloromethane	ND	ug/m3	3720	1900	710	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	3720	1900	670	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	3720	1900	520	
98-82-8	Cumene	ND	ug/m3	3720	1900	560	
110-82-7	Cyclohexane	ND	ug/m3	3720	3700	1200	
124-48-1	Dibromochloromethane	ND	ug/m3	3720	1900	520	
64-17-5	Ethanol	ND	ug/m3	3720	19000	6000	
100-41-4	Ethyl Benzene	ND	ug/m3	3720	1900	560	
75-69-4	Freon 11	ND	ug/m3	3720	1900	600	
76-13-1	Freon 113	280000	ug/m3	3720	1900	600	
76-14-2	Freon 114	ND	ug/m3	3720	1900	630	
75-71-8	Freon 12	ND	ug/m3	3720	1900	670	
306-83-2	Freon 123	ND	ug/m3	3720	1900	890	
354-23-4	Freon 123a	ND	ug/m3	3720	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	3720	1900	860	
142-82-5	Heptane	ND	ug/m3	3720	1900	600	
87-68-3	Hexachlorobutadiene	ND	ug/m3	3720	1900	670	
110-54-3	Hexane	ND	ug/m3	3720	1900	630	
179601-23-	m,p-Xylene	ND	ug/m3	3720	3700	1100	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	3720	1900	560	
75-09-2	Methylene Chloride	700	ug/m3	3720	1900	560	J
95-47-6	o-Xylene	ND	ug/m3	3720	1900	520	
103-65-1	Propylbenzene	ND	ug/m3	3720	1900	560	
100-42-5	Styrene	ND	ug/m3	3720	1900	560	
127-18-4	Tetrachloroethene	ND	ug/m3	3720	1900	520	
109-99-9	Tetrahydrofuran	ND	ug/m3	3720	1900	820	
108-88-3	Toluene	ND	ug/m3	3720	1900	600	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	3720	1900	630	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	3720	1900	600	
79-01-6	Trichloroethene	6700	ug/m3	3720	1900	560	
75-01-4	Vinyl Chloride	ND	ug/m3	3720	1900	710	

Borehole	600-SGW-3	Depth (ft)	12.5	Depth (m)	3.81	Event Date	3/22/2012

Sample	1203220838	Sample Type	Soil Gas	Analysis Method	TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	62.4	31	10	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	62.4	31	10	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	62.4	31	10	
75-34-3	1,1-Dichloroethane	ND	ug/m3	62.4	31	11	
75-35-4	1,1-Dichloroethene	ND	ug/m3	62.4	31	11	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	62.4	31	15	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	62.4	31	10	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	62.4	31	9.4	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	62.4	31	11	
107-06-2	1,2-Dichloroethane	ND	ug/m3	62.4	31	12	
78-87-5	1,2-Dichloropropane	ND	ug/m3	62.4	31	11	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	62.4	31	11	
106-99-0	1,3-Butadiene	ND	ug/m3	62.4	31	13	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	62.4	31	11	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	62.4	31	10	
123-91-1	1,4-Dioxane	ND	ug/m3	62.4	31	11	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	62.4	31	11	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	62.4	310	14	
591-78-6	2-Hexanone	ND	ug/m3	62.4	31	11	
67-63-0	2-Propanol	ND	ug/m3	62.4	62	25	
107-05-1	3-Chloropropene	ND	ug/m3	62.4	31	10	
622-96-8	4-Ethyltoluene	ND	ug/m3	62.4	31	11	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	62.4	31	8.7	
67-64-1	Acetone	ND	ug/m3	62.4	310	55	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	62.4	31	9.4	
71-43-2	Benzene	ND	ug/m3	62.4	31	8.7	
75-27-4	Bromodichloromethane	ND	ug/m3	62.4	31	10	
75-25-2	Bromoform	ND	ug/m3	62.4	31	8.7	
74-83-9	Bromomethane	ND	ug/m3	62.4	31	12	
75-15-0	Carbon Disulfide	ND	ug/m3	62.4	310	9.4	
56-23-5	Carbon Tetrachloride	ND	ug/m3	62.4	31	10	
108-90-7	Chlorobenzene	ND	ug/m3	62.4	31	10	
75-00-3	Chloroethane	ND	ug/m3	62.4	31	12	
67-66-3	Chloroform	29	ug/m3	62.4	31	12	J
74-87-3	Chloromethane	ND	ug/m3	62.4	31	12	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	62.4	31	11	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	62.4	31	8.7	
98-82-8	Cumene	ND	ug/m3	62.4	31	9.4	
110-82-7	Cyclohexane	ND	ug/m3	62.4	62	21	
124-48-1	Dibromochloromethane	ND	ug/m3	62.4	31	8.7	
64-17-5	Ethanol	ND	ug/m3	62.4	310	100	

100-41-4	Ethyl Benzene	ND	ug/m3	62.4	31	9.4	
75-69-4	Freon 11	ND	ug/m3	62.4	31	10	
76-13-1	Freon 113	4400	ug/m3	62.4	31	10	
76-14-2	Freon 114	ND	ug/m3	62.4	31	11	
75-71-8	Freon 12	ND	ug/m3	62.4	31	11	
306-83-2	Freon 123	ND	ug/m3	62.4	31	15	
354-23-4	Freon 123a	1800	ug/m3	62.4	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	62.4	31	14	
142-82-5	Heptane	ND	ug/m3	62.4	31	10	
87-68-3	Hexachlorobutadiene	ND	ug/m3	62.4	31	11	
110-54-3	Hexane	ND	ug/m3	62.4	31	11	
179601-23-	m,p-Xylene	ND	ug/m3	62.4	62	18	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	62.4	31	9.4	
75-09-2	Methylene Chloride	12	ug/m3	62.4	31	9.4	J
95-47-6	o-Xylene	ND	ug/m3	62.4	31	8.7	
103-65-1	Propylbenzene	ND	ug/m3	62.4	31	9.4	
100-42-5	Styrene	ND	ug/m3	62.4	31	9.4	
127-18-4	Tetrachloroethene	ND	ug/m3	62.4	31	8.7	
109-99-9	Tetrahydrofuran	ND	ug/m3	62.4	31	14	
108-88-3	Toluene	ND	ug/m3	62.4	31	10	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	62.4	31	11	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	62.4	31	10	
79-01-6	Trichloroethene	330	ug/m3	62.4	31	9.4	
75-01-4	Vinyl Chloride	ND	ug/m3	62.4	31	12	

Sample 1203221340 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	41.25	21	6.6	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	41.25	21	6.6	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	41.25	21	6.6	
75-34-3	1,1-Dichloroethane	ND	ug/m3	41.25	21	7	
75-35-4	1,1-Dichloroethene	ND	ug/m3	41.25	21	7	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	41.25	21	9.9	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	41.25	21	6.6	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	41.25	21	6.2	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	41.25	21	7	
107-06-2	1,2-Dichloroethane	ND	ug/m3	41.25	21	7.8	
78-87-5	1,2-Dichloropropane	ND	ug/m3	41.25	21	7	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	41.25	21	7	
106-99-0	1,3-Butadiene	ND	ug/m3	41.25	21	8.7	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	41.25	21	7	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	41.25	21	6.6	
123-91-1	1,4-Dioxane	ND	ug/m3	41.25	21	7	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	41.25	21	7	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	41.25	210	9.5	
591-78-6	2-Hexanone	ND	ug/m3	41.25	21	7.4	

67-63-0	2-Propanol	ND	ug/m3	41.25	41	17	
107-05-1	3-Chloropropene	ND	ug/m3	41.25	21	6.6	
622-96-8	4-Ethyltoluene	ND	ug/m3	41.25	21	7	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	41.25	21	5.8	
67-64-1	Acetone	ND	ug/m3	41.25	210	36	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	41.25	21	6.2	
71-43-2	Benzene	ND	ug/m3	41.25	21	5.8	
75-27-4	Bromodichloromethane	ND	ug/m3	41.25	21	6.6	
75-25-2	Bromoform	ND	ug/m3	41.25	21	5.8	
74-83-9	Bromomethane	ND	ug/m3	41.25	21	7.8	
75-15-0	Carbon Disulfide	ND	ug/m3	41.25	210	6.2	
56-23-5	Carbon Tetrachloride	ND	ug/m3	41.25	21	6.6	
108-90-7	Chlorobenzene	ND	ug/m3	41.25	21	6.6	
75-00-3	Chloroethane	ND	ug/m3	41.25	21	7.8	
67-66-3	Chloroform	33	ug/m3	41.25	21	7.8	
74-87-3	Chloromethane	ND	ug/m3	41.25	21	7.8	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	41.25	21	7.4	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	41.25	21	5.8	
98-82-8	Cumene	ND	ug/m3	41.25	21	6.2	
110-82-7	Cyclohexane	ND	ug/m3	41.25	41	14	
124-48-1	Dibromochloromethane	ND	ug/m3	41.25	21	5.8	
64-17-5	Ethanol	ND	ug/m3	41.25	210	66	
100-41-4	Ethyl Benzene	ND	ug/m3	41.25	21	6.2	
75-69-4	Freon 11	9.2	ug/m3	41.25	21	6.6	J
76-13-1	Freon 113	4100	ug/m3	41.25	21	6.6	
76-14-2	Freon 114	ND	ug/m3	41.25	21	7	
75-71-8	Freon 12	ND	ug/m3	41.25	21	7.4	
306-83-2	Freon 123	ND	ug/m3	41.25	21	9.9	
354-23-4	Freon 123a	2100	ug/m3	41.25	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	41.25	21	9.5	
142-82-5	Heptane	ND	ug/m3	41.25	21	6.6	
87-68-3	Hexachlorobutadiene	ND	ug/m3	41.25	21	7.4	
110-54-3	Hexane	ND	ug/m3	41.25	21	7	
179601-23-	m,p-Xylene	ND	ug/m3	41.25	41	12	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	41.25	21	6.2	
75-09-2	Methylene Chloride	7.5	ug/m3	41.25	21	6.2	J
95-47-6	o-Xylene	ND	ug/m3	41.25	21	5.8	
103-65-1	Propylbenzene	ND	ug/m3	41.25	21	6.2	
100-42-5	Styrene	ND	ug/m3	41.25	21	6.2	
127-18-4	Tetrachloroethene	ND	ug/m3	41.25	21	5.8	
109-99-9	Tetrahydrofuran	ND	ug/m3	41.25	21	9.1	
108-88-3	Toluene	ND	ug/m3	41.25	21	6.6	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	41.25	21	7	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	41.25	21	6.6	
79-01-6	Trichloroethene	400	ug/m3	41.25	21	6.2	
75-01-4	Vinyl Chloride	ND	ug/m3	41.25	21	7.8	

Sample **1203221536** **Sample Type** **Soil Gas** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	47.43	24	7.6	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	47.43	24	7.6	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	47.43	24	7.6	
75-34-3	1,1-Dichloroethane	ND	ug/m3	47.43	24	8.1	
75-35-4	1,1-Dichloroethene	ND	ug/m3	47.43	24	8.1	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	47.43	24	11	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	47.43	24	7.6	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	47.43	24	7.1	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	47.43	24	8.1	
107-06-2	1,2-Dichloroethane	ND	ug/m3	47.43	24	9	
78-87-5	1,2-Dichloropropane	ND	ug/m3	47.43	24	8.1	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	47.43	24	8.1	
106-99-0	1,3-Butadiene	ND	ug/m3	47.43	24	10	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	47.43	24	8.1	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	47.43	24	7.6	
123-91-1	1,4-Dioxane	ND	ug/m3	47.43	24	8.1	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	47.43	24	8.1	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	47.43	240	11	
591-78-6	2-Hexanone	ND	ug/m3	47.43	24	8.5	
67-63-0	2-Propanol	ND	ug/m3	47.43	47	19	
107-05-1	3-Chloropropene	ND	ug/m3	47.43	24	7.6	
622-96-8	4-Ethyltoluene	ND	ug/m3	47.43	24	8.1	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	47.43	24	6.6	
67-64-1	Acetone	ND	ug/m3	47.43	240	42	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	47.43	24	7.1	
71-43-2	Benzene	ND	ug/m3	47.43	24	6.6	
75-27-4	Bromodichloromethane	ND	ug/m3	47.43	24	7.6	
75-25-2	Bromoform	ND	ug/m3	47.43	24	6.6	
74-83-9	Bromomethane	ND	ug/m3	47.43	24	9	
75-15-0	Carbon Disulfide	ND	ug/m3	47.43	240	7.1	
56-23-5	Carbon Tetrachloride	ND	ug/m3	47.43	24	7.6	
108-90-7	Chlorobenzene	ND	ug/m3	47.43	24	7.6	
75-00-3	Chloroethane	ND	ug/m3	47.43	24	9	
67-66-3	Chloroform	28	ug/m3	47.43	24	9	
74-87-3	Chloromethane	ND	ug/m3	47.43	24	9	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	47.43	24	8.5	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	47.43	24	6.6	
98-82-8	Cumene	ND	ug/m3	47.43	24	7.1	
110-82-7	Cyclohexane	ND	ug/m3	47.43	47	16	
124-48-1	Dibromochloromethane	ND	ug/m3	47.43	24	6.6	
64-17-5	Ethanol	ND	ug/m3	47.43	240	76	
100-41-4	Ethyl Benzene	ND	ug/m3	47.43	24	7.1	
75-69-4	Freon 11	ND	ug/m3	47.43	24	7.6	

76-13-1	Freon 113	4300	ug/m3	47.43	24	7.6	
76-14-2	Freon 114	ND	ug/m3	47.43	24	8.1	
75-71-8	Freon 12	ND	ug/m3	47.43	24	8.5	
306-83-2	Freon 123	ND	ug/m3	47.43	24	11	
354-23-4	Freon 123a	1800	ug/m3	47.43	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	47.43	24	11	
142-82-5	Heptane	ND	ug/m3	47.43	24	7.6	
87-68-3	Hexachlorobutadiene	ND	ug/m3	47.43	24	8.5	
110-54-3	Hexane	ND	ug/m3	47.43	24	8.1	
179601-23-	m,p-Xylene	ND	ug/m3	47.43	47	14	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	47.43	24	7.1	
75-09-2	Methylene Chloride	9.1	ug/m3	47.43	24	7.1	J
95-47-6	o-Xylene	ND	ug/m3	47.43	24	6.6	
103-65-1	Propylbenzene	ND	ug/m3	47.43	24	7.1	
100-42-5	Styrene	ND	ug/m3	47.43	24	7.1	
127-18-4	Tetrachloroethene	ND	ug/m3	47.43	24	6.6	
109-99-9	Tetrahydrofuran	ND	ug/m3	47.43	24	10	
108-88-3	Toluene	ND	ug/m3	47.43	24	7.6	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	47.43	24	8.1	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	47.43	24	7.6	
79-01-6	Trichloroethene	310	ug/m3	47.43	24	7.1	
75-01-4	Vinyl Chloride	ND	ug/m3	47.43	24	9	

Sample 1203221710 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	33.8	17	5.4	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	33.8	17	5.4	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	33.8	17	5.4	
75-34-3	1,1-Dichloroethane	ND	ug/m3	33.8	17	5.7	
75-35-4	1,1-Dichloroethene	ND	ug/m3	33.8	17	5.7	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	33.8	17	8.1	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	33.8	17	5.4	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	33.8	17	5.1	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	33.8	17	5.7	
107-06-2	1,2-Dichloroethane	ND	ug/m3	33.8	17	6.4	
78-87-5	1,2-Dichloropropane	ND	ug/m3	33.8	17	5.7	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	33.8	17	5.7	
106-99-0	1,3-Butadiene	ND	ug/m3	33.8	17	7.1	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	33.8	17	5.7	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	33.8	17	5.4	
123-91-1	1,4-Dioxane	ND	ug/m3	33.8	17	5.7	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	33.8	17	5.7	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	33.8	170	7.8	
591-78-6	2-Hexanone	ND	ug/m3	33.8	17	6.1	
67-63-0	2-Propanol	ND	ug/m3	33.8	34	14	
107-05-1	3-Chloropropene	ND	ug/m3	33.8	17	5.4	

622-96-8	4-Ethyltoluene	ND	ug/m3	33.8	17	5.7	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	33.8	17	4.7	
67-64-1	Acetone	ND	ug/m3	33.8	170	30	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	33.8	17	5.1	
71-43-2	Benzene	ND	ug/m3	33.8	17	4.7	
75-27-4	Bromodichloromethane	ND	ug/m3	33.8	17	5.4	
75-25-2	Bromoform	ND	ug/m3	33.8	17	4.7	
74-83-9	Bromomethane	ND	ug/m3	33.8	17	6.4	
75-15-0	Carbon Disulfide	ND	ug/m3	33.8	170	5.1	
56-23-5	Carbon Tetrachloride	ND	ug/m3	33.8	17	5.4	
108-90-7	Chlorobenzene	ND	ug/m3	33.8	17	5.4	
75-00-3	Chloroethane	ND	ug/m3	33.8	17	6.4	
67-66-3	Chloroform	27	ug/m3	33.8	17	6.4	
74-87-3	Chloromethane	ND	ug/m3	33.8	17	6.4	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	33.8	17	6.1	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	33.8	17	4.7	
98-82-8	Cumene	ND	ug/m3	33.8	17	5.1	
110-82-7	Cyclohexane	ND	ug/m3	33.8	34	11	
124-48-1	Dibromochloromethane	ND	ug/m3	33.8	17	4.7	
64-17-5	Ethanol	ND	ug/m3	33.8	170	54	
100-41-4	Ethyl Benzene	ND	ug/m3	33.8	17	5.1	
75-69-4	Freon 11	8.2	ug/m3	33.8	17	5.4	J
76-13-1	Freon 113	3800	ug/m3	84.5	42	14	D
76-14-2	Freon 114	ND	ug/m3	33.8	17	5.7	
75-71-8	Freon 12	ND	ug/m3	33.8	17	6.1	
306-83-2	Freon 123	ND	ug/m3	33.8	17	8.1	
354-23-4	Freon 123a	2100	ug/m3	33.8	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	33.8	17	7.8	
142-82-5	Heptane	ND	ug/m3	33.8	17	5.4	
87-68-3	Hexachlorobutadiene	ND	ug/m3	33.8	17	6.1	
110-54-3	Hexane	ND	ug/m3	33.8	17	5.7	
179601-23-	m,p-Xylene	ND	ug/m3	33.8	34	9.8	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	33.8	17	5.1	
75-09-2	Methylene Chloride	6.8	ug/m3	33.8	17	5.1	J
95-47-6	o-Xylene	ND	ug/m3	33.8	17	4.7	
103-65-1	Propylbenzene	ND	ug/m3	33.8	17	5.1	
100-42-5	Styrene	ND	ug/m3	33.8	17	5.1	
127-18-4	Tetrachloroethene	ND	ug/m3	33.8	17	4.7	
109-99-9	Tetrahydrofuran	ND	ug/m3	33.8	17	7.4	
108-88-3	Toluene	ND	ug/m3	33.8	17	5.4	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	33.8	17	5.7	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	33.8	17	5.4	
79-01-6	Trichloroethene	300	ug/m3	33.8	17	5.1	
75-01-4	Vinyl Chloride	ND	ug/m3	33.8	17	6.4	

Sample **1203230945** **Sample Type** **Soil Gas** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	78.5	39	13	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	78.5	39	13	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	78.5	39	13	
75-34-3	1,1-Dichloroethane	ND	ug/m3	78.5	39	13	
75-35-4	1,1-Dichloroethene	ND	ug/m3	78.5	39	13	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	78.5	39	19	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	78.5	39	13	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	78.5	39	12	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	78.5	39	13	
107-06-2	1,2-Dichloroethane	ND	ug/m3	78.5	39	15	
78-87-5	1,2-Dichloropropane	ND	ug/m3	78.5	39	13	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	78.5	39	13	
106-99-0	1,3-Butadiene	ND	ug/m3	78.5	39	16	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	78.5	39	13	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	78.5	39	13	
123-91-1	1,4-Dioxane	ND	ug/m3	78.5	39	13	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	78.5	39	13	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	78.5	390	18	
591-78-6	2-Hexanone	ND	ug/m3	78.5	39	14	
67-63-0	2-Propanol	ND	ug/m3	78.5	79	31	
107-05-1	3-Chloropropene	ND	ug/m3	78.5	39	13	
622-96-8	4-Ethyltoluene	ND	ug/m3	78.5	39	13	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	78.5	39	11	
67-64-1	Acetone	ND	ug/m3	78.5	390	69	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	78.5	39	12	
71-43-2	Benzene	ND	ug/m3	78.5	39	11	
75-27-4	Bromodichloromethane	ND	ug/m3	78.5	39	13	
75-25-2	Bromoform	ND	ug/m3	78.5	39	11	
74-83-9	Bromomethane	ND	ug/m3	78.5	39	15	
75-15-0	Carbon Disulfide	ND	ug/m3	78.5	390	12	
56-23-5	Carbon Tetrachloride	ND	ug/m3	78.5	39	13	
108-90-7	Chlorobenzene	ND	ug/m3	78.5	39	13	
75-00-3	Chloroethane	ND	ug/m3	78.5	39	15	
67-66-3	Chloroform	26	ug/m3	78.5	39	15	J
74-87-3	Chloromethane	ND	ug/m3	78.5	39	15	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	78.5	39	14	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	78.5	39	11	
98-82-8	Cumene	ND	ug/m3	78.5	39	12	
110-82-7	Cyclohexane	ND	ug/m3	78.5	79	26	
124-48-1	Dibromochloromethane	ND	ug/m3	78.5	39	11	
64-17-5	Ethanol	ND	ug/m3	78.5	390	130	
100-41-4	Ethyl Benzene	ND	ug/m3	78.5	39	12	
75-69-4	Freon 11	18	ug/m3	78.5	39	13	J

76-13-1	Freon 113	6900	ug/m3	78.5	39	13	
76-14-2	Freon 114	ND	ug/m3	78.5	39	13	
75-71-8	Freon 12	ND	ug/m3	78.5	39	14	
306-83-2	Freon 123	ND	ug/m3	78.5	39	19	
354-23-4	Freon 123a	3300	ug/m3	78.5	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	78.5	39	18	
142-82-5	Heptane	ND	ug/m3	78.5	39	13	
87-68-3	Hexachlorobutadiene	ND	ug/m3	78.5	39	14	
110-54-3	Hexane	ND	ug/m3	78.5	39	13	
179601-23-	m,p-Xylene	ND	ug/m3	78.5	79	23	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	78.5	39	12	
75-09-2	Methylene Chloride	14	ug/m3	78.5	39	12	J
95-47-6	o-Xylene	ND	ug/m3	78.5	39	11	
103-65-1	Propylbenzene	ND	ug/m3	78.5	39	12	
100-42-5	Styrene	ND	ug/m3	78.5	39	12	
127-18-4	Tetrachloroethene	ND	ug/m3	78.5	39	11	
109-99-9	Tetrahydrofuran	ND	ug/m3	78.5	39	17	
108-88-3	Toluene	ND	ug/m3	78.5	39	13	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	78.5	39	13	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	78.5	39	13	
79-01-6	Trichloroethene	360	ug/m3	78.5	39	12	
75-01-4	Vinyl Chloride	ND	ug/m3	78.5	39	15	

Sample 1203231200 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	27	14	4.3	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	27	14	4.3	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	27	14	4.3	
75-34-3	1,1-Dichloroethane	ND	ug/m3	27	14	4.6	
75-35-4	1,1-Dichloroethene	ND	ug/m3	27	14	4.6	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	27	14	6.5	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	27	14	4.3	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	27	14	4.1	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	27	14	4.6	
107-06-2	1,2-Dichloroethane	ND	ug/m3	27	14	5.1	
78-87-5	1,2-Dichloropropane	ND	ug/m3	27	14	4.6	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	27	14	4.6	
106-99-0	1,3-Butadiene	ND	ug/m3	27	14	5.7	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	27	14	4.6	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	27	14	4.3	
123-91-1	1,4-Dioxane	ND	ug/m3	27	14	4.6	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	27	14	4.6	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	27	140	6.2	
591-78-6	2-Hexanone	ND	ug/m3	27	14	4.9	
67-63-0	2-Propanol	ND	ug/m3	27	27	11	
107-05-1	3-Chloropropene	ND	ug/m3	27	14	4.3	

622-96-8	4-Ethyltoluene	ND	ug/m3	27	14	4.6	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	27	14	3.8	
67-64-1	Acetone	ND	ug/m3	27	140	24	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	27	14	4.1	
71-43-2	Benzene	ND	ug/m3	27	14	3.8	
75-27-4	Bromodichloromethane	ND	ug/m3	27	14	4.3	
75-25-2	Bromoform	ND	ug/m3	27	14	3.8	
74-83-9	Bromomethane	ND	ug/m3	27	14	5.1	
75-15-0	Carbon Disulfide	ND	ug/m3	27	140	4.1	
56-23-5	Carbon Tetrachloride	ND	ug/m3	27	14	4.3	
108-90-7	Chlorobenzene	ND	ug/m3	27	14	4.3	
75-00-3	Chloroethane	ND	ug/m3	27	14	5.1	
67-66-3	Chloroform	23	ug/m3	27	14	5.1	
74-87-3	Chloromethane	ND	ug/m3	27	14	5.1	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	27	14	4.9	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	27	14	3.8	
98-82-8	Cumene	ND	ug/m3	27	14	4.1	
110-82-7	Cyclohexane	ND	ug/m3	27	27	8.9	
124-48-1	Dibromochloromethane	ND	ug/m3	27	14	3.8	
64-17-5	Ethanol	ND	ug/m3	27	140	43	
100-41-4	Ethyl Benzene	ND	ug/m3	27	14	4.1	
75-69-4	Freon 11	5.9	ug/m3	27	14	4.3	J
76-13-1	Freon 113	2300	ug/m3	27	14	4.3	
76-14-2	Freon 114	ND	ug/m3	27	14	4.6	
75-71-8	Freon 12	ND	ug/m3	27	14	4.9	
306-83-2	Freon 123	ND	ug/m3	27	14	6.5	
354-23-4	Freon 123a	2600	ug/m3	27	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	27	14	6.2	
142-82-5	Heptane	ND	ug/m3	27	14	4.3	
87-68-3	Hexachlorobutadiene	ND	ug/m3	27	14	4.9	
110-54-3	Hexane	ND	ug/m3	27	14	4.6	
179601-23-	m,p-Xylene	ND	ug/m3	27	27	7.8	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	27	14	4.1	
75-09-2	Methylene Chloride	5	ug/m3	27	14	4.1	J
95-47-6	o-Xylene	ND	ug/m3	27	14	3.8	
103-65-1	Propylbenzene	ND	ug/m3	27	14	4.1	
100-42-5	Styrene	ND	ug/m3	27	14	4.1	
127-18-4	Tetrachloroethene	ND	ug/m3	27	14	3.8	
109-99-9	Tetrahydrofuran	ND	ug/m3	27	14	5.9	
108-88-3	Toluene	ND	ug/m3	27	14	4.3	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	27	14	4.6	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	27	14	4.3	
79-01-6	Trichloroethene	220	ug/m3	27	14	4.1	
75-01-4	Vinyl Chloride	ND	ug/m3	27	14	5.1	

Sample **1203231756** **Sample Type** **Soil Gas** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	33.4	17	5.3	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	33.4	17	5.3	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	33.4	17	5.3	
75-34-3	1,1-Dichloroethane	ND	ug/m3	33.4	17	5.7	
75-35-4	1,1-Dichloroethene	ND	ug/m3	33.4	17	5.7	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	33.4	17	8	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	33.4	17	5.3	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	33.4	17	5	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	33.4	17	5.7	
107-06-2	1,2-Dichloroethane	ND	ug/m3	33.4	17	6.3	
78-87-5	1,2-Dichloropropane	ND	ug/m3	33.4	17	5.7	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	33.4	17	5.7	
106-99-0	1,3-Butadiene	ND	ug/m3	33.4	17	7	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	33.4	17	5.7	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	33.4	17	5.3	
123-91-1	1,4-Dioxane	ND	ug/m3	33.4	17	5.7	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	33.4	17	5.7	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	33.4	170	7.7	
591-78-6	2-Hexanone	ND	ug/m3	33.4	17	6	
67-63-0	2-Propanol	ND	ug/m3	33.4	33	13	
107-05-1	3-Chloropropene	ND	ug/m3	33.4	17	5.3	
622-96-8	4-Ethyltoluene	ND	ug/m3	33.4	17	5.7	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	33.4	17	4.7	
67-64-1	Acetone	54	ug/m3	33.4	170	29	J
100-44-7	alpha-Chlorotoluene	ND	ug/m3	33.4	17	5	
71-43-2	Benzene	ND	ug/m3	33.4	17	4.7	
75-27-4	Bromodichloromethane	ND	ug/m3	33.4	17	5.3	
75-25-2	Bromoform	ND	ug/m3	33.4	17	4.7	
74-83-9	Bromomethane	ND	ug/m3	33.4	17	6.3	
75-15-0	Carbon Disulfide	7.7	ug/m3	33.4	170	5	J
56-23-5	Carbon Tetrachloride	ND	ug/m3	33.4	17	5.3	
108-90-7	Chlorobenzene	ND	ug/m3	33.4	17	5.3	
75-00-3	Chloroethane	ND	ug/m3	33.4	17	6.3	
67-66-3	Chloroform	24	ug/m3	33.4	17	6.3	
74-87-3	Chloromethane	ND	ug/m3	33.4	17	6.3	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	33.4	17	6	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	33.4	17	4.7	
98-82-8	Cumene	ND	ug/m3	33.4	17	5	
110-82-7	Cyclohexane	ND	ug/m3	33.4	33	11	
124-48-1	Dibromochloromethane	ND	ug/m3	33.4	17	4.7	
64-17-5	Ethanol	ND	ug/m3	33.4	170	53	
100-41-4	Ethyl Benzene	ND	ug/m3	33.4	17	5	
75-69-4	Freon 11	7.3	ug/m3	33.4	17	5.3	J

76-13-1	Freon 113	3000	ug/m3	33.4	17	5.3	
76-14-2	Freon 114	ND	ug/m3	33.4	17	5.7	
75-71-8	Freon 12	ND	ug/m3	33.4	17	6	
306-83-2	Freon 123	ND	ug/m3	33.4	17	8	
354-23-4	Freon 123a	2200	ug/m3	33.4	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	33.4	17	7.7	
142-82-5	Heptane	ND	ug/m3	33.4	17	5.3	
87-68-3	Hexachlorobutadiene	ND	ug/m3	33.4	17	6	
110-54-3	Hexane	ND	ug/m3	33.4	17	5.7	
179601-23-	m,p-Xylene	ND	ug/m3	33.4	33	9.7	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	33.4	17	5	
75-09-2	Methylene Chloride	6	ug/m3	33.4	17	5	J
95-47-6	o-Xylene	ND	ug/m3	33.4	17	4.7	
103-65-1	Propylbenzene	ND	ug/m3	33.4	17	5	
100-42-5	Styrene	ND	ug/m3	33.4	17	5	
127-18-4	Tetrachloroethene	ND	ug/m3	33.4	17	4.7	
109-99-9	Tetrahydrofuran	ND	ug/m3	33.4	17	7.3	
108-88-3	Toluene	ND	ug/m3	33.4	17	5.3	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	33.4	17	5.7	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	33.4	17	5.3	
79-01-6	Trichloroethene	260	ug/m3	33.4	17	5	
75-01-4	Vinyl Chloride	ND	ug/m3	33.4	17	6.3	

Sample 1203241435 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	32.2	16	5.2	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	32.2	16	5.2	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	32.2	16	5.2	
75-34-3	1,1-Dichloroethane	ND	ug/m3	32.2	16	5.5	
75-35-4	1,1-Dichloroethene	ND	ug/m3	32.2	16	5.5	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	32.2	16	7.7	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	32.2	16	5.2	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	32.2	16	4.8	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	32.2	16	5.5	
107-06-2	1,2-Dichloroethane	ND	ug/m3	32.2	16	6.1	
78-87-5	1,2-Dichloropropane	ND	ug/m3	32.2	16	5.5	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	32.2	16	5.5	
106-99-0	1,3-Butadiene	ND	ug/m3	32.2	16	6.8	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	32.2	16	5.5	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	32.2	16	5.2	
123-91-1	1,4-Dioxane	ND	ug/m3	32.2	16	5.5	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	32.2	16	5.5	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	32.2	160	7.4	
591-78-6	2-Hexanone	ND	ug/m3	32.2	16	5.8	
67-63-0	2-Propanol	ND	ug/m3	32.2	32	13	
107-05-1	3-Chloropropene	ND	ug/m3	32.2	16	5.2	

622-96-8	4-Ethyltoluene	ND	ug/m3	32.2	16	5.5	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	32.2	16	4.5	
67-64-1	Acetone	ND	ug/m3	32.2	160	28	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	32.2	16	4.8	
71-43-2	Benzene	ND	ug/m3	32.2	16	4.5	
75-27-4	Bromodichloromethane	ND	ug/m3	32.2	16	5.2	
75-25-2	Bromoform	ND	ug/m3	32.2	16	4.5	
74-83-9	Bromomethane	ND	ug/m3	32.2	16	6.1	
75-15-0	Carbon Disulfide	ND	ug/m3	32.2	160	4.8	
56-23-5	Carbon Tetrachloride	ND	ug/m3	32.2	16	5.2	
108-90-7	Chlorobenzene	ND	ug/m3	32.2	16	5.2	
75-00-3	Chloroethane	ND	ug/m3	32.2	16	6.1	
67-66-3	Chloroform	25	ug/m3	32.2	16	6.1	
74-87-3	Chloromethane	ND	ug/m3	32.2	16	6.1	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	32.2	16	5.8	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	32.2	16	4.5	
98-82-8	Cumene	ND	ug/m3	32.2	16	4.8	
110-82-7	Cyclohexane	ND	ug/m3	32.2	32	11	
124-48-1	Dibromochloromethane	ND	ug/m3	32.2	16	4.5	
64-17-5	Ethanol	ND	ug/m3	32.2	160	52	
100-41-4	Ethyl Benzene	ND	ug/m3	32.2	16	4.8	
75-69-4	Freon 11	7.5	ug/m3	32.2	16	5.2	J
76-13-1	Freon 113	3400	ug/m3	80.5	40	13	D
76-14-2	Freon 114	ND	ug/m3	32.2	16	5.5	
75-71-8	Freon 12	ND	ug/m3	32.2	16	5.8	
306-83-2	Freon 123	ND	ug/m3	32.2	16	7.7	
354-23-4	Freon 123a	2100	ug/m3	32.2	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	32.2	16	7.4	
142-82-5	Heptane	ND	ug/m3	32.2	16	5.2	
87-68-3	Hexachlorobutadiene	ND	ug/m3	32.2	16	5.8	
110-54-3	Hexane	ND	ug/m3	32.2	16	5.5	
179601-23-	m,p-Xylene	ND	ug/m3	32.2	32	9.3	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	32.2	16	4.8	
75-09-2	Methylene Chloride	6.2	ug/m3	32.2	16	4.8	J
95-47-6	o-Xylene	ND	ug/m3	32.2	16	4.5	
103-65-1	Propylbenzene	ND	ug/m3	32.2	16	4.8	
100-42-5	Styrene	ND	ug/m3	32.2	16	4.8	
127-18-4	Tetrachloroethene	ND	ug/m3	32.2	16	4.5	
109-99-9	Tetrahydrofuran	ND	ug/m3	32.2	16	7.1	
108-88-3	Toluene	ND	ug/m3	32.2	16	5.2	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	32.2	16	5.5	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	32.2	16	5.2	
79-01-6	Trichloroethene	290	ug/m3	32.2	16	4.8	
75-01-4	Vinyl Chloride	ND	ug/m3	32.2	16	6.1	

Borehole	600-SGW-3	Depth (ft)	57.5	Depth (m)	17.53	Event Date	3/22/2012

Sample	1203220842	Sample Type	Soil Gas	Analysis Method	TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	104	52	17	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	104	52	17	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	104	52	17	
75-34-3	1,1-Dichloroethane	ND	ug/m3	104	52	18	
75-35-4	1,1-Dichloroethene	ND	ug/m3	104	52	18	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	104	52	25	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	104	52	17	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	104	52	16	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	104	52	18	
107-06-2	1,2-Dichloroethane	ND	ug/m3	104	52	20	
78-87-5	1,2-Dichloropropane	ND	ug/m3	104	52	18	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	104	52	18	
106-99-0	1,3-Butadiene	ND	ug/m3	104	52	22	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	104	52	18	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	104	52	17	
123-91-1	1,4-Dioxane	ND	ug/m3	104	52	18	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	104	52	18	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	104	520	24	
591-78-6	2-Hexanone	ND	ug/m3	104	52	19	
67-63-0	2-Propanol	ND	ug/m3	104	100	42	
107-05-1	3-Chloropropene	ND	ug/m3	104	52	17	
622-96-8	4-Ethyltoluene	ND	ug/m3	104	52	18	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	104	52	15	
67-64-1	Acetone	ND	ug/m3	104	520	92	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	104	52	16	
71-43-2	Benzene	ND	ug/m3	104	52	15	
75-27-4	Bromodichloromethane	ND	ug/m3	104	52	17	
75-25-2	Bromoform	ND	ug/m3	104	52	15	
74-83-9	Bromomethane	ND	ug/m3	104	52	20	
75-15-0	Carbon Disulfide	ND	ug/m3	104	520	16	
56-23-5	Carbon Tetrachloride	ND	ug/m3	104	52	17	
108-90-7	Chlorobenzene	ND	ug/m3	104	52	17	
75-00-3	Chloroethane	ND	ug/m3	104	52	20	
67-66-3	Chloroform	83	ug/m3	104	52	20	
74-87-3	Chloromethane	ND	ug/m3	104	52	20	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	104	52	19	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	104	52	15	
98-82-8	Cumene	ND	ug/m3	104	52	16	
110-82-7	Cyclohexane	ND	ug/m3	104	100	34	
124-48-1	Dibromochloromethane	ND	ug/m3	104	52	15	
64-17-5	Ethanol	ND	ug/m3	104	520	170	

100-41-4	Ethyl Benzene	ND	ug/m3	104	52	16	
75-69-4	Freon 11	ND	ug/m3	104	52	17	
76-13-1	Freon 113	9000	ug/m3	104	52	17	
76-14-2	Freon 114	ND	ug/m3	104	52	18	
75-71-8	Freon 12	ND	ug/m3	104	52	19	
306-83-2	Freon 123	ND	ug/m3	104	52	25	
354-23-4	Freon 123a	880	ug/m3	104	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	104	52	24	
142-82-5	Heptane	ND	ug/m3	104	52	17	
87-68-3	Hexachlorobutadiene	ND	ug/m3	104	52	19	
110-54-3	Hexane	ND	ug/m3	104	52	18	
179601-23-	m,p-Xylene	ND	ug/m3	104	100	30	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	104	52	16	
75-09-2	Methylene Chloride	17	ug/m3	104	52	16	J
95-47-6	o-Xylene	ND	ug/m3	104	52	15	
103-65-1	Propylbenzene	ND	ug/m3	104	52	16	
100-42-5	Styrene	ND	ug/m3	104	52	16	
127-18-4	Tetrachloroethene	ND	ug/m3	104	52	15	
109-99-9	Tetrahydrofuran	ND	ug/m3	104	52	23	
108-88-3	Toluene	ND	ug/m3	104	52	17	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	104	52	18	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	104	52	17	
79-01-6	Trichloroethene	1000	ug/m3	104	52	16	
75-01-4	Vinyl Chloride	ND	ug/m3	104	52	20	

Sample 1203221344 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	110	55	18	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	110	55	18	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	110	55	18	
75-34-3	1,1-Dichloroethane	ND	ug/m3	110	55	19	
75-35-4	1,1-Dichloroethene	ND	ug/m3	110	55	19	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	110	55	26	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	110	55	18	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	110	55	17	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	110	55	19	
107-06-2	1,2-Dichloroethane	ND	ug/m3	110	55	21	
78-87-5	1,2-Dichloropropane	ND	ug/m3	110	55	19	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	110	55	19	
106-99-0	1,3-Butadiene	ND	ug/m3	110	55	23	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	110	55	19	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	110	55	18	
123-91-1	1,4-Dioxane	ND	ug/m3	110	55	19	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	110	55	19	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	110	550	25	
591-78-6	2-Hexanone	ND	ug/m3	110	55	20	

67-63-0	2-Propanol	ND	ug/m3	110	110	44	
107-05-1	3-Chloropropene	ND	ug/m3	110	55	18	
622-96-8	4-Ethyltoluene	ND	ug/m3	110	55	19	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	110	55	15	
67-64-1	Acetone	ND	ug/m3	110	550	97	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	110	55	17	
71-43-2	Benzene	ND	ug/m3	110	55	15	
75-27-4	Bromodichloromethane	ND	ug/m3	110	55	18	
75-25-2	Bromoform	ND	ug/m3	110	55	15	
74-83-9	Bromomethane	ND	ug/m3	110	55	21	
75-15-0	Carbon Disulfide	ND	ug/m3	110	550	17	
56-23-5	Carbon Tetrachloride	ND	ug/m3	110	55	18	
108-90-7	Chlorobenzene	ND	ug/m3	110	55	18	
75-00-3	Chloroethane	ND	ug/m3	110	55	21	
67-66-3	Chloroform	80	ug/m3	110	55	21	
74-87-3	Chloromethane	ND	ug/m3	110	55	21	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	110	55	20	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	110	55	15	
98-82-8	Cumene	ND	ug/m3	110	55	17	
110-82-7	Cyclohexane	ND	ug/m3	110	110	36	
124-48-1	Dibromochloromethane	ND	ug/m3	110	55	15	
64-17-5	Ethanol	ND	ug/m3	110	550	180	
100-41-4	Ethyl Benzene	ND	ug/m3	110	55	17	
75-69-4	Freon 11	ND	ug/m3	110	55	18	
76-13-1	Freon 113	7600	ug/m3	110	55	18	
76-14-2	Freon 114	ND	ug/m3	110	55	19	
75-71-8	Freon 12	ND	ug/m3	110	55	20	
306-83-2	Freon 123	ND	ug/m3	110	55	26	
354-23-4	Freon 123a	910	ug/m3	110	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	110	55	25	
142-82-5	Heptane	ND	ug/m3	110	55	18	
87-68-3	Hexachlorobutadiene	ND	ug/m3	110	55	20	
110-54-3	Hexane	ND	ug/m3	110	55	19	
179601-23-	m,p-Xylene	ND	ug/m3	110	110	32	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	110	55	17	
75-09-2	Methylene Chloride	20	ug/m3	110	55	17	J
95-47-6	o-Xylene	ND	ug/m3	110	55	15	
103-65-1	Propylbenzene	ND	ug/m3	110	55	17	
100-42-5	Styrene	ND	ug/m3	110	55	17	
127-18-4	Tetrachloroethene	ND	ug/m3	110	55	15	
109-99-9	Tetrahydrofuran	ND	ug/m3	110	55	24	
108-88-3	Toluene	ND	ug/m3	110	55	18	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	110	55	19	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	110	55	18	
79-01-6	Trichloroethene	1100	ug/m3	110	55	17	
75-01-4	Vinyl Chloride	ND	ug/m3	110	55	21	

Sample **1203221345** **Sample Type** **Soil Gas-D** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	111.33	56	18	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	111.33	56	18	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	111.33	56	18	
75-34-3	1,1-Dichloroethane	ND	ug/m3	111.33	56	19	
75-35-4	1,1-Dichloroethene	ND	ug/m3	111.33	56	19	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	111.33	56	27	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	111.33	56	18	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	111.33	56	17	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	111.33	56	19	
107-06-2	1,2-Dichloroethane	ND	ug/m3	111.33	56	21	
78-87-5	1,2-Dichloropropane	ND	ug/m3	111.33	56	19	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	111.33	56	19	
106-99-0	1,3-Butadiene	ND	ug/m3	111.33	56	23	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	111.33	56	19	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	111.33	56	18	
123-91-1	1,4-Dioxane	ND	ug/m3	111.33	56	19	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	111.33	56	19	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	111.33	560	26	
591-78-6	2-Hexanone	ND	ug/m3	111.33	56	20	
67-63-0	2-Propanol	ND	ug/m3	111.33	110	45	
107-05-1	3-Chloropropene	ND	ug/m3	111.33	56	18	
622-96-8	4-Ethyltoluene	ND	ug/m3	111.33	56	19	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	111.33	56	16	
67-64-1	Acetone	ND	ug/m3	111.33	560	98	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	111.33	56	17	
71-43-2	Benzene	ND	ug/m3	111.33	56	16	
75-27-4	Bromodichloromethane	ND	ug/m3	111.33	56	18	
75-25-2	Bromoform	ND	ug/m3	111.33	56	16	
74-83-9	Bromomethane	ND	ug/m3	111.33	56	21	
75-15-0	Carbon Disulfide	ND	ug/m3	111.33	560	17	
56-23-5	Carbon Tetrachloride	ND	ug/m3	111.33	56	18	
108-90-7	Chlorobenzene	ND	ug/m3	111.33	56	18	
75-00-3	Chloroethane	ND	ug/m3	111.33	56	21	
67-66-3	Chloroform	94	ug/m3	111.33	56	21	
74-87-3	Chloromethane	ND	ug/m3	111.33	56	21	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	111.33	56	20	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	111.33	56	16	
98-82-8	Cumene	ND	ug/m3	111.33	56	17	
110-82-7	Cyclohexane	ND	ug/m3	111.33	110	37	
124-48-1	Dibromochloromethane	ND	ug/m3	111.33	56	16	
64-17-5	Ethanol	ND	ug/m3	111.33	560	180	
100-41-4	Ethyl Benzene	ND	ug/m3	111.33	56	17	
75-69-4	Freon 11	ND	ug/m3	111.33	56	18	

76-13-1	Freon 113	9000	ug/m3	111.33	56	18	
76-14-2	Freon 114	ND	ug/m3	111.33	56	19	
75-71-8	Freon 12	ND	ug/m3	111.33	56	20	
306-83-2	Freon 123	ND	ug/m3	111.33	56	27	
354-23-4	Freon 123a	1000	ug/m3	111.33	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	111.33	56	26	
142-82-5	Heptane	ND	ug/m3	111.33	56	18	
87-68-3	Hexachlorobutadiene	ND	ug/m3	111.33	56	20	
110-54-3	Hexane	ND	ug/m3	111.33	56	19	
179601-23-	m,p-Xylene	ND	ug/m3	111.33	110	32	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	111.33	56	17	
75-09-2	Methylene Chloride	21	ug/m3	111.33	56	17	J
95-47-6	o-Xylene	ND	ug/m3	111.33	56	16	
103-65-1	Propylbenzene	ND	ug/m3	111.33	56	17	
100-42-5	Styrene	ND	ug/m3	111.33	56	17	
127-18-4	Tetrachloroethene	ND	ug/m3	111.33	56	16	
109-99-9	Tetrahydrofuran	ND	ug/m3	111.33	56	24	
108-88-3	Toluene	ND	ug/m3	111.33	56	18	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	111.33	56	19	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	111.33	56	18	
79-01-6	Trichloroethene	1200	ug/m3	111.33	56	17	
75-01-4	Vinyl Chloride	ND	ug/m3	111.33	56	21	

Sample 1203221540 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	113.33	57	18	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	113.33	57	18	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	113.33	57	18	
75-34-3	1,1-Dichloroethane	ND	ug/m3	113.33	57	19	
75-35-4	1,1-Dichloroethene	ND	ug/m3	113.33	57	19	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	113.33	57	27	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	113.33	57	18	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	113.33	57	17	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	113.33	57	19	
107-06-2	1,2-Dichloroethane	ND	ug/m3	113.33	57	22	
78-87-5	1,2-Dichloropropane	ND	ug/m3	113.33	57	19	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	113.33	57	19	
106-99-0	1,3-Butadiene	ND	ug/m3	113.33	57	24	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	113.33	57	19	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	113.33	57	18	
123-91-1	1,4-Dioxane	ND	ug/m3	113.33	57	19	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	113.33	57	19	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	113.33	570	26	
591-78-6	2-Hexanone	ND	ug/m3	113.33	57	20	
67-63-0	2-Propanol	ND	ug/m3	113.33	110	45	
107-05-1	3-Chloropropene	ND	ug/m3	113.33	57	18	

622-96-8	4-Ethyltoluene	ND	ug/m3	113.33	57	19	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	113.33	57	16	
67-64-1	Acetone	ND	ug/m3	113.33	570	100	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	113.33	57	17	
71-43-2	Benzene	ND	ug/m3	113.33	57	16	
75-27-4	Bromodichloromethane	ND	ug/m3	113.33	57	18	
75-25-2	Bromoform	ND	ug/m3	113.33	57	16	
74-83-9	Bromomethane	ND	ug/m3	113.33	57	22	
75-15-0	Carbon Disulfide	ND	ug/m3	113.33	570	17	
56-23-5	Carbon Tetrachloride	ND	ug/m3	113.33	57	18	
108-90-7	Chlorobenzene	ND	ug/m3	113.33	57	18	
75-00-3	Chloroethane	ND	ug/m3	113.33	57	22	
67-66-3	Chloroform	79	ug/m3	113.33	57	22	
74-87-3	Chloromethane	ND	ug/m3	113.33	57	22	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	113.33	57	20	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	113.33	57	16	
98-82-8	Cumene	ND	ug/m3	113.33	57	17	
110-82-7	Cyclohexane	ND	ug/m3	113.33	110	37	
124-48-1	Dibromochloromethane	ND	ug/m3	113.33	57	16	
64-17-5	Ethanol	ND	ug/m3	113.33	570	180	
100-41-4	Ethyl Benzene	ND	ug/m3	113.33	57	17	
75-69-4	Freon 11	ND	ug/m3	113.33	57	18	
76-13-1	Freon 113	8500	ug/m3	113.33	57	18	
76-14-2	Freon 114	ND	ug/m3	113.33	57	19	
75-71-8	Freon 12	ND	ug/m3	113.33	57	20	
306-83-2	Freon 123	ND	ug/m3	113.33	57	27	
354-23-4	Freon 123a	820	ug/m3	113.33	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	113.33	57	26	
142-82-5	Heptane	ND	ug/m3	113.33	57	18	
87-68-3	Hexachlorobutadiene	ND	ug/m3	113.33	57	20	
110-54-3	Hexane	ND	ug/m3	113.33	57	19	
179601-23-	m,p-Xylene	ND	ug/m3	113.33	110	33	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	113.33	57	17	
75-09-2	Methylene Chloride	22	ug/m3	113.33	57	17	J
95-47-6	o-Xylene	ND	ug/m3	113.33	57	16	
103-65-1	Propylbenzene	ND	ug/m3	113.33	57	17	
100-42-5	Styrene	ND	ug/m3	113.33	57	17	
127-18-4	Tetrachloroethene	ND	ug/m3	113.33	57	16	
109-99-9	Tetrahydrofuran	ND	ug/m3	113.33	57	25	
108-88-3	Toluene	ND	ug/m3	113.33	57	18	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	113.33	57	19	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	113.33	57	18	
79-01-6	Trichloroethene	970	ug/m3	113.33	57	17	
75-01-4	Vinyl Chloride	ND	ug/m3	113.33	57	22	

Sample **1203221714** **Sample Type** **Soil Gas** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	112.67	56	18	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	112.67	56	18	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	112.67	56	18	
75-34-3	1,1-Dichloroethane	ND	ug/m3	112.67	56	19	
75-35-4	1,1-Dichloroethene	ND	ug/m3	112.67	56	19	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	112.67	56	27	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	112.67	56	18	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	112.67	56	17	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	112.67	56	19	
107-06-2	1,2-Dichloroethane	ND	ug/m3	112.67	56	21	
78-87-5	1,2-Dichloropropane	ND	ug/m3	112.67	56	19	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	112.67	56	19	
106-99-0	1,3-Butadiene	ND	ug/m3	112.67	56	24	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	112.67	56	19	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	112.67	56	18	
123-91-1	1,4-Dioxane	ND	ug/m3	112.67	56	19	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	112.67	56	19	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	112.67	560	26	
591-78-6	2-Hexanone	ND	ug/m3	112.67	56	20	
67-63-0	2-Propanol	ND	ug/m3	112.67	110	45	
107-05-1	3-Chloropropene	ND	ug/m3	112.67	56	18	
622-96-8	4-Ethyltoluene	ND	ug/m3	112.67	56	19	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	112.67	56	16	
67-64-1	Acetone	ND	ug/m3	112.67	560	99	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	112.67	56	17	
71-43-2	Benzene	ND	ug/m3	112.67	56	16	
75-27-4	Bromodichloromethane	ND	ug/m3	112.67	56	18	
75-25-2	Bromoform	ND	ug/m3	112.67	56	16	
74-83-9	Bromomethane	ND	ug/m3	112.67	56	21	
75-15-0	Carbon Disulfide	ND	ug/m3	112.67	560	17	
56-23-5	Carbon Tetrachloride	ND	ug/m3	112.67	56	18	
108-90-7	Chlorobenzene	ND	ug/m3	112.67	56	18	
75-00-3	Chloroethane	ND	ug/m3	112.67	56	21	
67-66-3	Chloroform	76	ug/m3	112.67	56	21	
74-87-3	Chloromethane	ND	ug/m3	112.67	56	21	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	112.67	56	20	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	112.67	56	16	
98-82-8	Cumene	ND	ug/m3	112.67	56	17	
110-82-7	Cyclohexane	ND	ug/m3	112.67	110	37	
124-48-1	Dibromochloromethane	ND	ug/m3	112.67	56	16	
64-17-5	Ethanol	ND	ug/m3	112.67	560	180	
100-41-4	Ethyl Benzene	ND	ug/m3	112.67	56	17	
75-69-4	Freon 11	ND	ug/m3	112.67	56	18	

76-13-1	Freon 113	8500	ug/m3	112.67	56	18	
76-14-2	Freon 114	ND	ug/m3	112.67	56	19	
75-71-8	Freon 12	ND	ug/m3	112.67	56	20	
306-83-2	Freon 123	ND	ug/m3	112.67	56	27	
354-23-4	Freon 123a	800	ug/m3	112.67	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	112.67	56	26	
142-82-5	Heptane	ND	ug/m3	112.67	56	18	
87-68-3	Hexachlorobutadiene	ND	ug/m3	112.67	56	20	
110-54-3	Hexane	ND	ug/m3	112.67	56	19	
179601-23-	m,p-Xylene	ND	ug/m3	112.67	110	33	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	112.67	56	17	
75-09-2	Methylene Chloride	22	ug/m3	112.67	56	17	J
95-47-6	o-Xylene	ND	ug/m3	112.67	56	16	
103-65-1	Propylbenzene	ND	ug/m3	112.67	56	17	
100-42-5	Styrene	ND	ug/m3	112.67	56	17	
127-18-4	Tetrachloroethene	ND	ug/m3	112.67	56	16	
109-99-9	Tetrahydrofuran	ND	ug/m3	112.67	56	25	
108-88-3	Toluene	ND	ug/m3	112.67	56	18	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	112.67	56	19	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	112.67	56	18	
79-01-6	Trichloroethene	1000	ug/m3	112.67	56	17	
75-01-4	Vinyl Chloride	ND	ug/m3	112.67	56	21	

Sample 1203230949 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	108	54	17	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	108	54	17	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	108	54	17	
75-34-3	1,1-Dichloroethane	ND	ug/m3	108	54	18	
75-35-4	1,1-Dichloroethene	ND	ug/m3	108	54	18	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	108	54	26	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	108	54	17	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	108	54	16	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	108	54	18	
107-06-2	1,2-Dichloroethane	ND	ug/m3	108	54	21	
78-87-5	1,2-Dichloropropane	ND	ug/m3	108	54	18	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	108	54	18	
106-99-0	1,3-Butadiene	ND	ug/m3	108	54	23	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	108	54	18	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	108	54	17	
123-91-1	1,4-Dioxane	ND	ug/m3	108	54	18	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	108	54	18	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	108	540	25	
591-78-6	2-Hexanone	ND	ug/m3	108	54	19	
67-63-0	2-Propanol	ND	ug/m3	108	110	43	
107-05-1	3-Chloropropene	ND	ug/m3	108	54	17	

622-96-8	4-Ethyltoluene	ND	ug/m3	108	54	18	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	108	54	15	
67-64-1	Acetone	ND	ug/m3	108	540	95	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	108	54	16	
71-43-2	Benzene	ND	ug/m3	108	54	15	
75-27-4	Bromodichloromethane	ND	ug/m3	108	54	17	
75-25-2	Bromoform	ND	ug/m3	108	54	15	
74-83-9	Bromomethane	ND	ug/m3	108	54	21	
75-15-0	Carbon Disulfide	ND	ug/m3	108	540	16	
56-23-5	Carbon Tetrachloride	ND	ug/m3	108	54	17	
108-90-7	Chlorobenzene	ND	ug/m3	108	54	17	
75-00-3	Chloroethane	ND	ug/m3	108	54	21	
67-66-3	Chloroform	96	ug/m3	108	54	21	
74-87-3	Chloromethane	ND	ug/m3	108	54	21	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	108	54	19	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	108	54	15	
98-82-8	Cumene	ND	ug/m3	108	54	16	
110-82-7	Cyclohexane	ND	ug/m3	108	110	36	
124-48-1	Dibromochloromethane	ND	ug/m3	108	54	15	
64-17-5	Ethanol	ND	ug/m3	108	540	170	
100-41-4	Ethyl Benzene	ND	ug/m3	108	54	16	
75-69-4	Freon 11	ND	ug/m3	108	54	17	
76-13-1	Freon 113	8600	ug/m3	108	54	17	
76-14-2	Freon 114	ND	ug/m3	108	54	18	
75-71-8	Freon 12	ND	ug/m3	108	54	19	
306-83-2	Freon 123	ND	ug/m3	108	54	26	
354-23-4	Freon 123a	970	ug/m3	108	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	108	54	25	
142-82-5	Heptane	ND	ug/m3	108	54	17	
87-68-3	Hexachlorobutadiene	ND	ug/m3	108	54	19	
110-54-3	Hexane	ND	ug/m3	108	54	18	
179601-23-	m,p-Xylene	ND	ug/m3	108	110	31	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	108	54	16	
75-09-2	Methylene Chloride	20	ug/m3	108	54	16	J
95-47-6	o-Xylene	ND	ug/m3	108	54	15	
103-65-1	Propylbenzene	ND	ug/m3	108	54	16	
100-42-5	Styrene	ND	ug/m3	108	54	16	
127-18-4	Tetrachloroethene	ND	ug/m3	108	54	15	
109-99-9	Tetrahydrofuran	ND	ug/m3	108	54	24	
108-88-3	Toluene	ND	ug/m3	108	54	17	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	108	54	18	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	108	54	17	
79-01-6	Trichloroethene	1300	ug/m3	108	54	16	
75-01-4	Vinyl Chloride	ND	ug/m3	108	54	21	

Sample **1203231204** **Sample Type** **Soil Gas** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	64.4	32	10	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	64.4	32	10	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	64.4	32	10	
75-34-3	1,1-Dichloroethane	ND	ug/m3	64.4	32	11	
75-35-4	1,1-Dichloroethene	ND	ug/m3	64.4	32	11	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	64.4	32	15	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	64.4	32	10	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	64.4	32	9.7	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	64.4	32	11	
107-06-2	1,2-Dichloroethane	ND	ug/m3	64.4	32	12	
78-87-5	1,2-Dichloropropane	ND	ug/m3	64.4	32	11	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	64.4	32	11	
106-99-0	1,3-Butadiene	ND	ug/m3	64.4	32	14	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	64.4	32	11	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	64.4	32	10	
123-91-1	1,4-Dioxane	ND	ug/m3	64.4	32	11	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	64.4	32	11	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	64.4	320	15	
591-78-6	2-Hexanone	ND	ug/m3	64.4	32	12	
67-63-0	2-Propanol	ND	ug/m3	64.4	64	26	
107-05-1	3-Chloropropene	ND	ug/m3	64.4	32	10	
622-96-8	4-Ethyltoluene	ND	ug/m3	64.4	32	11	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	64.4	32	9	
67-64-1	Acetone	ND	ug/m3	64.4	320	57	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	64.4	32	9.7	
71-43-2	Benzene	ND	ug/m3	64.4	32	9	
75-27-4	Bromodichloromethane	ND	ug/m3	64.4	32	10	
75-25-2	Bromoform	ND	ug/m3	64.4	32	9	
74-83-9	Bromomethane	ND	ug/m3	64.4	32	12	
75-15-0	Carbon Disulfide	ND	ug/m3	64.4	320	9.7	
56-23-5	Carbon Tetrachloride	ND	ug/m3	64.4	32	10	
108-90-7	Chlorobenzene	ND	ug/m3	64.4	32	10	
75-00-3	Chloroethane	ND	ug/m3	64.4	32	12	
67-66-3	Chloroform	71	ug/m3	64.4	32	12	
74-87-3	Chloromethane	ND	ug/m3	64.4	32	12	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	64.4	32	12	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	64.4	32	9	
98-82-8	Cumene	ND	ug/m3	64.4	32	9.7	
110-82-7	Cyclohexane	ND	ug/m3	64.4	64	21	
124-48-1	Dibromochloromethane	ND	ug/m3	64.4	32	9	
64-17-5	Ethanol	ND	ug/m3	64.4	320	100	
100-41-4	Ethyl Benzene	ND	ug/m3	64.4	32	9.7	
75-69-4	Freon 11	ND	ug/m3	64.4	32	10	

76-13-1	Freon 113	6500	ug/m3	64.4	32	10	
76-14-2	Freon 114	ND	ug/m3	64.4	32	11	
75-71-8	Freon 12	ND	ug/m3	64.4	32	12	
306-83-2	Freon 123	ND	ug/m3	64.4	32	15	
354-23-4	Freon 123a	730	ug/m3	64.4	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	64.4	32	15	
142-82-5	Heptane	ND	ug/m3	64.4	32	10	
87-68-3	Hexachlorobutadiene	ND	ug/m3	64.4	32	12	
110-54-3	Hexane	ND	ug/m3	64.4	32	11	
179601-23-	m,p-Xylene	ND	ug/m3	64.4	64	19	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	64.4	32	9.7	
75-09-2	Methylene Chloride	11	ug/m3	64.4	32	9.7	J
95-47-6	o-Xylene	ND	ug/m3	64.4	32	9	
103-65-1	Propylbenzene	ND	ug/m3	64.4	32	9.7	
100-42-5	Styrene	ND	ug/m3	64.4	32	9.7	
127-18-4	Tetrachloroethene	ND	ug/m3	64.4	32	9	
109-99-9	Tetrahydrofuran	ND	ug/m3	64.4	32	14	
108-88-3	Toluene	ND	ug/m3	64.4	32	10	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	64.4	32	11	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	64.4	32	10	
79-01-6	Trichloroethene	880	ug/m3	64.4	32	9.7	
75-01-4	Vinyl Chloride	ND	ug/m3	64.4	32	12	

Sample 1203231800 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	81	41	13	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	81	41	13	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	81	41	13	
75-34-3	1,1-Dichloroethane	ND	ug/m3	81	41	14	
75-35-4	1,1-Dichloroethene	ND	ug/m3	81	41	14	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	81	41	19	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	81	41	13	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	81	41	12	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	81	41	14	
107-06-2	1,2-Dichloroethane	ND	ug/m3	81	41	15	
78-87-5	1,2-Dichloropropane	ND	ug/m3	81	41	14	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	81	41	14	
106-99-0	1,3-Butadiene	ND	ug/m3	81	41	17	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	81	41	14	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	81	41	13	
123-91-1	1,4-Dioxane	ND	ug/m3	81	41	14	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	81	41	14	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	81	410	19	
591-78-6	2-Hexanone	ND	ug/m3	81	41	15	
67-63-0	2-Propanol	ND	ug/m3	81	81	32	
107-05-1	3-Chloropropene	ND	ug/m3	81	41	13	

622-96-8	4-Ethyltoluene	ND	ug/m3	81	41	14	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	81	41	11	
67-64-1	Acetone	160	ug/m3	81	410	71	J
100-44-7	alpha-Chlorotoluene	ND	ug/m3	81	41	12	
71-43-2	Benzene	ND	ug/m3	81	41	11	
75-27-4	Bromodichloromethane	ND	ug/m3	81	41	13	
75-25-2	Bromoform	ND	ug/m3	81	41	11	
74-83-9	Bromomethane	ND	ug/m3	81	41	15	
75-15-0	Carbon Disulfide	ND	ug/m3	81	410	12	
56-23-5	Carbon Tetrachloride	ND	ug/m3	81	41	13	
108-90-7	Chlorobenzene	ND	ug/m3	81	41	13	
75-00-3	Chloroethane	ND	ug/m3	81	41	15	
67-66-3	Chloroform	74	ug/m3	81	41	15	
74-87-3	Chloromethane	ND	ug/m3	81	41	15	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	81	41	15	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	81	41	11	
98-82-8	Cumene	ND	ug/m3	81	41	12	
110-82-7	Cyclohexane	ND	ug/m3	81	81	27	
124-48-1	Dibromochloromethane	ND	ug/m3	81	41	11	
64-17-5	Ethanol	ND	ug/m3	81	410	130	
100-41-4	Ethyl Benzene	ND	ug/m3	81	41	12	
75-69-4	Freon 11	ND	ug/m3	81	41	13	
76-13-1	Freon 113	6800	ug/m3	81	41	13	
76-14-2	Freon 114	ND	ug/m3	81	41	14	
75-71-8	Freon 12	ND	ug/m3	81	41	15	
306-83-2	Freon 123	ND	ug/m3	81	41	19	
354-23-4	Freon 123a	900	ug/m3	81	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	81	41	19	
142-82-5	Heptane	ND	ug/m3	81	41	13	
87-68-3	Hexachlorobutadiene	ND	ug/m3	81	41	15	
110-54-3	Hexane	ND	ug/m3	81	41	14	
179601-23-	m,p-Xylene	ND	ug/m3	81	81	23	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	81	41	12	
75-09-2	Methylene Chloride	15	ug/m3	81	41	12	J
95-47-6	o-Xylene	ND	ug/m3	81	41	11	
103-65-1	Propylbenzene	ND	ug/m3	81	41	12	
100-42-5	Styrene	ND	ug/m3	81	41	12	
127-18-4	Tetrachloroethene	ND	ug/m3	81	41	11	
109-99-9	Tetrahydrofuran	ND	ug/m3	81	41	18	
108-88-3	Toluene	ND	ug/m3	81	41	13	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	81	41	14	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	81	41	13	
79-01-6	Trichloroethene	920	ug/m3	81	41	12	
75-01-4	Vinyl Chloride	ND	ug/m3	81	41	15	

Sample **1203241439** **Sample Type** **Soil Gas** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	66.8	33	11	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	66.8	33	11	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	66.8	33	11	
75-34-3	1,1-Dichloroethane	ND	ug/m3	66.8	33	11	
75-35-4	1,1-Dichloroethene	ND	ug/m3	66.8	33	11	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	66.8	33	16	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	66.8	33	11	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	66.8	33	10	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	66.8	33	11	
107-06-2	1,2-Dichloroethane	ND	ug/m3	66.8	33	13	
78-87-5	1,2-Dichloropropane	ND	ug/m3	66.8	33	11	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	66.8	33	11	
106-99-0	1,3-Butadiene	ND	ug/m3	66.8	33	14	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	66.8	33	11	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	66.8	33	11	
123-91-1	1,4-Dioxane	ND	ug/m3	66.8	33	11	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	66.8	33	11	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	66.8	330	15	
591-78-6	2-Hexanone	ND	ug/m3	66.8	33	12	
67-63-0	2-Propanol	ND	ug/m3	66.8	67	27	
107-05-1	3-Chloropropene	ND	ug/m3	66.8	33	11	
622-96-8	4-Ethyltoluene	ND	ug/m3	66.8	33	11	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	66.8	33	9.4	
67-64-1	Acetone	ND	ug/m3	66.8	330	59	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	66.8	33	10	
71-43-2	Benzene	ND	ug/m3	66.8	33	9.4	
75-27-4	Bromodichloromethane	ND	ug/m3	66.8	33	11	
75-25-2	Bromoform	ND	ug/m3	66.8	33	9.4	
74-83-9	Bromomethane	ND	ug/m3	66.8	33	13	
75-15-0	Carbon Disulfide	ND	ug/m3	66.8	330	10	
56-23-5	Carbon Tetrachloride	ND	ug/m3	66.8	33	11	
108-90-7	Chlorobenzene	ND	ug/m3	66.8	33	11	
75-00-3	Chloroethane	ND	ug/m3	66.8	33	13	
67-66-3	Chloroform	79	ug/m3	66.8	33	13	
74-87-3	Chloromethane	ND	ug/m3	66.8	33	13	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	66.8	33	12	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	66.8	33	9.4	
98-82-8	Cumene	ND	ug/m3	66.8	33	10	
110-82-7	Cyclohexane	ND	ug/m3	66.8	67	22	
124-48-1	Dibromochloromethane	ND	ug/m3	66.8	33	9.4	
64-17-5	Ethanol	ND	ug/m3	66.8	330	110	
100-41-4	Ethyl Benzene	ND	ug/m3	66.8	33	10	
75-69-4	Freon 11	11	ug/m3	66.8	33	11	J

76-13-1	Freon 113	7200	ug/m3	111.33	56	18	D
76-14-2	Freon 114	ND	ug/m3	66.8	33	11	
75-71-8	Freon 12	ND	ug/m3	66.8	33	12	
306-83-2	Freon 123	ND	ug/m3	66.8	33	16	
354-23-4	Freon 123a	790	ug/m3	66.8	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	66.8	33	15	
142-82-5	Heptane	ND	ug/m3	66.8	33	11	
87-68-3	Hexachlorobutadiene	ND	ug/m3	66.8	33	12	
110-54-3	Hexane	ND	ug/m3	66.8	33	11	
179601-23-	m,p-Xylene	ND	ug/m3	66.8	67	19	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	66.8	33	10	
75-09-2	Methylene Chloride	12	ug/m3	66.8	33	10	J
95-47-6	o-Xylene	ND	ug/m3	66.8	33	9.4	
103-65-1	Propylbenzene	ND	ug/m3	66.8	33	10	
100-42-5	Styrene	ND	ug/m3	66.8	33	10	
127-18-4	Tetrachloroethene	ND	ug/m3	66.8	33	9.4	
109-99-9	Tetrahydrofuran	ND	ug/m3	66.8	33	15	
108-88-3	Toluene	ND	ug/m3	66.8	33	11	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	66.8	33	11	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	66.8	33	11	
79-01-6	Trichloroethene	980	ug/m3	66.8	33	10	
75-01-4	Vinyl Chloride	ND	ug/m3	66.8	33	13	

Borehole	600-SGW-3	Depth (ft)	107.5	Depth (m)	32.76	Event Date	3/22/2012

Sample	1203220848	Sample Type	Soil Gas	Analysis Method	TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	107.33	54	17	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	107.33	54	17	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	107.33	54	17	
75-34-3	1,1-Dichloroethane	ND	ug/m3	107.33	54	18	
75-35-4	1,1-Dichloroethene	ND	ug/m3	107.33	54	18	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	107.33	54	26	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	107.33	54	17	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	107.33	54	16	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	107.33	54	18	
107-06-2	1,2-Dichloroethane	ND	ug/m3	107.33	54	20	
78-87-5	1,2-Dichloropropane	ND	ug/m3	107.33	54	18	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	107.33	54	18	
106-99-0	1,3-Butadiene	ND	ug/m3	107.33	54	23	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	107.33	54	18	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	107.33	54	17	
123-91-1	1,4-Dioxane	ND	ug/m3	107.33	54	18	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	107.33	54	18	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	107.33	540	25	
591-78-6	2-Hexanone	ND	ug/m3	107.33	54	19	
67-63-0	2-Propanol	ND	ug/m3	107.33	110	43	
107-05-1	3-Chloropropene	ND	ug/m3	107.33	54	17	
622-96-8	4-Ethyltoluene	ND	ug/m3	107.33	54	18	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	107.33	54	15	
67-64-1	Acetone	ND	ug/m3	107.33	540	94	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	107.33	54	16	
71-43-2	Benzene	ND	ug/m3	107.33	54	15	
75-27-4	Bromodichloromethane	ND	ug/m3	107.33	54	17	
75-25-2	Bromoform	ND	ug/m3	107.33	54	15	
74-83-9	Bromomethane	ND	ug/m3	107.33	54	20	
75-15-0	Carbon Disulfide	ND	ug/m3	107.33	540	16	
56-23-5	Carbon Tetrachloride	ND	ug/m3	107.33	54	17	
108-90-7	Chlorobenzene	ND	ug/m3	107.33	54	17	
75-00-3	Chloroethane	ND	ug/m3	107.33	54	20	
67-66-3	Chloroform	46	ug/m3	107.33	54	20	J
74-87-3	Chloromethane	ND	ug/m3	107.33	54	20	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	107.33	54	19	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	107.33	54	15	
98-82-8	Cumene	ND	ug/m3	107.33	54	16	
110-82-7	Cyclohexane	ND	ug/m3	107.33	110	35	
124-48-1	Dibromochloromethane	ND	ug/m3	107.33	54	15	
64-17-5	Ethanol	ND	ug/m3	107.33	540	170	

100-41-4	Ethyl Benzene	ND	ug/m3	107.33	54	16	
75-69-4	Freon 11	ND	ug/m3	107.33	54	17	
76-13-1	Freon 113	8600	ug/m3	107.33	54	17	
76-14-2	Freon 114	ND	ug/m3	107.33	54	18	
75-71-8	Freon 12	ND	ug/m3	107.33	54	19	
306-83-2	Freon 123	ND	ug/m3	107.33	54	26	
354-23-4	Freon 123a	ND	ug/m3	107.33	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	107.33	54	25	
142-82-5	Heptane	ND	ug/m3	107.33	54	17	
87-68-3	Hexachlorobutadiene	ND	ug/m3	107.33	54	19	
110-54-3	Hexane	ND	ug/m3	107.33	54	18	
179601-23-	m,p-Xylene	ND	ug/m3	107.33	110	31	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	107.33	54	16	
75-09-2	Methylene Chloride	21	ug/m3	107.33	54	16	J
95-47-6	o-Xylene	ND	ug/m3	107.33	54	15	
103-65-1	Propylbenzene	ND	ug/m3	107.33	54	16	
100-42-5	Styrene	ND	ug/m3	107.33	54	16	
127-18-4	Tetrachloroethene	ND	ug/m3	107.33	54	15	
109-99-9	Tetrahydrofuran	ND	ug/m3	107.33	54	24	
108-88-3	Toluene	ND	ug/m3	107.33	54	17	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	107.33	54	18	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	107.33	54	17	
79-01-6	Trichloroethene	830	ug/m3	107.33	54	16	
75-01-4	Vinyl Chloride	ND	ug/m3	107.33	54	20	

Sample 1203221351 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	42	21	6.7	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	42	21	6.7	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	42	21	6.7	
75-34-3	1,1-Dichloroethane	ND	ug/m3	42	21	7.1	
75-35-4	1,1-Dichloroethene	ND	ug/m3	42	21	7.1	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	42	21	10	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	42	21	6.7	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	42	21	6.3	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	42	21	7.1	
107-06-2	1,2-Dichloroethane	ND	ug/m3	42	21	8	
78-87-5	1,2-Dichloropropane	ND	ug/m3	42	21	7.1	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	42	21	7.1	
106-99-0	1,3-Butadiene	ND	ug/m3	42	21	8.8	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	42	21	7.1	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	42	21	6.7	
123-91-1	1,4-Dioxane	ND	ug/m3	42	21	7.1	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	42	21	7.1	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	42	210	9.7	
591-78-6	2-Hexanone	ND	ug/m3	42	21	7.6	

67-63-0	2-Propanol	ND	ug/m3	42	42	17	
107-05-1	3-Chloropropene	ND	ug/m3	42	21	6.7	
622-96-8	4-Ethyltoluene	ND	ug/m3	42	21	7.1	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	42	21	5.9	
67-64-1	Acetone	ND	ug/m3	42	210	37	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	42	21	6.3	
71-43-2	Benzene	ND	ug/m3	42	21	5.9	
75-27-4	Bromodichloromethane	ND	ug/m3	42	21	6.7	
75-25-2	Bromoform	ND	ug/m3	42	21	5.9	
74-83-9	Bromomethane	ND	ug/m3	42	21	8	
75-15-0	Carbon Disulfide	ND	ug/m3	42	210	6.3	
56-23-5	Carbon Tetrachloride	ND	ug/m3	42	21	6.7	
108-90-7	Chlorobenzene	ND	ug/m3	42	21	6.7	
75-00-3	Chloroethane	ND	ug/m3	42	21	8	
67-66-3	Chloroform	ND	ug/m3	42	21	8	
74-87-3	Chloromethane	ND	ug/m3	42	21	8	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	42	21	7.6	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	42	21	5.9	
98-82-8	Cumene	ND	ug/m3	42	21	6.3	
110-82-7	Cyclohexane	ND	ug/m3	42	42	14	
124-48-1	Dibromochloromethane	ND	ug/m3	42	21	5.9	
64-17-5	Ethanol	ND	ug/m3	42	210	67	
100-41-4	Ethyl Benzene	ND	ug/m3	42	21	6.3	
75-69-4	Freon 11	7.9	ug/m3	42	21	6.7	J
76-13-1	Freon 113	3500	ug/m3	42	21	6.7	
76-14-2	Freon 114	ND	ug/m3	42	21	7.1	
75-71-8	Freon 12	ND	ug/m3	42	21	7.6	
306-83-2	Freon 123	ND	ug/m3	42	21	10	
354-23-4	Freon 123a	140	ug/m3	42	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	42	21	9.7	
142-82-5	Heptane	ND	ug/m3	42	21	6.7	
87-68-3	Hexachlorobutadiene	ND	ug/m3	42	21	7.6	
110-54-3	Hexane	ND	ug/m3	42	21	7.1	
179601-23-	m,p-Xylene	ND	ug/m3	42	42	12	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	42	21	6.3	
75-09-2	Methylene Chloride	8.3	ug/m3	42	21	6.3	J
95-47-6	o-Xylene	ND	ug/m3	42	21	5.9	
103-65-1	Propylbenzene	ND	ug/m3	42	21	6.3	
100-42-5	Styrene	ND	ug/m3	42	21	6.3	
127-18-4	Tetrachloroethene	ND	ug/m3	42	21	5.9	
109-99-9	Tetrahydrofuran	ND	ug/m3	42	21	9.2	
108-88-3	Toluene	ND	ug/m3	42	21	6.7	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	42	21	7.1	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	42	21	6.7	
79-01-6	Trichloroethene	ND	ug/m3	42	21	6.3	
75-01-4	Vinyl Chloride	ND	ug/m3	42	21	8	

Sample **1203221546** **Sample Type** **Soil Gas** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	86.5	43	14	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	86.5	43	14	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	86.5	43	14	
75-34-3	1,1-Dichloroethane	ND	ug/m3	86.5	43	15	
75-35-4	1,1-Dichloroethene	ND	ug/m3	86.5	43	15	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	86.5	43	21	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	86.5	43	14	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	86.5	43	13	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	86.5	43	15	
107-06-2	1,2-Dichloroethane	ND	ug/m3	86.5	43	16	
78-87-5	1,2-Dichloropropane	ND	ug/m3	86.5	43	15	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	86.5	43	15	
106-99-0	1,3-Butadiene	ND	ug/m3	86.5	43	18	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	86.5	43	15	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	86.5	43	14	
123-91-1	1,4-Dioxane	ND	ug/m3	86.5	43	15	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	86.5	43	15	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	86.5	430	20	
591-78-6	2-Hexanone	ND	ug/m3	86.5	43	16	
67-63-0	2-Propanol	ND	ug/m3	86.5	87	35	
107-05-1	3-Chloropropene	ND	ug/m3	86.5	43	14	
622-96-8	4-Ethyltoluene	ND	ug/m3	86.5	43	15	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	86.5	43	12	
67-64-1	Acetone	ND	ug/m3	86.5	430	76	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	86.5	43	13	
71-43-2	Benzene	ND	ug/m3	86.5	43	12	
75-27-4	Bromodichloromethane	ND	ug/m3	86.5	43	14	
75-25-2	Bromoform	ND	ug/m3	86.5	43	12	
74-83-9	Bromomethane	ND	ug/m3	86.5	43	16	
75-15-0	Carbon Disulfide	ND	ug/m3	86.5	430	13	
56-23-5	Carbon Tetrachloride	ND	ug/m3	86.5	43	14	
108-90-7	Chlorobenzene	ND	ug/m3	86.5	43	14	
75-00-3	Chloroethane	ND	ug/m3	86.5	43	16	
67-66-3	Chloroform	45	ug/m3	86.5	43	16	
74-87-3	Chloromethane	ND	ug/m3	86.5	43	16	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	86.5	43	16	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	86.5	43	12	
98-82-8	Cumene	ND	ug/m3	86.5	43	13	
110-82-7	Cyclohexane	ND	ug/m3	86.5	87	29	
124-48-1	Dibromochloromethane	ND	ug/m3	86.5	43	12	
64-17-5	Ethanol	ND	ug/m3	86.5	430	140	
100-41-4	Ethyl Benzene	ND	ug/m3	86.5	43	13	
75-69-4	Freon 11	ND	ug/m3	86.5	43	14	

76-13-1	Freon 113	8600	ug/m3	86.5	43	14	
76-14-2	Freon 114	ND	ug/m3	86.5	43	15	
75-71-8	Freon 12	ND	ug/m3	86.5	43	16	
306-83-2	Freon 123	ND	ug/m3	86.5	43	21	
354-23-4	Freon 123a	220	ug/m3	86.5	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	86.5	43	20	
142-82-5	Heptane	ND	ug/m3	86.5	43	14	
87-68-3	Hexachlorobutadiene	ND	ug/m3	86.5	43	16	
110-54-3	Hexane	ND	ug/m3	86.5	43	15	
179601-23-	m,p-Xylene	ND	ug/m3	86.5	87	25	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	86.5	43	13	
75-09-2	Methylene Chloride	16	ug/m3	86.5	43	13	J
95-47-6	o-Xylene	ND	ug/m3	86.5	43	12	
103-65-1	Propylbenzene	ND	ug/m3	86.5	43	13	
100-42-5	Styrene	ND	ug/m3	86.5	43	13	
127-18-4	Tetrachloroethene	220	ug/m3	86.5	43	12	
109-99-9	Tetrahydrofuran	ND	ug/m3	86.5	43	19	
108-88-3	Toluene	ND	ug/m3	86.5	43	14	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	86.5	43	15	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	86.5	43	14	
79-01-6	Trichloroethene	640	ug/m3	86.5	43	13	
75-01-4	Vinyl Chloride	ND	ug/m3	86.5	43	16	

Sample 1203221720 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	85	43	14	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	85	43	14	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	85	43	14	
75-34-3	1,1-Dichloroethane	ND	ug/m3	85	43	14	
75-35-4	1,1-Dichloroethene	ND	ug/m3	85	43	14	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	85	43	20	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	85	43	14	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	85	43	13	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	85	43	14	
107-06-2	1,2-Dichloroethane	ND	ug/m3	85	43	16	
78-87-5	1,2-Dichloropropane	ND	ug/m3	85	43	14	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	85	43	14	
106-99-0	1,3-Butadiene	ND	ug/m3	85	43	18	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	85	43	14	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	85	43	14	
123-91-1	1,4-Dioxane	ND	ug/m3	85	43	14	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	85	43	14	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	85	430	20	
591-78-6	2-Hexanone	ND	ug/m3	85	43	15	
67-63-0	2-Propanol	ND	ug/m3	85	85	34	
107-05-1	3-Chloropropene	ND	ug/m3	85	43	14	

622-96-8	4-Ethyltoluene	ND	ug/m3	85	43	14	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	85	43	12	
67-64-1	Acetone	ND	ug/m3	85	430	75	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	85	43	13	
71-43-2	Benzene	ND	ug/m3	85	43	12	
75-27-4	Bromodichloromethane	ND	ug/m3	85	43	14	
75-25-2	Bromoform	ND	ug/m3	85	43	12	
74-83-9	Bromomethane	ND	ug/m3	85	43	16	
75-15-0	Carbon Disulfide	ND	ug/m3	85	430	13	
56-23-5	Carbon Tetrachloride	ND	ug/m3	85	43	14	
108-90-7	Chlorobenzene	ND	ug/m3	85	43	14	
75-00-3	Chloroethane	ND	ug/m3	85	43	16	
67-66-3	Chloroform	42	ug/m3	85	43	16	J
74-87-3	Chloromethane	ND	ug/m3	85	43	16	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	85	43	15	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	85	43	12	
98-82-8	Cumene	ND	ug/m3	85	43	13	
110-82-7	Cyclohexane	ND	ug/m3	85	85	28	
124-48-1	Dibromochloromethane	ND	ug/m3	85	43	12	
64-17-5	Ethanol	ND	ug/m3	85	430	140	
100-41-4	Ethyl Benzene	ND	ug/m3	85	43	13	
75-69-4	Freon 11	ND	ug/m3	85	43	14	
76-13-1	Freon 113	8300	ug/m3	85	43	14	
76-14-2	Freon 114	ND	ug/m3	85	43	14	
75-71-8	Freon 12	ND	ug/m3	85	43	15	
306-83-2	Freon 123	ND	ug/m3	85	43	20	
354-23-4	Freon 123a	ND	ug/m3	85	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	85	43	20	
142-82-5	Heptane	ND	ug/m3	85	43	14	
87-68-3	Hexachlorobutadiene	ND	ug/m3	85	43	15	
110-54-3	Hexane	ND	ug/m3	85	43	14	
179601-23-	m,p-Xylene	ND	ug/m3	85	85	25	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	85	43	13	
75-09-2	Methylene Chloride	17	ug/m3	85	43	13	J
95-47-6	o-Xylene	ND	ug/m3	85	43	12	
103-65-1	Propylbenzene	ND	ug/m3	85	43	13	
100-42-5	Styrene	ND	ug/m3	85	43	13	
127-18-4	Tetrachloroethene	ND	ug/m3	85	43	12	
109-99-9	Tetrahydrofuran	ND	ug/m3	85	43	19	
108-88-3	Toluene	ND	ug/m3	85	43	14	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	85	43	14	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	85	43	14	
79-01-6	Trichloroethene	790	ug/m3	85	43	13	
75-01-4	Vinyl Chloride	ND	ug/m3	85	43	16	

Sample **1203230955** **Sample Type** **Soil Gas** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	111.33	56	18	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	111.33	56	18	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	111.33	56	18	
75-34-3	1,1-Dichloroethane	ND	ug/m3	111.33	56	19	
75-35-4	1,1-Dichloroethene	ND	ug/m3	111.33	56	19	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	111.33	56	27	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	111.33	56	18	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	111.33	56	17	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	111.33	56	19	
107-06-2	1,2-Dichloroethane	ND	ug/m3	111.33	56	21	
78-87-5	1,2-Dichloropropane	ND	ug/m3	111.33	56	19	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	111.33	56	19	
106-99-0	1,3-Butadiene	ND	ug/m3	111.33	56	23	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	111.33	56	19	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	111.33	56	18	
123-91-1	1,4-Dioxane	ND	ug/m3	111.33	56	19	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	111.33	56	19	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	111.33	560	26	
591-78-6	2-Hexanone	ND	ug/m3	111.33	56	20	
67-63-0	2-Propanol	ND	ug/m3	111.33	110	45	
107-05-1	3-Chloropropene	ND	ug/m3	111.33	56	18	
622-96-8	4-Ethyltoluene	ND	ug/m3	111.33	56	19	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	111.33	56	16	
67-64-1	Acetone	ND	ug/m3	111.33	560	98	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	111.33	56	17	
71-43-2	Benzene	ND	ug/m3	111.33	56	16	
75-27-4	Bromodichloromethane	ND	ug/m3	111.33	56	18	
75-25-2	Bromoform	ND	ug/m3	111.33	56	16	
74-83-9	Bromomethane	ND	ug/m3	111.33	56	21	
75-15-0	Carbon Disulfide	ND	ug/m3	111.33	560	17	
56-23-5	Carbon Tetrachloride	ND	ug/m3	111.33	56	18	
108-90-7	Chlorobenzene	ND	ug/m3	111.33	56	18	
75-00-3	Chloroethane	ND	ug/m3	111.33	56	21	
67-66-3	Chloroform	50	ug/m3	111.33	56	21	J
74-87-3	Chloromethane	ND	ug/m3	111.33	56	21	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	111.33	56	20	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	111.33	56	16	
98-82-8	Cumene	ND	ug/m3	111.33	56	17	
110-82-7	Cyclohexane	ND	ug/m3	111.33	110	37	
124-48-1	Dibromochloromethane	ND	ug/m3	111.33	56	16	
64-17-5	Ethanol	ND	ug/m3	111.33	560	180	
100-41-4	Ethyl Benzene	ND	ug/m3	111.33	56	17	
75-69-4	Freon 11	ND	ug/m3	111.33	56	18	

76-13-1	Freon 113	8400	ug/m3	111.33	56	18	
76-14-2	Freon 114	ND	ug/m3	111.33	56	19	
75-71-8	Freon 12	ND	ug/m3	111.33	56	20	
306-83-2	Freon 123	ND	ug/m3	111.33	56	27	
354-23-4	Freon 123a	ND	ug/m3	111.33	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	111.33	56	26	
142-82-5	Heptane	ND	ug/m3	111.33	56	18	
87-68-3	Hexachlorobutadiene	ND	ug/m3	111.33	56	20	
110-54-3	Hexane	ND	ug/m3	111.33	56	19	
179601-23-	m,p-Xylene	ND	ug/m3	111.33	110	32	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	111.33	56	17	
75-09-2	Methylene Chloride	21	ug/m3	111.33	56	17	J
95-47-6	o-Xylene	ND	ug/m3	111.33	56	16	
103-65-1	Propylbenzene	ND	ug/m3	111.33	56	17	
100-42-5	Styrene	ND	ug/m3	111.33	56	17	
127-18-4	Tetrachloroethene	ND	ug/m3	111.33	56	16	
109-99-9	Tetrahydrofuran	ND	ug/m3	111.33	56	24	
108-88-3	Toluene	ND	ug/m3	111.33	56	18	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	111.33	56	19	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	111.33	56	18	
79-01-6	Trichloroethene	1000	ug/m3	111.33	56	17	
75-01-4	Vinyl Chloride	ND	ug/m3	111.33	56	21	

Sample 1203231806 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	83	42	13	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	83	42	13	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	83	42	13	
75-34-3	1,1-Dichloroethane	ND	ug/m3	83	42	14	
75-35-4	1,1-Dichloroethene	ND	ug/m3	83	42	14	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	83	42	20	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	83	42	13	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	83	42	12	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	83	42	14	
107-06-2	1,2-Dichloroethane	ND	ug/m3	83	42	16	
78-87-5	1,2-Dichloropropane	ND	ug/m3	83	42	14	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	83	42	14	
106-99-0	1,3-Butadiene	ND	ug/m3	83	42	17	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	83	42	14	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	83	42	13	
123-91-1	1,4-Dioxane	ND	ug/m3	83	42	14	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	83	42	14	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	83	420	19	
591-78-6	2-Hexanone	ND	ug/m3	83	42	15	
67-63-0	2-Propanol	ND	ug/m3	83	83	33	
107-05-1	3-Chloropropene	ND	ug/m3	83	42	13	

622-96-8	4-Ethyltoluene	ND	ug/m3	83	42	14	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	83	42	12	
67-64-1	Acetone	ND	ug/m3	83	420	73	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	83	42	12	
71-43-2	Benzene	ND	ug/m3	83	42	12	
75-27-4	Bromodichloromethane	ND	ug/m3	83	42	13	
75-25-2	Bromoform	ND	ug/m3	83	42	12	
74-83-9	Bromomethane	ND	ug/m3	83	42	16	
75-15-0	Carbon Disulfide	ND	ug/m3	83	420	12	
56-23-5	Carbon Tetrachloride	ND	ug/m3	83	42	13	
108-90-7	Chlorobenzene	ND	ug/m3	83	42	13	
75-00-3	Chloroethane	ND	ug/m3	83	42	16	
67-66-3	Chloroform	41	ug/m3	83	42	16	J
74-87-3	Chloromethane	ND	ug/m3	83	42	16	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	83	42	15	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	83	42	12	
98-82-8	Cumene	ND	ug/m3	83	42	12	
110-82-7	Cyclohexane	ND	ug/m3	83	83	27	
124-48-1	Dibromochloromethane	ND	ug/m3	83	42	12	
64-17-5	Ethanol	ND	ug/m3	83	420	130	
100-41-4	Ethyl Benzene	ND	ug/m3	83	42	12	
75-69-4	Freon 11	ND	ug/m3	83	42	13	
76-13-1	Freon 113	6600	ug/m3	83	42	13	
76-14-2	Freon 114	ND	ug/m3	83	42	14	
75-71-8	Freon 12	ND	ug/m3	83	42	15	
306-83-2	Freon 123	ND	ug/m3	83	42	20	
354-23-4	Freon 123a	ND	ug/m3	83	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	83	42	19	
142-82-5	Heptane	ND	ug/m3	83	42	13	
87-68-3	Hexachlorobutadiene	ND	ug/m3	83	42	15	
110-54-3	Hexane	ND	ug/m3	83	42	14	
179601-23-	m,p-Xylene	ND	ug/m3	83	83	24	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	83	42	12	
75-09-2	Methylene Chloride	14	ug/m3	83	42	12	J
95-47-6	o-Xylene	ND	ug/m3	83	42	12	
103-65-1	Propylbenzene	ND	ug/m3	83	42	12	
100-42-5	Styrene	ND	ug/m3	83	42	12	
127-18-4	Tetrachloroethene	ND	ug/m3	83	42	12	
109-99-9	Tetrahydrofuran	ND	ug/m3	83	42	18	
108-88-3	Toluene	ND	ug/m3	83	42	13	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	83	42	14	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	83	42	13	
79-01-6	Trichloroethene	750	ug/m3	83	42	12	
75-01-4	Vinyl Chloride	ND	ug/m3	83	42	16	

Sample **1203241445** **Sample Type** **Soil Gas** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	70.8	35	11	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	70.8	35	11	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	70.8	35	11	
75-34-3	1,1-Dichloroethane	ND	ug/m3	70.8	35	12	
75-35-4	1,1-Dichloroethene	ND	ug/m3	70.8	35	12	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	70.8	35	17	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	70.8	35	11	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	70.8	35	11	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	70.8	35	12	
107-06-2	1,2-Dichloroethane	ND	ug/m3	70.8	35	13	
78-87-5	1,2-Dichloropropane	ND	ug/m3	70.8	35	12	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	70.8	35	12	
106-99-0	1,3-Butadiene	ND	ug/m3	70.8	35	15	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	70.8	35	12	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	70.8	35	11	
123-91-1	1,4-Dioxane	ND	ug/m3	70.8	35	12	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	70.8	35	12	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	70.8	350	16	
591-78-6	2-Hexanone	ND	ug/m3	70.8	35	13	
67-63-0	2-Propanol	ND	ug/m3	70.8	71	28	
107-05-1	3-Chloropropene	ND	ug/m3	70.8	35	11	
622-96-8	4-Ethyltoluene	ND	ug/m3	70.8	35	12	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	70.8	35	9.9	
67-64-1	Acetone	ND	ug/m3	70.8	350	62	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	70.8	35	11	
71-43-2	Benzene	ND	ug/m3	70.8	35	9.9	
75-27-4	Bromodichloromethane	ND	ug/m3	70.8	35	11	
75-25-2	Bromoform	ND	ug/m3	70.8	35	9.9	
74-83-9	Bromomethane	ND	ug/m3	70.8	35	13	
75-15-0	Carbon Disulfide	ND	ug/m3	70.8	350	11	
56-23-5	Carbon Tetrachloride	ND	ug/m3	70.8	35	11	
108-90-7	Chlorobenzene	ND	ug/m3	70.8	35	11	
75-00-3	Chloroethane	ND	ug/m3	70.8	35	13	
67-66-3	Chloroform	45	ug/m3	70.8	35	13	
74-87-3	Chloromethane	ND	ug/m3	70.8	35	13	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	70.8	35	13	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	70.8	35	9.9	
98-82-8	Cumene	ND	ug/m3	70.8	35	11	
110-82-7	Cyclohexane	ND	ug/m3	70.8	71	23	
124-48-1	Dibromochloromethane	ND	ug/m3	70.8	35	9.9	
64-17-5	Ethanol	ND	ug/m3	70.8	350	110	
100-41-4	Ethyl Benzene	ND	ug/m3	70.8	35	11	
75-69-4	Freon 11	ND	ug/m3	70.8	35	11	

76-13-1	Freon 113	7500	ug/m3	118	59	19	D
76-14-2	Freon 114	ND	ug/m3	70.8	35	12	
75-71-8	Freon 12	ND	ug/m3	70.8	35	13	
306-83-2	Freon 123	ND	ug/m3	70.8	35	17	
354-23-4	Freon 123a	210	ug/m3	70.8	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	70.8	35	16	
142-82-5	Heptane	ND	ug/m3	70.8	35	11	
87-68-3	Hexachlorobutadiene	ND	ug/m3	70.8	35	13	
110-54-3	Hexane	ND	ug/m3	70.8	35	12	
179601-23-	m,p-Xylene	ND	ug/m3	70.8	71	21	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	70.8	35	11	
75-09-2	Methylene Chloride	13	ug/m3	70.8	35	11	J
95-47-6	o-Xylene	ND	ug/m3	70.8	35	9.9	
103-65-1	Propylbenzene	ND	ug/m3	70.8	35	11	
100-42-5	Styrene	ND	ug/m3	70.8	35	11	
127-18-4	Tetrachloroethene	ND	ug/m3	70.8	35	9.9	
109-99-9	Tetrahydrofuran	ND	ug/m3	70.8	35	16	
108-88-3	Toluene	ND	ug/m3	70.8	35	11	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	70.8	35	12	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	70.8	35	11	
79-01-6	Trichloroethene	820	ug/m3	70.8	35	11	
75-01-4	Vinyl Chloride	ND	ug/m3	70.8	35	13	

Borehole	600-SGW-3	Depth (ft)	137.5	Depth (m)	41.91	Event Date	3/22/2012

Sample	1203220856	Sample Type	Soil Gas	Analysis Method	TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	3200	1600	510	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	3200	1600	510	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	3200	1600	510	
75-34-3	1,1-Dichloroethane	ND	ug/m3	3200	1600	540	
75-35-4	1,1-Dichloroethene	ND	ug/m3	3200	1600	540	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	3200	1600	770	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	3200	1600	510	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	3200	1600	480	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	3200	1600	540	
107-06-2	1,2-Dichloroethane	ND	ug/m3	3200	1600	610	
78-87-5	1,2-Dichloropropane	ND	ug/m3	3200	1600	540	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	3200	1600	540	
106-99-0	1,3-Butadiene	ND	ug/m3	3200	1600	670	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	3200	1600	540	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	3200	1600	510	
123-91-1	1,4-Dioxane	ND	ug/m3	3200	1600	540	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	3200	1600	540	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	3200	16000	740	
591-78-6	2-Hexanone	ND	ug/m3	3200	1600	580	
67-63-0	2-Propanol	ND	ug/m3	3200	3200	1300	
107-05-1	3-Chloropropene	ND	ug/m3	3200	1600	510	
622-96-8	4-Ethyltoluene	ND	ug/m3	3200	1600	540	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	3200	1600	450	
67-64-1	Acetone	ND	ug/m3	3200	16000	2800	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	3200	1600	480	
71-43-2	Benzene	ND	ug/m3	3200	1600	450	
75-27-4	Bromodichloromethane	ND	ug/m3	3200	1600	510	
75-25-2	Bromoform	ND	ug/m3	3200	1600	450	
74-83-9	Bromomethane	ND	ug/m3	3200	1600	610	
75-15-0	Carbon Disulfide	ND	ug/m3	3200	16000	480	
56-23-5	Carbon Tetrachloride	ND	ug/m3	3200	1600	510	
108-90-7	Chlorobenzene	ND	ug/m3	3200	1600	510	
75-00-3	Chloroethane	ND	ug/m3	3200	1600	610	
67-66-3	Chloroform	ND	ug/m3	3200	1600	610	
74-87-3	Chloromethane	ND	ug/m3	3200	1600	610	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	3200	1600	580	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	3200	1600	450	
98-82-8	Cumene	ND	ug/m3	3200	1600	480	
110-82-7	Cyclohexane	ND	ug/m3	3200	3200	1100	
124-48-1	Dibromochloromethane	ND	ug/m3	3200	1600	450	
64-17-5	Ethanol	ND	ug/m3	3200	16000	5100	

100-41-4	Ethyl Benzene	ND	ug/m3	3200	1600	480	
75-69-4	Freon 11	1200	ug/m3	3200	1600	510	J
76-13-1	Freon 113	330000	ug/m3	3200	1600	510	
76-14-2	Freon 114	ND	ug/m3	3200	1600	540	
75-71-8	Freon 12	ND	ug/m3	3200	1600	580	
306-83-2	Freon 123	ND	ug/m3	3200	1600	770	
354-23-4	Freon 123a	ND	ug/m3	3200	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	3200	1600	740	
142-82-5	Heptane	ND	ug/m3	3200	1600	510	
87-68-3	Hexachlorobutadiene	ND	ug/m3	3200	1600	580	
110-54-3	Hexane	ND	ug/m3	3200	1600	540	
179601-23-	m,p-Xylene	ND	ug/m3	3200	3200	930	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	3200	1600	480	
75-09-2	Methylene Chloride	550	ug/m3	3200	1600	480	J
95-47-6	o-Xylene	ND	ug/m3	3200	1600	450	
103-65-1	Propylbenzene	ND	ug/m3	3200	1600	480	
100-42-5	Styrene	ND	ug/m3	3200	1600	480	
127-18-4	Tetrachloroethene	ND	ug/m3	3200	1600	450	
109-99-9	Tetrahydrofuran	ND	ug/m3	3200	1600	700	
108-88-3	Toluene	ND	ug/m3	3200	1600	510	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	3200	1600	540	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	3200	1600	510	
79-01-6	Trichloroethene	2900	ug/m3	3200	1600	480	
75-01-4	Vinyl Chloride	ND	ug/m3	3200	1600	610	

Sample 1203221359 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	2716.67	1400	430	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	2716.67	1400	430	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	2716.67	1400	430	
75-34-3	1,1-Dichloroethane	ND	ug/m3	2716.67	1400	460	
75-35-4	1,1-Dichloroethene	ND	ug/m3	2716.67	1400	460	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	2716.67	1400	650	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	2716.67	1400	430	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	2716.67	1400	410	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	2716.67	1400	460	
107-06-2	1,2-Dichloroethane	ND	ug/m3	2716.67	1400	520	
78-87-5	1,2-Dichloropropane	ND	ug/m3	2716.67	1400	460	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	2716.67	1400	460	
106-99-0	1,3-Butadiene	ND	ug/m3	2716.67	1400	570	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	2716.67	1400	460	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	2716.67	1400	430	
123-91-1	1,4-Dioxane	ND	ug/m3	2716.67	1400	460	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	2716.67	1400	460	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	2716.67	14000	620	
591-78-6	2-Hexanone	ND	ug/m3	2716.67	1400	490	

67-63-0	2-Propanol	ND	ug/m3	2716.67	2700	1100	
107-05-1	3-Chloropropene	ND	ug/m3	2716.67	1400	430	
622-96-8	4-Ethyltoluene	ND	ug/m3	2716.67	1400	460	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	2716.67	1400	380	
67-64-1	Acetone	ND	ug/m3	2716.67	14000	2400	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	2716.67	1400	410	
71-43-2	Benzene	ND	ug/m3	2716.67	1400	380	
75-27-4	Bromodichloromethane	ND	ug/m3	2716.67	1400	430	
75-25-2	Bromoform	ND	ug/m3	2716.67	1400	380	
74-83-9	Bromomethane	ND	ug/m3	2716.67	1400	520	
75-15-0	Carbon Disulfide	ND	ug/m3	2716.67	14000	410	
56-23-5	Carbon Tetrachloride	ND	ug/m3	2716.67	1400	430	
108-90-7	Chlorobenzene	ND	ug/m3	2716.67	1400	430	
75-00-3	Chloroethane	ND	ug/m3	2716.67	1400	520	
67-66-3	Chloroform	ND	ug/m3	2716.67	1400	520	
74-87-3	Chloromethane	ND	ug/m3	2716.67	1400	520	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	2716.67	1400	490	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	2716.67	1400	380	
98-82-8	Cumene	ND	ug/m3	2716.67	1400	410	
110-82-7	Cyclohexane	ND	ug/m3	2716.67	2700	900	
124-48-1	Dibromochloromethane	ND	ug/m3	2716.67	1400	380	
64-17-5	Ethanol	ND	ug/m3	2716.67	14000	4300	
100-41-4	Ethyl Benzene	ND	ug/m3	2716.67	1400	410	
75-69-4	Freon 11	990	ug/m3	2716.67	1400	430	J
76-13-1	Freon 113	230000	ug/m3	2716.67	1400	430	
76-14-2	Freon 114	ND	ug/m3	2716.67	1400	460	
75-71-8	Freon 12	ND	ug/m3	2716.67	1400	490	
306-83-2	Freon 123	ND	ug/m3	2716.67	1400	650	
354-23-4	Freon 123a	ND	ug/m3	2716.67	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	2716.67	1400	620	
142-82-5	Heptane	ND	ug/m3	2716.67	1400	430	
87-68-3	Hexachlorobutadiene	ND	ug/m3	2716.67	1400	490	
110-54-3	Hexane	ND	ug/m3	2716.67	1400	460	
179601-23-	m,p-Xylene	ND	ug/m3	2716.67	2700	790	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	2716.67	1400	410	
75-09-2	Methylene Chloride	520	ug/m3	2716.67	1400	410	J
95-47-6	o-Xylene	ND	ug/m3	2716.67	1400	380	
103-65-1	Propylbenzene	ND	ug/m3	2716.67	1400	410	
100-42-5	Styrene	ND	ug/m3	2716.67	1400	410	
127-18-4	Tetrachloroethene	ND	ug/m3	2716.67	1400	380	
109-99-9	Tetrahydrofuran	ND	ug/m3	2716.67	1400	600	
108-88-3	Toluene	ND	ug/m3	2716.67	1400	430	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	2716.67	1400	460	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	2716.67	1400	430	
79-01-6	Trichloroethene	2600	ug/m3	2716.67	1400	410	
75-01-4	Vinyl Chloride	ND	ug/m3	2716.67	1400	520	

Sample **1203221554** **Sample Type** **Soil Gas** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	530	270	85	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	530	270	85	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	530	270	85	
75-34-3	1,1-Dichloroethane	ND	ug/m3	530	270	90	
75-35-4	1,1-Dichloroethene	ND	ug/m3	530	270	90	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	530	270	130	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	530	270	85	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	530	270	80	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	530	270	90	
107-06-2	1,2-Dichloroethane	ND	ug/m3	530	270	100	
78-87-5	1,2-Dichloropropane	ND	ug/m3	530	270	90	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	530	270	90	
106-99-0	1,3-Butadiene	ND	ug/m3	530	270	110	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	530	270	90	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	530	270	85	
123-91-1	1,4-Dioxane	ND	ug/m3	530	270	90	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	530	270	90	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	530	2700	120	
591-78-6	2-Hexanone	ND	ug/m3	530	270	95	
67-63-0	2-Propanol	ND	ug/m3	530	530	210	
107-05-1	3-Chloropropene	ND	ug/m3	530	270	85	
622-96-8	4-Ethyltoluene	ND	ug/m3	530	270	90	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	530	270	74	
67-64-1	Acetone	ND	ug/m3	530	2700	470	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	530	270	80	
71-43-2	Benzene	ND	ug/m3	530	270	74	
75-27-4	Bromodichloromethane	ND	ug/m3	530	270	85	
75-25-2	Bromoform	ND	ug/m3	530	270	74	
74-83-9	Bromomethane	ND	ug/m3	530	270	100	
75-15-0	Carbon Disulfide	ND	ug/m3	530	2700	80	
56-23-5	Carbon Tetrachloride	ND	ug/m3	530	270	85	
108-90-7	Chlorobenzene	ND	ug/m3	530	270	85	
75-00-3	Chloroethane	ND	ug/m3	530	270	100	
67-66-3	Chloroform	ND	ug/m3	530	270	100	
74-87-3	Chloromethane	ND	ug/m3	530	270	100	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	530	270	95	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	530	270	74	
98-82-8	Cumene	ND	ug/m3	530	270	80	
110-82-7	Cyclohexane	ND	ug/m3	530	530	170	
124-48-1	Dibromochloromethane	ND	ug/m3	530	270	74	
64-17-5	Ethanol	ND	ug/m3	530	2700	850	
100-41-4	Ethyl Benzene	ND	ug/m3	530	270	80	
75-69-4	Freon 11	210	ug/m3	530	270	85	J

76-13-1	Freon 113	51000	ug/m3	1590	800	250	D
76-14-2	Freon 114	ND	ug/m3	530	270	90	
75-71-8	Freon 12	ND	ug/m3	530	270	95	
306-83-2	Freon 123	ND	ug/m3	530	270	130	
354-23-4	Freon 123a	ND	ug/m3	530	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	530	270	120	
142-82-5	Heptane	ND	ug/m3	530	270	85	
87-68-3	Hexachlorobutadiene	ND	ug/m3	530	270	95	
110-54-3	Hexane	ND	ug/m3	530	270	90	
179601-23-	m,p-Xylene	ND	ug/m3	530	530	150	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	530	270	80	
75-09-2	Methylene Chloride	93	ug/m3	530	270	80	J
95-47-6	o-Xylene	ND	ug/m3	530	270	74	
103-65-1	Propylbenzene	ND	ug/m3	530	270	80	
100-42-5	Styrene	ND	ug/m3	530	270	80	
127-18-4	Tetrachloroethene	ND	ug/m3	530	270	74	
109-99-9	Tetrahydrofuran	ND	ug/m3	530	270	120	
108-88-3	Toluene	ND	ug/m3	530	270	85	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	530	270	90	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	530	270	85	
79-01-6	Trichloroethene	530	ug/m3	530	270	80	
75-01-4	Vinyl Chloride	ND	ug/m3	530	270	100	

Sample 1203221728 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	3360	1700	540	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	3360	1700	540	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	3360	1700	540	
75-34-3	1,1-Dichloroethane	ND	ug/m3	3360	1700	570	
75-35-4	1,1-Dichloroethene	ND	ug/m3	3360	1700	570	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	3360	1700	810	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	3360	1700	540	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	3360	1700	500	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	3360	1700	570	
107-06-2	1,2-Dichloroethane	ND	ug/m3	3360	1700	640	
78-87-5	1,2-Dichloropropane	ND	ug/m3	3360	1700	570	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	3360	1700	570	
106-99-0	1,3-Butadiene	ND	ug/m3	3360	1700	710	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	3360	1700	570	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	3360	1700	540	
123-91-1	1,4-Dioxane	ND	ug/m3	3360	1700	570	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	3360	1700	570	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	3360	17000	770	
591-78-6	2-Hexanone	ND	ug/m3	3360	1700	600	
67-63-0	2-Propanol	ND	ug/m3	3360	3400	1300	
107-05-1	3-Chloropropene	ND	ug/m3	3360	1700	540	

622-96-8	4-Ethyltoluene	ND	ug/m3	3360	1700	570	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	3360	1700	470	
67-64-1	Acetone	ND	ug/m3	3360	17000	3000	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	3360	1700	500	
71-43-2	Benzene	ND	ug/m3	3360	1700	470	
75-27-4	Bromodichloromethane	ND	ug/m3	3360	1700	540	
75-25-2	Bromoform	ND	ug/m3	3360	1700	470	
74-83-9	Bromomethane	ND	ug/m3	3360	1700	640	
75-15-0	Carbon Disulfide	ND	ug/m3	3360	17000	500	
56-23-5	Carbon Tetrachloride	ND	ug/m3	3360	1700	540	
108-90-7	Chlorobenzene	ND	ug/m3	3360	1700	540	
75-00-3	Chloroethane	ND	ug/m3	3360	1700	640	
67-66-3	Chloroform	ND	ug/m3	3360	1700	640	
74-87-3	Chloromethane	ND	ug/m3	3360	1700	640	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	3360	1700	600	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	3360	1700	470	
98-82-8	Cumene	ND	ug/m3	3360	1700	500	
110-82-7	Cyclohexane	ND	ug/m3	3360	3400	1100	
124-48-1	Dibromochloromethane	ND	ug/m3	3360	1700	470	
64-17-5	Ethanol	ND	ug/m3	3360	17000	5400	
100-41-4	Ethyl Benzene	ND	ug/m3	3360	1700	500	
75-69-4	Freon 11	1100	ug/m3	3360	1700	540	J
76-13-1	Freon 113	310000	ug/m3	3360	1700	540	
76-14-2	Freon 114	ND	ug/m3	3360	1700	570	
75-71-8	Freon 12	ND	ug/m3	3360	1700	600	
306-83-2	Freon 123	ND	ug/m3	3360	1700	810	
354-23-4	Freon 123a	ND	ug/m3	3360	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	3360	1700	770	
142-82-5	Heptane	ND	ug/m3	3360	1700	540	
87-68-3	Hexachlorobutadiene	ND	ug/m3	3360	1700	600	
110-54-3	Hexane	ND	ug/m3	3360	1700	570	
179601-23-	m,p-Xylene	ND	ug/m3	3360	3400	970	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	3360	1700	500	
75-09-2	Methylene Chloride	570	ug/m3	3360	1700	500	J
95-47-6	o-Xylene	ND	ug/m3	3360	1700	470	
103-65-1	Propylbenzene	ND	ug/m3	3360	1700	500	
100-42-5	Styrene	ND	ug/m3	3360	1700	500	
127-18-4	Tetrachloroethene	ND	ug/m3	3360	1700	470	
109-99-9	Tetrahydrofuran	ND	ug/m3	3360	1700	740	
108-88-3	Toluene	ND	ug/m3	3360	1700	540	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	3360	1700	570	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	3360	1700	540	
79-01-6	Trichloroethene	2700	ug/m3	3360	1700	500	
75-01-4	Vinyl Chloride	ND	ug/m3	3360	1700	640	

Sample **1203231003** **Sample Type** **Soil Gas** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	2342.86	1200	370	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	2342.86	1200	370	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	2342.86	1200	370	
75-34-3	1,1-Dichloroethane	ND	ug/m3	2342.86	1200	400	
75-35-4	1,1-Dichloroethene	ND	ug/m3	2342.86	1200	400	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	2342.86	1200	560	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	2342.86	1200	370	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	2342.86	1200	350	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	2342.86	1200	400	
107-06-2	1,2-Dichloroethane	ND	ug/m3	2342.86	1200	450	
78-87-5	1,2-Dichloropropane	ND	ug/m3	2342.86	1200	400	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	2342.86	1200	400	
106-99-0	1,3-Butadiene	ND	ug/m3	2342.86	1200	490	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	2342.86	1200	400	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	2342.86	1200	370	
123-91-1	1,4-Dioxane	ND	ug/m3	2342.86	1200	400	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	2342.86	1200	400	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	2342.86	12000	540	
591-78-6	2-Hexanone	ND	ug/m3	2342.86	1200	420	
67-63-0	2-Propanol	ND	ug/m3	2342.86	2300	940	
107-05-1	3-Chloropropene	ND	ug/m3	2342.86	1200	370	
622-96-8	4-Ethyltoluene	ND	ug/m3	2342.86	1200	400	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	2342.86	1200	330	
67-64-1	Acetone	ND	ug/m3	2342.86	12000	2100	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	2342.86	1200	350	
71-43-2	Benzene	ND	ug/m3	2342.86	1200	330	
75-27-4	Bromodichloromethane	ND	ug/m3	2342.86	1200	370	
75-25-2	Bromoform	ND	ug/m3	2342.86	1200	330	
74-83-9	Bromomethane	ND	ug/m3	2342.86	1200	450	
75-15-0	Carbon Disulfide	ND	ug/m3	2342.86	12000	350	
56-23-5	Carbon Tetrachloride	ND	ug/m3	2342.86	1200	370	
108-90-7	Chlorobenzene	ND	ug/m3	2342.86	1200	370	
75-00-3	Chloroethane	ND	ug/m3	2342.86	1200	450	
67-66-3	Chloroform	ND	ug/m3	2342.86	1200	450	
74-87-3	Chloromethane	ND	ug/m3	2342.86	1200	450	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	2342.86	1200	420	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	2342.86	1200	330	
98-82-8	Cumene	ND	ug/m3	2342.86	1200	350	
110-82-7	Cyclohexane	ND	ug/m3	2342.86	2300	770	
124-48-1	Dibromochloromethane	ND	ug/m3	2342.86	1200	330	
64-17-5	Ethanol	ND	ug/m3	2342.86	12000	3700	
100-41-4	Ethyl Benzene	ND	ug/m3	2342.86	1200	350	
75-69-4	Freon 11	1000	ug/m3	2342.86	1200	370	J

76-13-1	Freon 113	240000	ug/m3	2342.86	1200	370	
76-14-2	Freon 114	ND	ug/m3	2342.86	1200	400	
75-71-8	Freon 12	ND	ug/m3	2342.86	1200	420	
306-83-2	Freon 123	ND	ug/m3	2342.86	1200	560	
354-23-4	Freon 123a	ND	ug/m3	2342.86	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	2342.86	1200	540	
142-82-5	Heptane	ND	ug/m3	2342.86	1200	370	
87-68-3	Hexachlorobutadiene	ND	ug/m3	2342.86	1200	420	
110-54-3	Hexane	ND	ug/m3	2342.86	1200	400	
179601-23-	m,p-Xylene	ND	ug/m3	2342.86	2300	680	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	2342.86	1200	350	
75-09-2	Methylene Chloride	420	ug/m3	2342.86	1200	350	J
95-47-6	o-Xylene	ND	ug/m3	2342.86	1200	330	
103-65-1	Propylbenzene	ND	ug/m3	2342.86	1200	350	
100-42-5	Styrene	ND	ug/m3	2342.86	1200	350	
127-18-4	Tetrachloroethene	ND	ug/m3	2342.86	1200	330	
109-99-9	Tetrahydrofuran	ND	ug/m3	2342.86	1200	520	
108-88-3	Toluene	ND	ug/m3	2342.86	1200	370	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	2342.86	1200	400	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	2342.86	1200	370	
79-01-6	Trichloroethene	3200	ug/m3	2342.86	1200	350	
75-01-4	Vinyl Chloride	ND	ug/m3	2342.86	1200	450	

Sample 1203231814 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	2850	1400	460	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	2850	1400	460	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	2850	1400	460	
75-34-3	1,1-Dichloroethane	ND	ug/m3	2850	1400	480	
75-35-4	1,1-Dichloroethene	ND	ug/m3	2850	1400	480	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	2850	1400	680	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	2850	1400	460	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	2850	1400	430	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	2850	1400	480	
107-06-2	1,2-Dichloroethane	ND	ug/m3	2850	1400	540	
78-87-5	1,2-Dichloropropane	ND	ug/m3	2850	1400	480	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	2850	1400	480	
106-99-0	1,3-Butadiene	ND	ug/m3	2850	1400	600	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	2850	1400	480	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	2850	1400	460	
123-91-1	1,4-Dioxane	ND	ug/m3	2850	1400	480	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	2850	1400	480	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	2850	14000	660	
591-78-6	2-Hexanone	ND	ug/m3	2850	1400	510	
67-63-0	2-Propanol	ND	ug/m3	2850	2900	1100	
107-05-1	3-Chloropropene	ND	ug/m3	2850	1400	460	

622-96-8	4-Ethyltoluene	ND	ug/m3	2850	1400	480	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	2850	1400	400	
67-64-1	Acetone	ND	ug/m3	2850	14000	2500	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	2850	1400	430	
71-43-2	Benzene	ND	ug/m3	2850	1400	400	
75-27-4	Bromodichloromethane	ND	ug/m3	2850	1400	460	
75-25-2	Bromoform	ND	ug/m3	2850	1400	400	
74-83-9	Bromomethane	ND	ug/m3	2850	1400	540	
75-15-0	Carbon Disulfide	ND	ug/m3	2850	14000	430	
56-23-5	Carbon Tetrachloride	ND	ug/m3	2850	1400	460	
108-90-7	Chlorobenzene	ND	ug/m3	2850	1400	460	
75-00-3	Chloroethane	ND	ug/m3	2850	1400	540	
67-66-3	Chloroform	ND	ug/m3	2850	1400	540	
74-87-3	Chloromethane	ND	ug/m3	2850	1400	540	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	2850	1400	510	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	2850	1400	400	
98-82-8	Cumene	ND	ug/m3	2850	1400	430	
110-82-7	Cyclohexane	ND	ug/m3	2850	2900	940	
124-48-1	Dibromochloromethane	ND	ug/m3	2850	1400	400	
64-17-5	Ethanol	ND	ug/m3	2850	14000	4600	
100-41-4	Ethyl Benzene	ND	ug/m3	2850	1400	430	
75-69-4	Freon 11	1100	ug/m3	2850	1400	460	J
76-13-1	Freon 113	250000	ug/m3	2850	1400	460	
76-14-2	Freon 114	ND	ug/m3	2850	1400	480	
75-71-8	Freon 12	ND	ug/m3	2850	1400	510	
306-83-2	Freon 123	ND	ug/m3	2850	1400	680	
354-23-4	Freon 123a	ND	ug/m3	2850	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	2850	1400	660	
142-82-5	Heptane	ND	ug/m3	2850	1400	460	
87-68-3	Hexachlorobutadiene	ND	ug/m3	2850	1400	510	
110-54-3	Hexane	ND	ug/m3	2850	1400	480	
179601-23-	m,p-Xylene	ND	ug/m3	2850	2900	830	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	2850	1400	430	
75-09-2	Methylene Chloride	460	ug/m3	2850	1400	430	J
95-47-6	o-Xylene	ND	ug/m3	2850	1400	400	
103-65-1	Propylbenzene	ND	ug/m3	2850	1400	430	
100-42-5	Styrene	ND	ug/m3	2850	1400	430	
127-18-4	Tetrachloroethene	ND	ug/m3	2850	1400	400	
109-99-9	Tetrahydrofuran	ND	ug/m3	2850	1400	630	
108-88-3	Toluene	ND	ug/m3	2850	1400	460	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	2850	1400	480	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	2850	1400	460	
79-01-6	Trichloroethene	3700	ug/m3	2850	1400	430	
75-01-4	Vinyl Chloride	ND	ug/m3	2850	1400	540	

Sample **1203241453** **Sample Type** **Soil Gas** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	3500	1800	560	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	3500	1800	560	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	3500	1800	560	
75-34-3	1,1-Dichloroethane	ND	ug/m3	3500	1800	600	
75-35-4	1,1-Dichloroethene	ND	ug/m3	3500	1800	600	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	3500	1800	840	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	3500	1800	560	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	3500	1800	530	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	3500	1800	600	
107-06-2	1,2-Dichloroethane	ND	ug/m3	3500	1800	670	
78-87-5	1,2-Dichloropropane	ND	ug/m3	3500	1800	600	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	3500	1800	600	
106-99-0	1,3-Butadiene	ND	ug/m3	3500	1800	740	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	3500	1800	600	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	3500	1800	560	
123-91-1	1,4-Dioxane	ND	ug/m3	3500	1800	600	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	3500	1800	600	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	3500	18000	810	
591-78-6	2-Hexanone	ND	ug/m3	3500	1800	630	
67-63-0	2-Propanol	ND	ug/m3	3500	3500	1400	
107-05-1	3-Chloropropene	ND	ug/m3	3500	1800	560	
622-96-8	4-Ethyltoluene	ND	ug/m3	3500	1800	600	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	3500	1800	490	
67-64-1	Acetone	ND	ug/m3	3500	18000	3100	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	3500	1800	530	
71-43-2	Benzene	ND	ug/m3	3500	1800	490	
75-27-4	Bromodichloromethane	ND	ug/m3	3500	1800	560	
75-25-2	Bromoform	ND	ug/m3	3500	1800	490	
74-83-9	Bromomethane	ND	ug/m3	3500	1800	670	
75-15-0	Carbon Disulfide	ND	ug/m3	3500	18000	530	
56-23-5	Carbon Tetrachloride	ND	ug/m3	3500	1800	560	
108-90-7	Chlorobenzene	ND	ug/m3	3500	1800	560	
75-00-3	Chloroethane	ND	ug/m3	3500	1800	670	
67-66-3	Chloroform	ND	ug/m3	3500	1800	670	
74-87-3	Chloromethane	ND	ug/m3	3500	1800	670	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	3500	1800	630	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	3500	1800	490	
98-82-8	Cumene	ND	ug/m3	3500	1800	530	
110-82-7	Cyclohexane	ND	ug/m3	3500	3500	1200	
124-48-1	Dibromochloromethane	ND	ug/m3	3500	1800	490	
64-17-5	Ethanol	ND	ug/m3	3500	18000	5600	
100-41-4	Ethyl Benzene	ND	ug/m3	3500	1800	530	
75-69-4	Freon 11	1100	ug/m3	3500	1800	560	J

76-13-1	Freon 113	300000	ug/m3	3500	1800	560	
76-14-2	Freon 114	ND	ug/m3	3500	1800	600	
75-71-8	Freon 12	ND	ug/m3	3500	1800	630	
306-83-2	Freon 123	ND	ug/m3	3500	1800	840	
354-23-4	Freon 123a	ND	ug/m3	3500	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	3500	1800	810	
142-82-5	Heptane	ND	ug/m3	3500	1800	560	
87-68-3	Hexachlorobutadiene	ND	ug/m3	3500	1800	630	
110-54-3	Hexane	ND	ug/m3	3500	1800	600	
179601-23-	m,p-Xylene	ND	ug/m3	3500	3500	1000	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	3500	1800	530	
75-09-2	Methylene Chloride	610	ug/m3	3500	1800	530	J
95-47-6	o-Xylene	ND	ug/m3	3500	1800	490	
103-65-1	Propylbenzene	ND	ug/m3	3500	1800	530	
100-42-5	Styrene	ND	ug/m3	3500	1800	530	
127-18-4	Tetrachloroethene	ND	ug/m3	3500	1800	490	
109-99-9	Tetrahydrofuran	ND	ug/m3	3500	1800	770	
108-88-3	Toluene	ND	ug/m3	3500	1800	560	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	3500	1800	600	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	3500	1800	560	
79-01-6	Trichloroethene	2600	ug/m3	3500	1800	530	
75-01-4	Vinyl Chloride	ND	ug/m3	3500	1800	670	

Sample 1203241454 Sample Type Soil Gas-D Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	4225	2100	680	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	4225	2100	680	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	4225	2100	680	
75-34-3	1,1-Dichloroethane	ND	ug/m3	4225	2100	720	
75-35-4	1,1-Dichloroethene	ND	ug/m3	4225	2100	720	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	4225	2100	1000	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	4225	2100	680	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	4225	2100	630	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	4225	2100	720	
107-06-2	1,2-Dichloroethane	ND	ug/m3	4225	2100	800	
78-87-5	1,2-Dichloropropane	ND	ug/m3	4225	2100	720	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	4225	2100	720	
106-99-0	1,3-Butadiene	ND	ug/m3	4225	2100	890	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	4225	2100	720	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	4225	2100	680	
123-91-1	1,4-Dioxane	ND	ug/m3	4225	2100	720	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	4225	2100	720	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	4225	21000	970	
591-78-6	2-Hexanone	ND	ug/m3	4225	2100	760	
67-63-0	2-Propanol	ND	ug/m3	4225	4200	1700	
107-05-1	3-Chloropropene	ND	ug/m3	4225	2100	680	

622-96-8	4-Ethyltoluene	ND	ug/m3	4225	2100	720	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	4225	2100	590	
67-64-1	Acetone	ND	ug/m3	4225	21000	3700	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	4225	2100	630	
71-43-2	Benzene	ND	ug/m3	4225	2100	590	
75-27-4	Bromodichloromethane	ND	ug/m3	4225	2100	680	
75-25-2	Bromoform	ND	ug/m3	4225	2100	590	
74-83-9	Bromomethane	ND	ug/m3	4225	2100	800	
75-15-0	Carbon Disulfide	ND	ug/m3	4225	21000	630	
56-23-5	Carbon Tetrachloride	ND	ug/m3	4225	2100	680	
108-90-7	Chlorobenzene	ND	ug/m3	4225	2100	680	
75-00-3	Chloroethane	ND	ug/m3	4225	2100	800	
67-66-3	Chloroform	ND	ug/m3	4225	2100	800	
74-87-3	Chloromethane	ND	ug/m3	4225	2100	800	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	4225	2100	760	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	4225	2100	590	
98-82-8	Cumene	ND	ug/m3	4225	2100	630	
110-82-7	Cyclohexane	ND	ug/m3	4225	4200	1400	
124-48-1	Dibromochloromethane	ND	ug/m3	4225	2100	590	
64-17-5	Ethanol	ND	ug/m3	4225	21000	6800	
100-41-4	Ethyl Benzene	ND	ug/m3	4225	2100	630	
75-69-4	Freon 11	1100	ug/m3	4225	2100	680	J
76-13-1	Freon 113	290000	ug/m3	4225	2100	680	
76-14-2	Freon 114	ND	ug/m3	4225	2100	720	
75-71-8	Freon 12	ND	ug/m3	4225	2100	760	
306-83-2	Freon 123	ND	ug/m3	4225	2100	1000	
354-23-4	Freon 123a	ND	ug/m3	4225	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	4225	2100	970	
142-82-5	Heptane	ND	ug/m3	4225	2100	680	
87-68-3	Hexachlorobutadiene	ND	ug/m3	4225	2100	760	
110-54-3	Hexane	ND	ug/m3	4225	2100	720	
179601-23-	m,p-Xylene	ND	ug/m3	4225	4200	1200	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	4225	2100	630	
75-09-2	Methylene Chloride	720	ug/m3	4225	2100	630	J
95-47-6	o-Xylene	ND	ug/m3	4225	2100	590	
103-65-1	Propylbenzene	ND	ug/m3	4225	2100	630	
100-42-5	Styrene	ND	ug/m3	4225	2100	630	
127-18-4	Tetrachloroethene	ND	ug/m3	4225	2100	590	
109-99-9	Tetrahydrofuran	ND	ug/m3	4225	2100	930	
108-88-3	Toluene	ND	ug/m3	4225	2100	680	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	4225	2100	720	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	4225	2100	680	
79-01-6	Trichloroethene	2600	ug/m3	4225	2100	630	
75-01-4	Vinyl Chloride	ND	ug/m3	4225	2100	800	

Borehole	600-SGW-4	Depth (ft)	12.5	Depth (m)	3.81	Event Date	3/22/2012

Sample	1203220918	Sample Type	Soil Gas	Analysis Method	TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	162	81	26	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	162	81	26	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	162	81	26	
75-34-3	1,1-Dichloroethane	ND	ug/m3	162	81	28	
75-35-4	1,1-Dichloroethene	ND	ug/m3	162	81	28	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	162	81	39	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	162	81	26	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	162	81	24	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	162	81	28	
107-06-2	1,2-Dichloroethane	ND	ug/m3	162	81	31	
78-87-5	1,2-Dichloropropane	ND	ug/m3	162	81	28	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	162	81	28	
106-99-0	1,3-Butadiene	ND	ug/m3	162	81	34	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	162	81	28	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	162	81	26	
123-91-1	1,4-Dioxane	ND	ug/m3	162	81	28	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	162	81	28	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	162	810	37	
591-78-6	2-Hexanone	ND	ug/m3	162	81	29	
67-63-0	2-Propanol	ND	ug/m3	162	160	65	
107-05-1	3-Chloropropene	ND	ug/m3	162	81	26	
622-96-8	4-Ethyltoluene	ND	ug/m3	162	81	28	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	162	81	23	
67-64-1	Acetone	ND	ug/m3	162	810	140	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	162	81	24	
71-43-2	Benzene	ND	ug/m3	162	81	23	
75-27-4	Bromodichloromethane	ND	ug/m3	162	81	26	
75-25-2	Bromoform	ND	ug/m3	162	81	23	
74-83-9	Bromomethane	ND	ug/m3	162	81	31	
75-15-0	Carbon Disulfide	ND	ug/m3	162	810	24	
56-23-5	Carbon Tetrachloride	ND	ug/m3	162	81	26	
108-90-7	Chlorobenzene	ND	ug/m3	162	81	26	
75-00-3	Chloroethane	ND	ug/m3	162	81	31	
67-66-3	Chloroform	ND	ug/m3	162	81	31	
74-87-3	Chloromethane	ND	ug/m3	162	81	31	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	162	81	29	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	162	81	23	
98-82-8	Cumene	ND	ug/m3	162	81	24	
110-82-7	Cyclohexane	ND	ug/m3	162	160	53	
124-48-1	Dibromochloromethane	ND	ug/m3	162	81	23	
64-17-5	Ethanol	ND	ug/m3	162	810	260	

100-41-4	Ethyl Benzene	ND	ug/m3	162	81	24	
75-69-4	Freon 11	ND	ug/m3	162	81	26	
76-13-1	Freon 113	11000	ug/m3	162	81	26	
76-14-2	Freon 114	ND	ug/m3	162	81	28	
75-71-8	Freon 12	ND	ug/m3	162	81	29	
306-83-2	Freon 123	ND	ug/m3	162	81	39	
354-23-4	Freon 123a	630	ug/m3	162	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	162	81	37	
142-82-5	Heptane	ND	ug/m3	162	81	26	
87-68-3	Hexachlorobutadiene	ND	ug/m3	162	81	29	
110-54-3	Hexane	ND	ug/m3	162	81	28	
179601-23-	m,p-Xylene	ND	ug/m3	162	160	47	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	162	81	24	
75-09-2	Methylene Chloride	54	ug/m3	162	81	24	J
95-47-6	o-Xylene	ND	ug/m3	162	81	23	
103-65-1	Propylbenzene	ND	ug/m3	162	81	24	
100-42-5	Styrene	ND	ug/m3	162	81	24	
127-18-4	Tetrachloroethene	ND	ug/m3	162	81	23	
109-99-9	Tetrahydrofuran	ND	ug/m3	162	81	36	
108-88-3	Toluene	ND	ug/m3	162	81	26	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	162	81	28	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	162	81	26	
79-01-6	Trichloroethene	360	ug/m3	162	81	24	
75-01-4	Vinyl Chloride	ND	ug/m3	162	81	31	

Sample 1203241455 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	168	84	27	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	168	84	27	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	168	84	27	
75-34-3	1,1-Dichloroethane	ND	ug/m3	168	84	29	
75-35-4	1,1-Dichloroethene	ND	ug/m3	168	84	29	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	168	84	40	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	168	84	27	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	168	84	25	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	168	84	29	
107-06-2	1,2-Dichloroethane	ND	ug/m3	168	84	32	
78-87-5	1,2-Dichloropropane	ND	ug/m3	168	84	29	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	168	84	29	
106-99-0	1,3-Butadiene	ND	ug/m3	168	84	35	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	168	84	29	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	168	84	27	
123-91-1	1,4-Dioxane	ND	ug/m3	168	84	29	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	168	84	29	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	168	840	39	
591-78-6	2-Hexanone	ND	ug/m3	168	84	30	

67-63-0	2-Propanol	ND	ug/m3	168	170	67	
107-05-1	3-Chloropropene	ND	ug/m3	168	84	27	
622-96-8	4-Ethyltoluene	ND	ug/m3	168	84	29	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	168	84	24	
67-64-1	Acetone	ND	ug/m3	168	840	150	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	168	84	25	
71-43-2	Benzene	ND	ug/m3	168	84	24	
75-27-4	Bromodichloromethane	ND	ug/m3	168	84	27	
75-25-2	Bromoform	ND	ug/m3	168	84	24	
74-83-9	Bromomethane	ND	ug/m3	168	84	32	
75-15-0	Carbon Disulfide	ND	ug/m3	168	840	25	
56-23-5	Carbon Tetrachloride	ND	ug/m3	168	84	27	
108-90-7	Chlorobenzene	ND	ug/m3	168	84	27	
75-00-3	Chloroethane	ND	ug/m3	168	84	32	
67-66-3	Chloroform	ND	ug/m3	168	84	32	
74-87-3	Chloromethane	ND	ug/m3	168	84	32	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	168	84	30	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	168	84	24	
98-82-8	Cumene	ND	ug/m3	168	84	25	
110-82-7	Cyclohexane	ND	ug/m3	168	170	55	
124-48-1	Dibromochloromethane	ND	ug/m3	168	84	24	
64-17-5	Ethanol	ND	ug/m3	168	840	270	
100-41-4	Ethyl Benzene	ND	ug/m3	168	84	25	
75-69-4	Freon 11	ND	ug/m3	168	84	27	
76-13-1	Freon 113	11000	ug/m3	168	84	27	
76-14-2	Freon 114	ND	ug/m3	168	84	29	
75-71-8	Freon 12	ND	ug/m3	168	84	30	
306-83-2	Freon 123	ND	ug/m3	168	84	40	
354-23-4	Freon 123a	600	ug/m3	168	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	168	84	39	
142-82-5	Heptane	ND	ug/m3	168	84	27	
87-68-3	Hexachlorobutadiene	ND	ug/m3	168	84	30	
110-54-3	Hexane	ND	ug/m3	168	84	29	
179601-23-	m,p-Xylene	ND	ug/m3	168	170	49	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	168	84	25	
75-09-2	Methylene Chloride	53	ug/m3	168	84	25	J
95-47-6	o-Xylene	ND	ug/m3	168	84	24	
103-65-1	Propylbenzene	ND	ug/m3	168	84	25	
100-42-5	Styrene	ND	ug/m3	168	84	25	
127-18-4	Tetrachloroethene	ND	ug/m3	168	84	24	
109-99-9	Tetrahydrofuran	ND	ug/m3	168	84	37	
108-88-3	Toluene	ND	ug/m3	168	84	27	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	168	84	29	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	168	84	27	
79-01-6	Trichloroethene	350	ug/m3	168	84	25	
75-01-4	Vinyl Chloride	ND	ug/m3	168	84	32	

Borehole	600-SGW-4	Depth (ft)	47.5	Depth (m)	14.48	Event Date	3/22/2012

Sample	1203220922	Sample Type	Soil Gas	Analysis Method	TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	106	53	17	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	106	53	17	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	106	53	17	
75-34-3	1,1-Dichloroethane	ND	ug/m3	106	53	18	
75-35-4	1,1-Dichloroethene	ND	ug/m3	106	53	18	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	106	53	25	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	106	53	17	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	106	53	16	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	106	53	18	
107-06-2	1,2-Dichloroethane	ND	ug/m3	106	53	20	
78-87-5	1,2-Dichloropropane	ND	ug/m3	106	53	18	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	106	53	18	
106-99-0	1,3-Butadiene	ND	ug/m3	106	53	22	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	106	53	18	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	106	53	17	
123-91-1	1,4-Dioxane	ND	ug/m3	106	53	18	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	106	53	18	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	106	530	24	
591-78-6	2-Hexanone	ND	ug/m3	106	53	19	
67-63-0	2-Propanol	ND	ug/m3	106	110	42	
107-05-1	3-Chloropropene	ND	ug/m3	106	53	17	
622-96-8	4-Ethyltoluene	ND	ug/m3	106	53	18	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	106	53	15	
67-64-1	Acetone	ND	ug/m3	106	530	93	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	106	53	16	
71-43-2	Benzene	ND	ug/m3	106	53	15	
75-27-4	Bromodichloromethane	ND	ug/m3	106	53	17	
75-25-2	Bromoform	ND	ug/m3	106	53	15	
74-83-9	Bromomethane	ND	ug/m3	106	53	20	
75-15-0	Carbon Disulfide	ND	ug/m3	106	530	16	
56-23-5	Carbon Tetrachloride	ND	ug/m3	106	53	17	
108-90-7	Chlorobenzene	ND	ug/m3	106	53	17	
75-00-3	Chloroethane	ND	ug/m3	106	53	20	
67-66-3	Chloroform	ND	ug/m3	106	53	20	
74-87-3	Chloromethane	ND	ug/m3	106	53	20	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	106	53	19	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	106	53	15	
98-82-8	Cumene	ND	ug/m3	106	53	16	
110-82-7	Cyclohexane	ND	ug/m3	106	110	35	
124-48-1	Dibromochloromethane	ND	ug/m3	106	53	15	
64-17-5	Ethanol	ND	ug/m3	106	530	170	

100-41-4	Ethyl Benzene	ND	ug/m3	106	53	16	
75-69-4	Freon 11	ND	ug/m3	106	53	17	
76-13-1	Freon 113	8900	ug/m3	318	160	51	D
76-14-2	Freon 114	ND	ug/m3	106	53	18	
75-71-8	Freon 12	ND	ug/m3	106	53	19	
306-83-2	Freon 123	ND	ug/m3	106	53	25	
354-23-4	Freon 123a	420	ug/m3	106	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	106	53	24	
142-82-5	Heptane	ND	ug/m3	106	53	17	
87-68-3	Hexachlorobutadiene	ND	ug/m3	106	53	19	
110-54-3	Hexane	ND	ug/m3	106	53	18	
179601-23-	m,p-Xylene	ND	ug/m3	106	110	31	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	106	53	16	
75-09-2	Methylene Chloride	24	ug/m3	106	53	16	J
95-47-6	o-Xylene	ND	ug/m3	106	53	15	
103-65-1	Propylbenzene	ND	ug/m3	106	53	16	
100-42-5	Styrene	ND	ug/m3	106	53	16	
127-18-4	Tetrachloroethene	ND	ug/m3	106	53	15	
109-99-9	Tetrahydrofuran	ND	ug/m3	106	53	23	
108-88-3	Toluene	ND	ug/m3	106	53	17	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	106	53	18	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	106	53	17	
79-01-6	Trichloroethene	610	ug/m3	106	53	16	
75-01-4	Vinyl Chloride	ND	ug/m3	106	53	20	

Sample 1203241456 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	107.33	54	17	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	107.33	54	17	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	107.33	54	17	
75-34-3	1,1-Dichloroethane	ND	ug/m3	107.33	54	18	
75-35-4	1,1-Dichloroethene	ND	ug/m3	107.33	54	18	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	107.33	54	26	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	107.33	54	17	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	107.33	54	16	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	107.33	54	18	
107-06-2	1,2-Dichloroethane	ND	ug/m3	107.33	54	20	
78-87-5	1,2-Dichloropropane	ND	ug/m3	107.33	54	18	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	107.33	54	18	
106-99-0	1,3-Butadiene	ND	ug/m3	107.33	54	23	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	107.33	54	18	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	107.33	54	17	
123-91-1	1,4-Dioxane	ND	ug/m3	107.33	54	18	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	107.33	54	18	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	107.33	540	25	
591-78-6	2-Hexanone	ND	ug/m3	107.33	54	19	

67-63-0	2-Propanol	ND	ug/m3	107.33	110	43	
107-05-1	3-Chloropropene	ND	ug/m3	107.33	54	17	
622-96-8	4-Ethyltoluene	ND	ug/m3	107.33	54	18	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	107.33	54	15	
67-64-1	Acetone	ND	ug/m3	107.33	540	94	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	107.33	54	16	
71-43-2	Benzene	ND	ug/m3	107.33	54	15	
75-27-4	Bromodichloromethane	ND	ug/m3	107.33	54	17	
75-25-2	Bromoform	ND	ug/m3	107.33	54	15	
74-83-9	Bromomethane	ND	ug/m3	107.33	54	20	
75-15-0	Carbon Disulfide	ND	ug/m3	107.33	540	16	
56-23-5	Carbon Tetrachloride	ND	ug/m3	107.33	54	17	
108-90-7	Chlorobenzene	ND	ug/m3	107.33	54	17	
75-00-3	Chloroethane	ND	ug/m3	107.33	54	20	
67-66-3	Chloroform	ND	ug/m3	107.33	54	20	
74-87-3	Chloromethane	ND	ug/m3	107.33	54	20	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	107.33	54	19	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	107.33	54	15	
98-82-8	Cumene	ND	ug/m3	107.33	54	16	
110-82-7	Cyclohexane	ND	ug/m3	107.33	110	35	
124-48-1	Dibromochloromethane	ND	ug/m3	107.33	54	15	
64-17-5	Ethanol	ND	ug/m3	107.33	540	170	
100-41-4	Ethyl Benzene	ND	ug/m3	107.33	54	16	
75-69-4	Freon 11	ND	ug/m3	107.33	54	17	
76-13-1	Freon 113	9100	ug/m3	322	160	52	D
76-14-2	Freon 114	ND	ug/m3	107.33	54	18	
75-71-8	Freon 12	ND	ug/m3	107.33	54	19	
306-83-2	Freon 123	ND	ug/m3	107.33	54	26	
354-23-4	Freon 123a	410	ug/m3	107.33	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	107.33	54	25	
142-82-5	Heptane	ND	ug/m3	107.33	54	17	
87-68-3	Hexachlorobutadiene	ND	ug/m3	107.33	54	19	
110-54-3	Hexane	ND	ug/m3	107.33	54	18	
179601-23-	m,p-Xylene	ND	ug/m3	107.33	110	31	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	107.33	54	16	
75-09-2	Methylene Chloride	24	ug/m3	107.33	54	16	J
95-47-6	o-Xylene	ND	ug/m3	107.33	54	15	
103-65-1	Propylbenzene	ND	ug/m3	107.33	54	16	
100-42-5	Styrene	ND	ug/m3	107.33	54	16	
127-18-4	Tetrachloroethene	ND	ug/m3	107.33	54	15	
109-99-9	Tetrahydrofuran	ND	ug/m3	107.33	54	24	
108-88-3	Toluene	ND	ug/m3	107.33	54	17	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	107.33	54	18	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	107.33	54	17	
79-01-6	Trichloroethene	580	ug/m3	107.33	54	16	
75-01-4	Vinyl Chloride	ND	ug/m3	107.33	54	20	

Sample **1203241457** **Sample Type** **Soil Gas-D** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	113.33	57	18	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	113.33	57	18	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	113.33	57	18	
75-34-3	1,1-Dichloroethane	ND	ug/m3	113.33	57	19	
75-35-4	1,1-Dichloroethene	ND	ug/m3	113.33	57	19	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	113.33	57	27	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	113.33	57	18	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	113.33	57	17	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	113.33	57	19	
107-06-2	1,2-Dichloroethane	ND	ug/m3	113.33	57	22	
78-87-5	1,2-Dichloropropane	ND	ug/m3	113.33	57	19	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	113.33	57	19	
106-99-0	1,3-Butadiene	ND	ug/m3	113.33	57	24	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	113.33	57	19	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	113.33	57	18	
123-91-1	1,4-Dioxane	ND	ug/m3	113.33	57	19	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	113.33	57	19	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	113.33	570	26	
591-78-6	2-Hexanone	ND	ug/m3	113.33	57	20	
67-63-0	2-Propanol	ND	ug/m3	113.33	110	45	
107-05-1	3-Chloropropene	ND	ug/m3	113.33	57	18	
622-96-8	4-Ethyltoluene	ND	ug/m3	113.33	57	19	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	113.33	57	16	
67-64-1	Acetone	ND	ug/m3	113.33	570	100	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	113.33	57	17	
71-43-2	Benzene	ND	ug/m3	113.33	57	16	
75-27-4	Bromodichloromethane	ND	ug/m3	113.33	57	18	
75-25-2	Bromoform	ND	ug/m3	113.33	57	16	
74-83-9	Bromomethane	ND	ug/m3	113.33	57	22	
75-15-0	Carbon Disulfide	ND	ug/m3	113.33	570	17	
56-23-5	Carbon Tetrachloride	ND	ug/m3	113.33	57	18	
108-90-7	Chlorobenzene	ND	ug/m3	113.33	57	18	
75-00-3	Chloroethane	ND	ug/m3	113.33	57	22	
67-66-3	Chloroform	ND	ug/m3	113.33	57	22	
74-87-3	Chloromethane	ND	ug/m3	113.33	57	22	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	113.33	57	20	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	113.33	57	16	
98-82-8	Cumene	ND	ug/m3	113.33	57	17	
110-82-7	Cyclohexane	ND	ug/m3	113.33	110	37	
124-48-1	Dibromochloromethane	ND	ug/m3	113.33	57	16	
64-17-5	Ethanol	ND	ug/m3	113.33	570	180	
100-41-4	Ethyl Benzene	ND	ug/m3	113.33	57	17	
75-69-4	Freon 11	ND	ug/m3	113.33	57	18	

76-13-1	Freon 113	9200	ug/m3	340	170	54	D
76-14-2	Freon 114	ND	ug/m3	113.33	57	19	
75-71-8	Freon 12	ND	ug/m3	113.33	57	20	
306-83-2	Freon 123	ND	ug/m3	113.33	57	27	
354-23-4	Freon 123a	440	ug/m3	113.33	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	113.33	57	26	
142-82-5	Heptane	ND	ug/m3	113.33	57	18	
87-68-3	Hexachlorobutadiene	ND	ug/m3	113.33	57	20	
110-54-3	Hexane	ND	ug/m3	113.33	57	19	
179601-23-	m,p-Xylene	ND	ug/m3	113.33	110	33	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	113.33	57	17	
75-09-2	Methylene Chloride	27	ug/m3	113.33	57	17	J
95-47-6	o-Xylene	ND	ug/m3	113.33	57	16	
103-65-1	Propylbenzene	ND	ug/m3	113.33	57	17	
100-42-5	Styrene	ND	ug/m3	113.33	57	17	
127-18-4	Tetrachloroethene	ND	ug/m3	113.33	57	16	
109-99-9	Tetrahydrofuran	ND	ug/m3	113.33	57	25	
108-88-3	Toluene	ND	ug/m3	113.33	57	18	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	113.33	57	19	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	113.33	57	18	
79-01-6	Trichloroethene	640	ug/m3	113.33	57	17	
75-01-4	Vinyl Chloride	ND	ug/m3	113.33	57	22	

Borehole	600-SGW-4	Depth (ft)	107.5	Depth (m)	32.76	Event Date	3/22/2012

Sample	1203220928	Sample Type	Soil Gas	Analysis Method	TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	104	52	17	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	104	52	17	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	104	52	17	
75-34-3	1,1-Dichloroethane	ND	ug/m3	104	52	18	
75-35-4	1,1-Dichloroethene	ND	ug/m3	104	52	18	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	104	52	25	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	104	52	17	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	104	52	16	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	104	52	18	
107-06-2	1,2-Dichloroethane	ND	ug/m3	104	52	20	
78-87-5	1,2-Dichloropropane	ND	ug/m3	104	52	18	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	104	52	18	
106-99-0	1,3-Butadiene	ND	ug/m3	104	52	22	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	104	52	18	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	104	52	17	
123-91-1	1,4-Dioxane	ND	ug/m3	104	52	18	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	104	52	18	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	104	520	24	
591-78-6	2-Hexanone	ND	ug/m3	104	52	19	
67-63-0	2-Propanol	ND	ug/m3	104	100	42	
107-05-1	3-Chloropropene	ND	ug/m3	104	52	17	
622-96-8	4-Ethyltoluene	ND	ug/m3	104	52	18	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	104	52	15	
67-64-1	Acetone	ND	ug/m3	104	520	92	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	104	52	16	
71-43-2	Benzene	ND	ug/m3	104	52	15	
75-27-4	Bromodichloromethane	ND	ug/m3	104	52	17	
75-25-2	Bromoform	ND	ug/m3	104	52	15	
74-83-9	Bromomethane	ND	ug/m3	104	52	20	
75-15-0	Carbon Disulfide	ND	ug/m3	104	520	16	
56-23-5	Carbon Tetrachloride	ND	ug/m3	104	52	17	
108-90-7	Chlorobenzene	ND	ug/m3	104	52	17	
75-00-3	Chloroethane	ND	ug/m3	104	52	20	
67-66-3	Chloroform	ND	ug/m3	104	52	20	
74-87-3	Chloromethane	ND	ug/m3	104	52	20	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	104	52	19	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	104	52	15	
98-82-8	Cumene	ND	ug/m3	104	52	16	
110-82-7	Cyclohexane	ND	ug/m3	104	100	34	
124-48-1	Dibromochloromethane	ND	ug/m3	104	52	15	
64-17-5	Ethanol	ND	ug/m3	104	520	170	

100-41-4	Ethyl Benzene	ND	ug/m3	104	52	16	
75-69-4	Freon 11	ND	ug/m3	104	52	17	
76-13-1	Freon 113	8700	ug/m3	312	160	50	D
76-14-2	Freon 114	ND	ug/m3	104	52	18	
75-71-8	Freon 12	ND	ug/m3	104	52	19	
306-83-2	Freon 123	ND	ug/m3	104	52	25	
354-23-4	Freon 123a	ND	ug/m3	104	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	104	52	24	
142-82-5	Heptane	ND	ug/m3	104	52	17	
87-68-3	Hexachlorobutadiene	ND	ug/m3	104	52	19	
110-54-3	Hexane	ND	ug/m3	104	52	18	
179601-23-	m,p-Xylene	ND	ug/m3	104	100	30	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	104	52	16	
75-09-2	Methylene Chloride	21	ug/m3	104	52	16	J
95-47-6	o-Xylene	ND	ug/m3	104	52	15	
103-65-1	Propylbenzene	ND	ug/m3	104	52	16	
100-42-5	Styrene	ND	ug/m3	104	52	16	
127-18-4	Tetrachloroethene	ND	ug/m3	104	52	15	
109-99-9	Tetrahydrofuran	ND	ug/m3	104	52	23	
108-88-3	Toluene	ND	ug/m3	104	52	17	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	104	52	18	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	104	52	17	
79-01-6	Trichloroethene	580	ug/m3	104	52	16	
75-01-4	Vinyl Chloride	ND	ug/m3	104	52	20	

Sample 1203241503 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	111.33	56	18	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	111.33	56	18	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	111.33	56	18	
75-34-3	1,1-Dichloroethane	ND	ug/m3	111.33	56	19	
75-35-4	1,1-Dichloroethene	ND	ug/m3	111.33	56	19	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	111.33	56	27	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	111.33	56	18	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	111.33	56	17	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	111.33	56	19	
107-06-2	1,2-Dichloroethane	ND	ug/m3	111.33	56	21	
78-87-5	1,2-Dichloropropane	ND	ug/m3	111.33	56	19	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	111.33	56	19	
106-99-0	1,3-Butadiene	ND	ug/m3	111.33	56	23	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	111.33	56	19	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	111.33	56	18	
123-91-1	1,4-Dioxane	ND	ug/m3	111.33	56	19	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	111.33	56	19	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	111.33	560	26	
591-78-6	2-Hexanone	ND	ug/m3	111.33	56	20	

67-63-0	2-Propanol	ND	ug/m3	111.33	110	45	
107-05-1	3-Chloropropene	ND	ug/m3	111.33	56	18	
622-96-8	4-Ethyltoluene	ND	ug/m3	111.33	56	19	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	111.33	56	16	
67-64-1	Acetone	ND	ug/m3	111.33	560	98	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	111.33	56	17	
71-43-2	Benzene	ND	ug/m3	111.33	56	16	
75-27-4	Bromodichloromethane	ND	ug/m3	111.33	56	18	
75-25-2	Bromoform	ND	ug/m3	111.33	56	16	
74-83-9	Bromomethane	ND	ug/m3	111.33	56	21	
75-15-0	Carbon Disulfide	ND	ug/m3	111.33	560	17	
56-23-5	Carbon Tetrachloride	ND	ug/m3	111.33	56	18	
108-90-7	Chlorobenzene	ND	ug/m3	111.33	56	18	
75-00-3	Chloroethane	ND	ug/m3	111.33	56	21	
67-66-3	Chloroform	ND	ug/m3	111.33	56	21	
74-87-3	Chloromethane	ND	ug/m3	111.33	56	21	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	111.33	56	20	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	111.33	56	16	
98-82-8	Cumene	ND	ug/m3	111.33	56	17	
110-82-7	Cyclohexane	ND	ug/m3	111.33	110	37	
124-48-1	Dibromochloromethane	ND	ug/m3	111.33	56	16	
64-17-5	Ethanol	ND	ug/m3	111.33	560	180	
100-41-4	Ethyl Benzene	ND	ug/m3	111.33	56	17	
75-69-4	Freon 11	ND	ug/m3	111.33	56	18	
76-13-1	Freon 113	9600	ug/m3	334	170	53	D
76-14-2	Freon 114	ND	ug/m3	111.33	56	19	
75-71-8	Freon 12	ND	ug/m3	111.33	56	20	
306-83-2	Freon 123	ND	ug/m3	111.33	56	27	
354-23-4	Freon 123a	ND	ug/m3	111.33	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	111.33	56	26	
142-82-5	Heptane	ND	ug/m3	111.33	56	18	
87-68-3	Hexachlorobutadiene	ND	ug/m3	111.33	56	20	
110-54-3	Hexane	ND	ug/m3	111.33	56	19	
179601-23-	m,p-Xylene	ND	ug/m3	111.33	110	32	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	111.33	56	17	
75-09-2	Methylene Chloride	22	ug/m3	111.33	56	17	J
95-47-6	o-Xylene	ND	ug/m3	111.33	56	16	
103-65-1	Propylbenzene	ND	ug/m3	111.33	56	17	
100-42-5	Styrene	ND	ug/m3	111.33	56	17	
127-18-4	Tetrachloroethene	ND	ug/m3	111.33	56	16	
109-99-9	Tetrahydrofuran	ND	ug/m3	111.33	56	24	
108-88-3	Toluene	ND	ug/m3	111.33	56	18	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	111.33	56	19	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	111.33	56	18	
79-01-6	Trichloroethene	620	ug/m3	111.33	56	17	
75-01-4	Vinyl Chloride	ND	ug/m3	111.33	56	21	

Borehole	600-SGW-4	Depth (ft)	142.5	Depth (m)	43.43	Event Date	3/22/2012

Sample	1203220936	Sample Type	Soil Gas	Analysis Method	TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	690	ug/m3	3200	1600	510	J
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	3200	1600	510	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	3200	1600	510	
75-34-3	1,1-Dichloroethane	ND	ug/m3	3200	1600	540	
75-35-4	1,1-Dichloroethene	ND	ug/m3	3200	1600	540	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	3200	1600	770	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	3200	1600	510	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	3200	1600	480	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	3200	1600	540	
107-06-2	1,2-Dichloroethane	ND	ug/m3	3200	1600	610	
78-87-5	1,2-Dichloropropane	ND	ug/m3	3200	1600	540	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	3200	1600	540	
106-99-0	1,3-Butadiene	ND	ug/m3	3200	1600	670	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	3200	1600	540	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	3200	1600	510	
123-91-1	1,4-Dioxane	ND	ug/m3	3200	1600	540	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	3200	1600	540	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	3200	16000	740	
591-78-6	2-Hexanone	ND	ug/m3	3200	1600	580	
67-63-0	2-Propanol	ND	ug/m3	3200	3200	1300	
107-05-1	3-Chloropropene	ND	ug/m3	3200	1600	510	
622-96-8	4-Ethyltoluene	ND	ug/m3	3200	1600	540	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	3200	1600	450	
67-64-1	Acetone	ND	ug/m3	3200	16000	2800	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	3200	1600	480	
71-43-2	Benzene	ND	ug/m3	3200	1600	450	
75-27-4	Bromodichloromethane	ND	ug/m3	3200	1600	510	
75-25-2	Bromoform	ND	ug/m3	3200	1600	450	
74-83-9	Bromomethane	ND	ug/m3	3200	1600	610	
75-15-0	Carbon Disulfide	ND	ug/m3	3200	16000	480	
56-23-5	Carbon Tetrachloride	ND	ug/m3	3200	1600	510	
108-90-7	Chlorobenzene	ND	ug/m3	3200	1600	510	
75-00-3	Chloroethane	ND	ug/m3	3200	1600	610	
67-66-3	Chloroform	ND	ug/m3	3200	1600	610	
74-87-3	Chloromethane	ND	ug/m3	3200	1600	610	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	3200	1600	580	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	3200	1600	450	
98-82-8	Cumene	ND	ug/m3	3200	1600	480	
110-82-7	Cyclohexane	ND	ug/m3	3200	3200	1100	
124-48-1	Dibromochloromethane	ND	ug/m3	3200	1600	450	
64-17-5	Ethanol	ND	ug/m3	3200	16000	5100	

100-41-4	Ethyl Benzene	ND	ug/m3	3200	1600	480	
75-69-4	Freon 11	ND	ug/m3	3200	1600	510	
76-13-1	Freon 113	320000	ug/m3	5333.33	2700	850	D
76-14-2	Freon 114	ND	ug/m3	3200	1600	540	
75-71-8	Freon 12	ND	ug/m3	3200	1600	580	
306-83-2	Freon 123	ND	ug/m3	3200	1600	770	
354-23-4	Freon 123a	ND	ug/m3	3200	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	3200	1600	740	
142-82-5	Heptane	ND	ug/m3	3200	1600	510	
87-68-3	Hexachlorobutadiene	ND	ug/m3	3200	1600	580	
110-54-3	Hexane	ND	ug/m3	3200	1600	540	
179601-23-	m,p-Xylene	ND	ug/m3	3200	3200	930	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	3200	1600	480	
75-09-2	Methylene Chloride	ND	ug/m3	3200	1600	480	
95-47-6	o-Xylene	ND	ug/m3	3200	1600	450	
103-65-1	Propylbenzene	ND	ug/m3	3200	1600	480	
100-42-5	Styrene	ND	ug/m3	3200	1600	480	
127-18-4	Tetrachloroethene	ND	ug/m3	3200	1600	450	
109-99-9	Tetrahydrofuran	ND	ug/m3	3200	1600	700	
108-88-3	Toluene	ND	ug/m3	3200	1600	510	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	3200	1600	540	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	3200	1600	510	
79-01-6	Trichloroethene	1900	ug/m3	3200	1600	480	
75-01-4	Vinyl Chloride	ND	ug/m3	3200	1600	610	

Sample 1203241511 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	4175	2100	670	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	4175	2100	670	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	4175	2100	670	
75-34-3	1,1-Dichloroethane	ND	ug/m3	4175	2100	710	
75-35-4	1,1-Dichloroethene	ND	ug/m3	4175	2100	710	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	4175	2100	1000	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	4175	2100	670	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	4175	2100	630	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	4175	2100	710	
107-06-2	1,2-Dichloroethane	ND	ug/m3	4175	2100	790	
78-87-5	1,2-Dichloropropane	ND	ug/m3	4175	2100	710	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	4175	2100	710	
106-99-0	1,3-Butadiene	ND	ug/m3	4175	2100	880	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	4175	2100	710	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	4175	2100	670	
123-91-1	1,4-Dioxane	ND	ug/m3	4175	2100	710	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	4175	2100	710	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	4175	21000	960	
591-78-6	2-Hexanone	ND	ug/m3	4175	2100	750	

67-63-0	2-Propanol	ND	ug/m3	4175	4200	1700	
107-05-1	3-Chloropropene	ND	ug/m3	4175	2100	670	
622-96-8	4-Ethyltoluene	ND	ug/m3	4175	2100	710	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	4175	2100	580	
67-64-1	Acetone	ND	ug/m3	4175	21000	3700	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	4175	2100	630	
71-43-2	Benzene	ND	ug/m3	4175	2100	580	
75-27-4	Bromodichloromethane	ND	ug/m3	4175	2100	670	
75-25-2	Bromoform	ND	ug/m3	4175	2100	580	
74-83-9	Bromomethane	ND	ug/m3	4175	2100	790	
75-15-0	Carbon Disulfide	ND	ug/m3	4175	21000	630	
56-23-5	Carbon Tetrachloride	ND	ug/m3	4175	2100	670	
108-90-7	Chlorobenzene	ND	ug/m3	4175	2100	670	
75-00-3	Chloroethane	ND	ug/m3	4175	2100	790	
67-66-3	Chloroform	ND	ug/m3	4175	2100	790	
74-87-3	Chloromethane	ND	ug/m3	4175	2100	790	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	4175	2100	750	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	4175	2100	580	
98-82-8	Cumene	ND	ug/m3	4175	2100	630	
110-82-7	Cyclohexane	ND	ug/m3	4175	4200	1400	
124-48-1	Dibromochloromethane	ND	ug/m3	4175	2100	580	
64-17-5	Ethanol	ND	ug/m3	4175	21000	6700	
100-41-4	Ethyl Benzene	ND	ug/m3	4175	2100	630	
75-69-4	Freon 11	ND	ug/m3	4175	2100	670	
76-13-1	Freon 113	320000	ug/m3	4175	2100	670	
76-14-2	Freon 114	ND	ug/m3	4175	2100	710	
75-71-8	Freon 12	ND	ug/m3	4175	2100	750	
306-83-2	Freon 123	ND	ug/m3	4175	2100	1000	
354-23-4	Freon 123a	ND	ug/m3	4175	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	4175	2100	960	
142-82-5	Heptane	ND	ug/m3	4175	2100	670	
87-68-3	Hexachlorobutadiene	ND	ug/m3	4175	2100	750	
110-54-3	Hexane	ND	ug/m3	4175	2100	710	
179601-23-	m,p-Xylene	ND	ug/m3	4175	4200	1200	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	4175	2100	630	
75-09-2	Methylene Chloride	750	ug/m3	4175	2100	630	J
95-47-6	o-Xylene	ND	ug/m3	4175	2100	580	
103-65-1	Propylbenzene	ND	ug/m3	4175	2100	630	
100-42-5	Styrene	ND	ug/m3	4175	2100	630	
127-18-4	Tetrachloroethene	ND	ug/m3	4175	2100	580	
109-99-9	Tetrahydrofuran	ND	ug/m3	4175	2100	920	
108-88-3	Toluene	ND	ug/m3	4175	2100	670	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	4175	2100	710	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	4175	2100	670	
79-01-6	Trichloroethene	2000	ug/m3	4175	2100	630	J
75-01-4	Vinyl Chloride	ND	ug/m3	4175	2100	790	

Borehole	600-SGW-5	Depth (ft)	7.5	Depth (m)	2.29	Event Date	3/22/2012

Sample	1203221008	Sample Type	Soil Gas	Analysis Method	TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	4.1	2.1	0.66	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	4.1	2.1	0.66	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	4.1	2.1	0.66	
75-34-3	1,1-Dichloroethane	ND	ug/m3	4.1	2.1	0.7	
75-35-4	1,1-Dichloroethene	ND	ug/m3	4.1	2.1	0.7	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	4.1	2.1	0.98	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	4.1	2.1	0.66	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	4.1	2.1	0.62	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	4.1	2.1	0.7	
107-06-2	1,2-Dichloroethane	ND	ug/m3	4.1	2.1	0.78	
78-87-5	1,2-Dichloropropane	ND	ug/m3	4.1	2.1	0.7	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	4.1	2.1	0.7	
106-99-0	1,3-Butadiene	ND	ug/m3	4.1	2.1	0.86	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	4.1	2.1	0.7	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	4.1	2.1	0.66	
123-91-1	1,4-Dioxane	ND	ug/m3	4.1	2.1	0.7	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	4.1	2.1	0.7	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	4	ug/m3	4.1	21	0.94	J
591-78-6	2-Hexanone	ND	ug/m3	4.1	2.1	0.74	
67-63-0	2-Propanol	ND	ug/m3	4.1	4.1	1.6	
107-05-1	3-Chloropropene	ND	ug/m3	4.1	2.1	0.66	
622-96-8	4-Ethyltoluene	ND	ug/m3	4.1	2.1	0.7	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	4.1	2.1	0.57	
67-64-1	Acetone	15	ug/m3	4.1	21	3.6	J
100-44-7	alpha-Chlorotoluene	ND	ug/m3	4.1	2.1	0.62	
71-43-2	Benzene	ND	ug/m3	4.1	2.1	0.57	
75-27-4	Bromodichloromethane	ND	ug/m3	4.1	2.1	0.66	
75-25-2	Bromoform	ND	ug/m3	4.1	2.1	0.57	
74-83-9	Bromomethane	ND	ug/m3	4.1	2.1	0.78	
75-15-0	Carbon Disulfide	0.82	ug/m3	4.1	21	0.62	J
56-23-5	Carbon Tetrachloride	ND	ug/m3	4.1	2.1	0.66	
108-90-7	Chlorobenzene	ND	ug/m3	4.1	2.1	0.66	
75-00-3	Chloroethane	ND	ug/m3	4.1	2.1	0.78	
67-66-3	Chloroform	2.6	ug/m3	4.1	2.1	0.78	
74-87-3	Chloromethane	ND	ug/m3	4.1	2.1	0.78	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	4.1	2.1	0.74	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	4.1	2.1	0.57	
98-82-8	Cumene	ND	ug/m3	4.1	2.1	0.62	
110-82-7	Cyclohexane	ND	ug/m3	4.1	4.1	1.4	
124-48-1	Dibromochloromethane	ND	ug/m3	4.1	2.1	0.57	
64-17-5	Ethanol	ND	ug/m3	4.1	21	6.6	

100-41-4	Ethyl Benzene	ND	ug/m3	4.1	2.1	0.62	
75-69-4	Freon 11	2.7	ug/m3	4.1	2.1	0.66	
76-13-1	Freon 113	870	ug/m3	41	21	6.6	D
76-14-2	Freon 114	ND	ug/m3	4.1	2.1	0.7	
75-71-8	Freon 12	2	ug/m3	4.1	2.1	0.74	J
306-83-2	Freon 123	ND	ug/m3	4.1	2.1	0.98	
NA	Freon 123a	120	ug/m3	4.1	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	4.1	2.1	0.94	
142-82-5	Heptane	ND	ug/m3	4.1	2.1	0.66	
87-68-3	Hexachlorobutadiene	ND	ug/m3	4.1	2.1	0.74	
110-54-3	Hexane	ND	ug/m3	4.1	2.1	0.7	
179601-23-	m,p-Xylene	ND	ug/m3	4.1	4.1	1.2	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	4.1	2.1	0.62	
75-09-2	Methylene Chloride	0.7	ug/m3	4.1	2.1	0.62	J RB
95-47-6	o-Xylene	ND	ug/m3	4.1	2.1	0.57	
103-65-1	Propylbenzene	ND	ug/m3	4.1	2.1	0.62	
100-42-5	Styrene	ND	ug/m3	4.1	2.1	0.62	
127-18-4	Tetrachloroethene	ND	ug/m3	4.1	2.1	0.57	
109-99-9	Tetrahydrofuran	ND	ug/m3	4.1	2.1	0.9	
108-88-3	Toluene	ND	ug/m3	4.1	2.1	0.66	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	4.1	2.1	0.7	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	4.1	2.1	0.66	
79-01-6	Trichloroethene	92	ug/m3	4.1	2.1	0.62	
75-01-4	Vinyl Chloride	ND	ug/m3	4.1	2.1	0.78	

Sample 1203221400 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	12.62	6.3	2	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	12.62	6.3	2	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	12.62	6.3	2	
75-34-3	1,1-Dichloroethane	ND	ug/m3	12.62	6.3	2.1	
75-35-4	1,1-Dichloroethene	ND	ug/m3	12.62	6.3	2.1	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	12.62	6.3	3	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	12.62	6.3	2	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	12.62	6.3	1.9	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	12.62	6.3	2.1	
107-06-2	1,2-Dichloroethane	ND	ug/m3	12.62	6.3	2.4	
78-87-5	1,2-Dichloropropane	ND	ug/m3	12.62	6.3	2.1	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	12.62	6.3	2.1	
106-99-0	1,3-Butadiene	ND	ug/m3	12.62	6.3	2.6	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	12.62	6.3	2.1	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	12.62	6.3	2	
123-91-1	1,4-Dioxane	ND	ug/m3	12.62	6.3	2.1	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	12.62	6.3	2.1	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	7.5	ug/m3	12.62	63	2.9	J
591-78-6	2-Hexanone	ND	ug/m3	12.62	6.3	2.3	

67-63-0	2-Propanol	ND	ug/m3	12.62	13	5	
107-05-1	3-Chloropropene	ND	ug/m3	12.62	6.3	2	
622-96-8	4-Ethyltoluene	ND	ug/m3	12.62	6.3	2.1	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	12.62	6.3	1.8	
67-64-1	Acetone	24	ug/m3	12.62	63	11	J
100-44-7	alpha-Chlorotoluene	ND	ug/m3	12.62	6.3	1.9	
71-43-2	Benzene	ND	ug/m3	12.62	6.3	1.8	
75-27-4	Bromodichloromethane	ND	ug/m3	12.62	6.3	2	
75-25-2	Bromoform	ND	ug/m3	12.62	6.3	1.8	
74-83-9	Bromomethane	ND	ug/m3	12.62	6.3	2.4	
75-15-0	Carbon Disulfide	ND	ug/m3	12.62	63	1.9	
56-23-5	Carbon Tetrachloride	ND	ug/m3	12.62	6.3	2	
108-90-7	Chlorobenzene	ND	ug/m3	12.62	6.3	2	
75-00-3	Chloroethane	ND	ug/m3	12.62	6.3	2.4	
67-66-3	Chloroform	3.3	ug/m3	12.62	6.3	2.4	J
74-87-3	Chloromethane	ND	ug/m3	12.62	6.3	2.4	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	12.62	6.3	2.3	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	12.62	6.3	1.8	
98-82-8	Cumene	ND	ug/m3	12.62	6.3	1.9	
110-82-7	Cyclohexane	ND	ug/m3	12.62	13	4.2	
124-48-1	Dibromochloromethane	ND	ug/m3	12.62	6.3	1.8	
64-17-5	Ethanol	ND	ug/m3	12.62	63	20	
100-41-4	Ethyl Benzene	ND	ug/m3	12.62	6.3	1.9	
75-69-4	Freon 11	3	ug/m3	12.62	6.3	2	J
76-13-1	Freon 113	1000	ug/m3	12.62	6.3	2	
76-14-2	Freon 114	ND	ug/m3	12.62	6.3	2.1	
75-71-8	Freon 12	ND	ug/m3	12.62	6.3	2.3	
306-83-2	Freon 123	ND	ug/m3	12.62	6.3	3	
354-23-4	Freon 123a	ND	ug/m3	12.62	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	12.62	6.3	2.9	
142-82-5	Heptane	ND	ug/m3	12.62	6.3	2	
87-68-3	Hexachlorobutadiene	ND	ug/m3	12.62	6.3	2.3	
110-54-3	Hexane	ND	ug/m3	12.62	6.3	2.1	
179601-23-	m,p-Xylene	ND	ug/m3	12.62	13	3.7	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	12.62	6.3	1.9	
75-09-2	Methylene Chloride	2.3	ug/m3	12.62	6.3	1.9	J
95-47-6	o-Xylene	ND	ug/m3	12.62	6.3	1.8	
103-65-1	Propylbenzene	ND	ug/m3	12.62	6.3	1.9	
100-42-5	Styrene	ND	ug/m3	12.62	6.3	1.9	
127-18-4	Tetrachloroethene	ND	ug/m3	12.62	6.3	1.8	
109-99-9	Tetrahydrofuran	ND	ug/m3	12.62	6.3	2.8	
108-88-3	Toluene	ND	ug/m3	12.62	6.3	2	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	12.62	6.3	2.1	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	12.62	6.3	2	
79-01-6	Trichloroethene	110	ug/m3	12.62	6.3	1.9	
75-01-4	Vinyl Chloride	ND	ug/m3	12.62	6.3	2.4	

Sample **1203221517** **Sample Type** **Soil Gas** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	25.38	13	4.1	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	25.38	13	4.1	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	25.38	13	4.1	
75-34-3	1,1-Dichloroethane	ND	ug/m3	25.38	13	4.3	
75-35-4	1,1-Dichloroethene	ND	ug/m3	25.38	13	4.3	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	25.38	13	6.1	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	25.38	13	4.1	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	25.38	13	3.8	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	25.38	13	4.3	
107-06-2	1,2-Dichloroethane	ND	ug/m3	25.38	13	4.8	
78-87-5	1,2-Dichloropropane	ND	ug/m3	25.38	13	4.3	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	25.38	13	4.3	
106-99-0	1,3-Butadiene	ND	ug/m3	25.38	13	5.3	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	25.38	13	4.3	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	25.38	13	4.1	
123-91-1	1,4-Dioxane	ND	ug/m3	25.38	13	4.3	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	25.38	13	4.3	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	25.38	130	5.8	
591-78-6	2-Hexanone	ND	ug/m3	25.38	13	4.6	
67-63-0	2-Propanol	ND	ug/m3	25.38	25	10	
107-05-1	3-Chloropropene	ND	ug/m3	25.38	13	4.1	
622-96-8	4-Ethyltoluene	ND	ug/m3	25.38	13	4.3	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	25.38	13	3.6	
67-64-1	Acetone	ND	ug/m3	25.38	130	22	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	25.38	13	3.8	
71-43-2	Benzene	ND	ug/m3	25.38	13	3.6	
75-27-4	Bromodichloromethane	ND	ug/m3	25.38	13	4.1	
75-25-2	Bromoform	ND	ug/m3	25.38	13	3.6	
74-83-9	Bromomethane	ND	ug/m3	25.38	13	4.8	
75-15-0	Carbon Disulfide	ND	ug/m3	25.38	130	3.8	
56-23-5	Carbon Tetrachloride	ND	ug/m3	25.38	13	4.1	
108-90-7	Chlorobenzene	ND	ug/m3	25.38	13	4.1	
75-00-3	Chloroethane	ND	ug/m3	25.38	13	4.8	
67-66-3	Chloroform	ND	ug/m3	25.38	13	4.8	
74-87-3	Chloromethane	ND	ug/m3	25.38	13	4.8	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	25.38	13	4.6	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	25.38	13	3.6	
98-82-8	Cumene	ND	ug/m3	25.38	13	3.8	
110-82-7	Cyclohexane	ND	ug/m3	25.38	25	8.4	
124-48-1	Dibromochloromethane	ND	ug/m3	25.38	13	3.6	
64-17-5	Ethanol	ND	ug/m3	25.38	130	41	
100-41-4	Ethyl Benzene	ND	ug/m3	25.38	13	3.8	
75-69-4	Freon 11	6.3	ug/m3	25.38	13	4.1	J

76-13-1	Freon 113	2300	ug/m3	25.38	13	4.1	
76-14-2	Freon 114	ND	ug/m3	25.38	13	4.3	
75-71-8	Freon 12	ND	ug/m3	25.38	13	4.6	
306-83-2	Freon 123	ND	ug/m3	25.38	13	6.1	
354-23-4	Freon 123a	130	ug/m3	25.38	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	25.38	13	5.8	
142-82-5	Heptane	ND	ug/m3	25.38	13	4.1	
87-68-3	Hexachlorobutadiene	ND	ug/m3	25.38	13	4.6	
110-54-3	Hexane	ND	ug/m3	25.38	13	4.3	
179601-23-	m,p-Xylene	ND	ug/m3	25.38	25	7.4	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	25.38	13	3.8	
75-09-2	Methylene Chloride	5	ug/m3	25.38	13	3.8	J
95-47-6	o-Xylene	ND	ug/m3	25.38	13	3.6	
103-65-1	Propylbenzene	ND	ug/m3	25.38	13	3.8	
100-42-5	Styrene	ND	ug/m3	25.38	13	3.8	
127-18-4	Tetrachloroethene	ND	ug/m3	25.38	13	3.6	
109-99-9	Tetrahydrofuran	ND	ug/m3	25.38	13	5.6	
108-88-3	Toluene	8.2	ug/m3	25.38	13	4.1	J
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	25.38	13	4.3	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	25.38	13	4.1	
79-01-6	Trichloroethene	95	ug/m3	25.38	13	3.8	
75-01-4	Vinyl Chloride	ND	ug/m3	25.38	13	4.8	

Sample 1203221651 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	32.4	16	5.2	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	32.4	16	5.2	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	32.4	16	5.2	
75-34-3	1,1-Dichloroethane	ND	ug/m3	32.4	16	5.5	
75-35-4	1,1-Dichloroethene	ND	ug/m3	32.4	16	5.5	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	32.4	16	7.8	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	32.4	16	5.2	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	32.4	16	4.9	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	32.4	16	5.5	
107-06-2	1,2-Dichloroethane	ND	ug/m3	32.4	16	6.2	
78-87-5	1,2-Dichloropropane	ND	ug/m3	32.4	16	5.5	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	32.4	16	5.5	
106-99-0	1,3-Butadiene	ND	ug/m3	32.4	16	6.8	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	32.4	16	5.5	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	32.4	16	5.2	
123-91-1	1,4-Dioxane	ND	ug/m3	32.4	16	5.5	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	32.4	16	5.5	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	32.4	160	7.5	
591-78-6	2-Hexanone	ND	ug/m3	32.4	16	5.8	
67-63-0	2-Propanol	ND	ug/m3	32.4	32	13	
107-05-1	3-Chloropropene	ND	ug/m3	32.4	16	5.2	

622-96-8	4-Ethyltoluene	ND	ug/m3	32.4	16	5.5	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	32.4	16	4.5	
67-64-1	Acetone	ND	ug/m3	32.4	160	29	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	32.4	16	4.9	
71-43-2	Benzene	ND	ug/m3	32.4	16	4.5	
75-27-4	Bromodichloromethane	ND	ug/m3	32.4	16	5.2	
75-25-2	Bromoform	ND	ug/m3	32.4	16	4.5	
74-83-9	Bromomethane	ND	ug/m3	32.4	16	6.2	
75-15-0	Carbon Disulfide	7.3	ug/m3	32.4	160	4.9	J
56-23-5	Carbon Tetrachloride	ND	ug/m3	32.4	16	5.2	
108-90-7	Chlorobenzene	ND	ug/m3	32.4	16	5.2	
75-00-3	Chloroethane	ND	ug/m3	32.4	16	6.2	
67-66-3	Chloroform	ND	ug/m3	32.4	16	6.2	
74-87-3	Chloromethane	ND	ug/m3	32.4	16	6.2	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	32.4	16	5.8	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	32.4	16	4.5	
98-82-8	Cumene	ND	ug/m3	32.4	16	4.9	
110-82-7	Cyclohexane	ND	ug/m3	32.4	32	11	
124-48-1	Dibromochloromethane	ND	ug/m3	32.4	16	4.5	
64-17-5	Ethanol	ND	ug/m3	32.4	160	52	
100-41-4	Ethyl Benzene	ND	ug/m3	32.4	16	4.9	
75-69-4	Freon 11	14	ug/m3	32.4	16	5.2	J
76-13-1	Freon 113	3400	ug/m3	81	41	13	D
76-14-2	Freon 114	ND	ug/m3	32.4	16	5.5	
75-71-8	Freon 12	ND	ug/m3	32.4	16	5.8	
306-83-2	Freon 123	ND	ug/m3	32.4	16	7.8	
354-23-4	Freon 123a	95	ug/m3	32.4	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	32.4	16	7.5	
142-82-5	Heptane	ND	ug/m3	32.4	16	5.2	
87-68-3	Hexachlorobutadiene	ND	ug/m3	32.4	16	5.8	
110-54-3	Hexane	ND	ug/m3	32.4	16	5.5	
179601-23-	m,p-Xylene	ND	ug/m3	32.4	32	9.4	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	32.4	16	4.9	
75-09-2	Methylene Chloride	5.2	ug/m3	32.4	16	4.9	J
95-47-6	o-Xylene	ND	ug/m3	32.4	16	4.5	
103-65-1	Propylbenzene	ND	ug/m3	32.4	16	4.9	
100-42-5	Styrene	ND	ug/m3	32.4	16	4.9	
127-18-4	Tetrachloroethene	ND	ug/m3	32.4	16	4.5	
109-99-9	Tetrahydrofuran	ND	ug/m3	32.4	16	7.1	
108-88-3	Toluene	ND	ug/m3	32.4	16	5.2	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	32.4	16	5.5	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	32.4	16	5.2	
79-01-6	Trichloroethene	81	ug/m3	32.4	16	4.9	
75-01-4	Vinyl Chloride	ND	ug/m3	32.4	16	6.2	

Sample **1203230926** **Sample Type** **Soil Gas** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	4.03	2	0.64	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	4.03	2	0.64	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	4.03	2	0.64	
75-34-3	1,1-Dichloroethane	ND	ug/m3	4.03	2	0.68	
75-35-4	1,1-Dichloroethene	ND	ug/m3	4.03	2	0.68	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	4.03	2	0.97	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	4.03	2	0.64	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	4.03	2	0.6	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	4.03	2	0.68	
107-06-2	1,2-Dichloroethane	ND	ug/m3	4.03	2	0.76	
78-87-5	1,2-Dichloropropane	ND	ug/m3	4.03	2	0.68	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	4.03	2	0.68	
106-99-0	1,3-Butadiene	ND	ug/m3	4.03	2	0.85	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	4.03	2	0.68	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	4.03	2	0.64	
123-91-1	1,4-Dioxane	ND	ug/m3	4.03	2	0.68	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	4.03	2	0.68	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	1.6	ug/m3	4.03	20	0.93	J
591-78-6	2-Hexanone	ND	ug/m3	4.03	2	0.72	
67-63-0	2-Propanol	ND	ug/m3	4.03	4	1.6	
107-05-1	3-Chloropropene	ND	ug/m3	4.03	2	0.64	
622-96-8	4-Ethyltoluene	ND	ug/m3	4.03	2	0.68	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	4.03	2	0.56	
67-64-1	Acetone	6.4	ug/m3	4.03	20	3.5	J
100-44-7	alpha-Chlorotoluene	ND	ug/m3	4.03	2	0.6	
71-43-2	Benzene	ND	ug/m3	4.03	2	0.56	
75-27-4	Bromodichloromethane	ND	ug/m3	4.03	2	0.64	
75-25-2	Bromoform	ND	ug/m3	4.03	2	0.56	
74-83-9	Bromomethane	ND	ug/m3	4.03	2	0.76	
75-15-0	Carbon Disulfide	ND	ug/m3	4.03	20	0.6	
56-23-5	Carbon Tetrachloride	ND	ug/m3	4.03	2	0.64	
108-90-7	Chlorobenzene	ND	ug/m3	4.03	2	0.64	
75-00-3	Chloroethane	ND	ug/m3	4.03	2	0.76	
67-66-3	Chloroform	ND	ug/m3	4.03	2	0.76	
74-87-3	Chloromethane	ND	ug/m3	4.03	2	0.76	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	4.03	2	0.72	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	4.03	2	0.56	
98-82-8	Cumene	ND	ug/m3	4.03	2	0.6	
110-82-7	Cyclohexane	ND	ug/m3	4.03	4	1.3	
124-48-1	Dibromochloromethane	ND	ug/m3	4.03	2	0.56	
64-17-5	Ethanol	ND	ug/m3	4.03	20	6.4	
100-41-4	Ethyl Benzene	ND	ug/m3	4.03	2	0.6	
75-69-4	Freon 11	1.3	ug/m3	4.03	2	0.64	J

76-13-1	Freon 113	120	ug/m3	4.03	2	0.64	
76-14-2	Freon 114	ND	ug/m3	4.03	2	0.68	
75-71-8	Freon 12	1.9	ug/m3	4.03	2	0.72	J
306-83-2	Freon 123	ND	ug/m3	4.03	2	0.97	
354-23-4	Freon 123a	ND	ug/m3	4.03	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	4.03	2	0.93	
142-82-5	Heptane	ND	ug/m3	4.03	2	0.64	
87-68-3	Hexachlorobutadiene	ND	ug/m3	4.03	2	0.72	
110-54-3	Hexane	ND	ug/m3	4.03	2	0.68	
179601-23-	m,p-Xylene	ND	ug/m3	4.03	4	1.2	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	4.03	2	0.6	
75-09-2	Methylene Chloride	0.79	ug/m3	4.03	2	0.6	J RB
95-47-6	o-Xylene	ND	ug/m3	4.03	2	0.56	
103-65-1	Propylbenzene	ND	ug/m3	4.03	2	0.6	
100-42-5	Styrene	ND	ug/m3	4.03	2	0.6	
127-18-4	Tetrachloroethene	ND	ug/m3	4.03	2	0.56	
109-99-9	Tetrahydrofuran	ND	ug/m3	4.03	2	0.89	
108-88-3	Toluene	ND	ug/m3	4.03	2	0.64	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	4.03	2	0.68	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	4.03	2	0.64	
79-01-6	Trichloroethene	30	ug/m3	4.03	2	0.6	
75-01-4	Vinyl Chloride	ND	ug/m3	4.03	2	0.76	

Sample 1203231141 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	23.43	12	3.7	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	23.43	12	3.7	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	23.43	12	3.7	
75-34-3	1,1-Dichloroethane	ND	ug/m3	23.43	12	4	
75-35-4	1,1-Dichloroethene	ND	ug/m3	23.43	12	4	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	23.43	12	5.6	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	23.43	12	3.7	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	23.43	12	3.5	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	23.43	12	4	
107-06-2	1,2-Dichloroethane	ND	ug/m3	23.43	12	4.5	
78-87-5	1,2-Dichloropropane	ND	ug/m3	23.43	12	4	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	23.43	12	4	
106-99-0	1,3-Butadiene	ND	ug/m3	23.43	12	4.9	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	23.43	12	4	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	23.43	12	3.7	
123-91-1	1,4-Dioxane	ND	ug/m3	23.43	12	4	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	23.43	12	4	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	23.43	120	5.4	
591-78-6	2-Hexanone	ND	ug/m3	23.43	12	4.2	
67-63-0	2-Propanol	ND	ug/m3	23.43	23	9.4	
107-05-1	3-Chloropropene	ND	ug/m3	23.43	12	3.7	

622-96-8	4-Ethyltoluene	ND	ug/m3	23.43	12	4	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	23.43	12	3.3	
67-64-1	Acetone	ND	ug/m3	23.43	120	21	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	23.43	12	3.5	
71-43-2	Benzene	ND	ug/m3	23.43	12	3.3	
75-27-4	Bromodichloromethane	ND	ug/m3	23.43	12	3.7	
75-25-2	Bromoform	ND	ug/m3	23.43	12	3.3	
74-83-9	Bromomethane	ND	ug/m3	23.43	12	4.5	
75-15-0	Carbon Disulfide	ND	ug/m3	23.43	120	3.5	
56-23-5	Carbon Tetrachloride	ND	ug/m3	23.43	12	3.7	
108-90-7	Chlorobenzene	ND	ug/m3	23.43	12	3.7	
75-00-3	Chloroethane	ND	ug/m3	23.43	12	4.5	
67-66-3	Chloroform	ND	ug/m3	23.43	12	4.5	
74-87-3	Chloromethane	ND	ug/m3	23.43	12	4.5	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	23.43	12	4.2	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	23.43	12	3.3	
98-82-8	Cumene	ND	ug/m3	23.43	12	3.5	
110-82-7	Cyclohexane	ND	ug/m3	23.43	23	7.7	
124-48-1	Dibromochloromethane	ND	ug/m3	23.43	12	3.3	
64-17-5	Ethanol	ND	ug/m3	23.43	120	37	
100-41-4	Ethyl Benzene	ND	ug/m3	23.43	12	3.5	
75-69-4	Freon 11	9.7	ug/m3	23.43	12	3.7	J
76-13-1	Freon 113	2200	ug/m3	23.43	12	3.7	
76-14-2	Freon 114	ND	ug/m3	23.43	12	4	
75-71-8	Freon 12	ND	ug/m3	23.43	12	4.2	
306-83-2	Freon 123	ND	ug/m3	23.43	12	5.6	
354-23-4	Freon 123a	60	ug/m3	23.43	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	23.43	12	5.4	
142-82-5	Heptane	ND	ug/m3	23.43	12	3.7	
87-68-3	Hexachlorobutadiene	ND	ug/m3	23.43	12	4.2	
110-54-3	Hexane	ND	ug/m3	23.43	12	4	
179601-23-	m,p-Xylene	ND	ug/m3	23.43	23	6.8	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	23.43	12	3.5	
75-09-2	Methylene Chloride	4.2	ug/m3	23.43	12	3.5	J
95-47-6	o-Xylene	ND	ug/m3	23.43	12	3.3	
103-65-1	Propylbenzene	ND	ug/m3	23.43	12	3.5	
100-42-5	Styrene	ND	ug/m3	23.43	12	3.5	
127-18-4	Tetrachloroethene	ND	ug/m3	23.43	12	3.3	
109-99-9	Tetrahydrofuran	ND	ug/m3	23.43	12	5.2	
108-88-3	Toluene	ND	ug/m3	23.43	12	3.7	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	23.43	12	4	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	23.43	12	3.7	
79-01-6	Trichloroethene	58	ug/m3	23.43	12	3.5	
75-01-4	Vinyl Chloride	ND	ug/m3	23.43	12	4.5	

Sample **1203231737** **Sample Type** **Soil Gas** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	4.05	2	0.65	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	4.05	2	0.65	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	4.05	2	0.65	
75-34-3	1,1-Dichloroethane	ND	ug/m3	4.05	2	0.69	
75-35-4	1,1-Dichloroethene	ND	ug/m3	4.05	2	0.69	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	4.05	2	0.97	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	4.05	2	0.65	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	4.05	2	0.61	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	4.05	2	0.69	
107-06-2	1,2-Dichloroethane	ND	ug/m3	4.05	2	0.77	
78-87-5	1,2-Dichloropropane	ND	ug/m3	4.05	2	0.69	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	4.05	2	0.69	
106-99-0	1,3-Butadiene	ND	ug/m3	4.05	2	0.85	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	4.05	2	0.69	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	4.05	2	0.65	
123-91-1	1,4-Dioxane	ND	ug/m3	4.05	2	0.69	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	4.05	2	0.69	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	4.1	ug/m3	4.05	20	0.93	J
591-78-6	2-Hexanone	1.1	ug/m3	4.05	2	0.73	J
67-63-0	2-Propanol	ND	ug/m3	4.05	4.1	1.6	
107-05-1	3-Chloropropene	ND	ug/m3	4.05	2	0.65	
622-96-8	4-Ethyltoluene	ND	ug/m3	4.05	2	0.69	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	4.05	2	0.57	
67-64-1	Acetone	15	ug/m3	4.05	20	3.6	J
100-44-7	alpha-Chlorotoluene	ND	ug/m3	4.05	2	0.61	
71-43-2	Benzene	ND	ug/m3	4.05	2	0.57	
75-27-4	Bromodichloromethane	ND	ug/m3	4.05	2	0.65	
75-25-2	Bromoform	ND	ug/m3	4.05	2	0.57	
74-83-9	Bromomethane	ND	ug/m3	4.05	2	0.77	
75-15-0	Carbon Disulfide	0.88	ug/m3	4.05	20	0.61	J
56-23-5	Carbon Tetrachloride	ND	ug/m3	4.05	2	0.65	
108-90-7	Chlorobenzene	ND	ug/m3	4.05	2	0.65	
75-00-3	Chloroethane	ND	ug/m3	4.05	2	0.77	
67-66-3	Chloroform	2.6	ug/m3	4.05	2	0.77	
74-87-3	Chloromethane	ND	ug/m3	4.05	2	0.77	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	4.05	2	0.73	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	4.05	2	0.57	
98-82-8	Cumene	ND	ug/m3	4.05	2	0.61	
110-82-7	Cyclohexane	ND	ug/m3	4.05	4.1	1.3	
124-48-1	Dibromochloromethane	ND	ug/m3	4.05	2	0.57	
64-17-5	Ethanol	ND	ug/m3	4.05	20	6.5	
100-41-4	Ethyl Benzene	ND	ug/m3	4.05	2	0.61	
75-69-4	Freon 11	3.3	ug/m3	4.05	2	0.65	

76-13-1	Freon 113	950	ug/m3	40.5	20	6.5	D
76-14-2	Freon 114	ND	ug/m3	4.05	2	0.69	
75-71-8	Freon 12	2.1	ug/m3	4.05	2	0.73	
306-83-2	Freon 123	ND	ug/m3	4.05	2	0.97	
354-23-4	Freon 123a	110	ug/m3	4.05	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	4.05	2	0.93	
142-82-5	Heptane	ND	ug/m3	4.05	2	0.65	
87-68-3	Hexachlorobutadiene	ND	ug/m3	4.05	2	0.73	
110-54-3	Hexane	ND	ug/m3	4.05	2	0.69	
179601-23-	m,p-Xylene	ND	ug/m3	4.05	4.1	1.2	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	4.05	2	0.61	
75-09-2	Methylene Chloride	0.77	ug/m3	4.05	2	0.61	J RB
95-47-6	o-Xylene	ND	ug/m3	4.05	2	0.57	
103-65-1	Propylbenzene	ND	ug/m3	4.05	2	0.61	
100-42-5	Styrene	ND	ug/m3	4.05	2	0.61	
127-18-4	Tetrachloroethene	ND	ug/m3	4.05	2	0.57	
109-99-9	Tetrahydrofuran	ND	ug/m3	4.05	2	0.89	
108-88-3	Toluene	ND	ug/m3	4.05	2	0.65	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	4.05	2	0.69	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	4.05	2	0.65	
79-01-6	Trichloroethene	78	ug/m3	4.05	2	0.61	
75-01-4	Vinyl Chloride	ND	ug/m3	4.05	2	0.77	

Sample 1203241416 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	4.1	2.1	0.66	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	4.1	2.1	0.66	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	4.1	2.1	0.66	
75-34-3	1,1-Dichloroethane	ND	ug/m3	4.1	2.1	0.7	
75-35-4	1,1-Dichloroethene	ND	ug/m3	4.1	2.1	0.7	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	4.1	2.1	0.98	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	4.1	2.1	0.66	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	4.1	2.1	0.62	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	4.1	2.1	0.7	
107-06-2	1,2-Dichloroethane	ND	ug/m3	4.1	2.1	0.78	
78-87-5	1,2-Dichloropropane	ND	ug/m3	4.1	2.1	0.7	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	4.1	2.1	0.7	
106-99-0	1,3-Butadiene	ND	ug/m3	4.1	2.1	0.86	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	4.1	2.1	0.7	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	4.1	2.1	0.66	
123-91-1	1,4-Dioxane	ND	ug/m3	4.1	2.1	0.7	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	4.1	2.1	0.7	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	1.3	ug/m3	4.1	21	0.94	J
591-78-6	2-Hexanone	ND	ug/m3	4.1	2.1	0.74	
67-63-0	2-Propanol	ND	ug/m3	4.1	4.1	1.6	
107-05-1	3-Chloropropene	ND	ug/m3	4.1	2.1	0.66	

622-96-8	4-Ethyltoluene	ND	ug/m3	4.1	2.1	0.7	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	4.1	2.1	0.57	
67-64-1	Acetone	8	ug/m3	4.1	21	3.6	J
100-44-7	alpha-Chlorotoluene	ND	ug/m3	4.1	2.1	0.62	
71-43-2	Benzene	ND	ug/m3	4.1	2.1	0.57	
75-27-4	Bromodichloromethane	ND	ug/m3	4.1	2.1	0.66	
75-25-2	Bromoform	ND	ug/m3	4.1	2.1	0.57	
74-83-9	Bromomethane	ND	ug/m3	4.1	2.1	0.78	
75-15-0	Carbon Disulfide	ND	ug/m3	4.1	21	0.62	
56-23-5	Carbon Tetrachloride	ND	ug/m3	4.1	2.1	0.66	
108-90-7	Chlorobenzene	ND	ug/m3	4.1	2.1	0.66	
75-00-3	Chloroethane	ND	ug/m3	4.1	2.1	0.78	
67-66-3	Chloroform	2.6	ug/m3	4.1	2.1	0.78	
74-87-3	Chloromethane	ND	ug/m3	4.1	2.1	0.78	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	4.1	2.1	0.74	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	4.1	2.1	0.57	
98-82-8	Cumene	ND	ug/m3	4.1	2.1	0.62	
110-82-7	Cyclohexane	ND	ug/m3	4.1	4.1	1.4	
124-48-1	Dibromochloromethane	ND	ug/m3	4.1	2.1	0.57	
64-17-5	Ethanol	ND	ug/m3	4.1	21	6.6	
100-41-4	Ethyl Benzene	ND	ug/m3	4.1	2.1	0.62	
75-69-4	Freon 11	2.4	ug/m3	4.1	2.1	0.66	
76-13-1	Freon 113	800	ug/m3	41	21	6.6	D
76-14-2	Freon 114	ND	ug/m3	4.1	2.1	0.7	
75-71-8	Freon 12	2.1	ug/m3	4.1	2.1	0.74	
306-83-2	Freon 123	ND	ug/m3	4.1	2.1	0.98	
354-23-4	Freon 123a	96	ug/m3	4.1	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	4.1	2.1	0.94	
142-82-5	Heptane	ND	ug/m3	4.1	2.1	0.66	
87-68-3	Hexachlorobutadiene	ND	ug/m3	4.1	2.1	0.74	
110-54-3	Hexane	ND	ug/m3	4.1	2.1	0.7	
179601-23-	m,p-Xylene	ND	ug/m3	4.1	4.1	1.2	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	4.1	2.1	0.62	
75-09-2	Methylene Chloride	0.68	ug/m3	4.1	2.1	0.62	J RB
95-47-6	o-Xylene	ND	ug/m3	4.1	2.1	0.57	
103-65-1	Propylbenzene	ND	ug/m3	4.1	2.1	0.62	
100-42-5	Styrene	ND	ug/m3	4.1	2.1	0.62	
127-18-4	Tetrachloroethene	ND	ug/m3	4.1	2.1	0.57	
109-99-9	Tetrahydrofuran	ND	ug/m3	4.1	2.1	0.9	
108-88-3	Toluene	ND	ug/m3	4.1	2.1	0.66	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	4.1	2.1	0.7	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	4.1	2.1	0.66	
79-01-6	Trichloroethene	83	ug/m3	4.1	2.1	0.62	
75-01-4	Vinyl Chloride	ND	ug/m3	4.1	2.1	0.78	

Borehole	600-SGW-5	Depth (ft)	52.5	Depth (m)	16.00	Event Date	3/22/2012

Sample	1203221012	Sample Type	Soil Gas	Analysis Method	TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	159	80	25	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	159	80	25	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	159	80	25	
75-34-3	1,1-Dichloroethane	ND	ug/m3	159	80	27	
75-35-4	1,1-Dichloroethene	ND	ug/m3	159	80	27	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	159	80	38	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	159	80	25	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	159	80	24	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	159	80	27	
107-06-2	1,2-Dichloroethane	ND	ug/m3	159	80	30	
78-87-5	1,2-Dichloropropane	ND	ug/m3	159	80	27	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	159	80	27	
106-99-0	1,3-Butadiene	ND	ug/m3	159	80	33	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	159	80	27	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	159	80	25	
123-91-1	1,4-Dioxane	ND	ug/m3	159	80	27	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	159	80	27	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	159	800	37	
591-78-6	2-Hexanone	ND	ug/m3	159	80	29	
67-63-0	2-Propanol	ND	ug/m3	159	160	64	
107-05-1	3-Chloropropene	ND	ug/m3	159	80	25	
622-96-8	4-Ethyltoluene	ND	ug/m3	159	80	27	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	159	80	22	
67-64-1	Acetone	ND	ug/m3	159	800	140	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	159	80	24	
71-43-2	Benzene	ND	ug/m3	159	80	22	
75-27-4	Bromodichloromethane	ND	ug/m3	159	80	25	
75-25-2	Bromoform	ND	ug/m3	159	80	22	
74-83-9	Bromomethane	ND	ug/m3	159	80	30	
75-15-0	Carbon Disulfide	ND	ug/m3	159	800	24	
56-23-5	Carbon Tetrachloride	ND	ug/m3	159	80	25	
108-90-7	Chlorobenzene	ND	ug/m3	159	80	25	
75-00-3	Chloroethane	ND	ug/m3	159	80	30	
67-66-3	Chloroform	82	ug/m3	159	80	30	
74-87-3	Chloromethane	ND	ug/m3	159	80	30	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	159	80	29	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	159	80	22	
98-82-8	Cumene	ND	ug/m3	159	80	24	
110-82-7	Cyclohexane	ND	ug/m3	159	160	52	
124-48-1	Dibromochloromethane	ND	ug/m3	159	80	22	
64-17-5	Ethanol	ND	ug/m3	159	800	250	

100-41-4	Ethyl Benzene	ND	ug/m3	159	80	24	
75-69-4	Freon 11	ND	ug/m3	159	80	25	
76-13-1	Freon 113	11000	ug/m3	159	80	25	
76-14-2	Freon 114	ND	ug/m3	159	80	27	
75-71-8	Freon 12	ND	ug/m3	159	80	29	
306-83-2	Freon 123	ND	ug/m3	159	80	38	
NA	Freon 123a	560	ug/m3	159	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	159	80	37	
142-82-5	Heptane	ND	ug/m3	159	80	25	
87-68-3	Hexachlorobutadiene	ND	ug/m3	159	80	29	
110-54-3	Hexane	ND	ug/m3	159	80	27	
179601-23-	m,p-Xylene	ND	ug/m3	159	160	46	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	159	80	24	
75-09-2	Methylene Chloride	28	ug/m3	159	80	24	J
95-47-6	o-Xylene	ND	ug/m3	159	80	22	
103-65-1	Propylbenzene	ND	ug/m3	159	80	24	
100-42-5	Styrene	ND	ug/m3	159	80	24	
127-18-4	Tetrachloroethene	ND	ug/m3	159	80	22	
109-99-9	Tetrahydrofuran	ND	ug/m3	159	80	35	
108-88-3	Toluene	ND	ug/m3	159	80	25	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	159	80	27	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	159	80	25	
79-01-6	Trichloroethene	1900	ug/m3	159	80	24	
75-01-4	Vinyl Chloride	ND	ug/m3	159	80	30	

Sample 1203221404 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	128.46	64	21	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	128.46	64	21	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	128.46	64	21	
75-34-3	1,1-Dichloroethane	ND	ug/m3	128.46	64	22	
75-35-4	1,1-Dichloroethene	ND	ug/m3	128.46	64	22	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	128.46	64	31	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	128.46	64	21	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	128.46	64	19	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	128.46	64	22	
107-06-2	1,2-Dichloroethane	ND	ug/m3	128.46	64	24	
78-87-5	1,2-Dichloropropane	ND	ug/m3	128.46	64	22	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	128.46	64	22	
106-99-0	1,3-Butadiene	ND	ug/m3	128.46	64	27	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	128.46	64	22	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	128.46	64	21	
123-91-1	1,4-Dioxane	ND	ug/m3	128.46	64	22	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	128.46	64	22	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	128.46	640	30	
591-78-6	2-Hexanone	ND	ug/m3	128.46	64	23	

67-63-0	2-Propanol	ND	ug/m3	128.46	130	51	
107-05-1	3-Chloropropene	ND	ug/m3	128.46	64	21	
622-96-8	4-Ethyltoluene	ND	ug/m3	128.46	64	22	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	128.46	64	18	
67-64-1	Acetone	ND	ug/m3	128.46	640	110	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	128.46	64	19	
71-43-2	Benzene	ND	ug/m3	128.46	64	18	
75-27-4	Bromodichloromethane	ND	ug/m3	128.46	64	21	
75-25-2	Bromoform	ND	ug/m3	128.46	64	18	
74-83-9	Bromomethane	ND	ug/m3	128.46	64	24	
75-15-0	Carbon Disulfide	ND	ug/m3	128.46	640	19	
56-23-5	Carbon Tetrachloride	ND	ug/m3	128.46	64	21	
108-90-7	Chlorobenzene	ND	ug/m3	128.46	64	21	
75-00-3	Chloroethane	ND	ug/m3	128.46	64	24	
67-66-3	Chloroform	75	ug/m3	128.46	64	24	
74-87-3	Chloromethane	ND	ug/m3	128.46	64	24	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	128.46	64	23	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	128.46	64	18	
98-82-8	Cumene	ND	ug/m3	128.46	64	19	
110-82-7	Cyclohexane	ND	ug/m3	128.46	130	42	
124-48-1	Dibromochloromethane	ND	ug/m3	128.46	64	18	
64-17-5	Ethanol	ND	ug/m3	128.46	640	210	
100-41-4	Ethyl Benzene	ND	ug/m3	128.46	64	19	
75-69-4	Freon 11	ND	ug/m3	128.46	64	21	
76-13-1	Freon 113	10000	ug/m3	128.46	64	21	
76-14-2	Freon 114	ND	ug/m3	128.46	64	22	
75-71-8	Freon 12	ND	ug/m3	128.46	64	23	
306-83-2	Freon 123	ND	ug/m3	128.46	64	31	
354-23-4	Freon 123a	590	ug/m3	128.46	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	128.46	64	30	
142-82-5	Heptane	ND	ug/m3	128.46	64	21	
87-68-3	Hexachlorobutadiene	ND	ug/m3	128.46	64	23	
110-54-3	Hexane	ND	ug/m3	128.46	64	22	
179601-23-	m,p-Xylene	ND	ug/m3	128.46	130	37	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	128.46	64	19	
75-09-2	Methylene Chloride	24	ug/m3	128.46	64	19	J
95-47-6	o-Xylene	ND	ug/m3	128.46	64	18	
103-65-1	Propylbenzene	ND	ug/m3	128.46	64	19	
100-42-5	Styrene	ND	ug/m3	128.46	64	19	
127-18-4	Tetrachloroethene	ND	ug/m3	128.46	64	18	
109-99-9	Tetrahydrofuran	ND	ug/m3	128.46	64	28	
108-88-3	Toluene	ND	ug/m3	128.46	64	21	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	128.46	64	22	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	128.46	64	21	
79-01-6	Trichloroethene	1800	ug/m3	128.46	64	19	
75-01-4	Vinyl Chloride	ND	ug/m3	128.46	64	24	

Sample **1203221521** **Sample Type** **Soil Gas** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	110.67	55	18	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	110.67	55	18	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	110.67	55	18	
75-34-3	1,1-Dichloroethane	ND	ug/m3	110.67	55	19	
75-35-4	1,1-Dichloroethene	ND	ug/m3	110.67	55	19	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	110.67	55	27	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	110.67	55	18	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	110.67	55	17	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	110.67	55	19	
107-06-2	1,2-Dichloroethane	ND	ug/m3	110.67	55	21	
78-87-5	1,2-Dichloropropane	ND	ug/m3	110.67	55	19	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	110.67	55	19	
106-99-0	1,3-Butadiene	ND	ug/m3	110.67	55	23	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	110.67	55	19	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	110.67	55	18	
123-91-1	1,4-Dioxane	ND	ug/m3	110.67	55	19	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	110.67	55	19	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	110.67	550	25	
591-78-6	2-Hexanone	ND	ug/m3	110.67	55	20	
67-63-0	2-Propanol	ND	ug/m3	110.67	110	44	
107-05-1	3-Chloropropene	ND	ug/m3	110.67	55	18	
622-96-8	4-Ethyltoluene	ND	ug/m3	110.67	55	19	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	110.67	55	15	
67-64-1	Acetone	ND	ug/m3	110.67	550	97	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	110.67	55	17	
71-43-2	Benzene	ND	ug/m3	110.67	55	15	
75-27-4	Bromodichloromethane	ND	ug/m3	110.67	55	18	
75-25-2	Bromoform	ND	ug/m3	110.67	55	15	
74-83-9	Bromomethane	ND	ug/m3	110.67	55	21	
75-15-0	Carbon Disulfide	ND	ug/m3	110.67	550	17	
56-23-5	Carbon Tetrachloride	ND	ug/m3	110.67	55	18	
108-90-7	Chlorobenzene	ND	ug/m3	110.67	55	18	
75-00-3	Chloroethane	ND	ug/m3	110.67	55	21	
67-66-3	Chloroform	91	ug/m3	110.67	55	21	
74-87-3	Chloromethane	ND	ug/m3	110.67	55	21	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	110.67	55	20	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	110.67	55	15	
98-82-8	Cumene	ND	ug/m3	110.67	55	17	
110-82-7	Cyclohexane	ND	ug/m3	110.67	110	37	
124-48-1	Dibromochloromethane	ND	ug/m3	110.67	55	15	
64-17-5	Ethanol	ND	ug/m3	110.67	550	180	
100-41-4	Ethyl Benzene	ND	ug/m3	110.67	55	17	
75-69-4	Freon 11	ND	ug/m3	110.67	55	18	

76-13-1	Freon 113	12000	ug/m3	207.5	100	33	D
76-14-2	Freon 114	ND	ug/m3	110.67	55	19	
75-71-8	Freon 12	ND	ug/m3	110.67	55	20	
306-83-2	Freon 123	ND	ug/m3	110.67	55	27	
354-23-4	Freon 123a	620	ug/m3	110.67	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	110.67	55	25	
142-82-5	Heptane	ND	ug/m3	110.67	55	18	
87-68-3	Hexachlorobutadiene	ND	ug/m3	110.67	55	20	
110-54-3	Hexane	ND	ug/m3	110.67	55	19	
179601-23-	m,p-Xylene	ND	ug/m3	110.67	110	32	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	110.67	55	17	
75-09-2	Methylene Chloride	19	ug/m3	110.67	55	17	J
95-47-6	o-Xylene	ND	ug/m3	110.67	55	15	
103-65-1	Propylbenzene	ND	ug/m3	110.67	55	17	
100-42-5	Styrene	ND	ug/m3	110.67	55	17	
127-18-4	Tetrachloroethene	ND	ug/m3	110.67	55	15	
109-99-9	Tetrahydrofuran	ND	ug/m3	110.67	55	24	
108-88-3	Toluene	ND	ug/m3	110.67	55	18	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	110.67	55	19	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	110.67	55	18	
79-01-6	Trichloroethene	2100	ug/m3	110.67	55	17	
75-01-4	Vinyl Chloride	ND	ug/m3	110.67	55	21	

Sample 1203221655 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	106.67	53	17	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	106.67	53	17	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	106.67	53	17	
75-34-3	1,1-Dichloroethane	ND	ug/m3	106.67	53	18	
75-35-4	1,1-Dichloroethene	ND	ug/m3	106.67	53	18	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	106.67	53	26	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	106.67	53	17	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	106.67	53	16	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	106.67	53	18	
107-06-2	1,2-Dichloroethane	ND	ug/m3	106.67	53	20	
78-87-5	1,2-Dichloropropane	ND	ug/m3	106.67	53	18	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	106.67	53	18	
106-99-0	1,3-Butadiene	ND	ug/m3	106.67	53	22	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	106.67	53	18	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	106.67	53	17	
123-91-1	1,4-Dioxane	ND	ug/m3	106.67	53	18	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	106.67	53	18	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	106.67	530	25	
591-78-6	2-Hexanone	ND	ug/m3	106.67	53	19	
67-63-0	2-Propanol	ND	ug/m3	106.67	110	43	
107-05-1	3-Chloropropene	ND	ug/m3	106.67	53	17	

622-96-8	4-Ethyltoluene	ND	ug/m3	106.67	53	18	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	106.67	53	15	
67-64-1	Acetone	ND	ug/m3	106.67	530	94	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	106.67	53	16	
71-43-2	Benzene	ND	ug/m3	106.67	53	15	
75-27-4	Bromodichloromethane	ND	ug/m3	106.67	53	17	
75-25-2	Bromoform	ND	ug/m3	106.67	53	15	
74-83-9	Bromomethane	ND	ug/m3	106.67	53	20	
75-15-0	Carbon Disulfide	ND	ug/m3	106.67	530	16	
56-23-5	Carbon Tetrachloride	ND	ug/m3	106.67	53	17	
108-90-7	Chlorobenzene	ND	ug/m3	106.67	53	17	
75-00-3	Chloroethane	ND	ug/m3	106.67	53	20	
67-66-3	Chloroform	84	ug/m3	106.67	53	20	
74-87-3	Chloromethane	ND	ug/m3	106.67	53	20	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	106.67	53	19	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	106.67	53	15	
98-82-8	Cumene	ND	ug/m3	106.67	53	16	
110-82-7	Cyclohexane	ND	ug/m3	106.67	110	35	
124-48-1	Dibromochloromethane	ND	ug/m3	106.67	53	15	
64-17-5	Ethanol	ND	ug/m3	106.67	530	170	
100-41-4	Ethyl Benzene	ND	ug/m3	106.67	53	16	
75-69-4	Freon 11	ND	ug/m3	106.67	53	17	
76-13-1	Freon 113	11000	ug/m3	320	160	51	D
76-14-2	Freon 114	ND	ug/m3	106.67	53	18	
75-71-8	Freon 12	ND	ug/m3	106.67	53	19	
306-83-2	Freon 123	ND	ug/m3	106.67	53	26	
354-23-4	Freon 123a	590	ug/m3	106.67	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	106.67	53	25	
142-82-5	Heptane	ND	ug/m3	106.67	53	17	
87-68-3	Hexachlorobutadiene	ND	ug/m3	106.67	53	19	
110-54-3	Hexane	ND	ug/m3	106.67	53	18	
179601-23-	m,p-Xylene	ND	ug/m3	106.67	110	31	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	106.67	53	16	
75-09-2	Methylene Chloride	20	ug/m3	106.67	53	16	J
95-47-6	o-Xylene	ND	ug/m3	106.67	53	15	
103-65-1	Propylbenzene	ND	ug/m3	106.67	53	16	
100-42-5	Styrene	ND	ug/m3	106.67	53	16	
127-18-4	Tetrachloroethene	ND	ug/m3	106.67	53	15	
109-99-9	Tetrahydrofuran	ND	ug/m3	106.67	53	23	
108-88-3	Toluene	ND	ug/m3	106.67	53	17	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	106.67	53	18	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	106.67	53	17	
79-01-6	Trichloroethene	2000	ug/m3	106.67	53	16	
75-01-4	Vinyl Chloride	ND	ug/m3	106.67	53	20	

Sample **1203230930** **Sample Type** **Soil Gas** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	107.33	54	17	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	107.33	54	17	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	107.33	54	17	
75-34-3	1,1-Dichloroethane	ND	ug/m3	107.33	54	18	
75-35-4	1,1-Dichloroethene	ND	ug/m3	107.33	54	18	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	107.33	54	26	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	107.33	54	17	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	107.33	54	16	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	107.33	54	18	
107-06-2	1,2-Dichloroethane	ND	ug/m3	107.33	54	20	
78-87-5	1,2-Dichloropropane	ND	ug/m3	107.33	54	18	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	107.33	54	18	
106-99-0	1,3-Butadiene	ND	ug/m3	107.33	54	23	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	107.33	54	18	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	107.33	54	17	
123-91-1	1,4-Dioxane	ND	ug/m3	107.33	54	18	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	107.33	54	18	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	107.33	540	25	
591-78-6	2-Hexanone	ND	ug/m3	107.33	54	19	
67-63-0	2-Propanol	ND	ug/m3	107.33	110	43	
107-05-1	3-Chloropropene	ND	ug/m3	107.33	54	17	
622-96-8	4-Ethyltoluene	ND	ug/m3	107.33	54	18	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	107.33	54	15	
67-64-1	Acetone	ND	ug/m3	107.33	540	94	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	107.33	54	16	
71-43-2	Benzene	ND	ug/m3	107.33	54	15	
75-27-4	Bromodichloromethane	ND	ug/m3	107.33	54	17	
75-25-2	Bromoform	ND	ug/m3	107.33	54	15	
74-83-9	Bromomethane	ND	ug/m3	107.33	54	20	
75-15-0	Carbon Disulfide	ND	ug/m3	107.33	540	16	
56-23-5	Carbon Tetrachloride	ND	ug/m3	107.33	54	17	
108-90-7	Chlorobenzene	ND	ug/m3	107.33	54	17	
75-00-3	Chloroethane	ND	ug/m3	107.33	54	20	
67-66-3	Chloroform	67	ug/m3	107.33	54	20	
74-87-3	Chloromethane	ND	ug/m3	107.33	54	20	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	107.33	54	19	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	107.33	54	15	
98-82-8	Cumene	ND	ug/m3	107.33	54	16	
110-82-7	Cyclohexane	ND	ug/m3	107.33	110	35	
124-48-1	Dibromochloromethane	ND	ug/m3	107.33	54	15	
64-17-5	Ethanol	ND	ug/m3	107.33	540	170	
100-41-4	Ethyl Benzene	ND	ug/m3	107.33	54	16	
75-69-4	Freon 11	ND	ug/m3	107.33	54	17	

76-13-1	Freon 113	9200	ug/m3	107.33	54	17	
76-14-2	Freon 114	ND	ug/m3	107.33	54	18	
75-71-8	Freon 12	ND	ug/m3	107.33	54	19	
306-83-2	Freon 123	ND	ug/m3	107.33	54	26	
354-23-4	Freon 123a	500	ug/m3	107.33	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	107.33	54	25	
142-82-5	Heptane	ND	ug/m3	107.33	54	17	
87-68-3	Hexachlorobutadiene	ND	ug/m3	107.33	54	19	
110-54-3	Hexane	ND	ug/m3	107.33	54	18	
179601-23-	m,p-Xylene	ND	ug/m3	107.33	110	31	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	107.33	54	16	
75-09-2	Methylene Chloride	21	ug/m3	107.33	54	16	J
95-47-6	o-Xylene	ND	ug/m3	107.33	54	15	
103-65-1	Propylbenzene	ND	ug/m3	107.33	54	16	
100-42-5	Styrene	ND	ug/m3	107.33	54	16	
127-18-4	Tetrachloroethene	ND	ug/m3	107.33	54	15	
109-99-9	Tetrahydrofuran	ND	ug/m3	107.33	54	24	
108-88-3	Toluene	ND	ug/m3	107.33	54	17	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	107.33	54	18	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	107.33	54	17	
79-01-6	Trichloroethene	1600	ug/m3	107.33	54	16	
75-01-4	Vinyl Chloride	ND	ug/m3	107.33	54	20	

Sample 1203231145 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	162	81	26	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	162	81	26	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	162	81	26	
75-34-3	1,1-Dichloroethane	ND	ug/m3	162	81	28	
75-35-4	1,1-Dichloroethene	ND	ug/m3	162	81	28	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	162	81	39	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	162	81	26	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	162	81	24	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	162	81	28	
107-06-2	1,2-Dichloroethane	ND	ug/m3	162	81	31	
78-87-5	1,2-Dichloropropane	ND	ug/m3	162	81	28	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	162	81	28	
106-99-0	1,3-Butadiene	ND	ug/m3	162	81	34	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	162	81	28	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	162	81	26	
123-91-1	1,4-Dioxane	ND	ug/m3	162	81	28	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	162	81	28	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	162	810	37	
591-78-6	2-Hexanone	ND	ug/m3	162	81	29	
67-63-0	2-Propanol	ND	ug/m3	162	160	65	
107-05-1	3-Chloropropene	ND	ug/m3	162	81	26	

622-96-8	4-Ethyltoluene	ND	ug/m3	162	81	28	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	162	81	23	
67-64-1	Acetone	ND	ug/m3	162	810	140	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	162	81	24	
71-43-2	Benzene	ND	ug/m3	162	81	23	
75-27-4	Bromodichloromethane	ND	ug/m3	162	81	26	
75-25-2	Bromoform	ND	ug/m3	162	81	23	
74-83-9	Bromomethane	ND	ug/m3	162	81	31	
75-15-0	Carbon Disulfide	ND	ug/m3	162	810	24	
56-23-5	Carbon Tetrachloride	ND	ug/m3	162	81	26	
108-90-7	Chlorobenzene	ND	ug/m3	162	81	26	
75-00-3	Chloroethane	ND	ug/m3	162	81	31	
67-66-3	Chloroform	83	ug/m3	162	81	31	
74-87-3	Chloromethane	ND	ug/m3	162	81	31	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	162	81	29	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	162	81	23	
98-82-8	Cumene	ND	ug/m3	162	81	24	
110-82-7	Cyclohexane	ND	ug/m3	162	160	53	
124-48-1	Dibromochloromethane	ND	ug/m3	162	81	23	
64-17-5	Ethanol	ND	ug/m3	162	810	260	
100-41-4	Ethyl Benzene	ND	ug/m3	162	81	24	
75-69-4	Freon 11	ND	ug/m3	162	81	26	
76-13-1	Freon 113	12000	ug/m3	162	81	26	
76-14-2	Freon 114	ND	ug/m3	162	81	28	
75-71-8	Freon 12	ND	ug/m3	162	81	29	
306-83-2	Freon 123	ND	ug/m3	162	81	39	
354-23-4	Freon 123a	570	ug/m3	162	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	162	81	37	
142-82-5	Heptane	ND	ug/m3	162	81	26	
87-68-3	Hexachlorobutadiene	ND	ug/m3	162	81	29	
110-54-3	Hexane	ND	ug/m3	162	81	28	
179601-23-	m,p-Xylene	ND	ug/m3	162	160	47	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	162	81	24	
75-09-2	Methylene Chloride	32	ug/m3	162	81	24	J
95-47-6	o-Xylene	ND	ug/m3	162	81	23	
103-65-1	Propylbenzene	ND	ug/m3	162	81	24	
100-42-5	Styrene	ND	ug/m3	162	81	24	
127-18-4	Tetrachloroethene	ND	ug/m3	162	81	23	
109-99-9	Tetrahydrofuran	ND	ug/m3	162	81	36	
108-88-3	Toluene	ND	ug/m3	162	81	26	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	162	81	28	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	162	81	26	
79-01-6	Trichloroethene	2000	ug/m3	162	81	24	
75-01-4	Vinyl Chloride	ND	ug/m3	162	81	31	

Sample **1203231741** **Sample Type** **Soil Gas** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	146.36	73	23	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	146.36	73	23	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	146.36	73	23	
75-34-3	1,1-Dichloroethane	ND	ug/m3	146.36	73	25	
75-35-4	1,1-Dichloroethene	ND	ug/m3	146.36	73	25	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	146.36	73	35	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	146.36	73	23	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	146.36	73	22	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	146.36	73	25	
107-06-2	1,2-Dichloroethane	ND	ug/m3	146.36	73	28	
78-87-5	1,2-Dichloropropane	ND	ug/m3	146.36	73	25	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	146.36	73	25	
106-99-0	1,3-Butadiene	ND	ug/m3	146.36	73	31	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	146.36	73	25	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	146.36	73	23	
123-91-1	1,4-Dioxane	ND	ug/m3	146.36	73	25	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	146.36	73	25	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	146.36	730	34	
591-78-6	2-Hexanone	ND	ug/m3	146.36	73	26	
67-63-0	2-Propanol	ND	ug/m3	146.36	150	59	
107-05-1	3-Chloropropene	ND	ug/m3	146.36	73	23	
622-96-8	4-Ethyltoluene	ND	ug/m3	146.36	73	25	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	146.36	73	20	
67-64-1	Acetone	ND	ug/m3	146.36	730	130	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	146.36	73	22	
71-43-2	Benzene	ND	ug/m3	146.36	73	20	
75-27-4	Bromodichloromethane	ND	ug/m3	146.36	73	23	
75-25-2	Bromoform	ND	ug/m3	146.36	73	20	
74-83-9	Bromomethane	ND	ug/m3	146.36	73	28	
75-15-0	Carbon Disulfide	ND	ug/m3	146.36	730	22	
56-23-5	Carbon Tetrachloride	ND	ug/m3	146.36	73	23	
108-90-7	Chlorobenzene	ND	ug/m3	146.36	73	23	
75-00-3	Chloroethane	ND	ug/m3	146.36	73	28	
67-66-3	Chloroform	80	ug/m3	146.36	73	28	
74-87-3	Chloromethane	ND	ug/m3	146.36	73	28	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	146.36	73	26	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	146.36	73	20	
98-82-8	Cumene	ND	ug/m3	146.36	73	22	
110-82-7	Cyclohexane	ND	ug/m3	146.36	150	48	
124-48-1	Dibromochloromethane	ND	ug/m3	146.36	73	20	
64-17-5	Ethanol	ND	ug/m3	146.36	730	230	
100-41-4	Ethyl Benzene	ND	ug/m3	146.36	73	22	
75-69-4	Freon 11	ND	ug/m3	146.36	73	23	

76-13-1	Freon 113	11000	ug/m3	146.36	73	23	
76-14-2	Freon 114	ND	ug/m3	146.36	73	25	
75-71-8	Freon 12	ND	ug/m3	146.36	73	26	
306-83-2	Freon 123	ND	ug/m3	146.36	73	35	
354-23-4	Freon 123a	550	ug/m3	146.36	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	146.36	73	34	
142-82-5	Heptane	ND	ug/m3	146.36	73	23	
87-68-3	Hexachlorobutadiene	ND	ug/m3	146.36	73	26	
110-54-3	Hexane	ND	ug/m3	146.36	73	25	
179601-23-	m,p-Xylene	ND	ug/m3	146.36	150	42	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	146.36	73	22	
75-09-2	Methylene Chloride	25	ug/m3	146.36	73	22	J
95-47-6	o-Xylene	ND	ug/m3	146.36	73	20	
103-65-1	Propylbenzene	ND	ug/m3	146.36	73	22	
100-42-5	Styrene	ND	ug/m3	146.36	73	22	
127-18-4	Tetrachloroethene	ND	ug/m3	146.36	73	20	
109-99-9	Tetrahydrofuran	ND	ug/m3	146.36	73	32	
108-88-3	Toluene	ND	ug/m3	146.36	73	23	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	146.36	73	25	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	146.36	73	23	
79-01-6	Trichloroethene	1900	ug/m3	146.36	73	22	
75-01-4	Vinyl Chloride	ND	ug/m3	146.36	73	28	

Sample 1203241420 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	2.5	1.3	0.4	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	2.5	1.3	0.4	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	2.5	1.3	0.4	
75-34-3	1,1-Dichloroethane	ND	ug/m3	2.5	1.3	0.43	
75-35-4	1,1-Dichloroethene	ND	ug/m3	2.5	1.3	0.43	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	2.5	1.3	0.6	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	2.5	1.3	0.4	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	2.5	1.3	0.38	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	2.5	1.3	0.43	
107-06-2	1,2-Dichloroethane	ND	ug/m3	2.5	1.3	0.48	
78-87-5	1,2-Dichloropropane	ND	ug/m3	2.5	1.3	0.43	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	2.5	1.3	0.43	
106-99-0	1,3-Butadiene	ND	ug/m3	2.5	1.3	0.53	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	2.5	1.3	0.43	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	2.5	1.3	0.4	
123-91-1	1,4-Dioxane	ND	ug/m3	2.5	1.3	0.43	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	2.5	1.3	0.43	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	0.73	ug/m3	2.5	13	0.58	J
591-78-6	2-Hexanone	ND	ug/m3	2.5	1.3	0.45	
67-63-0	2-Propanol	ND	ug/m3	2.5	2.5	1	
107-05-1	3-Chloropropene	ND	ug/m3	2.5	1.3	0.4	

622-96-8	4-Ethyltoluene	ND	ug/m3	2.5	1.3	0.43	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	2.5	1.3	0.35	
67-64-1	Acetone	5.9	ug/m3	2.5	13	2.2	J
100-44-7	alpha-Chlorotoluene	ND	ug/m3	2.5	1.3	0.38	
71-43-2	Benzene	ND	ug/m3	2.5	1.3	0.35	
75-27-4	Bromodichloromethane	ND	ug/m3	2.5	1.3	0.4	
75-25-2	Bromoform	ND	ug/m3	2.5	1.3	0.35	
74-83-9	Bromomethane	ND	ug/m3	2.5	1.3	0.48	
75-15-0	Carbon Disulfide	ND	ug/m3	2.5	13	0.38	
56-23-5	Carbon Tetrachloride	ND	ug/m3	2.5	1.3	0.4	
108-90-7	Chlorobenzene	ND	ug/m3	2.5	1.3	0.4	
75-00-3	Chloroethane	ND	ug/m3	2.5	1.3	0.48	
67-66-3	Chloroform	ND	ug/m3	2.5	1.3	0.48	
74-87-3	Chloromethane	ND	ug/m3	2.5	1.3	0.48	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	2.5	1.3	0.45	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	2.5	1.3	0.35	
98-82-8	Cumene	ND	ug/m3	2.5	1.3	0.38	
110-82-7	Cyclohexane	ND	ug/m3	2.5	2.5	0.83	
124-48-1	Dibromochloromethane	ND	ug/m3	2.5	1.3	0.35	
64-17-5	Ethanol	ND	ug/m3	2.5	13	4	
100-41-4	Ethyl Benzene	ND	ug/m3	2.5	1.3	0.38	
75-69-4	Freon 11	ND	ug/m3	2.5	1.3	0.4	
76-13-1	Freon 113	24	ug/m3	2.5	1.3	0.4	
76-14-2	Freon 114	ND	ug/m3	2.5	1.3	0.43	
75-71-8	Freon 12	ND	ug/m3	2.5	1.3	0.45	
306-83-2	Freon 123	ND	ug/m3	2.5	1.3	0.6	
354-23-4	Freon 123a	ND	ug/m3	2.5	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	2.5	1.3	0.58	
142-82-5	Heptane	ND	ug/m3	2.5	1.3	0.4	
87-68-3	Hexachlorobutadiene	ND	ug/m3	2.5	1.3	0.45	
110-54-3	Hexane	ND	ug/m3	2.5	1.3	0.43	
179601-23-	m,p-Xylene	ND	ug/m3	2.5	2.5	0.73	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	2.5	1.3	0.38	
75-09-2	Methylene Chloride	0.44	ug/m3	2.5	1.3	0.38	J RB
95-47-6	o-Xylene	ND	ug/m3	2.5	1.3	0.35	
103-65-1	Propylbenzene	ND	ug/m3	2.5	1.3	0.38	
100-42-5	Styrene	ND	ug/m3	2.5	1.3	0.38	
127-18-4	Tetrachloroethene	ND	ug/m3	2.5	1.3	0.35	
109-99-9	Tetrahydrofuran	ND	ug/m3	2.5	1.3	0.55	
108-88-3	Toluene	ND	ug/m3	2.5	1.3	0.4	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	2.5	1.3	0.43	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	2.5	1.3	0.4	
79-01-6	Trichloroethene	3.6	ug/m3	2.5	1.3	0.38	
75-01-4	Vinyl Chloride	ND	ug/m3	2.5	1.3	0.48	

Borehole	600-SGW-5	Depth (ft)	102.5	Depth (m)	31.24	Event Date	3/22/2012

Sample	1203221018	Sample Type	Soil Gas	Analysis Method	TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	161	81	26	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	161	81	26	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	161	81	26	
75-34-3	1,1-Dichloroethane	ND	ug/m3	161	81	27	
75-35-4	1,1-Dichloroethene	ND	ug/m3	161	81	27	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	161	81	39	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	161	81	26	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	161	81	24	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	161	81	27	
107-06-2	1,2-Dichloroethane	ND	ug/m3	161	81	31	
78-87-5	1,2-Dichloropropane	ND	ug/m3	161	81	27	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	161	81	27	
106-99-0	1,3-Butadiene	ND	ug/m3	161	81	34	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	161	81	27	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	161	81	26	
123-91-1	1,4-Dioxane	ND	ug/m3	161	81	27	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	161	81	27	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	161	810	37	
591-78-6	2-Hexanone	ND	ug/m3	161	81	29	
67-63-0	2-Propanol	ND	ug/m3	161	160	64	
107-05-1	3-Chloropropene	ND	ug/m3	161	81	26	
622-96-8	4-Ethyltoluene	ND	ug/m3	161	81	27	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	161	81	23	
67-64-1	Acetone	ND	ug/m3	161	810	140	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	161	81	24	
71-43-2	Benzene	ND	ug/m3	161	81	23	
75-27-4	Bromodichloromethane	ND	ug/m3	161	81	26	
75-25-2	Bromoform	ND	ug/m3	161	81	23	
74-83-9	Bromomethane	ND	ug/m3	161	81	31	
75-15-0	Carbon Disulfide	ND	ug/m3	161	810	24	
56-23-5	Carbon Tetrachloride	ND	ug/m3	161	81	26	
108-90-7	Chlorobenzene	ND	ug/m3	161	81	26	
75-00-3	Chloroethane	ND	ug/m3	161	81	31	
67-66-3	Chloroform	78	ug/m3	161	81	31	J
74-87-3	Chloromethane	ND	ug/m3	161	81	31	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	161	81	29	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	161	81	23	
98-82-8	Cumene	ND	ug/m3	161	81	24	
110-82-7	Cyclohexane	ND	ug/m3	161	160	53	
124-48-1	Dibromochloromethane	ND	ug/m3	161	81	23	
64-17-5	Ethanol	ND	ug/m3	161	810	260	

100-41-4	Ethyl Benzene	ND	ug/m3	161	81	24	
75-69-4	Freon 11	ND	ug/m3	161	81	26	
76-13-1	Freon 113	15000	ug/m3	161	81	26	
76-14-2	Freon 114	ND	ug/m3	161	81	27	
75-71-8	Freon 12	ND	ug/m3	161	81	29	
306-83-2	Freon 123	ND	ug/m3	161	81	39	
NA	Freon 123a	470	ug/m3	161	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	161	81	37	
142-82-5	Heptane	ND	ug/m3	161	81	26	
87-68-3	Hexachlorobutadiene	ND	ug/m3	161	81	29	
110-54-3	Hexane	ND	ug/m3	161	81	27	
179601-23-	m,p-Xylene	ND	ug/m3	161	160	47	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	161	81	24	
75-09-2	Methylene Chloride	32	ug/m3	161	81	24	J
95-47-6	o-Xylene	ND	ug/m3	161	81	23	
103-65-1	Propylbenzene	ND	ug/m3	161	81	24	
100-42-5	Styrene	ND	ug/m3	161	81	24	
127-18-4	Tetrachloroethene	ND	ug/m3	161	81	23	
109-99-9	Tetrahydrofuran	ND	ug/m3	161	81	35	
108-88-3	Toluene	ND	ug/m3	161	81	26	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	161	81	27	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	161	81	26	
79-01-6	Trichloroethene	2100	ug/m3	161	81	24	
75-01-4	Vinyl Chloride	ND	ug/m3	161	81	31	

Sample 1203221410 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	109.33	55	17	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	109.33	55	17	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	109.33	55	17	
75-34-3	1,1-Dichloroethane	ND	ug/m3	109.33	55	19	
75-35-4	1,1-Dichloroethene	ND	ug/m3	109.33	55	19	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	109.33	55	26	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	109.33	55	17	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	109.33	55	16	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	109.33	55	19	
107-06-2	1,2-Dichloroethane	ND	ug/m3	109.33	55	21	
78-87-5	1,2-Dichloropropane	ND	ug/m3	109.33	55	19	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	109.33	55	19	
106-99-0	1,3-Butadiene	ND	ug/m3	109.33	55	23	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	109.33	55	19	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	109.33	55	17	
123-91-1	1,4-Dioxane	ND	ug/m3	109.33	55	19	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	109.33	55	19	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	109.33	550	25	
591-78-6	2-Hexanone	ND	ug/m3	109.33	55	20	

67-63-0	2-Propanol	ND	ug/m3	109.33	110	44	
107-05-1	3-Chloropropene	ND	ug/m3	109.33	55	17	
622-96-8	4-Ethyltoluene	ND	ug/m3	109.33	55	19	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	109.33	55	15	
67-64-1	Acetone	ND	ug/m3	109.33	550	96	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	109.33	55	16	
71-43-2	Benzene	ND	ug/m3	109.33	55	15	
75-27-4	Bromodichloromethane	ND	ug/m3	109.33	55	17	
75-25-2	Bromoform	ND	ug/m3	109.33	55	15	
74-83-9	Bromomethane	ND	ug/m3	109.33	55	21	
75-15-0	Carbon Disulfide	ND	ug/m3	109.33	550	16	
56-23-5	Carbon Tetrachloride	ND	ug/m3	109.33	55	17	
108-90-7	Chlorobenzene	ND	ug/m3	109.33	55	17	
75-00-3	Chloroethane	ND	ug/m3	109.33	55	21	
67-66-3	Chloroform	42	ug/m3	109.33	55	21	J
74-87-3	Chloromethane	ND	ug/m3	109.33	55	21	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	109.33	55	20	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	109.33	55	15	
98-82-8	Cumene	ND	ug/m3	109.33	55	16	
110-82-7	Cyclohexane	ND	ug/m3	109.33	110	36	
124-48-1	Dibromochloromethane	ND	ug/m3	109.33	55	15	
64-17-5	Ethanol	ND	ug/m3	109.33	550	170	
100-41-4	Ethyl Benzene	ND	ug/m3	109.33	55	16	
75-69-4	Freon 11	ND	ug/m3	109.33	55	17	
76-13-1	Freon 113	7700	ug/m3	109.33	55	17	
76-14-2	Freon 114	ND	ug/m3	109.33	55	19	
75-71-8	Freon 12	ND	ug/m3	109.33	55	20	
306-83-2	Freon 123	ND	ug/m3	109.33	55	26	
354-23-4	Freon 123a	ND	ug/m3	109.33	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	109.33	55	25	
142-82-5	Heptane	ND	ug/m3	109.33	55	17	
87-68-3	Hexachlorobutadiene	ND	ug/m3	109.33	55	20	
110-54-3	Hexane	ND	ug/m3	109.33	55	19	
179601-23-	m,p-Xylene	ND	ug/m3	109.33	110	32	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	109.33	55	16	
75-09-2	Methylene Chloride	20	ug/m3	109.33	55	16	J
95-47-6	o-Xylene	ND	ug/m3	109.33	55	15	
103-65-1	Propylbenzene	ND	ug/m3	109.33	55	16	
100-42-5	Styrene	ND	ug/m3	109.33	55	16	
127-18-4	Tetrachloroethene	ND	ug/m3	109.33	55	15	
109-99-9	Tetrahydrofuran	ND	ug/m3	109.33	55	24	
108-88-3	Toluene	ND	ug/m3	109.33	55	17	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	109.33	55	19	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	109.33	55	17	
79-01-6	Trichloroethene	1100	ug/m3	109.33	55	16	
75-01-4	Vinyl Chloride	ND	ug/m3	109.33	55	21	

Sample **1203221527** **Sample Type** **Soil Gas** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	222.5	110	36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	222.5	110	36	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	222.5	110	36	
75-34-3	1,1-Dichloroethane	ND	ug/m3	222.5	110	38	
75-35-4	1,1-Dichloroethene	ND	ug/m3	222.5	110	38	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	222.5	110	53	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	222.5	110	36	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	222.5	110	33	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	222.5	110	38	
107-06-2	1,2-Dichloroethane	ND	ug/m3	222.5	110	42	
78-87-5	1,2-Dichloropropane	ND	ug/m3	222.5	110	38	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	222.5	110	38	
106-99-0	1,3-Butadiene	ND	ug/m3	222.5	110	47	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	222.5	110	38	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	222.5	110	36	
123-91-1	1,4-Dioxane	ND	ug/m3	222.5	110	38	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	222.5	110	38	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	222.5	1100	51	
591-78-6	2-Hexanone	ND	ug/m3	222.5	110	40	
67-63-0	2-Propanol	ND	ug/m3	222.5	220	89	
107-05-1	3-Chloropropene	ND	ug/m3	222.5	110	36	
622-96-8	4-Ethyltoluene	ND	ug/m3	222.5	110	38	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	222.5	110	31	
67-64-1	Acetone	ND	ug/m3	222.5	1100	200	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	222.5	110	33	
71-43-2	Benzene	ND	ug/m3	222.5	110	31	
75-27-4	Bromodichloromethane	ND	ug/m3	222.5	110	36	
75-25-2	Bromoform	ND	ug/m3	222.5	110	31	
74-83-9	Bromomethane	ND	ug/m3	222.5	110	42	
75-15-0	Carbon Disulfide	ND	ug/m3	222.5	1100	33	
56-23-5	Carbon Tetrachloride	ND	ug/m3	222.5	110	36	
108-90-7	Chlorobenzene	ND	ug/m3	222.5	110	36	
75-00-3	Chloroethane	ND	ug/m3	222.5	110	42	
67-66-3	Chloroform	77	ug/m3	222.5	110	42	J
74-87-3	Chloromethane	ND	ug/m3	222.5	110	42	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	222.5	110	40	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	222.5	110	31	
98-82-8	Cumene	ND	ug/m3	222.5	110	33	
110-82-7	Cyclohexane	ND	ug/m3	222.5	220	73	
124-48-1	Dibromochloromethane	ND	ug/m3	222.5	110	31	
64-17-5	Ethanol	ND	ug/m3	222.5	1100	360	
100-41-4	Ethyl Benzene	ND	ug/m3	222.5	110	33	
75-69-4	Freon 11	ND	ug/m3	222.5	110	36	

76-13-1	Freon 113	15000	ug/m3	222.5	110	36	
76-14-2	Freon 114	ND	ug/m3	222.5	110	38	
75-71-8	Freon 12	ND	ug/m3	222.5	110	40	
306-83-2	Freon 123	ND	ug/m3	222.5	110	53	
354-23-4	Freon 123a	ND	ug/m3	222.5	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	222.5	110	51	
142-82-5	Heptane	ND	ug/m3	222.5	110	36	
87-68-3	Hexachlorobutadiene	ND	ug/m3	222.5	110	40	
110-54-3	Hexane	ND	ug/m3	222.5	110	38	
179601-23-	m,p-Xylene	ND	ug/m3	222.5	220	65	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	222.5	110	33	
75-09-2	Methylene Chloride	39	ug/m3	222.5	110	33	J
95-47-6	o-Xylene	ND	ug/m3	222.5	110	31	
103-65-1	Propylbenzene	ND	ug/m3	222.5	110	33	
100-42-5	Styrene	ND	ug/m3	222.5	110	33	
127-18-4	Tetrachloroethene	ND	ug/m3	222.5	110	31	
109-99-9	Tetrahydrofuran	ND	ug/m3	222.5	110	49	
108-88-3	Toluene	ND	ug/m3	222.5	110	36	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	222.5	110	38	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	222.5	110	36	
79-01-6	Trichloroethene	1900	ug/m3	222.5	110	33	
75-01-4	Vinyl Chloride	ND	ug/m3	222.5	110	42	

Sample 1203221701 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	203.75	100	33	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	203.75	100	33	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	203.75	100	33	
75-34-3	1,1-Dichloroethane	ND	ug/m3	203.75	100	35	
75-35-4	1,1-Dichloroethene	ND	ug/m3	203.75	100	35	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	203.75	100	49	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	203.75	100	33	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	203.75	100	31	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	203.75	100	35	
107-06-2	1,2-Dichloroethane	ND	ug/m3	203.75	100	39	
78-87-5	1,2-Dichloropropane	ND	ug/m3	203.75	100	35	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	203.75	100	35	
106-99-0	1,3-Butadiene	ND	ug/m3	203.75	100	43	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	203.75	100	35	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	203.75	100	33	
123-91-1	1,4-Dioxane	ND	ug/m3	203.75	100	35	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	203.75	100	35	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	203.75	1000	47	
591-78-6	2-Hexanone	ND	ug/m3	203.75	100	37	
67-63-0	2-Propanol	ND	ug/m3	203.75	200	82	
107-05-1	3-Chloropropene	ND	ug/m3	203.75	100	33	

622-96-8	4-Ethyltoluene	ND	ug/m3	203.75	100	35	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	203.75	100	29	
67-64-1	Acetone	ND	ug/m3	203.75	1000	180	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	203.75	100	31	
71-43-2	Benzene	ND	ug/m3	203.75	100	29	
75-27-4	Bromodichloromethane	ND	ug/m3	203.75	100	33	
75-25-2	Bromoform	ND	ug/m3	203.75	100	29	
74-83-9	Bromomethane	ND	ug/m3	203.75	100	39	
75-15-0	Carbon Disulfide	ND	ug/m3	203.75	1000	31	
56-23-5	Carbon Tetrachloride	ND	ug/m3	203.75	100	33	
108-90-7	Chlorobenzene	ND	ug/m3	203.75	100	33	
75-00-3	Chloroethane	ND	ug/m3	203.75	100	39	
67-66-3	Chloroform	72	ug/m3	203.75	100	39	J
74-87-3	Chloromethane	ND	ug/m3	203.75	100	39	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	203.75	100	37	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	203.75	100	29	
98-82-8	Cumene	ND	ug/m3	203.75	100	31	
110-82-7	Cyclohexane	ND	ug/m3	203.75	200	67	
124-48-1	Dibromochloromethane	ND	ug/m3	203.75	100	29	
64-17-5	Ethanol	ND	ug/m3	203.75	1000	330	
100-41-4	Ethyl Benzene	ND	ug/m3	203.75	100	31	
75-69-4	Freon 11	ND	ug/m3	203.75	100	33	
76-13-1	Freon 113	15000	ug/m3	203.75	100	33	
76-14-2	Freon 114	ND	ug/m3	203.75	100	35	
75-71-8	Freon 12	ND	ug/m3	203.75	100	37	
306-83-2	Freon 123	ND	ug/m3	203.75	100	49	
354-23-4	Freon 123a	ND	ug/m3	203.75	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	203.75	100	47	
142-82-5	Heptane	ND	ug/m3	203.75	100	33	
87-68-3	Hexachlorobutadiene	ND	ug/m3	203.75	100	37	
110-54-3	Hexane	ND	ug/m3	203.75	100	35	
179601-23-	m,p-Xylene	ND	ug/m3	203.75	200	59	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	203.75	100	31	
75-09-2	Methylene Chloride	36	ug/m3	203.75	100	31	J
95-47-6	o-Xylene	ND	ug/m3	203.75	100	29	
103-65-1	Propylbenzene	ND	ug/m3	203.75	100	31	
100-42-5	Styrene	ND	ug/m3	203.75	100	31	
127-18-4	Tetrachloroethene	ND	ug/m3	203.75	100	29	
109-99-9	Tetrahydrofuran	ND	ug/m3	203.75	100	45	
108-88-3	Toluene	ND	ug/m3	203.75	100	33	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	203.75	100	35	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	203.75	100	33	
79-01-6	Trichloroethene	1800	ug/m3	203.75	100	31	
75-01-4	Vinyl Chloride	ND	ug/m3	203.75	100	39	

Sample **1203230936** **Sample Type** **Soil Gas** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	164	82	26	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	164	82	26	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	164	82	26	
75-34-3	1,1-Dichloroethane	ND	ug/m3	164	82	28	
75-35-4	1,1-Dichloroethene	ND	ug/m3	164	82	28	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	164	82	39	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	164	82	26	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	164	82	25	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	164	82	28	
107-06-2	1,2-Dichloroethane	ND	ug/m3	164	82	31	
78-87-5	1,2-Dichloropropane	ND	ug/m3	164	82	28	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	164	82	28	
106-99-0	1,3-Butadiene	ND	ug/m3	164	82	34	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	164	82	28	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	164	82	26	
123-91-1	1,4-Dioxane	ND	ug/m3	164	82	28	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	164	82	28	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	164	820	38	
591-78-6	2-Hexanone	ND	ug/m3	164	82	30	
67-63-0	2-Propanol	ND	ug/m3	164	160	66	
107-05-1	3-Chloropropene	ND	ug/m3	164	82	26	
622-96-8	4-Ethyltoluene	ND	ug/m3	164	82	28	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	164	82	23	
67-64-1	Acetone	ND	ug/m3	164	820	140	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	164	82	25	
71-43-2	Benzene	ND	ug/m3	164	82	23	
75-27-4	Bromodichloromethane	ND	ug/m3	164	82	26	
75-25-2	Bromoform	ND	ug/m3	164	82	23	
74-83-9	Bromomethane	ND	ug/m3	164	82	31	
75-15-0	Carbon Disulfide	ND	ug/m3	164	820	25	
56-23-5	Carbon Tetrachloride	ND	ug/m3	164	82	26	
108-90-7	Chlorobenzene	ND	ug/m3	164	82	26	
75-00-3	Chloroethane	ND	ug/m3	164	82	31	
67-66-3	Chloroform	73	ug/m3	164	82	31	J
74-87-3	Chloromethane	ND	ug/m3	164	82	31	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	164	82	30	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	164	82	23	
98-82-8	Cumene	ND	ug/m3	164	82	25	
110-82-7	Cyclohexane	ND	ug/m3	164	160	54	
124-48-1	Dibromochloromethane	ND	ug/m3	164	82	23	
64-17-5	Ethanol	ND	ug/m3	164	820	260	
100-41-4	Ethyl Benzene	ND	ug/m3	164	82	25	
75-69-4	Freon 11	ND	ug/m3	164	82	26	

76-13-1	Freon 113	13000	ug/m3	164	82	26	
76-14-2	Freon 114	ND	ug/m3	164	82	28	
75-71-8	Freon 12	ND	ug/m3	164	82	30	
306-83-2	Freon 123	ND	ug/m3	164	82	39	
354-23-4	Freon 123a	500	ug/m3	164	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	164	82	38	
142-82-5	Heptane	ND	ug/m3	164	82	26	
87-68-3	Hexachlorobutadiene	ND	ug/m3	164	82	30	
110-54-3	Hexane	ND	ug/m3	164	82	28	
179601-23-	m,p-Xylene	ND	ug/m3	164	160	48	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	164	82	25	
75-09-2	Methylene Chloride	35	ug/m3	164	82	25	J
95-47-6	o-Xylene	ND	ug/m3	164	82	23	
103-65-1	Propylbenzene	ND	ug/m3	164	82	25	
100-42-5	Styrene	ND	ug/m3	164	82	25	
127-18-4	Tetrachloroethene	30	ug/m3	164	82	23	J
109-99-9	Tetrahydrofuran	ND	ug/m3	164	82	36	
108-88-3	Toluene	ND	ug/m3	164	82	26	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	164	82	28	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	164	82	26	
79-01-6	Trichloroethene	1900	ug/m3	164	82	25	
75-01-4	Vinyl Chloride	ND	ug/m3	164	82	31	

Sample 1203231151 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	200	100	32	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	200	100	32	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	200	100	32	
75-34-3	1,1-Dichloroethane	ND	ug/m3	200	100	34	
75-35-4	1,1-Dichloroethene	ND	ug/m3	200	100	34	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	200	100	48	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	200	100	32	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	200	100	30	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	200	100	34	
107-06-2	1,2-Dichloroethane	ND	ug/m3	200	100	38	
78-87-5	1,2-Dichloropropane	ND	ug/m3	200	100	34	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	200	100	34	
106-99-0	1,3-Butadiene	ND	ug/m3	200	100	42	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	200	100	34	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	200	100	32	
123-91-1	1,4-Dioxane	ND	ug/m3	200	100	34	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	200	100	34	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	200	1000	46	
591-78-6	2-Hexanone	ND	ug/m3	200	100	36	
67-63-0	2-Propanol	ND	ug/m3	200	200	80	
107-05-1	3-Chloropropene	ND	ug/m3	200	100	32	

622-96-8	4-Ethyltoluene	ND	ug/m3	200	100	34	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	200	100	28	
67-64-1	Acetone	ND	ug/m3	200	1000	180	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	200	100	30	
71-43-2	Benzene	ND	ug/m3	200	100	28	
75-27-4	Bromodichloromethane	ND	ug/m3	200	100	32	
75-25-2	Bromoform	ND	ug/m3	200	100	28	
74-83-9	Bromomethane	ND	ug/m3	200	100	38	
75-15-0	Carbon Disulfide	ND	ug/m3	200	1000	30	
56-23-5	Carbon Tetrachloride	ND	ug/m3	200	100	32	
108-90-7	Chlorobenzene	ND	ug/m3	200	100	32	
75-00-3	Chloroethane	ND	ug/m3	200	100	38	
67-66-3	Chloroform	76	ug/m3	200	100	38	J
74-87-3	Chloromethane	ND	ug/m3	200	100	38	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	200	100	36	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	200	100	28	
98-82-8	Cumene	ND	ug/m3	200	100	30	
110-82-7	Cyclohexane	ND	ug/m3	200	200	66	
124-48-1	Dibromochloromethane	ND	ug/m3	200	100	28	
64-17-5	Ethanol	ND	ug/m3	200	1000	320	
100-41-4	Ethyl Benzene	ND	ug/m3	200	100	30	
75-69-4	Freon 11	ND	ug/m3	200	100	32	
76-13-1	Freon 113	15000	ug/m3	200	100	32	
76-14-2	Freon 114	ND	ug/m3	200	100	34	
75-71-8	Freon 12	ND	ug/m3	200	100	36	
306-83-2	Freon 123	ND	ug/m3	200	100	48	
354-23-4	Freon 123a	ND	ug/m3	200	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	200	100	46	
142-82-5	Heptane	ND	ug/m3	200	100	32	
87-68-3	Hexachlorobutadiene	ND	ug/m3	200	100	36	
110-54-3	Hexane	ND	ug/m3	200	100	34	
179601-23-	m,p-Xylene	ND	ug/m3	200	200	58	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	200	100	30	
75-09-2	Methylene Chloride	37	ug/m3	200	100	30	J
95-47-6	o-Xylene	ND	ug/m3	200	100	28	
103-65-1	Propylbenzene	ND	ug/m3	200	100	30	
100-42-5	Styrene	ND	ug/m3	200	100	30	
127-18-4	Tetrachloroethene	ND	ug/m3	200	100	28	
109-99-9	Tetrahydrofuran	ND	ug/m3	200	100	44	
108-88-3	Toluene	ND	ug/m3	200	100	32	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	200	100	34	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	200	100	32	
79-01-6	Trichloroethene	2000	ug/m3	200	100	30	
75-01-4	Vinyl Chloride	ND	ug/m3	200	100	38	

Sample **1203231747** **Sample Type** **Soil Gas** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	182.22	91	29	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	182.22	91	29	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	182.22	91	29	
75-34-3	1,1-Dichloroethane	ND	ug/m3	182.22	91	31	
75-35-4	1,1-Dichloroethene	ND	ug/m3	182.22	91	31	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	182.22	91	44	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	182.22	91	29	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	182.22	91	27	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	182.22	91	31	
107-06-2	1,2-Dichloroethane	ND	ug/m3	182.22	91	35	
78-87-5	1,2-Dichloropropane	ND	ug/m3	182.22	91	31	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	182.22	91	31	
106-99-0	1,3-Butadiene	ND	ug/m3	182.22	91	38	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	182.22	91	31	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	182.22	91	29	
123-91-1	1,4-Dioxane	ND	ug/m3	182.22	91	31	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	182.22	91	31	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	182.22	910	42	
591-78-6	2-Hexanone	ND	ug/m3	182.22	91	33	
67-63-0	2-Propanol	ND	ug/m3	182.22	180	73	
107-05-1	3-Chloropropene	ND	ug/m3	182.22	91	29	
622-96-8	4-Ethyltoluene	ND	ug/m3	182.22	91	31	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	182.22	91	26	
67-64-1	Acetone	ND	ug/m3	182.22	910	160	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	182.22	91	27	
71-43-2	Benzene	ND	ug/m3	182.22	91	26	
75-27-4	Bromodichloromethane	ND	ug/m3	182.22	91	29	
75-25-2	Bromoform	ND	ug/m3	182.22	91	26	
74-83-9	Bromomethane	ND	ug/m3	182.22	91	35	
75-15-0	Carbon Disulfide	ND	ug/m3	182.22	910	27	
56-23-5	Carbon Tetrachloride	ND	ug/m3	182.22	91	29	
108-90-7	Chlorobenzene	ND	ug/m3	182.22	91	29	
75-00-3	Chloroethane	ND	ug/m3	182.22	91	35	
67-66-3	Chloroform	77	ug/m3	182.22	91	35	J
74-87-3	Chloromethane	ND	ug/m3	182.22	91	35	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	182.22	91	33	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	182.22	91	26	
98-82-8	Cumene	ND	ug/m3	182.22	91	27	
110-82-7	Cyclohexane	ND	ug/m3	182.22	180	60	
124-48-1	Dibromochloromethane	ND	ug/m3	182.22	91	26	
64-17-5	Ethanol	ND	ug/m3	182.22	910	290	
100-41-4	Ethyl Benzene	ND	ug/m3	182.22	91	27	
75-69-4	Freon 11	ND	ug/m3	182.22	91	29	

76-13-1	Freon 113	15000	ug/m3	182.22	91	29	
76-14-2	Freon 114	ND	ug/m3	182.22	91	31	
75-71-8	Freon 12	ND	ug/m3	182.22	91	33	
306-83-2	Freon 123	ND	ug/m3	182.22	91	44	
354-23-4	Freon 123a	ND	ug/m3	182.22	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	182.22	91	42	
142-82-5	Heptane	ND	ug/m3	182.22	91	29	
87-68-3	Hexachlorobutadiene	ND	ug/m3	182.22	91	33	
110-54-3	Hexane	ND	ug/m3	182.22	91	31	
179601-23-	m,p-Xylene	ND	ug/m3	182.22	180	53	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	182.22	91	27	
75-09-2	Methylene Chloride	34	ug/m3	182.22	91	27	J
95-47-6	o-Xylene	ND	ug/m3	182.22	91	26	
103-65-1	Propylbenzene	ND	ug/m3	182.22	91	27	
100-42-5	Styrene	ND	ug/m3	182.22	91	27	
127-18-4	Tetrachloroethene	ND	ug/m3	182.22	91	26	
109-99-9	Tetrahydrofuran	ND	ug/m3	182.22	91	40	
108-88-3	Toluene	ND	ug/m3	182.22	91	29	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	182.22	91	31	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	182.22	91	29	
79-01-6	Trichloroethene	2000	ug/m3	182.22	91	27	
75-01-4	Vinyl Chloride	ND	ug/m3	182.22	91	35	

Sample 1203241426 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	163	82	26	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	163	82	26	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	163	82	26	
75-34-3	1,1-Dichloroethane	ND	ug/m3	163	82	28	
75-35-4	1,1-Dichloroethene	ND	ug/m3	163	82	28	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	163	82	39	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	163	82	26	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	163	82	24	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	163	82	28	
107-06-2	1,2-Dichloroethane	ND	ug/m3	163	82	31	
78-87-5	1,2-Dichloropropane	ND	ug/m3	163	82	28	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	163	82	28	
106-99-0	1,3-Butadiene	ND	ug/m3	163	82	34	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	163	82	28	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	163	82	26	
123-91-1	1,4-Dioxane	ND	ug/m3	163	82	28	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	163	82	28	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	163	820	37	
591-78-6	2-Hexanone	ND	ug/m3	163	82	29	
67-63-0	2-Propanol	ND	ug/m3	163	160	65	
107-05-1	3-Chloropropene	ND	ug/m3	163	82	26	

622-96-8	4-Ethyltoluene	ND	ug/m3	163	82	28	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	163	82	23	
67-64-1	Acetone	ND	ug/m3	163	820	140	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	163	82	24	
71-43-2	Benzene	ND	ug/m3	163	82	23	
75-27-4	Bromodichloromethane	ND	ug/m3	163	82	26	
75-25-2	Bromoform	ND	ug/m3	163	82	23	
74-83-9	Bromomethane	ND	ug/m3	163	82	31	
75-15-0	Carbon Disulfide	ND	ug/m3	163	820	24	
56-23-5	Carbon Tetrachloride	ND	ug/m3	163	82	26	
108-90-7	Chlorobenzene	ND	ug/m3	163	82	26	
75-00-3	Chloroethane	ND	ug/m3	163	82	31	
67-66-3	Chloroform	73	ug/m3	163	82	31	J
74-87-3	Chloromethane	ND	ug/m3	163	82	31	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	163	82	29	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	163	82	23	
98-82-8	Cumene	ND	ug/m3	163	82	24	
110-82-7	Cyclohexane	ND	ug/m3	163	160	54	
124-48-1	Dibromochloromethane	ND	ug/m3	163	82	23	
64-17-5	Ethanol	ND	ug/m3	163	820	260	
100-41-4	Ethyl Benzene	ND	ug/m3	163	82	24	
75-69-4	Freon 11	ND	ug/m3	163	82	26	
76-13-1	Freon 113	16000	ug/m3	163	82	26	
76-14-2	Freon 114	ND	ug/m3	163	82	28	
75-71-8	Freon 12	ND	ug/m3	163	82	29	
306-83-2	Freon 123	ND	ug/m3	163	82	39	
354-23-4	Freon 123a	420	ug/m3	163	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	163	82	37	
142-82-5	Heptane	ND	ug/m3	163	82	26	
87-68-3	Hexachlorobutadiene	ND	ug/m3	163	82	29	
110-54-3	Hexane	ND	ug/m3	163	82	28	
179601-23-	m,p-Xylene	ND	ug/m3	163	160	47	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	163	82	24	
75-09-2	Methylene Chloride	29	ug/m3	163	82	24	J
95-47-6	o-Xylene	ND	ug/m3	163	82	23	
103-65-1	Propylbenzene	ND	ug/m3	163	82	24	
100-42-5	Styrene	ND	ug/m3	163	82	24	
127-18-4	Tetrachloroethene	ND	ug/m3	163	82	23	
109-99-9	Tetrahydrofuran	ND	ug/m3	163	82	36	
108-88-3	Toluene	ND	ug/m3	163	82	26	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	163	82	28	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	163	82	26	
79-01-6	Trichloroethene	1800	ug/m3	163	82	24	
75-01-4	Vinyl Chloride	ND	ug/m3	163	82	31	

Borehole	600-SGW-5	Depth (ft)	137.5	Depth (m)	41.91	Event Date	3/22/2012

Sample	1203221026	Sample Type	Soil Gas	Analysis Method	TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	4050	2000	650	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	4050	2000	650	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	4050	2000	650	
75-34-3	1,1-Dichloroethane	ND	ug/m3	4050	2000	690	
75-35-4	1,1-Dichloroethene	ND	ug/m3	4050	2000	690	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	4050	2000	970	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	4050	2000	650	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	4050	2000	610	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	4050	2000	690	
107-06-2	1,2-Dichloroethane	ND	ug/m3	4050	2000	770	
78-87-5	1,2-Dichloropropane	ND	ug/m3	4050	2000	690	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	4050	2000	690	
106-99-0	1,3-Butadiene	ND	ug/m3	4050	2000	850	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	4050	2000	690	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	4050	2000	650	
123-91-1	1,4-Dioxane	ND	ug/m3	4050	2000	690	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	4050	2000	690	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	4050	20000	930	
591-78-6	2-Hexanone	ND	ug/m3	4050	2000	730	
67-63-0	2-Propanol	ND	ug/m3	4050	4100	1600	
107-05-1	3-Chloropropene	ND	ug/m3	4050	2000	650	
622-96-8	4-Ethyltoluene	ND	ug/m3	4050	2000	690	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	4050	2000	570	
67-64-1	Acetone	ND	ug/m3	4050	20000	3600	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	4050	2000	610	
71-43-2	Benzene	ND	ug/m3	4050	2000	570	
75-27-4	Bromodichloromethane	ND	ug/m3	4050	2000	650	
75-25-2	Bromoform	ND	ug/m3	4050	2000	570	
74-83-9	Bromomethane	ND	ug/m3	4050	2000	770	
75-15-0	Carbon Disulfide	ND	ug/m3	4050	20000	610	
56-23-5	Carbon Tetrachloride	ND	ug/m3	4050	2000	650	
108-90-7	Chlorobenzene	ND	ug/m3	4050	2000	650	
75-00-3	Chloroethane	ND	ug/m3	4050	2000	770	
67-66-3	Chloroform	ND	ug/m3	4050	2000	770	
74-87-3	Chloromethane	ND	ug/m3	4050	2000	770	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	4050	2000	730	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	4050	2000	570	
98-82-8	Cumene	ND	ug/m3	4050	2000	610	
110-82-7	Cyclohexane	ND	ug/m3	4050	4100	1300	
124-48-1	Dibromochloromethane	ND	ug/m3	4050	2000	570	
64-17-5	Ethanol	ND	ug/m3	4050	20000	6500	

100-41-4	Ethyl Benzene	ND	ug/m3	4050	2000	610	
75-69-4	Freon 11	990	ug/m3	4050	2000	650	J
76-13-1	Freon 113	340000	ug/m3	4050	2000	650	
76-14-2	Freon 114	ND	ug/m3	4050	2000	690	
75-71-8	Freon 12	ND	ug/m3	4050	2000	730	
306-83-2	Freon 123	ND	ug/m3	4050	2000	970	
NA	Freon 123a	ND	ug/m3	4050	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	4050	2000	930	
142-82-5	Heptane	ND	ug/m3	4050	2000	650	
87-68-3	Hexachlorobutadiene	ND	ug/m3	4050	2000	730	
110-54-3	Hexane	ND	ug/m3	4050	2000	690	
179601-23-	m,p-Xylene	ND	ug/m3	4050	4100	1200	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	4050	2000	610	
75-09-2	Methylene Chloride	700	ug/m3	4050	2000	610	J
95-47-6	o-Xylene	ND	ug/m3	4050	2000	570	
103-65-1	Propylbenzene	ND	ug/m3	4050	2000	610	
100-42-5	Styrene	ND	ug/m3	4050	2000	610	
127-18-4	Tetrachloroethene	ND	ug/m3	4050	2000	570	
109-99-9	Tetrahydrofuran	ND	ug/m3	4050	2000	890	
108-88-3	Toluene	ND	ug/m3	4050	2000	650	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	4050	2000	690	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	4050	2000	650	
79-01-6	Trichloroethene	11000	ug/m3	4050	2000	610	
75-01-4	Vinyl Chloride	ND	ug/m3	4050	2000	770	

Sample 1203221418 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	4300	2200	690	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	4300	2200	690	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	4300	2200	690	
75-34-3	1,1-Dichloroethane	ND	ug/m3	4300	2200	730	
75-35-4	1,1-Dichloroethene	ND	ug/m3	4300	2200	730	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	4300	2200	1000	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	4300	2200	690	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	4300	2200	650	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	4300	2200	730	
107-06-2	1,2-Dichloroethane	ND	ug/m3	4300	2200	820	
78-87-5	1,2-Dichloropropane	ND	ug/m3	4300	2200	730	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	4300	2200	730	
106-99-0	1,3-Butadiene	ND	ug/m3	4300	2200	900	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	4300	2200	730	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	4300	2200	690	
123-91-1	1,4-Dioxane	ND	ug/m3	4300	2200	730	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	4300	2200	730	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	4300	22000	990	
591-78-6	2-Hexanone	ND	ug/m3	4300	2200	770	

67-63-0	2-Propanol	ND	ug/m3	4300	4300	1700	
107-05-1	3-Chloropropene	ND	ug/m3	4300	2200	690	
622-96-8	4-Ethyltoluene	ND	ug/m3	4300	2200	730	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	4300	2200	600	
67-64-1	Acetone	ND	ug/m3	4300	22000	3800	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	4300	2200	650	
71-43-2	Benzene	ND	ug/m3	4300	2200	600	
75-27-4	Bromodichloromethane	ND	ug/m3	4300	2200	690	
75-25-2	Bromoform	ND	ug/m3	4300	2200	600	
74-83-9	Bromomethane	ND	ug/m3	4300	2200	820	
75-15-0	Carbon Disulfide	ND	ug/m3	4300	22000	650	
56-23-5	Carbon Tetrachloride	ND	ug/m3	4300	2200	690	
108-90-7	Chlorobenzene	ND	ug/m3	4300	2200	690	
75-00-3	Chloroethane	ND	ug/m3	4300	2200	820	
67-66-3	Chloroform	ND	ug/m3	4300	2200	820	
74-87-3	Chloromethane	ND	ug/m3	4300	2200	820	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	4300	2200	770	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	4300	2200	600	
98-82-8	Cumene	ND	ug/m3	4300	2200	650	
110-82-7	Cyclohexane	ND	ug/m3	4300	4300	1400	
124-48-1	Dibromochloromethane	ND	ug/m3	4300	2200	600	
64-17-5	Ethanol	ND	ug/m3	4300	22000	6900	
100-41-4	Ethyl Benzene	ND	ug/m3	4300	2200	650	
75-69-4	Freon 11	840	ug/m3	4300	2200	690	J
76-13-1	Freon 113	290000	ug/m3	4300	2200	690	
76-14-2	Freon 114	ND	ug/m3	4300	2200	730	
75-71-8	Freon 12	ND	ug/m3	4300	2200	770	
306-83-2	Freon 123	ND	ug/m3	4300	2200	1000	
354-23-4	Freon 123a	ND	ug/m3	4300	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	4300	2200	990	
142-82-5	Heptane	ND	ug/m3	4300	2200	690	
87-68-3	Hexachlorobutadiene	ND	ug/m3	4300	2200	770	
110-54-3	Hexane	ND	ug/m3	4300	2200	730	
179601-23-	m,p-Xylene	ND	ug/m3	4300	4300	1200	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	4300	2200	650	
75-09-2	Methylene Chloride	830	ug/m3	4300	2200	650	J
95-47-6	o-Xylene	ND	ug/m3	4300	2200	600	
103-65-1	Propylbenzene	ND	ug/m3	4300	2200	650	
100-42-5	Styrene	ND	ug/m3	4300	2200	650	
127-18-4	Tetrachloroethene	ND	ug/m3	4300	2200	600	
109-99-9	Tetrahydrofuran	ND	ug/m3	4300	2200	950	
108-88-3	Toluene	ND	ug/m3	4300	2200	690	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	4300	2200	730	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	4300	2200	690	
79-01-6	Trichloroethene	8900	ug/m3	4300	2200	650	
75-01-4	Vinyl Chloride	ND	ug/m3	4300	2200	820	

Sample **1203221535** **Sample Type** **Soil Gas** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	4375	2200	700	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	4375	2200	700	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	4375	2200	700	
75-34-3	1,1-Dichloroethane	ND	ug/m3	4375	2200	740	
75-35-4	1,1-Dichloroethene	ND	ug/m3	4375	2200	740	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	4375	2200	1100	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	4375	2200	700	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	4375	2200	660	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	4375	2200	740	
107-06-2	1,2-Dichloroethane	ND	ug/m3	4375	2200	830	
78-87-5	1,2-Dichloropropane	ND	ug/m3	4375	2200	740	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	4375	2200	740	
106-99-0	1,3-Butadiene	ND	ug/m3	4375	2200	920	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	4375	2200	740	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	4375	2200	700	
123-91-1	1,4-Dioxane	ND	ug/m3	4375	2200	740	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	4375	2200	740	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	4375	22000	1000	
591-78-6	2-Hexanone	ND	ug/m3	4375	2200	790	
67-63-0	2-Propanol	ND	ug/m3	4375	4400	1800	
107-05-1	3-Chloropropene	ND	ug/m3	4375	2200	700	
622-96-8	4-Ethyltoluene	ND	ug/m3	4375	2200	740	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	4375	2200	610	
67-64-1	Acetone	ND	ug/m3	4375	22000	3900	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	4375	2200	660	
71-43-2	Benzene	ND	ug/m3	4375	2200	610	
75-27-4	Bromodichloromethane	ND	ug/m3	4375	2200	700	
75-25-2	Bromoform	ND	ug/m3	4375	2200	610	
74-83-9	Bromomethane	ND	ug/m3	4375	2200	830	
75-15-0	Carbon Disulfide	ND	ug/m3	4375	22000	660	
56-23-5	Carbon Tetrachloride	ND	ug/m3	4375	2200	700	
108-90-7	Chlorobenzene	ND	ug/m3	4375	2200	700	
75-00-3	Chloroethane	ND	ug/m3	4375	2200	830	
67-66-3	Chloroform	ND	ug/m3	4375	2200	830	
74-87-3	Chloromethane	ND	ug/m3	4375	2200	830	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	4375	2200	790	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	4375	2200	610	
98-82-8	Cumene	ND	ug/m3	4375	2200	660	
110-82-7	Cyclohexane	ND	ug/m3	4375	4400	1400	
124-48-1	Dibromochloromethane	ND	ug/m3	4375	2200	610	
64-17-5	Ethanol	ND	ug/m3	4375	22000	7000	
100-41-4	Ethyl Benzene	ND	ug/m3	4375	2200	660	
75-69-4	Freon 11	990	ug/m3	4375	2200	700	J

76-13-1	Freon 113	400000	ug/m3	4375	2200	700	
76-14-2	Freon 114	ND	ug/m3	4375	2200	740	
75-71-8	Freon 12	ND	ug/m3	4375	2200	790	
306-83-2	Freon 123	ND	ug/m3	4375	2200	1100	
354-23-4	Freon 123a	ND	ug/m3	4375	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	4375	2200	1000	
142-82-5	Heptane	ND	ug/m3	4375	2200	700	
87-68-3	Hexachlorobutadiene	ND	ug/m3	4375	2200	790	
110-54-3	Hexane	ND	ug/m3	4375	2200	740	
179601-23-	m,p-Xylene	ND	ug/m3	4375	4400	1300	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	4375	2200	660	
75-09-2	Methylene Chloride	770	ug/m3	4375	2200	660	J
95-47-6	o-Xylene	ND	ug/m3	4375	2200	610	
103-65-1	Propylbenzene	ND	ug/m3	4375	2200	660	
100-42-5	Styrene	ND	ug/m3	4375	2200	660	
127-18-4	Tetrachloroethene	ND	ug/m3	4375	2200	610	
109-99-9	Tetrahydrofuran	ND	ug/m3	4375	2200	960	
108-88-3	Toluene	ND	ug/m3	4375	2200	700	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	4375	2200	740	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	4375	2200	700	
79-01-6	Trichloroethene	10000	ug/m3	4375	2200	660	
75-01-4	Vinyl Chloride	ND	ug/m3	4375	2200	830	

Sample 1203221709 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	4200	2100	670	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	4200	2100	670	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	4200	2100	670	
75-34-3	1,1-Dichloroethane	ND	ug/m3	4200	2100	710	
75-35-4	1,1-Dichloroethene	ND	ug/m3	4200	2100	710	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	4200	2100	1000	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	4200	2100	670	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	4200	2100	630	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	4200	2100	710	
107-06-2	1,2-Dichloroethane	ND	ug/m3	4200	2100	800	
78-87-5	1,2-Dichloropropane	ND	ug/m3	4200	2100	710	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	4200	2100	710	
106-99-0	1,3-Butadiene	ND	ug/m3	4200	2100	880	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	4200	2100	710	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	4200	2100	670	
123-91-1	1,4-Dioxane	ND	ug/m3	4200	2100	710	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	4200	2100	710	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	4200	21000	970	
591-78-6	2-Hexanone	ND	ug/m3	4200	2100	760	
67-63-0	2-Propanol	ND	ug/m3	4200	4200	1700	
107-05-1	3-Chloropropene	ND	ug/m3	4200	2100	670	

622-96-8	4-Ethyltoluene	ND	ug/m3	4200	2100	710	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	4200	2100	590	
67-64-1	Acetone	ND	ug/m3	4200	21000	3700	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	4200	2100	630	
71-43-2	Benzene	ND	ug/m3	4200	2100	590	
75-27-4	Bromodichloromethane	ND	ug/m3	4200	2100	670	
75-25-2	Bromoform	ND	ug/m3	4200	2100	590	
74-83-9	Bromomethane	ND	ug/m3	4200	2100	800	
75-15-0	Carbon Disulfide	ND	ug/m3	4200	21000	630	
56-23-5	Carbon Tetrachloride	ND	ug/m3	4200	2100	670	
108-90-7	Chlorobenzene	ND	ug/m3	4200	2100	670	
75-00-3	Chloroethane	ND	ug/m3	4200	2100	800	
67-66-3	Chloroform	ND	ug/m3	4200	2100	800	
74-87-3	Chloromethane	ND	ug/m3	4200	2100	800	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	4200	2100	760	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	4200	2100	590	
98-82-8	Cumene	ND	ug/m3	4200	2100	630	
110-82-7	Cyclohexane	ND	ug/m3	4200	4200	1400	
124-48-1	Dibromochloromethane	ND	ug/m3	4200	2100	590	
64-17-5	Ethanol	ND	ug/m3	4200	21000	6700	
100-41-4	Ethyl Benzene	ND	ug/m3	4200	2100	630	
75-69-4	Freon 11	890	ug/m3	4200	2100	670	J
76-13-1	Freon 113	370000	ug/m3	4200	2100	670	
76-14-2	Freon 114	ND	ug/m3	4200	2100	710	
75-71-8	Freon 12	ND	ug/m3	4200	2100	760	
306-83-2	Freon 123	ND	ug/m3	4200	2100	1000	
354-23-4	Freon 123a	ND	ug/m3	4200	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	4200	2100	970	
142-82-5	Heptane	ND	ug/m3	4200	2100	670	
87-68-3	Hexachlorobutadiene	ND	ug/m3	4200	2100	760	
110-54-3	Hexane	ND	ug/m3	4200	2100	710	
179601-23-	m,p-Xylene	ND	ug/m3	4200	4200	1200	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	4200	2100	630	
75-09-2	Methylene Chloride	730	ug/m3	4200	2100	630	J
95-47-6	o-Xylene	ND	ug/m3	4200	2100	590	
103-65-1	Propylbenzene	ND	ug/m3	4200	2100	630	
100-42-5	Styrene	ND	ug/m3	4200	2100	630	
127-18-4	Tetrachloroethene	ND	ug/m3	4200	2100	590	
109-99-9	Tetrahydrofuran	ND	ug/m3	4200	2100	920	
108-88-3	Toluene	ND	ug/m3	4200	2100	670	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	4200	2100	710	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	4200	2100	670	
79-01-6	Trichloroethene	10000	ug/m3	4200	2100	630	
75-01-4	Vinyl Chloride	ND	ug/m3	4200	2100	800	

Sample **1203230944** **Sample Type** **Soil Gas** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	3320	1700	530	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	3320	1700	530	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	3320	1700	530	
75-34-3	1,1-Dichloroethane	ND	ug/m3	3320	1700	560	
75-35-4	1,1-Dichloroethene	ND	ug/m3	3320	1700	560	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	3320	1700	800	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	3320	1700	530	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	3320	1700	500	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	3320	1700	560	
107-06-2	1,2-Dichloroethane	ND	ug/m3	3320	1700	630	
78-87-5	1,2-Dichloropropane	ND	ug/m3	3320	1700	560	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	3320	1700	560	
106-99-0	1,3-Butadiene	ND	ug/m3	3320	1700	700	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	3320	1700	560	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	3320	1700	530	
123-91-1	1,4-Dioxane	ND	ug/m3	3320	1700	560	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	3320	1700	560	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	3320	17000	760	
591-78-6	2-Hexanone	ND	ug/m3	3320	1700	600	
67-63-0	2-Propanol	ND	ug/m3	3320	3300	1300	
107-05-1	3-Chloropropene	ND	ug/m3	3320	1700	530	
622-96-8	4-Ethyltoluene	ND	ug/m3	3320	1700	560	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	3320	1700	460	
67-64-1	Acetone	ND	ug/m3	3320	17000	2900	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	3320	1700	500	
71-43-2	Benzene	ND	ug/m3	3320	1700	460	
75-27-4	Bromodichloromethane	ND	ug/m3	3320	1700	530	
75-25-2	Bromoform	ND	ug/m3	3320	1700	460	
74-83-9	Bromomethane	ND	ug/m3	3320	1700	630	
75-15-0	Carbon Disulfide	ND	ug/m3	3320	17000	500	
56-23-5	Carbon Tetrachloride	ND	ug/m3	3320	1700	530	
108-90-7	Chlorobenzene	ND	ug/m3	3320	1700	530	
75-00-3	Chloroethane	ND	ug/m3	3320	1700	630	
67-66-3	Chloroform	ND	ug/m3	3320	1700	630	
74-87-3	Chloromethane	ND	ug/m3	3320	1700	630	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	3320	1700	600	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	3320	1700	460	
98-82-8	Cumene	ND	ug/m3	3320	1700	500	
110-82-7	Cyclohexane	ND	ug/m3	3320	3300	1100	
124-48-1	Dibromochloromethane	ND	ug/m3	3320	1700	460	
64-17-5	Ethanol	ND	ug/m3	3320	17000	5300	
100-41-4	Ethyl Benzene	ND	ug/m3	3320	1700	500	
75-69-4	Freon 11	800	ug/m3	3320	1700	530	J

76-13-1	Freon 113	280000	ug/m3	3320	1700	530	
76-14-2	Freon 114	ND	ug/m3	3320	1700	560	
75-71-8	Freon 12	ND	ug/m3	3320	1700	600	
306-83-2	Freon 123	ND	ug/m3	3320	1700	800	
354-23-4	Freon 123a	ND	ug/m3	3320	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	3320	1700	760	
142-82-5	Heptane	ND	ug/m3	3320	1700	530	
87-68-3	Hexachlorobutadiene	ND	ug/m3	3320	1700	600	
110-54-3	Hexane	ND	ug/m3	3320	1700	560	
179601-23-	m,p-Xylene	ND	ug/m3	3320	3300	960	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	3320	1700	500	
75-09-2	Methylene Chloride	600	ug/m3	3320	1700	500	J
95-47-6	o-Xylene	ND	ug/m3	3320	1700	460	
103-65-1	Propylbenzene	ND	ug/m3	3320	1700	500	
100-42-5	Styrene	ND	ug/m3	3320	1700	500	
127-18-4	Tetrachloroethene	ND	ug/m3	3320	1700	460	
109-99-9	Tetrahydrofuran	ND	ug/m3	3320	1700	730	
108-88-3	Toluene	ND	ug/m3	3320	1700	530	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	3320	1700	560	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	3320	1700	530	
79-01-6	Trichloroethene	10000	ug/m3	3320	1700	500	
75-01-4	Vinyl Chloride	ND	ug/m3	3320	1700	630	

Sample 1203231159 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	553.33	280	89	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	553.33	280	89	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	553.33	280	89	
75-34-3	1,1-Dichloroethane	ND	ug/m3	553.33	280	94	
75-35-4	1,1-Dichloroethene	ND	ug/m3	553.33	280	94	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	553.33	280	130	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	553.33	280	89	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	553.33	280	83	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	553.33	280	94	
107-06-2	1,2-Dichloroethane	ND	ug/m3	553.33	280	110	
78-87-5	1,2-Dichloropropane	ND	ug/m3	553.33	280	94	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	553.33	280	94	
106-99-0	1,3-Butadiene	ND	ug/m3	553.33	280	120	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	553.33	280	94	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	553.33	280	89	
123-91-1	1,4-Dioxane	ND	ug/m3	553.33	280	94	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	553.33	280	94	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	553.33	2800	130	
591-78-6	2-Hexanone	ND	ug/m3	553.33	280	100	
67-63-0	2-Propanol	ND	ug/m3	553.33	550	220	
107-05-1	3-Chloropropene	ND	ug/m3	553.33	280	89	

622-96-8	4-Ethyltoluene	ND	ug/m3	553.33	280	94	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	553.33	280	77	
67-64-1	Acetone	ND	ug/m3	553.33	2800	490	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	553.33	280	83	
71-43-2	Benzene	ND	ug/m3	553.33	280	77	
75-27-4	Bromodichloromethane	ND	ug/m3	553.33	280	89	
75-25-2	Bromoform	ND	ug/m3	553.33	280	77	
74-83-9	Bromomethane	ND	ug/m3	553.33	280	110	
75-15-0	Carbon Disulfide	ND	ug/m3	553.33	2800	83	
56-23-5	Carbon Tetrachloride	ND	ug/m3	553.33	280	89	
108-90-7	Chlorobenzene	ND	ug/m3	553.33	280	89	
75-00-3	Chloroethane	ND	ug/m3	553.33	280	110	
67-66-3	Chloroform	140	ug/m3	553.33	280	110	J
74-87-3	Chloromethane	ND	ug/m3	553.33	280	110	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	553.33	280	100	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	553.33	280	77	
98-82-8	Cumene	ND	ug/m3	553.33	280	83	
110-82-7	Cyclohexane	ND	ug/m3	553.33	550	180	
124-48-1	Dibromochloromethane	ND	ug/m3	553.33	280	77	
64-17-5	Ethanol	ND	ug/m3	553.33	2800	890	
100-41-4	Ethyl Benzene	ND	ug/m3	553.33	280	83	
75-69-4	Freon 11	1000	ug/m3	553.33	280	89	
76-13-1	Freon 113	310000	ug/m3	5533.33	2800	890	D
76-14-2	Freon 114	ND	ug/m3	553.33	280	94	
75-71-8	Freon 12	ND	ug/m3	553.33	280	100	
306-83-2	Freon 123	ND	ug/m3	553.33	280	130	
354-23-4	Freon 123a	3200	ug/m3	553.33	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	553.33	280	130	
142-82-5	Heptane	ND	ug/m3	553.33	280	89	
87-68-3	Hexachlorobutadiene	ND	ug/m3	553.33	280	100	
110-54-3	Hexane	ND	ug/m3	553.33	280	94	
179601-23-	m,p-Xylene	ND	ug/m3	553.33	550	160	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	553.33	280	83	
75-09-2	Methylene Chloride	94	ug/m3	553.33	280	83	J
95-47-6	o-Xylene	ND	ug/m3	553.33	280	77	
103-65-1	Propylbenzene	ND	ug/m3	553.33	280	83	
100-42-5	Styrene	ND	ug/m3	553.33	280	83	
127-18-4	Tetrachloroethene	ND	ug/m3	553.33	280	77	
109-99-9	Tetrahydrofuran	ND	ug/m3	553.33	280	120	
108-88-3	Toluene	ND	ug/m3	553.33	280	89	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	553.33	280	94	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	553.33	280	89	
79-01-6	Trichloroethene	14000	ug/m3	553.33	280	83	
75-01-4	Vinyl Chloride	ND	ug/m3	553.33	280	110	

Sample **1203231755** **Sample Type** **Soil Gas** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	3360	1700	540	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	3360	1700	540	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	3360	1700	540	
75-34-3	1,1-Dichloroethane	ND	ug/m3	3360	1700	570	
75-35-4	1,1-Dichloroethene	ND	ug/m3	3360	1700	570	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	3360	1700	810	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	3360	1700	540	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	3360	1700	500	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	3360	1700	570	
107-06-2	1,2-Dichloroethane	ND	ug/m3	3360	1700	640	
78-87-5	1,2-Dichloropropane	ND	ug/m3	3360	1700	570	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	3360	1700	570	
106-99-0	1,3-Butadiene	ND	ug/m3	3360	1700	710	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	3360	1700	570	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	3360	1700	540	
123-91-1	1,4-Dioxane	ND	ug/m3	3360	1700	570	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	3360	1700	570	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	3360	17000	770	
591-78-6	2-Hexanone	ND	ug/m3	3360	1700	600	
67-63-0	2-Propanol	ND	ug/m3	3360	3400	1300	
107-05-1	3-Chloropropene	ND	ug/m3	3360	1700	540	
622-96-8	4-Ethyltoluene	ND	ug/m3	3360	1700	570	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	3360	1700	470	
67-64-1	Acetone	ND	ug/m3	3360	17000	3000	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	3360	1700	500	
71-43-2	Benzene	ND	ug/m3	3360	1700	470	
75-27-4	Bromodichloromethane	ND	ug/m3	3360	1700	540	
75-25-2	Bromoform	ND	ug/m3	3360	1700	470	
74-83-9	Bromomethane	ND	ug/m3	3360	1700	640	
75-15-0	Carbon Disulfide	ND	ug/m3	3360	17000	500	
56-23-5	Carbon Tetrachloride	ND	ug/m3	3360	1700	540	
108-90-7	Chlorobenzene	ND	ug/m3	3360	1700	540	
75-00-3	Chloroethane	ND	ug/m3	3360	1700	640	
67-66-3	Chloroform	ND	ug/m3	3360	1700	640	
74-87-3	Chloromethane	ND	ug/m3	3360	1700	640	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	3360	1700	600	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	3360	1700	470	
98-82-8	Cumene	ND	ug/m3	3360	1700	500	
110-82-7	Cyclohexane	ND	ug/m3	3360	3400	1100	
124-48-1	Dibromochloromethane	ND	ug/m3	3360	1700	470	
64-17-5	Ethanol	ND	ug/m3	3360	17000	5400	
100-41-4	Ethyl Benzene	ND	ug/m3	3360	1700	500	
75-69-4	Freon 11	930	ug/m3	3360	1700	540	J

76-13-1	Freon 113	300000	ug/m3	3360	1700	540	
76-14-2	Freon 114	ND	ug/m3	3360	1700	570	
75-71-8	Freon 12	ND	ug/m3	3360	1700	600	
306-83-2	Freon 123	ND	ug/m3	3360	1700	810	
354-23-4	Freon 123a	ND	ug/m3	3360	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	3360	1700	770	
142-82-5	Heptane	ND	ug/m3	3360	1700	540	
87-68-3	Hexachlorobutadiene	ND	ug/m3	3360	1700	600	
110-54-3	Hexane	ND	ug/m3	3360	1700	570	
179601-23-	m,p-Xylene	ND	ug/m3	3360	3400	970	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	3360	1700	500	
75-09-2	Methylene Chloride	600	ug/m3	3360	1700	500	J
95-47-6	o-Xylene	ND	ug/m3	3360	1700	470	
103-65-1	Propylbenzene	ND	ug/m3	3360	1700	500	
100-42-5	Styrene	ND	ug/m3	3360	1700	500	
127-18-4	Tetrachloroethene	ND	ug/m3	3360	1700	470	
109-99-9	Tetrahydrofuran	ND	ug/m3	3360	1700	740	
108-88-3	Toluene	ND	ug/m3	3360	1700	540	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	3360	1700	570	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	3360	1700	540	
79-01-6	Trichloroethene	13000	ug/m3	3360	1700	500	
75-01-4	Vinyl Chloride	ND	ug/m3	3360	1700	640	

Sample 1203241434 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	4100	2100	660	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	4100	2100	660	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	4100	2100	660	
75-34-3	1,1-Dichloroethane	ND	ug/m3	4100	2100	700	
75-35-4	1,1-Dichloroethene	ND	ug/m3	4100	2100	700	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	4100	2100	980	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	4100	2100	660	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	4100	2100	620	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	4100	2100	700	
107-06-2	1,2-Dichloroethane	ND	ug/m3	4100	2100	780	
78-87-5	1,2-Dichloropropane	ND	ug/m3	4100	2100	700	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	4100	2100	700	
106-99-0	1,3-Butadiene	ND	ug/m3	4100	2100	860	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	4100	2100	700	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	4100	2100	660	
123-91-1	1,4-Dioxane	ND	ug/m3	4100	2100	700	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	4100	2100	700	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	4100	21000	940	
591-78-6	2-Hexanone	ND	ug/m3	4100	2100	740	
67-63-0	2-Propanol	ND	ug/m3	4100	4100	1600	
107-05-1	3-Chloropropene	ND	ug/m3	4100	2100	660	

622-96-8	4-Ethyltoluene	ND	ug/m3	4100	2100	700	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	4100	2100	570	
67-64-1	Acetone	ND	ug/m3	4100	21000	3600	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	4100	2100	620	
71-43-2	Benzene	ND	ug/m3	4100	2100	570	
75-27-4	Bromodichloromethane	ND	ug/m3	4100	2100	660	
75-25-2	Bromoform	ND	ug/m3	4100	2100	570	
74-83-9	Bromomethane	ND	ug/m3	4100	2100	780	
75-15-0	Carbon Disulfide	ND	ug/m3	4100	21000	620	
56-23-5	Carbon Tetrachloride	ND	ug/m3	4100	2100	660	
108-90-7	Chlorobenzene	ND	ug/m3	4100	2100	660	
75-00-3	Chloroethane	ND	ug/m3	4100	2100	780	
67-66-3	Chloroform	ND	ug/m3	4100	2100	780	
74-87-3	Chloromethane	ND	ug/m3	4100	2100	780	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	4100	2100	740	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	4100	2100	570	
98-82-8	Cumene	ND	ug/m3	4100	2100	620	
110-82-7	Cyclohexane	ND	ug/m3	4100	4100	1400	
124-48-1	Dibromochloromethane	ND	ug/m3	4100	2100	570	
64-17-5	Ethanol	ND	ug/m3	4100	21000	6600	
100-41-4	Ethyl Benzene	ND	ug/m3	4100	2100	620	
75-69-4	Freon 11	890	ug/m3	4100	2100	660	J
76-13-1	Freon 113	350000	ug/m3	4100	2100	660	
76-14-2	Freon 114	ND	ug/m3	4100	2100	700	
75-71-8	Freon 12	ND	ug/m3	4100	2100	740	
306-83-2	Freon 123	ND	ug/m3	4100	2100	980	
354-23-4	Freon 123a	ND	ug/m3	4100	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	4100	2100	940	
142-82-5	Heptane	ND	ug/m3	4100	2100	660	
87-68-3	Hexachlorobutadiene	ND	ug/m3	4100	2100	740	
110-54-3	Hexane	ND	ug/m3	4100	2100	700	
179601-23-	m,p-Xylene	ND	ug/m3	4100	4100	1200	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	4100	2100	620	
75-09-2	Methylene Chloride	ND	ug/m3	4100	2100	620	
95-47-6	o-Xylene	ND	ug/m3	4100	2100	570	
103-65-1	Propylbenzene	ND	ug/m3	4100	2100	620	
100-42-5	Styrene	ND	ug/m3	4100	2100	620	
127-18-4	Tetrachloroethene	ND	ug/m3	4100	2100	570	
109-99-9	Tetrahydrofuran	ND	ug/m3	4100	2100	900	
108-88-3	Toluene	ND	ug/m3	4100	2100	660	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	4100	2100	700	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	4100	2100	660	
79-01-6	Trichloroethene	10000	ug/m3	4100	2100	620	
75-01-4	Vinyl Chloride	ND	ug/m3	4100	2100	780	

Borehole	600-SGW-8	Depth (ft)	7.5	Depth (m)	2.29	Event Date	3/22/2012

Sample	1203220857	Sample Type	Soil Gas	Analysis Method	TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	3.78	1.9	0.6	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	3.78	1.9	0.6	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	3.78	1.9	0.6	
75-34-3	1,1-Dichloroethane	ND	ug/m3	3.78	1.9	0.64	
75-35-4	1,1-Dichloroethene	ND	ug/m3	3.78	1.9	0.64	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	3.78	1.9	0.91	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	3.78	1.9	0.6	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	3.78	1.9	0.57	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	3.78	1.9	0.64	
107-06-2	1,2-Dichloroethane	ND	ug/m3	3.78	1.9	0.72	
78-87-5	1,2-Dichloropropane	ND	ug/m3	3.78	1.9	0.64	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	3.78	1.9	0.64	
106-99-0	1,3-Butadiene	ND	ug/m3	3.78	1.9	0.79	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	3.78	1.9	0.64	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	3.78	1.9	0.6	
123-91-1	1,4-Dioxane	ND	ug/m3	3.78	1.9	0.64	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	3.78	1.9	0.64	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	3.78	19	0.87	
591-78-6	2-Hexanone	ND	ug/m3	3.78	1.9	0.68	
67-63-0	2-Propanol	2.4	ug/m3	3.78	3.8	1.5	J
107-05-1	3-Chloropropene	ND	ug/m3	3.78	1.9	0.6	
622-96-8	4-Ethyltoluene	ND	ug/m3	3.78	1.9	0.64	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	3.78	1.9	0.53	
67-64-1	Acetone	6.7	ug/m3	3.78	19	3.3	J
100-44-7	alpha-Chlorotoluene	ND	ug/m3	3.78	1.9	0.57	
71-43-2	Benzene	ND	ug/m3	3.78	1.9	0.53	
75-27-4	Bromodichloromethane	ND	ug/m3	3.78	1.9	0.6	
75-25-2	Bromoform	ND	ug/m3	3.78	1.9	0.53	
74-83-9	Bromomethane	ND	ug/m3	3.78	1.9	0.72	
75-15-0	Carbon Disulfide	1	ug/m3	3.78	19	0.57	J RB
56-23-5	Carbon Tetrachloride	ND	ug/m3	3.78	1.9	0.6	
108-90-7	Chlorobenzene	ND	ug/m3	3.78	1.9	0.6	
75-00-3	Chloroethane	ND	ug/m3	3.78	1.9	0.72	
67-66-3	Chloroform	ND	ug/m3	3.78	1.9	0.72	
74-87-3	Chloromethane	ND	ug/m3	3.78	1.9	0.72	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	3.78	1.9	0.68	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	3.78	1.9	0.53	
98-82-8	Cumene	ND	ug/m3	3.78	1.9	0.57	
110-82-7	Cyclohexane	ND	ug/m3	3.78	3.8	1.2	
124-48-1	Dibromochloromethane	ND	ug/m3	3.78	1.9	0.53	
64-17-5	Ethanol	ND	ug/m3	3.78	19	6	

100-41-4	Ethyl Benzene	ND	ug/m3	3.78	1.9	0.57	
75-69-4	Freon 11	1.2	ug/m3	3.78	1.9	0.6	J
76-13-1	Freon 113	12	ug/m3	3.78	1.9	0.6	
76-14-2	Freon 114	ND	ug/m3	3.78	1.9	0.64	
75-71-8	Freon 12	2.2	ug/m3	3.78	1.9	0.68	
306-83-2	Freon 123	ND	ug/m3	3.78	1.9	0.91	
354-23-4	Freon 123a	ND	ug/m3	3.78	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	3.78	1.9	0.87	
142-82-5	Heptane	ND	ug/m3	3.78	1.9	0.6	
87-68-3	Hexachlorobutadiene	ND	ug/m3	3.78	1.9	0.68	
110-54-3	Hexane	ND	ug/m3	3.78	1.9	0.64	
179601-23-	m,p-Xylene	ND	ug/m3	3.78	3.8	1.1	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	3.78	1.9	0.57	
75-09-2	Methylene Chloride	0.72	ug/m3	3.78	1.9	0.57	J RB
95-47-6	o-Xylene	ND	ug/m3	3.78	1.9	0.53	
103-65-1	Propylbenzene	ND	ug/m3	3.78	1.9	0.57	
100-42-5	Styrene	ND	ug/m3	3.78	1.9	0.57	
127-18-4	Tetrachloroethene	ND	ug/m3	3.78	1.9	0.53	
109-99-9	Tetrahydrofuran	ND	ug/m3	3.78	1.9	0.83	
108-88-3	Toluene	ND	ug/m3	3.78	1.9	0.6	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	3.78	1.9	0.64	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	3.78	1.9	0.6	
79-01-6	Trichloroethene	1.2	ug/m3	3.78	1.9	0.57	J
75-01-4	Vinyl Chloride	ND	ug/m3	3.78	1.9	0.72	

Sample 1203241547 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	1.53	0.77	0.24	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	1.53	0.77	0.24	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	1.53	0.77	0.24	
75-34-3	1,1-Dichloroethane	ND	ug/m3	1.53	0.77	0.26	
75-35-4	1,1-Dichloroethene	0.34	ug/m3	1.53	0.77	0.26	J
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	1.53	0.77	0.37	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	1.53	0.77	0.24	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	1.53	0.77	0.23	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	1.53	0.77	0.26	
107-06-2	1,2-Dichloroethane	ND	ug/m3	1.53	0.77	0.29	
78-87-5	1,2-Dichloropropane	ND	ug/m3	1.53	0.77	0.26	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	1.53	0.77	0.26	
106-99-0	1,3-Butadiene	ND	ug/m3	1.53	0.77	0.32	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	1.53	0.77	0.26	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	1.53	0.77	0.24	
123-91-1	1,4-Dioxane	ND	ug/m3	1.53	0.77	0.26	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	1.53	0.77	0.26	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	0.48	ug/m3	1.53	7.7	0.35	J
591-78-6	2-Hexanone	ND	ug/m3	1.53	0.77	0.28	

67-63-0	2-Propanol	ND	ug/m3	1.53	1.5	0.61	
107-05-1	3-Chloropropene	ND	ug/m3	1.53	0.77	0.24	
622-96-8	4-Ethyltoluene	ND	ug/m3	1.53	0.77	0.26	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	1.53	0.77	0.21	
67-64-1	Acetone	3.2	ug/m3	1.53	7.7	1.3	J
100-44-7	alpha-Chlorotoluene	ND	ug/m3	1.53	0.77	0.23	
71-43-2	Benzene	ND	ug/m3	1.53	0.77	0.21	
75-27-4	Bromodichloromethane	ND	ug/m3	1.53	0.77	0.24	
75-25-2	Bromoform	ND	ug/m3	1.53	0.77	0.21	
74-83-9	Bromomethane	ND	ug/m3	1.53	0.77	0.29	
75-15-0	Carbon Disulfide	0.4	ug/m3	1.53	7.7	0.23	J
56-23-5	Carbon Tetrachloride	ND	ug/m3	1.53	0.77	0.24	
108-90-7	Chlorobenzene	ND	ug/m3	1.53	0.77	0.24	
75-00-3	Chloroethane	ND	ug/m3	1.53	0.77	0.29	
67-66-3	Chloroform	0.3	ug/m3	1.53	0.77	0.29	J
74-87-3	Chloromethane	ND	ug/m3	1.53	0.77	0.29	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	1.53	0.77	0.28	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	1.53	0.77	0.21	
98-82-8	Cumene	ND	ug/m3	1.53	0.77	0.23	
110-82-7	Cyclohexane	ND	ug/m3	1.53	1.5	0.5	
124-48-1	Dibromochloromethane	ND	ug/m3	1.53	0.77	0.21	
64-17-5	Ethanol	ND	ug/m3	1.53	7.7	2.4	
100-41-4	Ethyl Benzene	ND	ug/m3	1.53	0.77	0.23	
75-69-4	Freon 11	2	ug/m3	1.53	0.77	0.24	
76-13-1	Freon 113	260	ug/m3	15.3	7.7	2.4	D
76-14-2	Freon 114	ND	ug/m3	1.53	0.77	0.26	
75-71-8	Freon 12	2.4	ug/m3	1.53	0.77	0.28	
306-83-2	Freon 123	ND	ug/m3	1.53	0.77	0.37	
354-23-4	Freon 123a	18	ug/m3	1.53	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	1.53	0.77	0.35	
142-82-5	Heptane	ND	ug/m3	1.53	0.77	0.24	
87-68-3	Hexachlorobutadiene	ND	ug/m3	1.53	0.77	0.28	
110-54-3	Hexane	ND	ug/m3	1.53	0.77	0.26	
179601-23-	m,p-Xylene	ND	ug/m3	1.53	1.5	0.44	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	1.53	0.77	0.23	
75-09-2	Methylene Chloride	0.34	ug/m3	1.53	0.77	0.23	J RB
95-47-6	o-Xylene	ND	ug/m3	1.53	0.77	0.21	
103-65-1	Propylbenzene	ND	ug/m3	1.53	0.77	0.23	
100-42-5	Styrene	ND	ug/m3	1.53	0.77	0.23	
127-18-4	Tetrachloroethene	ND	ug/m3	1.53	0.77	0.21	
109-99-9	Tetrahydrofuran	ND	ug/m3	1.53	0.77	0.34	
108-88-3	Toluene	0.5	ug/m3	1.53	0.77	0.24	J
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	1.53	0.77	0.26	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	1.53	0.77	0.24	
79-01-6	Trichloroethene	17	ug/m3	1.53	0.77	0.23	
75-01-4	Vinyl Chloride	ND	ug/m3	1.53	0.77	0.29	

Borehole	600-SGW-8	Depth (ft)	52.5	Depth (m)	16.00	Event Date	3/22/2012

Sample	1203220901	Sample Type	Soil Gas	Analysis Method	TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	3.83	1.9	0.61	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	3.83	1.9	0.61	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	3.83	1.9	0.61	
75-34-3	1,1-Dichloroethane	ND	ug/m3	3.83	1.9	0.65	
75-35-4	1,1-Dichloroethene	ND	ug/m3	3.83	1.9	0.65	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	3.83	1.9	0.92	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	3.83	1.9	0.61	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	3.83	1.9	0.57	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	3.83	1.9	0.65	
107-06-2	1,2-Dichloroethane	ND	ug/m3	3.83	1.9	0.73	
78-87-5	1,2-Dichloropropane	ND	ug/m3	3.83	1.9	0.65	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	3.83	1.9	0.65	
106-99-0	1,3-Butadiene	ND	ug/m3	3.83	1.9	0.8	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	3.83	1.9	0.65	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	3.83	1.9	0.61	
123-91-1	1,4-Dioxane	ND	ug/m3	3.83	1.9	0.65	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	3.83	1.9	0.65	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	1.7	ug/m3	3.83	19	0.88	J
591-78-6	2-Hexanone	0.72	ug/m3	3.83	1.9	0.69	J
67-63-0	2-Propanol	2.1	ug/m3	3.83	3.8	1.5	J
107-05-1	3-Chloropropene	ND	ug/m3	3.83	1.9	0.61	
622-96-8	4-Ethyltoluene	ND	ug/m3	3.83	1.9	0.65	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	3.83	1.9	0.54	
67-64-1	Acetone	7.7	ug/m3	3.83	19	3.4	J
100-44-7	alpha-Chlorotoluene	ND	ug/m3	3.83	1.9	0.57	
71-43-2	Benzene	ND	ug/m3	3.83	1.9	0.54	
75-27-4	Bromodichloromethane	ND	ug/m3	3.83	1.9	0.61	
75-25-2	Bromoform	ND	ug/m3	3.83	1.9	0.54	
74-83-9	Bromomethane	ND	ug/m3	3.83	1.9	0.73	
75-15-0	Carbon Disulfide	ND	ug/m3	3.83	19	0.57	
56-23-5	Carbon Tetrachloride	ND	ug/m3	3.83	1.9	0.61	
108-90-7	Chlorobenzene	ND	ug/m3	3.83	1.9	0.61	
75-00-3	Chloroethane	ND	ug/m3	3.83	1.9	0.73	
67-66-3	Chloroform	ND	ug/m3	3.83	1.9	0.73	
74-87-3	Chloromethane	ND	ug/m3	3.83	1.9	0.73	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	3.83	1.9	0.69	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	3.83	1.9	0.54	
98-82-8	Cumene	ND	ug/m3	3.83	1.9	0.57	
110-82-7	Cyclohexane	ND	ug/m3	3.83	3.8	1.3	
124-48-1	Dibromochloromethane	ND	ug/m3	3.83	1.9	0.54	
64-17-5	Ethanol	ND	ug/m3	3.83	19	6.1	

100-41-4	Ethyl Benzene	ND	ug/m3	3.83	1.9	0.57	
75-69-4	Freon 11	3.2	ug/m3	3.83	1.9	0.61	
76-13-1	Freon 113	180	ug/m3	3.83	1.9	0.61	
76-14-2	Freon 114	ND	ug/m3	3.83	1.9	0.65	
75-71-8	Freon 12	2.2	ug/m3	3.83	1.9	0.69	
306-83-2	Freon 123	ND	ug/m3	3.83	1.9	0.92	
354-23-4	Freon 123a	43	ug/m3	3.83	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	3.83	1.9	0.88	
142-82-5	Heptane	ND	ug/m3	3.83	1.9	0.61	
87-68-3	Hexachlorobutadiene	ND	ug/m3	3.83	1.9	0.69	
110-54-3	Hexane	ND	ug/m3	3.83	1.9	0.65	
179601-23-	m,p-Xylene	ND	ug/m3	3.83	3.8	1.1	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	3.83	1.9	0.57	
75-09-2	Methylene Chloride	0.76	ug/m3	3.83	1.9	0.57	J RB
95-47-6	o-Xylene	ND	ug/m3	3.83	1.9	0.54	
103-65-1	Propylbenzene	ND	ug/m3	3.83	1.9	0.57	
100-42-5	Styrene	ND	ug/m3	3.83	1.9	0.57	
127-18-4	Tetrachloroethene	ND	ug/m3	3.83	1.9	0.54	
109-99-9	Tetrahydrofuran	ND	ug/m3	3.83	1.9	0.84	
108-88-3	Toluene	ND	ug/m3	3.83	1.9	0.61	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	3.83	1.9	0.65	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	3.83	1.9	0.61	
79-01-6	Trichloroethene	3.6	ug/m3	3.83	1.9	0.57	
75-01-4	Vinyl Chloride	ND	ug/m3	3.83	1.9	0.73	

Sample 1203241551 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	1.57	0.79	0.25	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	1.57	0.79	0.25	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	1.57	0.79	0.25	
75-34-3	1,1-Dichloroethane	ND	ug/m3	1.57	0.79	0.27	
75-35-4	1,1-Dichloroethene	ND	ug/m3	1.57	0.79	0.27	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	1.57	0.79	0.38	
95-63-6	1,2,4-Trimethylbenzene	0.46	ug/m3	1.57	0.79	0.25	J
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	1.57	0.79	0.24	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	1.57	0.79	0.27	
107-06-2	1,2-Dichloroethane	ND	ug/m3	1.57	0.79	0.3	
78-87-5	1,2-Dichloropropane	ND	ug/m3	1.57	0.79	0.27	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	1.57	0.79	0.27	
106-99-0	1,3-Butadiene	ND	ug/m3	1.57	0.79	0.33	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	1.57	0.79	0.27	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	1.57	0.79	0.25	
123-91-1	1,4-Dioxane	ND	ug/m3	1.57	0.79	0.27	
540-84-1	2,2,4-Trimethylpentane	1.1	ug/m3	1.57	0.79	0.27	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	1.5	ug/m3	1.57	7.9	0.36	J
591-78-6	2-Hexanone	0.53	ug/m3	1.57	0.79	0.28	J

67-63-0	2-Propanol	ND	ug/m3	1.57	1.6	0.63	
107-05-1	3-Chloropropene	ND	ug/m3	1.57	0.79	0.25	
622-96-8	4-Ethyltoluene	ND	ug/m3	1.57	0.79	0.27	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	1.57	0.79	0.22	
67-64-1	Acetone	6.6	ug/m3	1.57	7.9	1.4	J
100-44-7	alpha-Chlorotoluene	ND	ug/m3	1.57	0.79	0.24	
71-43-2	Benzene	ND	ug/m3	1.57	0.79	0.22	
75-27-4	Bromodichloromethane	ND	ug/m3	1.57	0.79	0.25	
75-25-2	Bromoform	ND	ug/m3	1.57	0.79	0.22	
74-83-9	Bromomethane	ND	ug/m3	1.57	0.79	0.3	
75-15-0	Carbon Disulfide	0.29	ug/m3	1.57	7.9	0.24	J
56-23-5	Carbon Tetrachloride	ND	ug/m3	1.57	0.79	0.25	
108-90-7	Chlorobenzene	ND	ug/m3	1.57	0.79	0.25	
75-00-3	Chloroethane	ND	ug/m3	1.57	0.79	0.3	
67-66-3	Chloroform	0.49	ug/m3	1.57	0.79	0.3	J
74-87-3	Chloromethane	ND	ug/m3	1.57	0.79	0.3	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	1.57	0.79	0.28	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	1.57	0.79	0.22	
98-82-8	Cumene	ND	ug/m3	1.57	0.79	0.24	
110-82-7	Cyclohexane	ND	ug/m3	1.57	1.6	0.52	
124-48-1	Dibromochloromethane	ND	ug/m3	1.57	0.79	0.22	
64-17-5	Ethanol	ND	ug/m3	1.57	7.9	2.5	
100-41-4	Ethyl Benzene	ND	ug/m3	1.57	0.79	0.24	
75-69-4	Freon 11	3.8	ug/m3	1.57	0.79	0.25	
76-13-1	Freon 113	210	ug/m3	15.7	7.9	2.5	D
76-14-2	Freon 114	ND	ug/m3	1.57	0.79	0.27	
75-71-8	Freon 12	2.6	ug/m3	1.57	0.79	0.28	
306-83-2	Freon 123	ND	ug/m3	1.57	0.79	0.38	
354-23-4	Freon 123a	49	ug/m3	1.57	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	1.57	0.79	0.36	
142-82-5	Heptane	ND	ug/m3	1.57	0.79	0.25	
87-68-3	Hexachlorobutadiene	ND	ug/m3	1.57	0.79	0.28	
110-54-3	Hexane	0.47	ug/m3	1.57	0.79	0.27	J
179601-23-	m,p-Xylene	ND	ug/m3	1.57	1.6	0.46	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	1.57	0.79	0.24	
75-09-2	Methylene Chloride	0.28	ug/m3	1.57	0.79	0.24	J RB
95-47-6	o-Xylene	ND	ug/m3	1.57	0.79	0.22	
103-65-1	Propylbenzene	ND	ug/m3	1.57	0.79	0.24	
100-42-5	Styrene	ND	ug/m3	1.57	0.79	0.24	
127-18-4	Tetrachloroethene	ND	ug/m3	1.57	0.79	0.22	
109-99-9	Tetrahydrofuran	ND	ug/m3	1.57	0.79	0.35	
108-88-3	Toluene	0.28	ug/m3	1.57	0.79	0.25	J
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	1.57	0.79	0.27	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	1.57	0.79	0.25	
79-01-6	Trichloroethene	5.2	ug/m3	1.57	0.79	0.24	
75-01-4	Vinyl Chloride	ND	ug/m3	1.57	0.79	0.3	

Borehole	600-SGW-8	Depth (ft)	102.5	Depth (m)	31.24	Event Date	3/22/2012

Sample	1203220907	Sample Type	Soil Gas	Analysis Method	TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	3.95	2	0.63	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	3.95	2	0.63	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	3.95	2	0.63	
75-34-3	1,1-Dichloroethane	ND	ug/m3	3.95	2	0.67	
75-35-4	1,1-Dichloroethene	ND	ug/m3	3.95	2	0.67	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	3.95	2	0.95	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	3.95	2	0.63	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	3.95	2	0.59	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	3.95	2	0.67	
107-06-2	1,2-Dichloroethane	ND	ug/m3	3.95	2	0.75	
78-87-5	1,2-Dichloropropane	ND	ug/m3	3.95	2	0.67	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	3.95	2	0.67	
106-99-0	1,3-Butadiene	ND	ug/m3	3.95	2	0.83	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	3.95	2	0.67	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	3.95	2	0.63	
123-91-1	1,4-Dioxane	ND	ug/m3	3.95	2	0.67	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	3.95	2	0.67	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	1.1	ug/m3	3.95	20	0.91	J
591-78-6	2-Hexanone	ND	ug/m3	3.95	2	0.71	
67-63-0	2-Propanol	ND	ug/m3	3.95	4	1.6	
107-05-1	3-Chloropropene	ND	ug/m3	3.95	2	0.63	
622-96-8	4-Ethyltoluene	ND	ug/m3	3.95	2	0.67	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	3.95	2	0.55	
67-64-1	Acetone	7.8	ug/m3	3.95	20	3.5	J
100-44-7	alpha-Chlorotoluene	ND	ug/m3	3.95	2	0.59	
71-43-2	Benzene	ND	ug/m3	3.95	2	0.55	
75-27-4	Bromodichloromethane	ND	ug/m3	3.95	2	0.63	
75-25-2	Bromoform	ND	ug/m3	3.95	2	0.55	
74-83-9	Bromomethane	ND	ug/m3	3.95	2	0.75	
75-15-0	Carbon Disulfide	1.1	ug/m3	3.95	20	0.59	J RB
56-23-5	Carbon Tetrachloride	ND	ug/m3	3.95	2	0.63	
108-90-7	Chlorobenzene	ND	ug/m3	3.95	2	0.63	
75-00-3	Chloroethane	ND	ug/m3	3.95	2	0.75	
67-66-3	Chloroform	ND	ug/m3	3.95	2	0.75	
74-87-3	Chloromethane	ND	ug/m3	3.95	2	0.75	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	3.95	2	0.71	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	3.95	2	0.55	
98-82-8	Cumene	ND	ug/m3	3.95	2	0.59	
110-82-7	Cyclohexane	ND	ug/m3	3.95	4	1.3	
124-48-1	Dibromochloromethane	ND	ug/m3	3.95	2	0.55	
64-17-5	Ethanol	19	ug/m3	3.95	20	6.3	J

100-41-4	Ethyl Benzene	ND	ug/m3	3.95	2	0.59	
75-69-4	Freon 11	3.8	ug/m3	3.95	2	0.63	
76-13-1	Freon 113	110	ug/m3	3.95	2	0.63	
76-14-2	Freon 114	ND	ug/m3	3.95	2	0.67	
75-71-8	Freon 12	2.3	ug/m3	3.95	2	0.71	
306-83-2	Freon 123	ND	ug/m3	3.95	2	0.95	
354-23-4	Freon 123a	ND	ug/m3	3.95	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	3.95	2	0.91	
142-82-5	Heptane	ND	ug/m3	3.95	2	0.63	
87-68-3	Hexachlorobutadiene	ND	ug/m3	3.95	2	0.71	
110-54-3	Hexane	ND	ug/m3	3.95	2	0.67	
179601-23-	m,p-Xylene	ND	ug/m3	3.95	4	1.1	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	3.95	2	0.59	
75-09-2	Methylene Chloride	0.78	ug/m3	3.95	2	0.59	J RB
95-47-6	o-Xylene	ND	ug/m3	3.95	2	0.55	
103-65-1	Propylbenzene	ND	ug/m3	3.95	2	0.59	
100-42-5	Styrene	ND	ug/m3	3.95	2	0.59	
127-18-4	Tetrachloroethene	ND	ug/m3	3.95	2	0.55	
109-99-9	Tetrahydrofuran	ND	ug/m3	3.95	2	0.87	
108-88-3	Toluene	2.6	ug/m3	3.95	2	0.63	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	3.95	2	0.67	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	3.95	2	0.63	
79-01-6	Trichloroethene	1.3	ug/m3	3.95	2	0.59	J
75-01-4	Vinyl Chloride	ND	ug/m3	3.95	2	0.75	

Sample 1203241557 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	1.45	0.73	0.23	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	1.45	0.73	0.23	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	1.45	0.73	0.23	
75-34-3	1,1-Dichloroethane	ND	ug/m3	1.45	0.73	0.25	
75-35-4	1,1-Dichloroethene	ND	ug/m3	1.45	0.73	0.25	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	1.45	0.73	0.35	
95-63-6	1,2,4-Trimethylbenzene	0.35	ug/m3	1.45	0.73	0.23	J
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	1.45	0.73	0.22	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	1.45	0.73	0.25	
107-06-2	1,2-Dichloroethane	ND	ug/m3	1.45	0.73	0.28	
78-87-5	1,2-Dichloropropane	ND	ug/m3	1.45	0.73	0.25	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	1.45	0.73	0.25	
106-99-0	1,3-Butadiene	ND	ug/m3	1.45	0.73	0.3	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	1.45	0.73	0.25	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	1.45	0.73	0.23	
123-91-1	1,4-Dioxane	ND	ug/m3	1.45	0.73	0.25	
540-84-1	2,2,4-Trimethylpentane	0.87	ug/m3	1.45	0.73	0.25	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	7.2	ug/m3	1.45	7.3	0.33	J
591-78-6	2-Hexanone	0.41	ug/m3	1.45	0.73	0.26	J

67-63-0	2-Propanol	4.3	ug/m3	1.45	1.5	0.58	
107-05-1	3-Chloropropene	ND	ug/m3	1.45	0.73	0.23	
622-96-8	4-Ethyltoluene	ND	ug/m3	1.45	0.73	0.25	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	1.45	0.73	0.2	
67-64-1	Acetone	8.1	ug/m3	1.45	7.3	1.3	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	1.45	0.73	0.22	
71-43-2	Benzene	0.81	ug/m3	1.45	0.73	0.2	
75-27-4	Bromodichloromethane	ND	ug/m3	1.45	0.73	0.23	
75-25-2	Bromoform	ND	ug/m3	1.45	0.73	0.2	
74-83-9	Bromomethane	ND	ug/m3	1.45	0.73	0.28	
75-15-0	Carbon Disulfide	0.7	ug/m3	1.45	7.3	0.22	J
56-23-5	Carbon Tetrachloride	ND	ug/m3	1.45	0.73	0.23	
108-90-7	Chlorobenzene	ND	ug/m3	1.45	0.73	0.23	
75-00-3	Chloroethane	ND	ug/m3	1.45	0.73	0.28	
67-66-3	Chloroform	ND	ug/m3	1.45	0.73	0.28	
74-87-3	Chloromethane	ND	ug/m3	1.45	0.73	0.28	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	1.45	0.73	0.26	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	1.45	0.73	0.2	
98-82-8	Cumene	ND	ug/m3	1.45	0.73	0.22	
110-82-7	Cyclohexane	1.1	ug/m3	1.45	1.5	0.48	J
124-48-1	Dibromochloromethane	ND	ug/m3	1.45	0.73	0.2	
64-17-5	Ethanol	15	ug/m3	1.45	7.3	2.3	
100-41-4	Ethyl Benzene	0.84	ug/m3	1.45	0.73	0.22	
75-69-4	Freon 11	3.4	ug/m3	1.45	0.73	0.23	
76-13-1	Freon 113	93	ug/m3	1.45	0.73	0.23	
76-14-2	Freon 114	ND	ug/m3	1.45	0.73	0.25	
75-71-8	Freon 12	2.5	ug/m3	1.45	0.73	0.26	
306-83-2	Freon 123	ND	ug/m3	1.45	0.73	0.35	
354-23-4	Freon 123a	ND	ug/m3	1.45	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	1.45	0.73	0.33	
142-82-5	Heptane	1.3	ug/m3	1.45	0.73	0.23	
87-68-3	Hexachlorobutadiene	ND	ug/m3	1.45	0.73	0.26	
110-54-3	Hexane	1	ug/m3	1.45	0.73	0.25	
179601-23-	m,p-Xylene	1.3	ug/m3	1.45	1.5	0.42	J
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	1.45	0.73	0.22	
75-09-2	Methylene Chloride	0.59	ug/m3	1.45	0.73	0.22	J RB
95-47-6	o-Xylene	0.46	ug/m3	1.45	0.73	0.2	J
103-65-1	Propylbenzene	ND	ug/m3	1.45	0.73	0.22	
100-42-5	Styrene	0.34	ug/m3	1.45	0.73	0.22	J
127-18-4	Tetrachloroethene	0.48	ug/m3	1.45	0.73	0.2	J
109-99-9	Tetrahydrofuran	ND	ug/m3	1.45	0.73	0.32	
108-88-3	Toluene	48	ug/m3	1.45	0.73	0.23	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	1.45	0.73	0.25	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	1.45	0.73	0.23	
79-01-6	Trichloroethene	1.3	ug/m3	1.45	0.73	0.22	
75-01-4	Vinyl Chloride	ND	ug/m3	1.45	0.73	0.28	

Sample **1203241558** **Sample Type** **Soil Gas-D** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	1.45	0.73	0.23	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	1.45	0.73	0.23	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	1.45	0.73	0.23	
75-34-3	1,1-Dichloroethane	ND	ug/m3	1.45	0.73	0.25	
75-35-4	1,1-Dichloroethene	ND	ug/m3	1.45	0.73	0.25	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	1.45	0.73	0.35	
95-63-6	1,2,4-Trimethylbenzene	0.31	ug/m3	1.45	0.73	0.23	J
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	1.45	0.73	0.22	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	1.45	0.73	0.25	
107-06-2	1,2-Dichloroethane	ND	ug/m3	1.45	0.73	0.28	
78-87-5	1,2-Dichloropropane	ND	ug/m3	1.45	0.73	0.25	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	1.45	0.73	0.25	
106-99-0	1,3-Butadiene	ND	ug/m3	1.45	0.73	0.3	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	1.45	0.73	0.25	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	1.45	0.73	0.23	
123-91-1	1,4-Dioxane	ND	ug/m3	1.45	0.73	0.25	
540-84-1	2,2,4-Trimethylpentane	0.78	ug/m3	1.45	0.73	0.25	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	7.3	ug/m3	1.45	7.3	0.33	
591-78-6	2-Hexanone	ND	ug/m3	1.45	0.73	0.26	
67-63-0	2-Propanol	4.3	ug/m3	1.45	1.5	0.58	
107-05-1	3-Chloropropene	ND	ug/m3	1.45	0.73	0.23	
622-96-8	4-Ethyltoluene	ND	ug/m3	1.45	0.73	0.25	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	1.45	0.73	0.2	
67-64-1	Acetone	8.2	ug/m3	1.45	7.3	1.3	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	1.45	0.73	0.22	
71-43-2	Benzene	0.83	ug/m3	1.45	0.73	0.2	
75-27-4	Bromodichloromethane	ND	ug/m3	1.45	0.73	0.23	
75-25-2	Bromoform	ND	ug/m3	1.45	0.73	0.2	
74-83-9	Bromomethane	ND	ug/m3	1.45	0.73	0.28	
75-15-0	Carbon Disulfide	0.72	ug/m3	1.45	7.3	0.22	J
56-23-5	Carbon Tetrachloride	ND	ug/m3	1.45	0.73	0.23	
108-90-7	Chlorobenzene	ND	ug/m3	1.45	0.73	0.23	
75-00-3	Chloroethane	ND	ug/m3	1.45	0.73	0.28	
67-66-3	Chloroform	ND	ug/m3	1.45	0.73	0.28	
74-87-3	Chloromethane	ND	ug/m3	1.45	0.73	0.28	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	1.45	0.73	0.26	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	1.45	0.73	0.2	
98-82-8	Cumene	ND	ug/m3	1.45	0.73	0.22	
110-82-7	Cyclohexane	1.2	ug/m3	1.45	1.5	0.48	J
124-48-1	Dibromochloromethane	ND	ug/m3	1.45	0.73	0.2	
64-17-5	Ethanol	16	ug/m3	1.45	7.3	2.3	
100-41-4	Ethyl Benzene	0.86	ug/m3	1.45	0.73	0.22	
75-69-4	Freon 11	3.6	ug/m3	1.45	0.73	0.23	

76-13-1	Freon 113	95	ug/m3	1.45	0.73	0.23	
76-14-2	Freon 114	ND	ug/m3	1.45	0.73	0.25	
75-71-8	Freon 12	2.5	ug/m3	1.45	0.73	0.26	
306-83-2	Freon 123	ND	ug/m3	1.45	0.73	0.35	
354-23-4	Freon 123a	ND	ug/m3	1.45	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	1.45	0.73	0.33	
142-82-5	Heptane	1.4	ug/m3	1.45	0.73	0.23	
87-68-3	Hexachlorobutadiene	ND	ug/m3	1.45	0.73	0.26	
110-54-3	Hexane	1	ug/m3	1.45	0.73	0.25	
179601-23-	m,p-Xylene	1.3	ug/m3	1.45	1.5	0.42	J
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	1.45	0.73	0.22	
75-09-2	Methylene Chloride	0.64	ug/m3	1.45	0.73	0.22	J RB
95-47-6	o-Xylene	0.45	ug/m3	1.45	0.73	0.2	J
103-65-1	Propylbenzene	ND	ug/m3	1.45	0.73	0.22	
100-42-5	Styrene	0.35	ug/m3	1.45	0.73	0.22	J
127-18-4	Tetrachloroethene	0.48	ug/m3	1.45	0.73	0.2	J
109-99-9	Tetrahydrofuran	ND	ug/m3	1.45	0.73	0.32	
108-88-3	Toluene	49	ug/m3	1.45	0.73	0.23	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	1.45	0.73	0.25	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	1.45	0.73	0.23	
79-01-6	Trichloroethene	1.3	ug/m3	1.45	0.73	0.22	
75-01-4	Vinyl Chloride	ND	ug/m3	1.45	0.73	0.28	

Borehole	600-SGW-8	Depth (ft)	145.5	Depth (m)	44.35	Event Date	3/22/2012

Sample	1203220916	Sample Type	Soil Gas	Analysis Method	TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	78.5	39	13	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	78.5	39	13	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	78.5	39	13	
75-34-3	1,1-Dichloroethane	ND	ug/m3	78.5	39	13	
75-35-4	1,1-Dichloroethene	ND	ug/m3	78.5	39	13	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	78.5	39	19	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	78.5	39	13	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	78.5	39	12	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	78.5	39	13	
107-06-2	1,2-Dichloroethane	ND	ug/m3	78.5	39	15	
78-87-5	1,2-Dichloropropane	ND	ug/m3	78.5	39	13	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	78.5	39	13	
106-99-0	1,3-Butadiene	ND	ug/m3	78.5	39	16	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	78.5	39	13	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	78.5	39	13	
123-91-1	1,4-Dioxane	ND	ug/m3	78.5	39	13	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	78.5	39	13	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	78.5	390	18	
591-78-6	2-Hexanone	ND	ug/m3	78.5	39	14	
67-63-0	2-Propanol	ND	ug/m3	78.5	79	31	
107-05-1	3-Chloropropene	ND	ug/m3	78.5	39	13	
622-96-8	4-Ethyltoluene	ND	ug/m3	78.5	39	13	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	78.5	39	11	
67-64-1	Acetone	ND	ug/m3	78.5	390	69	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	78.5	39	12	
71-43-2	Benzene	ND	ug/m3	78.5	39	11	
75-27-4	Bromodichloromethane	ND	ug/m3	78.5	39	13	
75-25-2	Bromoform	ND	ug/m3	78.5	39	11	
74-83-9	Bromomethane	ND	ug/m3	78.5	39	15	
75-15-0	Carbon Disulfide	ND	ug/m3	78.5	390	12	
56-23-5	Carbon Tetrachloride	ND	ug/m3	78.5	39	13	
108-90-7	Chlorobenzene	ND	ug/m3	78.5	39	13	
75-00-3	Chloroethane	ND	ug/m3	78.5	39	15	
67-66-3	Chloroform	ND	ug/m3	78.5	39	15	
74-87-3	Chloromethane	ND	ug/m3	78.5	39	15	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	78.5	39	14	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	78.5	39	11	
98-82-8	Cumene	ND	ug/m3	78.5	39	12	
110-82-7	Cyclohexane	ND	ug/m3	78.5	79	26	
124-48-1	Dibromochloromethane	ND	ug/m3	78.5	39	11	
64-17-5	Ethanol	ND	ug/m3	78.5	390	130	

100-41-4	Ethyl Benzene	ND	ug/m3	78.5	39	12	
75-69-4	Freon 11	15	ug/m3	78.5	39	13	J
76-13-1	Freon 113	6800	ug/m3	78.5	39	13	
76-14-2	Freon 114	ND	ug/m3	78.5	39	13	
75-71-8	Freon 12	ND	ug/m3	78.5	39	14	
306-83-2	Freon 123	ND	ug/m3	78.5	39	19	
354-23-4	Freon 123a	ND	ug/m3	78.5	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	78.5	39	18	
142-82-5	Heptane	ND	ug/m3	78.5	39	13	
87-68-3	Hexachlorobutadiene	ND	ug/m3	78.5	39	14	
110-54-3	Hexane	ND	ug/m3	78.5	39	13	
179601-23-	m,p-Xylene	ND	ug/m3	78.5	79	23	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	78.5	39	12	
75-09-2	Methylene Chloride	14	ug/m3	78.5	39	12	J
95-47-6	o-Xylene	ND	ug/m3	78.5	39	11	
103-65-1	Propylbenzene	ND	ug/m3	78.5	39	12	
100-42-5	Styrene	ND	ug/m3	78.5	39	12	
127-18-4	Tetrachloroethene	ND	ug/m3	78.5	39	11	
109-99-9	Tetrahydrofuran	ND	ug/m3	78.5	39	17	
108-88-3	Toluene	ND	ug/m3	78.5	39	13	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	78.5	39	13	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	78.5	39	13	
79-01-6	Trichloroethene	ND	ug/m3	78.5	39	12	
75-01-4	Vinyl Chloride	ND	ug/m3	78.5	39	15	

Sample 1203241608 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	147	74	24	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	147	74	24	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	147	74	24	
75-34-3	1,1-Dichloroethane	ND	ug/m3	147	74	25	
75-35-4	1,1-Dichloroethene	ND	ug/m3	147	74	25	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	147	74	35	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	147	74	24	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	147	74	22	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	147	74	25	
107-06-2	1,2-Dichloroethane	ND	ug/m3	147	74	28	
78-87-5	1,2-Dichloropropane	ND	ug/m3	147	74	25	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	147	74	25	
106-99-0	1,3-Butadiene	ND	ug/m3	147	74	31	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	147	74	25	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	147	74	24	
123-91-1	1,4-Dioxane	ND	ug/m3	147	74	25	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	147	74	25	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	147	740	34	
591-78-6	2-Hexanone	ND	ug/m3	147	74	26	

67-63-0	2-Propanol	ND	ug/m3	147	150	59	
107-05-1	3-Chloropropene	ND	ug/m3	147	74	24	
622-96-8	4-Ethyltoluene	ND	ug/m3	147	74	25	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	147	74	21	
67-64-1	Acetone	ND	ug/m3	147	740	130	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	147	74	22	
71-43-2	Benzene	ND	ug/m3	147	74	21	
75-27-4	Bromodichloromethane	ND	ug/m3	147	74	24	
75-25-2	Bromoform	ND	ug/m3	147	74	21	
74-83-9	Bromomethane	ND	ug/m3	147	74	28	
75-15-0	Carbon Disulfide	ND	ug/m3	147	740	22	
56-23-5	Carbon Tetrachloride	ND	ug/m3	147	74	24	
108-90-7	Chlorobenzene	ND	ug/m3	147	74	24	
75-00-3	Chloroethane	ND	ug/m3	147	74	28	
67-66-3	Chloroform	ND	ug/m3	147	74	28	
74-87-3	Chloromethane	ND	ug/m3	147	74	28	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	147	74	26	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	147	74	21	
98-82-8	Cumene	ND	ug/m3	147	74	22	
110-82-7	Cyclohexane	ND	ug/m3	147	150	49	
124-48-1	Dibromochloromethane	ND	ug/m3	147	74	21	
64-17-5	Ethanol	ND	ug/m3	147	740	240	
100-41-4	Ethyl Benzene	ND	ug/m3	147	74	22	
75-69-4	Freon 11	ND	ug/m3	147	74	24	
76-13-1	Freon 113	8500	ug/m3	147	74	24	
76-14-2	Freon 114	ND	ug/m3	147	74	25	
75-71-8	Freon 12	ND	ug/m3	147	74	26	
306-83-2	Freon 123	ND	ug/m3	147	74	35	
354-23-4	Freon 123a	ND	ug/m3	147	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	147	74	34	
142-82-5	Heptane	ND	ug/m3	147	74	24	
87-68-3	Hexachlorobutadiene	ND	ug/m3	147	74	26	
110-54-3	Hexane	ND	ug/m3	147	74	25	
179601-23-	m,p-Xylene	ND	ug/m3	147	150	43	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	147	74	22	
75-09-2	Methylene Chloride	23	ug/m3	147	74	22	J
95-47-6	o-Xylene	ND	ug/m3	147	74	21	
103-65-1	Propylbenzene	ND	ug/m3	147	74	22	
100-42-5	Styrene	ND	ug/m3	147	74	22	
127-18-4	Tetrachloroethene	ND	ug/m3	147	74	21	
109-99-9	Tetrahydrofuran	ND	ug/m3	147	74	32	
108-88-3	Toluene	ND	ug/m3	147	74	24	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	147	74	25	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	147	74	24	
79-01-6	Trichloroethene	ND	ug/m3	147	74	22	
75-01-4	Vinyl Chloride	ND	ug/m3	147	74	28	

Borehole	600-SVE-1	Depth (ft)	40	Depth (m)	12.19	Event Date	3/22/2012

Sample	1203221140	Sample Type	Soil Gas	Analysis Method	TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	32.6	16	5.2	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	32.6	16	5.2	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	32.6	16	5.2	
75-34-3	1,1-Dichloroethane	ND	ug/m3	32.6	16	5.5	
75-35-4	1,1-Dichloroethene	ND	ug/m3	32.6	16	5.5	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	32.6	16	7.8	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	32.6	16	5.2	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	32.6	16	4.9	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	32.6	16	5.5	
107-06-2	1,2-Dichloroethane	ND	ug/m3	32.6	16	6.2	
78-87-5	1,2-Dichloropropane	ND	ug/m3	32.6	16	5.5	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	32.6	16	5.5	
106-99-0	1,3-Butadiene	ND	ug/m3	32.6	16	6.8	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	32.6	16	5.5	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	32.6	16	5.2	
123-91-1	1,4-Dioxane	ND	ug/m3	32.6	16	5.5	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	32.6	16	5.5	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	2200	ug/m3	32.6	160	7.5	
591-78-6	2-Hexanone	ND	ug/m3	32.6	16	5.9	
67-63-0	2-Propanol	ND	ug/m3	32.6	33	13	
107-05-1	3-Chloropropene	ND	ug/m3	32.6	16	5.2	
622-96-8	4-Ethyltoluene	ND	ug/m3	32.6	16	5.5	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	32.6	16	4.6	
67-64-1	Acetone	940	ug/m3	32.6	160	29	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	32.6	16	4.9	
71-43-2	Benzene	ND	ug/m3	32.6	16	4.6	
75-27-4	Bromodichloromethane	ND	ug/m3	32.6	16	5.2	
75-25-2	Bromoform	ND	ug/m3	32.6	16	4.6	
74-83-9	Bromomethane	ND	ug/m3	32.6	16	6.2	
75-15-0	Carbon Disulfide	9.9	ug/m3	32.6	160	4.9	J
56-23-5	Carbon Tetrachloride	ND	ug/m3	32.6	16	5.2	
108-90-7	Chlorobenzene	ND	ug/m3	32.6	16	5.2	
75-00-3	Chloroethane	ND	ug/m3	32.6	16	6.2	
67-66-3	Chloroform	8	ug/m3	32.6	16	6.2	J
74-87-3	Chloromethane	ND	ug/m3	32.6	16	6.2	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	32.6	16	5.9	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	32.6	16	4.6	
98-82-8	Cumene	ND	ug/m3	32.6	16	4.9	
110-82-7	Cyclohexane	ND	ug/m3	32.6	33	11	
124-48-1	Dibromochloromethane	ND	ug/m3	32.6	16	4.6	
64-17-5	Ethanol	ND	ug/m3	32.6	160	52	

100-41-4	Ethyl Benzene	ND	ug/m3	32.6	16	4.9	
75-69-4	Freon 11	ND	ug/m3	32.6	16	5.2	
76-13-1	Freon 113	320	ug/m3	32.6	16	5.2	
76-14-2	Freon 114	ND	ug/m3	32.6	16	5.5	
75-71-8	Freon 12	ND	ug/m3	32.6	16	5.9	
306-83-2	Freon 123	ND	ug/m3	32.6	16	7.8	
NA	Freon 123a	ND	ug/m3	32.6	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	32.6	16	7.5	
142-82-5	Heptane	ND	ug/m3	32.6	16	5.2	
87-68-3	Hexachlorobutadiene	ND	ug/m3	32.6	16	5.9	
110-54-3	Hexane	ND	ug/m3	32.6	16	5.5	
179601-23-	m,p-Xylene	ND	ug/m3	32.6	33	9.5	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	32.6	16	4.9	
75-09-2	Methylene Chloride	5.9	ug/m3	32.6	16	4.9	J
95-47-6	o-Xylene	ND	ug/m3	32.6	16	4.6	
103-65-1	Propylbenzene	ND	ug/m3	32.6	16	4.9	
100-42-5	Styrene	ND	ug/m3	32.6	16	4.9	
127-18-4	Tetrachloroethene	1100	ug/m3	32.6	16	4.6	
109-99-9	Tetrahydrofuran	3000	ug/m3	32.6	16	7.2	
108-88-3	Toluene	ND	ug/m3	32.6	16	5.2	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	32.6	16	5.5	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	32.6	16	5.2	
79-01-6	Trichloroethene	140	ug/m3	32.6	16	4.9	
75-01-4	Vinyl Chloride	ND	ug/m3	32.6	16	6.2	

Sample 1203221150 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	171	86	27	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	171	86	27	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	171	86	27	
75-34-3	1,1-Dichloroethane	ND	ug/m3	171	86	29	
75-35-4	1,1-Dichloroethene	ND	ug/m3	171	86	29	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	171	86	41	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	171	86	27	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	171	86	26	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	171	86	29	
107-06-2	1,2-Dichloroethane	ND	ug/m3	171	86	32	
78-87-5	1,2-Dichloropropane	ND	ug/m3	171	86	29	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	171	86	29	
106-99-0	1,3-Butadiene	ND	ug/m3	171	86	36	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	171	86	29	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	171	86	27	
123-91-1	1,4-Dioxane	ND	ug/m3	171	86	29	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	171	86	29	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	171	860	39	
591-78-6	2-Hexanone	ND	ug/m3	171	86	31	

67-63-0	2-Propanol	ND	ug/m3	171	170	68	
107-05-1	3-Chloropropene	ND	ug/m3	171	86	27	
622-96-8	4-Ethyltoluene	ND	ug/m3	171	86	29	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	171	86	24	
67-64-1	Acetone	ND	ug/m3	171	860	150	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	171	86	26	
71-43-2	Benzene	ND	ug/m3	171	86	24	
75-27-4	Bromodichloromethane	ND	ug/m3	171	86	27	
75-25-2	Bromoform	ND	ug/m3	171	86	24	
74-83-9	Bromomethane	ND	ug/m3	171	86	32	
75-15-0	Carbon Disulfide	ND	ug/m3	171	860	26	
56-23-5	Carbon Tetrachloride	ND	ug/m3	171	86	27	
108-90-7	Chlorobenzene	ND	ug/m3	171	86	27	
75-00-3	Chloroethane	ND	ug/m3	171	86	32	
67-66-3	Chloroform	88	ug/m3	171	86	32	
74-87-3	Chloromethane	ND	ug/m3	171	86	32	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	171	86	31	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	171	86	24	
98-82-8	Cumene	ND	ug/m3	171	86	26	
110-82-7	Cyclohexane	ND	ug/m3	171	170	56	
124-48-1	Dibromochloromethane	ND	ug/m3	171	86	24	
64-17-5	Ethanol	ND	ug/m3	171	860	270	
100-41-4	Ethyl Benzene	ND	ug/m3	171	86	26	
75-69-4	Freon 11	ND	ug/m3	171	86	27	
76-13-1	Freon 113	11000	ug/m3	171	86	27	
76-14-2	Freon 114	ND	ug/m3	171	86	29	
75-71-8	Freon 12	ND	ug/m3	171	86	31	
306-83-2	Freon 123	ND	ug/m3	171	86	41	
NA	Freon 123a	1300	ug/m3	171	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	171	86	39	
142-82-5	Heptane	ND	ug/m3	171	86	27	
87-68-3	Hexachlorobutadiene	ND	ug/m3	171	86	31	
110-54-3	Hexane	ND	ug/m3	171	86	29	
179601-23-	m,p-Xylene	ND	ug/m3	171	170	50	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	171	86	26	
75-09-2	Methylene Chloride	32	ug/m3	171	86	26	J
95-47-6	o-Xylene	ND	ug/m3	171	86	24	
103-65-1	Propylbenzene	ND	ug/m3	171	86	26	
100-42-5	Styrene	ND	ug/m3	171	86	26	
127-18-4	Tetrachloroethene	69	ug/m3	171	86	24	J
109-99-9	Tetrahydrofuran	66	ug/m3	171	86	38	J
108-88-3	Toluene	ND	ug/m3	171	86	27	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	171	86	29	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	171	86	27	
79-01-6	Trichloroethene	1500	ug/m3	171	86	26	
75-01-4	Vinyl Chloride	ND	ug/m3	171	86	32	

Sample **1203221155** **Sample Type** **Soil Gas** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	172	86	28	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	172	86	28	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	172	86	28	
75-34-3	1,1-Dichloroethane	ND	ug/m3	172	86	29	
75-35-4	1,1-Dichloroethene	ND	ug/m3	172	86	29	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	172	86	41	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	172	86	28	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	172	86	26	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	172	86	29	
107-06-2	1,2-Dichloroethane	ND	ug/m3	172	86	33	
78-87-5	1,2-Dichloropropane	ND	ug/m3	172	86	29	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	172	86	29	
106-99-0	1,3-Butadiene	ND	ug/m3	172	86	36	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	172	86	29	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	172	86	28	
123-91-1	1,4-Dioxane	ND	ug/m3	172	86	29	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	172	86	29	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	43	ug/m3	172	860	40	J
591-78-6	2-Hexanone	ND	ug/m3	172	86	31	
67-63-0	2-Propanol	ND	ug/m3	172	170	69	
107-05-1	3-Chloropropene	ND	ug/m3	172	86	28	
622-96-8	4-Ethyltoluene	ND	ug/m3	172	86	29	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	172	86	24	
67-64-1	Acetone	ND	ug/m3	172	860	150	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	172	86	26	
71-43-2	Benzene	ND	ug/m3	172	86	24	
75-27-4	Bromodichloromethane	ND	ug/m3	172	86	28	
75-25-2	Bromoform	ND	ug/m3	172	86	24	
74-83-9	Bromomethane	ND	ug/m3	172	86	33	
75-15-0	Carbon Disulfide	ND	ug/m3	172	860	26	
56-23-5	Carbon Tetrachloride	ND	ug/m3	172	86	28	
108-90-7	Chlorobenzene	ND	ug/m3	172	86	28	
75-00-3	Chloroethane	ND	ug/m3	172	86	33	
67-66-3	Chloroform	90	ug/m3	172	86	33	
74-87-3	Chloromethane	ND	ug/m3	172	86	33	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	172	86	31	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	172	86	24	
98-82-8	Cumene	ND	ug/m3	172	86	26	
110-82-7	Cyclohexane	ND	ug/m3	172	170	57	
124-48-1	Dibromochloromethane	ND	ug/m3	172	86	24	
64-17-5	Ethanol	ND	ug/m3	172	860	280	
100-41-4	Ethyl Benzene	ND	ug/m3	172	86	26	
75-69-4	Freon 11	ND	ug/m3	172	86	28	

76-13-1	Freon 113	11000	ug/m3	172	86	28	
76-14-2	Freon 114	ND	ug/m3	172	86	29	
75-71-8	Freon 12	ND	ug/m3	172	86	31	
306-83-2	Freon 123	ND	ug/m3	172	86	41	
NA	Freon 123a	1300	ug/m3	172	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	172	86	40	
142-82-5	Heptane	ND	ug/m3	172	86	28	
87-68-3	Hexachlorobutadiene	ND	ug/m3	172	86	31	
110-54-3	Hexane	ND	ug/m3	172	86	29	
179601-23-	m,p-Xylene	ND	ug/m3	172	170	50	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	172	86	26	
75-09-2	Methylene Chloride	33	ug/m3	172	86	26	J
95-47-6	o-Xylene	ND	ug/m3	172	86	24	
103-65-1	Propylbenzene	ND	ug/m3	172	86	26	
100-42-5	Styrene	ND	ug/m3	172	86	26	
127-18-4	Tetrachloroethene	35	ug/m3	172	86	24	J
109-99-9	Tetrahydrofuran	44	ug/m3	172	86	38	J
108-88-3	Toluene	ND	ug/m3	172	86	28	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	172	86	29	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	172	86	28	
79-01-6	Trichloroethene	1500	ug/m3	172	86	26	
75-01-4	Vinyl Chloride	ND	ug/m3	172	86	33	

Sample 1203221200 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	113.33	57	18	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	113.33	57	18	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	113.33	57	18	
75-34-3	1,1-Dichloroethane	ND	ug/m3	113.33	57	19	
75-35-4	1,1-Dichloroethene	ND	ug/m3	113.33	57	19	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	113.33	57	27	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	113.33	57	18	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	113.33	57	17	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	113.33	57	19	
107-06-2	1,2-Dichloroethane	ND	ug/m3	113.33	57	22	
78-87-5	1,2-Dichloropropane	ND	ug/m3	113.33	57	19	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	113.33	57	19	
106-99-0	1,3-Butadiene	ND	ug/m3	113.33	57	24	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	113.33	57	19	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	113.33	57	18	
123-91-1	1,4-Dioxane	ND	ug/m3	113.33	57	19	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	113.33	57	19	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	113.33	570	26	
591-78-6	2-Hexanone	ND	ug/m3	113.33	57	20	
67-63-0	2-Propanol	ND	ug/m3	113.33	110	45	
107-05-1	3-Chloropropene	ND	ug/m3	113.33	57	18	

622-96-8	4-Ethyltoluene	ND	ug/m3	113.33	57	19	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	113.33	57	16	
67-64-1	Acetone	ND	ug/m3	113.33	570	100	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	113.33	57	17	
71-43-2	Benzene	ND	ug/m3	113.33	57	16	
75-27-4	Bromodichloromethane	ND	ug/m3	113.33	57	18	
75-25-2	Bromoform	ND	ug/m3	113.33	57	16	
74-83-9	Bromomethane	ND	ug/m3	113.33	57	22	
75-15-0	Carbon Disulfide	ND	ug/m3	113.33	570	17	
56-23-5	Carbon Tetrachloride	ND	ug/m3	113.33	57	18	
108-90-7	Chlorobenzene	ND	ug/m3	113.33	57	18	
75-00-3	Chloroethane	ND	ug/m3	113.33	57	22	
67-66-3	Chloroform	100	ug/m3	113.33	57	22	
74-87-3	Chloromethane	ND	ug/m3	113.33	57	22	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	113.33	57	20	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	113.33	57	16	
98-82-8	Cumene	ND	ug/m3	113.33	57	17	
110-82-7	Cyclohexane	ND	ug/m3	113.33	110	37	
124-48-1	Dibromochloromethane	ND	ug/m3	113.33	57	16	
64-17-5	Ethanol	ND	ug/m3	113.33	570	180	
100-41-4	Ethyl Benzene	ND	ug/m3	113.33	57	17	
75-69-4	Freon 11	ND	ug/m3	113.33	57	18	
76-13-1	Freon 113	11000	ug/m3	113.33	57	18	
76-14-2	Freon 114	ND	ug/m3	113.33	57	19	
75-71-8	Freon 12	ND	ug/m3	113.33	57	20	
306-83-2	Freon 123	ND	ug/m3	113.33	57	27	
354-23-4	Freon 123a	1400	ug/m3	113.33	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	113.33	57	26	
142-82-5	Heptane	ND	ug/m3	113.33	57	18	
87-68-3	Hexachlorobutadiene	ND	ug/m3	113.33	57	20	
110-54-3	Hexane	ND	ug/m3	113.33	57	19	
179601-23-	m,p-Xylene	ND	ug/m3	113.33	110	33	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	113.33	57	17	
75-09-2	Methylene Chloride	23	ug/m3	113.33	57	17	J
95-47-6	o-Xylene	ND	ug/m3	113.33	57	16	
103-65-1	Propylbenzene	ND	ug/m3	113.33	57	17	
100-42-5	Styrene	ND	ug/m3	113.33	57	17	
127-18-4	Tetrachloroethene	19	ug/m3	113.33	57	16	J
109-99-9	Tetrahydrofuran	41	ug/m3	113.33	57	25	J
108-88-3	Toluene	ND	ug/m3	113.33	57	18	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	113.33	57	19	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	113.33	57	18	
79-01-6	Trichloroethene	1700	ug/m3	113.33	57	17	
75-01-4	Vinyl Chloride	ND	ug/m3	113.33	57	22	

Sample **1203221215** **Sample Type** **Soil Gas** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	133.08	67	21	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	133.08	67	21	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	133.08	67	21	
75-34-3	1,1-Dichloroethane	ND	ug/m3	133.08	67	23	
75-35-4	1,1-Dichloroethene	ND	ug/m3	133.08	67	23	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	133.08	67	32	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	133.08	67	21	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	133.08	67	20	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	133.08	67	23	
107-06-2	1,2-Dichloroethane	ND	ug/m3	133.08	67	25	
78-87-5	1,2-Dichloropropane	ND	ug/m3	133.08	67	23	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	133.08	67	23	
106-99-0	1,3-Butadiene	ND	ug/m3	133.08	67	28	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	133.08	67	23	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	133.08	67	21	
123-91-1	1,4-Dioxane	ND	ug/m3	133.08	67	23	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	133.08	67	23	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	133.08	670	31	
591-78-6	2-Hexanone	ND	ug/m3	133.08	67	24	
67-63-0	2-Propanol	ND	ug/m3	133.08	130	53	
107-05-1	3-Chloropropene	ND	ug/m3	133.08	67	21	
622-96-8	4-Ethyltoluene	ND	ug/m3	133.08	67	23	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	133.08	67	19	
67-64-1	Acetone	ND	ug/m3	133.08	670	120	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	133.08	67	20	
71-43-2	Benzene	ND	ug/m3	133.08	67	19	
75-27-4	Bromodichloromethane	ND	ug/m3	133.08	67	21	
75-25-2	Bromoform	ND	ug/m3	133.08	67	19	
74-83-9	Bromomethane	ND	ug/m3	133.08	67	25	
75-15-0	Carbon Disulfide	ND	ug/m3	133.08	670	20	
56-23-5	Carbon Tetrachloride	ND	ug/m3	133.08	67	21	
108-90-7	Chlorobenzene	ND	ug/m3	133.08	67	21	
75-00-3	Chloroethane	ND	ug/m3	133.08	67	25	
67-66-3	Chloroform	89	ug/m3	133.08	67	25	
74-87-3	Chloromethane	ND	ug/m3	133.08	67	25	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	133.08	67	24	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	133.08	67	19	
98-82-8	Cumene	ND	ug/m3	133.08	67	20	
110-82-7	Cyclohexane	ND	ug/m3	133.08	130	44	
124-48-1	Dibromochloromethane	ND	ug/m3	133.08	67	19	
64-17-5	Ethanol	ND	ug/m3	133.08	670	210	
100-41-4	Ethyl Benzene	ND	ug/m3	133.08	67	20	
75-69-4	Freon 11	ND	ug/m3	133.08	67	21	

76-13-1	Freon 113	10000	ug/m3	133.08	67	21	
76-14-2	Freon 114	ND	ug/m3	133.08	67	23	
75-71-8	Freon 12	ND	ug/m3	133.08	67	24	
306-83-2	Freon 123	ND	ug/m3	133.08	67	32	
354-23-4	Freon 123a	1300	ug/m3	133.08	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	133.08	67	31	
142-82-5	Heptane	ND	ug/m3	133.08	67	21	
87-68-3	Hexachlorobutadiene	ND	ug/m3	133.08	67	24	
110-54-3	Hexane	ND	ug/m3	133.08	67	23	
179601-23-	m,p-Xylene	ND	ug/m3	133.08	130	39	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	133.08	67	20	
75-09-2	Methylene Chloride	28	ug/m3	133.08	67	20	J
95-47-6	o-Xylene	ND	ug/m3	133.08	67	19	
103-65-1	Propylbenzene	ND	ug/m3	133.08	67	20	
100-42-5	Styrene	ND	ug/m3	133.08	67	20	
127-18-4	Tetrachloroethene	ND	ug/m3	133.08	67	19	
109-99-9	Tetrahydrofuran	34	ug/m3	133.08	67	29	J
108-88-3	Toluene	ND	ug/m3	133.08	67	21	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	133.08	67	23	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	133.08	67	21	
79-01-6	Trichloroethene	1500	ug/m3	133.08	67	20	
75-01-4	Vinyl Chloride	ND	ug/m3	133.08	67	25	

Sample 1203221230 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	138.46	69	22	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	138.46	69	22	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	138.46	69	22	
75-34-3	1,1-Dichloroethane	ND	ug/m3	138.46	69	24	
75-35-4	1,1-Dichloroethene	ND	ug/m3	138.46	69	24	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	138.46	69	33	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	138.46	69	22	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	138.46	69	21	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	138.46	69	24	
107-06-2	1,2-Dichloroethane	ND	ug/m3	138.46	69	26	
78-87-5	1,2-Dichloropropane	ND	ug/m3	138.46	69	24	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	138.46	69	24	
106-99-0	1,3-Butadiene	ND	ug/m3	138.46	69	29	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	138.46	69	24	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	138.46	69	22	
123-91-1	1,4-Dioxane	ND	ug/m3	138.46	69	24	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	138.46	69	24	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	33	ug/m3	138.46	690	32	J
591-78-6	2-Hexanone	ND	ug/m3	138.46	69	25	
67-63-0	2-Propanol	ND	ug/m3	138.46	140	55	
107-05-1	3-Chloropropene	ND	ug/m3	138.46	69	22	

622-96-8	4-Ethyltoluene	ND	ug/m3	138.46	69	24	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	138.46	69	19	
67-64-1	Acetone	ND	ug/m3	138.46	690	120	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	138.46	69	21	
71-43-2	Benzene	ND	ug/m3	138.46	69	19	
75-27-4	Bromodichloromethane	ND	ug/m3	138.46	69	22	
75-25-2	Bromoform	ND	ug/m3	138.46	69	19	
74-83-9	Bromomethane	ND	ug/m3	138.46	69	26	
75-15-0	Carbon Disulfide	310	ug/m3	138.46	690	21	J
56-23-5	Carbon Tetrachloride	ND	ug/m3	138.46	69	22	
108-90-7	Chlorobenzene	ND	ug/m3	138.46	69	22	
75-00-3	Chloroethane	ND	ug/m3	138.46	69	26	
67-66-3	Chloroform	95	ug/m3	138.46	69	26	
74-87-3	Chloromethane	ND	ug/m3	138.46	69	26	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	138.46	69	25	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	138.46	69	19	
98-82-8	Cumene	ND	ug/m3	138.46	69	21	
110-82-7	Cyclohexane	ND	ug/m3	138.46	140	46	
124-48-1	Dibromochloromethane	ND	ug/m3	138.46	69	19	
64-17-5	Ethanol	ND	ug/m3	138.46	690	220	
100-41-4	Ethyl Benzene	ND	ug/m3	138.46	69	21	
75-69-4	Freon 11	ND	ug/m3	138.46	69	22	
76-13-1	Freon 113	11000	ug/m3	138.46	69	22	
76-14-2	Freon 114	ND	ug/m3	138.46	69	24	
75-71-8	Freon 12	ND	ug/m3	138.46	69	25	
306-83-2	Freon 123	ND	ug/m3	138.46	69	33	
354-23-4	Freon 123a	ND	ug/m3	138.46	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	138.46	69	32	
142-82-5	Heptane	ND	ug/m3	138.46	69	22	
87-68-3	Hexachlorobutadiene	ND	ug/m3	138.46	69	25	
110-54-3	Hexane	ND	ug/m3	138.46	69	24	
179601-23-	m,p-Xylene	ND	ug/m3	138.46	140	40	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	138.46	69	21	
75-09-2	Methylene Chloride	29	ug/m3	138.46	69	21	J
95-47-6	o-Xylene	ND	ug/m3	138.46	69	19	
103-65-1	Propylbenzene	ND	ug/m3	138.46	69	21	
100-42-5	Styrene	ND	ug/m3	138.46	69	21	
127-18-4	Tetrachloroethene	ND	ug/m3	138.46	69	19	
109-99-9	Tetrahydrofuran	38	ug/m3	138.46	69	30	J
108-88-3	Toluene	ND	ug/m3	138.46	69	22	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	138.46	69	24	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	138.46	69	22	
79-01-6	Trichloroethene	1600	ug/m3	138.46	69	21	
75-01-4	Vinyl Chloride	ND	ug/m3	138.46	69	26	

Sample **1203221231** **Sample Type** **Soil Gas-D** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	145.38	73	23	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	145.38	73	23	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	145.38	73	23	
75-34-3	1,1-Dichloroethane	ND	ug/m3	145.38	73	25	
75-35-4	1,1-Dichloroethene	ND	ug/m3	145.38	73	25	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	145.38	73	35	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	145.38	73	23	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	145.38	73	22	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	145.38	73	25	
107-06-2	1,2-Dichloroethane	ND	ug/m3	145.38	73	28	
78-87-5	1,2-Dichloropropane	ND	ug/m3	145.38	73	25	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	145.38	73	25	
106-99-0	1,3-Butadiene	ND	ug/m3	145.38	73	31	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	145.38	73	25	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	145.38	73	23	
123-91-1	1,4-Dioxane	ND	ug/m3	145.38	73	25	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	145.38	73	25	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	145.38	730	33	
591-78-6	2-Hexanone	ND	ug/m3	145.38	73	26	
67-63-0	2-Propanol	ND	ug/m3	145.38	150	58	
107-05-1	3-Chloropropene	ND	ug/m3	145.38	73	23	
622-96-8	4-Ethyltoluene	ND	ug/m3	145.38	73	25	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	145.38	73	20	
67-64-1	Acetone	ND	ug/m3	145.38	730	130	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	145.38	73	22	
71-43-2	Benzene	ND	ug/m3	145.38	73	20	
75-27-4	Bromodichloromethane	ND	ug/m3	145.38	73	23	
75-25-2	Bromoform	ND	ug/m3	145.38	73	20	
74-83-9	Bromomethane	ND	ug/m3	145.38	73	28	
75-15-0	Carbon Disulfide	ND	ug/m3	145.38	730	22	
56-23-5	Carbon Tetrachloride	ND	ug/m3	145.38	73	23	
108-90-7	Chlorobenzene	ND	ug/m3	145.38	73	23	
75-00-3	Chloroethane	ND	ug/m3	145.38	73	28	
67-66-3	Chloroform	91	ug/m3	145.38	73	28	
74-87-3	Chloromethane	ND	ug/m3	145.38	73	28	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	145.38	73	26	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	145.38	73	20	
98-82-8	Cumene	ND	ug/m3	145.38	73	22	
110-82-7	Cyclohexane	ND	ug/m3	145.38	150	48	
124-48-1	Dibromochloromethane	ND	ug/m3	145.38	73	20	
64-17-5	Ethanol	ND	ug/m3	145.38	730	230	
100-41-4	Ethyl Benzene	ND	ug/m3	145.38	73	22	
75-69-4	Freon 11	ND	ug/m3	145.38	73	23	

76-13-1	Freon 113	11000	ug/m3	145.38	73	23	
76-14-2	Freon 114	ND	ug/m3	145.38	73	25	
75-71-8	Freon 12	ND	ug/m3	145.38	73	26	
306-83-2	Freon 123	ND	ug/m3	145.38	73	35	
354-23-4	Freon 123a	ND	ug/m3	145.38	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	145.38	73	33	
142-82-5	Heptane	ND	ug/m3	145.38	73	23	
87-68-3	Hexachlorobutadiene	ND	ug/m3	145.38	73	26	
110-54-3	Hexane	ND	ug/m3	145.38	73	25	
179601-23-	m,p-Xylene	ND	ug/m3	145.38	150	42	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	145.38	73	22	
75-09-2	Methylene Chloride	29	ug/m3	145.38	73	22	J
95-47-6	o-Xylene	ND	ug/m3	145.38	73	20	
103-65-1	Propylbenzene	ND	ug/m3	145.38	73	22	
100-42-5	Styrene	ND	ug/m3	145.38	73	22	
127-18-4	Tetrachloroethene	ND	ug/m3	145.38	73	20	
109-99-9	Tetrahydrofuran	39	ug/m3	145.38	73	32	J
108-88-3	Toluene	ND	ug/m3	145.38	73	23	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	145.38	73	25	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	145.38	73	23	
79-01-6	Trichloroethene	1600	ug/m3	145.38	73	22	
75-01-4	Vinyl Chloride	ND	ug/m3	145.38	73	28	

Sample 1203221245 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	130.77	65	21	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	130.77	65	21	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	130.77	65	21	
75-34-3	1,1-Dichloroethane	ND	ug/m3	130.77	65	22	
75-35-4	1,1-Dichloroethene	ND	ug/m3	130.77	65	22	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	130.77	65	31	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	130.77	65	21	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	130.77	65	20	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	130.77	65	22	
107-06-2	1,2-Dichloroethane	ND	ug/m3	130.77	65	25	
78-87-5	1,2-Dichloropropane	ND	ug/m3	130.77	65	22	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	130.77	65	22	
106-99-0	1,3-Butadiene	ND	ug/m3	130.77	65	27	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	130.77	65	22	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	130.77	65	21	
123-91-1	1,4-Dioxane	ND	ug/m3	130.77	65	22	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	130.77	65	22	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	130.77	650	30	
591-78-6	2-Hexanone	ND	ug/m3	130.77	65	24	
67-63-0	2-Propanol	ND	ug/m3	130.77	130	52	
107-05-1	3-Chloropropene	ND	ug/m3	130.77	65	21	

622-96-8	4-Ethyltoluene	ND	ug/m3	130.77	65	22	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	130.77	65	18	
67-64-1	Acetone	ND	ug/m3	130.77	650	120	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	130.77	65	20	
71-43-2	Benzene	ND	ug/m3	130.77	65	18	
75-27-4	Bromodichloromethane	ND	ug/m3	130.77	65	21	
75-25-2	Bromoform	ND	ug/m3	130.77	65	18	
74-83-9	Bromomethane	ND	ug/m3	130.77	65	25	
75-15-0	Carbon Disulfide	ND	ug/m3	130.77	650	20	
56-23-5	Carbon Tetrachloride	ND	ug/m3	130.77	65	21	
108-90-7	Chlorobenzene	ND	ug/m3	130.77	65	21	
75-00-3	Chloroethane	ND	ug/m3	130.77	65	25	
67-66-3	Chloroform	91	ug/m3	130.77	65	25	
74-87-3	Chloromethane	ND	ug/m3	130.77	65	25	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	130.77	65	24	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	130.77	65	18	
98-82-8	Cumene	ND	ug/m3	130.77	65	20	
110-82-7	Cyclohexane	ND	ug/m3	130.77	130	43	
124-48-1	Dibromochloromethane	ND	ug/m3	130.77	65	18	
64-17-5	Ethanol	ND	ug/m3	130.77	650	210	
100-41-4	Ethyl Benzene	ND	ug/m3	130.77	65	20	
75-69-4	Freon 11	ND	ug/m3	130.77	65	21	
76-13-1	Freon 113	11000	ug/m3	130.77	65	21	
76-14-2	Freon 114	ND	ug/m3	130.77	65	22	
75-71-8	Freon 12	ND	ug/m3	130.77	65	24	
306-83-2	Freon 123	ND	ug/m3	130.77	65	31	
354-23-4	Freon 123a	1300	ug/m3	130.77	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	130.77	65	30	
142-82-5	Heptane	ND	ug/m3	130.77	65	21	
87-68-3	Hexachlorobutadiene	ND	ug/m3	130.77	65	24	
110-54-3	Hexane	ND	ug/m3	130.77	65	22	
179601-23-	m,p-Xylene	ND	ug/m3	130.77	130	38	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	130.77	65	20	
75-09-2	Methylene Chloride	27	ug/m3	130.77	65	20	J
95-47-6	o-Xylene	ND	ug/m3	130.77	65	18	
103-65-1	Propylbenzene	ND	ug/m3	130.77	65	20	
100-42-5	Styrene	ND	ug/m3	130.77	65	20	
127-18-4	Tetrachloroethene	ND	ug/m3	130.77	65	18	
109-99-9	Tetrahydrofuran	ND	ug/m3	130.77	65	29	
108-88-3	Toluene	ND	ug/m3	130.77	65	21	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	130.77	65	22	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	130.77	65	21	
79-01-6	Trichloroethene	1600	ug/m3	130.77	65	20	
75-01-4	Vinyl Chloride	ND	ug/m3	130.77	65	25	

Sample **1203221515** **Sample Type** **Soil Gas** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	121.33	61	19	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	121.33	61	19	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	121.33	61	19	
75-34-3	1,1-Dichloroethane	ND	ug/m3	121.33	61	21	
75-35-4	1,1-Dichloroethene	ND	ug/m3	121.33	61	21	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	121.33	61	29	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	121.33	61	19	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	121.33	61	18	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	121.33	61	21	
107-06-2	1,2-Dichloroethane	ND	ug/m3	121.33	61	23	
78-87-5	1,2-Dichloropropane	ND	ug/m3	121.33	61	21	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	121.33	61	21	
106-99-0	1,3-Butadiene	ND	ug/m3	121.33	61	25	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	121.33	61	21	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	121.33	61	19	
123-91-1	1,4-Dioxane	ND	ug/m3	121.33	61	21	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	121.33	61	21	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	121.33	610	28	
591-78-6	2-Hexanone	ND	ug/m3	121.33	61	22	
67-63-0	2-Propanol	ND	ug/m3	121.33	120	49	
107-05-1	3-Chloropropene	ND	ug/m3	121.33	61	19	
622-96-8	4-Ethyltoluene	ND	ug/m3	121.33	61	21	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	121.33	61	17	
67-64-1	Acetone	ND	ug/m3	121.33	610	110	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	121.33	61	18	
71-43-2	Benzene	ND	ug/m3	121.33	61	17	
75-27-4	Bromodichloromethane	ND	ug/m3	121.33	61	19	
75-25-2	Bromoform	ND	ug/m3	121.33	61	17	
74-83-9	Bromomethane	ND	ug/m3	121.33	61	23	
75-15-0	Carbon Disulfide	ND	ug/m3	121.33	610	18	
56-23-5	Carbon Tetrachloride	ND	ug/m3	121.33	61	19	
108-90-7	Chlorobenzene	ND	ug/m3	121.33	61	19	
75-00-3	Chloroethane	ND	ug/m3	121.33	61	23	
67-66-3	Chloroform	110	ug/m3	121.33	61	23	
74-87-3	Chloromethane	ND	ug/m3	121.33	61	23	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	121.33	61	22	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	121.33	61	17	
98-82-8	Cumene	ND	ug/m3	121.33	61	18	
110-82-7	Cyclohexane	ND	ug/m3	121.33	120	40	
124-48-1	Dibromochloromethane	ND	ug/m3	121.33	61	17	
64-17-5	Ethanol	ND	ug/m3	121.33	610	190	
100-41-4	Ethyl Benzene	ND	ug/m3	121.33	61	18	
75-69-4	Freon 11	ND	ug/m3	121.33	61	19	

76-13-1	Freon 113	13000	ug/m3	364	180	58	D
76-14-2	Freon 114	ND	ug/m3	121.33	61	21	
75-71-8	Freon 12	ND	ug/m3	121.33	61	22	
306-83-2	Freon 123	ND	ug/m3	121.33	61	29	
354-23-4	Freon 123a	1500	ug/m3	121.33	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	121.33	61	28	
142-82-5	Heptane	ND	ug/m3	121.33	61	19	
87-68-3	Hexachlorobutadiene	ND	ug/m3	121.33	61	22	
110-54-3	Hexane	ND	ug/m3	121.33	61	21	
179601-23-	m,p-Xylene	ND	ug/m3	121.33	120	35	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	121.33	61	18	
75-09-2	Methylene Chloride	28	ug/m3	121.33	61	18	J
95-47-6	o-Xylene	ND	ug/m3	121.33	61	17	
103-65-1	Propylbenzene	ND	ug/m3	121.33	61	18	
100-42-5	Styrene	ND	ug/m3	121.33	61	18	
127-18-4	Tetrachloroethene	ND	ug/m3	121.33	61	17	
109-99-9	Tetrahydrofuran	ND	ug/m3	121.33	61	27	
108-88-3	Toluene	ND	ug/m3	121.33	61	19	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	121.33	61	21	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	121.33	61	19	
79-01-6	Trichloroethene	2000	ug/m3	121.33	61	18	
75-01-4	Vinyl Chloride	ND	ug/m3	121.33	61	23	

Sample 1203221650 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	98	49	16	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	98	49	16	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	98	49	16	
75-34-3	1,1-Dichloroethane	ND	ug/m3	98	49	17	
75-35-4	1,1-Dichloroethene	ND	ug/m3	98	49	17	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	98	49	24	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	98	49	16	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	98	49	15	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	98	49	17	
107-06-2	1,2-Dichloroethane	ND	ug/m3	98	49	19	
78-87-5	1,2-Dichloropropane	ND	ug/m3	98	49	17	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	98	49	17	
106-99-0	1,3-Butadiene	ND	ug/m3	98	49	21	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	98	49	17	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	98	49	16	
123-91-1	1,4-Dioxane	ND	ug/m3	98	49	17	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	98	49	17	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	98	490	23	
591-78-6	2-Hexanone	ND	ug/m3	98	49	18	
67-63-0	2-Propanol	ND	ug/m3	98	98	39	
107-05-1	3-Chloropropene	ND	ug/m3	98	49	16	

622-96-8	4-Ethyltoluene	ND	ug/m3	98	49	17	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	98	49	14	
67-64-1	Acetone	ND	ug/m3	98	490	86	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	98	49	15	
71-43-2	Benzene	ND	ug/m3	98	49	14	
75-27-4	Bromodichloromethane	ND	ug/m3	98	49	16	
75-25-2	Bromoform	ND	ug/m3	98	49	14	
74-83-9	Bromomethane	ND	ug/m3	98	49	19	
75-15-0	Carbon Disulfide	ND	ug/m3	98	490	15	
56-23-5	Carbon Tetrachloride	ND	ug/m3	98	49	16	
108-90-7	Chlorobenzene	ND	ug/m3	98	49	16	
75-00-3	Chloroethane	ND	ug/m3	98	49	19	
67-66-3	Chloroform	72	ug/m3	98	49	19	
74-87-3	Chloromethane	ND	ug/m3	98	49	19	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	98	49	18	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	98	49	14	
98-82-8	Cumene	ND	ug/m3	98	49	15	
110-82-7	Cyclohexane	ND	ug/m3	98	98	32	
124-48-1	Dibromochloromethane	ND	ug/m3	98	49	14	
64-17-5	Ethanol	ND	ug/m3	98	490	160	
100-41-4	Ethyl Benzene	ND	ug/m3	98	49	15	
75-69-4	Freon 11	ND	ug/m3	98	49	16	
76-13-1	Freon 113	9900	ug/m3	294	150	47	D
76-14-2	Freon 114	ND	ug/m3	98	49	17	
75-71-8	Freon 12	ND	ug/m3	98	49	18	
306-83-2	Freon 123	ND	ug/m3	98	49	24	
354-23-4	Freon 123a	850	ug/m3	98	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	98	49	23	
142-82-5	Heptane	ND	ug/m3	98	49	16	
87-68-3	Hexachlorobutadiene	ND	ug/m3	98	49	18	
110-54-3	Hexane	ND	ug/m3	98	49	17	
179601-23-	m,p-Xylene	ND	ug/m3	98	98	28	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	98	49	15	
75-09-2	Methylene Chloride	18	ug/m3	98	49	15	J
95-47-6	o-Xylene	ND	ug/m3	98	49	14	
103-65-1	Propylbenzene	ND	ug/m3	98	49	15	
100-42-5	Styrene	ND	ug/m3	98	49	15	
127-18-4	Tetrachloroethene	ND	ug/m3	98	49	14	
109-99-9	Tetrahydrofuran	ND	ug/m3	98	49	22	
108-88-3	Toluene	ND	ug/m3	98	49	16	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	98	49	17	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	98	49	16	
79-01-6	Trichloroethene	1300	ug/m3	98	49	15	
75-01-4	Vinyl Chloride	ND	ug/m3	98	49	19	

Sample **1203230925** **Sample Type** **Soil Gas** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	165.83	83	27	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	165.83	83	27	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	165.83	83	27	
75-34-3	1,1-Dichloroethane	ND	ug/m3	165.83	83	28	
75-35-4	1,1-Dichloroethene	ND	ug/m3	165.83	83	28	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	165.83	83	40	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	165.83	83	27	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	165.83	83	25	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	165.83	83	28	
107-06-2	1,2-Dichloroethane	ND	ug/m3	165.83	83	32	
78-87-5	1,2-Dichloropropane	ND	ug/m3	165.83	83	28	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	165.83	83	28	
106-99-0	1,3-Butadiene	ND	ug/m3	165.83	83	35	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	165.83	83	28	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	165.83	83	27	
123-91-1	1,4-Dioxane	ND	ug/m3	165.83	83	28	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	165.83	83	28	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	165.83	830	38	
591-78-6	2-Hexanone	ND	ug/m3	165.83	83	30	
67-63-0	2-Propanol	ND	ug/m3	165.83	170	66	
107-05-1	3-Chloropropene	ND	ug/m3	165.83	83	27	
622-96-8	4-Ethyltoluene	ND	ug/m3	165.83	83	28	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	165.83	83	23	
67-64-1	Acetone	ND	ug/m3	165.83	830	150	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	165.83	83	25	
71-43-2	Benzene	ND	ug/m3	165.83	83	23	
75-27-4	Bromodichloromethane	ND	ug/m3	165.83	83	27	
75-25-2	Bromoform	ND	ug/m3	165.83	83	23	
74-83-9	Bromomethane	ND	ug/m3	165.83	83	32	
75-15-0	Carbon Disulfide	ND	ug/m3	165.83	830	25	
56-23-5	Carbon Tetrachloride	ND	ug/m3	165.83	83	27	
108-90-7	Chlorobenzene	ND	ug/m3	165.83	83	27	
75-00-3	Chloroethane	ND	ug/m3	165.83	83	32	
67-66-3	Chloroform	91	ug/m3	165.83	83	32	
74-87-3	Chloromethane	ND	ug/m3	165.83	83	32	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	165.83	83	30	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	165.83	83	23	
98-82-8	Cumene	ND	ug/m3	165.83	83	25	
110-82-7	Cyclohexane	ND	ug/m3	165.83	170	55	
124-48-1	Dibromochloromethane	ND	ug/m3	165.83	83	23	
64-17-5	Ethanol	ND	ug/m3	165.83	830	270	
100-41-4	Ethyl Benzene	ND	ug/m3	165.83	83	25	
75-69-4	Freon 11	ND	ug/m3	165.83	83	27	

76-13-1	Freon 113	13000	ug/m3	165.83	83	27	
76-14-2	Freon 114	ND	ug/m3	165.83	83	28	
75-71-8	Freon 12	ND	ug/m3	165.83	83	30	
306-83-2	Freon 123	ND	ug/m3	165.83	83	40	
354-23-4	Freon 123a	1200	ug/m3	165.83	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	165.83	83	38	
142-82-5	Heptane	ND	ug/m3	165.83	83	27	
87-68-3	Hexachlorobutadiene	ND	ug/m3	165.83	83	30	
110-54-3	Hexane	ND	ug/m3	165.83	83	28	
179601-23-	m,p-Xylene	ND	ug/m3	165.83	170	48	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	165.83	83	25	
75-09-2	Methylene Chloride	33	ug/m3	165.83	83	25	J
95-47-6	o-Xylene	ND	ug/m3	165.83	83	23	
103-65-1	Propylbenzene	ND	ug/m3	165.83	83	25	
100-42-5	Styrene	ND	ug/m3	165.83	83	25	
127-18-4	Tetrachloroethene	ND	ug/m3	165.83	83	23	
109-99-9	Tetrahydrofuran	ND	ug/m3	165.83	83	36	
108-88-3	Toluene	ND	ug/m3	165.83	83	27	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	165.83	83	28	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	165.83	83	27	
79-01-6	Trichloroethene	1800	ug/m3	165.83	83	25	
75-01-4	Vinyl Chloride	ND	ug/m3	165.83	83	32	

Borehole	600-SVE-1	Depth (ft)	90	Depth (m)	27.43	Event Date	3/23/2012

Sample	1203231040	Sample Type	Soil Gas	Analysis Method	TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	163	82	26	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	163	82	26	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	163	82	26	
75-34-3	1,1-Dichloroethane	ND	ug/m3	163	82	28	
75-35-4	1,1-Dichloroethene	ND	ug/m3	163	82	28	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	163	82	39	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	163	82	26	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	163	82	24	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	163	82	28	
107-06-2	1,2-Dichloroethane	ND	ug/m3	163	82	31	
78-87-5	1,2-Dichloropropane	ND	ug/m3	163	82	28	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	163	82	28	
106-99-0	1,3-Butadiene	ND	ug/m3	163	82	34	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	163	82	28	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	163	82	26	
123-91-1	1,4-Dioxane	ND	ug/m3	163	82	28	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	163	82	28	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	510	ug/m3	163	820	37	J
591-78-6	2-Hexanone	ND	ug/m3	163	82	29	
67-63-0	2-Propanol	ND	ug/m3	163	160	65	
107-05-1	3-Chloropropene	ND	ug/m3	163	82	26	
622-96-8	4-Ethyltoluene	ND	ug/m3	163	82	28	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	163	82	23	
67-64-1	Acetone	280	ug/m3	163	820	140	J
100-44-7	alpha-Chlorotoluene	ND	ug/m3	163	82	24	
71-43-2	Benzene	ND	ug/m3	163	82	23	
75-27-4	Bromodichloromethane	ND	ug/m3	163	82	26	
75-25-2	Bromoform	ND	ug/m3	163	82	23	
74-83-9	Bromomethane	ND	ug/m3	163	82	31	
75-15-0	Carbon Disulfide	ND	ug/m3	163	820	24	
56-23-5	Carbon Tetrachloride	ND	ug/m3	163	82	26	
108-90-7	Chlorobenzene	ND	ug/m3	163	82	26	
75-00-3	Chloroethane	ND	ug/m3	163	82	31	
67-66-3	Chloroform	87	ug/m3	163	82	31	
74-87-3	Chloromethane	ND	ug/m3	163	82	31	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	163	82	29	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	163	82	23	
98-82-8	Cumene	ND	ug/m3	163	82	24	
110-82-7	Cyclohexane	ND	ug/m3	163	160	54	
124-48-1	Dibromochloromethane	ND	ug/m3	163	82	23	
64-17-5	Ethanol	ND	ug/m3	163	820	260	

100-41-4	Ethyl Benzene	ND	ug/m3	163	82	24	
75-69-4	Freon 11	ND	ug/m3	163	82	26	
76-13-1	Freon 113	14000	ug/m3	163	82	26	
76-14-2	Freon 114	ND	ug/m3	163	82	28	
75-71-8	Freon 12	ND	ug/m3	163	82	29	
306-83-2	Freon 123	ND	ug/m3	163	82	39	
354-23-4	Freon 123a	ND	ug/m3	163	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	163	82	37	
142-82-5	Heptane	ND	ug/m3	163	82	26	
87-68-3	Hexachlorobutadiene	ND	ug/m3	163	82	29	
110-54-3	Hexane	ND	ug/m3	163	82	28	
179601-23-	m,p-Xylene	ND	ug/m3	163	160	47	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	163	82	24	
75-09-2	Methylene Chloride	32	ug/m3	163	82	24	J
95-47-6	o-Xylene	ND	ug/m3	163	82	23	
103-65-1	Propylbenzene	ND	ug/m3	163	82	24	
100-42-5	Styrene	ND	ug/m3	163	82	24	
127-18-4	Tetrachloroethene	320	ug/m3	163	82	23	
109-99-9	Tetrahydrofuran	590	ug/m3	163	82	36	
108-88-3	Toluene	ND	ug/m3	163	82	26	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	163	82	28	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	163	82	26	
79-01-6	Trichloroethene	1700	ug/m3	163	82	24	
75-01-4	Vinyl Chloride	ND	ug/m3	163	82	31	

Sample 1203231045 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	197.5	99	32	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	197.5	99	32	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	197.5	99	32	
75-34-3	1,1-Dichloroethane	ND	ug/m3	197.5	99	34	
75-35-4	1,1-Dichloroethene	ND	ug/m3	197.5	99	34	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	197.5	99	47	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	197.5	99	32	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	197.5	99	30	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	197.5	99	34	
107-06-2	1,2-Dichloroethane	ND	ug/m3	197.5	99	38	
78-87-5	1,2-Dichloropropane	ND	ug/m3	197.5	99	34	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	197.5	99	34	
106-99-0	1,3-Butadiene	ND	ug/m3	197.5	99	41	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	197.5	99	34	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	197.5	99	32	
123-91-1	1,4-Dioxane	ND	ug/m3	197.5	99	34	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	197.5	99	34	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	197.5	990	45	
591-78-6	2-Hexanone	ND	ug/m3	197.5	99	36	

67-63-0	2-Propanol	ND	ug/m3	197.5	200	79	
107-05-1	3-Chloropropene	ND	ug/m3	197.5	99	32	
622-96-8	4-Ethyltoluene	ND	ug/m3	197.5	99	34	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	197.5	99	28	
67-64-1	Acetone	ND	ug/m3	197.5	990	170	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	197.5	99	30	
71-43-2	Benzene	ND	ug/m3	197.5	99	28	
75-27-4	Bromodichloromethane	ND	ug/m3	197.5	99	32	
75-25-2	Bromoform	ND	ug/m3	197.5	99	28	
74-83-9	Bromomethane	ND	ug/m3	197.5	99	38	
75-15-0	Carbon Disulfide	ND	ug/m3	197.5	990	30	
56-23-5	Carbon Tetrachloride	ND	ug/m3	197.5	99	32	
108-90-7	Chlorobenzene	ND	ug/m3	197.5	99	32	
75-00-3	Chloroethane	ND	ug/m3	197.5	99	38	
67-66-3	Chloroform	64	ug/m3	197.5	99	38	J
74-87-3	Chloromethane	ND	ug/m3	197.5	99	38	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	197.5	99	36	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	197.5	99	28	
98-82-8	Cumene	ND	ug/m3	197.5	99	30	
110-82-7	Cyclohexane	ND	ug/m3	197.5	200	65	
124-48-1	Dibromochloromethane	ND	ug/m3	197.5	99	28	
64-17-5	Ethanol	ND	ug/m3	197.5	990	320	
100-41-4	Ethyl Benzene	ND	ug/m3	197.5	99	30	
75-69-4	Freon 11	ND	ug/m3	197.5	99	32	
76-13-1	Freon 113	15000	ug/m3	197.5	99	32	
76-14-2	Freon 114	ND	ug/m3	197.5	99	34	
75-71-8	Freon 12	ND	ug/m3	197.5	99	36	
306-83-2	Freon 123	ND	ug/m3	197.5	99	47	
354-23-4	Freon 123a	640	ug/m3	197.5	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	197.5	99	45	
142-82-5	Heptane	ND	ug/m3	197.5	99	32	
87-68-3	Hexachlorobutadiene	ND	ug/m3	197.5	99	36	
110-54-3	Hexane	ND	ug/m3	197.5	99	34	
179601-23-	m,p-Xylene	ND	ug/m3	197.5	200	57	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	197.5	99	30	
75-09-2	Methylene Chloride	39	ug/m3	197.5	99	30	J
95-47-6	o-Xylene	ND	ug/m3	197.5	99	28	
103-65-1	Propylbenzene	ND	ug/m3	197.5	99	30	
100-42-5	Styrene	ND	ug/m3	197.5	99	30	
127-18-4	Tetrachloroethene	ND	ug/m3	197.5	99	28	
109-99-9	Tetrahydrofuran	84	ug/m3	197.5	99	43	J
108-88-3	Toluene	ND	ug/m3	197.5	99	32	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	197.5	99	34	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	197.5	99	32	
79-01-6	Trichloroethene	1700	ug/m3	197.5	99	30	
75-01-4	Vinyl Chloride	ND	ug/m3	197.5	99	38	

Sample **1203231050** **Sample Type** **Soil Gas** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	166	83	27	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	166	83	27	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	166	83	27	
75-34-3	1,1-Dichloroethane	ND	ug/m3	166	83	28	
75-35-4	1,1-Dichloroethene	28	ug/m3	166	83	28	J
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	166	83	40	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	166	83	27	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	166	83	25	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	166	83	28	
107-06-2	1,2-Dichloroethane	ND	ug/m3	166	83	32	
78-87-5	1,2-Dichloropropane	ND	ug/m3	166	83	28	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	166	83	28	
106-99-0	1,3-Butadiene	ND	ug/m3	166	83	35	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	166	83	28	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	166	83	27	
123-91-1	1,4-Dioxane	ND	ug/m3	166	83	28	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	166	83	28	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	166	830	38	
591-78-6	2-Hexanone	ND	ug/m3	166	83	30	
67-63-0	2-Propanol	ND	ug/m3	166	170	66	
107-05-1	3-Chloropropene	ND	ug/m3	166	83	27	
622-96-8	4-Ethyltoluene	ND	ug/m3	166	83	28	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	166	83	23	
67-64-1	Acetone	ND	ug/m3	166	830	150	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	166	83	25	
71-43-2	Benzene	ND	ug/m3	166	83	23	
75-27-4	Bromodichloromethane	ND	ug/m3	166	83	27	
75-25-2	Bromoform	ND	ug/m3	166	83	23	
74-83-9	Bromomethane	ND	ug/m3	166	83	32	
75-15-0	Carbon Disulfide	ND	ug/m3	166	830	25	
56-23-5	Carbon Tetrachloride	ND	ug/m3	166	83	27	
108-90-7	Chlorobenzene	ND	ug/m3	166	83	27	
75-00-3	Chloroethane	ND	ug/m3	166	83	32	
67-66-3	Chloroform	77	ug/m3	166	83	32	J
74-87-3	Chloromethane	ND	ug/m3	166	83	32	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	166	83	30	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	166	83	23	
98-82-8	Cumene	ND	ug/m3	166	83	25	
110-82-7	Cyclohexane	ND	ug/m3	166	170	55	
124-48-1	Dibromochloromethane	ND	ug/m3	166	83	23	
64-17-5	Ethanol	ND	ug/m3	166	830	270	
100-41-4	Ethyl Benzene	ND	ug/m3	166	83	25	
75-69-4	Freon 11	ND	ug/m3	166	83	27	

76-13-1	Freon 113	17000	ug/m3	166	83	27	
76-14-2	Freon 114	ND	ug/m3	166	83	28	
75-71-8	Freon 12	ND	ug/m3	166	83	30	
306-83-2	Freon 123	ND	ug/m3	166	83	40	
354-23-4	Freon 123a	740	ug/m3	166	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	166	83	38	
142-82-5	Heptane	ND	ug/m3	166	83	27	
87-68-3	Hexachlorobutadiene	ND	ug/m3	166	83	30	
110-54-3	Hexane	ND	ug/m3	166	83	28	
179601-23-	m,p-Xylene	ND	ug/m3	166	170	48	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	166	83	25	
75-09-2	Methylene Chloride	35	ug/m3	166	83	25	J
95-47-6	o-Xylene	ND	ug/m3	166	83	23	
103-65-1	Propylbenzene	ND	ug/m3	166	83	25	
100-42-5	Styrene	ND	ug/m3	166	83	25	
127-18-4	Tetrachloroethene	ND	ug/m3	166	83	23	
109-99-9	Tetrahydrofuran	62	ug/m3	166	83	37	J
108-88-3	Toluene	ND	ug/m3	166	83	27	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	166	83	28	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	166	83	27	
79-01-6	Trichloroethene	2000	ug/m3	166	83	25	
75-01-4	Vinyl Chloride	ND	ug/m3	166	83	32	

Sample 1203231055 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	210	110	34	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	210	110	34	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	210	110	34	
75-34-3	1,1-Dichloroethane	ND	ug/m3	210	110	36	
75-35-4	1,1-Dichloroethene	ND	ug/m3	210	110	36	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	210	110	50	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	210	110	34	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	210	110	32	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	210	110	36	
107-06-2	1,2-Dichloroethane	ND	ug/m3	210	110	40	
78-87-5	1,2-Dichloropropane	ND	ug/m3	210	110	36	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	210	110	36	
106-99-0	1,3-Butadiene	ND	ug/m3	210	110	44	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	210	110	36	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	210	110	34	
123-91-1	1,4-Dioxane	ND	ug/m3	210	110	36	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	210	110	36	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	210	1100	48	
591-78-6	2-Hexanone	ND	ug/m3	210	110	38	
67-63-0	2-Propanol	ND	ug/m3	210	210	84	
107-05-1	3-Chloropropene	ND	ug/m3	210	110	34	

622-96-8	4-Ethyltoluene	ND	ug/m3	210	110	36	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	210	110	29	
67-64-1	Acetone	ND	ug/m3	210	1100	180	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	210	110	32	
71-43-2	Benzene	ND	ug/m3	210	110	29	
75-27-4	Bromodichloromethane	ND	ug/m3	210	110	34	
75-25-2	Bromoform	ND	ug/m3	210	110	29	
74-83-9	Bromomethane	ND	ug/m3	210	110	40	
75-15-0	Carbon Disulfide	ND	ug/m3	210	1100	32	
56-23-5	Carbon Tetrachloride	ND	ug/m3	210	110	34	
108-90-7	Chlorobenzene	ND	ug/m3	210	110	34	
75-00-3	Chloroethane	ND	ug/m3	210	110	40	
67-66-3	Chloroform	69	ug/m3	210	110	40	J
74-87-3	Chloromethane	ND	ug/m3	210	110	40	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	210	110	38	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	210	110	29	
98-82-8	Cumene	ND	ug/m3	210	110	32	
110-82-7	Cyclohexane	ND	ug/m3	210	210	69	
124-48-1	Dibromochloromethane	ND	ug/m3	210	110	29	
64-17-5	Ethanol	ND	ug/m3	210	1100	340	
100-41-4	Ethyl Benzene	ND	ug/m3	210	110	32	
75-69-4	Freon 11	ND	ug/m3	210	110	34	
76-13-1	Freon 113	15000	ug/m3	210	110	34	
76-14-2	Freon 114	ND	ug/m3	210	110	36	
75-71-8	Freon 12	ND	ug/m3	210	110	38	
306-83-2	Freon 123	ND	ug/m3	210	110	50	
354-23-4	Freon 123a	660	ug/m3	210	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	210	110	48	
142-82-5	Heptane	ND	ug/m3	210	110	34	
87-68-3	Hexachlorobutadiene	ND	ug/m3	210	110	38	
110-54-3	Hexane	ND	ug/m3	210	110	36	
179601-23-	m,p-Xylene	ND	ug/m3	210	210	61	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	210	110	32	
75-09-2	Methylene Chloride	43	ug/m3	210	110	32	J
95-47-6	o-Xylene	ND	ug/m3	210	110	29	
103-65-1	Propylbenzene	ND	ug/m3	210	110	32	
100-42-5	Styrene	ND	ug/m3	210	110	32	
127-18-4	Tetrachloroethene	ND	ug/m3	210	110	29	
109-99-9	Tetrahydrofuran	53	ug/m3	210	110	46	J
108-88-3	Toluene	ND	ug/m3	210	110	34	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	210	110	36	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	210	110	34	
79-01-6	Trichloroethene	1700	ug/m3	210	110	32	
75-01-4	Vinyl Chloride	ND	ug/m3	210	110	40	

Sample **1203231110** **Sample Type** **Soil Gas** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	237.14	120	38	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	237.14	120	38	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	237.14	120	38	
75-34-3	1,1-Dichloroethane	ND	ug/m3	237.14	120	40	
75-35-4	1,1-Dichloroethene	ND	ug/m3	237.14	120	40	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	237.14	120	57	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	237.14	120	38	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	237.14	120	36	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	237.14	120	40	
107-06-2	1,2-Dichloroethane	ND	ug/m3	237.14	120	45	
78-87-5	1,2-Dichloropropane	ND	ug/m3	237.14	120	40	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	237.14	120	40	
106-99-0	1,3-Butadiene	ND	ug/m3	237.14	120	50	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	237.14	120	40	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	237.14	120	38	
123-91-1	1,4-Dioxane	ND	ug/m3	237.14	120	40	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	237.14	120	40	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	237.14	1200	55	
591-78-6	2-Hexanone	ND	ug/m3	237.14	120	43	
67-63-0	2-Propanol	ND	ug/m3	237.14	240	95	
107-05-1	3-Chloropropene	ND	ug/m3	237.14	120	38	
622-96-8	4-Ethyltoluene	ND	ug/m3	237.14	120	40	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	237.14	120	33	
67-64-1	Acetone	ND	ug/m3	237.14	1200	210	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	237.14	120	36	
71-43-2	Benzene	ND	ug/m3	237.14	120	33	
75-27-4	Bromodichloromethane	ND	ug/m3	237.14	120	38	
75-25-2	Bromoform	ND	ug/m3	237.14	120	33	
74-83-9	Bromomethane	ND	ug/m3	237.14	120	45	
75-15-0	Carbon Disulfide	ND	ug/m3	237.14	1200	36	
56-23-5	Carbon Tetrachloride	ND	ug/m3	237.14	120	38	
108-90-7	Chlorobenzene	ND	ug/m3	237.14	120	38	
75-00-3	Chloroethane	ND	ug/m3	237.14	120	45	
67-66-3	Chloroform	81	ug/m3	237.14	120	45	J
74-87-3	Chloromethane	ND	ug/m3	237.14	120	45	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	237.14	120	43	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	237.14	120	33	
98-82-8	Cumene	ND	ug/m3	237.14	120	36	
110-82-7	Cyclohexane	ND	ug/m3	237.14	240	78	
124-48-1	Dibromochloromethane	ND	ug/m3	237.14	120	33	
64-17-5	Ethanol	ND	ug/m3	237.14	1200	380	
100-41-4	Ethyl Benzene	ND	ug/m3	237.14	120	36	
75-69-4	Freon 11	ND	ug/m3	237.14	120	38	

76-13-1	Freon 113	18000	ug/m3	237.14	120	38	
76-14-2	Freon 114	ND	ug/m3	237.14	120	40	
75-71-8	Freon 12	ND	ug/m3	237.14	120	43	
306-83-2	Freon 123	ND	ug/m3	237.14	120	57	
354-23-4	Freon 123a	820	ug/m3	237.14	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	237.14	120	55	
142-82-5	Heptane	ND	ug/m3	237.14	120	38	
87-68-3	Hexachlorobutadiene	ND	ug/m3	237.14	120	43	
110-54-3	Hexane	ND	ug/m3	237.14	120	40	
179601-23-	m,p-Xylene	ND	ug/m3	237.14	240	69	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	237.14	120	36	
75-09-2	Methylene Chloride	49	ug/m3	237.14	120	36	J
95-47-6	o-Xylene	ND	ug/m3	237.14	120	33	
103-65-1	Propylbenzene	ND	ug/m3	237.14	120	36	
100-42-5	Styrene	ND	ug/m3	237.14	120	36	
127-18-4	Tetrachloroethene	ND	ug/m3	237.14	120	33	
109-99-9	Tetrahydrofuran	ND	ug/m3	237.14	120	52	
108-88-3	Toluene	ND	ug/m3	237.14	120	38	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	237.14	120	40	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	237.14	120	38	
79-01-6	Trichloroethene	2100	ug/m3	237.14	120	36	
75-01-4	Vinyl Chloride	ND	ug/m3	237.14	120	45	

Sample 1203231125 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	275	140	44	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	275	140	44	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	275	140	44	
75-34-3	1,1-Dichloroethane	ND	ug/m3	275	140	47	
75-35-4	1,1-Dichloroethene	ND	ug/m3	275	140	47	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	275	140	66	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	275	140	44	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	275	140	41	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	275	140	47	
107-06-2	1,2-Dichloroethane	ND	ug/m3	275	140	52	
78-87-5	1,2-Dichloropropane	ND	ug/m3	275	140	47	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	275	140	47	
106-99-0	1,3-Butadiene	ND	ug/m3	275	140	58	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	275	140	47	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	275	140	44	
123-91-1	1,4-Dioxane	ND	ug/m3	275	140	47	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	275	140	47	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	275	1400	63	
591-78-6	2-Hexanone	ND	ug/m3	275	140	50	
67-63-0	2-Propanol	ND	ug/m3	275	280	110	
107-05-1	3-Chloropropene	ND	ug/m3	275	140	44	

622-96-8	4-Ethyltoluene	ND	ug/m3	275	140	47	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	275	140	39	
67-64-1	Acetone	ND	ug/m3	275	1400	240	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	275	140	41	
71-43-2	Benzene	ND	ug/m3	275	140	39	
75-27-4	Bromodichloromethane	ND	ug/m3	275	140	44	
75-25-2	Bromoform	ND	ug/m3	275	140	39	
74-83-9	Bromomethane	ND	ug/m3	275	140	52	
75-15-0	Carbon Disulfide	ND	ug/m3	275	1400	41	
56-23-5	Carbon Tetrachloride	ND	ug/m3	275	140	44	
108-90-7	Chlorobenzene	ND	ug/m3	275	140	44	
75-00-3	Chloroethane	ND	ug/m3	275	140	52	
67-66-3	Chloroform	79	ug/m3	275	140	52	J
74-87-3	Chloromethane	ND	ug/m3	275	140	52	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	275	140	50	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	275	140	39	
98-82-8	Cumene	ND	ug/m3	275	140	41	
110-82-7	Cyclohexane	ND	ug/m3	275	280	91	
124-48-1	Dibromochloromethane	ND	ug/m3	275	140	39	
64-17-5	Ethanol	ND	ug/m3	275	1400	440	
100-41-4	Ethyl Benzene	ND	ug/m3	275	140	41	
75-69-4	Freon 11	ND	ug/m3	275	140	44	
76-13-1	Freon 113	18000	ug/m3	275	140	44	
76-14-2	Freon 114	ND	ug/m3	275	140	47	
75-71-8	Freon 12	ND	ug/m3	275	140	50	
306-83-2	Freon 123	ND	ug/m3	275	140	66	
354-23-4	Freon 123a	ND	ug/m3	275	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	275	140	63	
142-82-5	Heptane	ND	ug/m3	275	140	44	
87-68-3	Hexachlorobutadiene	ND	ug/m3	275	140	50	
110-54-3	Hexane	ND	ug/m3	275	140	47	
179601-23-	m,p-Xylene	ND	ug/m3	275	280	80	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	275	140	41	
75-09-2	Methylene Chloride	57	ug/m3	275	140	41	J
95-47-6	o-Xylene	ND	ug/m3	275	140	39	
103-65-1	Propylbenzene	ND	ug/m3	275	140	41	
100-42-5	Styrene	ND	ug/m3	275	140	41	
127-18-4	Tetrachloroethene	ND	ug/m3	275	140	39	
109-99-9	Tetrahydrofuran	ND	ug/m3	275	140	61	
108-88-3	Toluene	ND	ug/m3	275	140	44	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	275	140	47	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	275	140	44	
79-01-6	Trichloroethene	2000	ug/m3	275	140	41	
75-01-4	Vinyl Chloride	ND	ug/m3	275	140	52	

Sample **1203231140** **Sample Type** **Soil Gas** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	283.33	140	45	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	283.33	140	45	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	283.33	140	45	
75-34-3	1,1-Dichloroethane	ND	ug/m3	283.33	140	48	
75-35-4	1,1-Dichloroethene	ND	ug/m3	283.33	140	48	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	283.33	140	68	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	283.33	140	45	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	283.33	140	43	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	283.33	140	48	
107-06-2	1,2-Dichloroethane	ND	ug/m3	283.33	140	54	
78-87-5	1,2-Dichloropropane	ND	ug/m3	283.33	140	48	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	283.33	140	48	
106-99-0	1,3-Butadiene	ND	ug/m3	283.33	140	60	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	283.33	140	48	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	283.33	140	45	
123-91-1	1,4-Dioxane	ND	ug/m3	283.33	140	48	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	283.33	140	48	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	283.33	1400	65	
591-78-6	2-Hexanone	ND	ug/m3	283.33	140	51	
67-63-0	2-Propanol	ND	ug/m3	283.33	280	110	
107-05-1	3-Chloropropene	ND	ug/m3	283.33	140	45	
622-96-8	4-Ethyltoluene	ND	ug/m3	283.33	140	48	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	283.33	140	40	
67-64-1	Acetone	ND	ug/m3	283.33	1400	250	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	283.33	140	43	
71-43-2	Benzene	ND	ug/m3	283.33	140	40	
75-27-4	Bromodichloromethane	ND	ug/m3	283.33	140	45	
75-25-2	Bromoform	ND	ug/m3	283.33	140	40	
74-83-9	Bromomethane	ND	ug/m3	283.33	140	54	
75-15-0	Carbon Disulfide	ND	ug/m3	283.33	1400	43	
56-23-5	Carbon Tetrachloride	ND	ug/m3	283.33	140	45	
108-90-7	Chlorobenzene	ND	ug/m3	283.33	140	45	
75-00-3	Chloroethane	ND	ug/m3	283.33	140	54	
67-66-3	Chloroform	87	ug/m3	283.33	140	54	J
74-87-3	Chloromethane	ND	ug/m3	283.33	140	54	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	283.33	140	51	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	283.33	140	40	
98-82-8	Cumene	ND	ug/m3	283.33	140	43	
110-82-7	Cyclohexane	ND	ug/m3	283.33	280	94	
124-48-1	Dibromochloromethane	ND	ug/m3	283.33	140	40	
64-17-5	Ethanol	ND	ug/m3	283.33	1400	450	
100-41-4	Ethyl Benzene	ND	ug/m3	283.33	140	43	
75-69-4	Freon 11	ND	ug/m3	283.33	140	45	

76-13-1	Freon 113	21000	ug/m3	283.33	140	45	
76-14-2	Freon 114	ND	ug/m3	283.33	140	48	
75-71-8	Freon 12	ND	ug/m3	283.33	140	51	
306-83-2	Freon 123	ND	ug/m3	283.33	140	68	
354-23-4	Freon 123a	750	ug/m3	283.33	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	283.33	140	65	
142-82-5	Heptane	ND	ug/m3	283.33	140	45	
87-68-3	Hexachlorobutadiene	ND	ug/m3	283.33	140	51	
110-54-3	Hexane	ND	ug/m3	283.33	140	48	
179601-23-	m,p-Xylene	ND	ug/m3	283.33	280	82	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	283.33	140	43	
75-09-2	Methylene Chloride	52	ug/m3	283.33	140	43	J
95-47-6	o-Xylene	ND	ug/m3	283.33	140	40	
103-65-1	Propylbenzene	ND	ug/m3	283.33	140	43	
100-42-5	Styrene	ND	ug/m3	283.33	140	43	
127-18-4	Tetrachloroethene	ND	ug/m3	283.33	140	40	
109-99-9	Tetrahydrofuran	ND	ug/m3	283.33	140	62	
108-88-3	Toluene	ND	ug/m3	283.33	140	45	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	283.33	140	48	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	283.33	140	45	
79-01-6	Trichloroethene	2300	ug/m3	283.33	140	43	
75-01-4	Vinyl Chloride	ND	ug/m3	283.33	140	54	

Sample 1203231315 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	236	120	38	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	236	120	38	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	236	120	38	
75-34-3	1,1-Dichloroethane	ND	ug/m3	236	120	40	
75-35-4	1,1-Dichloroethene	ND	ug/m3	236	120	40	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	236	120	57	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	236	120	38	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	236	120	35	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	236	120	40	
107-06-2	1,2-Dichloroethane	ND	ug/m3	236	120	45	
78-87-5	1,2-Dichloropropane	ND	ug/m3	236	120	40	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	236	120	40	
106-99-0	1,3-Butadiene	ND	ug/m3	236	120	50	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	236	120	40	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	236	120	38	
123-91-1	1,4-Dioxane	ND	ug/m3	236	120	40	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	236	120	40	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	236	1200	54	
591-78-6	2-Hexanone	ND	ug/m3	236	120	42	
67-63-0	2-Propanol	ND	ug/m3	236	240	94	
107-05-1	3-Chloropropene	ND	ug/m3	236	120	38	

622-96-8	4-Ethyltoluene	ND	ug/m3	236	120	40	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	236	120	33	
67-64-1	Acetone	ND	ug/m3	236	1200	210	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	236	120	35	
71-43-2	Benzene	ND	ug/m3	236	120	33	
75-27-4	Bromodichloromethane	ND	ug/m3	236	120	38	
75-25-2	Bromoform	ND	ug/m3	236	120	33	
74-83-9	Bromomethane	ND	ug/m3	236	120	45	
75-15-0	Carbon Disulfide	ND	ug/m3	236	1200	35	
56-23-5	Carbon Tetrachloride	ND	ug/m3	236	120	38	
108-90-7	Chlorobenzene	ND	ug/m3	236	120	38	
75-00-3	Chloroethane	ND	ug/m3	236	120	45	
67-66-3	Chloroform	92	ug/m3	236	120	45	J
74-87-3	Chloromethane	ND	ug/m3	236	120	45	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	236	120	42	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	236	120	33	
98-82-8	Cumene	ND	ug/m3	236	120	35	
110-82-7	Cyclohexane	ND	ug/m3	236	240	78	
124-48-1	Dibromochloromethane	ND	ug/m3	236	120	33	
64-17-5	Ethanol	ND	ug/m3	236	1200	380	
100-41-4	Ethyl Benzene	ND	ug/m3	236	120	35	
75-69-4	Freon 11	ND	ug/m3	236	120	38	
76-13-1	Freon 113	22000	ug/m3	236	120	38	
76-14-2	Freon 114	ND	ug/m3	236	120	40	
75-71-8	Freon 12	ND	ug/m3	236	120	42	
306-83-2	Freon 123	ND	ug/m3	236	120	57	
354-23-4	Freon 123a	780	ug/m3	236	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	236	120	54	
142-82-5	Heptane	ND	ug/m3	236	120	38	
87-68-3	Hexachlorobutadiene	ND	ug/m3	236	120	42	
110-54-3	Hexane	ND	ug/m3	236	120	40	
179601-23-	m,p-Xylene	ND	ug/m3	236	240	68	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	236	120	35	
75-09-2	Methylene Chloride	43	ug/m3	236	120	35	J
95-47-6	o-Xylene	ND	ug/m3	236	120	33	
103-65-1	Propylbenzene	ND	ug/m3	236	120	35	
100-42-5	Styrene	ND	ug/m3	236	120	35	
127-18-4	Tetrachloroethene	ND	ug/m3	236	120	33	
109-99-9	Tetrahydrofuran	ND	ug/m3	236	120	52	
108-88-3	Toluene	ND	ug/m3	236	120	38	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	236	120	40	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	236	120	38	
79-01-6	Trichloroethene	2400	ug/m3	236	120	35	
75-01-4	Vinyl Chloride	ND	ug/m3	236	120	45	

Sample **1203231420** **Sample Type** **Soil Gas** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	315	160	50	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	315	160	50	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	315	160	50	
75-34-3	1,1-Dichloroethane	ND	ug/m3	315	160	54	
75-35-4	1,1-Dichloroethene	ND	ug/m3	315	160	54	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	315	160	76	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	315	160	50	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	315	160	47	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	315	160	54	
107-06-2	1,2-Dichloroethane	ND	ug/m3	315	160	60	
78-87-5	1,2-Dichloropropane	ND	ug/m3	315	160	54	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	315	160	54	
106-99-0	1,3-Butadiene	ND	ug/m3	315	160	66	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	315	160	54	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	315	160	50	
123-91-1	1,4-Dioxane	ND	ug/m3	315	160	54	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	315	160	54	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	315	1600	72	
591-78-6	2-Hexanone	ND	ug/m3	315	160	57	
67-63-0	2-Propanol	ND	ug/m3	315	320	130	
107-05-1	3-Chloropropene	ND	ug/m3	315	160	50	
622-96-8	4-Ethyltoluene	ND	ug/m3	315	160	54	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	315	160	44	
67-64-1	Acetone	ND	ug/m3	315	1600	280	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	315	160	47	
71-43-2	Benzene	ND	ug/m3	315	160	44	
75-27-4	Bromodichloromethane	ND	ug/m3	315	160	50	
75-25-2	Bromoform	ND	ug/m3	315	160	44	
74-83-9	Bromomethane	ND	ug/m3	315	160	60	
75-15-0	Carbon Disulfide	ND	ug/m3	315	1600	47	
56-23-5	Carbon Tetrachloride	ND	ug/m3	315	160	50	
108-90-7	Chlorobenzene	ND	ug/m3	315	160	50	
75-00-3	Chloroethane	ND	ug/m3	315	160	60	
67-66-3	Chloroform	97	ug/m3	315	160	60	J
74-87-3	Chloromethane	ND	ug/m3	315	160	60	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	315	160	57	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	315	160	44	
98-82-8	Cumene	ND	ug/m3	315	160	47	
110-82-7	Cyclohexane	ND	ug/m3	315	320	100	
124-48-1	Dibromochloromethane	ND	ug/m3	315	160	44	
64-17-5	Ethanol	ND	ug/m3	315	1600	500	
100-41-4	Ethyl Benzene	ND	ug/m3	315	160	47	
75-69-4	Freon 11	ND	ug/m3	315	160	50	

76-13-1	Freon 113	22000	ug/m3	315	160	50	
76-14-2	Freon 114	ND	ug/m3	315	160	54	
75-71-8	Freon 12	ND	ug/m3	315	160	57	
306-83-2	Freon 123	ND	ug/m3	315	160	76	
354-23-4	Freon 123a	ND	ug/m3	315	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	315	160	72	
142-82-5	Heptane	ND	ug/m3	315	160	50	
87-68-3	Hexachlorobutadiene	ND	ug/m3	315	160	57	
110-54-3	Hexane	ND	ug/m3	315	160	54	
179601-23-	m,p-Xylene	ND	ug/m3	315	320	91	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	315	160	47	
75-09-2	Methylene Chloride	61	ug/m3	315	160	47	J
95-47-6	o-Xylene	ND	ug/m3	315	160	44	
103-65-1	Propylbenzene	ND	ug/m3	315	160	47	
100-42-5	Styrene	ND	ug/m3	315	160	47	
127-18-4	Tetrachloroethene	ND	ug/m3	315	160	44	
109-99-9	Tetrahydrofuran	ND	ug/m3	315	160	69	
108-88-3	Toluene	ND	ug/m3	315	160	50	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	315	160	54	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	315	160	50	
79-01-6	Trichloroethene	2400	ug/m3	315	160	47	
75-01-4	Vinyl Chloride	ND	ug/m3	315	160	60	

Sample 1203231525 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	340	170	54	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	340	170	54	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	340	170	54	
75-34-3	1,1-Dichloroethane	ND	ug/m3	340	170	58	
75-35-4	1,1-Dichloroethene	ND	ug/m3	340	170	58	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	340	170	82	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	340	170	54	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	340	170	51	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	340	170	58	
107-06-2	1,2-Dichloroethane	ND	ug/m3	340	170	65	
78-87-5	1,2-Dichloropropane	ND	ug/m3	340	170	58	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	340	170	58	
106-99-0	1,3-Butadiene	ND	ug/m3	340	170	71	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	340	170	58	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	340	170	54	
123-91-1	1,4-Dioxane	ND	ug/m3	340	170	58	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	340	170	58	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	340	1700	78	
591-78-6	2-Hexanone	ND	ug/m3	340	170	61	
67-63-0	2-Propanol	ND	ug/m3	340	340	140	
107-05-1	3-Chloropropene	ND	ug/m3	340	170	54	

622-96-8	4-Ethyltoluene	ND	ug/m3	340	170	58	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	340	170	48	
67-64-1	Acetone	ND	ug/m3	340	1700	300	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	340	170	51	
71-43-2	Benzene	ND	ug/m3	340	170	48	
75-27-4	Bromodichloromethane	ND	ug/m3	340	170	54	
75-25-2	Bromoform	ND	ug/m3	340	170	48	
74-83-9	Bromomethane	ND	ug/m3	340	170	65	
75-15-0	Carbon Disulfide	ND	ug/m3	340	1700	51	
56-23-5	Carbon Tetrachloride	ND	ug/m3	340	170	54	
108-90-7	Chlorobenzene	ND	ug/m3	340	170	54	
75-00-3	Chloroethane	ND	ug/m3	340	170	65	
67-66-3	Chloroform	96	ug/m3	340	170	65	J
74-87-3	Chloromethane	ND	ug/m3	340	170	65	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	340	170	61	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	340	170	48	
98-82-8	Cumene	ND	ug/m3	340	170	51	
110-82-7	Cyclohexane	ND	ug/m3	340	340	110	
124-48-1	Dibromochloromethane	ND	ug/m3	340	170	48	
64-17-5	Ethanol	ND	ug/m3	340	1700	540	
100-41-4	Ethyl Benzene	ND	ug/m3	340	170	51	
75-69-4	Freon 11	ND	ug/m3	340	170	54	
76-13-1	Freon 113	24000	ug/m3	340	170	54	
76-14-2	Freon 114	ND	ug/m3	340	170	58	
75-71-8	Freon 12	ND	ug/m3	340	170	61	
306-83-2	Freon 123	ND	ug/m3	340	170	82	
354-23-4	Freon 123a	ND	ug/m3	340	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	340	170	78	
142-82-5	Heptane	ND	ug/m3	340	170	54	
87-68-3	Hexachlorobutadiene	ND	ug/m3	340	170	61	
110-54-3	Hexane	ND	ug/m3	340	170	58	
179601-23-	m,p-Xylene	ND	ug/m3	340	340	99	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	340	170	51	
75-09-2	Methylene Chloride	60	ug/m3	340	170	51	J
95-47-6	o-Xylene	ND	ug/m3	340	170	48	
103-65-1	Propylbenzene	ND	ug/m3	340	170	51	
100-42-5	Styrene	ND	ug/m3	340	170	51	
127-18-4	Tetrachloroethene	ND	ug/m3	340	170	48	
109-99-9	Tetrahydrofuran	ND	ug/m3	340	170	75	
108-88-3	Toluene	ND	ug/m3	340	170	54	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	340	170	58	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	340	170	54	
79-01-6	Trichloroethene	2500	ug/m3	340	170	51	
75-01-4	Vinyl Chloride	ND	ug/m3	340	170	65	

Sample **1203231630** **Sample Type** **Soil Gas** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	271.25	140	43	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	271.25	140	43	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	271.25	140	43	
75-34-3	1,1-Dichloroethane	ND	ug/m3	271.25	140	46	
75-35-4	1,1-Dichloroethene	ND	ug/m3	271.25	140	46	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	271.25	140	65	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	271.25	140	43	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	271.25	140	41	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	271.25	140	46	
107-06-2	1,2-Dichloroethane	ND	ug/m3	271.25	140	52	
78-87-5	1,2-Dichloropropane	ND	ug/m3	271.25	140	46	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	271.25	140	46	
106-99-0	1,3-Butadiene	ND	ug/m3	271.25	140	57	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	271.25	140	46	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	271.25	140	43	
123-91-1	1,4-Dioxane	ND	ug/m3	271.25	140	46	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	271.25	140	46	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	271.25	1400	62	
591-78-6	2-Hexanone	ND	ug/m3	271.25	140	49	
67-63-0	2-Propanol	ND	ug/m3	271.25	270	110	
107-05-1	3-Chloropropene	ND	ug/m3	271.25	140	43	
622-96-8	4-Ethyltoluene	ND	ug/m3	271.25	140	46	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	271.25	140	38	
67-64-1	Acetone	ND	ug/m3	271.25	1400	240	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	271.25	140	41	
71-43-2	Benzene	ND	ug/m3	271.25	140	38	
75-27-4	Bromodichloromethane	ND	ug/m3	271.25	140	43	
75-25-2	Bromoform	ND	ug/m3	271.25	140	38	
74-83-9	Bromomethane	ND	ug/m3	271.25	140	52	
75-15-0	Carbon Disulfide	ND	ug/m3	271.25	1400	41	
56-23-5	Carbon Tetrachloride	ND	ug/m3	271.25	140	43	
108-90-7	Chlorobenzene	ND	ug/m3	271.25	140	43	
75-00-3	Chloroethane	ND	ug/m3	271.25	140	52	
67-66-3	Chloroform	100	ug/m3	271.25	140	52	J
74-87-3	Chloromethane	ND	ug/m3	271.25	140	52	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	271.25	140	49	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	271.25	140	38	
98-82-8	Cumene	ND	ug/m3	271.25	140	41	
110-82-7	Cyclohexane	ND	ug/m3	271.25	270	90	
124-48-1	Dibromochloromethane	ND	ug/m3	271.25	140	38	
64-17-5	Ethanol	ND	ug/m3	271.25	1400	430	
100-41-4	Ethyl Benzene	ND	ug/m3	271.25	140	41	
75-69-4	Freon 11	ND	ug/m3	271.25	140	43	

76-13-1	Freon 113	25000	ug/m3	271.25	140	43	
76-14-2	Freon 114	ND	ug/m3	271.25	140	46	
75-71-8	Freon 12	ND	ug/m3	271.25	140	49	
306-83-2	Freon 123	ND	ug/m3	271.25	140	65	
354-23-4	Freon 123a	790	ug/m3	271.25	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	271.25	140	62	
142-82-5	Heptane	ND	ug/m3	271.25	140	43	
87-68-3	Hexachlorobutadiene	ND	ug/m3	271.25	140	49	
110-54-3	Hexane	ND	ug/m3	271.25	140	46	
179601-23-	m,p-Xylene	ND	ug/m3	271.25	270	79	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	271.25	140	41	
75-09-2	Methylene Chloride	49	ug/m3	271.25	140	41	J
95-47-6	o-Xylene	ND	ug/m3	271.25	140	38	
103-65-1	Propylbenzene	ND	ug/m3	271.25	140	41	
100-42-5	Styrene	ND	ug/m3	271.25	140	41	
127-18-4	Tetrachloroethene	ND	ug/m3	271.25	140	38	
109-99-9	Tetrahydrofuran	ND	ug/m3	271.25	140	60	
108-88-3	Toluene	ND	ug/m3	271.25	140	43	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	271.25	140	46	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	271.25	140	43	
79-01-6	Trichloroethene	2600	ug/m3	271.25	140	41	
75-01-4	Vinyl Chloride	ND	ug/m3	271.25	140	52	

Sample 1203231735 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	5.85	2.9	0.94	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	5.85	2.9	0.94	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	5.85	2.9	0.94	
75-34-3	1,1-Dichloroethane	ND	ug/m3	5.85	2.9	0.99	
75-35-4	1,1-Dichloroethene	ND	ug/m3	5.85	2.9	0.99	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	5.85	2.9	1.4	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	5.85	2.9	0.94	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	5.85	2.9	0.88	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	5.85	2.9	0.99	
107-06-2	1,2-Dichloroethane	ND	ug/m3	5.85	2.9	1.1	
78-87-5	1,2-Dichloropropane	ND	ug/m3	5.85	2.9	0.99	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	5.85	2.9	0.99	
106-99-0	1,3-Butadiene	ND	ug/m3	5.85	2.9	1.2	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	5.85	2.9	0.99	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	5.85	2.9	0.94	
123-91-1	1,4-Dioxane	ND	ug/m3	5.85	2.9	0.99	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	5.85	2.9	0.99	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	5.85	29	1.3	
591-78-6	2-Hexanone	ND	ug/m3	5.85	2.9	1.1	
67-63-0	2-Propanol	ND	ug/m3	5.85	5.9	2.3	
107-05-1	3-Chloropropene	ND	ug/m3	5.85	2.9	0.94	

622-96-8	4-Ethyltoluene	ND	ug/m3	5.85	2.9	0.99	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	5.85	2.9	0.82	
67-64-1	Acetone	ND	ug/m3	5.85	29	5.1	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	5.85	2.9	0.88	
71-43-2	Benzene	ND	ug/m3	5.85	2.9	0.82	
75-27-4	Bromodichloromethane	ND	ug/m3	5.85	2.9	0.94	
75-25-2	Bromoform	ND	ug/m3	5.85	2.9	0.82	
74-83-9	Bromomethane	ND	ug/m3	5.85	2.9	1.1	
75-15-0	Carbon Disulfide	ND	ug/m3	5.85	29	0.88	
56-23-5	Carbon Tetrachloride	ND	ug/m3	5.85	2.9	0.94	
108-90-7	Chlorobenzene	ND	ug/m3	5.85	2.9	0.94	
75-00-3	Chloroethane	ND	ug/m3	5.85	2.9	1.1	
67-66-3	Chloroform	ND	ug/m3	5.85	2.9	1.1	
74-87-3	Chloromethane	ND	ug/m3	5.85	2.9	1.1	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	5.85	2.9	1.1	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	5.85	2.9	0.82	
98-82-8	Cumene	ND	ug/m3	5.85	2.9	0.88	
110-82-7	Cyclohexane	ND	ug/m3	5.85	5.9	1.9	
124-48-1	Dibromochloromethane	ND	ug/m3	5.85	2.9	0.82	
64-17-5	Ethanol	ND	ug/m3	5.85	29	9.4	
100-41-4	Ethyl Benzene	ND	ug/m3	5.85	2.9	0.88	
75-69-4	Freon 11	ND	ug/m3	5.85	2.9	0.94	
76-13-1	Freon 113	ND	ug/m3	5.85	2.9	0.94	QD
76-14-2	Freon 114	ND	ug/m3	5.85	2.9	0.99	
75-71-8	Freon 12	1.7	ug/m3	5.85	2.9	1.1	J
306-83-2	Freon 123	ND	ug/m3	5.85	2.9	1.4	
354-23-4	Freon 123a	ND	ug/m3	5.85	NA	NA	* QD
75-43-4	Freon 21	ND	ug/m3	5.85	2.9	1.3	
142-82-5	Heptane	ND	ug/m3	5.85	2.9	0.94	
87-68-3	Hexachlorobutadiene	ND	ug/m3	5.85	2.9	1.1	
110-54-3	Hexane	ND	ug/m3	5.85	2.9	0.99	
179601-23-	m,p-Xylene	ND	ug/m3	5.85	5.9	1.7	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	5.85	2.9	0.88	
75-09-2	Methylene Chloride	1.1	ug/m3	5.85	2.9	0.88	J
95-47-6	o-Xylene	ND	ug/m3	5.85	2.9	0.82	
103-65-1	Propylbenzene	ND	ug/m3	5.85	2.9	0.88	
100-42-5	Styrene	ND	ug/m3	5.85	2.9	0.88	
127-18-4	Tetrachloroethene	ND	ug/m3	5.85	2.9	0.82	
109-99-9	Tetrahydrofuran	ND	ug/m3	5.85	2.9	1.3	
108-88-3	Toluene	ND	ug/m3	5.85	2.9	0.94	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	5.85	2.9	0.99	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	5.85	2.9	0.94	
79-01-6	Trichloroethene	ND	ug/m3	5.85	2.9	0.88	QD
75-01-4	Vinyl Chloride	ND	ug/m3	5.85	2.9	1.1	

Sample **1203231736** **Sample Type** **Soil Gas-D** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	246.67	120	39	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	246.67	120	39	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	246.67	120	39	
75-34-3	1,1-Dichloroethane	ND	ug/m3	246.67	120	42	
75-35-4	1,1-Dichloroethene	ND	ug/m3	246.67	120	42	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	246.67	120	59	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	246.67	120	39	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	246.67	120	37	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	246.67	120	42	
107-06-2	1,2-Dichloroethane	ND	ug/m3	246.67	120	47	
78-87-5	1,2-Dichloropropane	ND	ug/m3	246.67	120	42	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	246.67	120	42	
106-99-0	1,3-Butadiene	ND	ug/m3	246.67	120	52	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	246.67	120	42	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	246.67	120	39	
123-91-1	1,4-Dioxane	ND	ug/m3	246.67	120	42	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	246.67	120	42	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	246.67	1200	57	
591-78-6	2-Hexanone	ND	ug/m3	246.67	120	44	
67-63-0	2-Propanol	ND	ug/m3	246.67	250	99	
107-05-1	3-Chloropropene	ND	ug/m3	246.67	120	39	
622-96-8	4-Ethyltoluene	ND	ug/m3	246.67	120	42	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	246.67	120	35	
67-64-1	Acetone	ND	ug/m3	246.67	1200	220	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	246.67	120	37	
71-43-2	Benzene	ND	ug/m3	246.67	120	35	
75-27-4	Bromodichloromethane	ND	ug/m3	246.67	120	39	
75-25-2	Bromoform	ND	ug/m3	246.67	120	35	
74-83-9	Bromomethane	ND	ug/m3	246.67	120	47	
75-15-0	Carbon Disulfide	ND	ug/m3	246.67	1200	37	
56-23-5	Carbon Tetrachloride	ND	ug/m3	246.67	120	39	
108-90-7	Chlorobenzene	ND	ug/m3	246.67	120	39	
75-00-3	Chloroethane	ND	ug/m3	246.67	120	47	
67-66-3	Chloroform	98	ug/m3	246.67	120	47	J
74-87-3	Chloromethane	ND	ug/m3	246.67	120	47	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	246.67	120	44	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	246.67	120	35	
98-82-8	Cumene	ND	ug/m3	246.67	120	37	
110-82-7	Cyclohexane	ND	ug/m3	246.67	250	81	
124-48-1	Dibromochloromethane	ND	ug/m3	246.67	120	35	
64-17-5	Ethanol	ND	ug/m3	246.67	1200	390	
100-41-4	Ethyl Benzene	ND	ug/m3	246.67	120	37	
75-69-4	Freon 11	ND	ug/m3	246.67	120	39	

76-13-1	Freon 113	25000	ug/m3	246.67	120	39	QD
76-14-2	Freon 114	ND	ug/m3	246.67	120	42	
75-71-8	Freon 12	ND	ug/m3	246.67	120	44	
306-83-2	Freon 123	ND	ug/m3	246.67	120	59	
354-23-4	Freon 123a	740	ug/m3	246.67	NA	NA	TIC QD
75-43-4	Freon 21	ND	ug/m3	246.67	120	57	
142-82-5	Heptane	ND	ug/m3	246.67	120	39	
87-68-3	Hexachlorobutadiene	ND	ug/m3	246.67	120	44	
110-54-3	Hexane	ND	ug/m3	246.67	120	42	
179601-23-	m,p-Xylene	ND	ug/m3	246.67	250	72	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	246.67	120	37	
75-09-2	Methylene Chloride	46	ug/m3	246.67	120	37	J
95-47-6	o-Xylene	ND	ug/m3	246.67	120	35	
103-65-1	Propylbenzene	ND	ug/m3	246.67	120	37	
100-42-5	Styrene	ND	ug/m3	246.67	120	37	
127-18-4	Tetrachloroethene	ND	ug/m3	246.67	120	35	
109-99-9	Tetrahydrofuran	ND	ug/m3	246.67	120	54	
108-88-3	Toluene	ND	ug/m3	246.67	120	39	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	246.67	120	42	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	246.67	120	39	
79-01-6	Trichloroethene	2600	ug/m3	246.67	120	37	QD
75-01-4	Vinyl Chloride	ND	ug/m3	246.67	120	47	

Borehole	600-SVE-1	Depth (ft)	130	Depth (m)	39.62	Event Date	3/24/2012

Sample	1203240745	Sample Type	Soil Gas	Analysis Method	TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	37.75	19	6	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	37.75	19	6	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	37.75	19	6	
75-34-3	1,1-Dichloroethane	ND	ug/m3	37.75	19	6.4	
75-35-4	1,1-Dichloroethene	6.7	ug/m3	37.75	19	6.4	J
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	37.75	19	9.1	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	37.75	19	6	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	37.75	19	5.7	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	37.75	19	6.4	
107-06-2	1,2-Dichloroethane	ND	ug/m3	37.75	19	7.2	
78-87-5	1,2-Dichloropropane	ND	ug/m3	37.75	19	6.4	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	37.75	19	6.4	
106-99-0	1,3-Butadiene	ND	ug/m3	37.75	19	7.9	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	37.75	19	6.4	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	37.75	19	6	
123-91-1	1,4-Dioxane	ND	ug/m3	37.75	19	6.4	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	37.75	19	6.4	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	830	ug/m3	37.75	190	8.7	
591-78-6	2-Hexanone	ND	ug/m3	37.75	19	6.8	
67-63-0	2-Propanol	ND	ug/m3	37.75	38	15	
107-05-1	3-Chloropropene	ND	ug/m3	37.75	19	6	
622-96-8	4-Ethyltoluene	ND	ug/m3	37.75	19	6.4	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	37.75	19	5.3	
67-64-1	Acetone	400	ug/m3	37.75	190	33	FB
100-44-7	alpha-Chlorotoluene	ND	ug/m3	37.75	19	5.7	
71-43-2	Benzene	ND	ug/m3	37.75	19	5.3	
75-27-4	Bromodichloromethane	ND	ug/m3	37.75	19	6	
75-25-2	Bromoform	ND	ug/m3	37.75	19	5.3	
74-83-9	Bromomethane	ND	ug/m3	37.75	19	7.2	
75-15-0	Carbon Disulfide	ND	ug/m3	37.75	190	5.7	
56-23-5	Carbon Tetrachloride	ND	ug/m3	37.75	19	6	
108-90-7	Chlorobenzene	ND	ug/m3	37.75	19	6	
75-00-3	Chloroethane	ND	ug/m3	37.75	19	7.2	
67-66-3	Chloroform	25	ug/m3	37.75	19	7.2	
74-87-3	Chloromethane	ND	ug/m3	37.75	19	7.2	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	37.75	19	6.8	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	37.75	19	5.3	
98-82-8	Cumene	ND	ug/m3	37.75	19	5.7	
110-82-7	Cyclohexane	ND	ug/m3	37.75	38	12	
124-48-1	Dibromochloromethane	ND	ug/m3	37.75	19	5.3	
64-17-5	Ethanol	ND	ug/m3	37.75	190	60	

100-41-4	Ethyl Benzene	ND	ug/m3	37.75	19	5.7	
75-69-4	Freon 11	ND	ug/m3	37.75	19	6	
76-13-1	Freon 113	3100	ug/m3	37.75	19	6	
76-14-2	Freon 114	ND	ug/m3	37.75	19	6.4	
75-71-8	Freon 12	ND	ug/m3	37.75	19	6.8	
306-83-2	Freon 123	ND	ug/m3	37.75	19	9.1	
354-23-4	Freon 123a	ND	ug/m3	37.75	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	37.75	19	8.7	
142-82-5	Heptane	ND	ug/m3	37.75	19	6	
87-68-3	Hexachlorobutadiene	ND	ug/m3	37.75	19	6.8	
110-54-3	Hexane	ND	ug/m3	37.75	19	6.4	
179601-23-	m,p-Xylene	ND	ug/m3	37.75	38	11	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	37.75	19	5.7	
75-09-2	Methylene Chloride	8.1	ug/m3	37.75	19	5.7	J FB
95-47-6	o-Xylene	ND	ug/m3	37.75	19	5.3	
103-65-1	Propylbenzene	ND	ug/m3	37.75	19	5.7	
100-42-5	Styrene	ND	ug/m3	37.75	19	5.7	
127-18-4	Tetrachloroethene	590	ug/m3	37.75	19	5.3	
109-99-9	Tetrahydrofuran	1200	ug/m3	37.75	19	8.3	
108-88-3	Toluene	ND	ug/m3	37.75	19	6	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	37.75	19	6.4	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	37.75	19	6	
79-01-6	Trichloroethene	1100	ug/m3	37.75	19	5.7	
75-01-4	Vinyl Chloride	ND	ug/m3	37.75	19	7.2	

Sample 1203240750 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	357.78	180	57	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	357.78	180	57	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	357.78	180	57	
75-34-3	1,1-Dichloroethane	ND	ug/m3	357.78	180	61	
75-35-4	1,1-Dichloroethene	ND	ug/m3	357.78	180	61	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	357.78	180	86	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	357.78	180	57	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	357.78	180	54	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	357.78	180	61	
107-06-2	1,2-Dichloroethane	ND	ug/m3	357.78	180	68	
78-87-5	1,2-Dichloropropane	ND	ug/m3	357.78	180	61	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	357.78	180	61	
106-99-0	1,3-Butadiene	ND	ug/m3	357.78	180	75	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	357.78	180	61	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	357.78	180	57	
123-91-1	1,4-Dioxane	ND	ug/m3	357.78	180	61	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	357.78	180	61	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	390	ug/m3	357.78	1800	82	J
591-78-6	2-Hexanone	ND	ug/m3	357.78	180	64	

67-63-0	2-Propanol	ND	ug/m3	357.78	360	140	
107-05-1	3-Chloropropene	ND	ug/m3	357.78	180	57	
622-96-8	4-Ethyltoluene	ND	ug/m3	357.78	180	61	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	357.78	180	50	
67-64-1	Acetone	500	ug/m3	357.78	1800	310	J
100-44-7	alpha-Chlorotoluene	ND	ug/m3	357.78	180	54	
71-43-2	Benzene	ND	ug/m3	357.78	180	50	
75-27-4	Bromodichloromethane	ND	ug/m3	357.78	180	57	
75-25-2	Bromoform	ND	ug/m3	357.78	180	50	
74-83-9	Bromomethane	ND	ug/m3	357.78	180	68	
75-15-0	Carbon Disulfide	ND	ug/m3	357.78	1800	54	
56-23-5	Carbon Tetrachloride	ND	ug/m3	357.78	180	57	
108-90-7	Chlorobenzene	ND	ug/m3	357.78	180	57	
75-00-3	Chloroethane	ND	ug/m3	357.78	180	68	
67-66-3	Chloroform	79	ug/m3	357.78	180	68	J
74-87-3	Chloromethane	ND	ug/m3	357.78	180	68	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	357.78	180	64	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	357.78	180	50	
98-82-8	Cumene	ND	ug/m3	357.78	180	54	
110-82-7	Cyclohexane	ND	ug/m3	357.78	360	120	
124-48-1	Dibromochloromethane	ND	ug/m3	357.78	180	50	
64-17-5	Ethanol	ND	ug/m3	357.78	1800	570	
100-41-4	Ethyl Benzene	ND	ug/m3	357.78	180	54	
75-69-4	Freon 11	ND	ug/m3	357.78	180	57	
76-13-1	Freon 113	26000	ug/m3	357.78	180	57	
76-14-2	Freon 114	ND	ug/m3	357.78	180	61	
75-71-8	Freon 12	ND	ug/m3	357.78	180	64	
306-83-2	Freon 123	ND	ug/m3	357.78	180	86	
354-23-4	Freon 123a	ND	ug/m3	357.78	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	357.78	180	82	
142-82-5	Heptane	ND	ug/m3	357.78	180	57	
87-68-3	Hexachlorobutadiene	ND	ug/m3	357.78	180	64	
110-54-3	Hexane	ND	ug/m3	357.78	180	61	
179601-23-	m,p-Xylene	ND	ug/m3	357.78	360	100	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	357.78	180	54	
75-09-2	Methylene Chloride	73	ug/m3	357.78	180	54	J FB
95-47-6	o-Xylene	ND	ug/m3	357.78	180	50	
103-65-1	Propylbenzene	ND	ug/m3	357.78	180	54	
100-42-5	Styrene	ND	ug/m3	357.78	180	54	
127-18-4	Tetrachloroethene	ND	ug/m3	357.78	180	50	
109-99-9	Tetrahydrofuran	1100	ug/m3	357.78	180	79	
108-88-3	Toluene	ND	ug/m3	357.78	180	57	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	357.78	180	61	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	357.78	180	57	
79-01-6	Trichloroethene	3200	ug/m3	357.78	180	54	
75-01-4	Vinyl Chloride	ND	ug/m3	357.78	180	68	

Sample **1203240755** **Sample Type** **Soil Gas** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	314	160	50	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	314	160	50	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	314	160	50	
75-34-3	1,1-Dichloroethane	ND	ug/m3	314	160	53	
75-35-4	1,1-Dichloroethene	ND	ug/m3	314	160	53	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	314	160	75	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	314	160	50	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	314	160	47	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	314	160	53	
107-06-2	1,2-Dichloroethane	ND	ug/m3	314	160	60	
78-87-5	1,2-Dichloropropane	ND	ug/m3	314	160	53	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	314	160	53	
106-99-0	1,3-Butadiene	ND	ug/m3	314	160	66	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	314	160	53	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	314	160	50	
123-91-1	1,4-Dioxane	ND	ug/m3	314	160	53	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	314	160	53	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	300	ug/m3	314	1600	72	J
591-78-6	2-Hexanone	ND	ug/m3	314	160	57	
67-63-0	2-Propanol	ND	ug/m3	314	310	130	
107-05-1	3-Chloropropene	ND	ug/m3	314	160	50	
622-96-8	4-Ethyltoluene	ND	ug/m3	314	160	53	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	314	160	44	
67-64-1	Acetone	410	ug/m3	314	1600	280	J FB
100-44-7	alpha-Chlorotoluene	ND	ug/m3	314	160	47	
71-43-2	Benzene	ND	ug/m3	314	160	44	
75-27-4	Bromodichloromethane	ND	ug/m3	314	160	50	
75-25-2	Bromoform	ND	ug/m3	314	160	44	
74-83-9	Bromomethane	ND	ug/m3	314	160	60	
75-15-0	Carbon Disulfide	ND	ug/m3	314	1600	47	
56-23-5	Carbon Tetrachloride	ND	ug/m3	314	160	50	
108-90-7	Chlorobenzene	ND	ug/m3	314	160	50	
75-00-3	Chloroethane	ND	ug/m3	314	160	60	
67-66-3	Chloroform	82	ug/m3	314	160	60	J
74-87-3	Chloromethane	ND	ug/m3	314	160	60	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	314	160	57	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	314	160	44	
98-82-8	Cumene	ND	ug/m3	314	160	47	
110-82-7	Cyclohexane	ND	ug/m3	314	310	100	
124-48-1	Dibromochloromethane	ND	ug/m3	314	160	44	
64-17-5	Ethanol	ND	ug/m3	314	1600	500	
100-41-4	Ethyl Benzene	ND	ug/m3	314	160	47	
75-69-4	Freon 11	ND	ug/m3	314	160	50	

76-13-1	Freon 113	27000	ug/m3	314	160	50	
76-14-2	Freon 114	ND	ug/m3	314	160	53	
75-71-8	Freon 12	ND	ug/m3	314	160	57	
306-83-2	Freon 123	ND	ug/m3	314	160	75	
354-23-4	Freon 123a	ND	ug/m3	314	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	314	160	72	
142-82-5	Heptane	ND	ug/m3	314	160	50	
87-68-3	Hexachlorobutadiene	ND	ug/m3	314	160	57	
110-54-3	Hexane	ND	ug/m3	314	160	53	
179601-23-	m,p-Xylene	ND	ug/m3	314	310	91	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	314	160	47	
75-09-2	Methylene Chloride	65	ug/m3	314	160	47	J FB
95-47-6	o-Xylene	ND	ug/m3	314	160	44	
103-65-1	Propylbenzene	ND	ug/m3	314	160	47	
100-42-5	Styrene	ND	ug/m3	314	160	47	
127-18-4	Tetrachloroethene	ND	ug/m3	314	160	44	
109-99-9	Tetrahydrofuran	820	ug/m3	314	160	69	
108-88-3	Toluene	ND	ug/m3	314	160	50	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	314	160	53	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	314	160	50	
79-01-6	Trichloroethene	3200	ug/m3	314	160	47	
75-01-4	Vinyl Chloride	ND	ug/m3	314	160	60	

Sample 1203240800 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	324	160	52	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	324	160	52	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	324	160	52	
75-34-3	1,1-Dichloroethane	ND	ug/m3	324	160	55	
75-35-4	1,1-Dichloroethene	ND	ug/m3	324	160	55	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	324	160	78	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	324	160	52	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	324	160	49	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	324	160	55	
107-06-2	1,2-Dichloroethane	ND	ug/m3	324	160	62	
78-87-5	1,2-Dichloropropane	ND	ug/m3	324	160	55	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	324	160	55	
106-99-0	1,3-Butadiene	ND	ug/m3	324	160	68	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	324	160	55	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	324	160	52	
123-91-1	1,4-Dioxane	ND	ug/m3	324	160	55	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	324	160	55	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	190	ug/m3	324	1600	75	J
591-78-6	2-Hexanone	ND	ug/m3	324	160	58	
67-63-0	2-Propanol	ND	ug/m3	324	320	130	
107-05-1	3-Chloropropene	ND	ug/m3	324	160	52	

622-96-8	4-Ethyltoluene	ND	ug/m3	324	160	55	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	324	160	45	
67-64-1	Acetone	310	ug/m3	324	1600	290	J FB
100-44-7	alpha-Chlorotoluene	ND	ug/m3	324	160	49	
71-43-2	Benzene	ND	ug/m3	324	160	45	
75-27-4	Bromodichloromethane	ND	ug/m3	324	160	52	
75-25-2	Bromoform	ND	ug/m3	324	160	45	
74-83-9	Bromomethane	ND	ug/m3	324	160	62	
75-15-0	Carbon Disulfide	ND	ug/m3	324	1600	49	
56-23-5	Carbon Tetrachloride	ND	ug/m3	324	160	52	
108-90-7	Chlorobenzene	ND	ug/m3	324	160	52	
75-00-3	Chloroethane	ND	ug/m3	324	160	62	
67-66-3	Chloroform	86	ug/m3	324	160	62	J
74-87-3	Chloromethane	ND	ug/m3	324	160	62	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	324	160	58	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	324	160	45	
98-82-8	Cumene	ND	ug/m3	324	160	49	
110-82-7	Cyclohexane	ND	ug/m3	324	320	110	
124-48-1	Dibromochloromethane	ND	ug/m3	324	160	45	
64-17-5	Ethanol	ND	ug/m3	324	1600	520	
100-41-4	Ethyl Benzene	ND	ug/m3	324	160	49	
75-69-4	Freon 11	ND	ug/m3	324	160	52	
76-13-1	Freon 113	29000	ug/m3	324	160	52	
76-14-2	Freon 114	ND	ug/m3	324	160	55	
75-71-8	Freon 12	ND	ug/m3	324	160	58	
306-83-2	Freon 123	ND	ug/m3	324	160	78	
354-23-4	Freon 123a	ND	ug/m3	324	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	324	160	75	
142-82-5	Heptane	ND	ug/m3	324	160	52	
87-68-3	Hexachlorobutadiene	ND	ug/m3	324	160	58	
110-54-3	Hexane	ND	ug/m3	324	160	55	
179601-23-	m,p-Xylene	ND	ug/m3	324	320	94	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	324	160	49	
75-09-2	Methylene Chloride	64	ug/m3	324	160	49	J FB
95-47-6	o-Xylene	ND	ug/m3	324	160	45	
103-65-1	Propylbenzene	ND	ug/m3	324	160	49	
100-42-5	Styrene	ND	ug/m3	324	160	49	
127-18-4	Tetrachloroethene	ND	ug/m3	324	160	45	
109-99-9	Tetrahydrofuran	530	ug/m3	324	160	71	
108-88-3	Toluene	ND	ug/m3	324	160	52	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	324	160	55	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	324	160	52	
79-01-6	Trichloroethene	3500	ug/m3	324	160	49	
75-01-4	Vinyl Chloride	ND	ug/m3	324	160	62	

Sample **1203240815** **Sample Type** **Soil Gas** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	402.5	200	64	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	402.5	200	64	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	402.5	200	64	
75-34-3	1,1-Dichloroethane	ND	ug/m3	402.5	200	68	
75-35-4	1,1-Dichloroethene	ND	ug/m3	402.5	200	68	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	402.5	200	97	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	402.5	200	64	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	402.5	200	60	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	402.5	200	68	
107-06-2	1,2-Dichloroethane	ND	ug/m3	402.5	200	76	
78-87-5	1,2-Dichloropropane	ND	ug/m3	402.5	200	68	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	402.5	200	68	
106-99-0	1,3-Butadiene	ND	ug/m3	402.5	200	85	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	402.5	200	68	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	402.5	200	64	
123-91-1	1,4-Dioxane	ND	ug/m3	402.5	200	68	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	402.5	200	68	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	402.5	2000	93	
591-78-6	2-Hexanone	ND	ug/m3	402.5	200	72	
67-63-0	2-Propanol	ND	ug/m3	402.5	400	160	
107-05-1	3-Chloropropene	ND	ug/m3	402.5	200	64	
622-96-8	4-Ethyltoluene	ND	ug/m3	402.5	200	68	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	402.5	200	56	
67-64-1	Acetone	ND	ug/m3	402.5	2000	350	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	402.5	200	60	
71-43-2	Benzene	ND	ug/m3	402.5	200	56	
75-27-4	Bromodichloromethane	ND	ug/m3	402.5	200	64	
75-25-2	Bromoform	ND	ug/m3	402.5	200	56	
74-83-9	Bromomethane	ND	ug/m3	402.5	200	76	
75-15-0	Carbon Disulfide	ND	ug/m3	402.5	2000	60	
56-23-5	Carbon Tetrachloride	ND	ug/m3	402.5	200	64	
108-90-7	Chlorobenzene	ND	ug/m3	402.5	200	64	
75-00-3	Chloroethane	ND	ug/m3	402.5	200	76	
67-66-3	Chloroform	89	ug/m3	402.5	200	76	J
74-87-3	Chloromethane	ND	ug/m3	402.5	200	76	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	402.5	200	72	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	402.5	200	56	
98-82-8	Cumene	ND	ug/m3	402.5	200	60	
110-82-7	Cyclohexane	ND	ug/m3	402.5	400	130	
124-48-1	Dibromochloromethane	ND	ug/m3	402.5	200	56	
64-17-5	Ethanol	ND	ug/m3	402.5	2000	640	
100-41-4	Ethyl Benzene	ND	ug/m3	402.5	200	60	
75-69-4	Freon 11	ND	ug/m3	402.5	200	64	

76-13-1	Freon 113	31000	ug/m3	402.5	200	64	
76-14-2	Freon 114	ND	ug/m3	402.5	200	68	
75-71-8	Freon 12	ND	ug/m3	402.5	200	72	
306-83-2	Freon 123	ND	ug/m3	402.5	200	97	
354-23-4	Freon 123a	ND	ug/m3	402.5	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	402.5	200	93	
142-82-5	Heptane	ND	ug/m3	402.5	200	64	
87-68-3	Hexachlorobutadiene	ND	ug/m3	402.5	200	72	
110-54-3	Hexane	ND	ug/m3	402.5	200	68	
179601-23-	m,p-Xylene	ND	ug/m3	402.5	400	120	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	402.5	200	60	
75-09-2	Methylene Chloride	84	ug/m3	402.5	200	60	J FB
95-47-6	o-Xylene	ND	ug/m3	402.5	200	56	
103-65-1	Propylbenzene	ND	ug/m3	402.5	200	60	
100-42-5	Styrene	ND	ug/m3	402.5	200	60	
127-18-4	Tetrachloroethene	ND	ug/m3	402.5	200	56	
109-99-9	Tetrahydrofuran	250	ug/m3	402.5	200	89	
108-88-3	Toluene	ND	ug/m3	402.5	200	64	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	402.5	200	68	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	402.5	200	64	
79-01-6	Trichloroethene	3600	ug/m3	402.5	200	60	
75-01-4	Vinyl Chloride	ND	ug/m3	402.5	200	76	

Sample 1203240830 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	364.44	180	58	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	364.44	180	58	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	364.44	180	58	
75-34-3	1,1-Dichloroethane	ND	ug/m3	364.44	180	62	
75-35-4	1,1-Dichloroethene	ND	ug/m3	364.44	180	62	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	364.44	180	87	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	364.44	180	58	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	364.44	180	55	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	364.44	180	62	
107-06-2	1,2-Dichloroethane	ND	ug/m3	364.44	180	69	
78-87-5	1,2-Dichloropropane	ND	ug/m3	364.44	180	62	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	364.44	180	62	
106-99-0	1,3-Butadiene	ND	ug/m3	364.44	180	77	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	364.44	180	62	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	364.44	180	58	
123-91-1	1,4-Dioxane	ND	ug/m3	364.44	180	62	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	364.44	180	62	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	364.44	1800	84	
591-78-6	2-Hexanone	ND	ug/m3	364.44	180	66	
67-63-0	2-Propanol	ND	ug/m3	364.44	360	150	
107-05-1	3-Chloropropene	ND	ug/m3	364.44	180	58	

622-96-8	4-Ethyltoluene	ND	ug/m3	364.44	180	62	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	364.44	180	51	
67-64-1	Acetone	ND	ug/m3	364.44	1800	320	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	364.44	180	55	
71-43-2	Benzene	ND	ug/m3	364.44	180	51	
75-27-4	Bromodichloromethane	ND	ug/m3	364.44	180	58	
75-25-2	Bromoform	ND	ug/m3	364.44	180	51	
74-83-9	Bromomethane	ND	ug/m3	364.44	180	69	
75-15-0	Carbon Disulfide	ND	ug/m3	364.44	1800	55	
56-23-5	Carbon Tetrachloride	ND	ug/m3	364.44	180	58	
108-90-7	Chlorobenzene	ND	ug/m3	364.44	180	58	
75-00-3	Chloroethane	ND	ug/m3	364.44	180	69	
67-66-3	Chloroform	89	ug/m3	364.44	180	69	J
74-87-3	Chloromethane	ND	ug/m3	364.44	180	69	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	364.44	180	66	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	364.44	180	51	
98-82-8	Cumene	ND	ug/m3	364.44	180	55	
110-82-7	Cyclohexane	ND	ug/m3	364.44	360	120	
124-48-1	Dibromochloromethane	ND	ug/m3	364.44	180	51	
64-17-5	Ethanol	ND	ug/m3	364.44	1800	580	
100-41-4	Ethyl Benzene	ND	ug/m3	364.44	180	55	
75-69-4	Freon 11	ND	ug/m3	364.44	180	58	
76-13-1	Freon 113	32000	ug/m3	364.44	180	58	
76-14-2	Freon 114	ND	ug/m3	364.44	180	62	
75-71-8	Freon 12	ND	ug/m3	364.44	180	66	
306-83-2	Freon 123	ND	ug/m3	364.44	180	87	
354-23-4	Freon 123a	ND	ug/m3	364.44	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	364.44	180	84	
142-82-5	Heptane	ND	ug/m3	364.44	180	58	
87-68-3	Hexachlorobutadiene	ND	ug/m3	364.44	180	66	
110-54-3	Hexane	ND	ug/m3	364.44	180	62	
179601-23-	m,p-Xylene	ND	ug/m3	364.44	360	110	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	364.44	180	55	
75-09-2	Methylene Chloride	75	ug/m3	364.44	180	55	J FB
95-47-6	o-Xylene	ND	ug/m3	364.44	180	51	
103-65-1	Propylbenzene	ND	ug/m3	364.44	180	55	
100-42-5	Styrene	ND	ug/m3	364.44	180	55	
127-18-4	Tetrachloroethene	ND	ug/m3	364.44	180	51	
109-99-9	Tetrahydrofuran	120	ug/m3	364.44	180	80	J
108-88-3	Toluene	ND	ug/m3	364.44	180	58	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	364.44	180	62	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	364.44	180	58	
79-01-6	Trichloroethene	3700	ug/m3	364.44	180	55	
75-01-4	Vinyl Chloride	ND	ug/m3	364.44	180	69	

Sample 1203240845 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	402.5	200	64	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	402.5	200	64	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	402.5	200	64	
75-34-3	1,1-Dichloroethane	ND	ug/m3	402.5	200	68	
75-35-4	1,1-Dichloroethene	ND	ug/m3	402.5	200	68	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	402.5	200	97	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	402.5	200	64	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	402.5	200	60	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	402.5	200	68	
107-06-2	1,2-Dichloroethane	ND	ug/m3	402.5	200	76	
78-87-5	1,2-Dichloropropane	ND	ug/m3	402.5	200	68	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	402.5	200	68	
106-99-0	1,3-Butadiene	ND	ug/m3	402.5	200	85	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	402.5	200	68	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	402.5	200	64	
123-91-1	1,4-Dioxane	ND	ug/m3	402.5	200	68	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	402.5	200	68	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	402.5	2000	93	
591-78-6	2-Hexanone	ND	ug/m3	402.5	200	72	
67-63-0	2-Propanol	ND	ug/m3	402.5	400	160	
107-05-1	3-Chloropropene	ND	ug/m3	402.5	200	64	
622-96-8	4-Ethyltoluene	ND	ug/m3	402.5	200	68	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	402.5	200	56	
67-64-1	Acetone	ND	ug/m3	402.5	2000	350	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	402.5	200	60	
71-43-2	Benzene	ND	ug/m3	402.5	200	56	
75-27-4	Bromodichloromethane	ND	ug/m3	402.5	200	64	
75-25-2	Bromoform	ND	ug/m3	402.5	200	56	
74-83-9	Bromomethane	ND	ug/m3	402.5	200	76	
75-15-0	Carbon Disulfide	ND	ug/m3	402.5	2000	60	
56-23-5	Carbon Tetrachloride	ND	ug/m3	402.5	200	64	
108-90-7	Chlorobenzene	ND	ug/m3	402.5	200	64	
75-00-3	Chloroethane	ND	ug/m3	402.5	200	76	
67-66-3	Chloroform	90	ug/m3	402.5	200	76	J
74-87-3	Chloromethane	ND	ug/m3	402.5	200	76	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	402.5	200	72	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	402.5	200	56	
98-82-8	Cumene	ND	ug/m3	402.5	200	60	
110-82-7	Cyclohexane	ND	ug/m3	402.5	400	130	
124-48-1	Dibromochloromethane	ND	ug/m3	402.5	200	56	
64-17-5	Ethanol	ND	ug/m3	402.5	2000	640	
100-41-4	Ethyl Benzene	ND	ug/m3	402.5	200	60	
75-69-4	Freon 11	ND	ug/m3	402.5	200	64	

76-13-1	Freon 113	33000	ug/m3	402.5	200	64	
76-14-2	Freon 114	ND	ug/m3	402.5	200	68	
75-71-8	Freon 12	ND	ug/m3	402.5	200	72	
306-83-2	Freon 123	ND	ug/m3	402.5	200	97	
354-23-4	Freon 123a	ND	ug/m3	402.5	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	402.5	200	93	
142-82-5	Heptane	ND	ug/m3	402.5	200	64	
87-68-3	Hexachlorobutadiene	ND	ug/m3	402.5	200	72	
110-54-3	Hexane	ND	ug/m3	402.5	200	68	
179601-23-	m,p-Xylene	ND	ug/m3	402.5	400	120	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	402.5	200	60	
75-09-2	Methylene Chloride	85	ug/m3	402.5	200	60	J FB
95-47-6	o-Xylene	ND	ug/m3	402.5	200	56	
103-65-1	Propylbenzene	ND	ug/m3	402.5	200	60	
100-42-5	Styrene	ND	ug/m3	402.5	200	60	
127-18-4	Tetrachloroethene	ND	ug/m3	402.5	200	56	
109-99-9	Tetrahydrofuran	140	ug/m3	402.5	200	89	J
108-88-3	Toluene	ND	ug/m3	402.5	200	64	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	402.5	200	68	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	402.5	200	64	
79-01-6	Trichloroethene	3700	ug/m3	402.5	200	60	
75-01-4	Vinyl Chloride	ND	ug/m3	402.5	200	76	

Sample 1203240846 Sample Type Soil Gas-D Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	468.57	230	75	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	468.57	230	75	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	468.57	230	75	
75-34-3	1,1-Dichloroethane	ND	ug/m3	468.57	230	80	
75-35-4	1,1-Dichloroethene	ND	ug/m3	468.57	230	80	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	468.57	230	110	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	468.57	230	75	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	468.57	230	70	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	468.57	230	80	
107-06-2	1,2-Dichloroethane	ND	ug/m3	468.57	230	89	
78-87-5	1,2-Dichloropropane	ND	ug/m3	468.57	230	80	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	468.57	230	80	
106-99-0	1,3-Butadiene	ND	ug/m3	468.57	230	98	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	468.57	230	80	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	468.57	230	75	
123-91-1	1,4-Dioxane	ND	ug/m3	468.57	230	80	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	468.57	230	80	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	468.57	2300	110	
591-78-6	2-Hexanone	ND	ug/m3	468.57	230	84	
67-63-0	2-Propanol	ND	ug/m3	468.57	470	190	
107-05-1	3-Chloropropene	ND	ug/m3	468.57	230	75	

622-96-8	4-Ethyltoluene	ND	ug/m3	468.57	230	80	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	468.57	230	66	
67-64-1	Acetone	ND	ug/m3	468.57	2300	410	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	468.57	230	70	
71-43-2	Benzene	ND	ug/m3	468.57	230	66	
75-27-4	Bromodichloromethane	ND	ug/m3	468.57	230	75	
75-25-2	Bromoform	ND	ug/m3	468.57	230	66	
74-83-9	Bromomethane	ND	ug/m3	468.57	230	89	
75-15-0	Carbon Disulfide	ND	ug/m3	468.57	2300	70	
56-23-5	Carbon Tetrachloride	ND	ug/m3	468.57	230	75	
108-90-7	Chlorobenzene	ND	ug/m3	468.57	230	75	
75-00-3	Chloroethane	ND	ug/m3	468.57	230	89	
67-66-3	Chloroform	ND	ug/m3	468.57	230	89	
74-87-3	Chloromethane	ND	ug/m3	468.57	230	89	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	468.57	230	84	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	468.57	230	66	
98-82-8	Cumene	ND	ug/m3	468.57	230	70	
110-82-7	Cyclohexane	ND	ug/m3	468.57	470	150	
124-48-1	Dibromochloromethane	ND	ug/m3	468.57	230	66	
64-17-5	Ethanol	ND	ug/m3	468.57	2300	750	
100-41-4	Ethyl Benzene	ND	ug/m3	468.57	230	70	
75-69-4	Freon 11	ND	ug/m3	468.57	230	75	
76-13-1	Freon 113	33000	ug/m3	468.57	230	75	
76-14-2	Freon 114	ND	ug/m3	468.57	230	80	
75-71-8	Freon 12	ND	ug/m3	468.57	230	84	
306-83-2	Freon 123	ND	ug/m3	468.57	230	110	
354-23-4	Freon 123a	ND	ug/m3	468.57	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	468.57	230	110	
142-82-5	Heptane	ND	ug/m3	468.57	230	75	
87-68-3	Hexachlorobutadiene	ND	ug/m3	468.57	230	84	
110-54-3	Hexane	ND	ug/m3	468.57	230	80	
179601-23-	m,p-Xylene	ND	ug/m3	468.57	470	140	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	468.57	230	70	
75-09-2	Methylene Chloride	97	ug/m3	468.57	230	70	J FB
95-47-6	o-Xylene	ND	ug/m3	468.57	230	66	
103-65-1	Propylbenzene	ND	ug/m3	468.57	230	70	
100-42-5	Styrene	ND	ug/m3	468.57	230	70	
127-18-4	Tetrachloroethene	ND	ug/m3	468.57	230	66	
109-99-9	Tetrahydrofuran	100	ug/m3	468.57	230	100	J
108-88-3	Toluene	ND	ug/m3	468.57	230	75	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	468.57	230	80	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	468.57	230	75	
79-01-6	Trichloroethene	3600	ug/m3	468.57	230	70	
75-01-4	Vinyl Chloride	ND	ug/m3	468.57	230	89	

Sample **1203240950** **Sample Type** **Soil Gas** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	425	210	68	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	425	210	68	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	425	210	68	
75-34-3	1,1-Dichloroethane	ND	ug/m3	425	210	72	
75-35-4	1,1-Dichloroethene	ND	ug/m3	425	210	72	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	425	210	100	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	425	210	68	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	425	210	64	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	425	210	72	
107-06-2	1,2-Dichloroethane	ND	ug/m3	425	210	81	
78-87-5	1,2-Dichloropropane	ND	ug/m3	425	210	72	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	425	210	72	
106-99-0	1,3-Butadiene	ND	ug/m3	425	210	89	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	425	210	72	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	425	210	68	
123-91-1	1,4-Dioxane	ND	ug/m3	425	210	72	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	425	210	72	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	425	2100	98	
591-78-6	2-Hexanone	ND	ug/m3	425	210	77	
67-63-0	2-Propanol	ND	ug/m3	425	430	170	
107-05-1	3-Chloropropene	ND	ug/m3	425	210	68	
622-96-8	4-Ethyltoluene	ND	ug/m3	425	210	72	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	425	210	60	
67-64-1	Acetone	ND	ug/m3	425	2100	370	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	425	210	64	
71-43-2	Benzene	ND	ug/m3	425	210	60	
75-27-4	Bromodichloromethane	ND	ug/m3	425	210	68	
75-25-2	Bromoform	ND	ug/m3	425	210	60	
74-83-9	Bromomethane	ND	ug/m3	425	210	81	
75-15-0	Carbon Disulfide	ND	ug/m3	425	2100	64	
56-23-5	Carbon Tetrachloride	ND	ug/m3	425	210	68	
108-90-7	Chlorobenzene	ND	ug/m3	425	210	68	
75-00-3	Chloroethane	ND	ug/m3	425	210	81	
67-66-3	Chloroform	90	ug/m3	425	210	81	J
74-87-3	Chloromethane	ND	ug/m3	425	210	81	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	425	210	77	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	425	210	60	
98-82-8	Cumene	ND	ug/m3	425	210	64	
110-82-7	Cyclohexane	ND	ug/m3	425	430	140	
124-48-1	Dibromochloromethane	ND	ug/m3	425	210	60	
64-17-5	Ethanol	ND	ug/m3	425	2100	680	
100-41-4	Ethyl Benzene	ND	ug/m3	425	210	64	
75-69-4	Freon 11	ND	ug/m3	425	210	68	

76-13-1	Freon 113	34000	ug/m3	425	210	68	
76-14-2	Freon 114	ND	ug/m3	425	210	72	
75-71-8	Freon 12	ND	ug/m3	425	210	77	
306-83-2	Freon 123	ND	ug/m3	425	210	100	
354-23-4	Freon 123a	ND	ug/m3	425	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	425	210	98	
142-82-5	Heptane	ND	ug/m3	425	210	68	
87-68-3	Hexachlorobutadiene	ND	ug/m3	425	210	77	
110-54-3	Hexane	ND	ug/m3	425	210	72	
179601-23-	m,p-Xylene	ND	ug/m3	425	430	120	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	425	210	64	
75-09-2	Methylene Chloride	86	ug/m3	425	210	64	J FB
95-47-6	o-Xylene	ND	ug/m3	425	210	60	
103-65-1	Propylbenzene	ND	ug/m3	425	210	64	
100-42-5	Styrene	ND	ug/m3	425	210	64	
127-18-4	Tetrachloroethene	ND	ug/m3	425	210	60	
109-99-9	Tetrahydrofuran	150	ug/m3	425	210	94	J
108-88-3	Toluene	ND	ug/m3	425	210	68	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	425	210	72	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	425	210	68	
79-01-6	Trichloroethene	3600	ug/m3	425	210	64	
75-01-4	Vinyl Chloride	ND	ug/m3	425	210	81	

Sample 1203241055 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	364	180	58	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	364	180	58	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	364	180	58	
75-34-3	1,1-Dichloroethane	ND	ug/m3	364	180	62	
75-35-4	1,1-Dichloroethene	ND	ug/m3	364	180	62	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	364	180	87	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	364	180	58	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	364	180	55	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	364	180	62	
107-06-2	1,2-Dichloroethane	ND	ug/m3	364	180	69	
78-87-5	1,2-Dichloropropane	ND	ug/m3	364	180	62	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	364	180	62	
106-99-0	1,3-Butadiene	ND	ug/m3	364	180	76	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	364	180	62	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	364	180	58	
123-91-1	1,4-Dioxane	ND	ug/m3	364	180	62	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	364	180	62	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	364	1800	84	
591-78-6	2-Hexanone	ND	ug/m3	364	180	66	
67-63-0	2-Propanol	ND	ug/m3	364	360	150	
107-05-1	3-Chloropropene	ND	ug/m3	364	180	58	

622-96-8	4-Ethyltoluene	ND	ug/m3	364	180	62	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	364	180	51	
67-64-1	Acetone	ND	ug/m3	364	1800	320	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	364	180	55	
71-43-2	Benzene	ND	ug/m3	364	180	51	
75-27-4	Bromodichloromethane	ND	ug/m3	364	180	58	
75-25-2	Bromoform	ND	ug/m3	364	180	51	
74-83-9	Bromomethane	ND	ug/m3	364	180	69	
75-15-0	Carbon Disulfide	ND	ug/m3	364	1800	55	
56-23-5	Carbon Tetrachloride	ND	ug/m3	364	180	58	
108-90-7	Chlorobenzene	ND	ug/m3	364	180	58	
75-00-3	Chloroethane	ND	ug/m3	364	180	69	
67-66-3	Chloroform	88	ug/m3	364	180	69	J
74-87-3	Chloromethane	ND	ug/m3	364	180	69	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	364	180	66	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	364	180	51	
98-82-8	Cumene	ND	ug/m3	364	180	55	
110-82-7	Cyclohexane	ND	ug/m3	364	360	120	
124-48-1	Dibromochloromethane	ND	ug/m3	364	180	51	
64-17-5	Ethanol	ND	ug/m3	364	1800	580	
100-41-4	Ethyl Benzene	ND	ug/m3	364	180	55	
75-69-4	Freon 11	ND	ug/m3	364	180	58	
76-13-1	Freon 113	34000	ug/m3	364	180	58	
76-14-2	Freon 114	ND	ug/m3	364	180	62	
75-71-8	Freon 12	ND	ug/m3	364	180	66	
306-83-2	Freon 123	ND	ug/m3	364	180	87	
354-23-4	Freon 123a	ND	ug/m3	364	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	364	180	84	
142-82-5	Heptane	ND	ug/m3	364	180	58	
87-68-3	Hexachlorobutadiene	ND	ug/m3	364	180	66	
110-54-3	Hexane	ND	ug/m3	364	180	62	
179601-23-	m,p-Xylene	ND	ug/m3	364	360	110	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	364	180	55	
75-09-2	Methylene Chloride	71	ug/m3	364	180	55	J FB
95-47-6	o-Xylene	ND	ug/m3	364	180	51	
103-65-1	Propylbenzene	ND	ug/m3	364	180	55	
100-42-5	Styrene	ND	ug/m3	364	180	55	
127-18-4	Tetrachloroethene	ND	ug/m3	364	180	51	
109-99-9	Tetrahydrofuran	ND	ug/m3	364	180	80	
108-88-3	Toluene	ND	ug/m3	364	180	58	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	364	180	62	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	364	180	58	
79-01-6	Trichloroethene	3500	ug/m3	364	180	55	
75-01-4	Vinyl Chloride	ND	ug/m3	364	180	69	

Sample **1203241200** **Sample Type** **Soil Gas** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	398	200	64	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	398	200	64	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	398	200	64	
75-34-3	1,1-Dichloroethane	ND	ug/m3	398	200	68	
75-35-4	1,1-Dichloroethene	ND	ug/m3	398	200	68	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	398	200	96	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	398	200	64	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	398	200	60	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	398	200	68	
107-06-2	1,2-Dichloroethane	ND	ug/m3	398	200	76	
78-87-5	1,2-Dichloropropane	ND	ug/m3	398	200	68	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	398	200	68	
106-99-0	1,3-Butadiene	ND	ug/m3	398	200	84	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	398	200	68	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	398	200	64	
123-91-1	1,4-Dioxane	ND	ug/m3	398	200	68	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	398	200	68	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	398	2000	92	
591-78-6	2-Hexanone	ND	ug/m3	398	200	72	
67-63-0	2-Propanol	ND	ug/m3	398	400	160	
107-05-1	3-Chloropropene	ND	ug/m3	398	200	64	
622-96-8	4-Ethyltoluene	ND	ug/m3	398	200	68	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	398	200	56	
67-64-1	Acetone	ND	ug/m3	398	2000	350	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	398	200	60	
71-43-2	Benzene	ND	ug/m3	398	200	56	
75-27-4	Bromodichloromethane	ND	ug/m3	398	200	64	
75-25-2	Bromoform	ND	ug/m3	398	200	56	
74-83-9	Bromomethane	ND	ug/m3	398	200	76	
75-15-0	Carbon Disulfide	ND	ug/m3	398	2000	60	
56-23-5	Carbon Tetrachloride	ND	ug/m3	398	200	64	
108-90-7	Chlorobenzene	ND	ug/m3	398	200	64	
75-00-3	Chloroethane	ND	ug/m3	398	200	76	
67-66-3	Chloroform	88	ug/m3	398	200	76	J
74-87-3	Chloromethane	ND	ug/m3	398	200	76	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	398	200	72	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	398	200	56	
98-82-8	Cumene	ND	ug/m3	398	200	60	
110-82-7	Cyclohexane	ND	ug/m3	398	400	130	
124-48-1	Dibromochloromethane	ND	ug/m3	398	200	56	
64-17-5	Ethanol	ND	ug/m3	398	2000	640	
100-41-4	Ethyl Benzene	ND	ug/m3	398	200	60	
75-69-4	Freon 11	ND	ug/m3	398	200	64	

76-13-1	Freon 113	33000	ug/m3	398	200	64	
76-14-2	Freon 114	ND	ug/m3	398	200	68	
75-71-8	Freon 12	ND	ug/m3	398	200	72	
306-83-2	Freon 123	ND	ug/m3	398	200	96	
354-23-4	Freon 123a	ND	ug/m3	398	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	398	200	92	
142-82-5	Heptane	ND	ug/m3	398	200	64	
87-68-3	Hexachlorobutadiene	ND	ug/m3	398	200	72	
110-54-3	Hexane	ND	ug/m3	398	200	68	
179601-23-	m,p-Xylene	ND	ug/m3	398	400	120	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	398	200	60	
75-09-2	Methylene Chloride	86	ug/m3	398	200	60	J FB
95-47-6	o-Xylene	ND	ug/m3	398	200	56	
103-65-1	Propylbenzene	ND	ug/m3	398	200	60	
100-42-5	Styrene	ND	ug/m3	398	200	60	
127-18-4	Tetrachloroethene	ND	ug/m3	398	200	56	
109-99-9	Tetrahydrofuran	ND	ug/m3	398	200	88	
108-88-3	Toluene	ND	ug/m3	398	200	64	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	398	200	68	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	398	200	64	
79-01-6	Trichloroethene	3300	ug/m3	398	200	60	
75-01-4	Vinyl Chloride	ND	ug/m3	398	200	76	

Sample 1203241310 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	468.89	230	75	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	468.89	230	75	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	468.89	230	75	
75-34-3	1,1-Dichloroethane	ND	ug/m3	468.89	230	80	
75-35-4	1,1-Dichloroethene	ND	ug/m3	468.89	230	80	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	468.89	230	110	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	468.89	230	75	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	468.89	230	70	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	468.89	230	80	
107-06-2	1,2-Dichloroethane	ND	ug/m3	468.89	230	89	
78-87-5	1,2-Dichloropropane	ND	ug/m3	468.89	230	80	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	468.89	230	80	
106-99-0	1,3-Butadiene	ND	ug/m3	468.89	230	98	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	468.89	230	80	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	468.89	230	75	
123-91-1	1,4-Dioxane	ND	ug/m3	468.89	230	80	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	468.89	230	80	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	468.89	2300	110	
591-78-6	2-Hexanone	ND	ug/m3	468.89	230	84	
67-63-0	2-Propanol	ND	ug/m3	468.89	470	190	
107-05-1	3-Chloropropene	ND	ug/m3	468.89	230	75	

622-96-8	4-Ethyltoluene	ND	ug/m3	468.89	230	80	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	468.89	230	66	
67-64-1	Acetone	ND	ug/m3	468.89	2300	410	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	468.89	230	70	
71-43-2	Benzene	ND	ug/m3	468.89	230	66	
75-27-4	Bromodichloromethane	ND	ug/m3	468.89	230	75	
75-25-2	Bromoform	ND	ug/m3	468.89	230	66	
74-83-9	Bromomethane	ND	ug/m3	468.89	230	89	
75-15-0	Carbon Disulfide	ND	ug/m3	468.89	2300	70	
56-23-5	Carbon Tetrachloride	ND	ug/m3	468.89	230	75	
108-90-7	Chlorobenzene	ND	ug/m3	468.89	230	75	
75-00-3	Chloroethane	ND	ug/m3	468.89	230	89	
67-66-3	Chloroform	ND	ug/m3	468.89	230	89	
74-87-3	Chloromethane	ND	ug/m3	468.89	230	89	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	468.89	230	84	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	468.89	230	66	
98-82-8	Cumene	ND	ug/m3	468.89	230	70	
110-82-7	Cyclohexane	ND	ug/m3	468.89	470	150	
124-48-1	Dibromochloromethane	ND	ug/m3	468.89	230	66	
64-17-5	Ethanol	ND	ug/m3	468.89	2300	750	
100-41-4	Ethyl Benzene	ND	ug/m3	468.89	230	70	
75-69-4	Freon 11	ND	ug/m3	468.89	230	75	
76-13-1	Freon 113	32000	ug/m3	468.89	230	75	
76-14-2	Freon 114	ND	ug/m3	468.89	230	80	
75-71-8	Freon 12	ND	ug/m3	468.89	230	84	
306-83-2	Freon 123	ND	ug/m3	468.89	230	110	
354-23-4	Freon 123a	ND	ug/m3	468.89	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	468.89	230	110	
142-82-5	Heptane	ND	ug/m3	468.89	230	75	
87-68-3	Hexachlorobutadiene	ND	ug/m3	468.89	230	84	
110-54-3	Hexane	ND	ug/m3	468.89	230	80	
179601-23-	m,p-Xylene	ND	ug/m3	468.89	470	140	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	468.89	230	70	
75-09-2	Methylene Chloride	93	ug/m3	468.89	230	70	J FB
95-47-6	o-Xylene	ND	ug/m3	468.89	230	66	
103-65-1	Propylbenzene	ND	ug/m3	468.89	230	70	
100-42-5	Styrene	ND	ug/m3	468.89	230	70	
127-18-4	Tetrachloroethene	ND	ug/m3	468.89	230	66	
109-99-9	Tetrahydrofuran	ND	ug/m3	468.89	230	100	
108-88-3	Toluene	ND	ug/m3	468.89	230	75	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	468.89	230	80	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	468.89	230	75	
79-01-6	Trichloroethene	3200	ug/m3	468.89	230	70	
75-01-4	Vinyl Chloride	ND	ug/m3	468.89	230	89	

Sample **1203241415** **Sample Type** **Soil Gas** **Analysis Method** **TO-15**

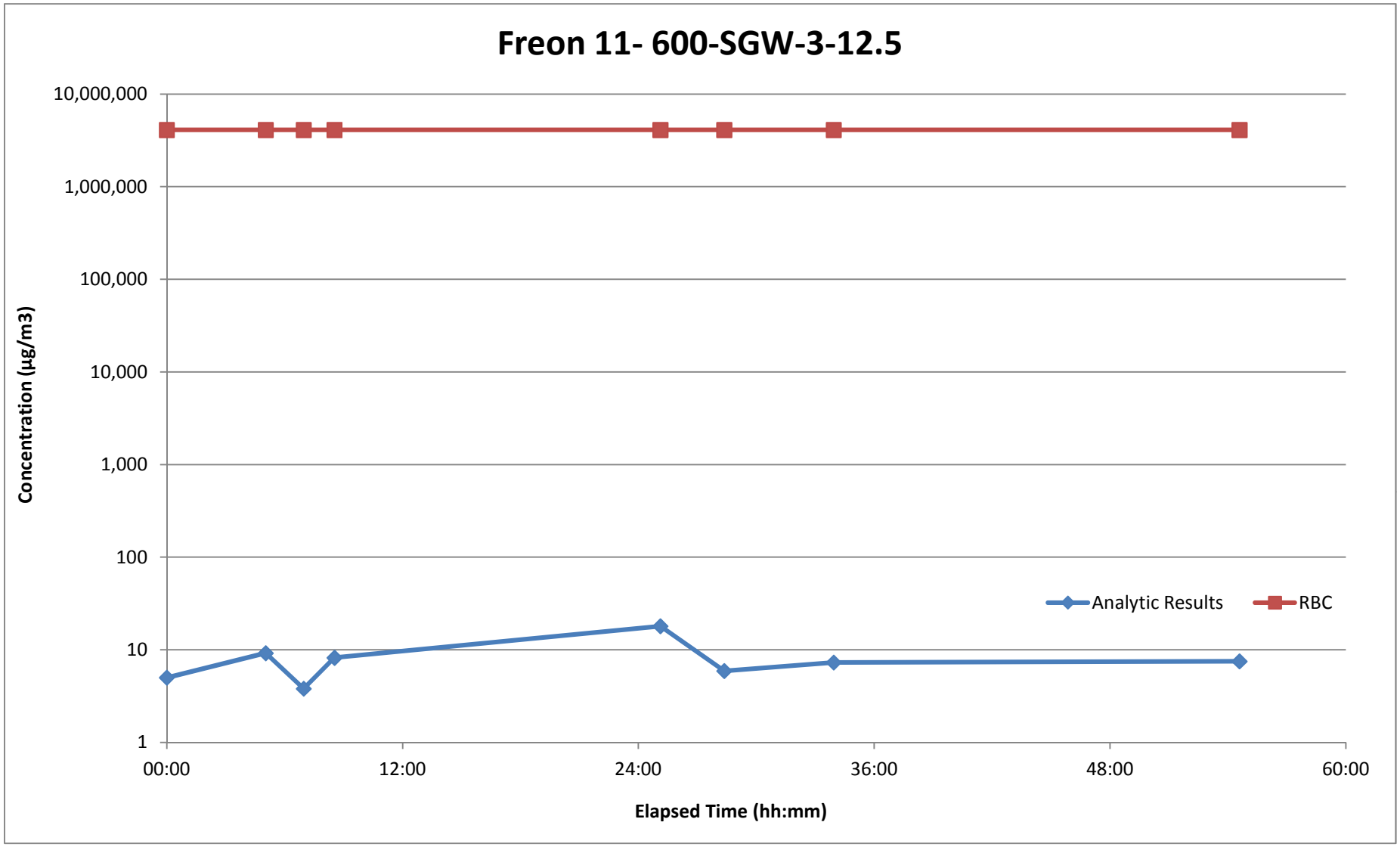
CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	403.33	200	65	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	403.33	200	65	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	403.33	200	65	
75-34-3	1,1-Dichloroethane	ND	ug/m3	403.33	200	69	
75-35-4	1,1-Dichloroethene	ND	ug/m3	403.33	200	69	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	403.33	200	97	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	403.33	200	65	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	403.33	200	61	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	403.33	200	69	
107-06-2	1,2-Dichloroethane	ND	ug/m3	403.33	200	77	
78-87-5	1,2-Dichloropropane	ND	ug/m3	403.33	200	69	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	403.33	200	69	
106-99-0	1,3-Butadiene	ND	ug/m3	403.33	200	85	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	403.33	200	69	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	403.33	200	65	
123-91-1	1,4-Dioxane	ND	ug/m3	403.33	200	69	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	403.33	200	69	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	403.33	2000	93	
591-78-6	2-Hexanone	ND	ug/m3	403.33	200	73	
67-63-0	2-Propanol	ND	ug/m3	403.33	400	160	
107-05-1	3-Chloropropene	ND	ug/m3	403.33	200	65	
622-96-8	4-Ethyltoluene	ND	ug/m3	403.33	200	69	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	403.33	200	56	
67-64-1	Acetone	ND	ug/m3	403.33	2000	350	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	403.33	200	61	
71-43-2	Benzene	ND	ug/m3	403.33	200	56	
75-27-4	Bromodichloromethane	ND	ug/m3	403.33	200	65	
75-25-2	Bromoform	ND	ug/m3	403.33	200	56	
74-83-9	Bromomethane	ND	ug/m3	403.33	200	77	
75-15-0	Carbon Disulfide	ND	ug/m3	403.33	2000	61	
56-23-5	Carbon Tetrachloride	ND	ug/m3	403.33	200	65	
108-90-7	Chlorobenzene	ND	ug/m3	403.33	200	65	
75-00-3	Chloroethane	ND	ug/m3	403.33	200	77	
67-66-3	Chloroform	87	ug/m3	403.33	200	77	J
74-87-3	Chloromethane	ND	ug/m3	403.33	200	77	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	403.33	200	73	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	403.33	200	56	
98-82-8	Cumene	ND	ug/m3	403.33	200	61	
110-82-7	Cyclohexane	ND	ug/m3	403.33	400	130	
124-48-1	Dibromochloromethane	ND	ug/m3	403.33	200	56	
64-17-5	Ethanol	ND	ug/m3	403.33	2000	650	
100-41-4	Ethyl Benzene	ND	ug/m3	403.33	200	61	
75-69-4	Freon 11	ND	ug/m3	403.33	200	65	

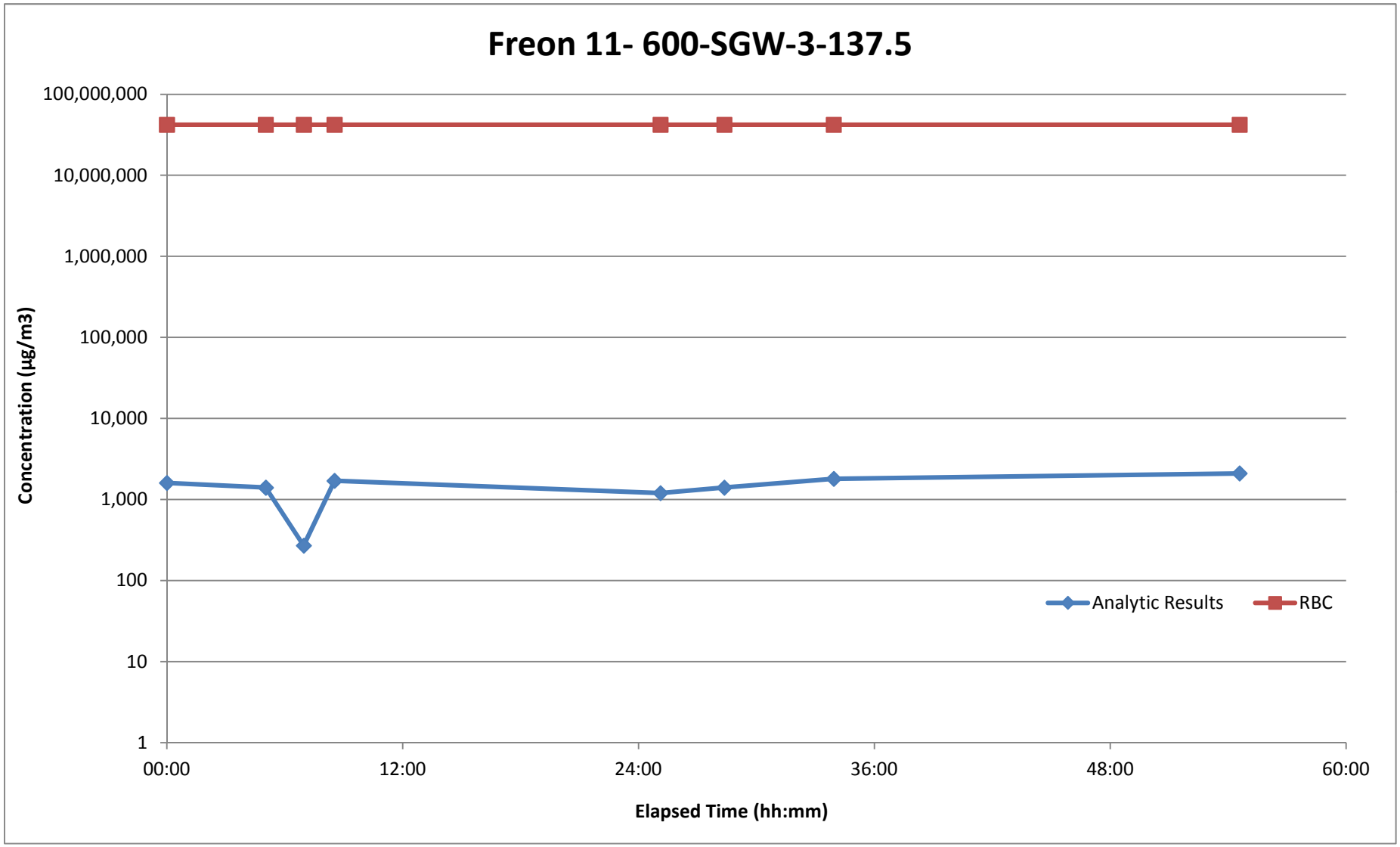
76-13-1	Freon 113	32000	ug/m3	403.33	200	65	
76-14-2	Freon 114	ND	ug/m3	403.33	200	69	
75-71-8	Freon 12	ND	ug/m3	403.33	200	73	
306-83-2	Freon 123	ND	ug/m3	403.33	200	97	
354-23-4	Freon 123a	ND	ug/m3	403.33	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	403.33	200	93	
142-82-5	Heptane	ND	ug/m3	403.33	200	65	
87-68-3	Hexachlorobutadiene	ND	ug/m3	403.33	200	73	
110-54-3	Hexane	ND	ug/m3	403.33	200	69	
179601-23-	m,p-Xylene	ND	ug/m3	403.33	400	120	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	403.33	200	61	
75-09-2	Methylene Chloride	81	ug/m3	403.33	200	61	J FB
95-47-6	o-Xylene	ND	ug/m3	403.33	200	56	
103-65-1	Propylbenzene	ND	ug/m3	403.33	200	61	
100-42-5	Styrene	ND	ug/m3	403.33	200	61	
127-18-4	Tetrachloroethene	ND	ug/m3	403.33	200	56	
109-99-9	Tetrahydrofuran	ND	ug/m3	403.33	200	89	
108-88-3	Toluene	ND	ug/m3	403.33	200	65	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	403.33	200	69	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	403.33	200	65	
79-01-6	Trichloroethene	3200	ug/m3	403.33	200	61	
75-01-4	Vinyl Chloride	ND	ug/m3	403.33	200	77	

Appendix E

Graphs of COCs vs. RBCs

(600-SGW-3 and 600 SGW-5)


Freon 11- 600-SGW-3-12.5
10,000,000
1,000,000
100,000
10,000
1,000
100
10
1
Concentration (µg/m3)
00:00
12:00
24:00
36:00
48:00
60:00
Elapsed Time (hh:mm)
Analytic Results
RBC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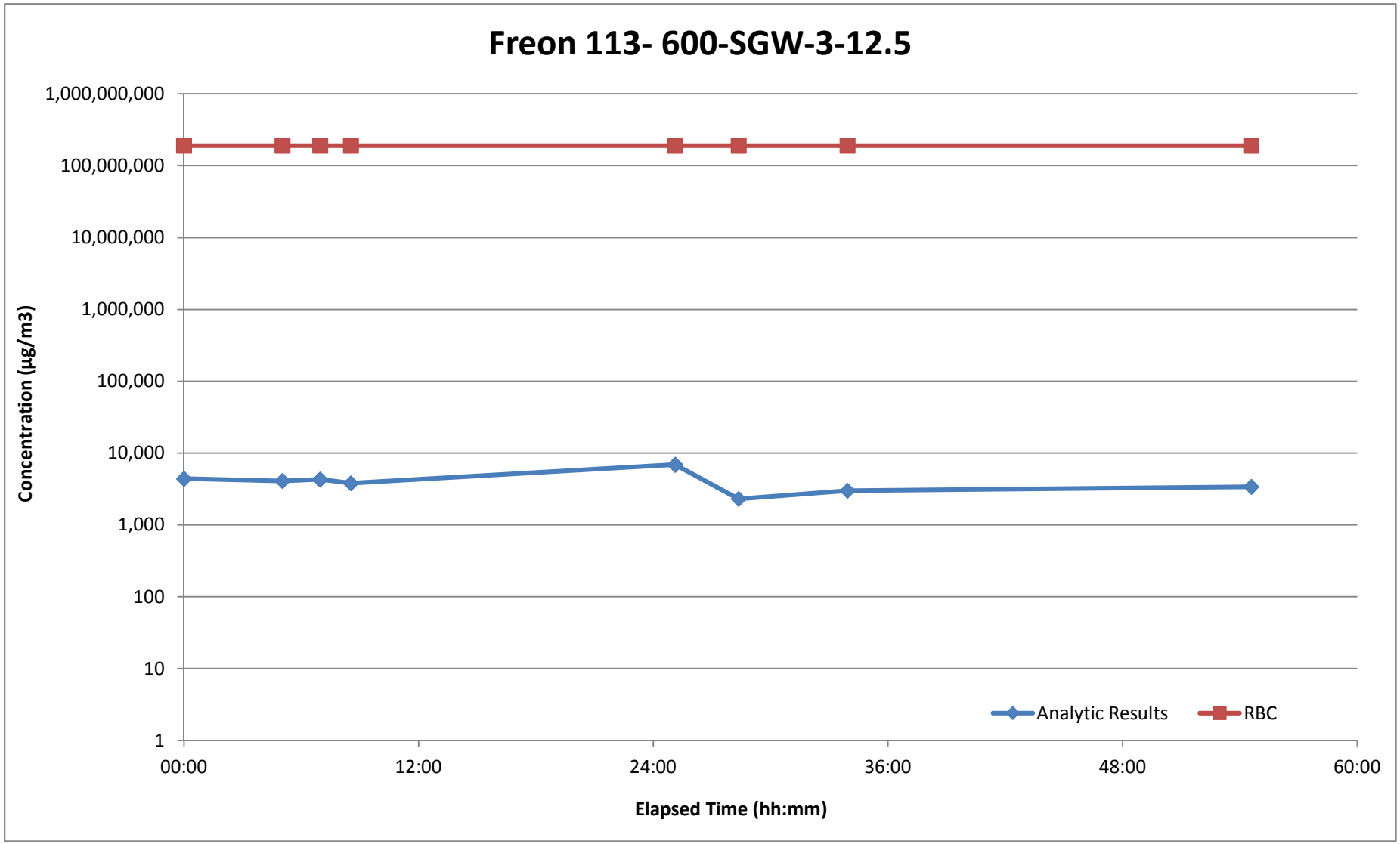
10,000,000
1,000,000
100,000
10,000
1,000
100
10
1
Concentration (µg/m3)
00:00
12:00
24:00
36:00
48:00
60:00
Elapsed Time (hh:mm)
Analytic Results
RBC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100,000,000
10,000,000
1,000,000
100,000
10,000
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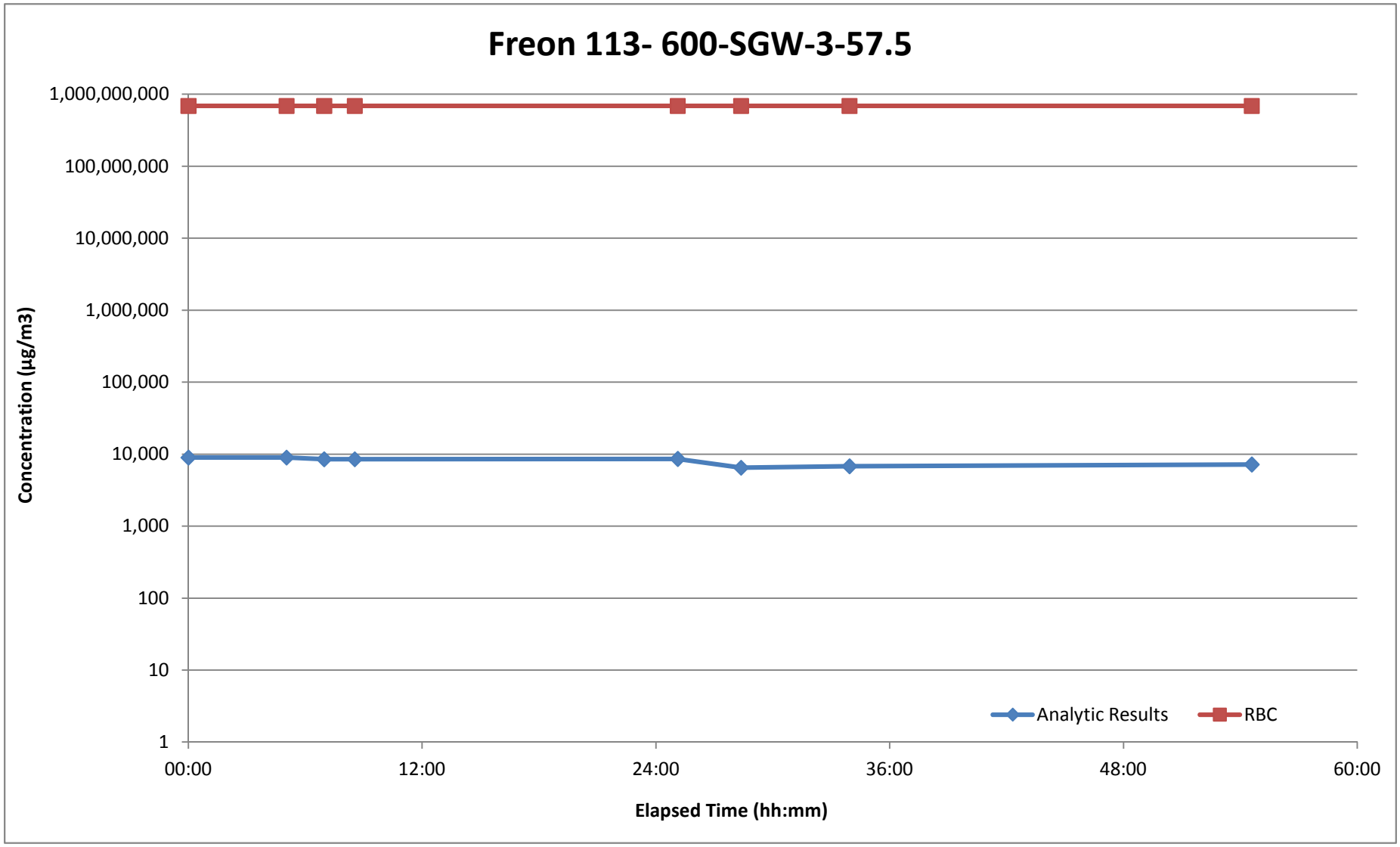
100
10
1
Concentration (µg/m3)
00:00
12:00
24:00
36:00
48:00
60:00
Elapsed Time (hh:mm)
Analytic Results
RBC


Freon 113- 600-SGW-3-57.5
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100,000
10,000
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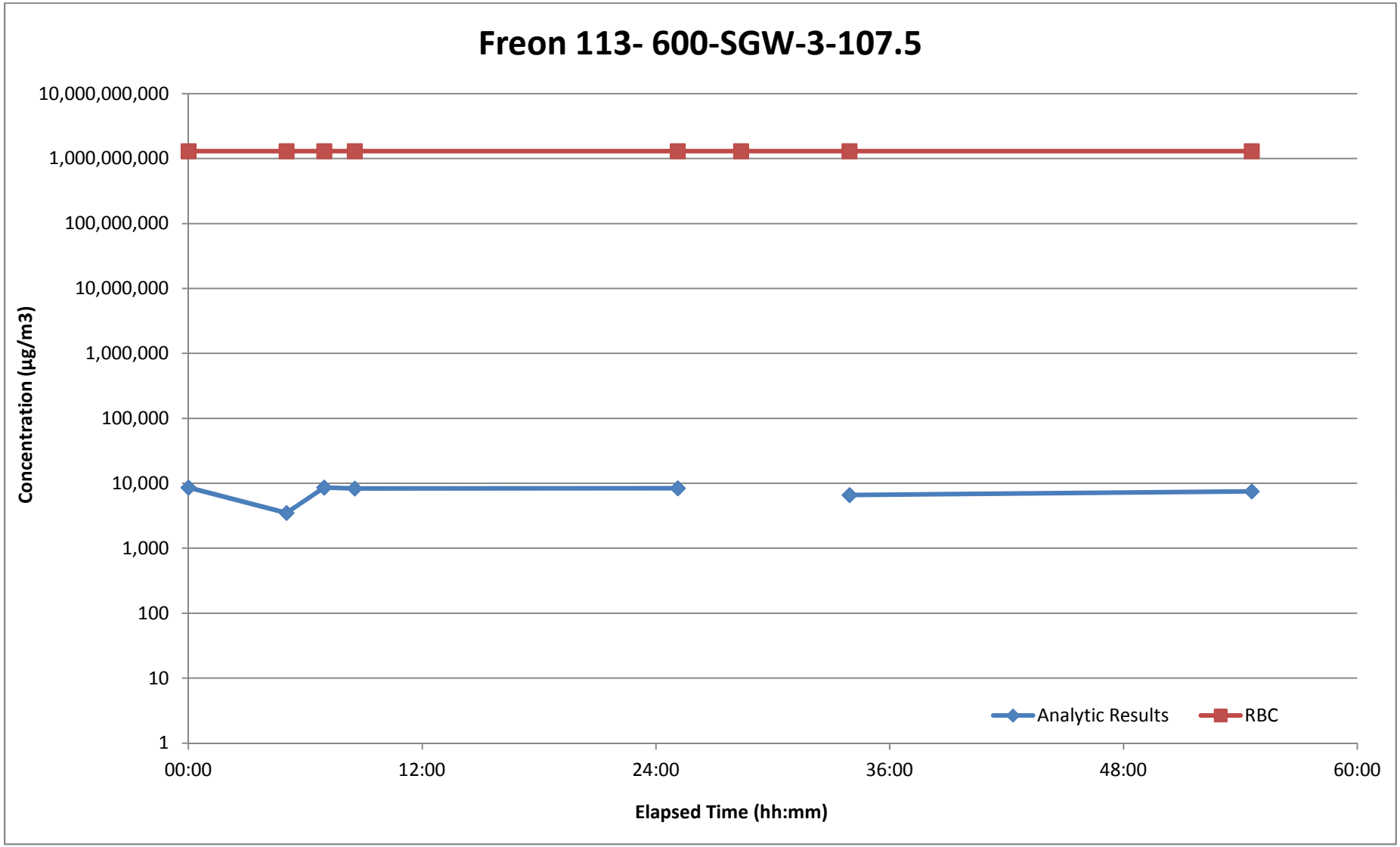
100
10
1
Concentration (µg/m3)
00:00
12:00
24:00
36:00
48:00
60:00
Elapsed Time (hh:mm)
Analytic Results
RBC


Freon 113- 600-SGW-3-107.5
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100,000,000
10,000,000
1,000,000
100,000
10,000
1,000
100
10
1
Concentration (µg/m3)
00:00
12:00
24:00
36:00
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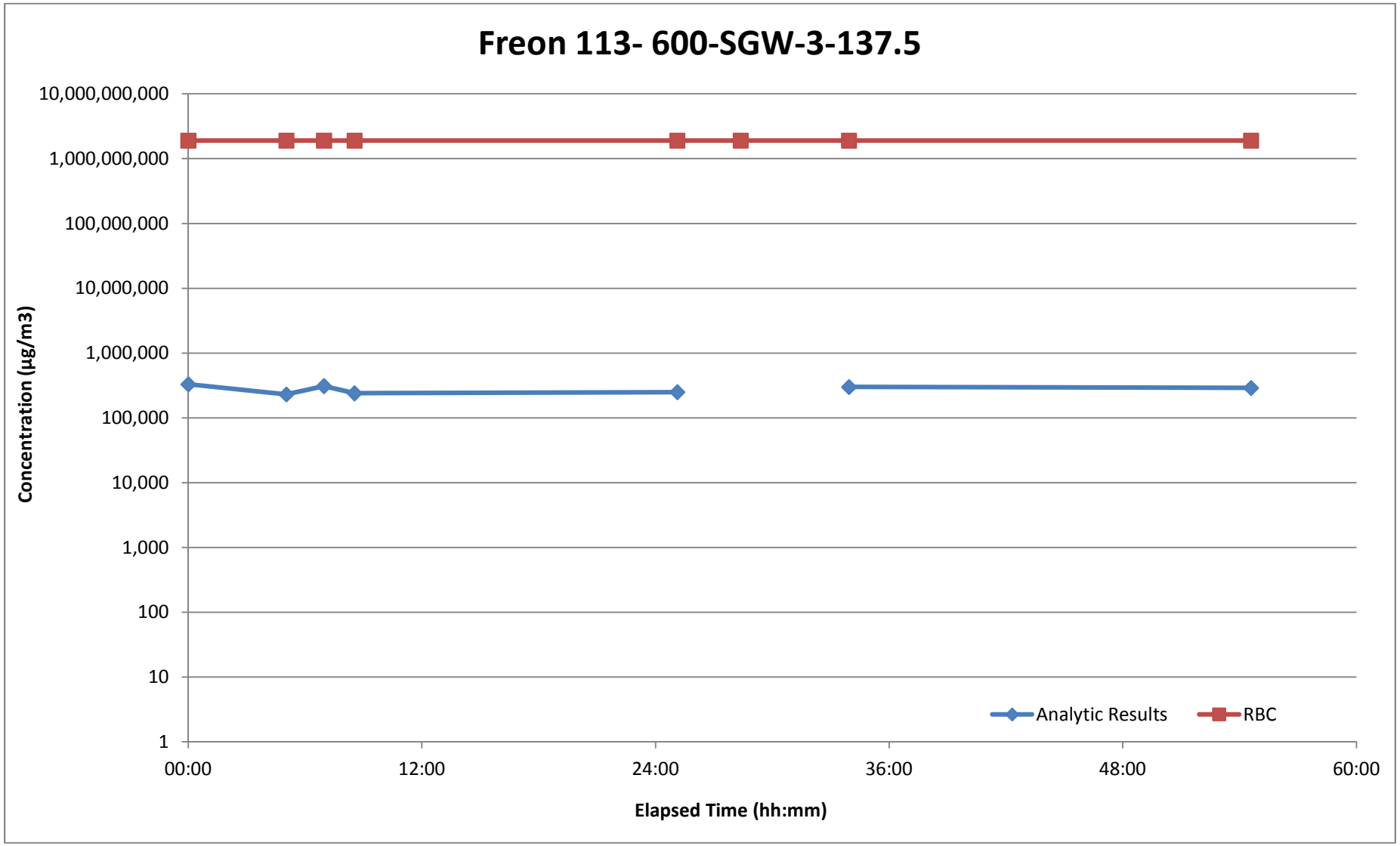
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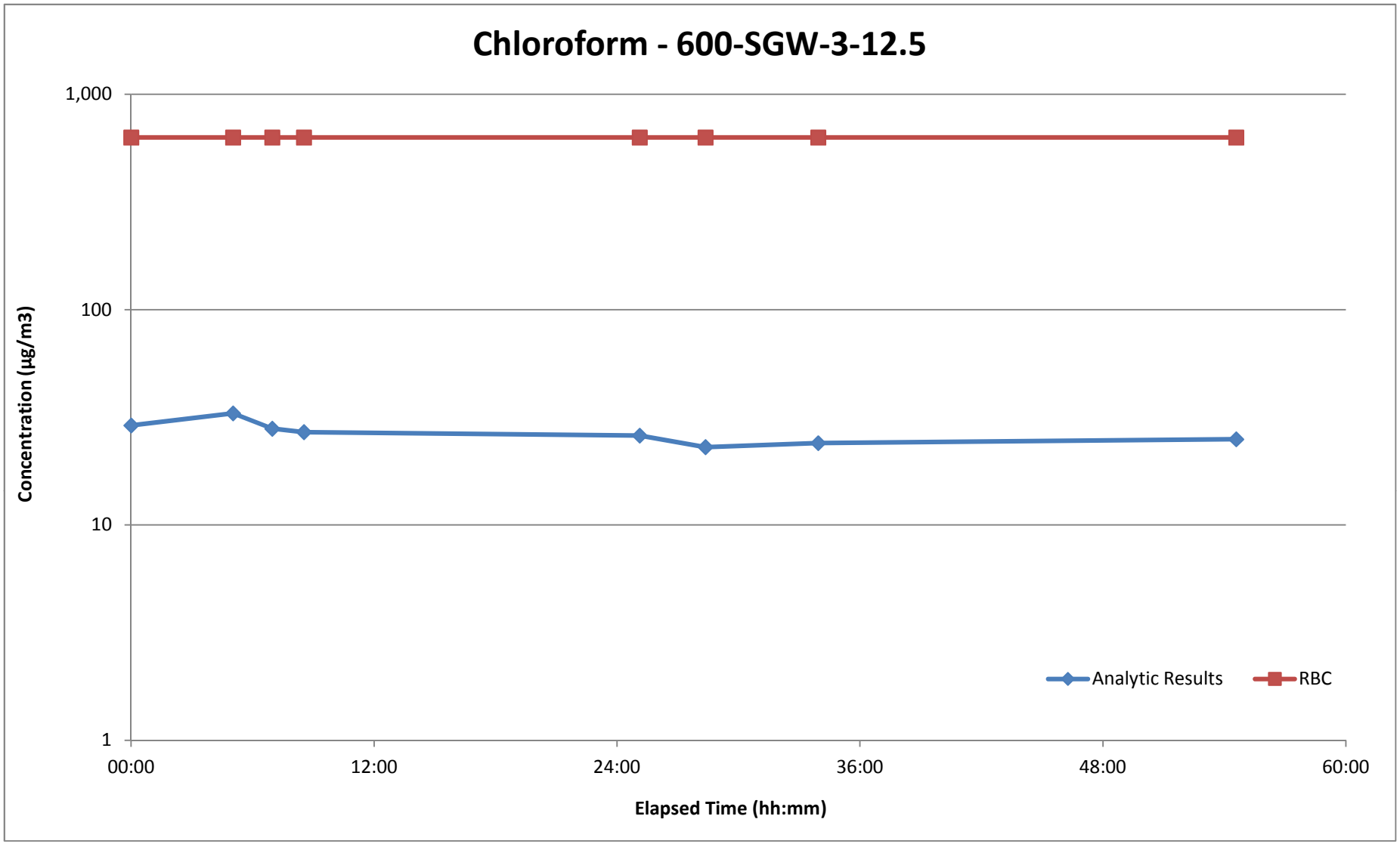
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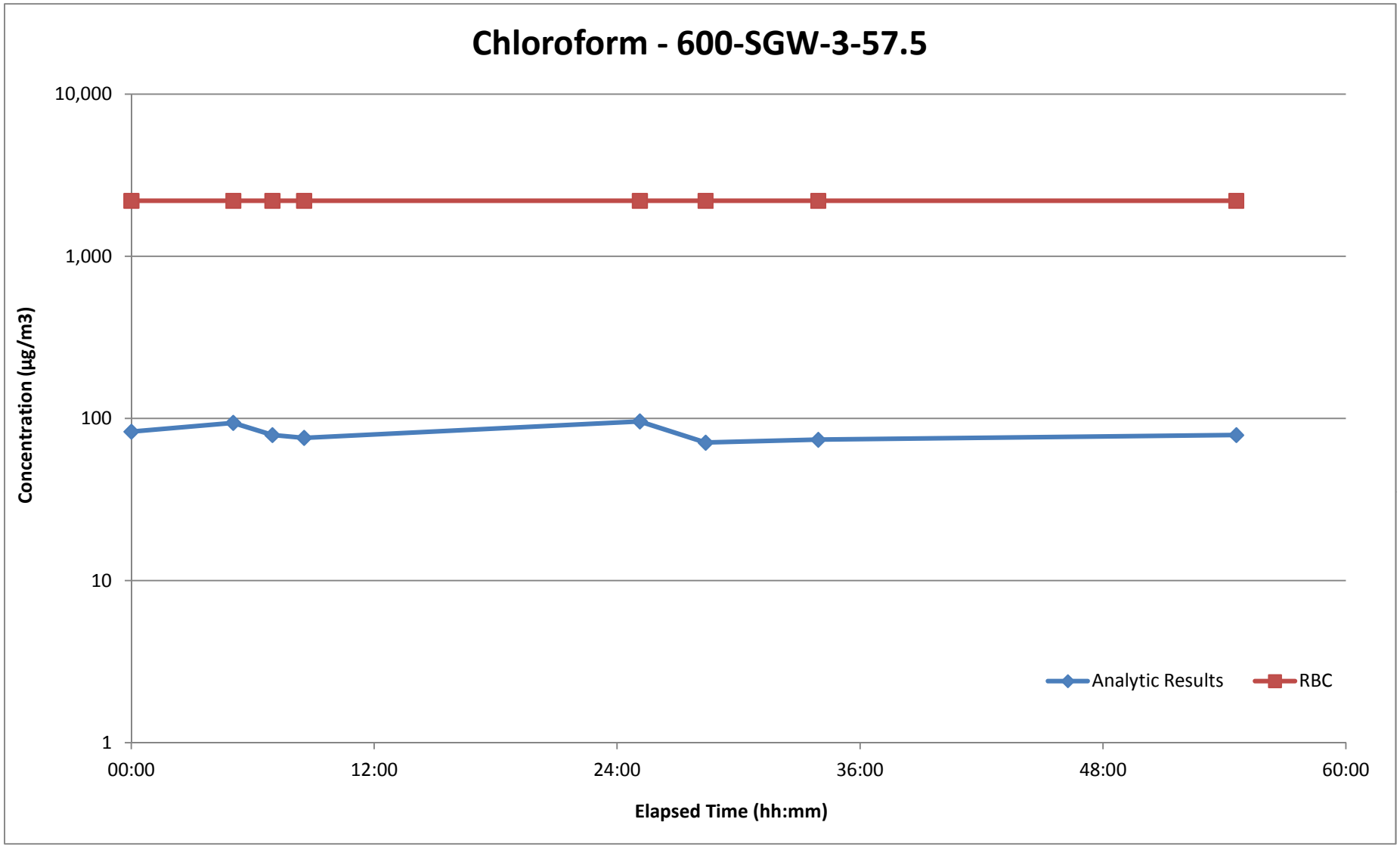
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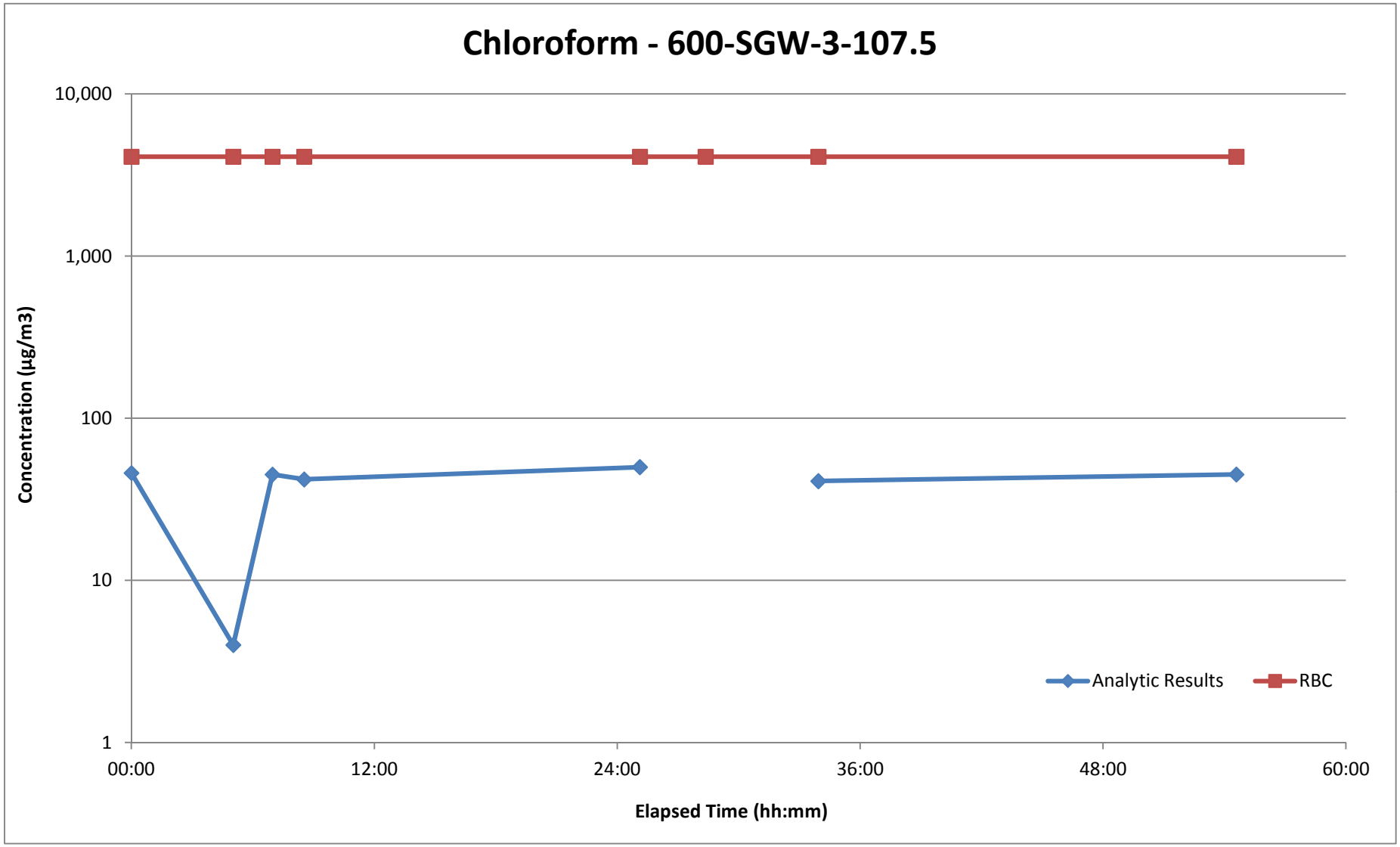
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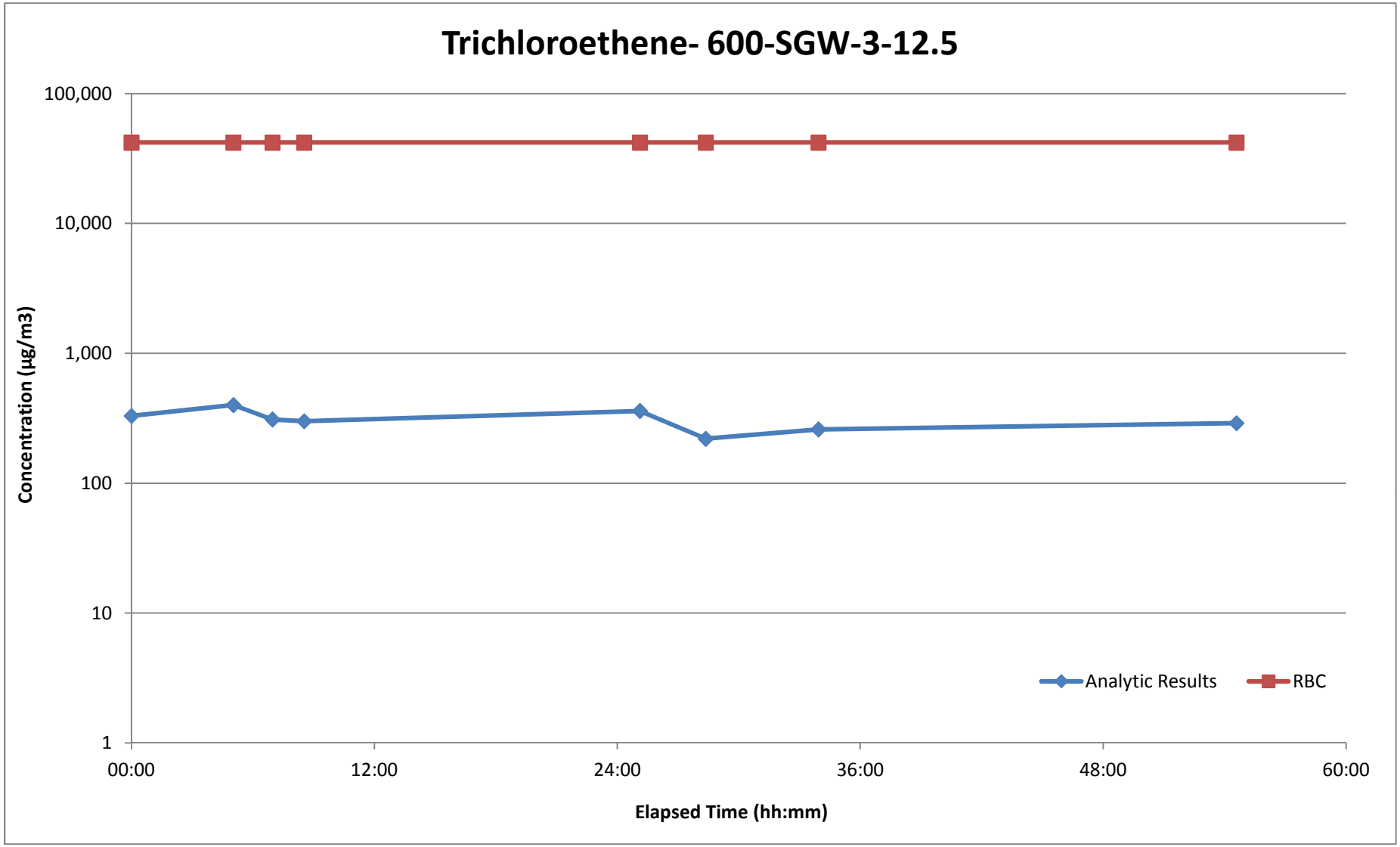
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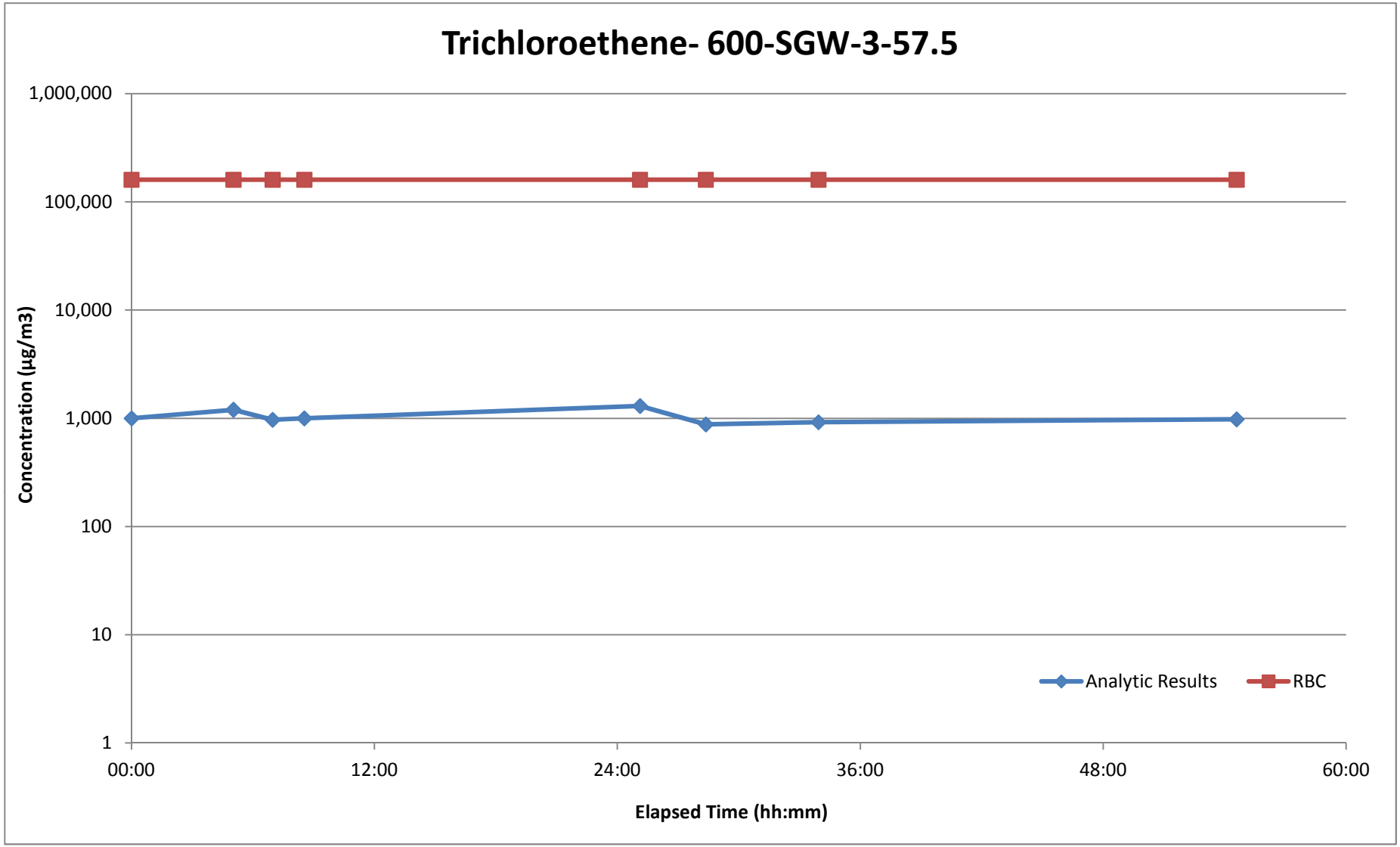
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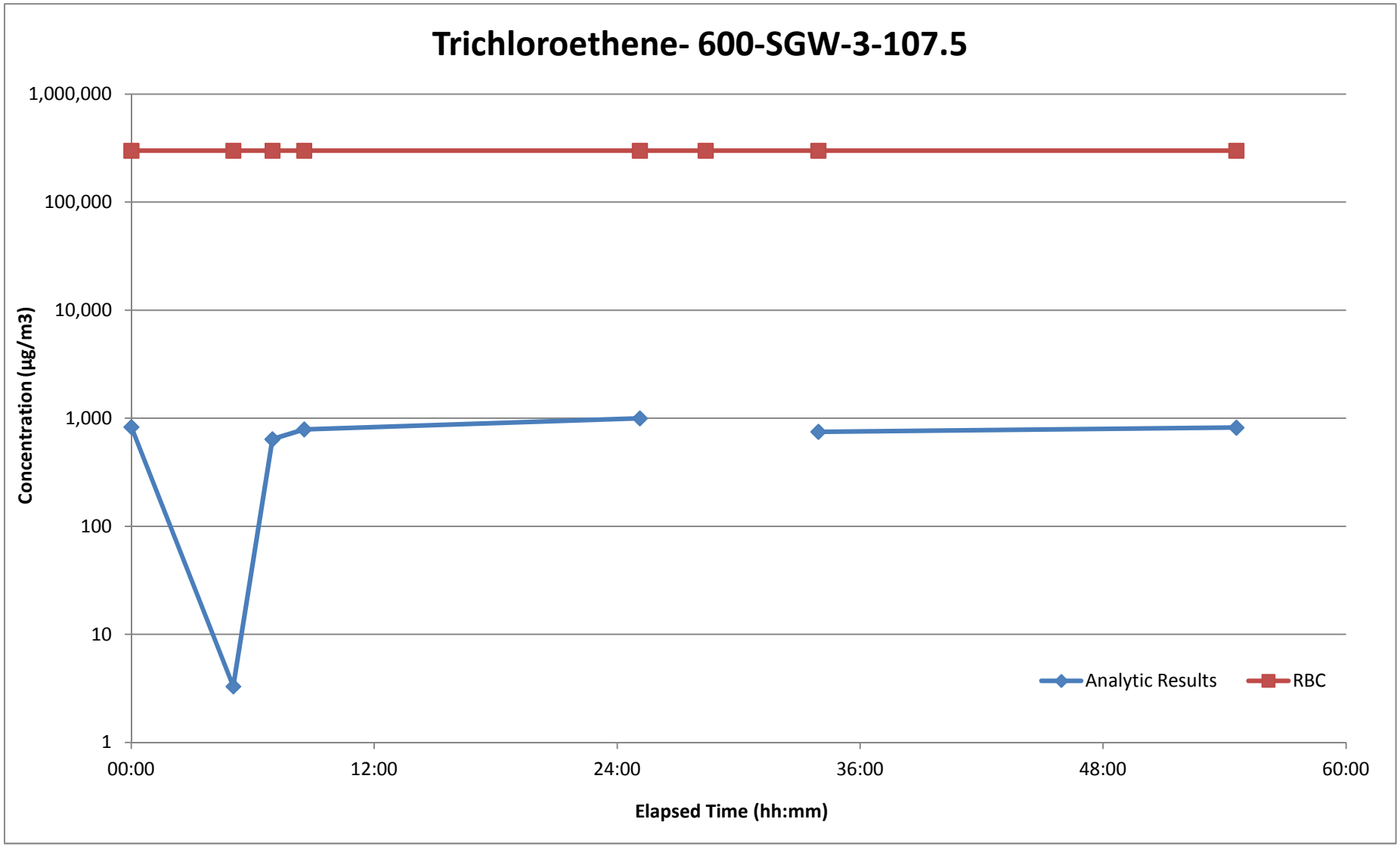
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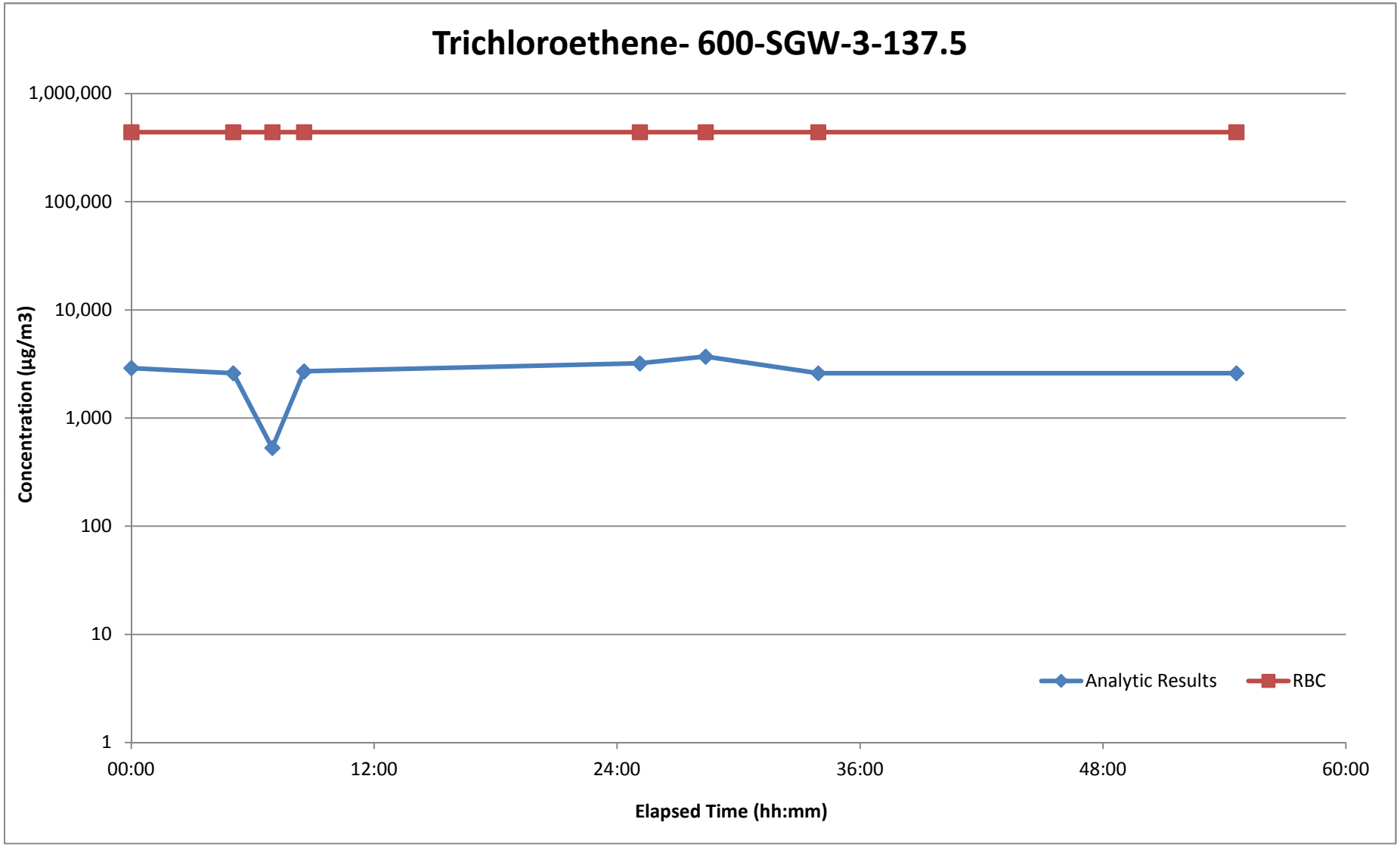
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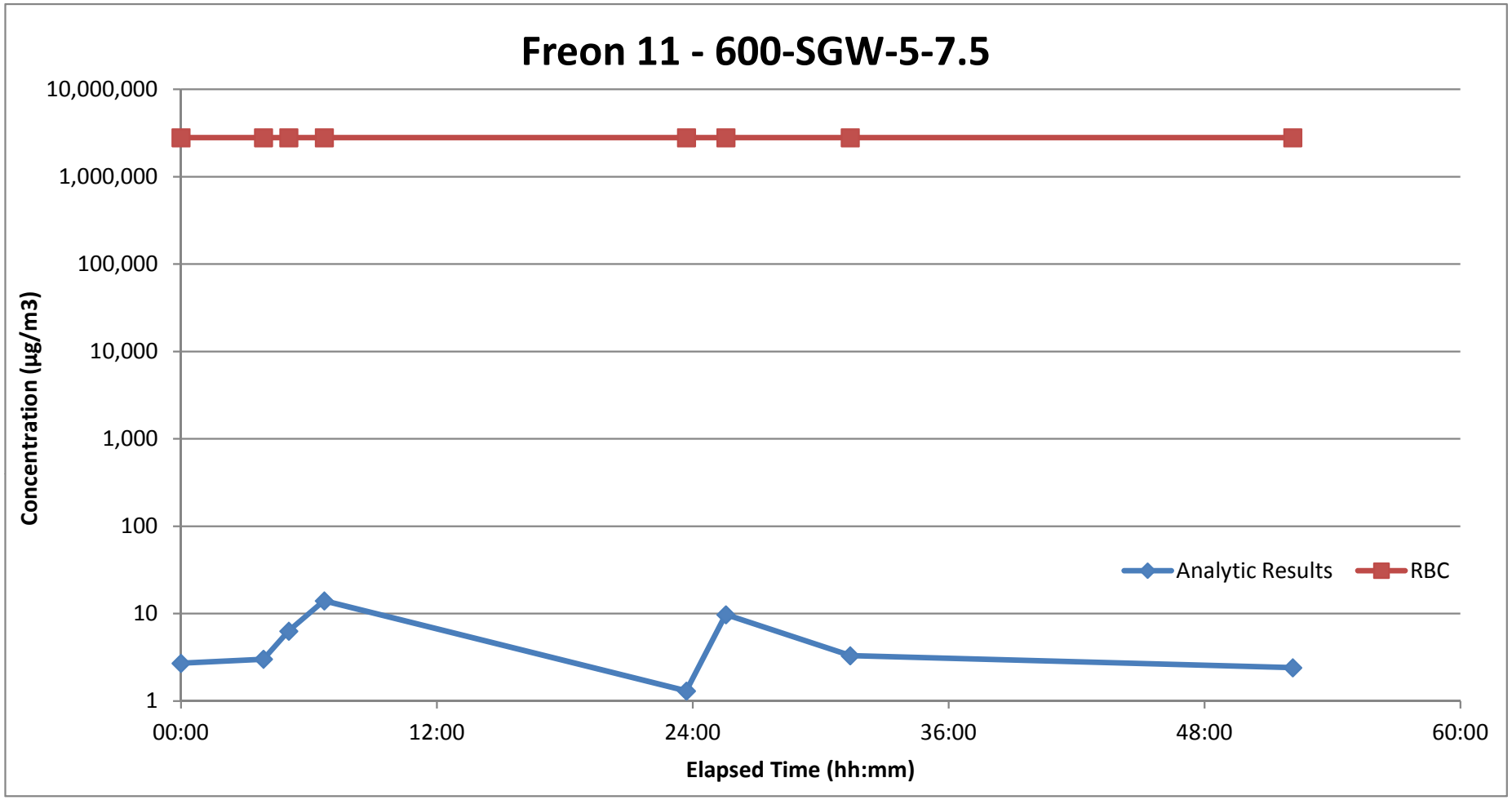
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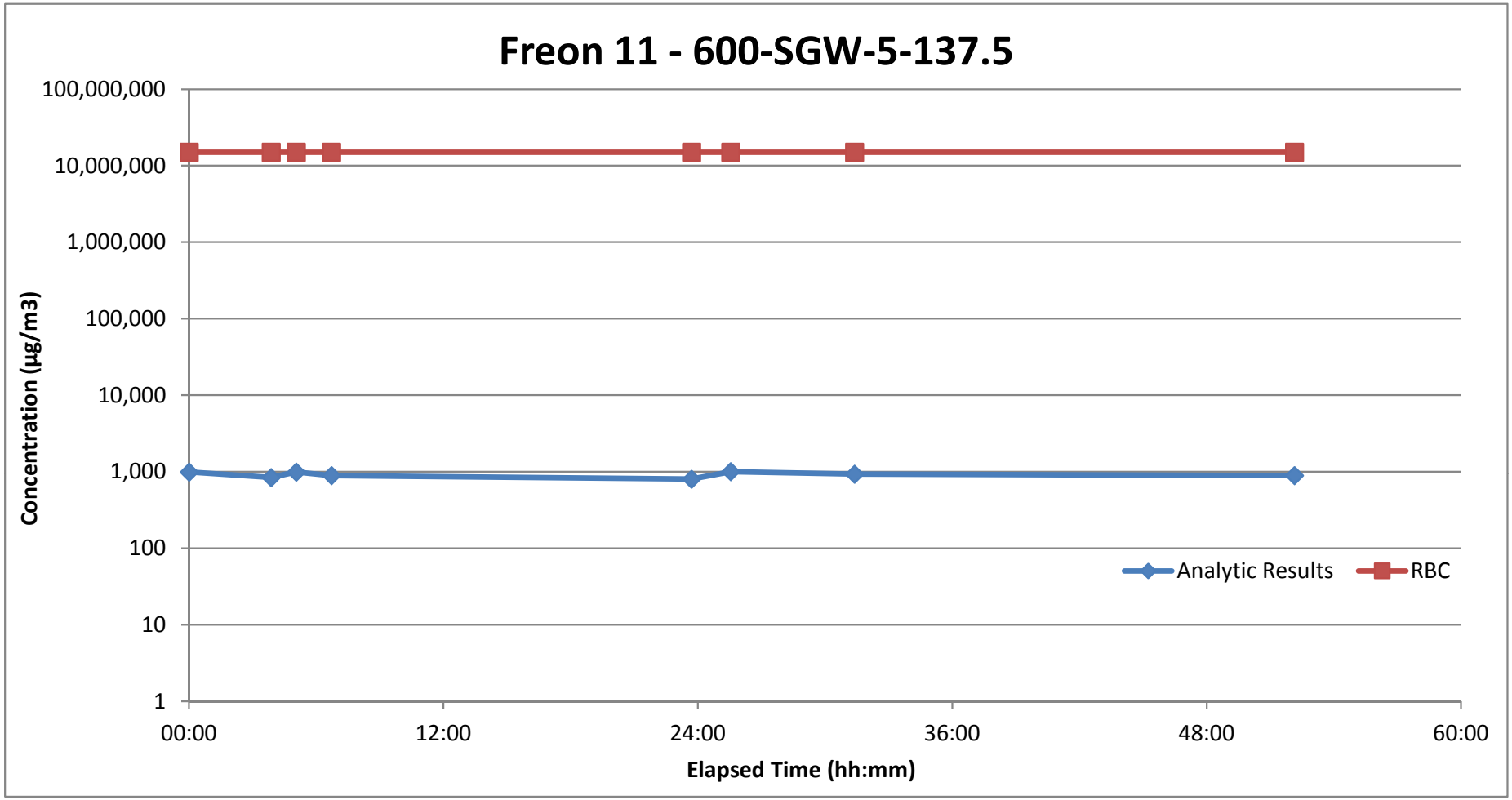
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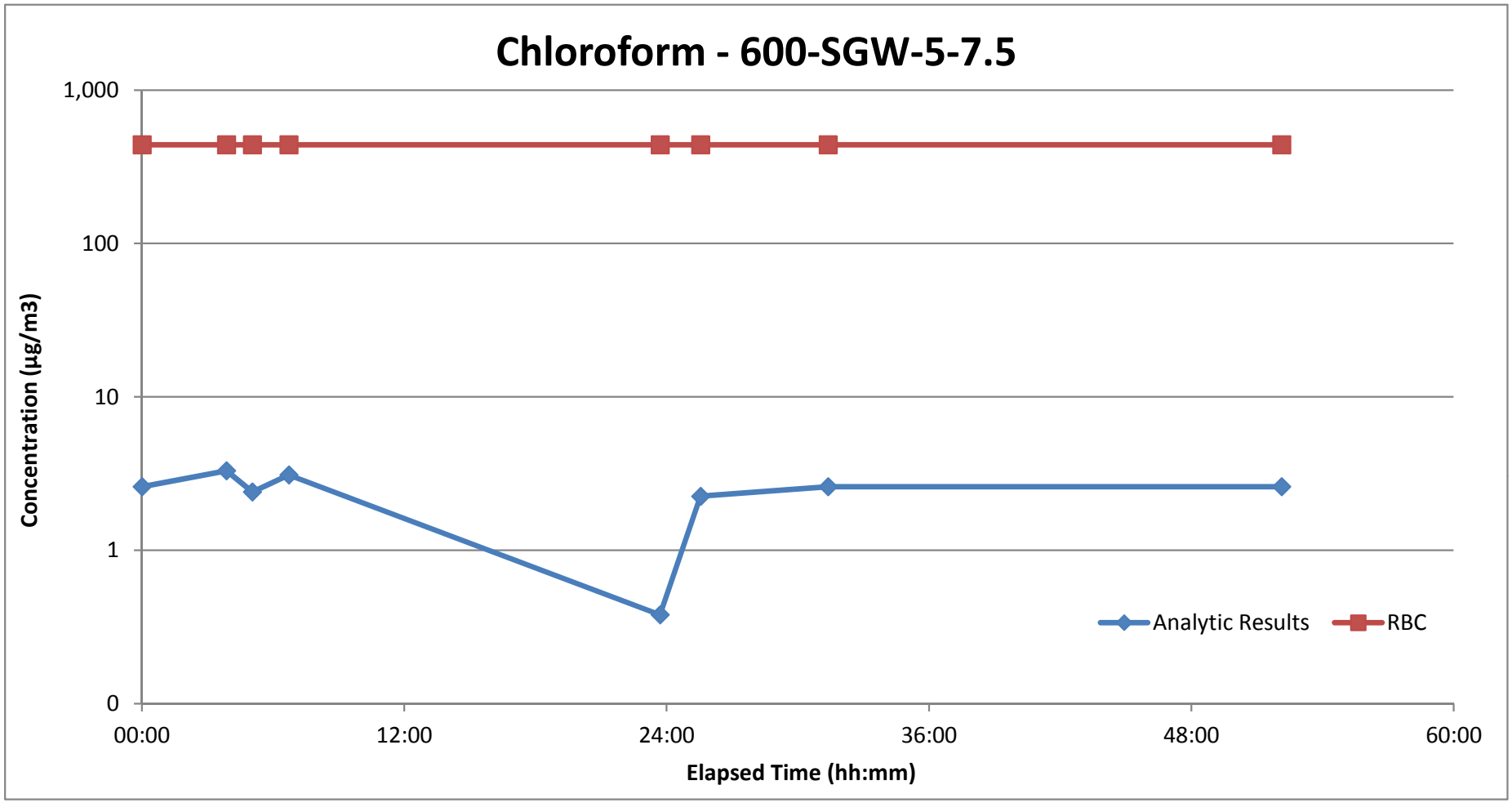
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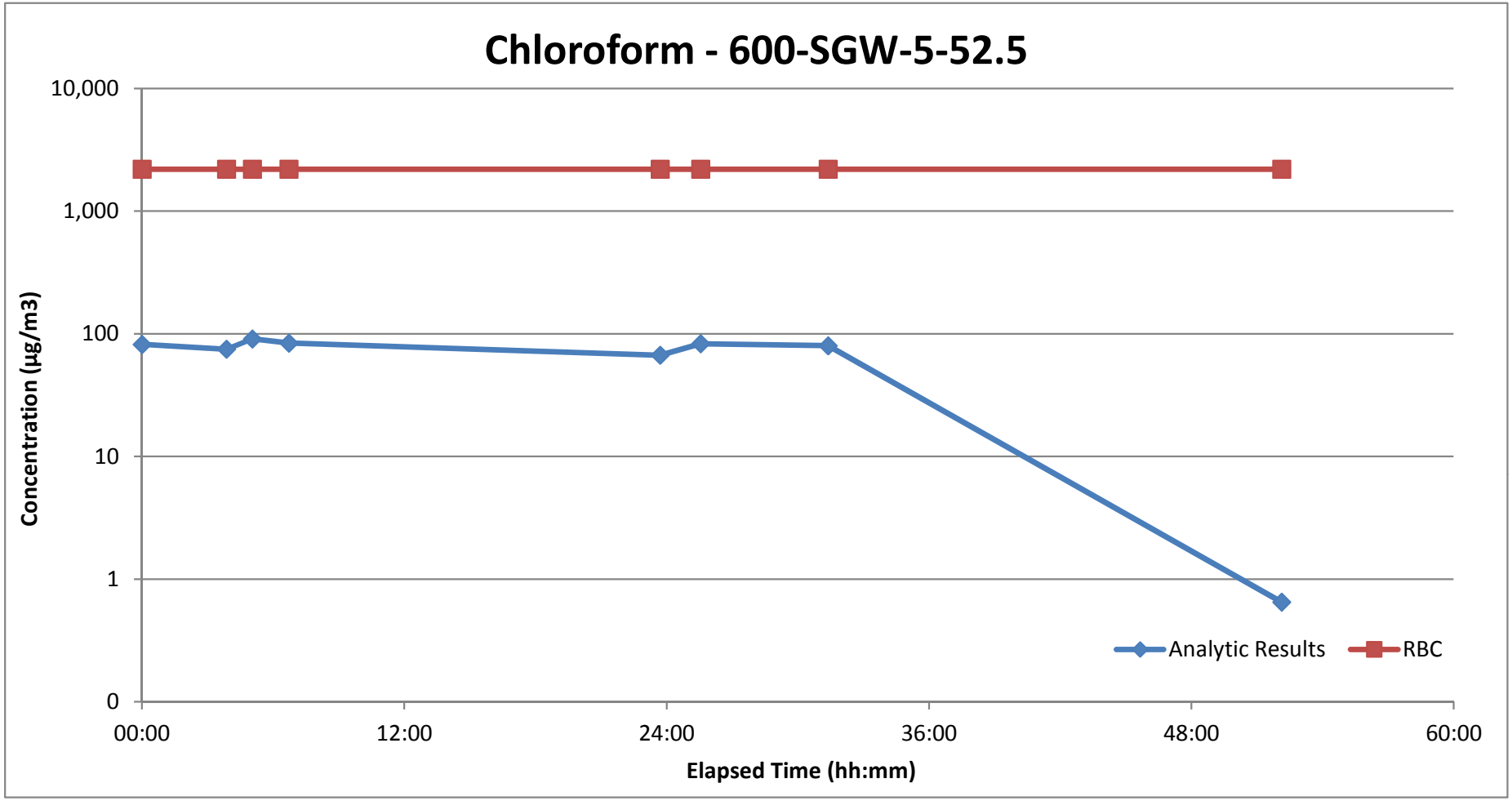
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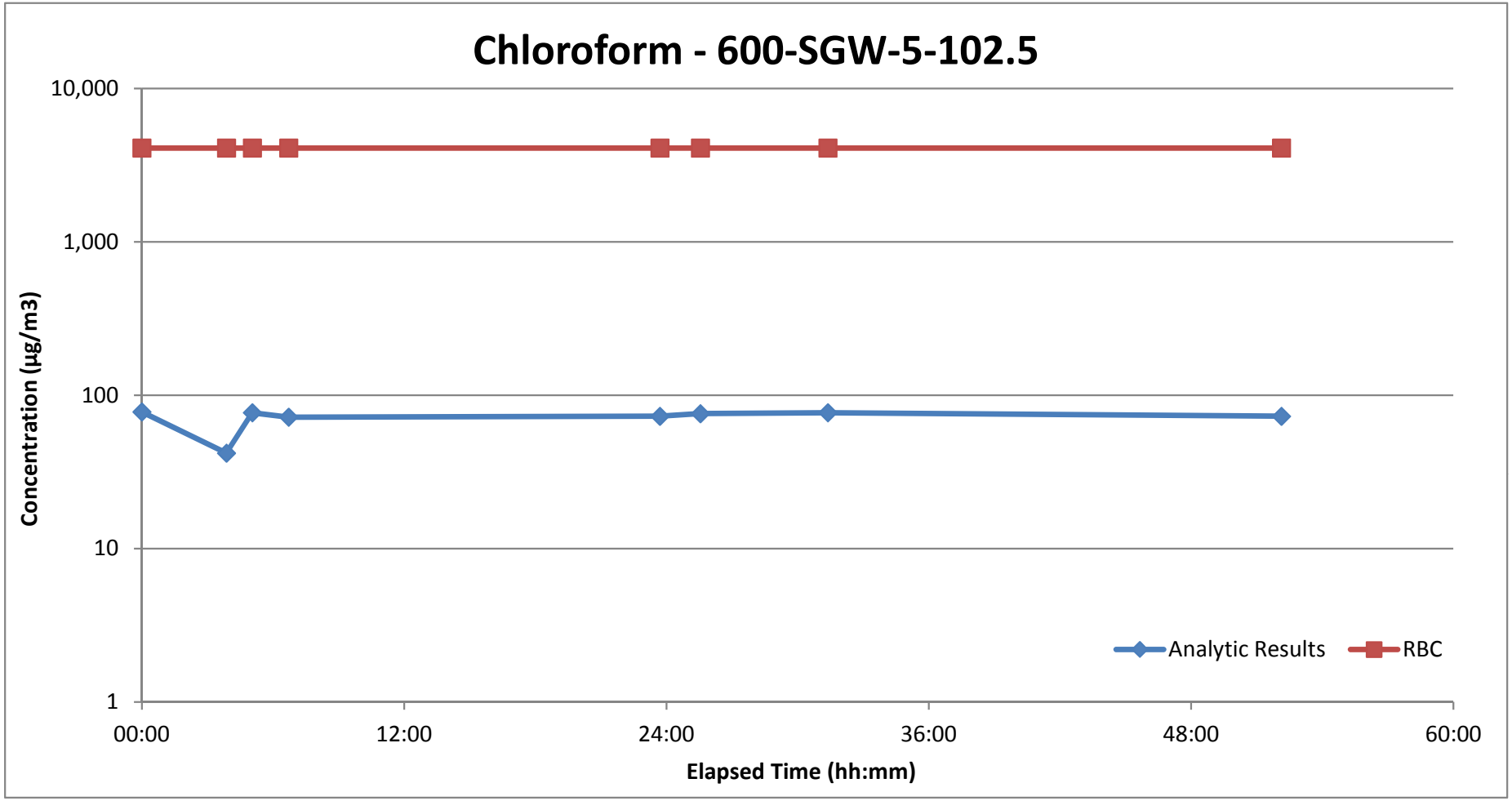
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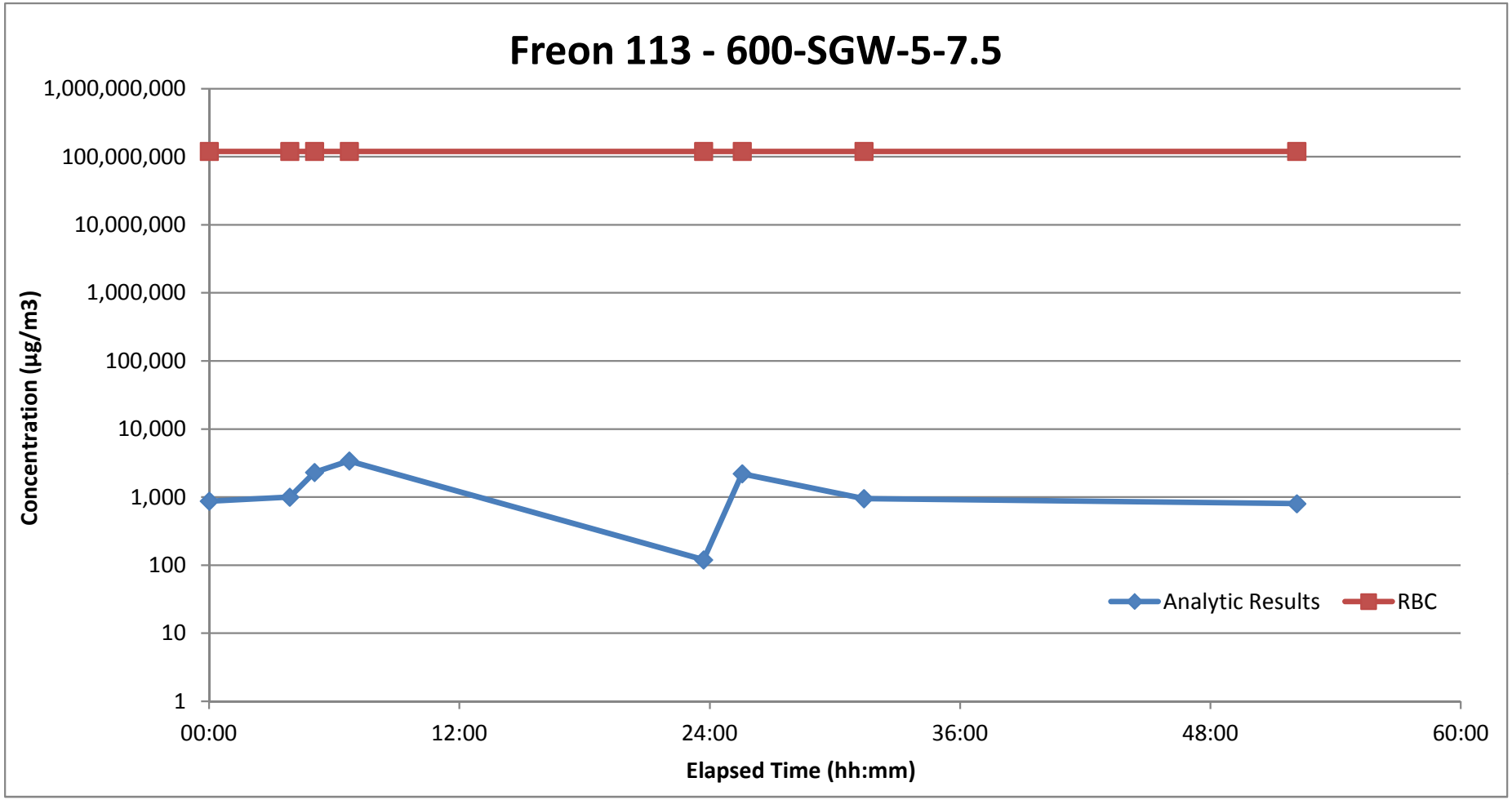
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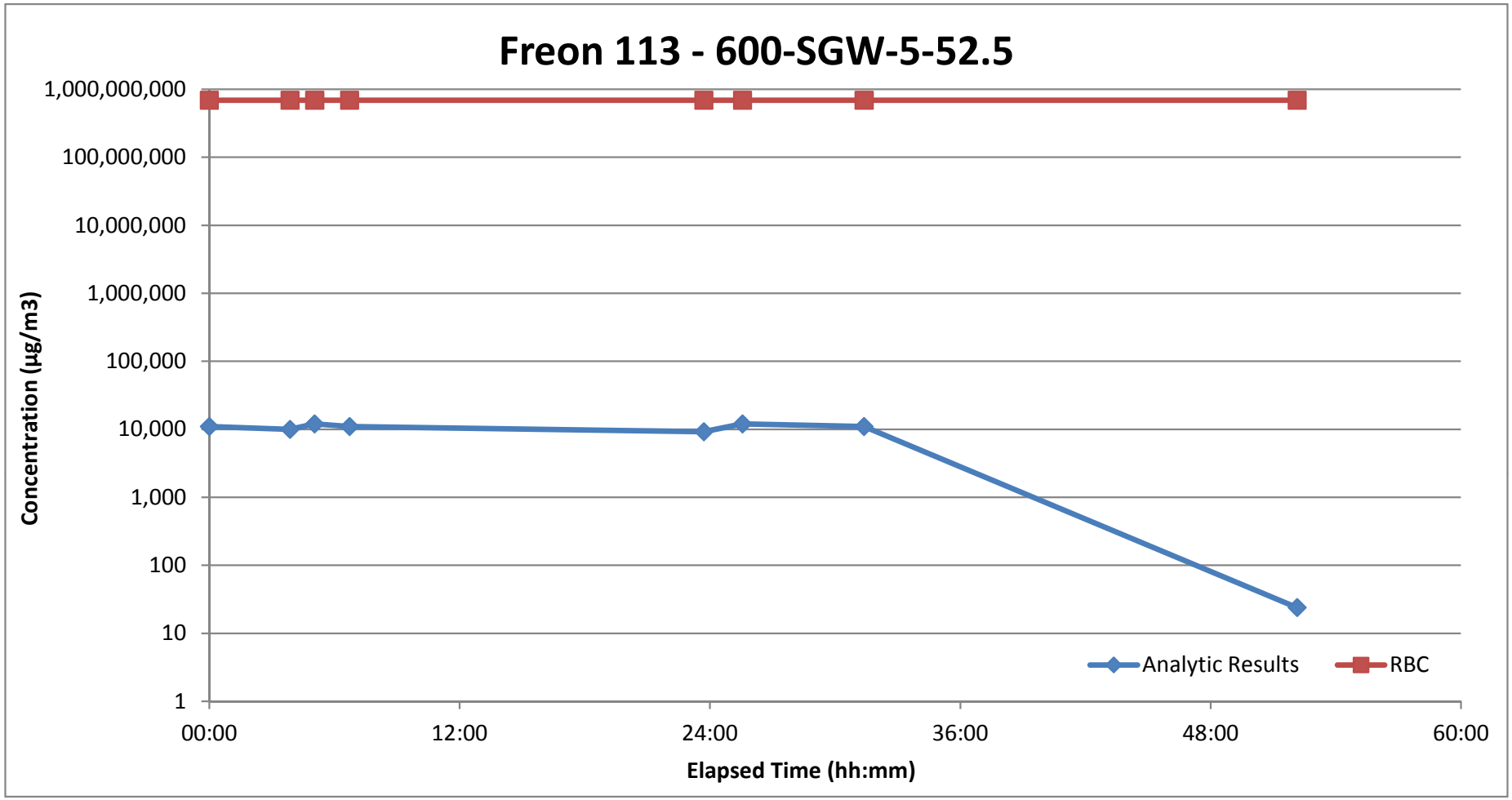
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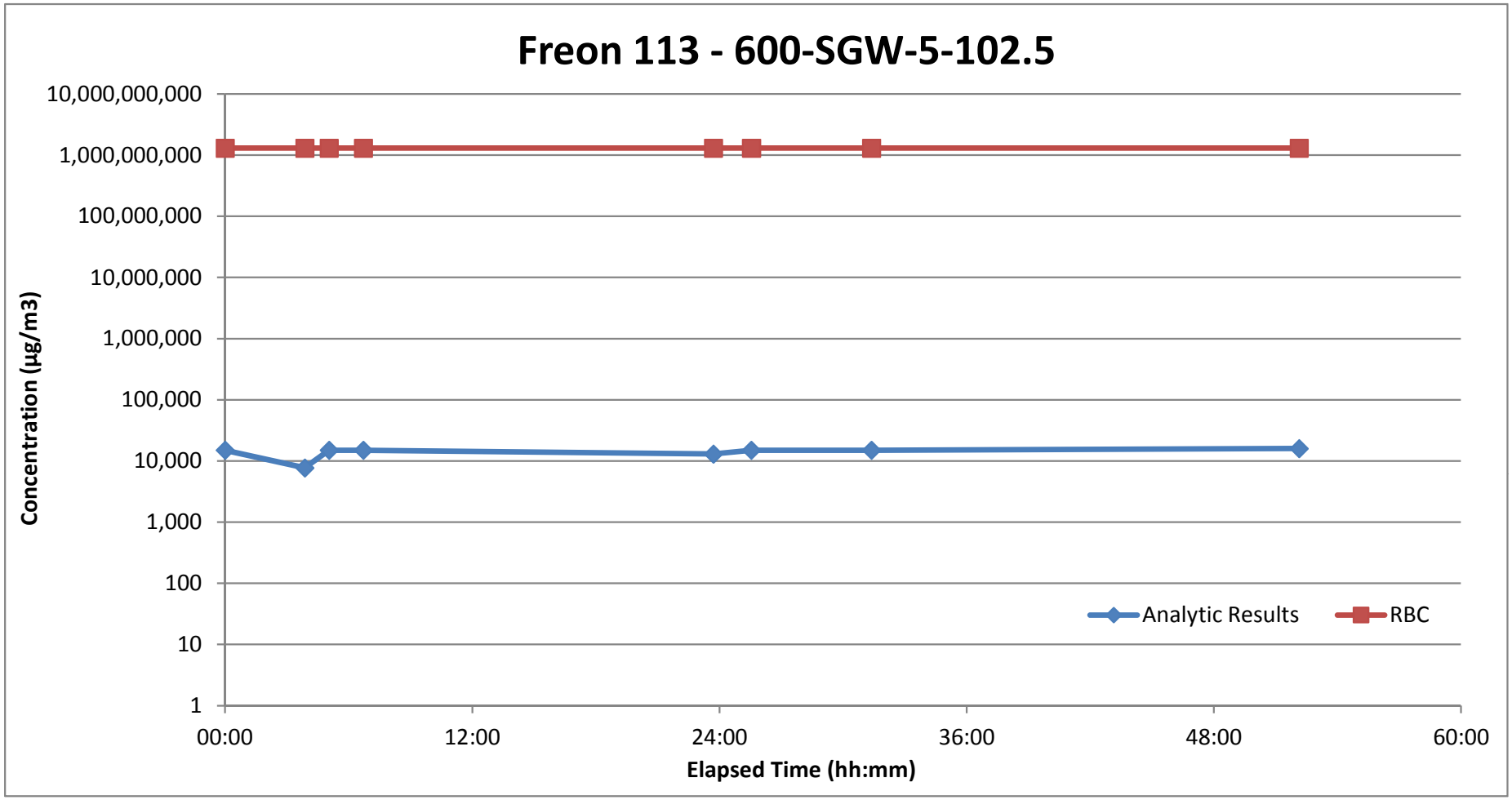
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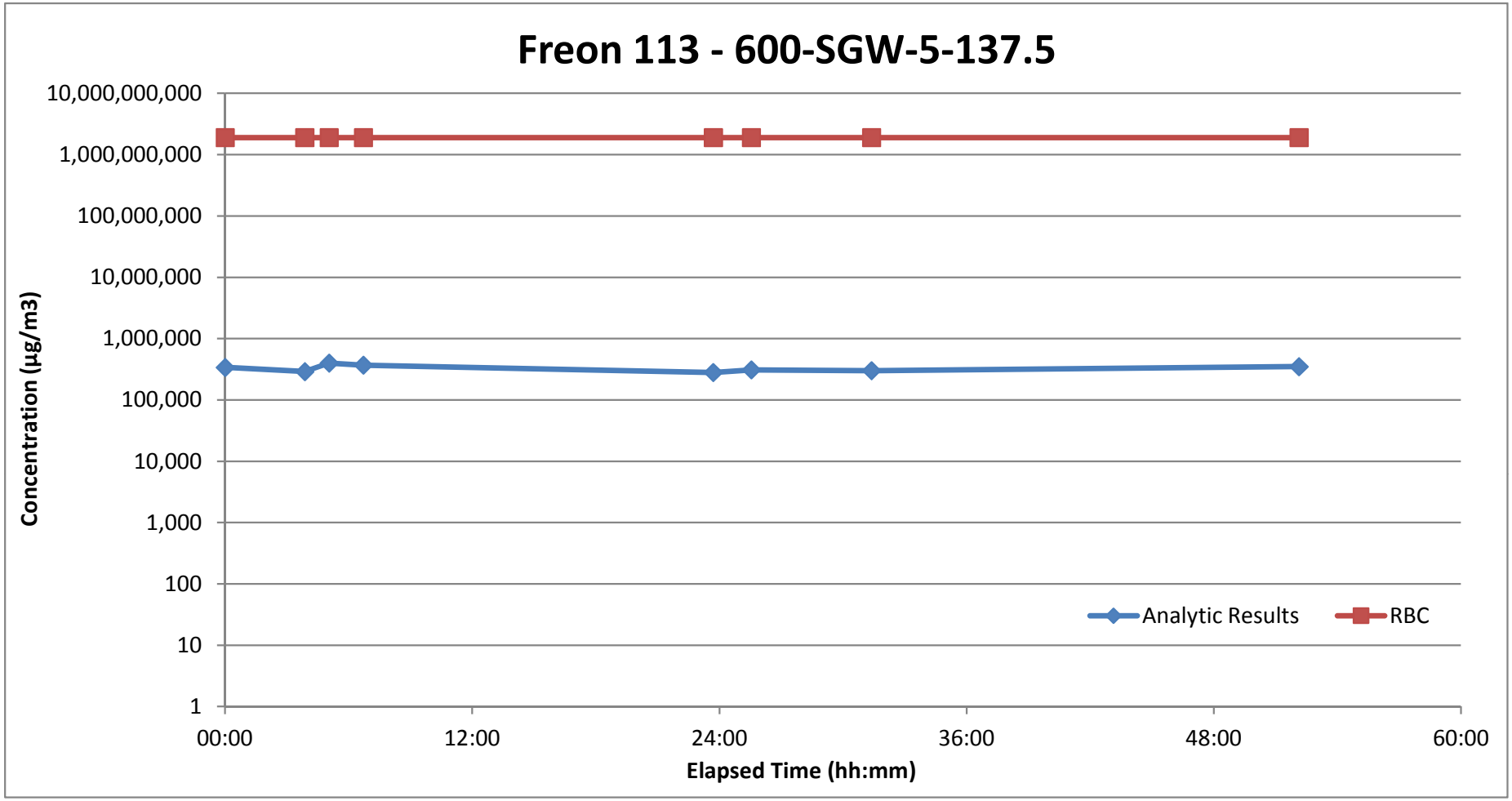
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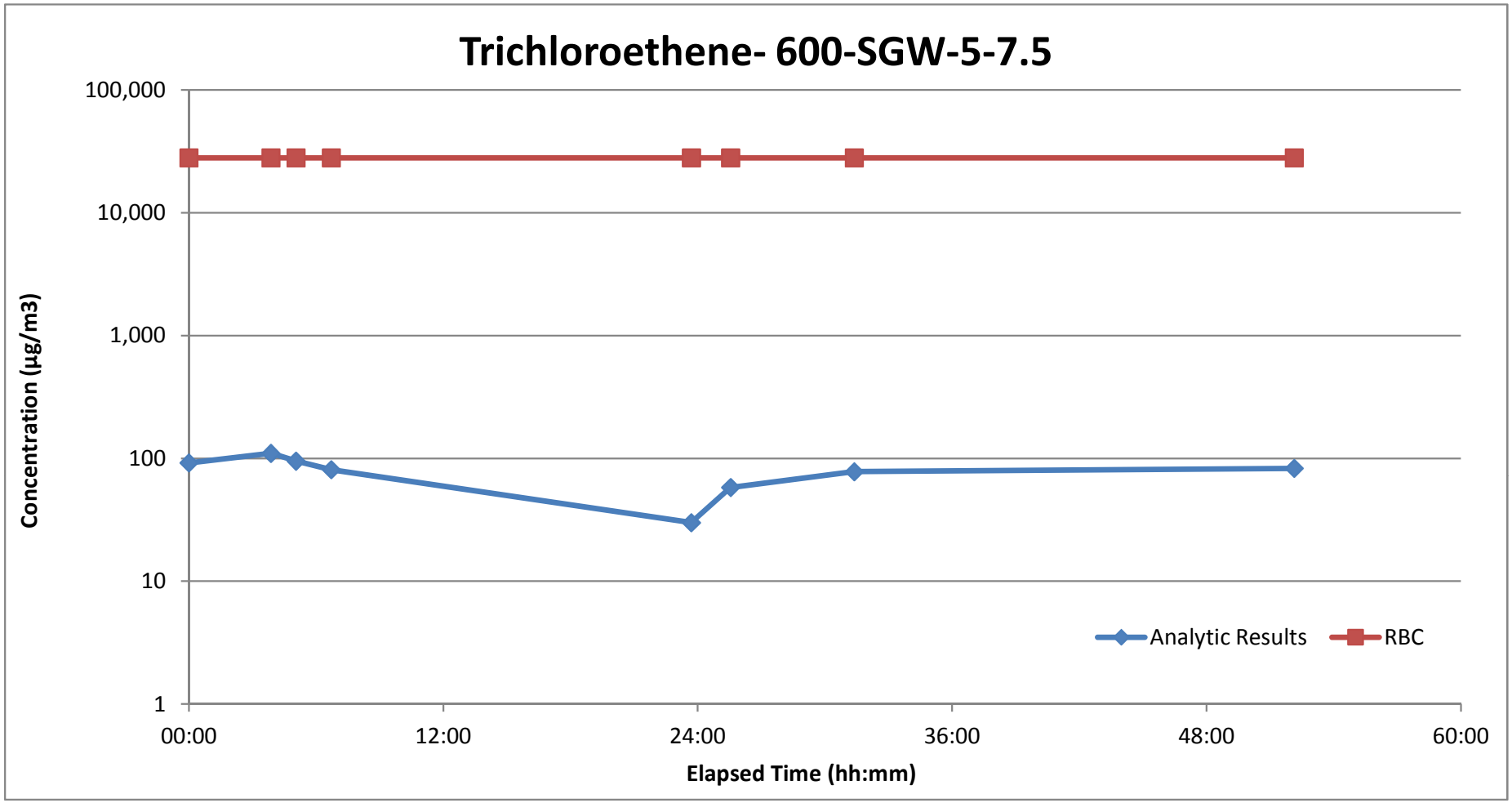
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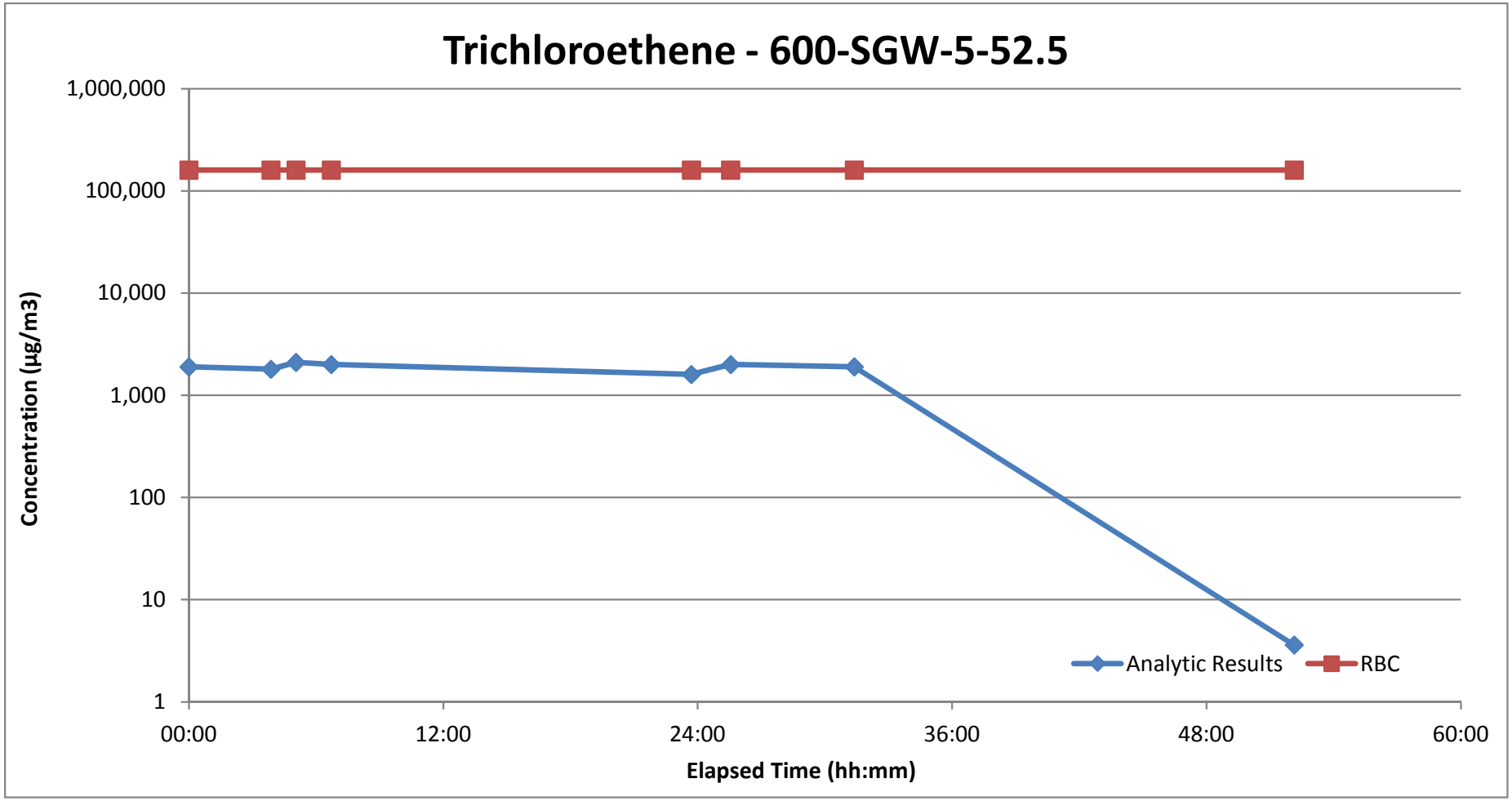
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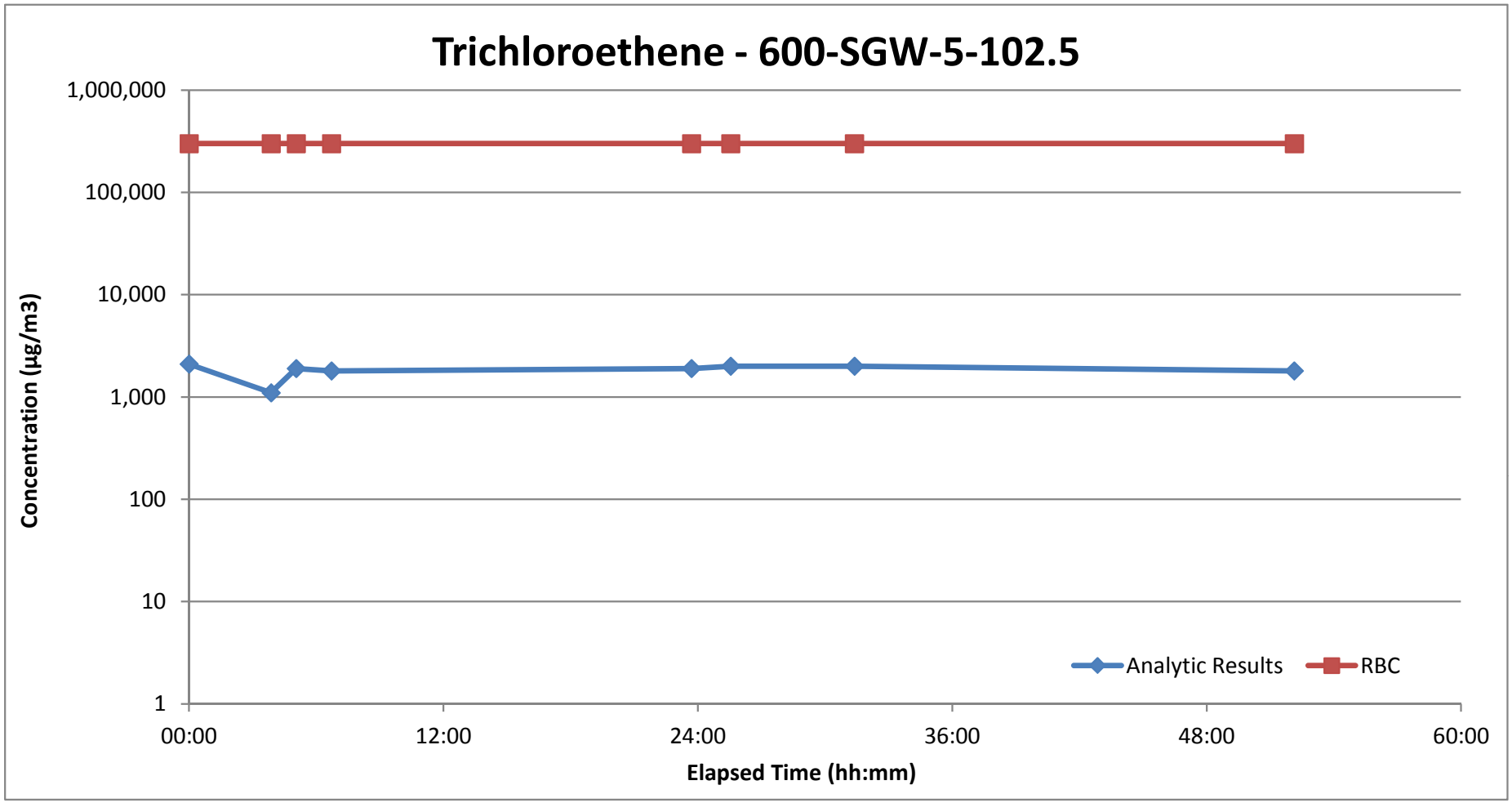
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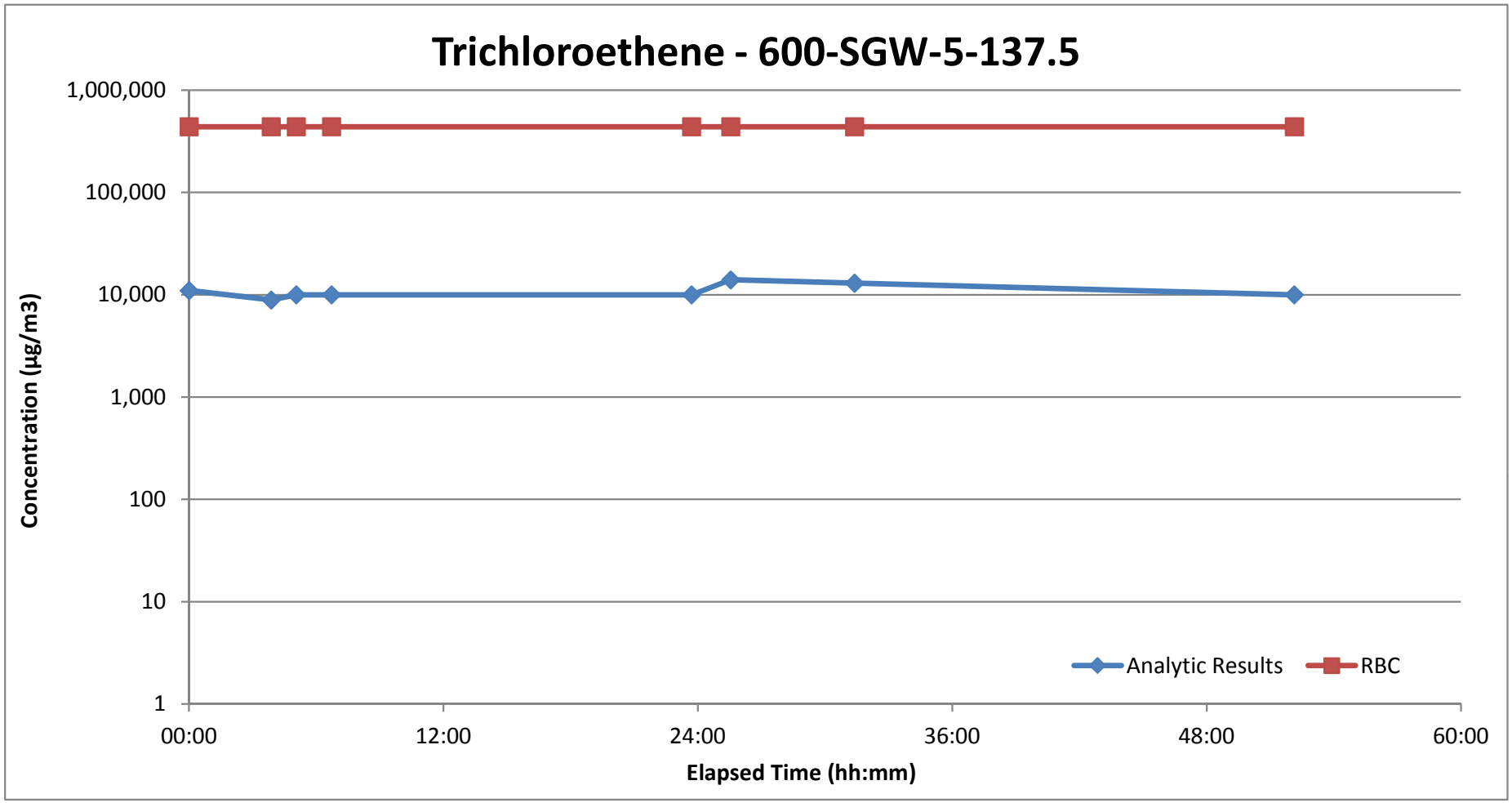
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National Aeronautics and
Space Administration

600 Area Soil Vapor Extraction

Pilot Test Investigation Report

June 2012

Revised September 2012

NM8800019434
NASA Johnson Space Center White Sands Test Facility
12600 NASA Road Las Cruces, New Mexico 88012

NASA Johnson Space Center White Sands Test Facility

600 Area Soil Vapor Extraction Pilot Test Investigation Report

June 2012

Revised September 2012

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_____ _____

Radel Bunker-Farrah
Chief, NASA Environmental Office

Date

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Executive Summary

This 600 Area Soil Vapor Extraction Pilot Test Investigation Report (Report) documents and summarizes the performance of a soil vapor extraction (SVE) pilot test at the WSTF 600 Area Closure (Closure). Following NASA's submittal of a revised 600 Area Closure Investigation Report and the related 200-600 Area Soil Gas and Groundwater Data Evaluation Report on March 30, 2011, NMED issued a Notice of Approval with Modifications on June 9, 2011. That document directed NASA to submit a Soil Vapor Extraction Pilot Study Work Plan for the Closure. The planned objective of the SVE pilot test was to determine the capabilities and optimal design for an SVE system at and surrounding the Closure. The pilot test was to generate the data required to determine if SVE can be used as a practical component of an interim remedy for the Closure.

NASA submitted the 600 Area Closure Soil Vapor Extraction Pilot Test Work Plan (SVEPTWP) on September 1, 2011. NMED approved the SVEPTWP with slight modifications on October 28, 2011. NASA drilled and installed the SVE pilot test well (600-SVE-1) and an additional perched groundwater monitoring well specified in the SVEPTWP in September and October 2011. NASA completed planning and coordination of the SVE pilot test in late 2011 and early 2012. In March 2012, NASA's SVE pilot test subcontractor, URS Corporation, mobilized to WSTF and performed the required SVE pilot test and field data collection activities with the support of on-site personnel. Soil vapor samples were collected from 600-SVE-1 and five adjacent multiport soil vapor monitoring (MSVM) wells during the SVE pilot test. NASA submitted these samples to an off-site analytical laboratory for analysis of VOCs by EPA Method TO-15 and performed data review and evaluation in April and May 2012.

A portable SVE unit was utilized to perform the required pilot test activities. The unit was attached to 600-SVE-1 and was utilized to "step test" each of the three screened intervals in the well at vacuum pressures equivalent to 15, 30, 50, 70, 90, and 120 inches of water. Each step in the test consisted of active pumping until the applied vacuum stabilized as well as the monitoring of various field parameters and sampling at 600-SVE-1 and MSVM wells. Sampling and monitoring activities included the measurement of flow rates, real-time VOC concentrations at the SVE well, real-time VOC concentrations at the SVE discharge, barometric pressure, and the concentrations of oxygen and carbon dioxide at 600-SVE-1. Induced vacuum was monitored at the associated MSVM wells, located between 76 and 340 ft from 600-SVE-1.

Field data collected during the SVE pilot test indicated that the SVE pilot test well had a relatively minor impact on the vadose zone beneath the Closure. The MSVM wells exhibited only minor responses to the vacuum applied to 600-SVE-1. At the top two zones of 600-SVE-1, NASA was unable to perform some of the later steps in the test because flow rates achieved at lower vacuum levels exceeded the ability of the available instrumentation to monitor the flow. PID readings of total ionizable volatile compounds at 600-SVE-1 and the discharge of the SVE system indicated that low levels of volatile organic compounds (VOCs) were extracted from the vadose zone and successfully treated by the granular activated carbon (GAC).

Analytical data from samples collected during the SVE pilot test were consistent with the results of previous investigations at the Closure. Concentrations of VOCs are less than or equal to concentrations that would be in equilibrium with the local groundwater. Further, concentrations of the VOCs, including the five primary contaminants of concern (COCs) for this investigation (TCE, PCE, chloroform, Freon 11, and Freon 113), were at least one order of magnitude less than the site-specific risk-based concentrations calculated using the EPA-approved Johnson and Ettinger subsurface vapor intrusion model. Although the development of these risk-based concentrations was not included in the SVEPTWP,

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NASA determined that accurate and consistent decisions related to vadose zone investigations at WSTF could not be made without established comparison values for soil vapor. NASA first performed a review of available literature and regulations to determine if potentially applicable cleanup standards already existed. When this evaluation did not identify applicable regulatory standards, NASA commissioned the development of site-specific criteria as described in the concurrently submitted *Development of Site-Specific Risk-Based Regulatory Criteria for Soil Vapor* (NASA, 2012a)..

Based on a comprehensive review of the data from previous investigations and data generated during the SVE pilot test, NASA continues to believe VOC concentrations in the vadose zone beneath the Closure are already at levels that are protective of human health and the environment. Concentrations of COCs are below OSHA occupational exposure limits, residential indoor air screening levels for soil vapor intrusion, and calculated risk-based concentrations for indoor commercial workers. Therefore, NASA concludes that corrective action is not warranted for the low levels of VOCs in the vadose zone. The vadose zone beneath the Closure is not a continuing source of contamination in the groundwater. NASA recommends that no further investigations be performed on the soils beneath ~~at~~ the 600 Area Closure, and further recommends that additional testing or corrective action not be conducted except to support ongoing and future groundwater remediation efforts. NASA also recommends a pilot scale project to determine if contaminated perched groundwater near the 600 Area Closure can be successfully extracted and treated..

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List of Acronyms

bgs	below ground surface
cfm	cubic feet per minute
CO_2	Carbon dioxide
COC	Contaminant of concern
CoC	Chain-of-custody
EPA	Environmental Protection Agency
ft	feet
GAC	Granular activated carbon
gpm	gallons per minute
HWB	Hazardous Waste Bureau
HWMU	Hazardous waste management unit
IDW	Investigation-derived waste
in-WC	inches of water column
JSC	Johnson Space Center
MSVM	Multiport soil vapor monitoring
NASA	National Aeronautics and Space Administration
NDMA	N-nitrosodimethylamine
NIOSH	National Institute for Occupational Safety and Health
NMED	New Mexico Environment Department
O_2	Oxygen
OSHA	Occupational Safety and Health Administration
PCC	Post-closure care
PCE	Tetrachloroethene
PID	Photoionization detector
PPE	Personal protective equipment
psi	pounds per square inch
PVC	Polyvinyl chloride
QA/QC	Quality assurance and quality control
RBC	Risk-based concentration
RCRA	Resource Conservation and Recovery Act
RFI	RCRA Facility Investigation
SAM	San Andres Mountains
scfm	standard cubic feet per minute
SSL	Soil screening level
SVE	Soil vapor extraction
SWMU	Solid waste management unit
TCE	Trichloroethene
TIVC	Total ionizable volatile compounds
TSI	TSI Incorporated
VOC	Volatile organic compounds
WSTF	White Sands Test Facility

1.0 Introduction

The National Aeronautics and Space Administration (NASA) Johnson Space Center (JSC) White Sands Test Facility (WSTF) is located in Dona Ana County, 18 miles northeast of Las Cruces, New Mexico and 65 miles north of El Paso, Texas. Figure 1.1 provides a WSTF location map. Access to the site is provided by a paved road, which intersects U.S. Highway 70 one mile west of Organ, New Mexico. The installation occupies over 60,000 acres along the western flank of the southern San Andres Mountains (SAM), one of the most prominent north-south trending ranges in southwestern New Mexico. The SAM represent a typical uplifted mountain block separated by broad intermontaine basins characteristic of the Basin and Range province of the southwestern United States. WSTF is located on the alluvial-covered pediment slope between the SAM to the east, and Jornada del Muerto Basin to the west.

WSTF's primary activities in support of the space program are:

- Development, qualification, refurbishment, and testing of spacecraft propulsion systems, subsystems, and ground support equipment.
- Investigation of flight hardware anomalies.
- Testing of materials and components.
- Performance of hazard and failure analyses.

Hazardous wastes are generated during the course of the testing and evaluation processes at WSTF. Many wastes were historically managed in surface impoundments within the WSTF industrial area, which contributed to groundwater contamination. There are five closed hazardous waste management units (HWMUs) at WSTF, including the 600 Area impoundments. The 600 Area HWMU was closed by NASA in August 1989 and was managed under the WSTF Post-closure Care (PCC) Permit between the time of closure and November 2009, when management of the HWMUs was incorporated into NASA's Hazardous Waste Permit (Permit [NMED, 2009]). Investigations continue in order to determine the extent of soil and groundwater contamination.

NASA developed and submitted the 600 Area Closure Investigation Work Plan (NASA, 2008) on July 2, 2008. After significant NMED input and revision, the final 600 Area Investigation Work Plan (600CIWP, NASA, 2009) was submitted on April 17, 2009. NMED approved the 600CIWP on May 6, 2009. To address anomalies encountered early in the field investigation, an addendum was submitted on October 14, 2009 via email and approved on October 27, 2009. NASA performed the investigation between September 2009 and January 2010 and submitted the initial 600 Area Closure Investigation Report (600CIR, NASA, 2010]) on August 30, 2010. NMED disapproved that report on December 10, 2010 (NMED, 2010). NASA submitted a revised investigation report on March 30, 2011 (NASA, 2011a), along with the related 200-600 Area Soil Gas and Groundwater Data Evaluation Report (NASA, 2011b).

NMED issued a Notice of Approval (NOA) with Modifications on June 9, 2011 (NMED, 2011a). That document directed NASA to develop and perform a soil vapor extraction pilot test. NASA submitted the 600 Area Closure Soil Vapor Extraction (SVE) Pilot Test Work Plan on September 1, 2011 (NASA, 2011c). The SVE Pilot Test Work Plan (SVEPTWP) addressed the development of a pilot test for soil SVE at the WSTF 600 Area Closure (Closure) located to the west of the 100 Area Administration buildings and was approved by NMED on October 28, 2011 (NMED, 2011b). Figure 1.2 provides a topographic map that shows the location of the Closure in relation to other relevant features at WSTF.

2.0 Background

A brief description of the site background is provided in this section. Detailed background information for WSTF and the Closure is provided in the 600CIWP (NASA, 2009a) and 600CIR (NASA, 2010a).

2.1 Operational History

In the mid-1960s, the 600 Area Surface Impoundments, commonly referred to as the salt or evaporation ponds, were designed to contain the saltwater backwash produced from regenerating the zeolite beds in the WSTF water softening plant located to the south. The impoundments received saltwater backwash from the water softening plant through an 8-in diameter pipeline from 1964 to 1984. From 1968 to 1986, 4,000 to 12,000 gallons of hazardous waste per week were transported by tanker truck from the 200 Area Clean Room and Chemistry Laboratory Tanks to the surface impoundments. White Sands Missile Range's High Energy Laser System Test Facility also contributed process waste from September 1983 to June 1984. Primary wastes generated during routine laboratory activities included several VOCs: trichloroethene (TCE); tetrachloroethene (PCE); Freon 11; Freon 21; and Freon 113. TCE and PCE are chlorinated solvents and the other compounds are chlorofluorocarbons. A comprehensive list of potential contaminants was provided in the 600CIWP (NASA, 2009a).

Material disposal into the impoundments ceased on June 13, 1986. The Closure Plan for the 600 Area impoundments was submitted by NASA in June 1988 and approved by NMED in September 1988. All residual fluids in the impoundments were removed in 1989. During closure, materials in the ponds were thoroughly mixed to facilitate exposure to wind and sun to reduce contaminant mass. Clean fill (clayey soil) was also added and the resulting mixture was analyzed for compaction/ permeability. The Closure was completed by NASA on August 8, 1989 and approved by NMED on November 1, 1989. The final closure report is provided in Appendix 1 of the 600CIWP (NASA, 2009a).

2.2 Contaminants of Concern

Although there were numerous contaminants of concern (COCs) during the initial investigation of the Closure, the concentrations of hazardous constituents in soil were, with two exceptions, below regulatory limits. Arsenic and thallium were detected at concentrations above the residential soil screening levels (SSLs) but below Construction Worker SSLs. Both metals were attributed to background concentrations within native WSTF soils. The remaining COCs included, but were not limited to: N-nitrosodimethylamine (NDMA); N-nitrodimethylamine; tetrachloroethene (PCE); trichloroethene (TCE); acrylonitrile; chloroform; tetrahydrofuran (THF); trichlorofluoromethane (Freon 11); dichlorofluoromethane (Freon 21); 1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113); 1,2-dichloro-1,1,2-trifluoroethane (Freon 123A).

On December 16, 2009 during the 600 Area Closure Investigation fieldwork, NMED determined that soil cuttings generated from boreholes met applicable standards and cleanup levels and approved the determination that investigation-derived waste (IDW) from the Closure be managed as non-hazardous waste (NMED, 2009c). On August 25, 2010 NMED approved the NASA request for IDW soil cuttings disposal as nonhazardous waste (NMED, 2010).

Following the installation of soil gas wells within investigation boreholes, NASA performed a technical evaluation of soil gas VOC concentrations using Occupational Safety and Health Administration (OSHA) and National Institute for Occupational Safety and Health (NIOSH) exposure limits. Based on that evaluation, NASA concluded that concentrations of VOCs beneath the Closure did not exceed any potentially applicable limits and that there was no continuing source of VOCs in soil gas (NASA, 2011a). NASA developed the SVEPTWP to comply with the NOA with Modifications (NMED, 2011a). NMED

specifically mentioned TCE, PCE, and chloroform as contaminants of interest. These three constituents, in addition to Freon 11 and Freon 113, comprise the primary potential COCs for the pilot test described in the SVEPTWP.

2.3 Deviations from NMED Directives

NMED's June 9, 2011 NOA with Modifications included specific requirements upon which an SVE pilot test was to be based. After careful consideration of those requirements, NASA recommended the following deviations from the SVE Pilot Test Work Plan. NMED reviewed these deviations, provided additional input, and approved them (NMED, 2011b).

2.3.1 Location of SVE Pilot Test Well

Based on geological conditions beneath the Closure, it was anticipated that the SVE well would have a radius of influence of approximately 100 ft or less. NMED specified that the SVE pilot test well "must be installed 75 to 100 feet due south of former boring 600-SB-8." The location specified by NMED places the SVE well less than 100 ft from one existing multiport soil gas monitoring well and potentially the second proposed perched groundwater monitoring well (600-H), which was only tentatively planned (and subsequently not installed). Additionally, the two likely piezometers within 100 ft of the NMED-proposed location are in the same direction from the well location. Other monitoring locations are greater than 100 ft from the proposed SVE well. Based on the limited opportunity for observation, an alternate location for the SVE well allowed for more thorough testing.

NASA located the SVE well approximately 76 ft west of existing multiport soil gas monitoring well 600-SGW-5 (Figure 2.1). This location placed the SVE well within 100 ft of existing multiport soil gas monitoring well 600-SGW-3, located 96 ft to the northwest, and perched groundwater monitoring well 600-G, located 66 ft to the east. This ensured the availability of at least three proximal piezometers that were expected to respond during the test. It also remained within a reasonable distance (150 ft) of multiport soil gas monitoring well 600-SGW-1, providing the potential for measuring the influence of the SVE well in three directions with two types of piezometers. Further, NASA's location placed the SVE well within the southeast Closure cell, which showed slightly higher concentrations of COCs during the 600 Closure Investigation (NASA, 2011a). This cell was also the primary point of discharge of contaminants to the impoundment via tankers and the Hazardous Waste Transmission Line.

2.3.2 Design of SVE Pilot Test Well

NMED stated that the SVE well "must be screened from the bedrock surface to approximately ten feet above the bedrock surface…" In order to generate more data, and to provide for more comprehensive understanding of the vadose zone beneath the Closure, NASA installed a set of three nested SVE wells with 10 ft screens in a single borehole. In addition to the screened interval immediately above the bedrock, NASA installed two additional screened intervals at intermediate locations in the alluvium under the Closure. A completion diagram of the SVE well is provided in Appendix A.

2.3.3 Duration of Steps in Pilot Test

NMED directed NASA to conduct step tests during the SVE pilot test. Each step of the test was to be performed at a specified vacuum pressure for four hours. An expert NASA SVE consultant suggested that, given the site's geology, it was likely that extraction characteristics would stabilize

within approximately one hour of the start of each step in the test. NASA planned to measure extraction pressures at regular intervals during each step of the test. Based on input received from the SVE consultant, NASA proposed to run each step of the test for two to four hours or until vacuum pressures measured at 15 minute intervals stabilized as indicated by three consecutive extraction vacuum pressure measurements within five percent of each other.

2.3.4 Selection of Observation Wells

NMED directed NASA to obtain pressure measurements from "… all of the 600 Area Closure soil gas observation wells." After careful consideration of the site's geology and expected SVE performance, it was concluded that the radius of influence of the SVE well was extremely unlikely to exceed 200 ft. Therefore, the two most distant soil gas wells, 600-SGW-6 and 600-SGW-7, were not included as piezometers in this plan. Piezometers 600-SGW-2 and 600-SGW-8, at distances of 322 ft and 340 ft from the SVE well, respectively, were selected to monitor for any unlikely responses at distances greater than 200 ft. In the event soil gas monitoring wells 600-SGW-2 and 600-SGW-8 had shown any response to vacuums applied to 600-SVE-1, wells 600-SGW-6 and 600-SGW-7 would have been added to the network of soil gas monitoring wells. This was not required during the pilot test. Figure 2.1 shows the locations of the observation wells.

2.3.5 Schedule for Performing Pilot Test

NMED directed NASA to complete the SVE pilot test and submit a report summarizing the results on or before December 30, 2011. NASA proposed to complete the SVE pilot test and submit a report no later than May 31, 2012. NASA also proposed to revise the schedule for submittal of the 200 Area Investigation Work Plan, and to defer further field work on the 300 and 400 Area investigations. These proposed schedule changes are summarized in a letter dated September 1, 2011 submitted concurrently with the SVEPTWP.

2.4 Deviations from the SVEPTWP

During planning and implementation of the SVE pilot test, minor deviations from the approved SVEPTWP were required. This section describes those deviations.

2.4.1 Vacuum Equipment Limitations

During performance of the field work for the pilot test, NASA observed that the measurable parameters for the instrument used to monitor air flow, temperature, and relative humidity (a TA440 by TSI Incorporated) were exceeded due to high flow regimes. Under these circumstances, the vacuum and consequently the flow rate were limited. At the 40- to 50-ft (12.19 to 15.24 m) screened interval of the SVE pilot test well (referred to as 600-SVE -1-40) the maximum vacuum achievable at a measurable flow rate was 67 inches of water column (in-WC) at approximately 218 standard cubic feet per minute (scfm). At the 90- to 100-ft (27.43 to 30.48 m) screened interval (referred to as 600-SVE-1-90) the maximum vacuum achievable at a measurable flow rate was 101 in-WC at approximately 200 scfm. NASA believes that the vacuum pressures specified by NMED were not achievable at the shallower intervals in 600-SVE-1 because of limitations resulting from the high porosity and permeability of the soils beneath and in the vicinity of the Closure. As demonstrated by the flow rates measured by the instrumentation, too much air was flowing through the soil to achieve the highest vacuum levels. The required vacuum levels are believed to have been achievable at greater depth because the soil pore space and permeability are lower due to differences in depositional geology, increased fine soil particles with depth, or increased compaction with depth.

2.4.2 In-situ Pressure Transducer

In accordance with the equipment list in the SVEPTWP, a down-hole pressure transducer was initially installed in the 40- to 50-ft screened interval in 600-SVE-1 at a depth of 45 ft to monitor pressure responses during the pilot test. Upon completion of testing the 50-ft interval and during reconfiguration of the vacuum system piping at 600-SVE -1, it was observed that the sonde had been sucked through the vacuum piping and was deposited in the separator tank of the SVE system, which is approximately 20 to 30 ft (horizontal distance) from 600-SVE -1. Use of the down-hole pressure sonde was discontinued for the remainder of the test.

3.0 Scope of Activities

In accordance with the 600 SVEPTWP (NASA, 2011c), the objective of this Report is to describe the activities associated with performing an SVE pilot test at the 600 Area Closure. The pilot test was required by NMED to determine the capabilities and optimal design for an SVE system at and surrounding the Closure. The objective of the pilot test was to generate the data required to determine if SVE can be used as a practical component of an interim remedy for the Closure. The scope of the pilot test was limited to the Closure and the underlying vadose zone. Activities performed during this project included the installation of an SVE well and additional perched groundwater monitoring well, performance of the required SVE pilot test, monitoring of physical parameters during the pilot test, collection of soil vapor samples, and evaluation of the field and analytical data collected or generated during the pilot test.

3.1 Well Installation

As required by the approved SVEPTWP, NASA installed one soil vapor extraction well, identified as 600-SVE-1, in the southeast cell of the Closure in September 2011. NASA also installed a groundwater monitoring, identified as 600-G-138, adjacent to the east corner of the Closure. Specific information related to drilling and installing these wells is provided in Section 4.2. Physical parameters were measured at the SVE well during the pilot test as indicated in the SVEPTWP.

3.2 SVE Pilot Test

NASA subcontracted URS Corporation (URS) to provide the equipment and personnel for performing the fieldwork for the SVE pilot test. The subcontractor-provided portable SVE unit (Figure 3.1) was mobilized to WSTF and used to perform the required pilot test activities as described in the SVEPTWP between March 22, 2012 and March 24, 2012. As shown in Figure 3.2, the unit was attached to each inner casing in nested well 600-SVE-1 and utilized to “step test” each of the three screened intervals at vacuum pressures equivalent to 15, 30, 50, 70, 90, and 120 in-WC. Throughout the test, the applied vacuum pressure was monitored at the SVE well at 15-minute intervals. Each step of the test was actively pumped until the vacuum pressure equilibrated as indicated by three consecutive measurements that were within five percent.

3.3 Monitoring and Sampling

Sampling and monitoring preceding and during the pilot test consisted of several activities, including the measurement of flow rates and applied vacuum pressures at the SVE well, measurement of induced vacuum pressures at piezometers, real-time measurements of total ionizable volatile compounds (TIVCs) at the SVE well and SVE system discharge, measurement of barometric pressure, measurement of percent oxygen (O_2), carbon dioxide (CO_2), temperature, and relative humidity at the SVE well, and the collection of samples from the SVE well and observation wells for the analysis of VOCs by EPA Method TO-15.

Six previously installed multiport soil vapor monitoring (MSVM) wells were selected to serve as observation wells for the pilot test. Collection of field data and soil vapor samples is described in more detail later in this report.

The SVEPTWP (NASA, 2011c) included the installation of a groundwater monitoring well near the east corner of the Closure to better characterize perched groundwater that was discovered during the 600 Area Investigation during the installation of well 600-SGW-5. This monitoring well, 600-G-138, has been sampled twice since its installation in September and October 2011 for standard WSTF COCs, including several VOCs, NDMA, bromacil, and several metals. The results of groundwater monitoring are presented in Section 6.2.

3.4 Data Evaluation

NASA environmental personnel reviewed and evaluated analytical data from soil vapor and groundwater samples collected during the SVE pilot test in accordance with established WSTF data review procedures. Data were evaluated to support the development of conclusions and recommendations offered in this report. Chemical analytical results were compared to those obtained during previous investigations at the Closure and to potentially applicable regulatory criteria.

3.5 IDW Management

While performing the activities specified in the approved SVEPTWP (NASA, 2011c), a variety of IDW was generated, including saturated and unsaturated soil cuttings, groundwater produced during development and sampling of the perched groundwater monitoring well, water collected in the vapor/water separator on the SVE pilot test unit, potentially contaminated debris (PPE, disposable equipment, plastic sheeting, etc.), used granular activated carbon (GAC), and decontamination solutions. These waste streams were managed as indicated below.

Unsaturated soil cuttings or cores were previously determined to be non-hazardous waste and were collected in bulk containers during drilling activities. Saturated soil cuttings or cores were managed under the 90-day provisions of 40 CFR 262.34 during the investigation field work. Upon completion of drilling activities, NASA submitted a request for a “contained-in determination” to NMED (NASA, 2011d). NMED approved the request on December 2, 2011 (NMED, 2011c) and the soil cuttings were spread on the ground surface to the north of the Closure in February 2012.

Groundwater produced during the development and sampling of 600-G-138 was transferred to a 90-day accumulation area near the investigation site and was disposed of in the 200 Area Evaporation Tank Unit within 90 days. During the SVE pilot test, vapor extracted from 600-SVE-1 was processed through a vapor/water separator and the condensate was recovered in a collection tank. At the end of the pilot test, the condensate was transferred to WSTF containers and the collection tank on the SVE unit was triple rinsed with potable water. The rinse water was collected in the container with the condensate and transported to the 200 Area Evaporation Tank Unit for disposal. Water used for equipment decontamination during the investigation was collected at the decontamination and transferred to the 200 Area Evaporation Tank Unit for disposal.

Contaminated debris was collected at the investigation site during the drilling and installation of 600-SVE-1 and 600-G-138. Upon receipt of the “contained-in determination” (NMED, 2011c), debris contaminated with soil cuttings or water was designated as non-hazardous and disposed of as solid waste. A small amount of petroleum-contaminated debris was managed as hazardous waste and shipped to Clean Harbors for disposal.

The GAC was removed from the SVE pilot test unit and stored in bulk containers before URS demobilized from WSTF. URS and NASA personnel determined that less than one percent of the GAC capacity was utilized during the SVE pilot test, thus it was not spent during the test. The GAC is stored at WSTF pending use for another project.

4.0 Field Investigation Results

4.1 Surface Conditions

Surface conditions at the Closure were described in detail in Section 3.2 of the 600CIWP (NASA, 2009), Section 2.1 of the 600 Area CIR (NASA, 2010a), and Section 4.1 of the revised 600 Area CIR (NASA, 2011a).

4.2 Drilling Activities

Six existing MSVM wells were utilized to monitor induced vacuum pressure and to collect soil vapor samples before, during, and after the pilot test. Specific information related to drilling these wells was provided in Section 4.2 of the revised 600 Area CIR (NASA, 2011a). In addition to previously installed wells, NASA drilled the SVE pilot test well (600-SVE-1) and an additional perched groundwater monitoring well (600-G-138).

4.2.1 Drilling Method

The coarse and unconsolidated nature of the alluvium overlying bedrock below the 600 Area Closure, with coarser gravel clasts up to several feet in diameter precluded the use of the standard hollow stem auger drilling method due to historically low sample recovery percentages (≤50%) experienced using this method and the high probability of auger refusal due to large cobbles prior to depths of 50 ft (15.24 m) bgs. A recent attempt to utilize a rotosonic drilling rig was performed during the WSTF 600 Area Closure Investigation fieldwork in October 2009 due to the high quality and recovery reported for soil sample cores. Although the quality of soil samples was superior relative to previous methods, rotosonic drilling was discontinued due to drilling conditions that were incompatible with the drilling method. Rotosonic drilling was determined not to be feasible with or without the addition of water during the drilling process, due to an inability to advance to depths beyond approximately 100 ft (30.48 m) bgs.

Following consideration of the geologic conditions and communication with prospective drilling subcontractors, the 600-SVE-1 and 600-G-138 boreholes were installed using a Stratex rotary drilling rig with air as the drilling fluid. This drilling method was determined to have the greatest probability for success in completing the required borehole to the target depth of bedrock at 150 ft (45.72 m) bgs while providing the best possible soil samples for geological and geotechnical analyses. A full sized rig was required due to the power requirements necessary to advance boreholes through the coarse alluvial formation to the target depth. Drawbacks in using the full-sized rig (approximately 45,000 lbs and dimensions of approximately 10 ft x 40 ft [3.05 m x 12.19 m]) were maneuverability and an increased potential for damage to the Closure. The risk was minimized through the use of 6 ft x 8 ft plastic mats that were used to underlay the rig and provide access to the drilling location.

4.2.2 Pilot Test Well 600-SVE-1

SVE pilot test borehole 600-SVE-1 was drilled on the 600 Area Closure through the footprint of the former southeast cell between October 2 and 8, 2011. The borehole was located approximately 70 ft (21.33 m) west of the most proximal observation well pair, consisting of multiport soil gas well 600-SGW-5 and perched groundwater monitoring well 600-G. Figure 2.1 provides the location of the borehole

in relation to the pilot test piezometers and other features on or near the Closure. The borehole encountered bedrock at 149 ft (45.41 m) bgs and had a total depth of 152 ft (46.33 m) bgs. A nested pilot test well was installed within the borehole between October 8 and 10, 2011.

The Stratex method utilized compressed air as the drilling lubricant to clean the borehole of cuttings during advancement of the drill stem and bit and the simultaneous advancement of a 12-inch (30.48 cm) diameter casing to prevent borehole collapse. Accordingly, cuttings were a mixed result of chips from the bottom of the borehole and above and did not accurately represent the specific depth of the drill bit. A generalized borehole lithologic log is presented in Appendix A.

Two soil geotechnical samples were collected using a custom sonic core barrel (referred to as the BLN Hammer by the project drilling subcontractor) driven by the rig's pneumatic drive head at 60 – 65 ft (18.29 to 19.81 m) bgs and 95 to 100 ft (28.95 to 30.48 m) bgs. A soil sample was not recovered at a depth corresponding to the deep sampling zone despite several attempts. Drilling conditions became more difficult with depth and the deep sampling attempts were only able to advance a few inches. The results of geotechnical sampling performed as part of this investigation are consistent with those from past investigations (see Section 3.3.6.3 and Table 4.3 of the revised 600 CIR, NASA, 2011a). Therefore, a detailed evaluation of the sample results was not performed. Complete laboratory results for the geotechnical samples are provided in Appendix B.

4.2.3 Monitoring Well 600-G-138

Conventional groundwater monitoring well 600-G-138 was drilled adjacent to the east corner of the 600 Area Closure just outside the footprint of the former southeast cell between September 29, 2011 and October 1, 2011. The borehole was located approximately 20 ft northwest of multiport soil gas well 600-SGW-5. These two wells form the most proximal observation well pair to well 600-SVE-1. Well 600-G-138 was installed to monitor between two and three feet of perched groundwater identified on the top of andesite bedrock at this location during the installation of well 600-SGW-5. Figure 2.1 provides the location of well 600-G-138 relative to other features at the Closure. The borehole encountered andesite bedrock at 146 ft (44.50 m) bgs and had a total depth of 148 ft (45.11 m) bgs. A conventional groundwater monitoring well was installed within the borehole on October 1, 2011.

The 600-G-138 borehole was installed using the same Stratex rotary drilling rig with air as the drilling fluid. The full sized rig was required due to the power requirements necessary to advance the borehole through the coarse alluvial formation to the target depth. Compressed air was used to clean the borehole of cuttings during advancement of the drill stem and bit and the simultaneous advancement of a 12-in (30.48 cm) diameter casing to prevent borehole collapse. Cuttings comprised a mixture of chips from the bottom of the borehole and above and did not accurately represent the specific depth of the drill bit. A generalized borehole lithologic log is presented in Appendix A.

No analytical soil samples were collected from well 600-G-138. Geotechnical and geochemical soil samples were collected from the adjacent 600-SGW-5 borehole during installation in November and December 2009.

4.3 Borehole Logging

The six MSVM wells that were used in the pilot test were drilled and installed during the 600 Area Closure Investigation. Specific information related to borehole logging was provided in Section 4.2 of the revised 600 Area CIR (NASA, 2011a).

Lithologic logging of the boreholes for 600-SVE-1 and 600-G-138 was conducted by the on-site geologist, using the two soil samples collected from soil cores and from cuttings generated from the rig cyclone on a minimum of 10-ft centers. The soil boring logs include general information (name, location, dates, depths, and drilling details), a Unified Soil Classification System (USCS) description, core depth intervals and recoveries, sample locations with identification, and a lithologic description using standard USCS criteria. Lithologic logging results are provided in the borehole lithologic logs (Appendix A).

4.4 Subsurface Conditions

Subsurface conditions at the Closure were described in detail in Section 3.3 of the 600CIWP (NASA, 2009), Section 4.4 of the 600 Area CIR (NASA, 2010), and Section 4.6 of the revised 600 Area CIR (NASA, 2011a).

4.5 Investigation Well Construction

Six existing MSVM wells were utilized to monitor induced vacuum pressure and to collect soil vapor samples before, during, and after the pilot test. Specific information related to the installation and construction of these MSVM wells was provided in Sections 4.2 and 4.3 of the revised 600 Area CIR (NASA, 2011a). Well construction details for the two additional wells installed for the SVE pilot test are provided in the following sections.

4.5.1 600-SVE-1

The initial proposed well construction for the SVE pilot test well was provided as Figure 6 in the SVEPPTWP (NASA, 2011c). An updated SVE well design was provided to NMED following completion of the borehole, but prior to installation of the well. Following NMED approval, the pilot test well was constructed using three individual nested 2-in schedule 80 PVC wells installed inside a 12-in (30.48 cm) casing. The well was screened using 10 ft (3.05 m) x 0.020-in slot screen at three locations in the alluvium: 40 – 50 ft (12.19 to 15.24 m) bgs; 90 – 100 ft (27.43 to 30.48 m) bgs; and, 130 – 140 ft (39.65 to 42.70 m) bgs as presented in the well completion diagram in Appendix A. The lowermost screened interval extended downward to approximately 9 ft (2.74 m) above bedrock at 149 (45.42 m) ft bgs.

Each nested well was installed through the over-ride casing. Annular materials were installed between the multi-port well and the boring through a 1.5-in diameter tremie pipe to prevent bridging. Annular materials consisted of 10/20 mesh graded Colorado silica sand pack to approximately two ft (0.61 m) above and below each of the three screened intervals. Bentonite seals comprising bentonite chips that were hydrated following emplacement were then installed on either sides of the screen sand pack and varied in thickness between 2.7 to 13.9 ft (0.82 to 4.24 m). Cement/bentonite slurry was then installed between the bentonite seals and from above the top sand pack to 3 ft (0.91 m) bgs. The remainder of the borehole was cemented to the surface using Portland Type II cement with 5% bentonite powder by volume. Following well and annular material installation, a six-inch (15.24 cm) diameter steel vault was installed to protect the nested well casing. A 4 ft x 4 ft (1.22 m x 1.22 m) cement pad that slopes away from the well was constructed at ground level on the top of the Closure. A brass cap was inserted into the concrete pad at each well. The well was then surveyed and the coordinates and elevation were recorded in the applicable well files. A well completion report was provided to NMED on January 27, 2012 (NASA, 2012b) and accepted by NMED on April 10, 2012 (NMED, 2012).

4.5.2 600-G-138

The initial proposed well construction for the SVE pilot test well was provided as Figure 5 in the SVEPPTWP (NASA, 2011c). An updated 600-G-138 well design was provided to NMED following

completion of the borehole, but prior to installation of the well. Following NMED approval, the well was constructed using 4-in (10.16m) schedule 80 PVC inside 12-in (30.48 cm) diameter casing. The well was screened using 10 ft (3.05 m) x 0.020-in (0.05 cm) slot screen located across the alluvium-andesite bedrock interface at 137.5 – 147.5 ft (41.91 to 44.95 m) bgs as presented in the well completion diagram in Appendix A. The well was installed through the over-ride casing. Annular materials were installed between the conventional well and the boring through a 1.5-inch diameter tremie pipe to prevent bridging. Annular materials consisted of 10/20 mesh graded Colorado silica sand pack from the bottom of the well to approximately five ft (1.54 m) above the screened interval. Finer grained 16/40 mesh graded Colorado silica sand was installed over a four ft (1.22 m) interval above the 10/20 sand pack. A bentonite seal comprising bentonite chips that were hydrated following emplacement were then installed above the 16/40 sand pack over a seven ft (2.13 m) interval, and cement/bentonite slurry was then installed above the bentonite seal to 3 ft (0.91 m) bgs. The remainder of the borehole was cemented to the surface using Portland Type II cement with 5% bentonite powder by volume. Following well and annular material installation, a six-inch (15.24 cm) diameter steel vault was installed to protect the nested well materials. A four ft x four ft (1.22 m x 1.22 m) cement pad that slopes away from the well was constructed at ground level on the top of the Closure. A brass cap was inserted into the concrete pad, and bollard posts were constructed around the wellhead to protect the well from any vehicular traffic. The well was then surveyed and the coordinates and elevation were recorded in the applicable well files. A well completion report was provided to NMED on January 27, 2012 (NASA, 2012b) and accepted by NMED on April 10, 2012 (NMED, 2012).

4.6 Groundwater Conditions

Groundwater conditions at the Closure were described in detail in Section 3.3 of the 600CIWP (NASA, 2009) and in Section 4.6 of the 600 Area CIR (NASA, 2010) and revised 600 Area CIR (NASA, 2011a).

4.7 Surface Air and Subsurface Vapor Conditions

Surface air was not characterized as part of this investigation. Subsurface geological conditions that influence vapor conditions were discussed in Section 3.3 of the 600CIWP (NASA, 2009), Section 4.4 of the 600 Area CIR (NASA, 2010), and Section 4.6 of the revised 600 Area CIR (NASA, 2011a). Subsurface vapor monitoring was conducted at the SVE well, which was installed as indicated in Section 4.5.1, and proximal MSVM wells, which were installed as indicated in Section 4.3 of the revised 600 Area CIR (NASA, 2011a). Field screening of the SVE well and the SVE system discharge was performed as indicated in Section 5.4 of the SVEPTWP (NASA, 2011c). Subsurface vapor conditions in the area of the Closure surrounding the SVE well were characterized by collecting soil gas samples from the six MSVM wells (observation wells) identified in the SVEPTWP. Subsurface air flow pathways and air flow regimes were not quantitatively characterized as part of this investigation.

4.8 Pilot Test Results

Pilot testing activities occurred from March 22, 2012 through March 24, 2012. Prior to testing, 600-SVE-1 and the six observation wells/vacuum piezometers were sampled for the analysis of VOCs by EPA Method TO-15 using standard WSTF procedures. On March 22, 2012 the SVE system was functional tested to ensure smooth operation. The system was operated for a short period of time with the PVC manifold “blanked/shut-in” to observe for leaks; none were detected.

The testing began with the 40- to 50-ft (12.19 to 15.24 m) interval (referred to as 600-SVE -1-40) on March 22, 2012. A vacuum of approximately 15 in-WC was then applied to 600-SVE -1-40 while the following parameters were measured and recorded: flowrate, temperature, photoionization detector (PID) readings (source), relative humidity, oxygen content, carbon dioxide content, atmospheric pressure,

vacuum and PID readings (SVE unit discharge). Vacuum readings were obtained and recorded for the observation wells as prescribed in the SVEPTWP. When monitored vacuum pressures reached equilibrium as indicated on the available instrumentation, the applied vacuum was increased to the next "step." This series of events was repeated until maximum vacuum was applied to 600-SVE-1-40. As described in Section 2.~~3.2~~4.1, vacuum equipment limitations precluded the application of vacuum in excess of 67 in-WC at 600-SVE-1-40, at which point the measurement capability of the TSI velocity meter was exceeded, potentially due to turbulent flow in the piping. The applied vacuum was reduced and increased several times in order to maintain the flow rate within the TSI velocity meter's measurement range. After approximately one-half hour of variable vacuum, operations were concluded for the day.

On March 23, 2012 operations continued. The 50 in-WC vacuum "step" was repeated until stable. The vacuum was then increased toward the 70 in-WC vacuum "step". Again the measurement range of the TSI velocity meter was regularly exceeded. The "step" was stabilized and equilibrated at approximately 67 in-WC and a flow rate of approximately 218 scfm. Due to the constraints placed on the equipment because of the site geology, the test for this interval was concluded. Table 4.1 provides the field data collected during the stepped test of 600-SVE-1-40.

On March 23, 2012, the 90 to 100-ft (27.43 to 30.48 m) interval (referred to as 600-SVE -1-90) was tested. The initial vacuum "step", 15 in-WC, was started and each subsequent "step" was completed, through 90 in-WC. At the 120 in-WC "step", again the measurement capability of the TSI velocity meter was exceeded. The final "step" equilibrated for 600-SVE -1-90 was 101 in-WC at an approximate flow rate of 200 scfm. Due to the constraints placed on the equipment because of the site geology, the test for this interval was concluded. Table 4.2 provides the field data collected during the stepped test of 600-SVE-1-90.

On March 24, 2012, the 130 to 140-ft (39.65 to 42.70 m) interval (referred to as 600-SVE -1-130) was tested. The initial vacuum "step", 15 in-WC, was started and each subsequent "step" was completed through 120 in-WC. The final "step" equilibrated for 600-SVE -1-130 was 118.5 in-WC (98.75 percent of the nominal 120 in-WC) at an approximate flow rate of 72.2 scfm. Table 4.3 provides the field data collected during the stepped test of 600-SVE-1-130.

During each day of the pilot test, temperature readings (presented in Tables 4.1, 4.2, and 4.3) collected at the influent of the SVE system fluctuated similarly to the ambient temperature. A review of ambient temperature readings from a weather monitoring station approximately 8 miles south of WSTF indicates that the changes in temperature measurements at the SVE system were relatively consistent with changes in ambient temperatures throughout the test. It is therefore concluded that the ambient temperature affected the monitoring of soil vapor temperature in some manner. During the test of each zone of 600-SVE-1, the other two zones of the well were monitored for induced vacuum. A short circuit within the borehole would have resulted in the presence of induced vacuum at one or both of the zones not being actively pumped. There was no evidence that the application of vacuum to a single zone of the well induced a vacuum in the other two zones, indicating that there was no intrawell short circuit. A short circuit outside of the SVE well elsewhere in the SVE system would have resulted in the dilution of concentrations of VOCs in the samples collected from the SVE system. Chemical analytical data from soil vapor samples collected during the test are consistent with soil analytical data from soil vapor samples collected from monitoring wells installed at similar depth at the Closure. NASA does not believe the temperature variations observed in the SVE measurements had an adverse effect on the overall results of the test.

Throughout the pilot test, the MSVM wells used as observation wells were routinely monitored for induced vacuum. Table 4.4 provides the induced vacuum measurements collected during the pilot test at the observation wells.

5.0 Regulatory Criteria

Specific regulatory criteria for the remediation of soil gas are not provided in applicable New Mexico regulations or the Permit. Therefore it is not possible to conclusively determine whether concentrations of VOCs in the soil gas beneath the Closure exceed regulatory limits and require remedial action. This lack of regulatory criteria also limits NASA's ability to determine whether the SVE pilot test or subsequent SVE systems successfully achieve established remediation objectives. Following the 600 Area Investigation, the maximum concentration of selected soil gas VOCs (the contaminants showing the highest measured concentrations) was compared with OSHA or National Institute for Occupational Safety and Health (NIOSH) exposure limits for technical evaluation purposes. This comparison was presented in Table 7.9 of the 600 Area CIR (NASA, 2010). None of the maximum measured concentrations exceeded the most conservative OSHA or NIOSH limits, and all were between one to five orders of magnitude lower than the equivalent OSHA or NIOSH limit. In addition, preliminary assessment of indoor air concentrations was provided in Table 7.14 of the revised 600 Area CIR (NASA, 2011a). Estimated indoor air concentrations for all COCs were below the residential screening level, and for the majority of COCs were orders of magnitude below the residential screening level.

As described fully in the concurrently submitted *Development of Site-Specific Risk-Based Regulatory Criteria for Soil Vapor* (NASA, 2012a), NASA performed a comprehensive review of available literature and regulations to determine if soil vapor regulatory standards have been promulgated. Accepted regulatory criteria were not available, so NASA subcontracted Geosyntec Consultants, Inc. (Geosyntec) to determine if WSTF-specific regulatory criteria for soil vapor could be developed based on current guidance. Mr. Robert Ettinger of Geosyntec utilized the EPA-approved Johnson and Ettinger (J&E) model as a basis for the development of potential site-specific regulatory criteria for soil vapor at WSTF. Mr. Ettinger states that "…RBCs represent concentrations that are protective of human health based on the potential migration of VOCs from soil gas to indoor air (i.e., the vapor intrusion pathway) and provide a point of reference to screen data collected as part of site investigation activities. Note, however, that soil gas concentrations exceeding the RBCs do not necessarily indicate the site poses a human health risk or hazard, but are an indication that further evaluation or action may be warranted…" (Geosyntec, 2012). RBCs were calculated for a variety of WSTF COCs.

6.0 Site Contamination

6.1 Soil Sampling

Soil samples were collected at two locations in well 600-SVE-1 proximal to the position of the upper two screened zones for geotechnical testing. Attempts to collect a soil sample at depth corresponding to the lower screened zone were unsuccessful. Previous investigations have provided adequate chemical analytical data for soil beneath and surrounding the Closure, thus no additional analytical samples were collected as part of the pilot test. Soil analytical data were provided in Section 6.1 of the revised 600 Area CIR (NASA, 2011a).

6.2 Groundwater Sampling

Groundwater monitoring well 600-G-138 was installed prior to the SVE pilot test in order to better characterize perched groundwater that was first discovered during the 600 Area Closure Investigation (see Section 3.3.5 of the revised 600 Area CIR [NASA, 2011a]). Sampling was conducted at 600-G-138 in January and April 2012. Groundwater indicator parameters were measured during both sampling events. Samples were also collected for the analysis of a variety of WSTF COCs. Groundwater general chemistry and analytical results for the primary COCs presented in Section 2.2 are provided in Table 6.1. All

chemical analytical results for groundwater samples collected from 600-G-138 are provided in Appendix C.

In addition to the groundwater sampling performed at 600-G-138, groundwater data were collected and evaluated from other locations on or near the Closure during the 600 Area Closure Investigation. These data were presented in Sections 6.2 and 6.3 of the revised 600 Area CIR (NASA, 2011a). Additional groundwater monitoring data are also available in the WSTF Periodic Monitoring Report, submitted to NMED on a quarterly basis.

6.3 Subsurface Vapor Sampling

As indicated in the SVEPTWP (NASA, 2011c), two methods were used to characterize subsurface vapor conditions. Field screening was performed on the SVE well (source) and SVE system discharge. A portable field PID equipped with a 10.6eV lamp was used to field screen for TIVCs at the SVE well and SVE system discharge. PID readings ranged from zero parts per million (ppm) TIVC to 13.8 ppm TIVC in the SVE well. PID responses ranged from zero ppm to 0.5 ppm in the SVE discharge. The measurement of TIVC was addressed in Section 4.8. PID readings are presented in Table 4.1 through Table 4.3.

In addition to field screening, soil vapor sampling was performed at the SVE pilot test well and surrounding MSVM wells. The three zones of 600-SVE-1 were sampled during each step of the pilot test. Two of the MSVM wells, 600-SGW-3 and 600-SGW-5 (the most proximal wells to 600-SVE-1) were sampled before the SVE pilot test, after the test, and during the pumping at each of the three zones in 600-SVE-1. Sampling was performed at the remaining four MSVM wells before and after the SVE pilot test. Samples were collected in 1-liter Summa canisters and shipped to a contracted off-site laboratory for analysis of VOCs by EPA Method TO-15. The maximum concentrations of the primary COCs (see Section 2.2) for each sampling location are provided in Table 6.2. All the chemical analytical data from soil gas samples collected at the SVE pilot test well and MSVM wells during the pilot test are provided in Appendix D. The chemical analytical data from samples collected at 600-SVE-1 during the pilot test were used to calculate the mass of VOCs removed from the subsurface. Table 6.3 provides mass removal information.

7.0 Investigation Summary and Interpretation of Results

7.1 Investigation Summary

The objective of the 600 Area Soil Vapor Extraction Pilot Test was to determine the capabilities and optimal design for an SVE system at and surrounding the Closure. The pilot test was expected to generate the data required to determine if SVE can be used as a practical component of an interim remedy for the Closure, if required. The scope of the pilot test was limited to the Closure and the underlying vadose zone.

In order to accomplish the objectives of the pilot test, NASA performed the following major activities:

- Installed 600-SVE-1 and 600-G-138 to serve as the SVE pilot test well and an additional groundwater monitoring well, respectively.
- Performed SVE pilot test fieldwork in accordance with the approved SVEPTWP.
- Collected various field data to determine impact of SVE on the vadose zone beneath the Closure.
- Collected a comprehensive set of soil vapor samples for analysis of VOCs to quantitate the influence, if any, of SVE on subsurface VOC concentrations.

- Evaluated field data collected during the pilot test and chemical analytical data from soil vapor samples collected throughout the test.
- Determined risk-based concentrations of many COCs in soil vapor to which the concentrations measured during the investigation could be compared to determine if threats to human health or the environment are present.

Because this investigation was focused primarily on determining whether SVE could be a practical means of achieving remediation goals ("extraction of VOCs from the subsurface") (NMED, 2011a), the minimal groundwater and soil sampling results collected in association with the SVE pilot test were not evaluated as thoroughly as the field data and soil vapor results. A comprehensive evaluation of the groundwater and soils beneath and adjacent to the Closure was performed following the 600 Area Closure Investigation and was presented in the revised 600 CIR (NASA, 2011a). The results of soil and groundwater sampling performed in accordance with the SVEPTWP are consistent with those from previous sampling efforts.

7.2 Interpretations of SVE Pilot Test Field Data

Field data were collected from the SVE pilot test well and the MSVM wells during the SVE pilot test. These data were discussed and briefly evaluated in preceding sections. Interpretations of the data are presented in this section and are used to develop conclusions and recommendations presented later in the report.

7.2.1 Interpreting Radius of Influence Based on Vacuum Measurements

The primary objective of the SVE pilot test was to determine the capabilities and optimal design for an SVE treatment system at the Closure. An indicator of system capability is the radius of influence of the extraction well. Two key observations can be made from the field data presented in Table 4.1 through Table 4.4 relative to the radius of influence of the SVE well. First, the flow rate and applied vacuum in 600-SVE-1 stabilized rapidly, suggesting that extraction had only a localized impact on the surrounding geology. Second, the application of vacuum to the top and bottom zones (with depths f 40 and 130 ft bgs, respectively) of the SVE pilot test well had no measureable impact on the observation wells monitored during the test. Neither 600-SGW-3 nor 600-SGW-5, both of which are less than 100 ft from 600-SVE-1, responded reliably to the extraction from 600-SVE-1-40 or 600-SVE-1-130. During extraction testing of 600-SVE-1-90, a very minor induced vacuum was measured at a single zone at 600-SG-5 (the zone at 102.5 ft bgs). From these observations, it can be determined that the radius of influence of 600-SVE-1-90 may be up to 76 ft, while the radius of influence of 600-SVE-1-40 and 600-SVE-1-130 is less than 76 ft. Overall, the vacuum measurements collected during the test illustrate that the extraction of subsurface air at the flow rates and applied vacuum of the pilot test was unable to create a pressure gradient that would induce measureable movement of soil vapor at nearby observation wells. This suggests that the coalescent alluvial fan deposits beneath the Closure are not favorable for efficient application of SVE.

7.2.2 Interpreting TIVC Measurements and Treatment Suitability

The low TIVC measurements obtained at the SVE well and SVE system discharge suggest that SVE may not be an efficient method for removing the fairly low and highly diffused concentrations of VOCs in the vadose zone beneath the Closure. This is further supported by NASA's evaluation of the analytical data (see next section). However, the evaluation of PID readings at the SVE system discharge compared to those at the source does confirm that the GAC used in the pilot test is an effective method for removing VOCs from soil vapor. Confirmation of this treatment technology for VOCs in WSTF soil implies that the use of GAC could be appropriate at other locations where higher concentrations of VOCs in soil vapor are present.

7.3 Interpretations of SVE Pilot Test Analytical Data

Soil vapor samples were collected from the SVE pilot test well and the MSVM wells. Like field data, analytical data were presented and discussed in preceding sections. The data are interpreted in this section and used in conjunction with the field data to develop conclusions and recommendations presented later in the report.

7.3.1 Interpreting Analytical Data from the SVE Well

Of the five primary COCs monitored during the SVE pilot test, four were routinely detected in samples collected from the SVE pilot test well: chloroform; TCE; PCE, and Freon 113. Freon 11 was not detected reliably in the SVE well.

Figures 7.1, 7.2, 7.3, and 7.4 show that concentrations of chloroform, TCE, PCE, and Freon 113, respectively, stabilized quickly in the extracted vapor and tended to remain relatively consistent during the consecutive steps at the three zones of 600-SVE-1. In conjunction with the rapid stabilization of the flow rate and applied vacuum at these extraction zones, consistent VOC concentrations demonstrate that large volumes of soil vapor with low contaminant concentrations are accessible at these locations. This would be expected given the high porosity (typically 20 to 40% based on geotechnical analysis) of the vadose zone soils beneath the Closure and the substantial amount of time elapsed since the Closure was constructed during which diffusive transport of VOCs occurred.

The concentrations of TCE, PCE, and Freon 113 were lower in the shallow zone of 600-SVE-1, and tended to increase with depth (Figures 7.1, 7.2, and 7.4). The vertical concentrations of chloroform were irregular during the test (Figure 7.4). These vertical concentration profiles are consistent with the results of sampling performed during the 600 Area Investigation as described in Section 7.2.4 of the revised 600 Area CIR (NASA, 2011a) and support the previous conclusion that VOC concentrations in soil gas are the result of diffusive transport from perched or regional groundwater.

7.3.2 Interpreting Analytical Data from the MSVM Wells

Field data from the MSVM wells show that the extraction of soil vapor at 600-SVE-1 did not significantly influence the subsurface at the MSVM well locations, thus an exhaustive evaluation of chemical analytical results at these locations is not warranted. Observation wells 600-SGW-3 and 600-SGW-5, the nearest MSVM wells to the SVE pilot test well, were sampled regularly during the test. At each sampling depth in these wells, the concentrations of the primary COCs remained relatively consistent with respect to time. Chemical analytical data from soil vapor samples collected from the MSVM wells during the SVE pilot test are consistent with the results from sampling performed at MSVM wells during the 600 Area Investigation (NASA, 2011a). As seen in the SVE well, concentrations of COCs in the observation wells tended to increase with depth in the vadose zone.

7.4 Comparison of Results to Regulatory Criteria

Unlike groundwater and soils, there are no specific regulatory criteria for soil vapor in the Permit. NASA attempted to locate potentially applicable regulatory levels for soil vapor in other applicable jurisdictions, but was unsuccessful. As a result, a direct comparison of measured concentrations to federal or state cleanup standards cannot be performed. Recognizing this deficiency, NASA subcontracted the services of Geosyntec, a recognized expert in the field of soil vapor intrusion work, to assist with the development of values to which measured concentrations of COCs in soil vapor could be compared. NASA's concurrently submitted *Development of Site-Specific Risk-Based Regulatory Criteria for Soil Vapor* (NASA, 2012a) provides specific information on the related project to calculate potential regulatory

criteria for soil vapor. The calculated risk-based concentrations (RBCs) for the five primary COCs at varying soil depths are presented in Table 7.1. RBCs were calculated for multiple depths in order to provide risk-based levels to which depth-specific soil vapor sample results could be directly compared. A complete list of RBCs, including calculation methodology and supporting data used in the application of the J&E model, is provided in the companion document (NASA, 2012a). In the absence of established regulatory criteria to which measured concentrations in the vadose zone or extracted vapor can be compared, NASA believes that comparisons to calculated RBCs provide an ideal mechanism for determining if vadose zone contamination presents a risk to human health or the environment. Maximum concentrations of COCs detected during the SVE pilot test are compared to these RBCs in Table 7.2. None of the VOC concentrations measured during the SVE pilot test exceeded the RBCs for commercial workers. In fact, all but two of the 110 measured maximum concentrations of COCs are at least one order of magnitude below the corresponding RBC for a comparable depth.

Figures 7.5 through 7.8 compare measured concentrations of chloroform, TCE, PCE, and Freon 113, respectively, in the topmost zone of the SVE pilot test well (600-SVE-1-40) to the calculated indoor commercial worker RBCs for those COCs at a comparable depth. Freon 11 is not presented because most results were non-detect. Figures 7.9 through 7.11 compare measured concentrations of chloroform, TCE, and Freon 113, respectively, in the middle zone of the SVE pilot test well (600-SVE-1-90) to the calculated RBCs for those COCs at a comparable depth. PCE and Freon 11 are not presented because most results were non-detect. Figures 7.12 through 7.14 compare measured concentrations of chloroform, TCE, and Freon 113, respectively, in the lowermost zone of the SVE pilot test well (600-SVE-1-130) to calculated RBCs at a comparable depth. PCE and Freon 11 are not presented because most results were non-detect. The graphs presented in Figures 7.5 through 7.14 clearly demonstrate that soil vapor extracted from various depths in the vadose zone beneath the Closure are significantly below calculated risk-based concentrations. It is important to note that the vertical axes of these graphs (denoting concentrations) are logarithmic.

Soil vapor COC concentrations in samples collected from MSVM wells adjacent to 600-SVE-1 were also compared to calculated indoor commercial worker RBCs. Appendix E provides a series of graphs that compare the available measured concentrations of the primary COCs in MSVM wells 600-SGW-3 and 600-SGW-5 to calculated RBCs at comparable depths. In virtually every case the VOCs are at least one order of magnitude less than their comparable RBC, and in many cases the measured concentrations are several orders of magnitude lower than calculated RBCs, indicating no threat to human health or the environment from the relatively low levels of VOCs in the vadose zone beneath the Closure.

7.5 Conclusions

7.5.1 Conclusions from Previous Investigations

NASA completed a comprehensive investigation of the 600 Area Closure in 2009 and 2010 and provided the results of that investigation to NMED in the revised 600 Closure Investigation Report (NASA, 2011a). That investigation concluded that the vadose zone beneath the Closure was not a continuing source of contamination to the groundwater based on soil, soil vapor, and groundwater data. Concentrations of COCs in soil beneath the Closure were below risk-based cleanup levels specified in the Permit and were comparable to concentrations from samples collected outside the footprint of the Closure. Measured concentrations of COCs in soil vapor below the Closure were less than or equal to concentrations that would be in equilibrium with the local groundwater, thus the mass transport of primary COCs was interpreted to be from groundwater to soil gas (off-gassing). Measured soil gas concentrations were compared to regulatory levels for vapor intrusion in a residential setting and to OSHA exposure limits. Contaminant concentrations in soil gas below the Closure were below OSHA occupational exposure limits and residential indoor air screening levels. Based on the conclusions of that

investigation, NASA recommended that no further investigations or corrective action be performed at the Closure (NASA, 2011a). NASA believes that these conclusions and recommendations remain valid following the SVE pilot test.

7.5.2 Conclusions from SVE Pilot Test

NMED approved NASA's 600 Closure Investigation Report (NMED, 2011b), but also directed NASA to perform an SVE pilot test to determine if SVE could be used as a practical component of an interim remedy for the Closure. NASA completed the SVE pilot test in accordance with the NMED-approved SVEPTWP (NASA, 2011c). During the test, NASA collected a variety of field and chemical analytical data, both at the SVE pilot test well and from MSVM wells installed during the previous investigation.

Based on the collection and interpretation of SVE pilot test data, the following conclusions can be drawn regarding the performance of the SVE pilot system and the need for and applicability of SVE as a remediation strategy for the Closure.

- The lack of induced vacuum response in MSVM wells surrounding 600-SVE-1, in conjunction with the rapid stabilization of applied vacuum at 600-SVE-1, supports initial estimates of a relatively small radius of influence for a properly installed SVE. The observed radius of influence for the pilot test well was less than or equal to 76 ft, demonstrating the difficulty of creating a pressure gradient in the vadose zone beneath the Closure. The test was run at vacuums similar to those employed in commercial SVE systems, suggesting that a system capable of impacting the entire vadose zone beneath the Closure would be highly inefficient for the relatively small contaminant mass removal expected.
- Concentrations of COCs in the three zones of 600-SVE-1 remained low and relatively consistent over the various steps in the SVE pilot test, indicating that the results are representative of overall conditions in the vadose zone, where relatively low and diffuse concentrations of VOCs are present as a result of the underlying contaminated groundwater.
- The very low levels of TIVC (PID readings) observed at the SVE system discharge indicate that GAC is an effective treatment media for VOCs at the relatively low levels encountered in the vadose zone beneath the Closure, suggesting it would be suitable for use at other WSTF locations where higher vadose zone VOC concentrations may warrant treatment.

Additional conclusions are reached from the evaluation of the results of monitoring performed during the SVE pilot test at other locations in the vadose zone beneath the Closure and a consideration of the development of site-specific RBCs for soil vapor. These conclusions are presented below:

- Concentrations of COCs in soil vapor, including the five primary COCs identified in Section 2.2, are typically orders of magnitude less than the calculated risk-based concentrations developed to determine whether VOC concentrations pose a risk to human health or the environment. This holds true for all tested levels within the vadose zone.
- Measured soil gas concentrations of VOCs remain below OSHA occupational exposure limits and residential indoor air screening levels.
- Concentrations of COCs, including the five primary COCs identified in Section 2.2, in soil vapor beneath the Closure remain less than or equal to concentrations that would be in equilibrium with the local groundwater.

7.5.3 Overall Conclusions

A careful review of the results and conclusions of the 600 Area Closure Investigation and thorough evaluation of the data collected during the SVE pilot test continue to support NASA's overall conclusion that the soil vapor beneath the 600 Area Closure does not present a risk to human health or the environment. The concentrations of COCs in the vadose zone are less than currently available standards and calculated risk-based concentrations. The data indicate that SVE is not an appropriate or efficient corrective action for the vadose zone beneath the 600 Area Closure because of the relatively low levels of VOCs diffused throughout a large volume of highly porous soil. In general, NASA concludes that the vadose zone beneath the 600 Area Closure is not a continuing source of contamination to the groundwater and an extensive corrective action such as SVE is not required. Results from monitoring and sampling performed during the SVE pilot test support this conclusion.

8.0 Recommendations

NASA recommends that no further characterization of soil ~~or soil vapor~~ be performed for the vadose zone beneath the 600 Area Closure. Concentrations of VOCs in soil samples collected in the 600 Area Closure Investigation were below residential soil screening levels. Of all the COCs in the initial investigation, only two metals (arsenic and thallium) exceeded residential soil screening levels. These concentrations were attributed to the natural occurrence of these metals in WSTF soils. Analysis of soil samples indicated there was no continuing source of contamination in the soil beneath the closure (NASA 2011a).

~~In addition,~~ NASA concludes that corrective action is not required for the vadose zone beneath and adjacent to the Closure, and recommends that no further investigations or testing be conducted to evaluate remedial action for the vadose zone below the 600 Area Closure. Concentrations of COCs in soil vapor, including the five primary COCs identified in Section 2.2 of this report, are typically orders of magnitude less than the calculated risk-based concentrations developed to determine whether VOC concentrations pose a risk to human health or the environment. Chemical analytical results of soil vapor samples collected during all sampling events to date indicate that there is no continuing source of contamination in the vadose zone.

Regional and perched groundwater beneath the Closure is contaminated with WSTF COCs. COCs detected in soil vapor below the Closure indicate that measured concentrations in soil gas are less than or equal to concentrations that would be in equilibrium with the local groundwater. Because of the presence of WSTF COCs in the perched and regional groundwater, additional soil vapor monitoring will be performed as necessary to support ongoing and planned groundwater monitoring and corrective action.

NASA further recommends that no risk assessment is required for the soil and soil vapor beneath the 600 Area Closure. ~~Justifications for these recommendations are presented below:~~ The concentrations of COCs in the soil and soil vapor are below established cleanup levels and the conservative risk-based concentrations proposed as potential regulatory criteria for soil vapor. COC concentrations in the soil and soil vapor do not present a risk to human health or the environment.

Finally, NASA recommends that contaminated perched groundwater located near the 600 Area Closure be considered for extraction and treatment. NASA recommends the use of a non-dedicated pump to extract groundwater prior to transport to and treatment by the Mid-plume Interception and Treatment System as investigation-derived waste. Soil vapor in proximal soil vapor monitoring well(s) will be concurrently monitored to determine how the removal of contaminated perched groundwater influences concentrations of COCs in the soil vapor. NASA proposes to submit an abbreviated work plan describing the planned process in more detail by November 16, 2012.

~~Concentrations of VOCs in soil samples collected in the 600 Area Closure Investigation were below residential soil screening levels. Of all the COCs in the initial investigation, only two metals (arsenic and thallium) exceeded residential soil screening levels. These concentrations were attributed to the natural occurrence of these metals in WSTF soils. Analysis of soil samples indicated there was no continuing source of contamination in the soil beneath the closure (NASA 2011a).~~

~~Concentrations of COCs in soil vapor, including the five primary COCs identified in Section 2.2 of this report, are typically orders of magnitude less than the calculated risk-based concentrations developed to determine whether VOC concentrations pose a risk to human health or the environment. Chemical analytical results of soil vapor samples collected during all sampling events to date indicate that there is no continuing source of contamination in the vadose zone.~~

~~Regional and perched groundwater beneath the Closure is contaminated with WSTF COCs. COCs detected in soil vapor below the Closure indicate that measured concentrations in soil gas are less than or equal to concentrations that would be in equilibrium with the local groundwater.~~

~~NASA anticipates the submittal of a Permit modification request for no further action at the 600 Area Closure by September 30, 2012.~~

9.0 References

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Tables

Table 4.1 Field Data Collected During SVE Pilot Test at 600-SVE-1-40

Date	Time	TIVC (ppm)	Flow rate (scfm)	Temperature (Deg. F)	Relative Humidity (%)	Oxygen (%)	Carbon Dioxide (%)	Atmospheric Pressure (in. H_2O)	Vacuum (in. H_2O)	TIVC (ppm) SVE System Discharge
~~Prior to~~At Start of Test										
03/22/12	1125	13.8	0.94	74.0	78.4	19.5	00.3	406.90	0.009	NA
Test Step #1										
03/22/12	1200	1.3	85.21	71.0	13.6	18.6	1.4	406.77	15.4	NA
03/22/12	1215	1.2	85.15	71.0	13.1	18.3	1.3	406.63	15.4	0.4
03/22/12	1230	1.4	83.85	71.7	13.3	18.4	1.0	406.63	15.3	NA
03/22/12	1245	1.4	84.21	71.0	14.0	18.2	1.0	406.49	15.3	0.5
Test Step #2										
03/22/12	1430	1.3	134.20	72.9	11.2	9.6	1.5	405.68	30.1	NA
03/22/12	1445	1.3	133.46	74.1	10.8	10.8	1.3	405.54	30.0	0.5
03/22/12	1500	1.4	133.93	75.4	11.2	10.4	1.3	405.54	30.2	NA
03/22/12	1515	1.2	134.17	76.5	9.3	18.4	0.8	405.41	30.2	0.5
Test Step #3										
03/22/12	1605	0.5	182.51	77.5	7.6	15.4	0.2	405.27	50.1	NA
03/22/12	1620	0.8	183.01	76.9	6.1	17.3	0.0	405.13	50.1	0.5
03/22/12	1635	0.4	185.21	77.2	7.4	17.4	0.0	405.13	50.1	NA
03/22/12	1650	N/A	185.21	77.2	7.6	16.4	1.3	405.00	50.2	0.4
Test Step #4										
03/23/12	0840	N/A	N/A	59.0	15.9	19.4	2.3	407.58	67.5	NA
03/23/12	0855	N/A	N/A	62.2	13.7	20.1	00.3	407.58	67.2	NA
03/23/12	0910	N/A	N/A	62.1	13.6	20.1	0.6	407.58	66.9	NA
03/23/12	0925	N/A	N/A	64.1	12.4	20.0	0.8	407.58	66.9	0.2

NA – Not available, measurement not taken

Table 4.2 Field Data Collected During SVE Pilot Test at 600-SVE-1-90

Date	Time	TIVC (ppm)	Flow rate (scfm)	Temperature (Deg. F)	Relative Humidity (%)	Oxygen (%)	Carbon Dioxide (%)	Atmospheric Pressure (in. H_2O)	Vacuum (in. H_2O)	TIVC (ppm) SVE System Discharge
~~Prior to~~At Start of Test										
03/23/12	1055	1.0	49.50	69.9	12.0	18.4	0.4	407.31	14.9	NA
Step Test #1										
03/23/12	1110	0.7	49.69	71.4	11.2	18.9	0.3	407.31	15.1	0.0
03/23/12	1125	0.1	49.68	71.8	10.8	18.0	0.5	407.17	15.1	NA
03/23/12	1140	0.3	49.62	73.0	9.8	19.5	0.2	407.17	15.1	0.0
03/23/12	1155	NA	NA	NA	NA	NA	NA	407.14	NA	NA
Step Test #2										
03/23/12	1230	0.4	83.33	75.5	8.9	17.8	0.8	407.04	29.6	NA
03/23/12	1245	0.5	83.70	75.2	8.1	18.2	0.9	406.90	29.4	0.0
03/23/12	1300	0.5	84.62	74.0	8.1	19.9	0.0	406.90	29.6	NA
03/23/12	1315	0.5	86.39	75.2	7.9	19.8	0.0	406.77	29.6	0.0
Step Test #3										
03/23/12	1335	0.4	122.74	75.8	7.6	19.7	0.1	406.77	49.5	NA
03/23/12	1350	0.8	121.69	74.8	8.1	19.7	0.1	406.63	49.5	0.0
03/23/12	1405	0.7	121.00	74.2	8.0	19.7	0.1	406.49	49.5	NA
03/23/12	1420	0.5	125.03	79.4	7.8	19.7	0.1	406.36	49.4	0.0
Step Test #4										
03/23/12	1440	0.2	155.83	76.5	7.2	19.8	0.0	406.09	70.1	NA
03/23/12	1455	0.5	159.77	77.5	6.9	19.6	0.0	405.95	70.2	0.0
03/23/12	1510	0.1	156.78	78.9	7.4	19.6	0.0	405.81	69.6	NA
03/23/12	1525	0.2	156.51	77.6	7.3	19.5	0.0	405.81	69.8	0.0

Table 4.2 Field Data Collected During SVE Pilot Test at 600-SVE-1-90

Date	Time	TIVC (ppm)	Flow rate (scfm)	Temperature (Deg. F)	Relative Humidity (%)	Oxygen (%)	Carbon Dioxide (%)	Atmospheric Pressure (in. H_2O)	Vacuum (in. H_2O)	TIVC (ppm) SVE System Discharge
Step Test #5										
03/23/12	1545	0.2	183.49	78.2	6.0	19.1	0.0	405.68	90.0	NA
03/23/12	1600	0.0	182.76	78.2	6.2	17.0	0.7	405.68	89.8	0.0
03/23/12	1615	0.2	188.18	80.4	6.0	16.4	0.4	405.54	89.8	NA
03/23/12	1630	0.0	184.48	78.5	6.1	16.9	0.2	405.54	89.5	0.0
Step Test #6										
03/23/12	1650	0.0	197.66	78.7	6.4	17.2	0.2	405.41	101.7	NA
03/23/12	1705	0.0	204.78	80.5	5.1	17.0	0.2	405.41	101.5	0.0
03/23/12	1720	0.1	198.33	79.6	5.1	16.9	0.2	405.41	101.2	NA
03/23/12	1735	0.0	201.12	83.7	4.7	17.1	0.2	405.27	101.5	0.0

NA – Not available, measurement not taken

Table 4.3 Field Data Collected During SVE Pilot Test at 600-SVE-1-130

Date	Time	TIVC (ppm)	Flow rate (scfm)	Temperature (Deg. F)	Relative Humidity (%)	Oxygen (%)	Carbon Dioxide (%)	Atmospheric Pressure (in. H_2O)	Vacuum (in. H_2O)	TIVC (ppm) SVE System Discharge
~~Prior to~~At Start of Test										
03/24/12	0740	0.7	0.00	49.9	76.3	20.2	0.1	407.04	0.0	0.1
Step Test #1										
03/24/12	0800	1.4	6.31	59.2	24.8	19.9	0.9	407.04	15.1	NA
03/24/12	0815	1.3	6.76	64.2	20.6	19.2	1.3	407.17	14.7	0.0
03/24/12	0830	1.2	6.64	66.9	19.7	18.2	1.0	407.31	14.6	NA
03/24/12	0845	1.1	7.42	62.5	21.7	18.1	1.0	407.31	14.6	0.0
Step Test #2										
03/24/12	0905	1.1	12.91	62.1	20.0	18.9	1.0	407.31	30.1	NA
03/24/12	0920	0.6	12.82	65.0	19.4	19.1	1.0	407.45	29.9	0.0
03/24/12	0935	1.0	12.87	65.8	18.9	18.9	1.0	407.45	30.1	NA
03/24/12	0950	0.9	13.05	67.5	16.7	18.9	0.7	407.31	29.8	0.0
Step Test #3										
03/24/12	1010	0.9	23.92	69.4	14.9	18.3	1.0	407.31	50.1	NA
03/24/12	1025	0.7	20.88	70.3	13.8	18.3	1.0	407.31	50.0	0.0
03/24/12	1040	0.7	21.66	70.8	13.8	18.6	0.9	407.31	50.0	NA
03/24/12	1055	0.8	21.85	74.0	11.6	18.6	0.9	407.17	50.0	0.0
Step Test #4										
03/24/12	1115	0.3	33.72	73.9	12.1	18.7	0.9	407.17	70.3	NA
03/24/12	1130	N/A	34.46	76.0	11.0	18.7	0.9	407.17	69.9	0.0
03/24/12	1145	N/A	34.79	74.7	10.0	18.7	0.9	407.04	70.0	NA
03/24/12	1200	0.5	36.50	76.7	9.6	18.2	0.9	406.90	69.7	NA

Table 4.3 Field Data Collected During SVE Pilot Test at 600-SVE-1-130

Date	Time	TIVC (ppm)	Flow rate (scfm)	Temperature (Deg. F)	Relative Humidity (%)	Oxygen (%)	Carbon Dioxide (%)	Atmospheric Pressure (in. H_2O)	Vacuum (in. H_2O)	TIVC (ppm) SVE System Discharge
Step Test #5										
03/24/12	1225	0.5	51.00	79.1	7.6	18.5	0.9	406.77	90.7	NA
03/24/12	1240	0.0	52.34	79.4	7.7	18.1	0.9	406.77	90.4	0.0
03/24/12	1255	0.0	52.20	78.1	7.6	18.4	0.9	406.77	89.8	NA
03/24/12	1310	0.4	53.44	80.0	6.8	18.2	0.9	406.63	89.5	0.0
Step Test #6										
03/24/12	1330	0.1	70.37	79.5	6.7	19.5	0.0	406.49	120.3	NA
03/24/12	1345	0.3	71.40	81.0	6.5	19.5	0.0	406.49	119.5	0.0
03/24/12	1400	0.2	72.72	81.6	6.9	19.4	0.0	406.36	119.1	NA
03/24/12	1415	0.3	72.20	81.3	6.9	19.2	0.0	406.22	118.5	0.0

NA – Not available, measurement not taken

Table 4.4 Field Data Collected at MSVM (Observation) Wells

Induced Vacuum in 600-SGW-1 (sample port depth provided in ft)				
Date	**Time**	**12.5 Vacuum (in. H_2O)**	**57.5 Vacuum (in. H_2O)**	**117.5 Vacuum (in. H_2O)**
Measurements While Testing 600-SVE-1-40				
03/22/12	1125	0.0	0.0	0.0
03/22/12	1225	0.0	0.0	0.0
03/22/12	1425	0.0	0.0	0.0
03/22/12	1515	0.0	0.0	0.0
03/22/12	1620	0.0	0.0	0.0
03/22/12	1650	0.0	0.0	0.0
03/23/12	0855	0.0	0.0	0.0
03/23/12	0925	0.0	0.0	0.0
Measurements While Testing 600-SVE-1-130				
03/24/12	0740	0.0	0.0	0.0
03/24/12	0815	0.0	0.0	0.0
03/24/12	0845	0.0	0.0	0.0
03/24/12	0920	0.0	0.0	0.0
03/24/12	0950	0.0	0.0	0.0
03/24/12	1025	0.0	0.0	0.0
03/24/12	1055	0.0	0.0	0.0
03/24/12	1130	0.0	0.0	0.0
03/24/12	1200	0.0	0.0	0.0
03/24/12	1240	0.0	0.0	0.0
03/24/12	1310	0.0	0.0	0.0
03/24/12	1345	0.0	0.0	0.0
03/24/12	1415	0.0	0.0	0.0
~~03/22/12~~	~~1125~~	~~0.0~~	~~0.0~~	~~0.0~~

Induced Vacuum in 600-SGW-2 (sample port depth provided in ft)					
Date	**Time**	**12.5 Vacuum (in. H_2O)**	**47.5 Vacuum (in. H_2O)**	**107.5 Vacuum (in. H_2O)**	**150.0 Vacuum (in. H_2O)**
Measurements While Testing 600-SVE-1-40					
03/22/12	1125	0.0	0.0	0.0	0.0
03/22/12	1225	0.0	0.0	0.0	0.0

Table 4.4 Field Data Collected at MSVM (Observation) Wells

03/22/12	1425	0.0	0.0	0.0	0.0
03/22/12	1515	0.0	0.0	0.0	0.0
03/22/12	1620	0.0	0.0	0.0	0.0
03/22/12	1650	0.0	0.0	0.0	0.0
03/23/12	0855	0.0	0.0	0.0	0.0
03/23/12	0925	0.0	0.0	0.0	0.0
Measurements While Testing 600-SVE-1-130					
03/24/12	0740	0.0	0.0	0.0	0.0
03/24/12	0815	0.0	0.0	0.0	0.0
03/24/12	0845	0.0	0.0	0.0	0.0
03/24/12	0920	0.0	0.0	0.0	0.0
03/24/12	0950	0.0	0.0	0.0	0.0
03/24/12	1025	0.0	0.0	0.0	0.0
03/24/12	1055	0.0	0.0	0.0	0.0
03/24/12	1130	0.0	0.0	0.0	0.0
03/24/12	1200	0.0	0.0	0.0	0.0
03/24/12	1240	0.0	0.0	0.0	0.0
03/24/12	1310	0.0	0.0	0.0	0.0
03/24/12	1345	0.0	0.0	0.0	0.0
03/24/12	1415	0.0	0.0	0.0	0.0

Induced Vacuum in 600-SGW-3 (sample port depth provided in ft)					
Date	**Time**	**12.5 Vacuum (in. H_2O)**	**57.5 Vacuum (in. H_2O)**	**107.5 Vacuum (in. H_2O)**	**137.5 Vacuum (in. H_2O)**
Measurements While Testing 600-SVE-1-40					
03/22/12	1125	0.0	0.0	0.0	0.0
03/22/12~~03/23/12~~	1215	0.0	0.0	0.0	0.0
03/22/12~~03/24/12~~	1245	0.0	0.0	0.0	0.0
03/22/12~~03/25/12~~	1445	0.0	0.0	0.0	0.0
03/22/12~~03/26/12~~	1515	0.0	0.0	0.0	0.0
03/22/12~~03/27/12~~	1620	0.0	0.0	0.0	0.0
03/22/12	1650	0.0	0.0	0.0	0.0
03/23/12	0855	0.0	0.5	0.0	0.0
03/23/12	0825	0.0	0.5	0.0	0.0
Measurements While Testing 600-SVE-1-90					

Table 4.4 Field Data Collected at MSVM (Observation) Wells

03/23/12	1030	0.0	0.0	0.0	0.0
03/23/12	1110	0.0	0.0	0.0	0.0
03/23/12	1140	0.0	0.0	0.0	0.0
03/23/12	1210	0.0	0.0	0.0	0.0
03/23/12	1245	0.0	0.0	0.0	0.0
03/23/12	1315	0.0	0.0	0.0	0.0
03/23/12	1350	0.0	0.0	0.0	0.0
03/23/12	1420	0.0	0.0	0.0	0.0
03/23/12	1455	0.0	0.0	0.0	0.0
03/23/12	1525	0.0	0.0	0.0	0.0
03/23/12	1600	0.0	0.0	0.0	0.0
03/23/12	1630	0.0	0.0	0.0	0.0
03/23/12	1705	0.0	0.0	0.0	0.0
03/23/12	1735	0.0	0.0	0.0	0.0
Measurements While Testing 600-SVE-1-130					
03/24/12	0740	0.0	0.0	0.0	0.0
03/24/12	0815	0.0	0.0	0.0	0.0
03/24/12	0845	0.0	0.0	0.0	0.0
03/24/12	0920	0.0	0.0	0.0	0.0
03/24/12	0950	0.0	0.0	0.0	0.0
03/24/12	1025	0.0	0.0	0.0	0.0
03/24/12	1055	0.0	0.0	0.0	0.0
03/24/12	1130	0.0	0.0	0.0	0.0
03/24/12	1200	0.0	0.0	0.0	0.0
03/24/12	1240	0.0	0.0	0.0	0.0
03/24/12	1310	0.0	0.0	0.0	0.0
03/24/12	1345	0.0	0.0	0.0	0.0
03/24/12	1415	0.0	0.0	0.0	0.0

Induced Vacuum in 600-SGW-4 (sample port depth provided in ft)					
Date	**Time**	**12.5 Vacuum (in. H_2O)**	**47.5 Vacuum (in. H_2O)**	**107.5 Vacuum (in. H_2O)**	**142.5 Vacuum (in. H_2O)**
Measurements While Testing 600-SVE-1-40					
03/22/12	1125	0.0	0.0	0.0	0.0
03/22/12~~03/23/12~~	1215	0.0	0.0	0.0	0.0

Table 4.4 Field Data Collected at MSVM (Observation) Wells

03/22/12~~03/24/12~~	1245	0.0	0.0	0.0	0.0
03/22/12~~03/25/12~~	~~315~~1515	0.0	0.0	0.0	0.0
03/22/12~~03/26/12~~	1620	0.0	0.0	0.0	0.0
03/22/12~~03/27/12~~	1650	0.0	0.0	0.0	0.0
03/23/12	0825	0.0	0.0	0.0	0.0
03/23/12	0855	0.0	0.0	0.0	0.0
Measurements While Testing 600-SVE-1-90					
03/23/12	1030	0.0	0.0	0.0	0.0
03/23/12	1110	0.0	0.0	0.0	0.0
03/23/12	1140	0.0	0.0	0.0	0.0
03/23/12	1215	0.0	0.0	0.0	0.0
03/23/12	1245	0.0	0.0	0.0	0.0
03/23/12	1315	0.0	0.0	0.0	0.0
03/23/12	1350	0.0	0.0	0.0	0.0
03/23/12	1420	0.0	0.0	0.0	0.0
03/23/12	1455	0.0	0.0	0.0	0.0
03/23/12	1525	0.0	0.0	0.0	0.0
03/23/12	1600	0.0	0.0	0.0	0.0
03/23/12	1630	0.0	0.0	0.0	0.0
03/23/12	1705	0.0	0.0	0.0	0.0
03/23/12	1735	0.0	0.0	0.0	0.0
Measurements While Testing 600-SVE-1-130					
03/24/12	0740	0.0	0.0	0.0	0.0
03/24/12	0815	0.0	0.0	0.0	0.0
03/24/12	0845	0.0	0.0	0.0	0.0
03/24/12	0920	0.0	0.0	0.0	0.0
03/24/12	0950	0.0	0.0	0.0	0.0
03/24/12	1025	0.0	0.0	0.0	0.0
03/24/12	1055	0.0	0.0	0.0	0.0
03/24/12	1130	0.0	0.0	0.0	0.0
03/24/12	1200	0.0	0.0	0.0	0.0
03/24/12	1240	0.0	0.0	0.0	0.0
03/24/12	1310	0.0	0.0	0.0	0.0
03/24/12	1345	0.0	0.0	0.0	0.0
03/24/12	1415	0.0	0.0	0.0	0.0

Table 4.4 Field Data Collected at MSVM (Observation) Wells

Induced Vacuum in 600-SGW-5 (sample port depth provided in ft)					
Date	**Time**	**7.5 Vacuum (in. H_2O)**	**52.5 Vacuum (in. H_2O)**	**102.5 Vacuum (in. H_2O)**	**137.5 Vacuum (in. H_2O)**
Measurements While Testing 600-SVE-1-40					
03/22/12	1125	0.0	0.0	0.0	0.0
03/22/12~~03/23/12~~	1215	0.0	0.0	0.0	0.0
03/22/12~~03/24/12~~	1245	0.0	0.0	0.0	0.0
03/22/12~~03/25/12~~	1445	0.0	0.0	0.0	0.0
03/22/12~~03/26/12~~	1515	0.0	0.0	0.0	0.0
03/22/12~~03/27/12~~	1620	0.0	0.0	0.0	0.0
03/22/12	1650	0.0	0.0	0.0	0.0
03/23/12	0855	0.0	0.6	0.0	0.0
03/23/12	0825	0.0	0.6	0.0	0.0
Measurements While Testing 600-SVE-1-90					
03/23/12	1030	0.0	0.0	0.0	0.0
03/23/12	1110	0.0	0.0	0.0	0.0
03/23/12	1140	0.0	0.0	0.0	0.0
03/23/12	1210	0.0	0.0	0.0	0.0
03/23/12	1245	0.0	0.0	0.0	0.0
03/23/12	1315	0.0	0.0	0.0	0.0
03/23/12	1350	0.0	0.0	0.0	0.0
03/23/12	1420	0.0	0.0	0.0	0.0
03/23/12	1455	0.0	0.0	0.5	0.0
03/23/12	1525	0.0	0.0	0.6	0.0
03/23/12	1600	0.0	0.0	0.0	0.0
03/23/12	1630	0.0	0.0	0.0	0.0
03/23/12	1705	0.0	0.0	0.0	0.0
03/23/12	1735	0.0	0.0	0.0	0.0
Measurements While Testing 600-SVE-1-130					
03/24/12	0740	0.0	0.0	0.0	0.0
03/24/12	0815	0.0	0.0	0.0	0.0
03/24/12	0845	0.0	0.0	0.0	0.0
03/24/12	0920	0.0	0.0	0.0	0.0
03/24/12	0950	0.0	0.0	0.0	0.0

Table 4.4 Field Data Collected at MSVM (Observation) Wells

03/24/12	1025	0.0	0.0	0.0	0.0
03/24/12	1055	0.0	0.0	0.0	0.0
03/24/12	1130	0.0	0.0	0.0	0.0
03/24/12	1200	0.0	0.0	0.0	0.0
03/24/12	1240	0.0	0.0	0.0	0.0
03/24/12	1310	0.0	0.0	0.0	0.0
03/24/12	1345	0.0	0.0	0.0	0.0
03/24/12	1415	0.0	0.0	0.0	0.0

Induced Vacuum in 600-SGW-8 (sample port depth provided in ft)					
Date	**Time**	**7.5 Vacuum (in. H_2O)**	**52.5 Vacuum (in. H_2O)**	**102.5 Vacuum (in. H_2O)**	**150.5 Vacuum (in. H_2O)**
Measurements While Testing 600-SVE-1-40					
03/22/12	1125	0.0	0.0	0.0	0.0
03/22/12~~03/23/12~~	1215	0.0	0.0	0.0	0.0
03/22/12~~03/24/12~~	1245	0.0	0.0	0.0	0.0
03/22/12~~03/25/12~~	~~315~~1515	0.0	0.0	0.0	0.0
03/22/12~~03/26/12~~	1620	0.0	0.0	0.0	0.0
03/22/12~~03/27/12~~	1650	0.0	0.0	0.0	0.0
03/23/12	0825	0.0	0.0	0.0	0.0
03/23/12	0855	0.0	0.0	0.0	0.0
Measurements While Testing 600-SVE-1-90					
03/23/12	1030	0.0	0.0	0.0	0.0
03/23/12	1110	0.0	0.0	0.0	0.0
03/23/12	1140	0.0	0.0	0.0	0.0
03/23/12	1215	0.0	0.0	0.0	0.0
03/23/12	1245	0.0	0.0	0.0	0.0
03/23/12	1315	0.0	0.0	0.0	0.0
03/23/12	1350	0.0	0.0	0.0	0.0
03/23/12	1420	0.0	0.0	0.0	0.0
03/23/12	1455	0.0	0.0	0.0	0.0
03/23/12	1525	0.0	0.0	0.0	0.0
03/23/12	1600	0.0	0.0	0.0	0.0
03/23/12	1630	0.0	0.0	0.0	0.0
03/23/12	1705	0.0	0.0	0.0	0.0

Table 4.4 Field Data Collected at MSVM (Observation) Wells

03/23/12	1735	0.0	0.0	0.0	0.0
Measurements While Testing 600-SVE-1-130					
03/24/12	0740	0.0	0.0	0.0	0.0
03/24/12	0815	0.0	0.0	0.0	0.0
03/24/12	0845	0.0	0.0	0.0	0.0
03/24/12	0920	0.0	0.0	0.0	0.0
03/24/12	0950	0.0	0.0	0.0	0.0
03/24/12	1025	0.0	0.0	0.0	0.0
03/24/12	1055	0.0	0.0	0.0	0.0
03/24/12	1130	0.0	0.0	0.0	0.0
03/24/12	1200	0.0	0.0	0.0	0.0
03/24/12	1240	0.0	0.0	0.0	0.0
03/24/12	1310	0.0	0.0	0.0	0.0
03/24/12	1345	0.0	0.0	0.0	0.0
03/24/12	1415	0.0	0.0	0.0	0.0

Table 6.1 Groundwater General Chemistry and COC Concentrations in 600-G-138

CAS Number	Analyte/Measurement	January 2012 Result	April 2012 Result
NA	Temperature	20.4 °C	20.2 °C
NA	Conductivity	2380 µS/cm	2460 µS/cm
NA	pH	8.46	8.57
NA	Turbidity	9.17 NTU	46.1 NTU
67-66-3	Chloroform	0.62 µg/L	0.52 µg/L
79-01-6	Trichloroethene	110 µg/L	84 µg/L
127-18-4	Tetrachloroethene	ND	ND
76-13-1	Freon 113	51 µg/L	27 µg/L
75-69-4	Freon 11	0.59 µg/L	0.34 µg/L

NTU – Nephelometric Turbidity Units
ND – Non-detect

Table 6.2 Maximum Concentrations of Primary COCs in SVE Pilot Test Wells

Maximum Analyte Concentrations in 600-SVE-1 (top of screened interval provided in ft)				
		40	90	130
CAS Number	**Analyte**	**Conc. (µg/m^3)**	**Conc. (µg/m^3)**	**Conc. (µg/m^3)**

Table 6.2 Maximum Concentrations of Primary COCs in SVE Pilot Test Wells

67-66-3	Chloroform	110	100	90	
79-01-6	Trichloroethene	2,000	2,600	3,700	
127-18-4	Tetrachloroethene	1,100	320	590	
76-13-1	Freon 113	13,000	25,000	34,000	
75-69-4	Freon 11	ND	ND	ND	
Maximum Analyte Concentrations in 600-SGW-1 (sample port depth provided in ft)					
		12.5	57	117.5	
CAS Number	**Analyte**	**Conc. (µg/m^3)**	**Conc. (µg/m^3)**	**Conc. (µg/m^3)**	
67-66-3	Chloroform	ND	93	ND	
79-01-6	Trichloroethene	1,900	3,400	6,400	
127-18-4	Tetrachloroethene	ND	8.4	ND	
76-13-1	Freon 113	110,000	72,000	110,000	
75-69-4	Freon 11	ND	46	ND	
Maximum Analyte Concentrations in 600-SGW-2 (sample port depth provided in ft)					
		12.5	47.5	107.5	150
CAS Number	**Analyte**	**Conc. (µg/m^3)**	**Conc. (µg/m^3)**	**Conc. (µg/m^3)**	**Conc. (µg/m^3)**
67-66-3	Chloroform	ND	ND	ND	ND
79-01-6	Trichloroethene	970	5,700	8,500	9,300
127-18-4	Tetrachloroethene	ND	ND	ND	ND
76-13-1	Freon 113	49,000	140,000	280,000	280,000
75-69-4	Freon 11	ND	ND	ND	ND
Maximum Analyte Concentrations in 600-SGW-3 (sample port depth provided in ft)					
		12.5	57.5	107.5	137.5
CAS Number	**Analyte**	**Conc. (µg/m^3)**	**Conc. (µg/m^3)**	**Conc. (µg/m^3)**	**Conc. (µg/m^3)**
67-66-3	Chloroform	33	96	50	ND
79-01-6	Trichloroethene	400	1,300	1,000	3,700
127-18-4	Tetrachloroethene	ND	ND	220	ND
76-13-1	Freon 113	6,900	9,000	8,600	330,000
75-69-4	Freon 11	18	11	7.9	1,200
Maximum Analyte Concentrations in 600-SGW-4 (sample port depth provided in ft)					
		12.5	47.5	107.5	142.5
CAS Number	**Analyte**	**Conc. (µg/m^3)**	**Conc. (µg/m^3)**	**Conc. (µg/m^3)**	**Conc. (µg/m^3)**
67-66-3	Chloroform	ND	ND	ND	ND
79-01-6	Trichloroethene	360	580	620	2,000
127-18-4	Tetrachloroethene	ND	ND	ND	ND
76-13-1	Freon 113	11,000	9,200	9,600	320,000
75-69-4	Freon 11	ND	ND	ND	ND

Table 6.2 Maximum Concentrations of Primary COCs in SVE Pilot Test Wells

Maximum Analyte Concentrations in 600-SGW-5 (sample port depth provided in ft)					
		7.5	52.5	102.5	137.5
CAS Number	**Analyte**	**Conc. (µg/m^3)**	**Conc. (µg/m^3)**	**Conc. (µg/m^3)**	**Conc. (µg/m^3)**
67-66-3	Chloroform	3.3	91	78	140
79-01-6	Trichloroethene	110	2,100	2,100	14,000
127-18-4	Tetrachloroethene	ND	ND	30	ND
76-13-1	Freon 113	3,400	12,000	16,000	400,000
75-69-4	Freon 11	14	ND	ND	1,000

Maximum Analyte Concentrations in 600-SGW-8 (sample port depth provided in ft)					
		7.5	52.5	102.5	145.5
CAS Number	**Analyte**	**Conc. (µg/m^3)**	**Conc. (µg/m^3)**	**Conc. (µg/m^3)**	**Conc. (µg/m^3)**
67-66-3	Chloroform	0.30	0.49	ND	ND
79-01-6	Trichloroethene	17	5.2	1.3	ND
127-18-4	Tetrachloroethene	ND	ND	0.48	ND
76-13-1	Freon 113	260	210	110	15
75-69-4	Freon 11	2.0	3.8	3.8	8,500

ND – Non-detect

Table 6.3 Mass Removed

		Mass of COC Extracted (grams)				
Zone	**Time Pumped (hours:minutes)**	**TCE**	**PCE**	**Chloroform**	**Freon 11**	**Freon 113**
600-SVE-1-40	6:40	2.87	0.02	0.16	NA	20.13
600-SVE-1-90	6:56	4.08	0.03	0.16	NA	38.49
600-SVE-1-130	6:30	1.23	0.01	0.03	NA	12.12
	Total extracted (grams):	**8.17**	**0.06**	**0.34**	**NA**	**70.74**

NA – Not applicable because Freon 11 was not detected in the SVE well

Table 7.1 Commercial Worker Risk Based Concentrations for COCs at Various Depths

CAS Number	Analyte	RBC (µg/m3) 5 ft bgs	RBC (µg/m^3) 10 ft bgs	RBC (µg/m^3) 50 ft bgs	RBC (µg/m^3) 100 ft bgs	RBC (µg/m^3) 150 ft bgs
67-66-3	Chloroform	440	630	2,200	4,100	6,000
79-01-6	Trichloroethene	2~~,~~8,000	4~~,~~2,000	160,000	300,000	440,000
127-18-4	Tetrachloroethene	460,000	710,000	~~270,000~~2.7E6	5~~10,000~~.1E6	7~~60,000~~.6E6
76-13-1	Freon 113	~~120,000,000~~1.2E8	~~190,000,000~~1.9E8	6~~90,000,000~~.9E8	1~~,300,000,000~~.3E9	1~~,900,000,000~~.9E9
75-69-4	Freon 11	~~2,800,000~~2.8E6	4~~,100,000~~.1E6	1~~5,000,000~~.5E7	2~~8,000,000~~.8E7	4~~2,000,000~~.2E7

Table 7.2 Comparison of Maximum Soil Gas COC Concentrations to Commercial Worker RBCs

Maximum Analyte Concentrations in 600-SVE-1 (sample port depth and RBC comparison level provided in ft)							
Sample Depths:		40 (50)		90 (100)		130 (150)	
CAS Number	**Analyte**	**Conc. (µg/m^3)**	**RBC (µg/m^3)**	**Conc. (µg/m^3)**	**RBC (µg/m^3)**	**Conc. (µg/m^3)**	**RBC (µg/m^3)**
67-66-3	Chloroform	110	2,200	100	4,100	90	6,000
79-01-6	Trichloroethene	2,000	160,000	2,600	300,000	3,700	440,000
127-18-4	Tetrachloroethene	1,100	~~270,000~~2.7E6	320	~~510,000~~5.1E6	590	~~760,000~~7.6E6
76-13-1	Freon 113	13,000	6~~90,000,000~~.9E8	25,000	1~~,300,000,000~~.3E9	34,000	1~~,900,000,000~~.9E9
75-69-4	Freon 11	ND	1~~5,000,000~~.5E7	ND	2~~8,000,000~~.8E7	ND	4~~2,000,000~~.2E7

Maximum Analyte Concentrations in 600-SGW-1 (sample port depth and RBC comparison level provided in ft)							
Sample Depths:		12.5 (10)		57 (50)		117.5 (100)	
CAS Number	**Analyte**	**Conc. (µg/m^3)**	**RBC (µg/m^3)**	**Conc. (µg/m^3)**	**RBC (µg/m^3)**	**Conc. (µg/m^3)**	**RBC (µg/m^3)**
67-66-3	Chloroform	ND	630	93	2,200	ND	4,100

Table 7.2 Comparison of Maximum Soil Gas COC Concentrations to Commercial Worker RBCs

79-01-6	Trichloroethene	1,900	4~~,~~2,000	3,400	160,000~~16,000~~	6,400	300,000~~30,000~~
127-18-4	Tetrachloroethene	ND	710,000	8.4	2.7E6~~270,000~~	ND	5.1E6~~510,000~~
76-13-1	Freon 113	110,000	1~~90,000,000~~.9E8	72,000	6~~90,000,000~~.9E8	110,000	1~~,300,000,000~~.3E9
75-69-4	Freon 11	ND	4~~,100,000~~.1E6	46	1~~5,000,000~~.5E7	ND	2~~8,000,000~~.8E7

Maximum Analyte Concentrations in 600-SGW-2 (sample port depth and RBC comparison level provided in ft)

Sample Depths:		12.5 (10)		47.5 (50)		107.5 (100)		150 (150)	
CAS Number	**Analyte**	**Conc. (µg/m^3)**	**RBC (µg/m^3)**	**Conc. (µg/m^3)**	**RBC (µg/m^3)**	**Conc. (µg/m^3)**	**RBC (µg/m^3)**	**Conc. (µg/m^3)**	**RBC (µg/m^3)**
67-66-3	Chloroform	ND	630	ND	2,200	ND	4,100	ND	6,000
79-01-6	Trichloroethene	970	42,000~~4,200~~	5,700	160,000~~16,000~~	8,500	300,000~~30,000~~	9,300	440,000~~44,000~~
127-18-4	Tetrachloroethene	ND	710,000~~71,000~~	ND	2.7E6~~270,000~~	ND	5.1E6~~510,000~~	ND	7.6E6~~760,000~~
76-13-1	Freon 113	49,000	1~~90,000,000~~.9E8	140,000	6~~90,000,000~~.9E8	280,000	1~~,300,000,000~~.3E9	280,000	1~~,900,000,000~~.9E9
75-69-4	Freon 11	ND	4~~,100,000~~.1E6	ND	1~~5,000,000~~.5E7	ND	2~~8,000,000~~.8E7	ND	4~~2,000,000~~.2E7

Maximum Analyte Concentrations in 600-SGW-3 (sample port depth and RBC comparison level provided in ft)

Sample Depths:		12.5 (10)		47.5 (50)		107.5 (100)		150 (150)	
CAS Number	**Analyte**	**Conc. (µg/m^3)**	**RBC (µg/m^3)**	**Conc. (µg/m^3)**	**RBC (µg/m^3)**	**Conc. (µg/m^3)**	**RBC (µg/m^3)**	**Conc. (µg/m^3)**	**RBC (µg/m^3)**
67-66-3	Chloroform	33	630	96	2,200	50	4,100	ND	6,000
79-01-6	Trichloroethene	400	42,000~~4,200~~	1,300	160,000~~16,000~~	1,000	300,000~~30,000~~	3,700	440,000~~44,000~~
127-18-4	Tetrachloroethene	ND	710,000~~71,000~~	ND	2.7E6~~270,000~~	220	5.1E6~~510,000~~	ND	7.6E6~~760,000~~

Table 7.2 Comparison of Maximum Soil Gas COC Concentrations to Commercial Worker RBCs

76-13-1	Freon 113	6,900	1~~90,000,000~~.9E8	9,000	6~~90,000,000~~.9E8	8,600	1~~,300,000,000~~.3E9	330,000	1~~,900,000,000~~.9E9
75-69-4	Freon 11	18	4~~,100,000~~.1E6	11	1~~5,000,000~~.5E7	7.9	2~~8,000,000~~.8E7	1,200	4~~2,000,000~~.2E7

Maximum Analyte Concentrations in 600-SGW-4 (sample port depth and RBC comparison level provided in ft)									
Sample Depths:		12.5 (10)		47.5 (50)		107.5 (100)		142.5 (150)	
CAS Number	**Analyte**	**Conc. (µg/m^3)**	**RBC**	**Conc. (µg/m^3)**	**RBC**	**Conc. (µg/m^3)**	**RBC**	**Conc. (µg/m^3)**	**RBC**
67-66-3	Chloroform	ND	630	ND	2,200	ND	4,100	ND	6,000
79-01-6	Trichloroethene	360	42,000~~4,200~~	580	160,000~~16,000~~	620	300,000~~30,000~~	2,000	440,000~~44,000~~
127-18-4	Tetrachloroethene	ND	710,000~~71,000~~	ND	2.7E6~~270,000~~	ND	5.1E6~~510,000~~	ND	7.6E6~~760,000~~
76-13-1	Freon 113	11,000	1~~90,000,000~~.9E8	9,200	6~~90,000,000~~.9E8	9,600	1~~,300,000,000~~.3E9	320,000	1~~,900,000,000~~.9E9
75-69-4	Freon 11	ND	4~~,100,000~~.1E6	ND	1~~5,000,000~~.5E7	ND	2~~8,000,000~~.8E7	ND	4~~2,000,000~~.2E7

Maximum Analyte Concentrations in 600-SGW-5 (sample port depth and RBC comparison level provided in ft)									
Sample Depths:		7.5(5)		52.5 (50)		102.5 (100)		137.5 (150)	
CAS Number	**Analyte**	**Conc. (µg/m^3)**	**RBC (µg/m^3)**	**Conc. (µg/m^3)**	**RBC (µg/m^3)**	**Conc. (µg/m^3)**	**RBC (µg/m^3)**	**Conc. (µg/m^3)**	**RBC (µg/m^3)**
67-66-3	Chloroform	3.3	440	91	2,200	78	4,100	140	6,000
79-01-6	Trichloroethene	110	42,000~~2,800~~	2,100	160,000~~16,000~~	2,100	300,000~~30,000~~	14,000	440,000~~44,000~~
127-18-4	Tetrachloroethene	ND	710,000~~46,000~~	ND	2.7E6~~270,000~~	30	5.1E6~~510,000~~	ND	7.6E6~~760,000~~
76-13-1	Freon 113	3,400	1~~20,000,000~~.2E7	12,000	6~~90,000,000~~.9E8	16,000	1~~,300,000,000~~.3E9	400,000	1~~,900,000,000~~.9E9

Table 7.2 Comparison of Maximum Soil Gas COC Concentrations to Commercial Worker RBCs

75-69-4	Freon 11	14	2~~,800,000~~.8E6	ND	1~~5,000,000~~.5E7	ND	2~~8,000,000~~.8E7	1,000	4~~2,000,000~~.2E7

Maximum Analyte Concentrations in 600-SGW-8 (sample port depth and RBC comparison level provided in ft)									
Sample Depths:		7.5 (5)		52.5 (50)		102.5 (100)		145.5 (150)	
CAS Number	**Analyte**	**Conc. (µg/m^3)**	**RBC (µg/m^3)**	**Conc. (µg/m^3)**	**RBC (µg/m^3)**	**Conc. (µg/m^3)**	**RBC (µg/m^3)**	**Conc. (µg/m^3)**	**RBC (µg/m^3)**
67-66-3	Chloroform	0.30	440	0.49	2,200	ND	4,100	ND	6,000
79-01-6	Trichloroethene	17	42,000~~2,800~~	5.2	160,000~~16,000~~	1.3	300,000~~30,000~~	ND	440,000~~44,000~~
127-18-4	Tetrachloroethene	ND	710,000~~46,000~~	ND	2.7E6~~270,000~~	0.48	5.1E6~~510,000~~	ND	7.6E6~~760,000~~
76-13-1	Freon 113	260	1~~20,000,000~~.2E8	210	6~~90,000,000~~.9E8	110	1~~,300,000,000~~.3E9	15	1~~,900,000,000~~.9E9
75-69-4	Freon 11	2.0	2~~,800,000~~.8E6	3.8	1~~5,000,000~~.5E7	3.8	2~~8,000,000~~.8E7	8,500	4~~2,000,000~~.2E7

ND – Non-detect

Figures

Figure 1.1 WSTF Location Map

(See figure on next page.)

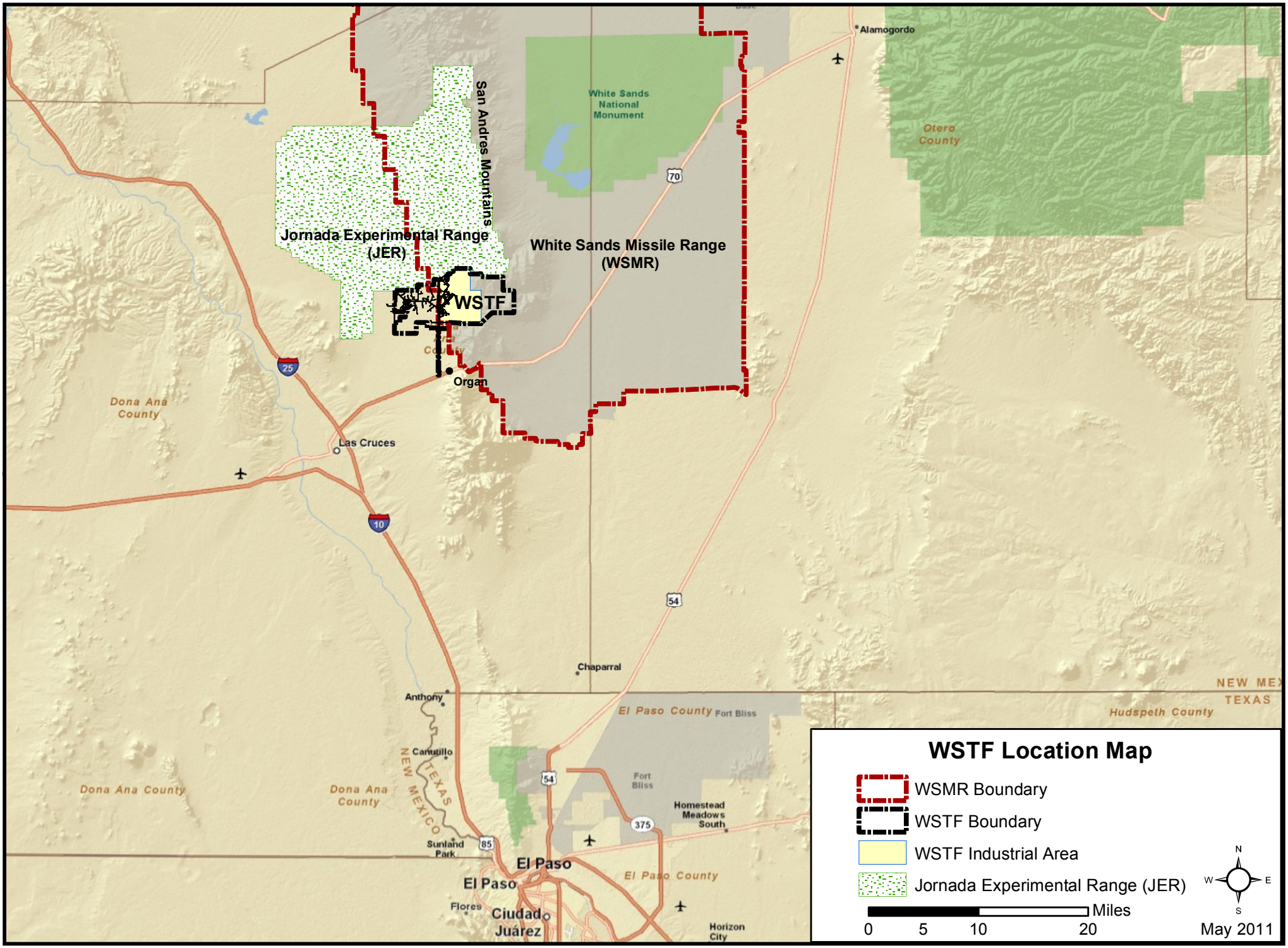

WSTF Location Map
WSMR Boundary
WSTF Boundary
WSTF Industrial Area
Jornada Experimental Range (JER)
Miles
0
5
10
20
May 2011
N
S
E
W
Jornada Experimental Range (JER)
San Andres Mountains
White Sands Missile Range (WSMR)
WSTF
White Sands National Monument
Alamogordo
Otero County
Organ
Las Cruces
Dona Ana County
Chaparral
Anthony
Canutillo
Sunland Park
El Paso
Ciudad Juárez
Flores
Horizon City
Homestead Meadows South
Fort Bliss
El Paso County
Hudspeth County
NEW MEXICO
TEXAS
70
25
10
54
85
375

Figure 1.2 Topographic Map of 100 and 600 Areas

(See figure on next page.)

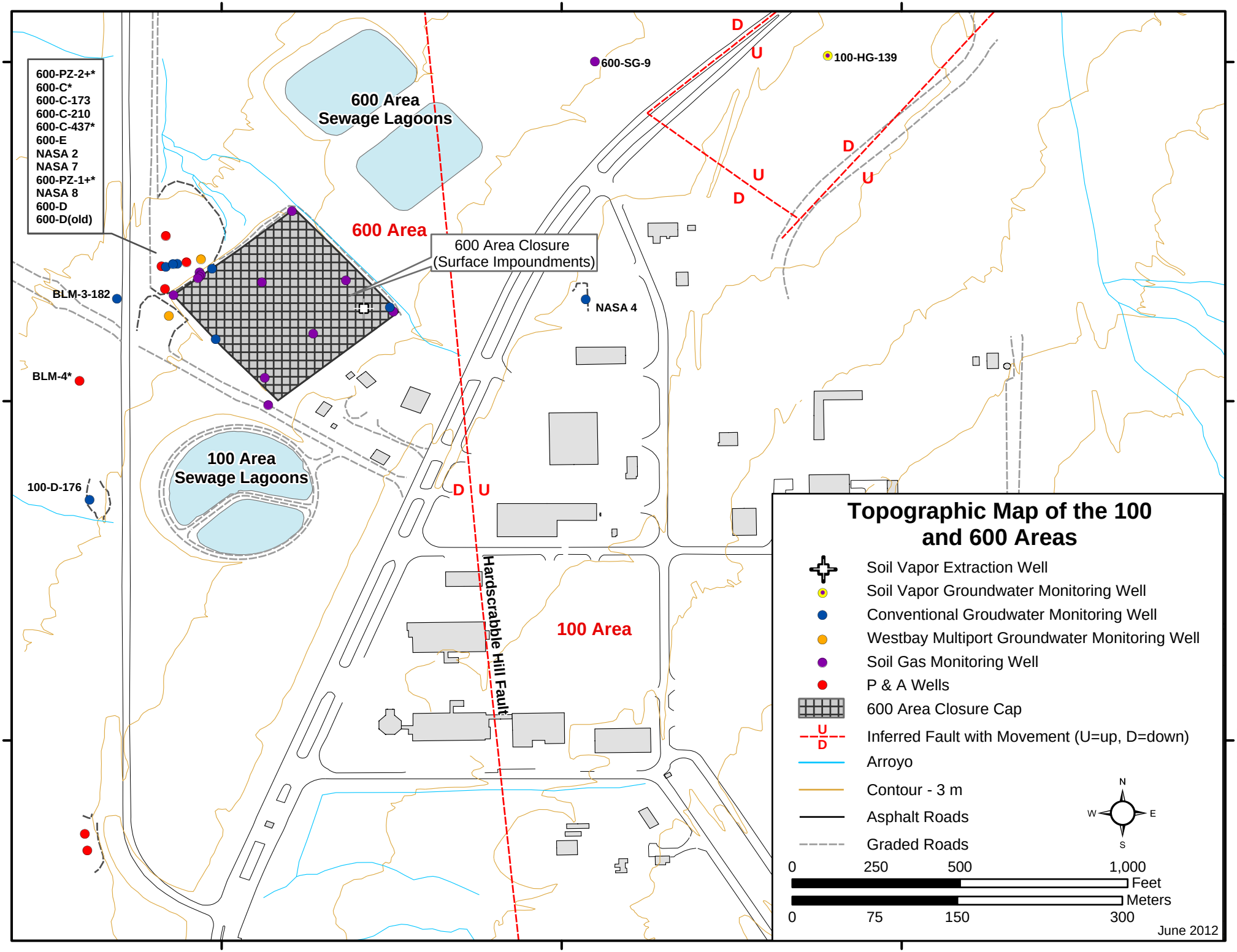

Topographic Map of the 100 and 600 Areas
Soil Vapor Extraction Well
Soil Vapor Groundwater Monitoring Well
Conventional Groudwater Monitoring Well
Westbay Multiport Groundwater Monitoring Well
Soil Gas Monitoring Well
P & A Wells
600 Area Closure Cap
Inferred Fault with Movement (U=up, D=down)
Arroyo
Contour - 3 m
Asphalt Roads
Graded Roads
0 250 500 1,000 Feet
0 75 150 300 Meters
June 2012
600 Area Sewage Lagoons
600 Area
600 Area Closure (Surface Impoundments)
100 Area Sewage Lagoons
100 Area
Hardscrabble Hill Fault
600-SG-9
100-HG-139
NASA 4
BLM-3-182
BLM-4*
100-D-176
600-PZ-2+*
600-C*
600-C-173
600-C-210
600-C-437*
600-E
NASA 2
NASA 7
600-PZ-1+*
NASA 8
600-D
600-D(old)
106°36'50"W
106°36'40"W
106°36'30"W
32°30'40"N
32°30'30"N
32°30'20"N

Figure 2.1 Map of 600 Area Closure

(See figure on next page.)

600 Closure Soil Boring 2009/2010
600 Area Soil Boring (1987)
600 Closure Soil Gas Well (1987)
Conventional Well
Perched Water Well
Multiport Well
MSVGM Well
P&A Well
600 Closure Soil Gas Well (2009/2010)
Soil Vapor Extraction Well
Former 600 Surface Impoundments
WSTF Steam Cleaning Pad
Overflow Pipe (Removed 1988)
Hazardous Waste Transmission Line (Abandoned 1988)

0 50 100 200 Feet
0 15 30 60 Meters

N W E S

May 2012

Figure 3.1 Photograph of URS Mobile SVE Unit

Figure 3.2 Photograph of SVE Wellhead Configuration

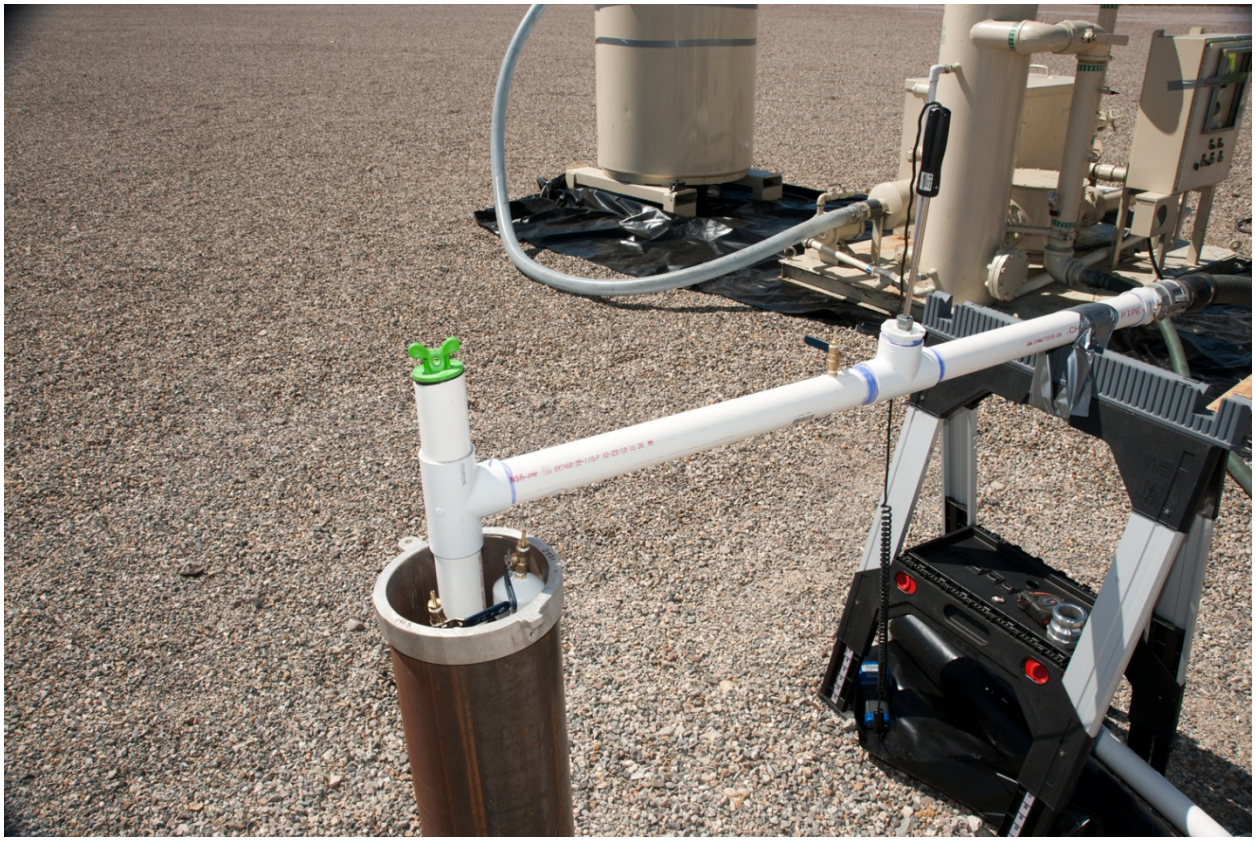


Figure 7.1 Vertical Concentration Profile of Chloroform in 600-SVE-1 during Pilot Test

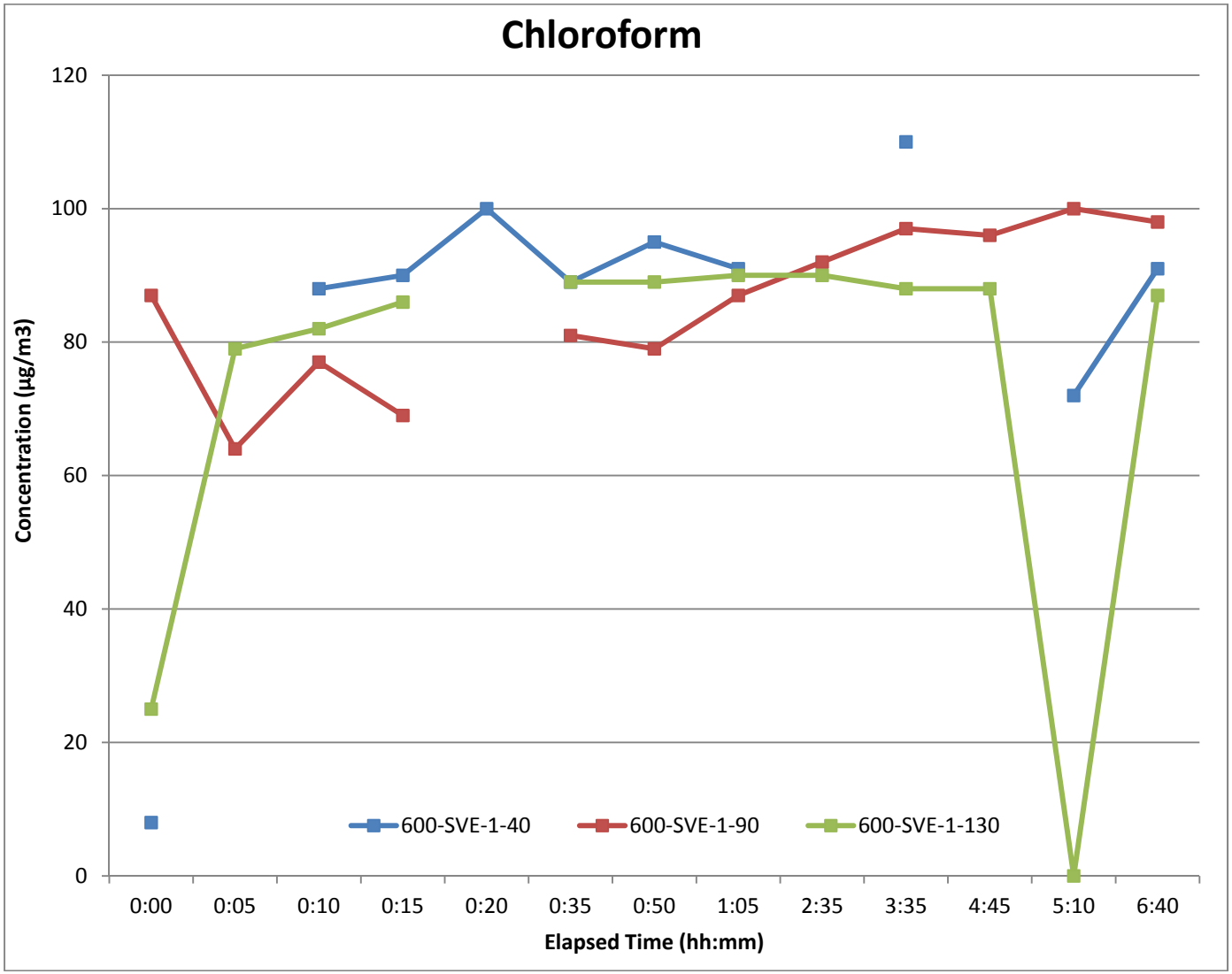


Figure 7.2 Vertical Concentration Profile of TCE in 600-SVE-1 during Pilot Test

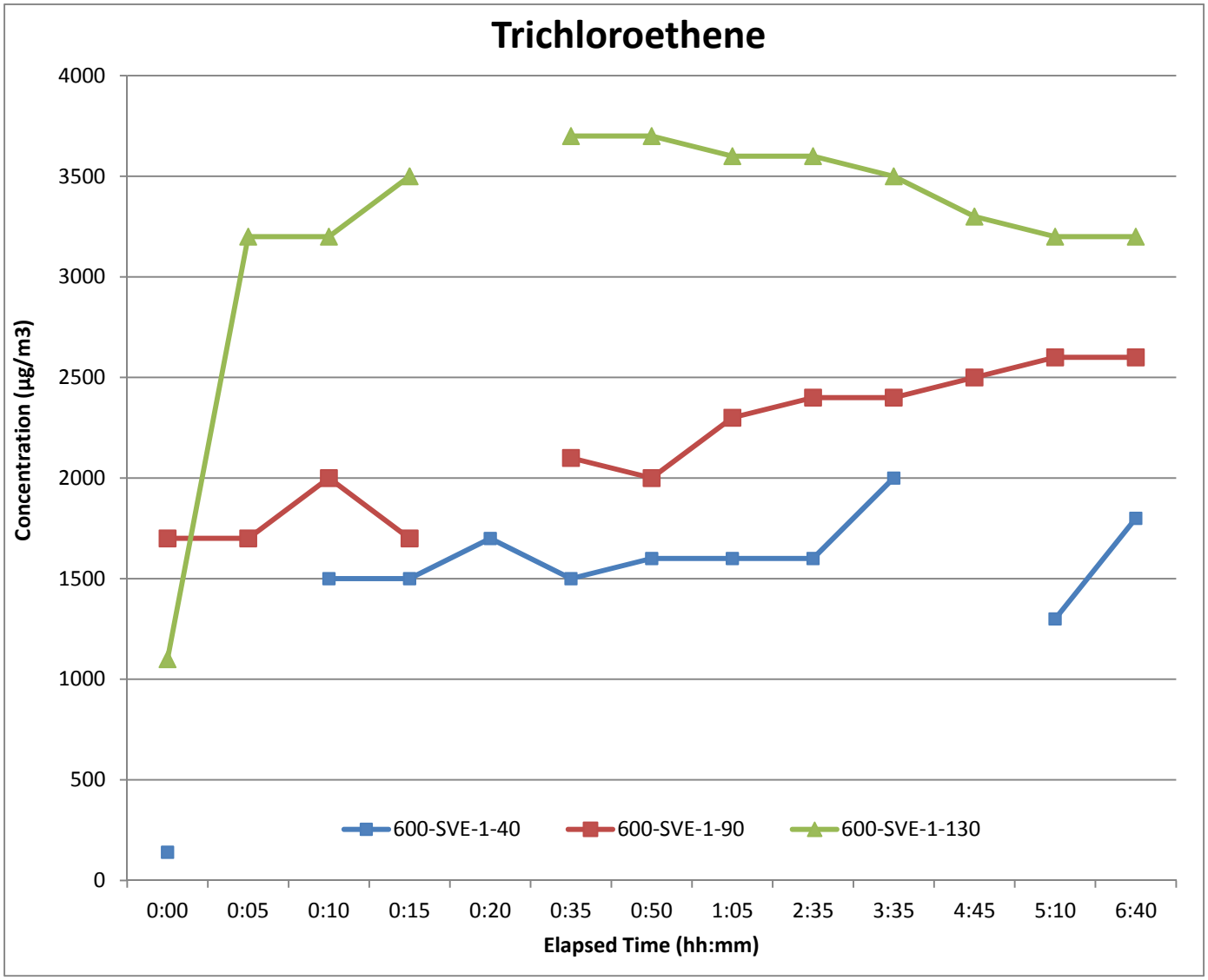


Figure 7.3 Vertical Concentration Profile of PCE in 600-SVE-1 during Pilot Test

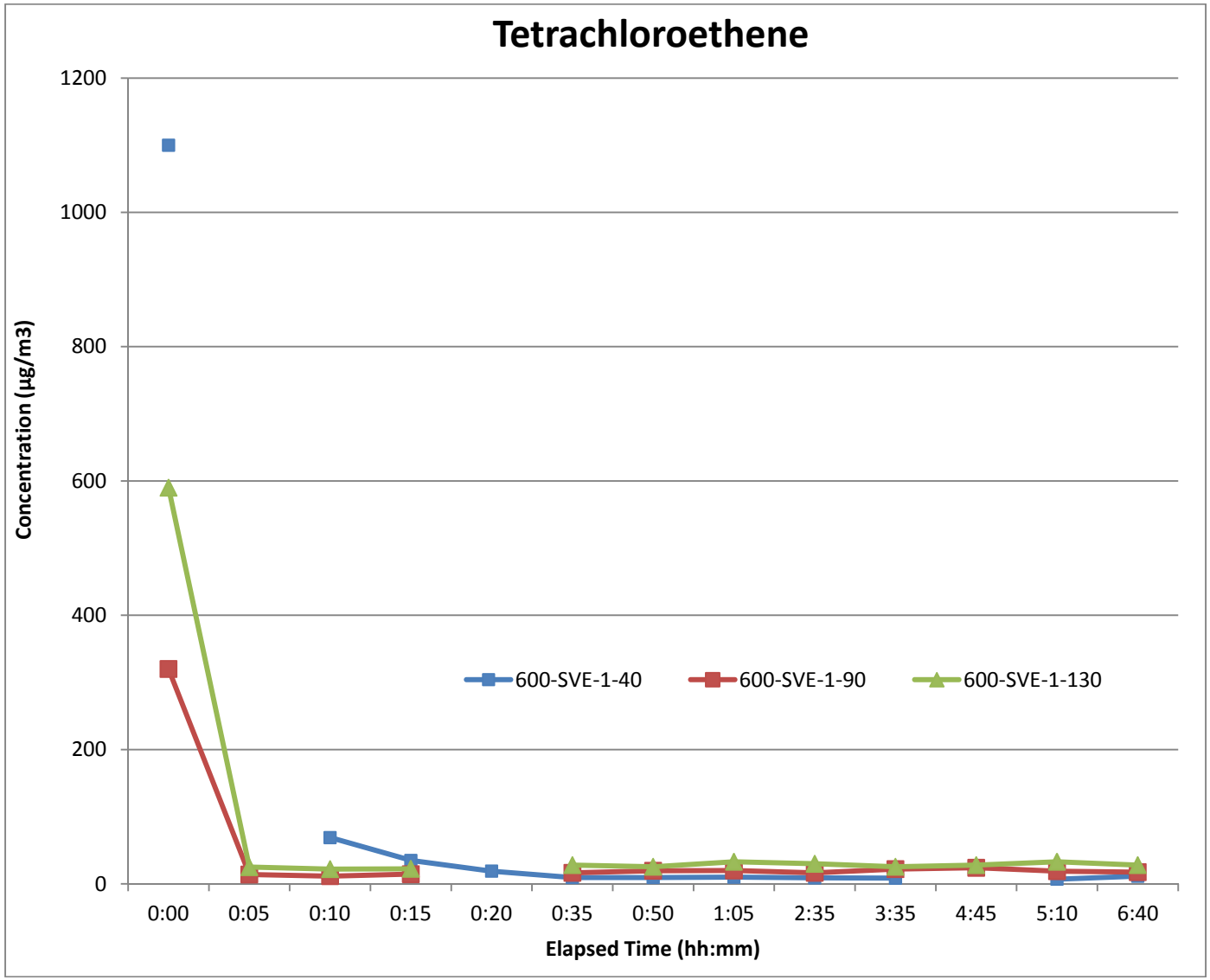


Figure 7.4 Vertical Concentration Profile of Freon 113 in 600-SVE-1 during Pilot Test

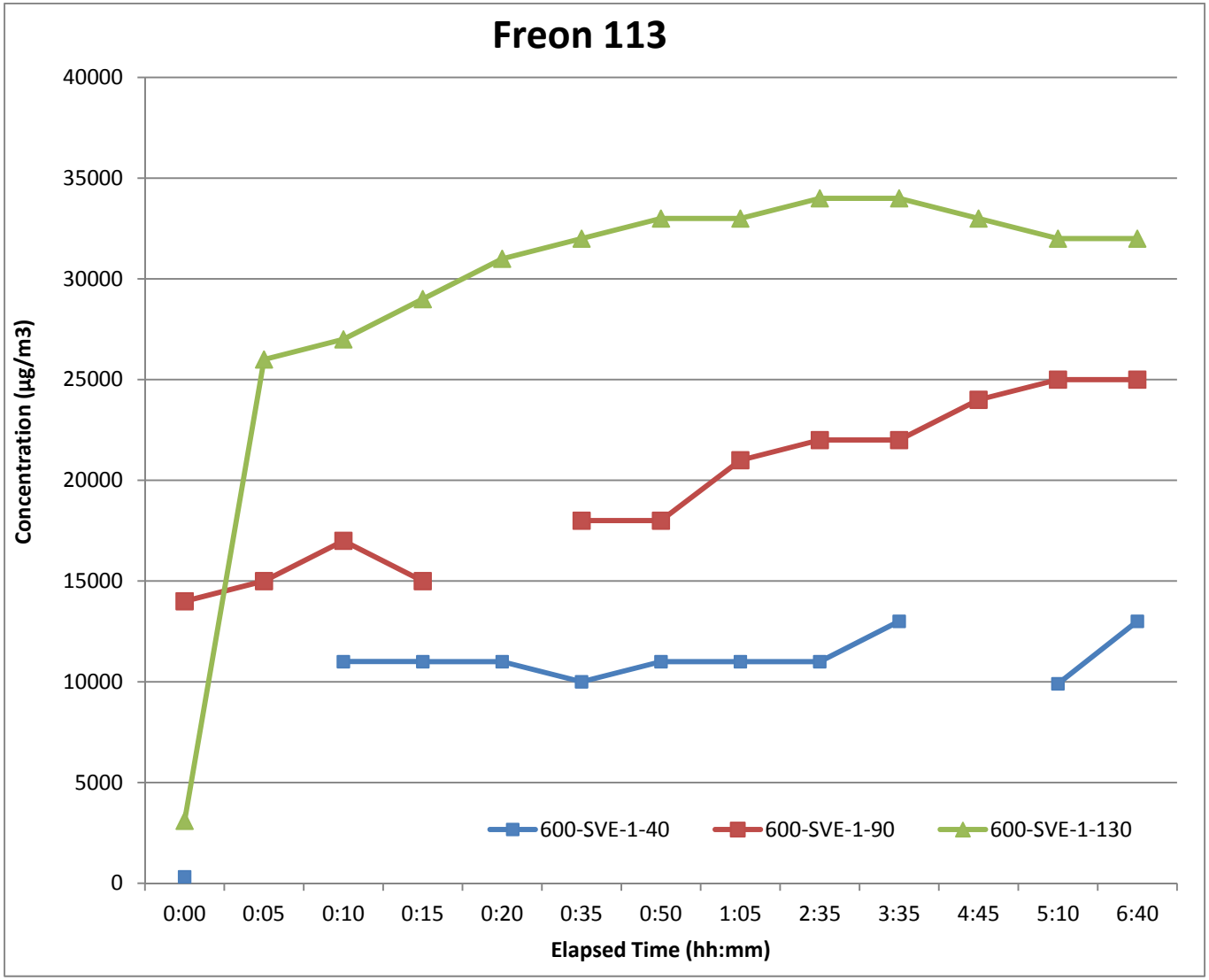


Figure 7.5 Comparison of Chloroform Concentrations in 600-SVE-1-40 to RBC

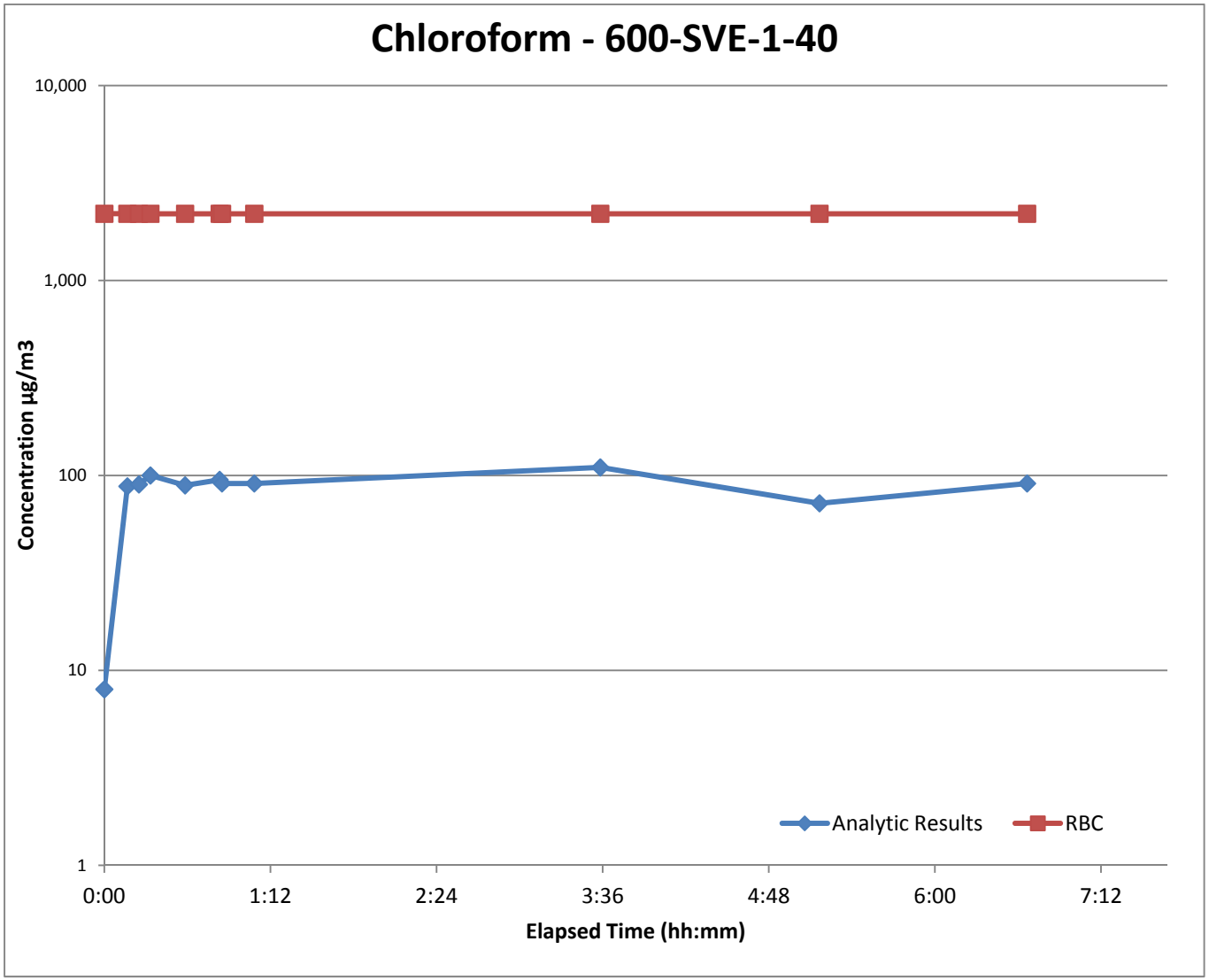


Figure 7.6 Comparison of TCE Concentrations in 600-SVE-1-40 to RBC

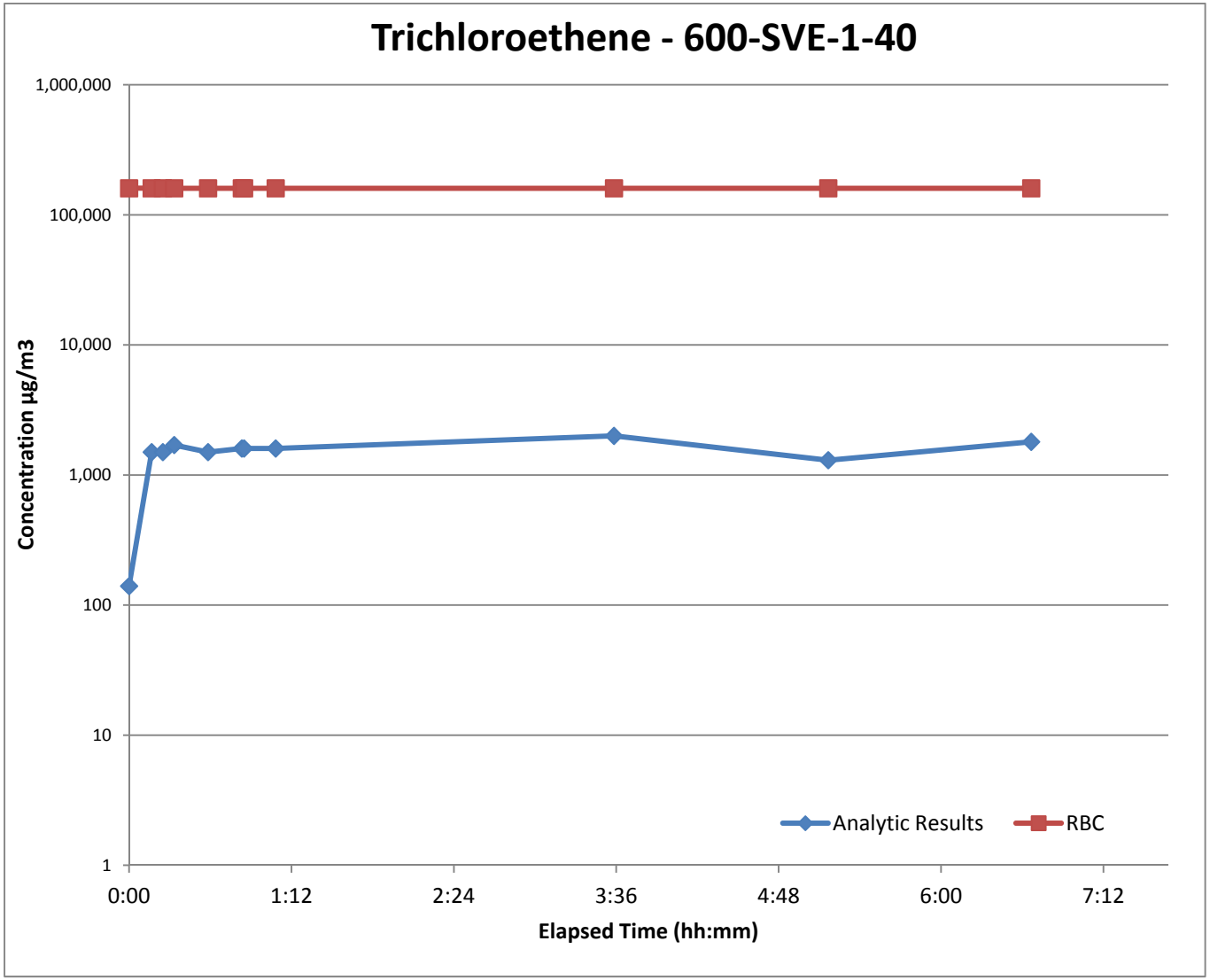


Figure 7.7 Comparison of PCE Concentrations in 600-SVE-1-40 to RBC

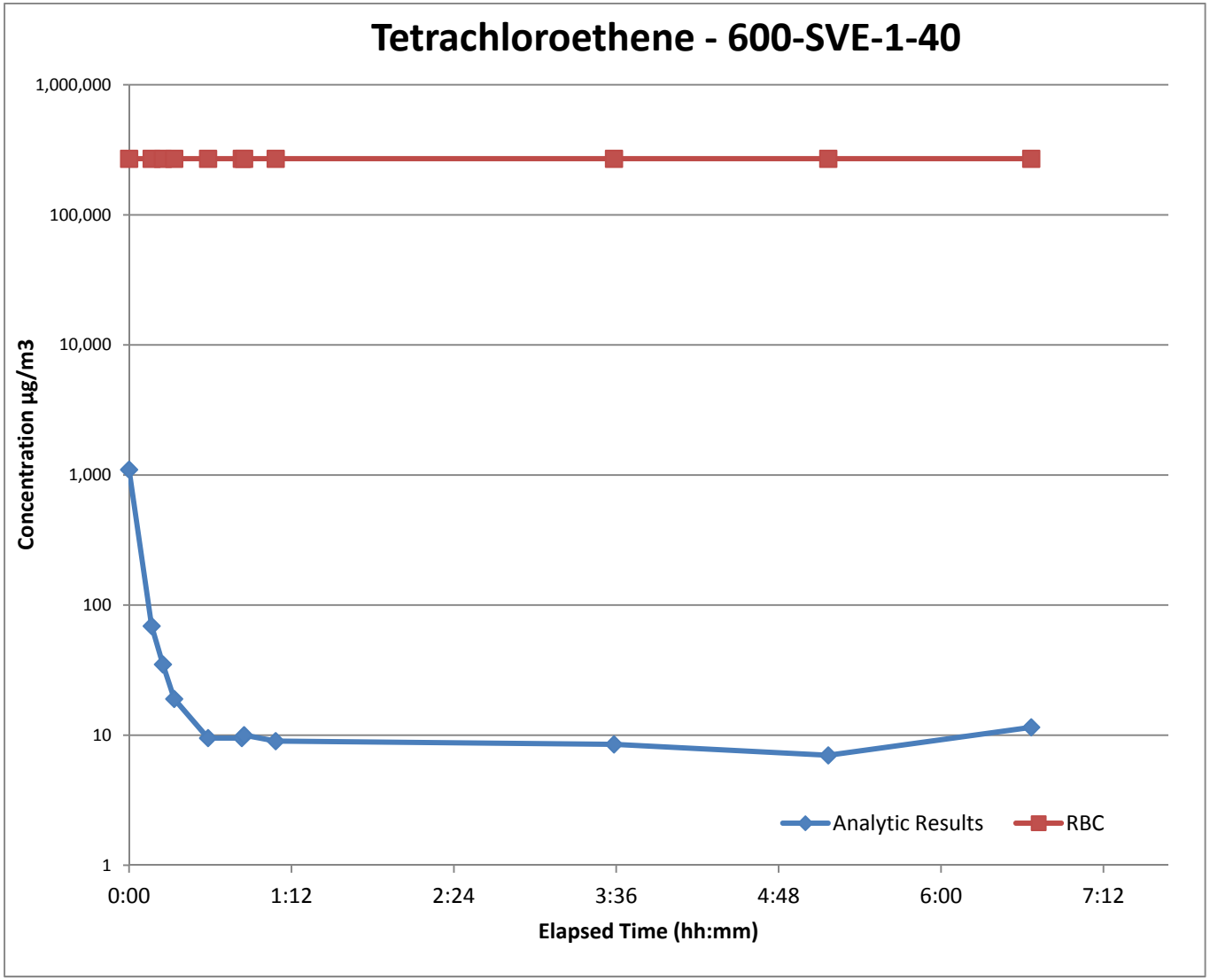


Figure 7.8 Comparison of Freon 113 Concentrations in 600-SVE-1-40 to RBC

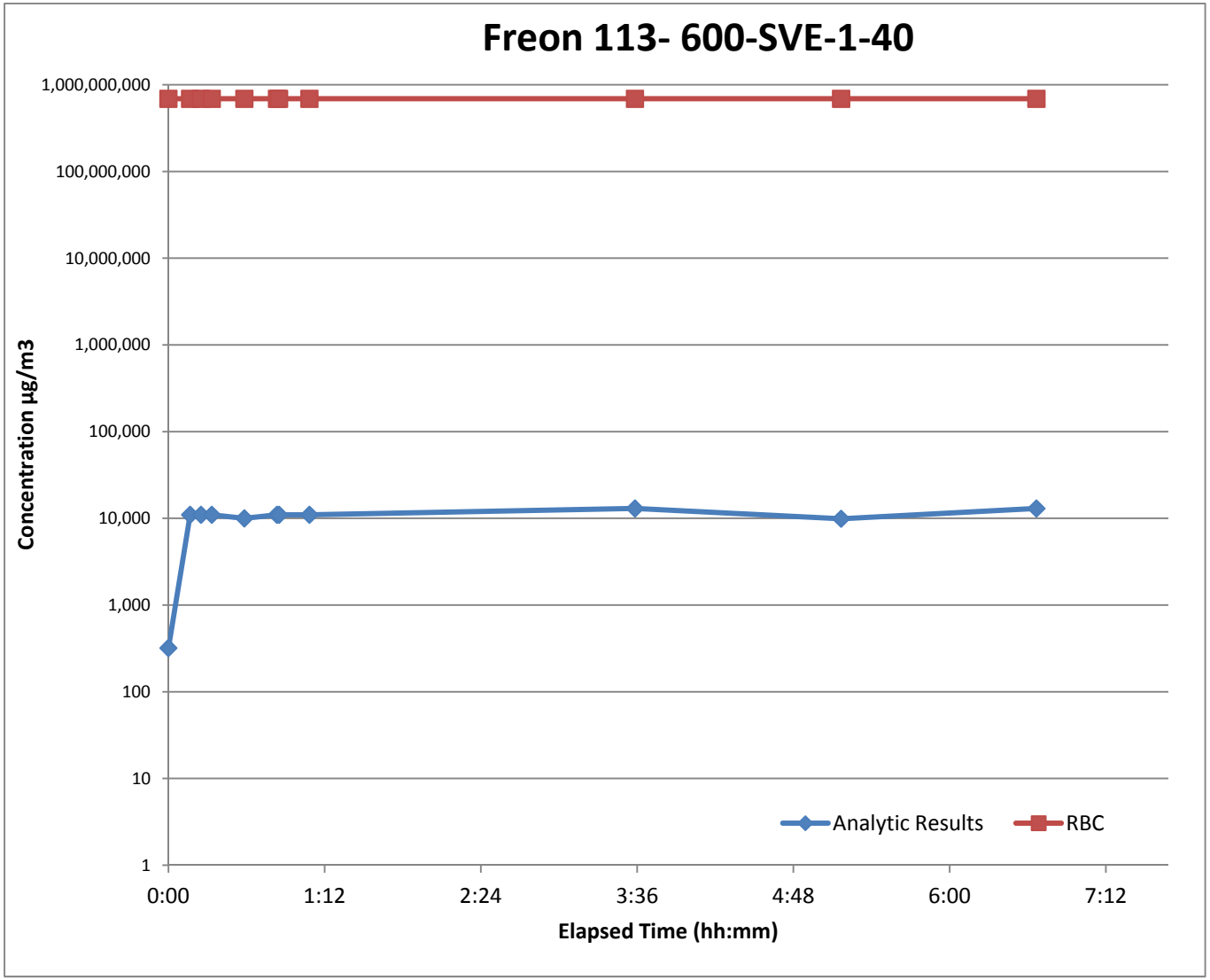


Figure 7.9 Comparison of Chloroform Concentrations in 600-SVE-1-90 to RBC

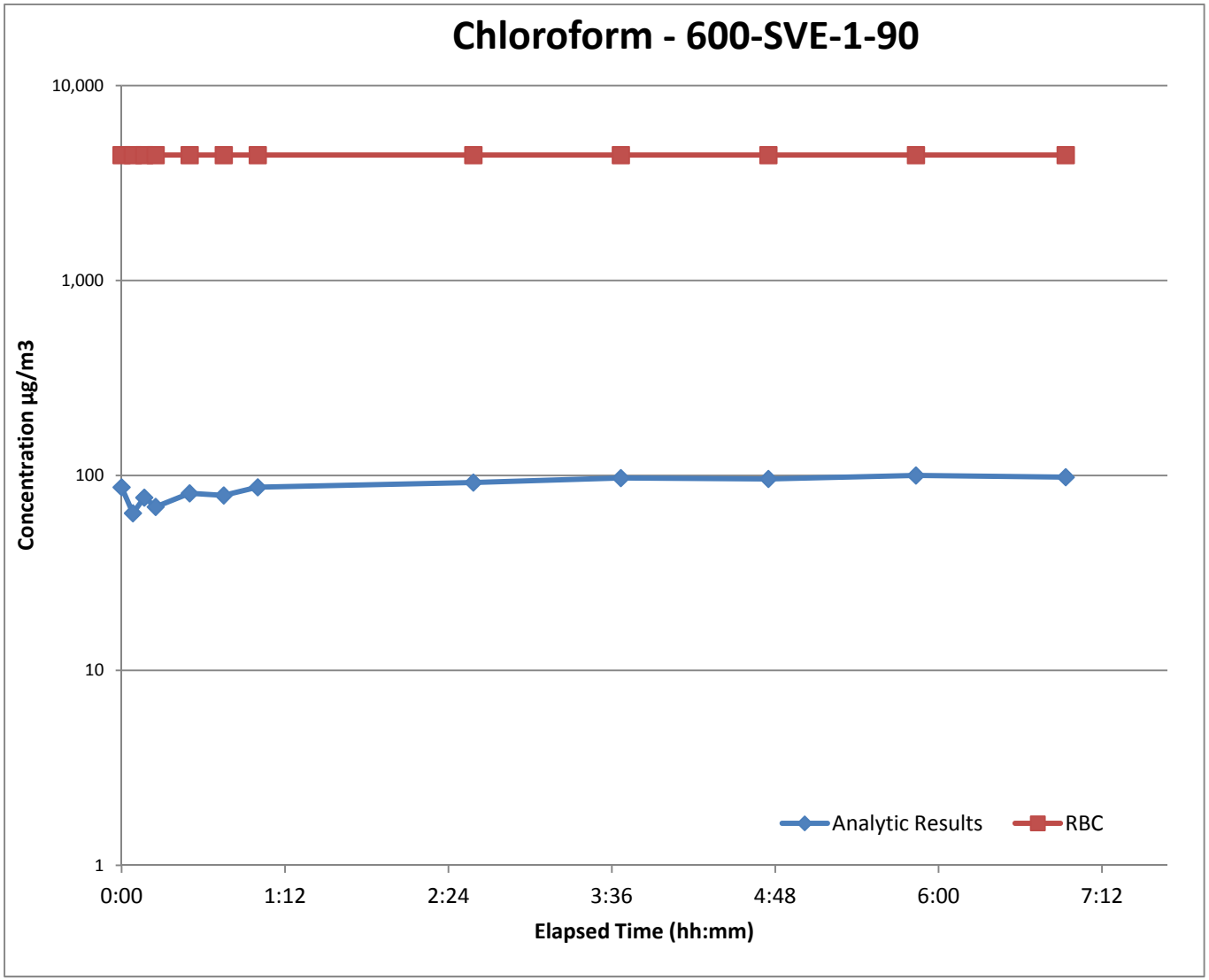


Figure 7.10 Comparison of TCE Concentrations in 600-SVE-1-90 to RBC

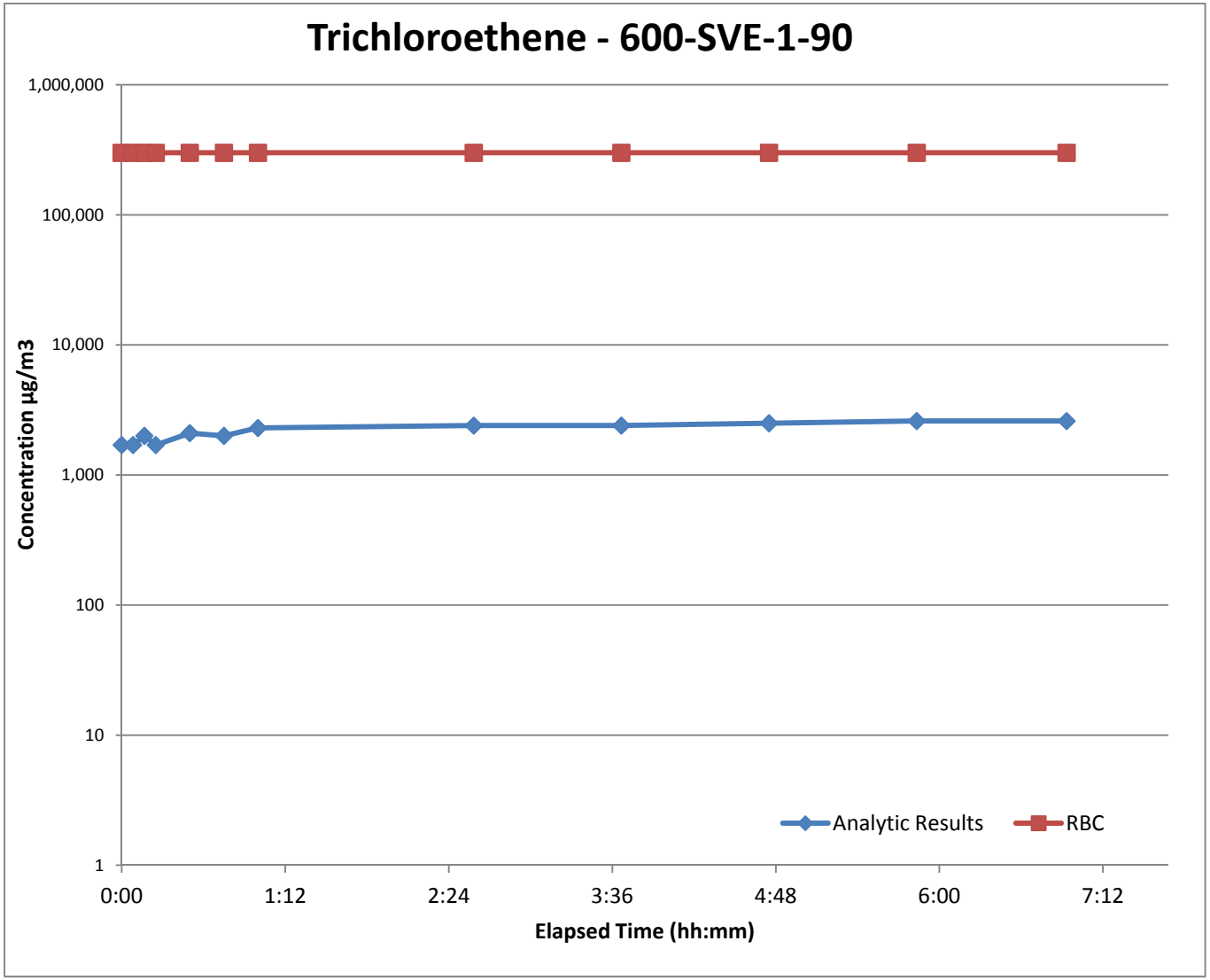


Figure 7.11 Comparison of Freon 113 Concentrations in 600-SVE-1-90 to RBC

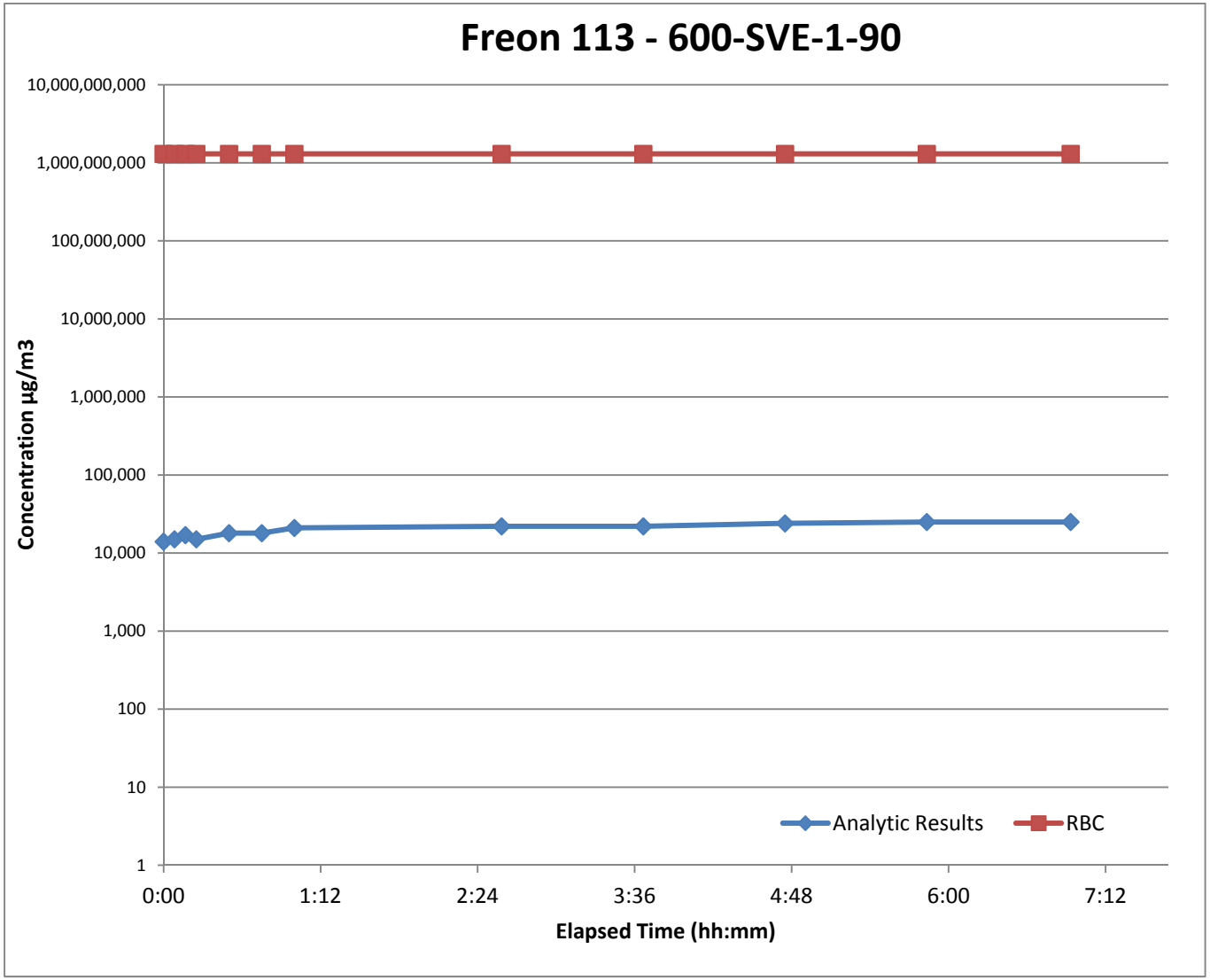


Figure 7.12 Comparison of Chloroform Concentrations in 600-SVE-1-130 to RBC

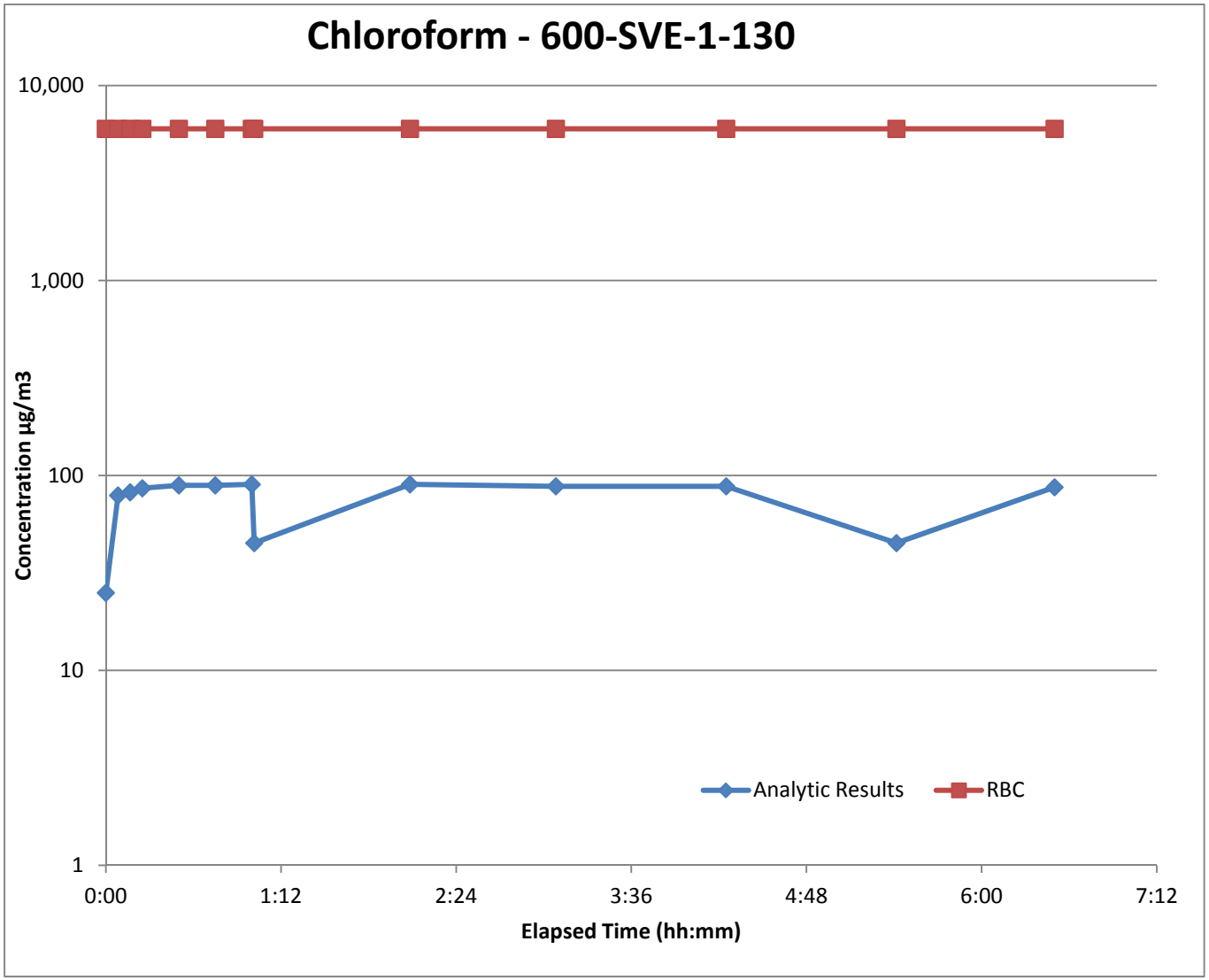


Figure 7.13 Comparison of TCE Concentrations in 600-SVE-1-130 to RBC

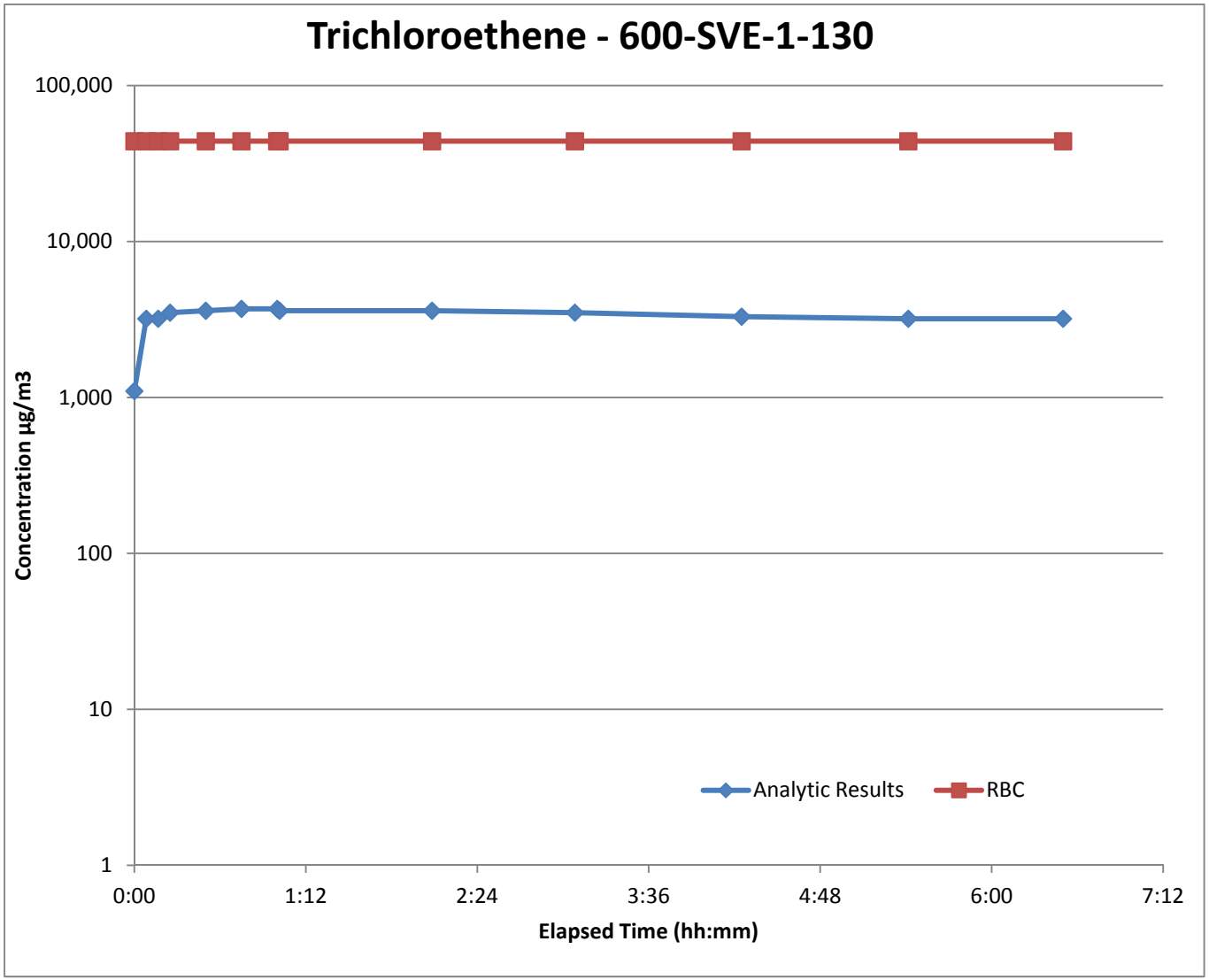
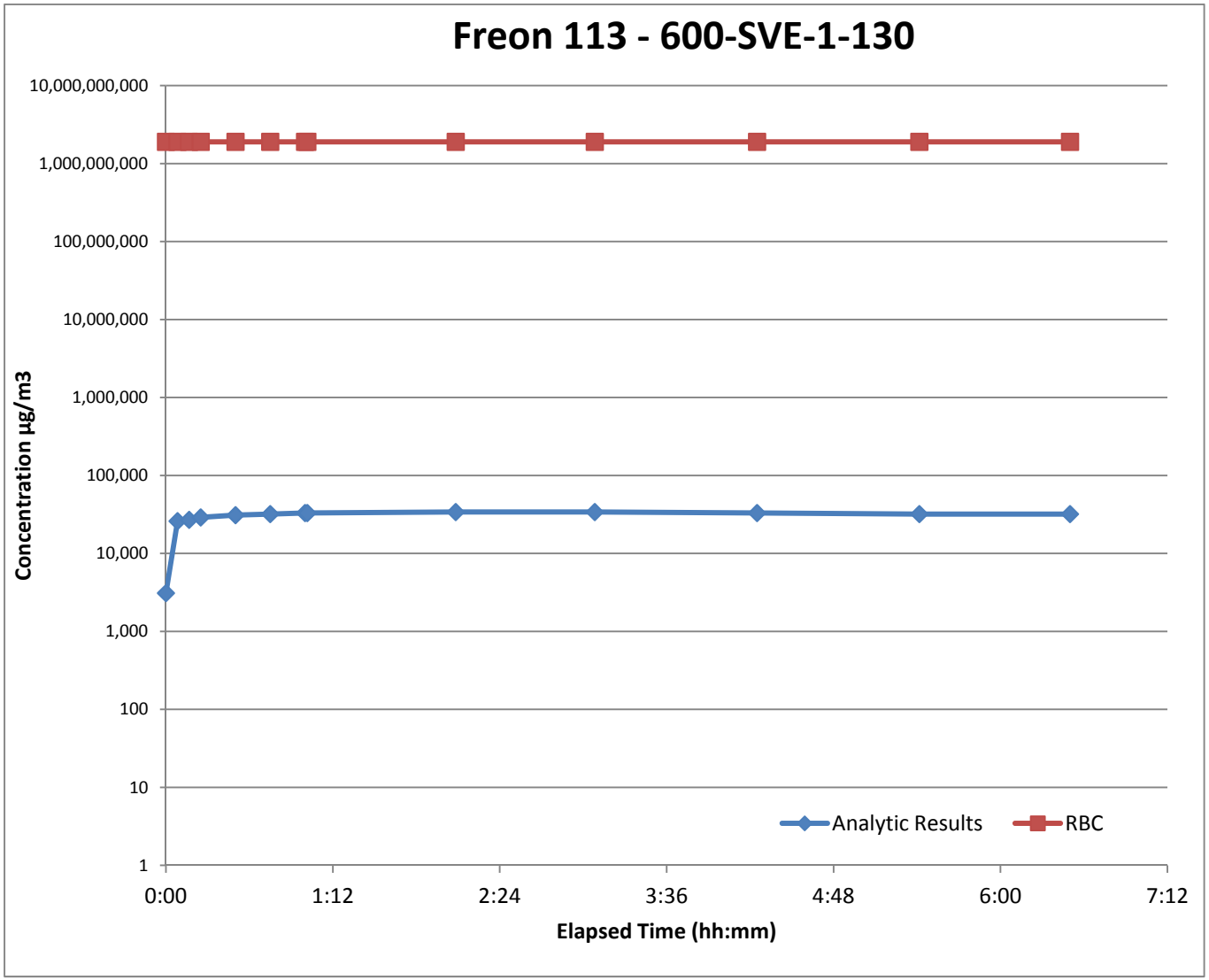


Figure 7.14 Comparison of Freon 113 Concentrations in 600-SVE-1-130 to RBC



Appendix A

Borehole Lithologic Logs and Completion Diagrams

(600-SVE-1 and 600-G-138)

BOREHOLE LITHOLOGIC LOG

JSC - White Sands Test Facility
Las Cruces, New Mexico, USA

Location ID: **600-SVE-1**

Site ID: **NASA-WSTF, Doña Ana County, NM**

Township and Range: **SW 1/4, NW 1/4, SW 1/4, Sec. 2, T21S, R3E**
NM State Plane Coordinates (NAD 83): **549114.72 N 1528593.37 E ***
Elevation (Brass Cap): **4762.04 ft (ground)***
Total Depth of Borehole (bgs): **152'**
Bedrock Type and Depth (bgs): **149'; Rhyolitic Tuff**
Drilling Method: **Stratex Casing Advance Air Rotary**
Drilling Contractor: **WDC Exploration & Wells**
Driller: **T. Valentine, L. Aylmer**
Sampling Method: **N/A**

Depth to Groundwater: **Water observed @ 152'**
Surface Casing Depth and Diameter: **10"**
Borehole Diameter: **12"**

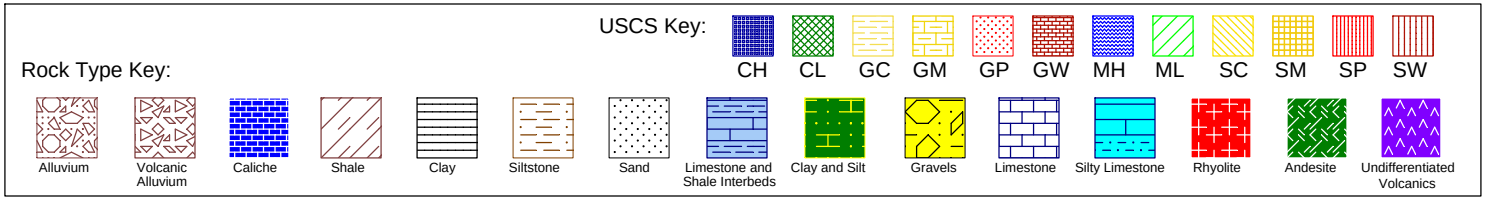
Field Representative(s): **Jim Lawrence**

Dates Drilling Started and Completed: **10/2/2011-10/11/2011**
Comments: ***survey data taken by WSTF personnel using GPS.**

USCS Key: CH CL GC GM GP GW MH ML SC SM SP SW

Rock Type Key: Alluvium, Volcanic Alluvium, Caliche, Shale, Clay, Siltstone, Sand, Limestone and Shale Interbeds, Clay and Silt, Gravels, Limestone, Silty Limestone, Rhyolite, Andesite, Undifferentiated Volcanics

Depth (bgs) feet meters	Lithology	Visual Percent 0 100	%	From	To	Sample I.D. Number	Sample Type	USCS	Lithology Description
0							Grab sample chips were collected every 10' (3.05 m) from cyclone for lithology descriptions.	Alluvial soils are primarily GM (silty gravel).	0'-7' (0-2.13 m) CLOSURE CAP (imported fill): 0'-2.5' (0-0.76 m) GRAVEL: angular to subrounded, fine to coarse mixture, limestone/volcanics (fill). 2.5'-6.5' (0.76-1.98 m) SAND: medium grained, subrounded to round, fine to coarse sand, light brown (7.5 YR 8/1). Well graded (fill). 6.5'-7' (1.98-2.13 m) CONCRETE. 7'-149' (2.13- 45.42 m) SANTA FE GROUP ALLUVIUM: Late Pliocene to Quaternary in age. Alluvium comprises a poorly to moderately cemented pebble to boulder conglomerate. Caliche horizons, clay lenses, and carbonate-cemented zones occur sporadically throughout the alluvial section. The unit is generally light gray (7.5 YR 7/1) to reddish yellow (7.5 YR 6/6) for unwashed chips. The alluvium is unconsolidated and comprises a silty sandy gravel with clasts supported in a matrix of sand, silt, and clay. Sorting is poor and clasts range from angular to subrounded. Clasts comprise 35-65% of the lithologic samples. Rock chips range between 0.05 and 0.6" (0.13-1.53 cm) in size. Larger clasts have been pulverized by the Stratex drilling method. Sedimentary clasts include light gray (N7) to gray (N4) micritic to fossiliferous limestone, brown (7.5 YR 5/3) siltstone, and reddish brown (5 YR 5/3) sandstone. Volcanic clasts comprise pinkish white (5 YR 8/2) rhyolite and white (5 YR 8/2) quartzite. Limestone is predominanat and forms 70% of the clast lithologies, followed by 20% siltstone and sandstone, and 10% volcanics.
10									
20									
30									
40									
50									
60			80% recovery	60'	65'	600-SVE-1 (60-65')	California split spoon		



Depth (bgs) feet / meters	Lithology	Visual Percent 0 100	%	From	To	Sample I.D. Number	Sample Type	USCS	Lithology Description
20 / 70								Alluvial soils are primarily GM (silty gravel).	
80 / 90			80% recovery	95'	100'	600-SVE-1 (95-100')	California split spoon		
30 / 100									
110 / 120									
130 / 40									149'-152' (45.4-46.3 m) RHYOLITE TUFF BEDROCK: pinkish white (5 YR 8/2) to white (5 YR 8/1), quartz phenocrysts, feldspar phenocrysts, and lithic fragments to 1/16" maximum length. Phenocrysts are suspended in an aphanitic matrix of rhyolitic composition. Larger lithic fragments or potentially xenoliths of limestone are visible up to >1/4" size in selected chips. Matrix locally clayey and chips are moderate to friable in hardness.
140 / 150									Water observed @ 152' when air turned on with rig. Total Depth (TD) = 152'

WELL COMPLETION DIAGRAM

SOIL VAPOR EXTRACTION (SVE) PILOT TEST WELL

JSC - White Sands Test Facility
Las Cruces, New Mexico, USA

Well ID: **600-SVE-1** Site ID: **NASA-WSTF, Doña Ana County, NM**

Township and Range: **SW 1/4, NW 1/4, SW 1/4, Sec. 2, T21S, R3E**
Site Coordinates (NAD 83): **549114.42' N 1528593.37' E ***
Elevation (Brass Cap): **4762.04' ***
Elevation (Top of Casing): **not measured**
Drilling Contractor: **WDC Exploration & Wells**
Driller: **L. Aylmer**
Total Depth of Borehole (bgs): **152' (46.33 m)**
Borehole Diameter: **9 5/8" Stratex Casing Air Advance = 12"**
Depth to Bedrock (bgs): **149' (45.41 m); Rhyolite**
Depth to Groundwater: **150.15' (45.76 m; measured 10/5/2011)**
Total Depth Surface Casing (bgs): **N/A**
Diameter and Type Surface Casing: **9 5/8" Drive Casing (removed as well was installed)**

Date(s) Well Installed: **10/5/2011-10/6/2011**
Field Representative(s): **Jim Lawrence, John Pearson, and Doug Whitmire**
Total Number of SVE Zones: **3**
SVE Port Installation Method: **Clustered PVC Casings in Borehole**
Diameter and Type Casing: **Nominal 2" (2.5" OD) Schedule 80 PVC**
SVE Screen(s)(bgs): **40'-50'; 90'-100'; and 130.1'-140.1'**
(12.19-15.24 m; 27.43-30.48 m; and 39.65-42.70 m)
Comments: ***Survey data taken by WSTF personnel using GPS**

Casing
2" (2.5" OD) Schedule 80 PVC

Screen
2" (2.5" OD) Schedule 80 PVC

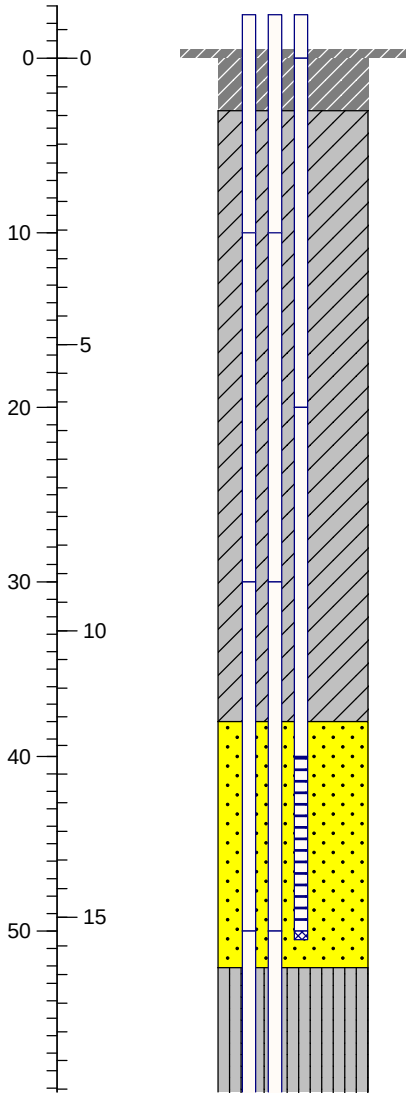
Surface Casing
N/A

End Cap
2" (2.5" OD) Schedule 80 PVC

Explanation:

10/20 Sand Cement Mix
Water Level
Cement
Alluvium
Slough
Cement with 5% Bentonite
Bentonite Seal
10/20 Sand

Feet/Meters



Well Descriptions
All depths listed are bgs (unless noted)

Soil Vapor Extraction (SVE) Casings Stick-Up = ~2.75' (0.84 m)

Well completed with 6" x 6' steel well protector with locking cap, ~4' x 4' concrete well pad, and barrier posts above ground surface.

Top of Nominal 2" (2.5" OD) Schedule 80 PVC 0.020"-Slot Screen = 40' (12.19 m)

Bottom of Nominal 2" (2.5" OD) Schedule 80 PVC 0.020"-Slot Screen = 50' (15.24 m)

Annular/Borehole Descriptions
All depths listed are bgs

Top of Cement = 0'

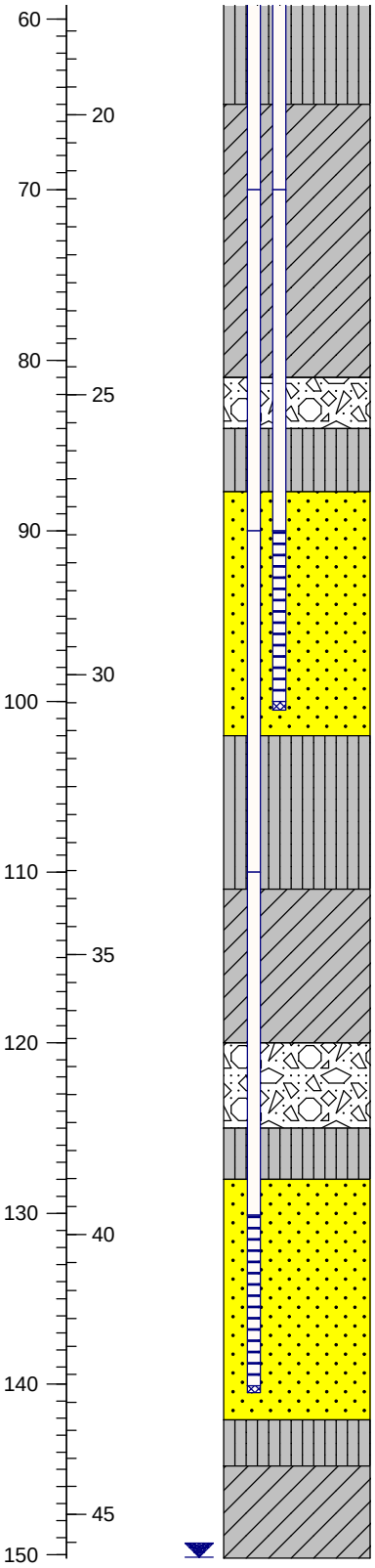
Top of Cement (Portland Type I/II with 5% bentonite) = 3' (0.91 m)

Top of 10/20 Sand = 38' (11.58 m)

Top of Bentonite = 52.1' (15.88 m)

Casing **2" (2.5" OD) Schedule 80 PVC**	Surface Casing **N/A**	**Casing Explanation:**	
Screen **2" (2.5" OD) Schedule 80 PVC**	End Cap **2" (2.5" OD) Schedule 80 PVC**	10/20 Sand Cement Mix Water Level	Cement Alluvium Slough Cement with 5% Bentonite Bentonite Seal 10/20 Sand

Feet/Meters



Well Descriptions All depths listed are bgs (unless noted)	**Annular/Borehole Descriptions** All depths listed are bgs
	Top of Cement (Portland Type I/II with 5% bentonite) = 65' (19.81 m)
	Top of Slough = 81' (24.69 m)
	Top of Bentonite = 84' (25.60 m)
	Top of 10/20 Sand = 87.7' (26.73 m)
Top of Nominal 2" (2.5" OD) Schedule 80 PVC 0.020"-Slot Screen = 90' (27.43 m)	
Bottom of Nominal 2" (2.5" OD) Schedule 80 PVC 0.020"-Slot Screen = 100' (30.48 m)	
	Top of Bentonite = 102' (31.09 m)
	Top of Cement (Portland Type I/II with 5% bentonite) = 111' (33.83 m)
	Top of Slough = 120' (36.57 m)
	Top of Bentonite = 125' (38.10 m)
	Top of 10/20 Sand = 128' (39.01 m)
Top of Nominal 2" (2.5" OD) Schedule 80 PVC 0.020"-Slot Screen = 130.1' (39.65 m)	
Bottom of Nominal 2" (2.5" OD) Schedule 80 PVC 0.020"-Slot Screen = 140.1' (42.70 m)	
	Top of Bentonite = 142.1' (43.31 m)
	Top of Cement (Portland Type I/II with 5% bentonite) = 144.8' (44.13 m)
Groundwater During Drilling (First Occurrence) = 150.15' (45.76; measured 10/5/2011 during drilling bgs)	
	12" Borehole TD = 152' (46.33 m)

BOREHOLE LITHOLOGIC LOG

JSC - White Sands Test Facility
Las Cruces, New Mexico, USA

Location ID: **600-G-138**

Site ID: **NASA-WSTF, Doña Ana County, NM**

Township and Range: **SW 1/4, NW 1/4, SW 1/4, Sec. 2, T21S, R3E**
NM State Plane Coordinates (NAD 83): **549124.48 N 1528671.11 E**
Elevation (Brass Cap): **4759.43 ft.**
Total Depth of Borehole (bgs): **148'**
Bedrock Type and Depth (bgs): **146'; Andesite**
Drilling Method: **Stratex Casing Advance Air Rotary**
Drilling Contractor: **WDC Exploration & Wells**
Driller: **Roger Langley**
Sampling Method: **N/A**

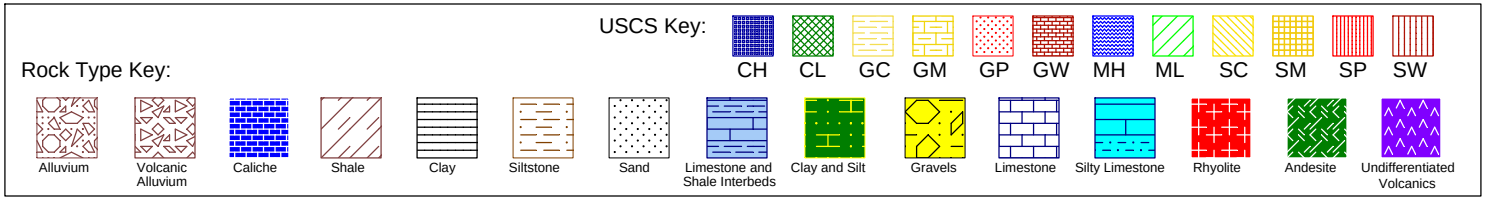
Depth to Groundwater: **142.45' (measured 10/1/2011 bgs)**
Surface Casing Depth and Diameter: **9 5/8" Drive Casing**
Borehole Diameter: **9 5/8" Stratex Casing - makes a 12" bore-hole (per M. Green, WDC drilling supervisor)**
Field Representative(s): **John Roland**

Dates Drilling Started and Completed: **9/29/2011-9/30/2011**
Comments: **The drive casing was removed as the well was installed.**

USCS Key: CH CL GC GM GP GW MH ML SC SM SP SW

Rock Type Key: Alluvium, Volcanic Alluvium, Caliche, Shale, Clay, Siltstone, Sand, Limestone and Shale Interbeds, Clay and Silt, Gravels, Limestone, Silty Limestone, Rhyolite, Andesite, Undifferentiated Volcanics

Depth (bgs) feet / meters	Lithology	Visual Percent (0 – 100)	%	From	To	Sample I.D. Number	Sample Type	USCS	Lithology Description
0 / 0						No analytical samples were collected for this borehole.			0 - 146' (0 - 44.5 m) SANTA FE GROUP ALLUVIUM: Late Pliocene to Quaternary in age. The alluvium comprises a poorly to moderately cemented pebble to boulder conglomerate. Caliche horizons, clay lenses and carbonate-cemented zones occur sporadically throughout the alluvial section. The unit is generally pinkish white (5 YR 6/3) to light reddish brown (2.5 YR 5/4) for unwashed chips. The alluvium is unconsolidated and comprises a silty, sandy gravel with clasts supported within a matrix of sand and silt. Sorting is poor. Clasts range from angular to subrounded and comprise 30-70% of the lithologic samples. Rock chips range between 0.05 to 1.1 inches (0.13-2.79 cm) in size. Larger clasts have been pulverized by the Stratex drilling method. Sedimentary clasts include light gray (N7) to gray (N4)) micritic to fossiliferous limestone, yellowish red (5 YR 5/6) siltstone and mudstone, reddish brown (5YR 5/4) sandstone, and medium gray chert (N5). Igneous clasts include pinkish white (5 YR 6/3) rhyolite and quartzite. Limestone predominates and accounts for 70% of the clast lithology, siltstone and mudstone 20%, and volcanic clasts 10%.
				~7' (2.13 m)			grab	GM	
10				~17' (5.18 m)			grab	GM/GC	
20				~27' (8.23 m)			grab	GC	
30 / 10				~38' (11.58 m)			grab	SW	
40				~48' (14.63 m)			grab	GM/GC	
50				~57' (17.37 m)			grab	GM/GC	
60									



Depth (bgs) feet / meters	Lithology	Visual Percent (0 – 100)	%	From	To	Sample I.D. Number	Sample Type	USCS	Lithology Description
20 / 70				~67' (20.42 m)		No analytical samples were collected for this borehole.	grab	GM/GC	
80				~77' (23.47 m)			grab	GM/GC	
90				~87' (26.52 m)			grab	GM	
30 / 100				~97' (29.56 m)			grab	GM	
110				~108' (32.92 m)			grab	GM	
120				~117' (35.66 m)			grab	GM	
130 / 40				~127' (38.71 m)			grab	GM	
140				~137' (41.76 m)			grab	GM	146' - 148' (44.5 - 45.1 m) ANDESITE: Dark reddish brown (5 YR 2.5/2) to black (5 YR 2.5/1), showing microporphyritic texture with plagioclase microphenocrysts to 1/16" in size. Irregular indurated chips with no visible fractures.
								bedrock	Total Depth (TD) = 148' (45.1 m)

WELL COMPLETION DIAGRAM

Perched Groundwater Monitoring

JSC - White Sands Test Facility
Las Cruces, New Mexico, USA

Well ID: **600-G-138**

Site ID: **NASA-WSTF, Doña Ana County, NM**

Township and Range: **SW 1/4, NW 1/4, SW 1/4, Sec. 2, T21S, R3E**
NM State Plane Coordinates (NAD 83): **549126.20' N 1528671.29' E**
Elevation (Brass Cap): **4759.43'**
Elevation (Top of Casing): **4761.41'**
Drilling Contractor: **WDC Exploration & Wells**
Driller: **T. Valentine**
Total Depth of Borehole (bgs): **148' (45.11 m)**
Borehole Diameter: **9 5/8" Stratex Casing Air Advance = 12"**
Depth to Bedrock (bgs): **146' (44.50 m); andesite**
Depth to Groundwater: **142.45' (43.42 m; measured 10/1/2011 bgs)**
Total Depth Surface Casing (bgs): **N/A**
Diameter and Type Surface Casing: **9 5/8" Drive Casing (removed as well was installed)**

Date(s) Well Installed: **10/1/2011**
Date(s) Well Developed: **10/19/2001**
Field Representative(s): **John Roland**
Total Depth Well Casing (bgs): **148' (45.11 m)**
Type of Casing: **Schedule 80 PVC**
Diameter Well Casing: **Nominal 4" (4.5" OD)**
Groundwater Screened Zone (bgs): **137.5'-147.5' (41.91-44.96 m)**
Comments: **The well measures groundwater perched on the bedrock surface, not the regional groundwater within bedrock.**

Explanation:

Surface Casing
N/A

Conventional Casing
4.5" OD Schedule 80 PVC

Conventional Screen
4.5" OD Schedule 80 PVC
0.020"

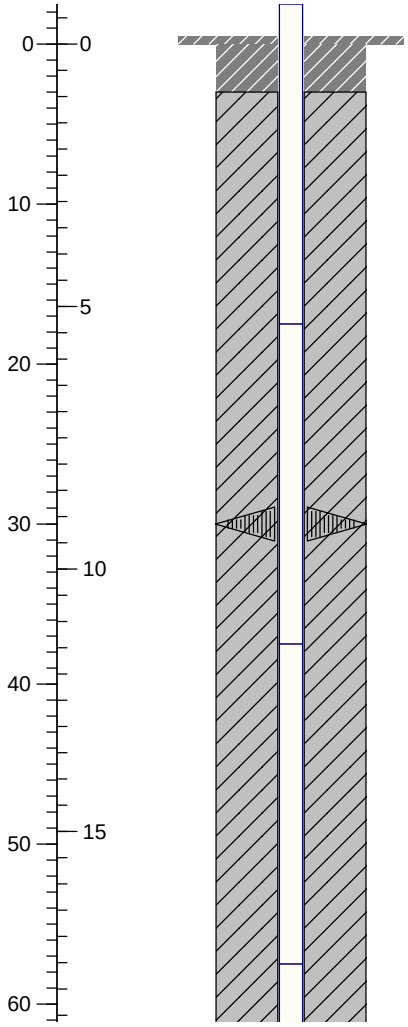
Conventional End Cap
4.5" OD Schedule 80 PVC

Bolted Steel Centralizers
Cage Type

Water Table

Cement
Cement (5% Bentonite)
Bentonite Seal
10/20 Sand/ Bentonite Mix
Slough
1/8 Gravel
8/20-16/40 Sand Mix
4/8 Sand
6/9 Sand
8/12 Sand
8/20 Sand
10/20 Sand
16/40 Sand
20/40 Sand
30/70 Sand

Feet/Meters



Well Descriptions
All depths listed are bgs (unless noted)

Conventional Well Stick-Up = ~3' (0.91 m)

This well monitors perched (above the bedrock) groundwater under the 600 Area Closure.

Well completed with 6" x 6' steel well protector with locking cap, ~4' x 4' concrete well pad, and barrier posts above ground surface.

Steel bolt-on centralizer ~30' (9.14 m)

Annular/Borehole Descriptions
All depths listed are bgs

Top of Cement = 0'

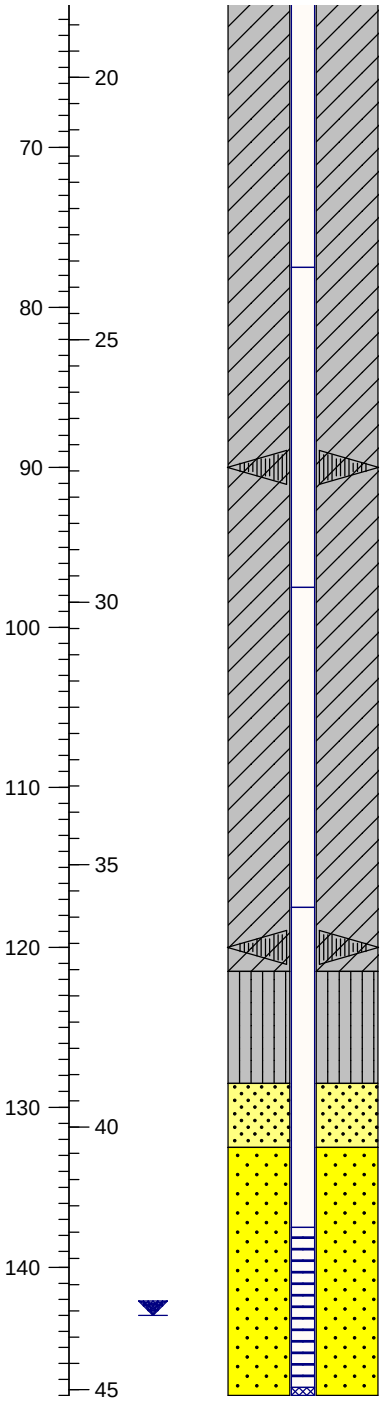
Top of Cement (Portland Type I/II with 5% bentonite) = 3' (0.91 m)

Casing Explanation:

- Surface Casing — **9 5/8" Drive Casing (removed as well was installed)**
- Conventional Casing — **4.5" OD Schedule 80 PVC**
- Conventional Screen — **4.5" OD Schedule 80 PVC 0.020"**
- Conventional End Cap — **4.5" OD Schedule 80 PVC**
- **Bolted Steel Centralizers Cage Type**
- Water Table

Cement	1/8 Gravel	8/20 Sand
Cement (5% Bentonite)	8/20-16/40 Sand Mix	10/20 Sand
Bentonite Seal	4/8 Sand	16/40 Sand
10/20 Sand/ Bentonite Mix	6/9 Sand	20/40 Sand
Slough	8/12 Sand	30/70 Sand

Feet/Meters



Well Descriptions
All depths listed are bgs (unless noted)

Steel bolt-on centralizer ~90' (27.43 m)

Steel bolt-on centralizer ~120' (36.57 m)

Top of Nominal 4" (4.5" OD) Schedule 80 PVC 0.020"-Slot Screen = 137.5' (41.91 m)

*Groundwater During Drilling (First Occurrence) = 142.45' (43.42 m; measured 10/1/2011 bgs)

Water Table = 143' (43.58 m; measured 10/25/2011 bgs at first sampling)

Bottom of Nominal 4" (4.5" OD) Schedule 80 PVC 0.020"-Slot Screen = 147.5' (44.96 m)

PVC cap contains a 1/4" diameter weep hole (to accommodate dry periods)

Nominal 4" (4.5" OD) Schedule 80 PVC Casing TD = 148' (45.11 m)

Annular/Borehole Descriptions
All depths listed are bgs

Top of Bentonite = 121.5' (37.03 m)

Top of 16/40 Sand = 128.5' (39.16 m)

*Groundwater was not present during drilling, but seeped in overnight.

Top of 10/20 Sand = 132.5' (40.38 m)

12" Borehole TD = 148' (45.11 m) drilled with 9 5/8" Stratex Casing Advance Air Rotary method

Appendix B

Results of Geotechnical Samples from 600-SVE-1

Laboratory Report for NASA WSTF Environmental Department

PO# ECO 0000001

December 19, 2011

Daniel B. Stephens & Associates, Inc.

5840 Osuna Road NE • Albuquerque, New Mexico 87109

December 19, 2011

Geoff Giles
NASA WSTF Environmental Department
12600 NASA Road
Las Cruces, NM 88012
(575) 524-5352

Re: DBS&A Laboratory Report for NASA WSTF Environmental Department PO# ECO 0000001

Dear Mr. Giles:

Enclosed is the final report for the NASA WSTF Environmental Department PO# ECO 0000001 samples. Please review this report and provide any comments as samples will be held for a maximum of 30 days. After 30 days samples will be returned or disposed of in an appropriate manner.

All testing results were evaluated subjectively for consistency and reasonableness, and the results appear to be reasonably representative of the material tested. However, DBS&A does not assume any responsibility for interpretations or analyses based on the data enclosed, nor can we guarantee that these data are fully representative of the undisturbed materials at the field site. We recommend that careful evaluation of these laboratory results be made for your particular application.

The testing utilized to generate the enclosed final report employs methods that are standard for the industry. The results do not constitute a professional opinion by DBS&A, nor can the results affect any professional or expert opinions rendered with respect thereto by DBS&A. You have acknowledged that all the testing undertaken by us, and the final report provided, constitutes mere test results using standardized methods, and cannot be used to disqualify DBS&A from rendering any professional or expert opinion, having waived any claim of conflict of interest by DBS&A.

We are pleased to provide this service to NASA WSTF Environmental Department and look forward to future laboratory testing on other projects. If you have any questions about the enclosed data, please do not hesitate to call.

Sincerely,

DANIEL B. STEPHENS & ASSOCIATES, INC.
SOIL TESTING & RESEARCH LABORATORY

Celina Sessa
Assistant Laboratory Manager
Enclosure

Daniel B. Stephens & Associates, Inc.
Soil Testing & Research Laboratory
5840 Osuna Rd. NE
Albuquerque, NM 87109
505-889-7752
FAX 505-889-0258

Summaries

Summary of Tests Performed

Laboratory Sample Number	Initial Soil Properties[1]			Saturated Hydraulic Conductivity[2]			Moisture Characteristics[3]								Particle Size[4]			Specific Gravity[5]		Air Perm-eability	Atterberg Limits	Proctor Compaction
	G	VM	VD	CH	FH	FW	HC	PP	FP	DPP	RH	EP	WHC	K_{unsat}	DS	WS	H	F	C			
600-SVE-1 (60-65')	X	X		X			X	X		X	X			X		X	X	X	X		X	
600-SVE-1 (95-100')	X	X		X			X			X	X			X		X	X	X	X		X	

[1] G = Gravimetric Moisture Content, VM = Volume Measurement Method, VD = Volume Displacement Method

[2] CH = Constant Head Rigid Wall, FH = Falling Head Rigid Wall, FW = Falling Head Rising Tail Flexible Wall

[3] HC = Hanging Column, PP = Pressure Plate, FP = Filter Paper, DPP = Dew Point Potentiometer, RH = Relative Humidity Box, EP = Effective Porosity, WHC = Water Holding Capacity, Kunsat = Calculated Unsaturated Hydraulic Conductivity

[4] DS = Dry Sieve, WS = Wet Sieve, H = Hydrometer

[5] F = Fine (<4.75mm), C = Coarse (>4.75mm)

Notes

Sample Preparation:
Two samples arrived on October 24, 2011. Sample 600-SVE-1 (60'-65') arrived in a 2/3-full 1-gallon bag and a 4.5" x 23" pvc tube wrapped in heavy plastic and sealed with tape. The material in the pvc tube was used for all analyses for this sample. Sample 600-SVE-1 (95'-100') arrived in two 2/3-full 1-gallon bags, one labeled 'top' and the other labeled 'bottom'. The material labeled 'bottom' was used for all analyses for this sample. Both samples were subjected to saturated hydraulic conductivity, moisture retention testing, particle size analysis (PSA), Atterberg limits and specific gravity testing.

A subsample was obtained by cutting the pvc tube for sample 600-SVE-1 (60'-65') to a length of 2.25". The prepared sub-sample was then subjected to saturated hydraulic conductivity and moisture retention testing. Separate subsamples were prepared for PSA, Atterberg limits and specific gravity testing.

Sample 600-SVE-1 (95'-100') was remolded in a 6" diameter ring at the 'as received' moisture content using a moderate compactive effort, based on the preparation technician's judgment and experience with compaction testing. The sample received saturated hydraulic conductivity, moisture retention testing, Atterberg limits and specific gravity testing. To meet the minimum requirement for diameter to particle ratio, material larger than 3/4" (19.0 mm) was removed from sample 600-SVE-1 (95'-100'), and the material passing the 3/4" sieve was used to prepare subsamples for saturated hydraulic conductivity, moisture retention testing and Atterberg limits. Oversize correction calculations were applied to the measured values for this sample. Following completion of the above tests, all previously tested material was combined to perform PSA testing.

Percent Saturation at Saturation:
Sample 600-SVE-1 (95'-100') was calculated to be greater than 105% saturated at the saturated stage of testing. Potential causes for high saturation values can include: underestimating the saturated sample volume, and/or the presence of salt that is going into solution and therefore lowering the dry weight.

General Notes:
Volume changes occurred for both samples during the hanging column and pressure plate portion of the analysis. The reported volumetric moisture contents are adjusted for volume changes, where applicable. Due to the irregularities formed on the sample surfaces during settling or swelling, volume measurements obtained after the initial reading should be considered estimates.

Summary of Sample Preparation/Volume Changes

	Initial Sample Data[1]			Volume Change Post Saturation[2]				Volume Change Post Drying Curve[3]			
Sample Number	Moisture Content (%, g/g)	Dry Bulk Density (g/cm^3)	Dry Bulk Density (pcf)	Dry Bulk Density (g/cm^3)	Dry Bulk Density (pcf)	% Volume Change (%)	% of Initial Density (%)	Dry Bulk Density (g/cm^3)	Dry Bulk Density (pcf)	% Volume Change (%)	% of Initial Density (%)
600-SVE-1 (60-65')	14.0	1.67	104.1	1.60	99.9	+4.20%	96.0%	1.64	102.4	+1.61%	98.4%

[1]Initial Sample Data: The 'as received' dry bulk density and moisture content.

[2]Volume Change Post Saturation: Volume change measurements were obtained after saturated hydraulic conductivity testing.

[3]Volume Change Post Drying Curve: Volume change measurements were obtained throughout hanging column and pressure plate testing. The 'Volume Change Post Drying Curve' values represent the final sample dimensions after the last pressure plate point.

Notes:

"+" indicates sample swelling, "-" indicates sample settling, and "---" indicates no volume change occurred.

Summary of Sample Preparation/Volume Changes

	Target Remold Parameters[1]			Actual Remold Data				Volume Change Post Saturation[2]				Volume Change Post Drying Curve[3]			
Sample Number	Moist. Cont. (%, g/g)	Dry Bulk Density (g/cm^3)	Dry Bulk Density (pcf)	Moist. Cont. (%, g/g)	Dry Bulk Density (g/cm^3)	Dry Bulk Density (pcf)	% of Target Density (%)	Dry Bulk Density (g/cm^3)	Dry Bulk Density (pcf)	% Volume Change (%)	% of Actual Density (%)	Dry Bulk Density (g/cm^3)	Dry Bulk Density (pcf)	% Volume Change (%)	% of Actual Density (%)
600-SVE-1 (95-100')	0.9	'moderate'		1.7	2.11	131.8	NA	2.11	131.8	---	100.0%	2.29	143.0	-7.85%	108.5%

[1]Target Remold Parameters: Provided by the client: Remold to the 'as received' moisture content using moderate compactive effort.

[2]Volume Change Post Saturation: Volume change measurements were obtained after saturated hydraulic conductivity testing.

[3]Volume Change Post Drying Curve: Volume change measurements were obtained throughout hanging column and pressure plate testing. The 'Volume Change Post Drying Curve' values represent the final sample dimensions after the last pressure plate point.

Notes:

"+" indicates sample swelling, "-" indicates sample settling, and "---" indicates no volume change occurred.

NA = Not applicable

Summary of Initial Moisture Content, Dry Bulk Density Wet Bulk Density and Calculated Porosity

Sample Number	Moisture Content: As Received, Gravimetric (%, g/g)	Moisture Content: As Received, Volumetric (%, cm^3/cm^3)	Moisture Content: Remolded, Gravimetric (%, g/g)	Moisture Content: Remolded, Volumetric (%, cm^3/cm^3)	Dry Bulk Density (g/cm^3)	Wet Bulk Density (g/cm^3)	Calculated Porosity (%)
600-SVE-1 (60-65')	14.0	23.3	---	---	1.67	1.90	38.8
600-SVE-1 (95-100')	0.9	NA	1.7	3.5	2.11	2.15	22.4

NA = Not analyzed

--- = This sample was not remolded

Summary of Saturated Hydraulic Conductivity Tests

Sample Number	K_{sat} (cm/sec)	Oversize Corrected K_{sat} (cm/sec)	Method of Analysis	
			Constant Head	Falling Head
600-SVE-1 (60-65')	4.0E-03	NA	X	
600-SVE-1 (95-100')	1.6E-02	1.1E-02	X	

--- = Oversize correction is unnecessary since coarse fraction < 5% of composite mass
NR = Not requested
NA = Not applicable

Summary of Moisture Characteristics of the Initial Drainage Curve

Sample Number	Pressure Head (-cm water)	Moisture Content (%, cm^3/cm^3)
600-SVE-1 (60-65')	0	39.5 ‡‡
	6	39.5 ‡‡
	20	38.2 ‡‡
	77	35.4 ‡‡
	337	28.9 ‡‡
	18866	9.9 ‡‡
	39160	8.0 ‡‡
	171122	4.9 ‡‡
	318076	3.9 ‡‡
	857025	2.9 ‡‡
600-SVE-1 (95-100')	0	25.6
	5	23.3
	11	21.8
	49	20.4 ‡‡
	192	18.0 ‡‡
	15399	3.6 ‡‡
	52622	2.2 ‡‡
	159701	1.7 ‡‡
	857025	0.9 ‡‡

‡‡ Volume adjustments are applicable at this matric potential (see data sheet for this sample).

Summary of Calculated Unsaturated Hydraulic Properties

Sample Number	α (cm^{-1})	N (dimensionless)	θ_r (% vol)	θ_s (% vol)	Oversize Corrected θ_r (% vol)	Oversize Corrected θ_s (% vol)
600-SVE-1 (60-65')	0.0072	1.2862	0.00	39.25	NA	NA
600-SVE-1 (95-100')	0.0094	1.3635	0.00	23.49	0.00	16.76

--- = Oversize correction is unnecessary since coarse fraction < 5% of composite mass

NR = Not requested

NA = Not applicable

Summary of Particle Size Characteristics

Sample Number	d_{10} (mm)	d_{50} (mm)	d_{60} (mm)	C_u	C_c	Method	ASTM Classification	USDA Classification
600-SVE-1 (60-65')	0.0013	0.045	0.11	85	0.40	WS/H	Sandy lean clay s(CL)	Loam † (Est)
600-SVE-1 (95-100')	0.12	9.8	15	125	4.1	WS/H	Poorly-graded gravel with silt and sand (GP-GM)s	Sandy Loam †

d_{50} = Median particle diameter

Est = Reported values for d_{10}, C_u, C_c, and soil classification are estimates, since extrapolation was required to obtain the d_{10} diameter

$$C_u = \frac{d_{60}}{d_{10}}$$

$$C_c = \frac{(d_{30})^2}{(d_{10})(d_{60})}$$

DS = Dry sieve

H = Hydrometer

WS = Wet sieve

† Greater than 10% of sample is coarse material

Percent Gravel, Sand, Silt and Clay*

Sample Number	% Gravel (>4.75mm)	% Sand (<4.75mm, >0.075mm)	% Silt (<0.075mm, >0.002mm)	% Clay (<0.002mm)
600-SVE-1 (60-65')	8.0	35.3	41.7	15.0
600-SVE-1 (95-100')	63.3	27.9	6.1	2.8

*USCS classification does not classify clay fraction based on particle size. USDA definition of clay (<0.002mm) used in this table.

Summary of Atterberg Tests

Sample Number	Liquid Limit	Plastic Limit	Plasticity Index	Classification
600-SVE-1 (60-65')	35	22	13	CL
600-SVE-1 (95-100')	20	17	3	ML

--- = Soil requires visual-manual classification due to non-plasticity

Summary of Specific Gravity Tests

	Test Sample			Oversize Material			Bulk Sample
Sample Number	Specific Gravity	Particle Size	% of Bulk Sample	Specific Gravity	Particle Size	% of Bulk Sample	Specific Gravity**
600-SVE-1 (60-65')	2.73	<4.75mm	92.0%	---	>4.75mm	8.0%	2.73
600-SVE-1 (95-100')	2.73	<3/4"	65.8%	2.74	>3/4"	34.2%	2.73

--- = Unnecessary since specified fraction <5% of composite mass

* = Based on specific gravity of material <4.75mm

** = Weighted average

NA = Not analyzed

Initial Properties

Summary of Initial Moisture Content, Dry Bulk Density Wet Bulk Density and Calculated Porosity

Sample Number	Moisture Content: As Received, Gravimetric (%, g/g)	Moisture Content: As Received, Volumetric (%, cm^3/cm^3)	Moisture Content: Remolded, Gravimetric (%, g/g)	Moisture Content: Remolded, Volumetric (%, cm^3/cm^3)	Dry Bulk Density (g/cm^3)	Wet Bulk Density (g/cm^3)	Calculated Porosity (%)
600-SVE-1 (60-65')	14.0	23.3	---	---	1.67	1.90	38.8
600-SVE-1 (95-100')	0.9	NA	1.7	3.5	2.11	2.15	22.4

NA = Not analyzed

--- = This sample was not remolded

Data for Initial Moisture Content, Bulk Density, Porosity, and Percent Saturation

Job Name: NASA
Job Number: LB11.0218.00
Sample Number: 600-SVE-1 (60-65')
PO Number: ECO 0000001
Date Received: 10/24/2011

	As Received	Remolded
Test Date:	25-Oct-11	---
Field weight of sample* (g)*:*	1051.70	
Tare weight, ring (g)*:*	246.80	
Tare weight, pan/plate (g)*:*	0.00	
Tare weight, other (g)*:*	0.00	
Dry weight of sample (g)*:*	706.24	
Sample volume (cm^3)*:*	423.57	
Measured particle density (g/cm^3)*:*	2.73	
Gravimetric Moisture Content (% g/g)*:*	14.0	
Volumetric Moisture Content (% vol)*:*	23.3	
Dry bulk density (g/cm^3)*:*	1.67	
Wet bulk density (g/cm^3)*:*	1.90	
Calculated Porosity (% vol)*:*	38.8	
Percent Saturation:	60.0	

Laboratory analysis by: K. Wright
Data entered by: C. Sessa
Checked by: J. Hines

Comments:

* Weight including tares
NA = Not analyzed
--- = This sample was not remolded

Data for Initial Moisture Content, Bulk Density, Porosity, and Percent Saturation

Job Name: NASA
Job Number: LB11.0218.00
Sample Number: 600-SVE-1 (95-100')
PO Number: ECO 0000001
Date Received: 10/24/2011

	As Received	Remolded
Test Date:	28-Oct-11	1-Nov-11
Field weight of sample* (g):	1426.70	2831.20
Tare weight, ring (g):	0.00	160.85
Tare weight, pan/plate (g):	407.59	0.00
Tare weight, other (g):	0.00	0.00
Dry weight of sample (g):	1009.91	2626.34
Sample volume (cm^3):	NA	1243.90
Measured particle density (g/cm^3):	2.72	2.72
Gravimetric Moisture Content (% g/g):	0.9	1.7
Volumetric Moisture Content (% vol):	NA	3.5
Dry bulk density (g/cm^3):	NA	2.11
Wet bulk density (g/cm^3):	NA	2.15
Calculated Porosity (% vol):	NA	22.4
Percent Saturation:	NA	15.8
Laboratory analysis by:	K. Wright	K. Wright
Data entered by:	C. Sessa	C. Sessa
Checked by:	J. Hines	J. Hines

Comments:

* Weight including tares
NA = Not analyzed
--- = This sample was not remolded

Saturated Hydraulic Conductivity

Summary of Saturated Hydraulic Conductivity Tests

Sample Number	K_{sat} (cm/sec)	Oversize Corrected K_{sat} (cm/sec)	Method of Analysis	
			Constant Head	Falling Head
600-SVE-1 (60-65')	4.0E-03	NA	X	
600-SVE-1 (95-100')	1.6E-02	1.1E-02	X	

--- = Oversize correction is unnecessary since coarse fraction < 5% of composite mass
NR = Not requested
NA = Not applicable

Saturated Hydraulic Conductivity
Constant Head Method

Job name:	NASA	*Type of water used:*	TAP
Job number:	LB11.0218.00	*Collection vessel tare* (g):	10.94
Sample number:	600-SVE-1 (60-65')	*Sample length* (cm):	5.79
PO Number:	ECO 0000001	*Sample diameter* (cm):	9.65
Date Received:	10/24/2011	*Sample x-sectional area* (cm^2):	73.17

Date	Time	Temp (°C)	Head (cm)	Q + Tare (g)	Q (cm^3)	Elapsed time (sec)	Ksat (cm/sec)	Ksat @ 20°C (cm/sec)
Test # 1:								
27-Oct-11	8:45:09	21.0	1.9	22.36	11.4	117	4.1E-03	4.0E-03
27-Oct-11	8:47:06							
Test # 2:								
27-Oct-11	9:09:48	21.0	1.7	22.21	11.3	128	4.1E-03	4.0E-03
27-Oct-11	9:11:56							
Test # 3:								
27-Oct-11	9:35:25	21.5	1.5	22.69	11.8	153	4.1E-03	3.9E-03
27-Oct-11	9:37:58							

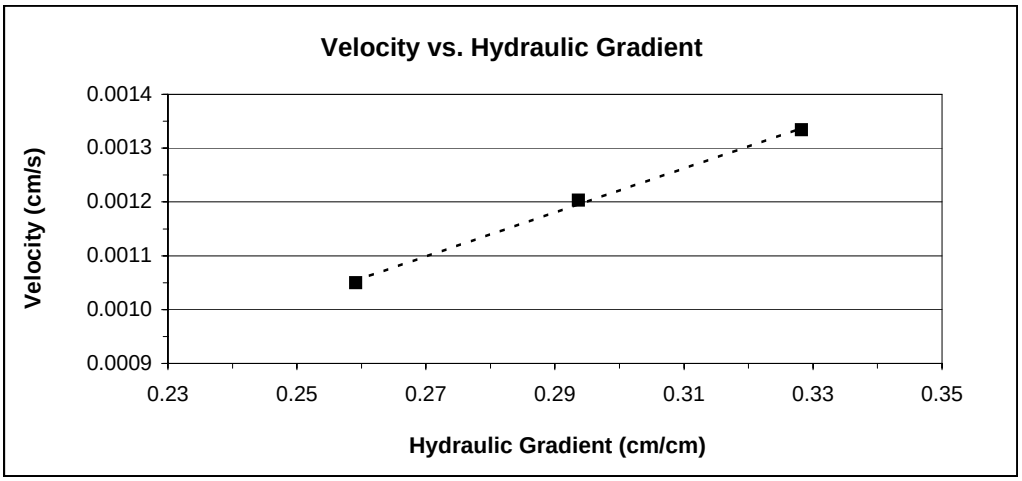
***Average Ksat* (cm/sec):** **4.0E-03**

***Oversize Corrected Ksat* (cm/sec):** **NA**

Comments:

--- = Oversize correction is unnecessary since coarse fraction < 5% of composite mass

NA = Not applicable



Laboratory analysis by: K. Wright

Data entered by: K. Wright

Checked by: J. Hines

Saturated Hydraulic Conductivity
Constant Head Method

Job name:	NASA	*Type of water used:*	TAP
Job number:	LB11.0218.00	*Collection vessel tare* (g)*:*	10.18
Sample number:	600-SVE-1 (95-100')	*Sample length* (cm)*:*	7.00
PO Number:	ECO 0000001	*Sample diameter* (cm)*:*	15.05
Date Received:	10/24/2011	*Sample x-sectional area* (cm^2)*:*	177.78

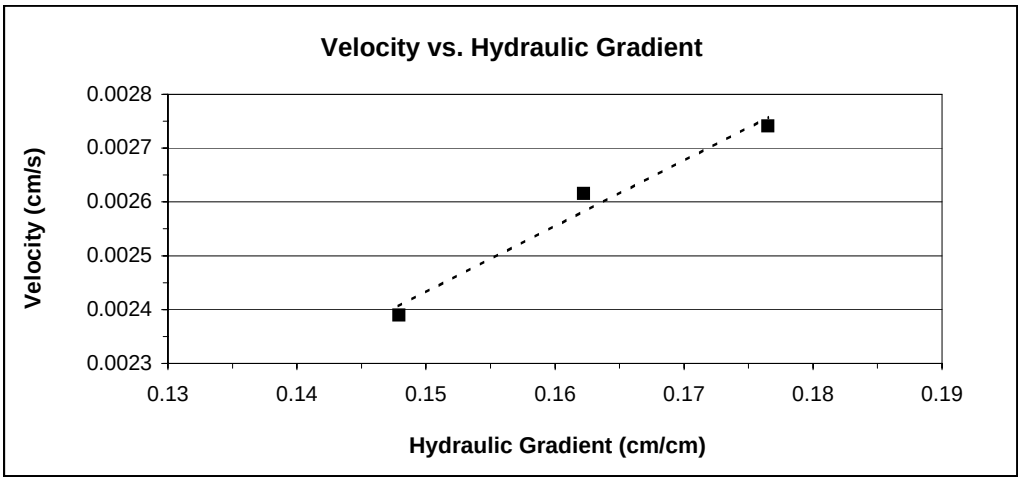
Date	Time	Temp (°C)	Head (cm)	Q + Tare (g)	Q (cm^3)	Elapsed time (sec)	Ksat (cm/sec)	Ksat @ 20°C (cm/sec)
Test # 1:								
3-Nov-11	9:17:20	20.5	1.2	39.42	29.2	60	1.6E-02	1.6E-02
3-Nov-11	9:18:20							
Test # 2:								
3-Nov-11	9:45:00	20.5	1.1	38.08	27.9	60	1.7E-02	1.6E-02
3-Nov-11	9:46:00							
Test # 3:								
3-Nov-11	10:23:00	20.5	1	35.67	25.5	60	1.7E-02	1.7E-02
3-Nov-11	10:24:00							

Average Ksat* (cm/sec)*: **1.6E-02**

Oversize Corrected Ksat* (cm/sec)*: **1.1E-02**

Comments:

--- = Oversize correction is unnecessary since coarse fraction < 5% of composite mass



Laboratory analysis by: K. Wright
Data entered by: K. Wright
Checked by: J. Hines

Oversize Correction Data Sheet

Job Name: NASA
Job Number: LB11.0218.00
Sample Number: 600-SVE-1 (95-100')
PO Number: ECO 0000001
Date Received: 10/24/2011

Split (3/4", 3/8", #4): 3/4
Calculated Porosity of Fines (% vol)*:* 22.4

	Coarse Fraction*	Fines Fraction	Composite
Subsample Mass (g)*:*	1944.45	3735.38	5679.83
Bulk Density (g/cm^3)*:*	2.74	2.11	2.29
Volume of Solids (cm^3)*:*	710.77	1372.67	2083.45
Volume of Voids (cm^3)*:*	0.00	396.50	396.50
Total Volume (cm^3)*:*	710.77	1769.17	2479.94
Volumetric Fraction (%)*:*	28.66	71.34	100.00
Mass Fraction (%)*:*	34.23	65.77	100.00
Ksat (cm/sec)*:*	NM	1.6E-02	1.1E-02

* = Porosity and moisture content of coarse fraction assumed to be zero.
--- = Oversize correction is unnecessary since coarse fraction < 5% of composite mass
NM = Not measured

Laboratory analysis by: K. Wright
Data entered by: K. Wright
Checked by: J. Hines

Moisture Retention Characteristics

Summary of Moisture Characteristics of the Initial Drainage Curve

Sample Number	Pressure Head (-cm water)	Moisture Content (%, cm^3/cm^3)
600-SVE-1 (60-65')	0	39.5 ‡‡
	6	39.5 ‡‡
	20	38.2 ‡‡
	77	35.4 ‡‡
	337	28.9 ‡‡
	18866	9.9 ‡‡
	39160	8.0 ‡‡
	171122	4.9 ‡‡
	318076	3.9 ‡‡
	857025	2.9 ‡‡
600-SVE-1 (95-100')	0	25.6
	5	23.3
	11	21.8
	49	20.4 ‡‡
	192	18.0 ‡‡
	15399	3.6 ‡‡
	52622	2.2 ‡‡
	159701	1.7 ‡‡
	857025	0.9 ‡‡

‡‡ Volume adjustments are applicable at this matric potential (see data sheet for this sample).

Summary of Calculated Unsaturated Hydraulic Properties

Sample Number	α (cm^{-1})	N (dimensionless)	θ_r (% vol)	θ_s (% vol)	Oversize Corrected θ_r (% vol)	Oversize Corrected θ_s (% vol)
600-SVE-1 (60-65')	0.0072	1.2862	0.00	39.25	NA	NA
600-SVE-1 (95-100')	0.0094	1.3635	0.00	23.49	0.00	16.76

--- = Oversize correction is unnecessary since coarse fraction < 5% of composite mass

NR = Not requested

NA = Not applicable

Moisture Retention Data

Hanging Column / Pressure Plate

(Soil-Water Characteristic Curve)

Job Name: NASA
Job Number: LB11.0218.00
Sample Number: 600-SVE-1 (60-65')
PO Number: ECO 0000001
Date Received: 10/24/2011

Dry wt. of sample (g): 706.24
Tare wt., ring (g): 246.80
Tare wt., screen & clamp (g): 47.28
Initial sample volume (cm^3): 423.57
Initial dry bulk density (g/cm^3): 1.67
Measured particle density (g/cm^3): 2.73
Initial calculated total porosity (%): 38.83

	Date	Time	Weight* (g)	Matric Potential (-cm water)	Moisture Content † (% vol)	
Hanging column:	27-Oct-11	12:30	1174.71	0	39.51	‡‡
	3-Nov-11	11:00	1174.42	6.0	39.47	‡‡
	10-Nov-11	8:50	1168.84	20.0	38.23	‡‡
	18-Nov-11	13:50	1156.05	77.0	35.41	‡‡
Pressure plate:	28-Nov-11	8:00	1124.77	337	28.92	‡‡

Volume Adjusted Data [1]

	Matric Potential (-cm water)	Adjusted Volume (cm^3)	% Volume Change [2] (%)	Adjusted Density (g/cm^3)	Adjusted Calculated Porosity (%)
Hanging column:	0.0	441.35	+4.20%	1.60	41.29
	6.0	441.13	+4.15%	1.60	41.27
	20.0	440.84	+4.08%	1.60	41.23
	77.0	439.82	+3.83%	1.61	41.09
Pressure plate:	337	430.38	+1.61%	1.64	39.80

Comments:

[1] Applicable if the sample experienced volume changes during testing. 'Volume Adjusted' values represent each of the volume change measurements obtained after saturated hydraulic conductivity testing and throughout hanging column/pressure plate testing. "---" indicates no volume changes occurred.

[2] Represents percent volume change from original sample volume. A '+' denotes measured sample swelling, a '-' denotes measured sample settling, and '---' denotes no volume change occurred.

* Weight including tares

† Assumed density of water is 1.0 g/cm^3

‡‡ Volume adjustments are applicable at this matric potential (see comment #1). Changes in volume, if applicable, are estimated based on obtainable measurements of changes in sample length and diameter.

Technician Notes:

Laboratory analysis by: K. Wright
Data entered by: C. Sessa
Checked by: J. Hines

Moisture Retention Data

Dew Point Potentiometer / Relative Humidity Box

(Soil-Water Characteristic Curve)

Sample Number: 600-SVE-1 (60-65')

Initial sample bulk density (g/cm^3)*:* 1.67

Fraction of bulk sample used (<2.00mm fraction) (%): 87.37

Dry weight of dew point potentiometer sample* (g)*:* 150.02

Tare weight, jar (g)*:* 113.80

	Date	Time	Weight* (g)	Water Potential (-cm water)	Moisture Content † (% vol)	
Dew point potentiometer:	8-Dec-11	14:10	152.53	18866	9.94	‡‡
	8-Dec-11	13:45	152.03	39160	7.96	‡‡
	8-Dec-11	12:35	151.27	171122	4.95	‡‡
	8-Dec-11	10:35	151.00	318076	3.88	‡‡

Volume Adjusted Data [1]

	Water Potential (-cm water)	Adjusted Volume (cm^3)	% Volume Change [2] (%)	Adjusted Density (g/cm^3)	Adjusted Calc. Porosity (%)
Dew point potentiometer:	18866	430.38	+1.61%	1.64	39.80
	39160	430.38	+1.61%	1.64	39.80
	171122	430.38	+1.61%	1.64	39.80
	318076	430.38	+1.61%	1.64	39.80

Dry weight of relative humidity box sample* (g)*:* 80.29

Tare weight (g)*:* 42.10

	Date	Time	Weight* (g)	Water Potential (-cm water)	Moisture Content † (% vol)	
Relative humidity box:	12-Dec-11	13:20	81.07	857025	2.93	‡‡

Volume Adjusted Data [1]

	Water Potential (-cm water)	Adjusted Volume (cm^3)	% Volume Change [2] (%)	Adjusted Density (g/cm^3)	Adjusted Calc. Porosity (%)
Relative humidity box:	857025	430.38	+1.61%	1.64	39.80

Comments:

[1] Applicable if the sample experienced volume changes during testing. 'Volume Adjusted' values represent the volume change measurements obtained after the last hanging column or pressure plate point. "---" indicates no volume changes occurred.

[2] Represents percent volume change from original sample volume. A '+' denotes measured sample swelling, a '-' denotes measured sample settling, and '---' denotes no volume change occurred.

* Weight including tares

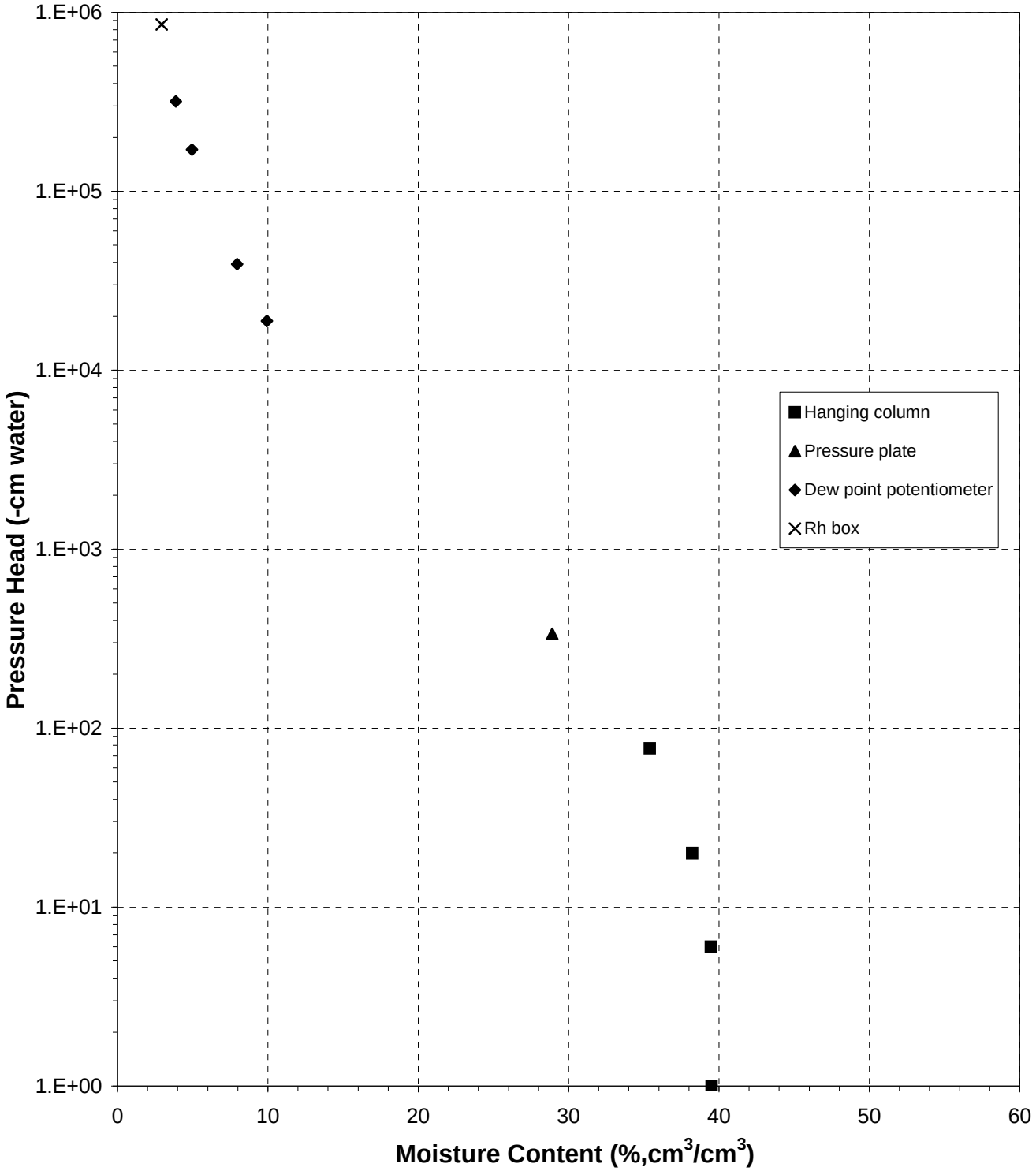
† Adjusted for >2.00mm (#10 sieve) material not used in DPP/RH testing. Assumed moisture content of material >2.00mm is zero, and assumed density of water is 1.0 g/cm^3.

‡‡ Volume adjustments are applicable at this matric potential (see comment #1). Changes in volume, if applicable, are estimated based on obtainable measurements of changes in sample length and diameter.

Laboratory analysis by: D. O'Dowd/K. Wright
Data entered by: C. Sessa
Checked by: J. Hines

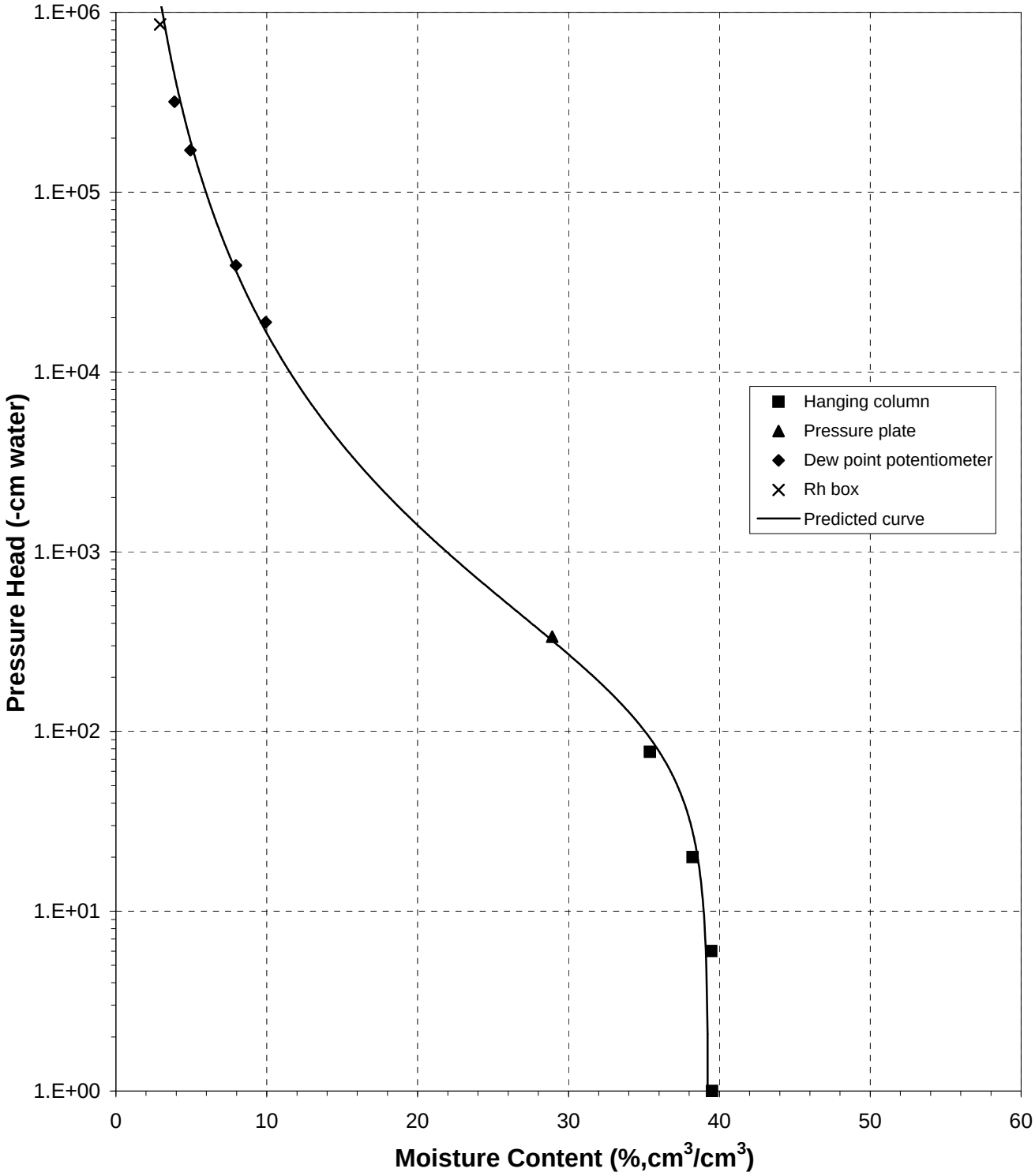
Water Retention Data Points

Sample Number: 600-SVE-1 (60-65')



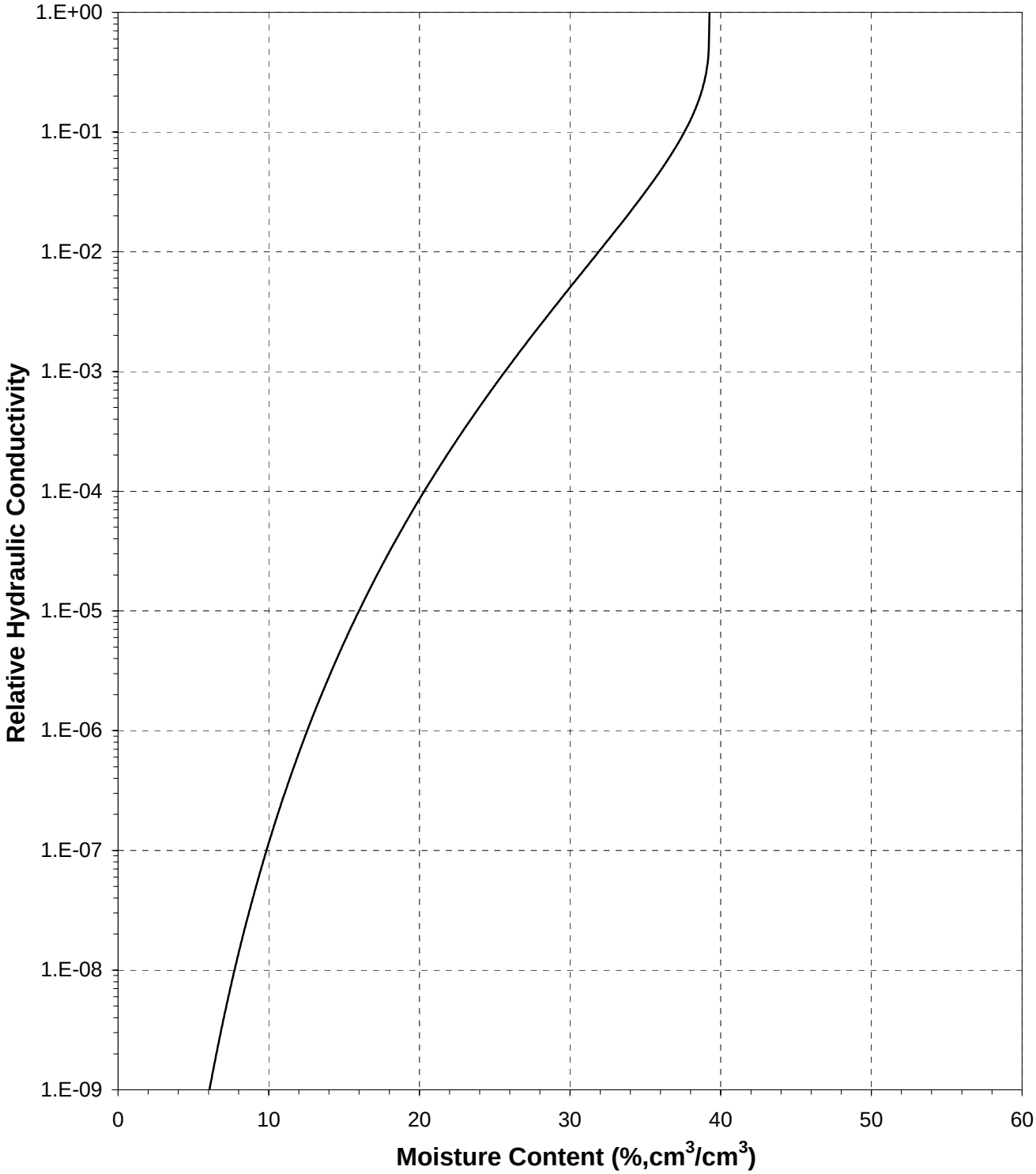
Predicted Water Retention Curve and Data Points

Sample Number: 600-SVE-1 (60-65')



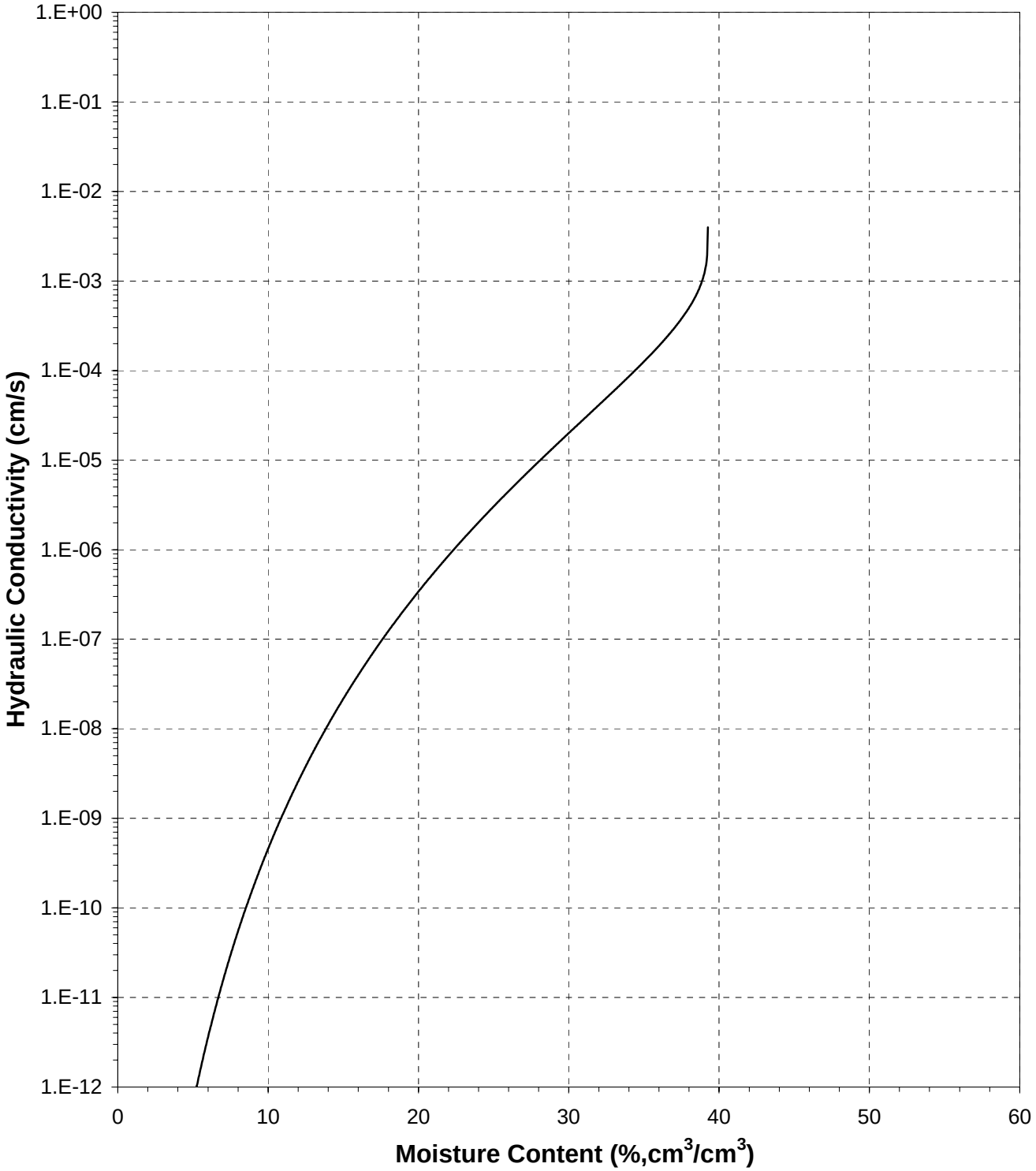
Plot of Relative Hydraulic Conductivity vs Moisture Content

Sample Number: 600-SVE-1 (60-65')



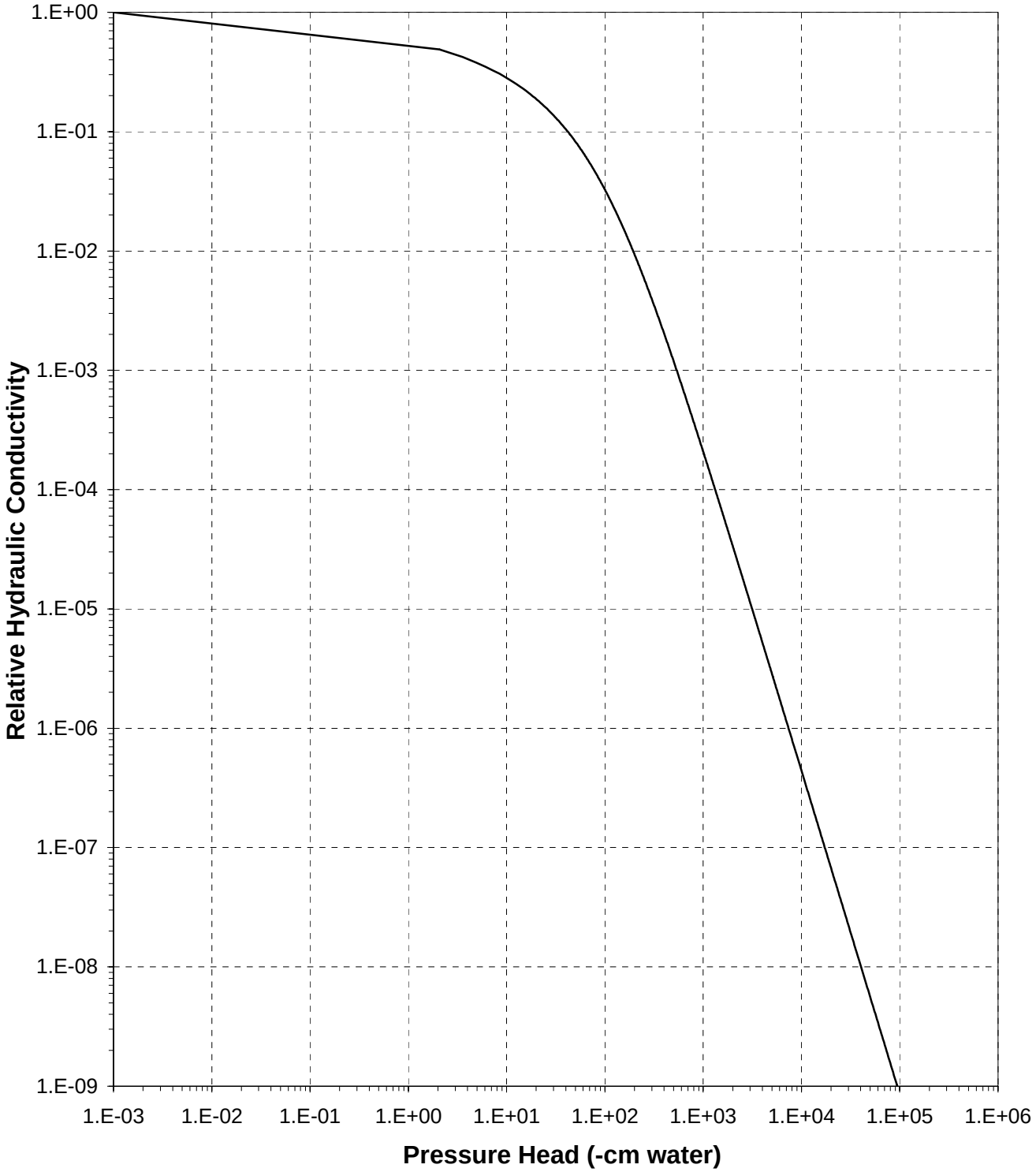
Plot of Hydraulic Conductivity vs Moisture Content

Sample Number: 600-SVE-1 (60-65')



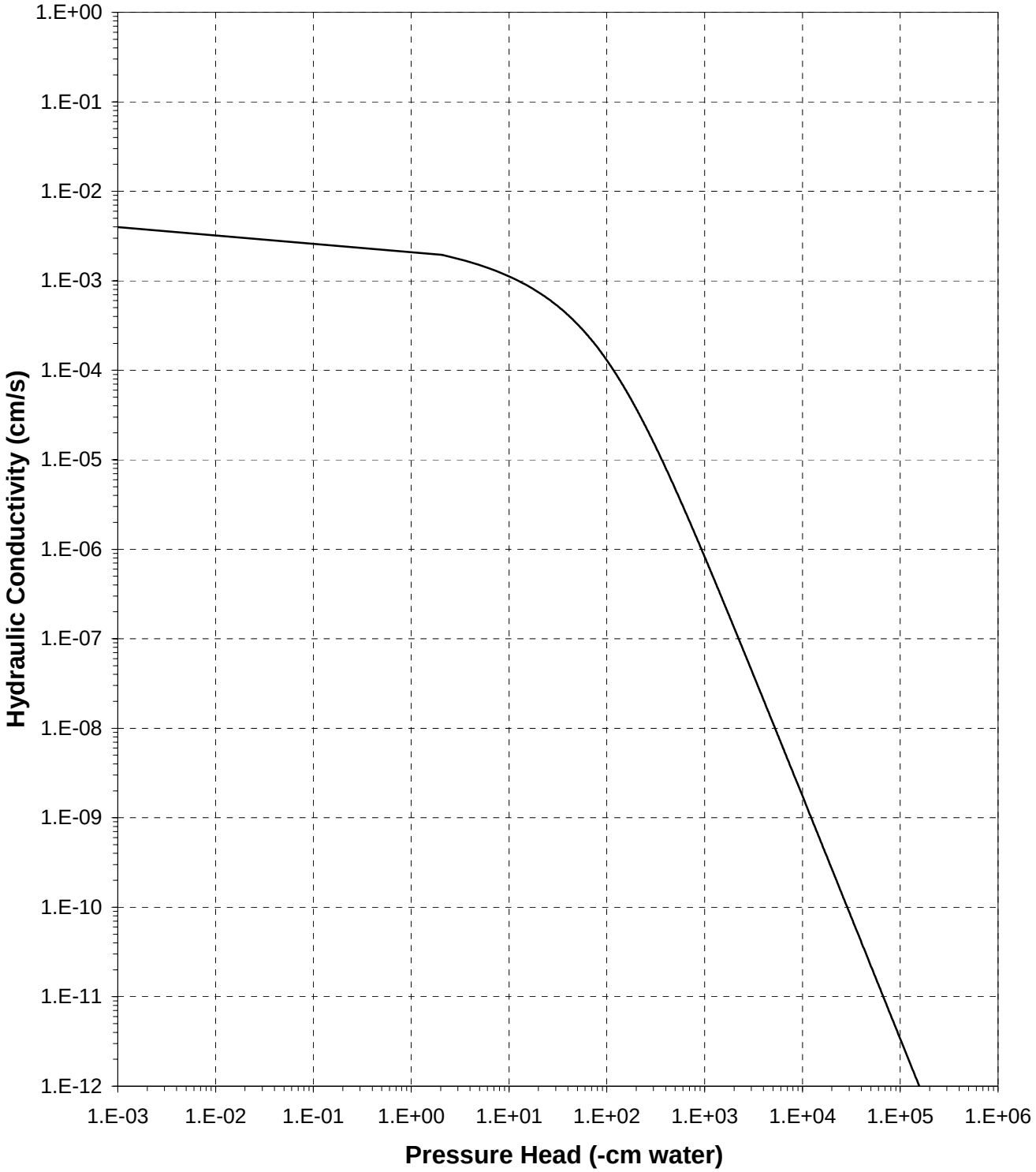
Plot of Relative Hydraulic Conductivity vs Pressure Head

Sample Number: 600-SVE-1 (60-65')



Plot of Hydraulic Conductivity vs Pressure Head

Sample Number: 600-SVE-1 (60-65')



Moisture Retention Data

Hanging Column / Pressure Plate

(Soil-Water Characteristic Curve)

Job Name: NASA
Job Number: LB11.0218.00
Sample Number: 600-SVE-1 (95-100')
PO Number: ECO 0000001
Date Received: 10/24/2011

Dry wt. of sample (g): 2626.34
Tare wt., ring (g): 160.85
Tare wt., screen & clamp (g): 51.37
Initial sample volume (cm^3): 1243.90
Initial dry bulk density (g/cm^3): 2.11
Measured particle density (g/cm^3): 2.72
Initial calculated total porosity (%): 22.41

	Date	Time	Weight* (g)	Matric Potential (-cm water)	Moisture Content† (% vol)	
Hanging column:	3-Nov-11	10:45	3157.31	0	25.63	
	10-Nov-11	8:40	3128.25	5.0	23.29	
	18-Nov-11	13:45	3109.67	11.0	21.80	
	28-Nov-11	10:05	3085.30	49.0	20.40	‡‡
	5-Dec-11	8:15	3045.19	192.0	18.03	‡‡

Volume Adjusted Data [1]

	Matric Potential (-cm water)	Adjusted Volume (cm^3)	% Volume Change [2] (%)	Adjusted Density (g/cm^3)	Adjusted Calculated Porosity (%)
Hanging column:	0.0	---	---	---	---
	5.0	---	---	---	---
	11.0	---	---	---	---
	49.0	1209.24	-2.79%	2.17	20.19
	192.0	1146.30	-7.85%	2.29	15.81

Comments:

[1] Applicable if the sample experienced volume changes during testing. 'Volume Adjusted' values represent each of the volume change measurements obtained after saturated hydraulic conductivity testing and throughout hanging column/pressure plate testing. "---" indicates no volume changes occurred.

[2] Represents percent volume change from original sample volume. A '+' denotes measured sample swelling, a '-' denotes measured sample settling, and '---' denotes no volume change occurred.

* Weight including tares

† Assumed density of water is 1.0 g/cm^3

‡‡ Volume adjustments are applicable at this matric potential (see comment #1). Changes in volume, if applicable, are estimated based on obtainable measurements of changes in sample length and diameter.

Technician Notes:

Laboratory analysis by: K. Wright
Data entered by: C. Sessa
Checked by: J. Hines

Moisture Retention Data

Dew Point Potentiometer / Relative Humidity Box

(Soil-Water Characteristic Curve)

Sample Number: 600-SVE-1 (95-100')

Initial sample bulk density (g/cm^3)*:* 2.11
Fraction of test sample used (<2.00mm fraction) (%): 40.03

Dry weight of dew point potentiometer sample* (g)*:* 162.18
Tare weight, jar (g)*:* 117.46

	Date	Time	Weight* (g)	Water Potential (-cm water)	Moisture Content† (% vol)	
Dew point potentiometer:	8-Dec-11	15:01	163.95	15399	3.63	‡‡
	8-Dec-11	10:55	163.23	52622	2.15	‡‡
	8-Dec-11	12:50	163.00	159701	1.68	‡‡

Volume Adjusted Data [1]

	Water Potential (-cm water)	Adjusted Volume (cm^3)	% Volume Change [2] (%)	Adjusted Density (g/cm^3)	Adjusted Calc. Porosity (%)
Dew point potentiometer:	15399	1146.30	-7.85%	2.29	15.81
	52622	1146.30	-7.85%	2.29	15.81
	159701	1146.30	-7.85%	2.29	15.81

Dry weight of relative humidity box sample* (g)*:* 90.70
Tare weight (g)*:* 42.91

	Date	Time	Weight* (g)	Water Potential (-cm water)	Moisture Content† (% vol)	
Relative humidity box:	12-Dec-11	13:20	91.19	857025	0.94	‡‡

Volume Adjusted Data [1]

	Water Potential (-cm water)	Adjusted Volume (cm^3)	% Volume Change [2] (%)	Adjusted Density (g/cm^3)	Adjusted Calc. Porosity (%)
Relative humidity box:	857025	1146.30	-7.85%	2.29	15.81

Comments:

[1] Applicable if the sample experienced volume changes during testing. 'Volume Adjusted' values represent the volume change measurements obtained after the last hanging column or pressure plate point. "---" indicates no volume changes occurred.

[2] Represents percent volume change from original sample volume. A '+' denotes measured sample swelling, a '-' denotes measured sample settling, and '---' denotes no volume change occurred.

* Weight including tares

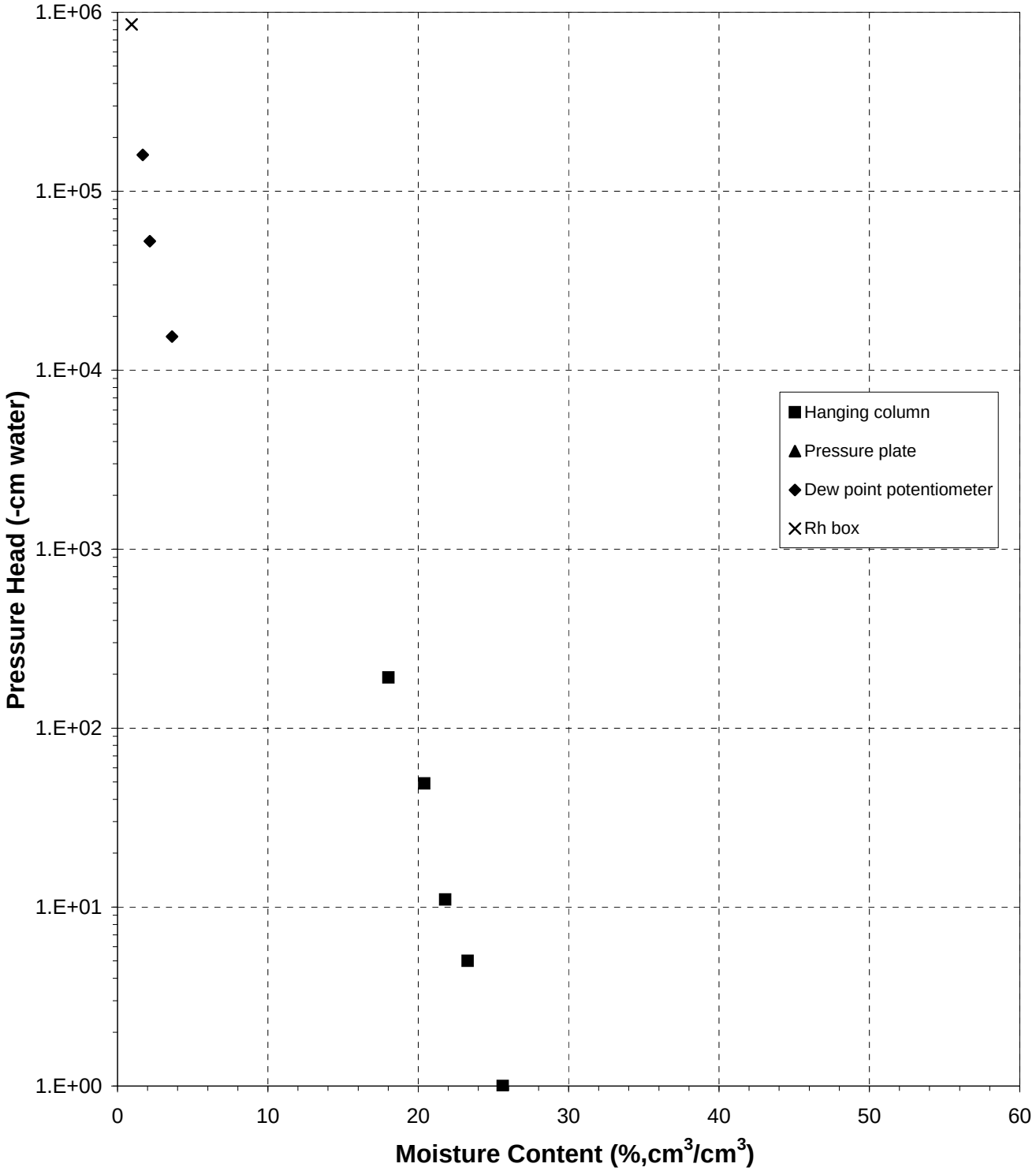
† Adjusted for >2.00mm (#10 sieve) material not used in DPP/RH testing. Assumed moisture content of material >2.00mm is zero, and assumed density of water is 1.0 g/cm^3.

‡‡ Volume adjustments are applicable at this matric potential (see comment #1). Changes in volume, if applicable, are estimated based on obtainable measurements of changes in sample length and diameter.

Laboratory analysis by: D. O'Dowd/K. Wright
Data entered by: C. Sessa
Checked by: J. Hines

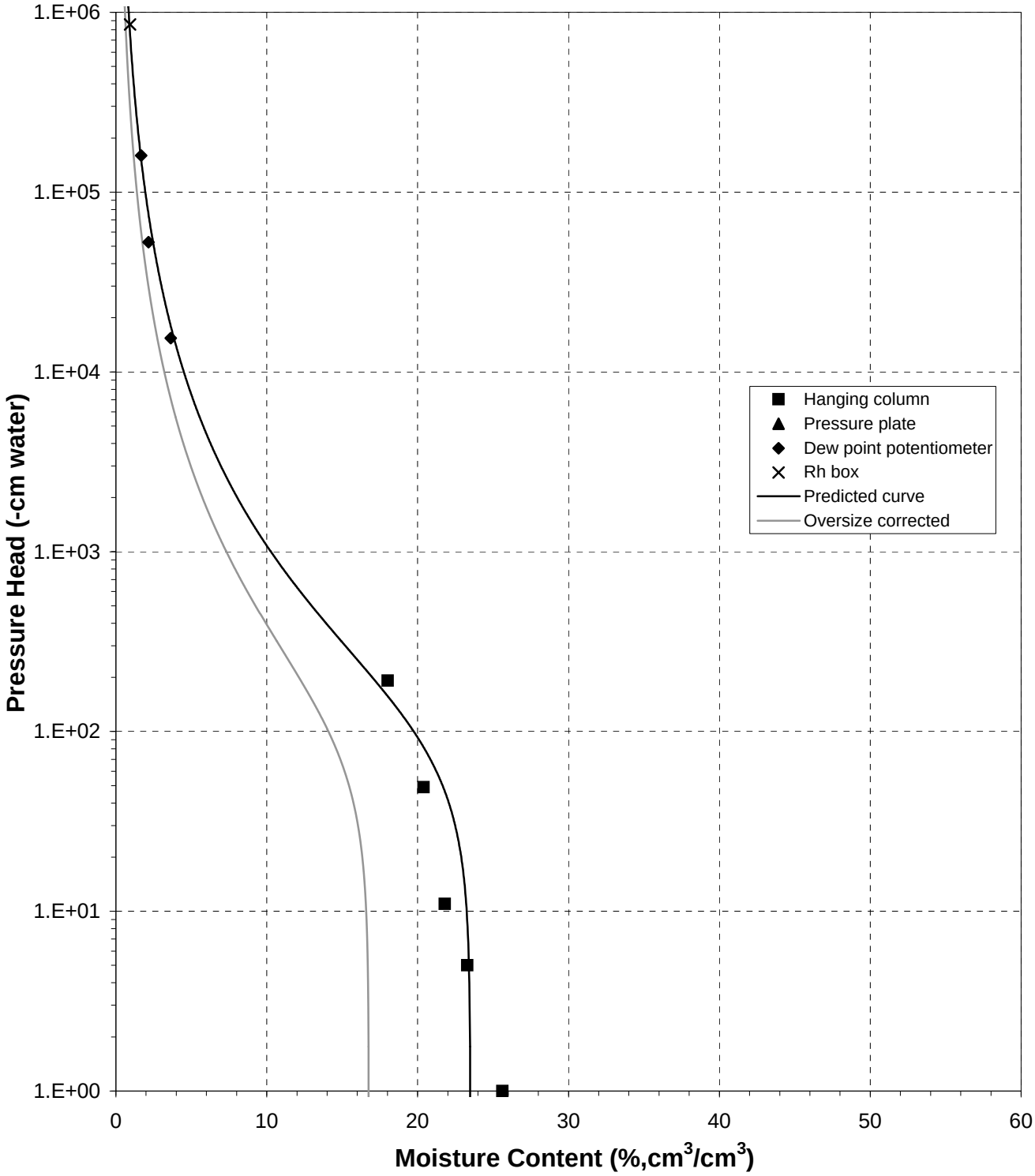
Water Retention Data Points

Sample Number: 600-SVE-1 (95-100')



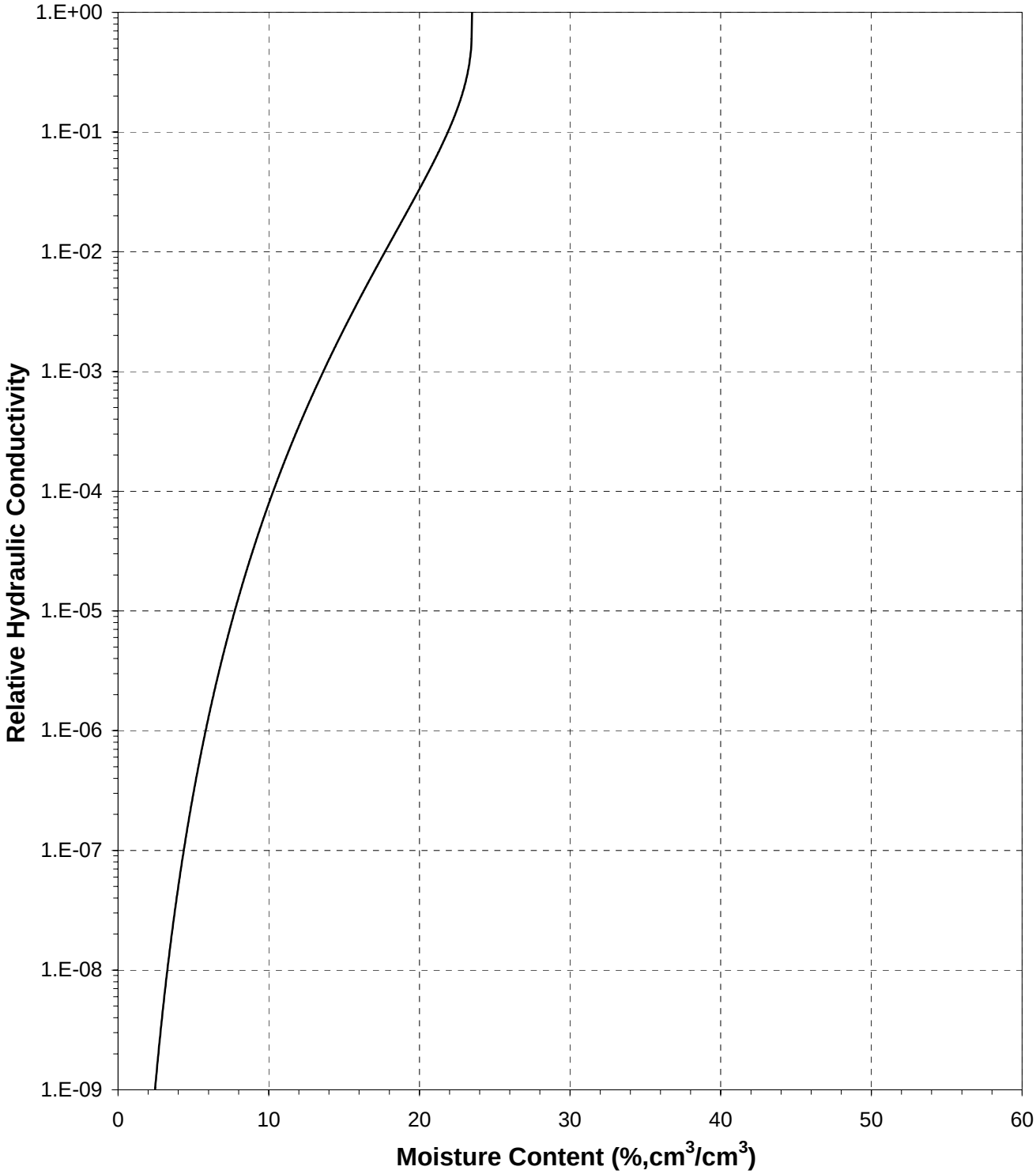
Predicted Water Retention Curve and Data Points

Sample Number: 600-SVE-1 (95-100')



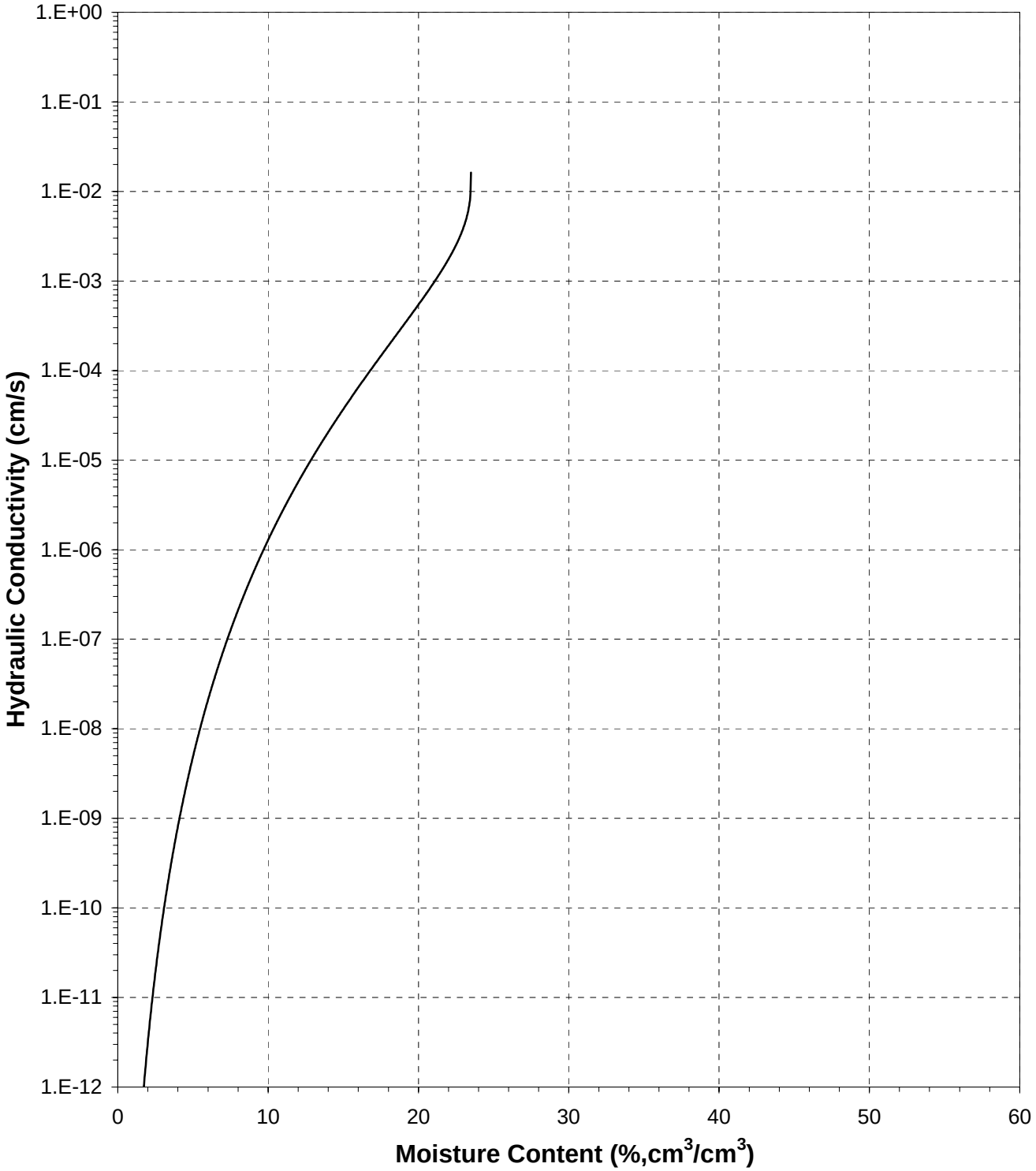
Plot of Relative Hydraulic Conductivity vs Moisture Content

Sample Number: 600-SVE-1 (95-100')



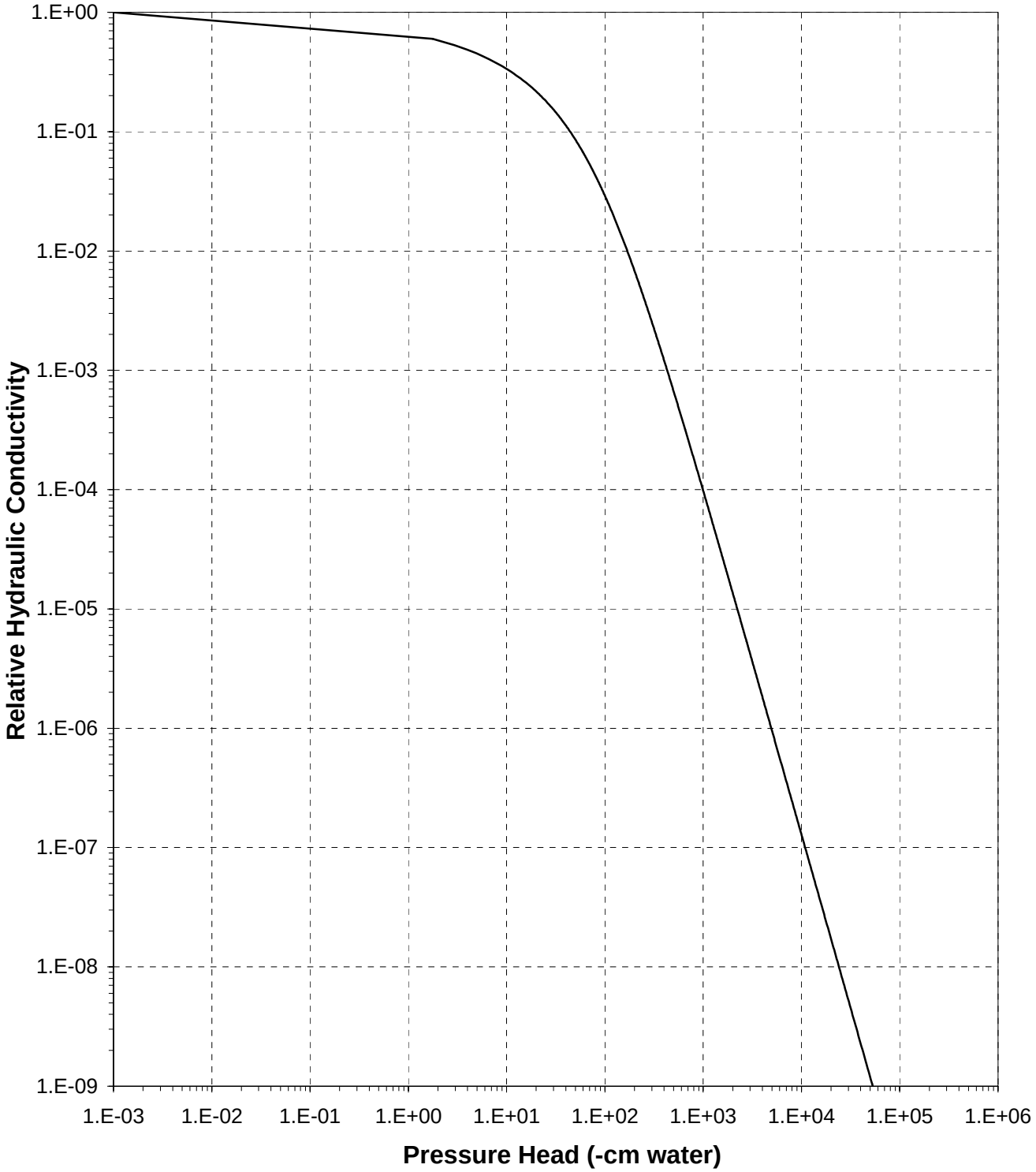
Plot of Hydraulic Conductivity vs Moisture Content

Sample Number: 600-SVE-1 (95-100')



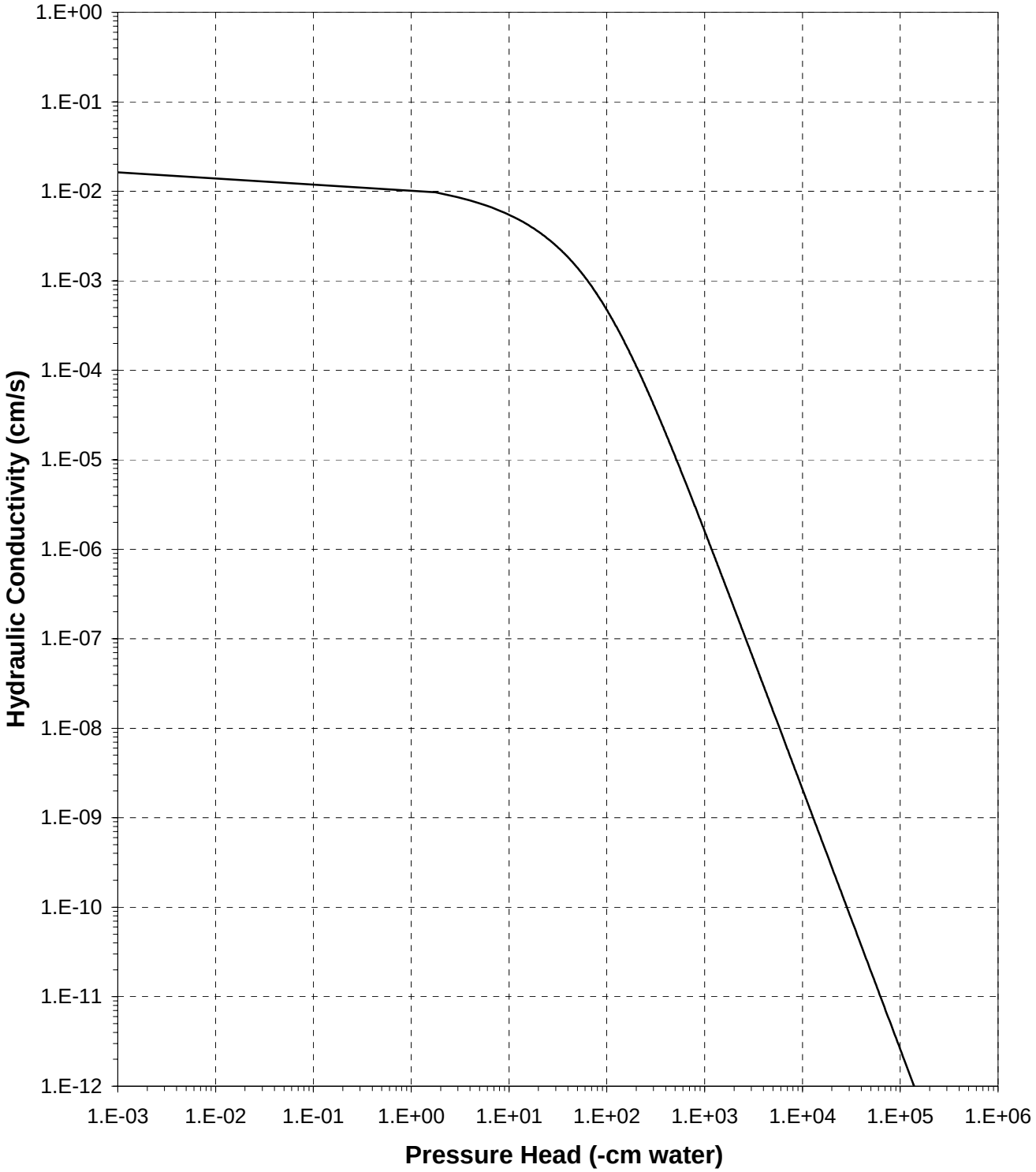
Plot of Relative Hydraulic Conductivity vs Pressure Head

Sample Number: 600-SVE-1 (95-100')



Plot of Hydraulic Conductivity vs Pressure Head

Sample Number: 600-SVE-1 (95-100')



Oversize Correction Data Sheet

Job Name: NASA
Job Number: LB11.0218.00
Sample Number: 600-SVE-1 (95-100')
PO Number: ECO 0000001
Date Received: 10/24/2011

Split (3/4", 3/8", #4): 3/4

	Coarse Fraction*	Fines Fraction**	Composite
Subsample Mass (g):	1944.45	3735.38	5679.83
Mass Fraction (%):	34.23	65.77	100.00
Initial Sample θ_i			
Bulk Density (g/cm^3):	2.74	2.11	2.29
Calculated Porosity (% vol):	0.00	22.41	22.41
Volume of Solids (cm^3):	710.77	1372.67	2083.45
Volume of Voids (cm^3):	0.00	396.50	396.50
Total Volume (cm^3):	710.77	1769.17	2479.94
Volumetric Fraction (%):	28.66	71.34	100.00
Initial Moisture Content (% vol):	0.00	3.54	2.52
Saturated Sample θ_s			
Bulk Density (g/cm^3):	2.74	2.11	2.29
Calculated Porosity (% vol):	0.00	22.41	22.41
Volume of Solids (cm^3):	710.77	1372.67	2083.45
Volume of Voids (cm^3):	0.00	396.50	396.50
Total Volume (cm^3):	710.77	1769.17	2479.94
Volumetric Fraction (%):	28.66	71.34	100.00
Saturated Moisture Content (% vol):	0.00	23.49	16.76
Residual Sample θ_r			
Bulk Density (g/cm^3):	2.74	2.29	2.43
Calculated Porosity (% vol):	0.00	15.81	15.81
Volume of Solids (cm^3):	710.77	1372.67	2083.45
Volume of Voids (cm^3):	0.00	257.68	257.68
Total Volume (cm^3):	710.77	1630.36	2341.13
Volumetric Fraction (%):	30.36	69.64	100.00
Residual Moisture Content (% vol):	0.00	0.00	0.00
Ksat (cm/sec):	NM	1.6E-02	1.1E-02

* = Porosity and moisture content of coarse fraction assumed to be zero.
** = Volume adjusted, if applicable. See notes on Moisture Retention Data pages.
NM = Not measured

Laboratory analysis by: K. Wright
Data entered by: C. Sessa
Checked by: J. Hines

Particle Size Analysis

Summary of Particle Size Characteristics

Sample Number	d_{10} (mm)	d_{50} (mm)	d_{60} (mm)	C_u	C_c	Method	ASTM Classification	USDA Classification
600-SVE-1 (60-65')	0.0013	0.045	0.11	85	0.40	WS/H	Sandy lean clay s(CL)	Loam † (Est)
600-SVE-1 (95-100')	0.12	9.8	15	125	4.1	WS/H	Poorly-graded gravel with silt and sand (GP-GM)s	Sandy Loam †

d_{50} = Median particle diameter

Est = Reported values for d_{10}, C_u, C_c, and soil classification are estimates, since extrapolation was required to obtain the d_{10} diameter

$$C_u = \frac{d_{60}}{d_{10}}$$

$$C_c = \frac{(d_{30})^2}{(d_{10})(d_{60})}$$

DS = Dry sieve

H = Hydrometer

WS = Wet sieve

† Greater than 10% of sample is coarse material

Percent Gravel, Sand, Silt and Clay*

Sample Number	% Gravel (>4.75mm)	% Sand (<4.75mm, >0.075mm)	% Silt (<0.075mm, >0.002mm)	% Clay (<0.002mm)
600-SVE-1 (60-65')	8.0	35.3	41.7	15.0
600-SVE-1 (95-100')	63.3	27.9	6.1	2.8

*USCS classification does not classify clay fraction based on particle size. USDA definition of clay (<0.002mm) used in this table.

Particle Size Analysis
Wet Sieve Data (#10 Split)

Job Name: NASA
Job Number: LB11.0218.00
Sample Number: 600-SVE-1 (60-65')
PO Number: ECO 0000001
Date Received: 10/24/2011
Test Date: 13-Dec-11

Initial Dry Weight of Sample (g): 495.34
Weight Passing #10 (g): 432.76
Weight Retained #10 (g): 62.58
Weight of Hydrometer Sample (g): 48.62
Calculated Weight of Sieve Sample (g): 55.65

Shape: Angular
Hardness: Soft

Test Fraction	Sieve Number	Diameter (mm)	Wt. Retained	Cum Wt. Retained	Wt. Passing	% Passing
+10						
	3"	75	0.00	0.00	495.34	100.00
	2"	50	0.00	0.00	495.34	100.00
	1.5"	38.1	0.00	0.00	495.34	100.00
	1"	25	0.00	0.00	495.34	100.00
	3/4"	19.0	0.00	0.00	495.34	100.00
	3/8"	9.5	21.81	21.81	473.53	95.60
	4	4.75	18.03	39.84	455.50	91.96
	10	2.00	22.74	62.58	432.76	87.37
-10			(Based on calculated sieve wt.)			
	20	0.85	2.38	9.41	46.24	83.09
	40	0.425	3.68	13.09	42.56	76.48
	60	0.250	3.74	16.83	38.82	69.76
	140	0.106	5.38	22.21	33.44	60.09
	200	0.075	1.92	24.13	31.52	56.64
	dry pan		0.45	24.58	31.07	
	wet pan			31.07	0.00	

d_{10} (mm): 0.0013
d_{16} (mm): 0.0022
d_{30} (mm): 0.0076
d_{50} (mm): 0.045
d_{60} (mm): 0.11
d_{84} (mm): 1.0

Median Particle Diameter --d_{50} (mm): 0.045
Uniformity Coefficient, Cu --$[d_{60}/d_{10}]$ (mm): 85
Coefficient of Curvature, Cc --$[(d_{30})^2/(d_{10}*d_{60})]$ (mm): 0.40
Mean Particle Diameter --$[(d_{16}+d_{50}+d_{84})/3]$ (mm): 0.35

Note: Reported values for d_{10}, C_u, C_c, and soil classification are estimates, since extrapolation was required to obtain the d_{10} diameter

Classification of fines: CL

ASTM Soil Classification: Sandy lean clay s(CL)
USDA Soil Classification: Loam †

† Greater than 10% of sample is coarse material

Laboratory analysis by: K. Wright
Data entered by: J. Hines
Checked by: C. Sessa

Daniel B. Stephens & Associates, Inc.

Particle Size Analysis
Hydrometer Data

Job Name: NASA
Job Number: LB11.0218.00
Sample Number: 600-SVE-1 (60-65')
PO Number: ECO 0000001
Date Received: 10/24/2011

Test Date: 8-Dec-11
Start Time: 9:00

Type of Water Used: DISTILLED
Reaction with H_2O_2*:* NA
Dispersant:* $(NaPO_3)_6$
Measured particle density: 2.73

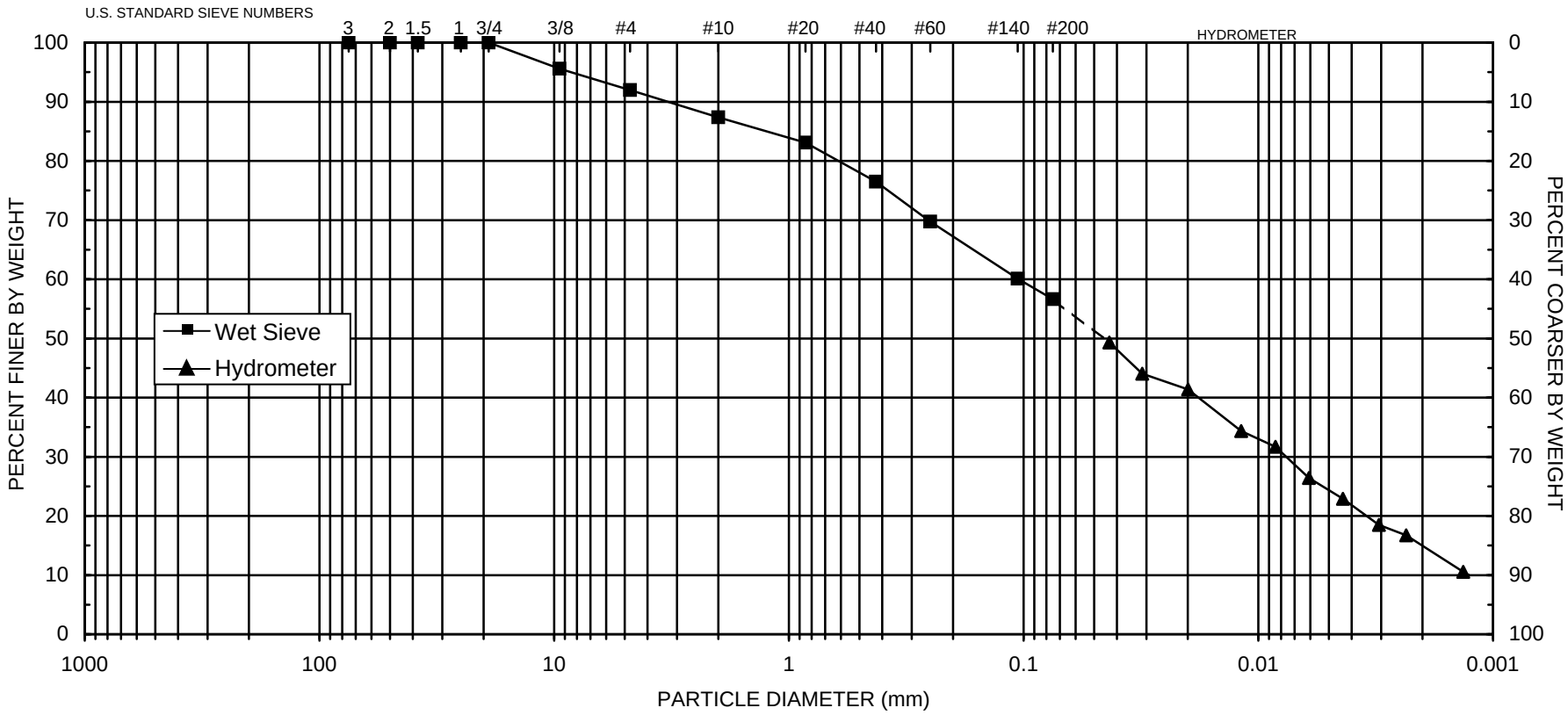
Initial Wt. (g)*:* 48.62
Total Sample Wt. (g)*:* 495.34
Wt. Passing #10 (g): 432.76

Date	Time (min)	Temp (°C)	R (g/L)	R_L (g/L)	R_{corr} (g/L)	L (cm)	D (mm)	P (%)	% Finer
8-Dec-11	1	20.1	35.0	7.0	28.0	10.6	0.04318	56.4	49.3
	2	20.1	32.0	7.0	25.0	11.1	0.03123	50.4	44.0
	5	20.2	30.5	7.0	23.5	11.3	0.01995	47.4	41.4
	15	20.3	26.5	7.0	19.5	12.0	0.01183	39.3	34.3
	30	20.3	25.0	7.0	18.0	12.2	0.00845	36.3	31.7
	60	20.4	22.0	7.0	15.0	12.7	0.00609	30.2	26.4
	120	20.5	20.0	7.0	13.0	13.0	0.00436	26.2	22.9
	250	20.8	17.0	6.5	10.5	13.5	0.00306	21.2	18.5
	426	21.5	15.5	6.0	9.5	13.8	0.00235	19.1	16.7
9-Dec-11	1380	20.5	13.0	7.0	6.0	14.2	0.00134	12.1	10.6

Comments:

* Dispersion device: mechanically operated stirring device

Laboratory analysis by: K. Wright
Data entered by: J. Hines
Checked by: C. Sessa



UNIFIED	COBBLES	GRAVEL		SAND			SILT OR CLAY			
		Coarse	Fine	Coarse	Medium	Fine				
USDA	COBBLES	GRAVEL		SAND				SILT		CLAY
				Very coarse	Coarse	Medium	Fine	Very fine		

d_{10} = **0.0013**	d_{30} = **0.0076**	d_{50} = **0.045**	d_{60} = **0.11**	C_u = **85**	C_c = **0.40**

SAMPLE NUMBER	DATE RECEIVED	ASTM CLASSIFICATION	USDA CLASSIFICATION
600-SVE-1 (60-65')	**10/24/2011**	**Sandy lean clay s(CL)**	**Loam** †

† Greater than 10% of sample is coarse material

Note: Reported values for d_{10}, C_u, C_c, and ASTM classification are estimates, since extrapolation was required to obtain the d_{10} diameter

Daniel B. Stephens & Associates, Inc.

Particle Size Analysis
Wet Sieve Data (#10 Split)

Job Name: NASA
Job Number: LB11.0218.00
Sample Number: 600-SVE-1 (95-100')
PO Number: ECO 0000001
Date Received: 10/24/2011

Test Date: 13-Dec-11

Initial Dry Weight of Sample (g): 5679.83
Weight Passing #10 (g): 1495.28
Weight Retained #10 (g): 4184.55
Weight of Hydrometer Sample (g): 73.27
Calculated Weight of Sieve Sample (g): 278.32

Shape: Angular
Hardness: Soft

Test Fraction	Sieve Number	Diameter (mm)	Wt. Retained	Cum Wt. Retained	Wt. Passing	% Passing
+10						
	3"	75	573.01	573.01	5106.82	89.91
	2"	50	449.46	1022.47	4657.36	82.00
	1.5"	38.1	94.64	1117.11	4562.72	80.33
	1"	25	415.49	1532.60	4147.23	73.02
	3/4"	19.0	411.85	1944.45	3735.38	65.77
	3/8"	9.5	940.85	2885.30	2794.53	49.20
	4	4.75	711.46	3596.76	2083.07	36.67
	10	2.00	587.79	4184.55	1495.28	26.33
-10			(Based on calculated sieve wt.)			
	20	0.85	16.82	221.87	56.45	20.28
	40	0.425	13.66	235.53	42.79	15.37
	60	0.250	7.73	243.26	35.06	12.60
	140	0.106	8.33	251.59	26.73	9.60
	200	0.075	2.20	253.79	24.53	8.81
	dry pan		0.30	254.09	24.23	
	wet pan			24.23	0.00	

d_{10} (mm): 0.12
d_{16} (mm): 0.46
d_{30} (mm): 2.7
d_{50} (mm): 9.8
d_{60} (mm): 15
d_{84} (mm): 55

Median Particle Diameter --d_{50} (mm): 9.8
Uniformity Coefficient, Cu --$[d_{60}/d_{10}]$ (mm): 125
Coefficient of Curvature, Cc --$[(d_{30})^2/(d_{10}*d_{60})]$ (mm): 4.1
Mean Particle Diameter --$[(d_{16}+d_{50}+d_{84})/3]$ (mm): 22

Classification of fines: ML

ASTM Soil Classification: Poorly-graded gravel with silt and sand (GP-GM)s
USDA Soil Classification: Sandy Loam †

† Greater than 10% of sample is coarse material

Laboratory analysis by: K. Wright
Data entered by: J. Hines
Checked by: C. Sessa

Particle Size Analysis
Hydrometer Data

Job Name: NASA
Job Number: LB11.0218.00
Sample Number: 600-SVE-1 (95-100')
PO Number: ECO 0000001
Date Received: 10/24/2011

Test Date: 8-Dec-11
Start Time: 9:06

Type of Water Used: DISTILLED
Reaction with H_2O_2*:* NA
Dispersant:* $(NaPO_3)_6$
Measured particle density: 2.72

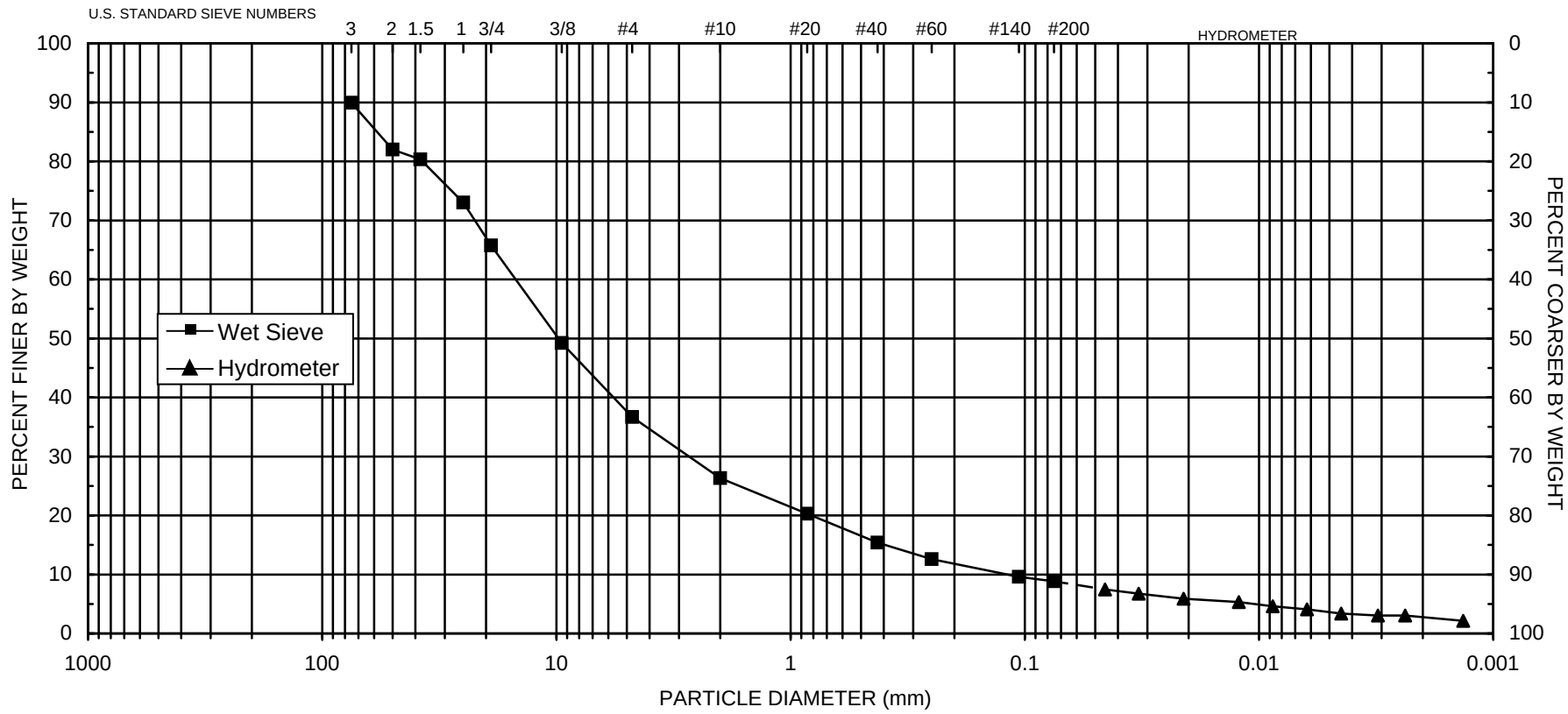
Initial Wt. (g)*:* 73.27
Total Sample Wt. (g)*:* 5679.83
Wt. Passing #10 (g): 1495.28

Date	Time (min)	Temp (°C)	R (g/L)	R_L (g/L)	R_{corr} (g/L)	L (cm)	D (mm)	P (%)	% Finer
8-Dec-11	1	20.2	28.0	7.0	21.0	11.7	0.04548	28.4	7.5
	2	20.2	26.0	7.0	19.0	12.0	0.03261	25.7	6.8
	5	20.2	23.5	7.0	16.5	12.4	0.02097	22.3	5.9
	15	20.3	22.0	7.0	15.0	12.7	0.01221	20.3	5.3
	30	20.3	20.0	7.0	13.0	13.0	0.00875	17.6	4.6
	60	20.4	18.5	7.0	11.5	13.3	0.00624	15.5	4.1
	120	20.5	16.5	7.0	9.5	13.6	0.00446	12.8	3.4
	250	20.8	15.0	6.5	8.5	13.8	0.00310	11.5	3.0
	421	21.5	14.5	6.0	8.5	13.9	0.00238	11.5	3.0
9-Dec-11	1375	20.5	13.0	7.0	6.0	14.2	0.00134	8.1	2.1

Comments:

* Dispersion device: mechanically operated stirring device

Laboratory analysis by: K. Wright
Data entered by: J. Hines
Checked by: C. Sessa



UNIFIED	COBBLES	GRAVEL		SAND			SILT OR CLAY				
		Coarse	Fine	Coarse	Medium	Fine					
USDA	COBBLES	GRAVEL		SAND					SILT	CLAY	
				Very coarse	Coarse	Medium	Fine	Very fine			

d_{10} = **0.12**	d_{30} = **2.7**	d_{50} = **9.8**	d_{60} = **15**	C_u = **125**	C_c = **4.1**

SAMPLE NUMBER	DATE RECEIVED	ASTM CLASSIFICATION	USDA CLASSIFICATION
600-SVE-1 (95-100')	**10/24/2011**	**Poorly-graded gravel with silt and sand (GP-GM)s**	**Sandy Loam** †

† Greater than 10% of sample is coarse material

Daniel B. Stephens & Associates, Inc.

Atterberg Limits/
Identification of Fines

Summary of Atterberg Tests

Sample Number	Liquid Limit	Plastic Limit	Plasticity Index	Classification
600-SVE-1 (60-65')	35	22	13	CL
600-SVE-1 (95-100')	20	17	3	ML

--- = Soil requires visual-manual classification due to non-plasticity

Atterberg Limits

Job Name: NASA
Job Number: LB11.0218.00
Sample Number: 600-SVE-1 (60-65')
PO Number: ECO 0000001
Date Received: 10/24/2011

Test Date: 8-Dec-11

Liquid Limit

	Trial 1	Trial 2	Trial 3
Number of drops:	35	25	19
Pan number:	LL1	LL2	LL3
Weight of pan plus moist soil (g):	123.30	127.14	128.07
Weight of pan plus dry soil (g)	120.82	124.52	125.37
Weight of pan (g):	113.31	116.95	117.85
Gravimetric moisture content (% g/g):	33.02	34.61	35.90

Liquid Limit: 35

Plastic Limit

	Trial 1	Trial 2
Pan number:	PL1	PL2
Weight of pan plus moist soil (g):	120.41	122.59
Weight of pan plus dry soil (g)	119.57	121.72
Weight of pan (g):	115.72	117.70
Gravimetric moisture content (% g/g):	21.82	21.64

Plastic Limit: 22

Results

Percent of Sample Retained on #40 Sieve: See Sieve

Liquid Limit: 35
Plastic Limit: 22
Plasticity Index: 13

Classification: CL

Comments:

--- = Soil requires visual-manual classification due to non-plasticity
* = 1-point method requested by client

Laboratory analysis by: D. O'Dowd
Data entered by: D. O'Dowd
Checked by: J. Hines

Atterberg Limits

Job Name: NASA
Job Number: LB11.0218.00
Sample Number: 600-SVE-1 (95-100')
PO Number: ECO 0000001
Date Received: 10/24/2011

Test Date: 8-Dec-11

Liquid Limit

	Trial 1	Trial 2	Trial 3
Number of drops:	33	25	17
Pan number:	LL1	LL2	LL3
Weight of pan plus moist soil (g):	124.62	131.28	128.15
Weight of pan plus dry soil (g)	122.65	128.60	126.32
Weight of pan (g):	112.65	115.31	117.83
Gravimetric moisture content (% g/g):	19.70	20.17	21.55
Liquid Limit:	20		

Plastic Limit

	Trial 1	Trial 2
Pan number:	PL1	PL2
Weight of pan plus moist soil (g):	124.99	124.30
Weight of pan plus dry soil (g)	123.60	122.62
Weight of pan (g):	115.31	112.59
Gravimetric moisture content (% g/g):	16.77	16.75
Plastic Limit:	17	

Results

Percent of Sample Retained on #40 Sieve: See Sieve

Liquid Limit: 20
Plastic Limit: 17
Plasticity Index: 3

Classification: ML

Comments:

--- = Soil requires visual-manual classification due to non-plasticity
* = 1-point method requested by client

Laboratory analysis by: D. O'Dowd
Data entered by: D. O'Dowd
Checked by: J. Hines

Specific Gravity

Summary of Specific Gravity Tests

	Test Sample			Oversize Material			Bulk Sample
Sample Number	Specific Gravity	Particle Size	% of Bulk Sample	Specific Gravity	Particle Size	% of Bulk Sample	Specific Gravity**
600-SVE-1 (60-65')	2.73	<4.75mm	92.0%	---	>4.75mm	8.0%	2.73
600-SVE-1 (95-100')	2.73	<3/4"	65.8%	2.74	>3/4"	34.2%	2.73

--- = Unnecessary since specified fraction <5% of composite mass

* = Based on specific gravity of material <4.75mm

** = Weighted average

NA = Not analyzed

Data for Specific Gravity of Test Sample: 600-SVE-1 (60-65')

Job Name: NASA
Job Number: LB11.0218.00
Sample Number: 600-SVE-1 (60-65')
PO Number: ECO 0000001
Date Received: 10/24/2011

ASTM D854 (<4.75mm Fraction)

Test Date:	8-Dec-11	
Percent of Test Sample (% g/g):	91.96	
Percent of Bulk Sample (% g/g):	91.96	
	Trial 1	*Trial 2*
Weight of pycnometer filled w/air (g):	102.79	94.23
Weight of pycnometer filled w/soil (g):	153.41	144.49
Weight of pycnometer filled w/soil & water (g):	384.31	375.37
Weight of pycnometer filled w/water (g):	352.16	343.52
Specific Gravity (g/g):	2.74	2.73
Observed temperature (°C):	20.40	20.40
Density of water at observed temperature (g/cm^3):	0.9981	0.9981
Correction factor, K:	0.9999	0.9999
Specific Gravity at 20°C (g/g):	2.74	2.73
Average Specific Gravity (g/g):	2.74	
Average Particle Density (g/cm^3):	2.73	

ASTM C127 (>4.75mm) Fraction

Test Date:	7-Dec-11
Percent of Test Sample (% g/g):	8.04
Percent of Bulk Sample (% g/g):	8.04
Tare Weight (g):	0.0
Saturated Surface Dry (SSD) mass in Air & Tare (g):	32.6
Saturated Apparent mass in Water & Tare (g):	20.0
Oven Dry (OD) mass in Air & Tare (g):	31.9
SSD Specific Gravity (g/g):	2.59
Apparent Specific Gravity (g/g):	2.68
OD Specific Gravity (g/g):	2.53
Percent Absorption (%):	2.1
Observed Temperature (°C):	20.0
Density of water at observed temperature (g/m^3):	0.9982
Correction Factor, K:	1.0000
Specific Gravity (Apparent), Corrected to 20° C:	2.68
Particle Density (Apparent), Corrected to 20° C (g/cm^3):	2.68

Specific Gravity (Apparent) of Test Sample*:	**2.73**	** Weighted Average*
Particle Density (Apparent) of Test Sample (g/cm^3)*:	2.73	

Laboratory analysis by: K. Wright
Data entered by: J. Hines
Checked by: J. Hines

Data for Specific Gravity of Test Sample: 600-SVE-1 (95-100')

Job Name: NASA
Job Number: LB11.0218.00
Sample Number: 600-SVE-1 (95-100')
PO Number: ECO 0000001
Date Received: 10/24/2011

ASTM D854 (<4.75mm Fraction)

Test Date:	7-Dec-11	
Percent of Test Sample (% g/g):	55.77	
Percent of Bulk Sample (% g/g):	36.67	
	Trial 1	*Trial 2*
Weight of pycnometer filled w/air (g):	95.11	107.67
Weight of pycnometer filled w/soil (g):	146.46	160.15
Weight of pycnometer filled w/soil & water (g):	376.85	390.18
Weight of pycnometer filled w/water (g):	344.36	356.88
Specific Gravity (g/g):	2.72	2.74
Observed temperature (°C):	20.40	20.40
Density of water at observed temperature (g/cm^3):	0.9981	0.9981
Correction factor, K:	0.9999	0.9999
Specific Gravity at 20°C (g/g):	2.72	2.74
Average Specific Gravity (g/g):	2.73	
Average Particle Density (g/cm^3):	2.72	

ASTM C127 (>4.75mm to <3/4") Fraction

Test Date:	13-Dec-11
Percent of Test Sample (% g/g):	44.23
Percent of Bulk Sample (% g/g):	29.09
Tare Weight (g):	0.0
Saturated Surface Dry (SSD) mass in Air & Tare (g):	168.64
Saturated Apparent mass in Water & Tare (g):	105.16
Oven Dry (OD) mass in Air & Tare (g):	166.23
SSD Specific Gravity (g/g):	2.66
Apparent Specific Gravity (g/g):	2.72
OD Specific Gravity (g/g):	2.62
Percent Absorption (%):	1.4
Observed Temperature (°C):	20.0
Density of water at observed temperature (g/m^3):	0.9982
Correction Factor, K:	1.0000
Specific Gravity (Apparent), Corrected to 20° C:	2.72
Particle Density (Apparent), Corrected to 20° C (g/cm^3):	2.72

***Specific Gravity (Apparent) of Test Sample* (<3/4" fraction)*:** **2.73** ** Weighted Average*

Particle Density (Apparent) of Test Sample (g/cm^3)* (<3/4" fraction): 2.72

Laboratory analysis by: K. Wright
Data entered by: C. Sessa
Checked by: J. Hines

Data for Specific Gravity of Oversized Material for Sample: 600-SVE-1 (95-100')

Job Name: NASA
Job Number: LB11.0218.00
Sample Number: 600-SVE-1 (95-100')
PO Number: ECO 0000001
Date Received: 10/24/2011

Test Date: 13-Dec-11

ASTM C127	**Fraction >3/4"**
Percent of Oversized Sample (% g/g):	100.00
Percent of Bulk Sample (% g/g):	34.23
Tare Weight (g):	0.0
Saturated Surface Dry (SSD) mass in Air & Tare (g):	159.24
Saturated Apparent mass in Water & Tare (g):	100.45
Oven Dry (OD) mass in Air & Tare (g):	158.16
SSD Specific Gravity (g/g):	2.71
Apparent Specific Gravity (g/g):	2.74
OD Specific Gravity (g/g):	2.69
Percent Absorption (%):	0.7
Observed Temperature (°C):	20.0
Density of water at observed temperature (g/m^3):	0.9982
Correction Factor, K:	1.0000
Specific Gravity (Apparent), Corrected to 20° C:	2.74
Particle Density (Apparent), Corrected to 20° C (g/cm^3)*:*	2.74

***Specific Gravity (Apparent) of Oversized Material* (>3/4" fraction):** **2.74** ** Weighted Average*

Particle Density (Apparent) of Oversized Material (g/cm^3)* (>3/4" fraction): 2.74

Laboratory analysis by: D. O'Dowd
Data entered by: C. Sessa
Checked by: J. Hines

Laboratory Tests and Methods

Tests and Methods

Dry Bulk Density:	ASTM D7263
Moisture Content:	ASTM D7263
Calculated Porosity:	ASTM D7263
Saturated Hydraulic Conductivity:	
Constant Head: (Rigid Wall)	ASTM D 2434 (modified apparatus)
Hanging Column Method:	ASTM D6836 (modified apparatus)
Pressure Plate Method:	ASTM D6836 (modified apparatus)
Water Potential (Dewpoint Potentiometer) Method:	ASTM D6836
Relative Humidity (Box) Method:	Campbell, G. and G. Gee. 1986. Water Potential: Miscellaneous Methods. Chp. 25, pp. 631-632, in A. Klute (ed.), Methods of Soil Analysis. Part 1. American Society of Agronomy, Madison, WI; Karathanasis & Hajek. 1982. Quantitative Evaluation of Water Adsorption on Soil Clays. SSA Journal 46:1321-1325
Moisture Retention Characteristics & Calculated Unsaturated Hydraulic Conductivity:	ASTM D6836; van Genuchten, M.T. 1980. A closed-form equation for predicting the hydraulic conductivity of unsaturated soils. SSSAJ 44:892-898; van Genuchten, M.T., F.J. Leij, and S.R. Yates. 1991. The RETC code for quantifying the hydraulic functions of unsaturated soils. Robert S. Kerr Environmental Research Laboratory, Office of Research and Development, U.S. Environmental Protection Agency, Ada, Oklahoma. EPA/600/2091/065. December 1991
Specific Gravity Fine	ASTM D854
Specific Gravity Coarse	ASTM C127
Particle Size Analysis:	ASTM D422
USCS (ASTM) Classification:	ASTM D422, ASTM D2487
USDA Classification:	ASTM D422, USDA Soil Textural Triangle
Atterberg Limits:	ASTM D4318
Coarse Fraction (Gravel) Correction (calc):	ASTM D4718; Bouwer, H. and Rice, R.C. 1984. Hydraulic Properties of Stony Vadose Zones. Groundwater Vol. 22, No. 6

WSTF CHAIN OF CUSTODY RECORD

Date 10-21-11

Page 1 of 1

Laboratory / PO # ECO 0000001

Return Address for Analytical Reports:

NASA / WSTF
P.O. Box 20
Las Cruces, NM 88004
Attn: ☐ Lori Minnick ☒ Other J. ROLAND
(575) 524-5119 (575) 524-_____

Special Instructions

Please return coolers and contents of coolers as soon as possible.

Return Address:

NASA / WSTF
Building 120 / Route 70
Las Cruces, NM 88012
Attn: Lori Minnick

Sample No.	Well ID.	# of Containers	Sample Type (Aqueous)	Halogenated Volatile Organics Ice/No Headspace (40 ml Vial) ( )	Volatile Organics Ice/No Headspace (40 ml Vial) ( )	Nitrosamines Ice (1 L Glass Bottle) ( )	RCRA Metals (As, Ba, Cd, Cr, Pb, Hg, Se and Ag) Ice/HNO_3 (500 ml Poly)	PARTICLE SIZE	SPECIFIC GRAVITY	UNSATURATED HYDRAULIC COND.	ATTERBERG LIMITS	Comments
	600-SVE-1							X	X	X	X	60-65'
	"							X	X	X	X	95-100'
	"							X	X	X	X	95-100'
	"							X	X	X	X	TUBE

Relinquished By:	Date/Time:	Accepted By:	Date/Time:
Lori Minnick	10-21-11 / 0900 HRS.	Crystal Kraus	10/24/11 1000

WSTF – 381B (02/00)

Appendix C
Groundwater Analytical Data from 600-G

Analytical Results for Sampling Events at 600-G-138

Event Date	Analysis Method	Sample	Constituent	Result	Units	Quant Limit	Det Limit	Extract Efficiency	QA Flag
1/11/2012	PARAMS	1201111300B	Temperature	20.4	ºC	NA	NA		
1/11/2012	PARAMS	1201111300B	Conductivity	2380	µS/cm	NA	NA		
1/11/2012	PARAMS	1201111300B	Turbidity	9.17	NTU	NA	NA		
1/11/2012	PARAMS	1201111300B	DTW	145.36	ft	NA	NA		
1/11/2012	PARAMS	1201111300B	pH	8.46	NA	NA	NA		
1/11/2012	8260C	1201111310B	Dichlorodifluoromethane (CFC 12)	ND	ug/L	1.0	0.56		
1/11/2012	8260C	1201111310B	Propionitrile	ND	ug/L	5.0	1.3		
1/11/2012	8260C	1201111310B	Methylcyclohexane	ND	ug/L	10	0.25		
1/11/2012	8260C	1201111310B	Methyl tert-Butyl Ether	ND	ug/L	10	0.20		
1/11/2012	8260C	1201111310B	Methyl Methacrylate	ND	ug/L	2.0	0.36		
1/11/2012	8260C	1201111310B	Methacrylonitrile	ND	ug/L	5.0	0.38		
1/11/2012	8260C	1201111310B	Iodomethane	ND	ug/L	5.0	0.39		
1/11/2012	8260C	1201111310B	Ethylbenzene	ND	ug/L	1.0	0.20		
1/11/2012	8260C	1201111310B	Ethyl Methacrylate	ND	ug/L	2.0	0.26		
1/11/2012	8260C	1201111310B	Styrene	ND	ug/L	1.0	0.20		
1/11/2012	8260C	1201111310B	Dichlorofluoromethane (CFC 21)	ND	ug/L	1.0	0.24		
1/11/2012	8260C	1201111310B	Trichloroethene (TCE)	110	ug/L	1.0	0.23		
1/11/2012	8260C	1201111310B	Dibromomethane	ND	ug/L	1.0	0.25		
1/11/2012	8260C	1201111310B	Dibromochloromethane	ND	ug/L	1.0	0.20		
1/11/2012	8260C	1201111310B	Cyclohexane	ND	ug/L	10	0.24		
1/11/2012	8260C	1201111310B	Dichloromethane	ND	ug/L	1.0	0.22		
1/11/2012	8260C	1201111310B	m,p-Xylenes	ND	ug/L	2.0	0.20		
1/11/2012	8260C	1201111310B	Toluene-d8	105	%	NA	NA		
1/11/2012	8260C	1201111310B	Dibromofluoromethane	106	%	NA	NA		
1/11/2012	8260C	1201111310B	4-Bromofluorobenzene	107	%	NA	NA		
1/11/2012	8260C	1201111310B	1,2-Dichloro-1,1,2-trifluoroethane (CFC 123a)	1	ug/L	1.0	0.35		
1/11/2012	8260C	1201111310B	trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	0.54		
1/11/2012	8260C	1201111310B	trans-1,3-Dichloropropene	ND	ug/L	1.0	0.20		
1/11/2012	8260C	1201111310B	Tetrahydrofuran (THF)	ND	ug/L	5.0	0.66		
1/11/2012	8260C	1201111310B	o-Xylene	ND	ug/L	1.0	0.20		
1/11/2012	8260C	1201111310B	Tetrachloroethene (PCE)	ND	ug/L	1.0	0.20		
1/11/2012	8260C	1201111310B	cis-1,3-Dichloropropene	ND	ug/L	1.0	0.20		
1/11/2012	8260C	1201111310B	cis-1,2-Dichloroethene	ND	ug/L	1.0	0.20		
1/11/2012	8260C	1201111310B	Vinyl Acetate	ND	ug/L	5.0	0.62		
1/11/2012	8260C	1201111310B	Trichlorofluoromethane (CFC 11)	0.59	ug/L	1.0	0.20		J

1/11/2012	8260C	1201111310B	Toluene	ND	ug/L	1.0	0.20		
1/11/2012	8260C	1201111310B	Chloromethane	ND	ug/L	2.0	0.24		
1/11/2012	8260C	1201111310B	trans-1,2-Dichloroethene	ND	ug/L	1.0	0.20		
1/11/2012	8260C	1201111310B	1,1-Dichloroethene	0.87	ug/L	1.0	0.29		J
1/11/2012	8260C	1201111310B	2,2-Dichloro-1,1,1-trifluoroethane (CFC 123)	ND	ug/L	1.0	0.27		
1/11/2012	8260C	1201111310B	Chloroform	0.62	ug/L	1.0	0.22		J
1/11/2012	8260C	1201111310B	1,4-Dioxane	ND	ug/L	100	13		
1/11/2012	8260C	1201111310B	1,2-Dichloropropane	ND	ug/L	1.0	0.28		
1/11/2012	8260C	1201111310B	1,2-Dichloroethane	ND	ug/L	1.0	0.20		
1/11/2012	8260C	1201111310B	1,2-Dibromoethane	ND	ug/L	1.0	0.20		
1/11/2012	8260C	1201111310B	2-Chloro-1,3-butadiene	ND	ug/L	1.0	0.20		
1/11/2012	8260C	1201111310B	1,2,3-Trichloropropane	ND	ug/L	1.0	0.46		
1/11/2012	8260C	1201111310B	2-Butanone (MEK)	ND	ug/L	5.0	0.51		
1/11/2012	8260C	1201111310B	1,1-Dichloroethane (1,1-DCA)	ND	ug/L	1.0	0.20		
1/11/2012	8260C	1201111310B	1,1,2-Trichloro-1,2,2-Trifluoroethane	51	ug/L	1.0	0.31		
1/11/2012	8260C	1201111310B	1,1,2-Trichloroethane	ND	ug/L	1.0	0.23		
1/11/2012	8260C	1201111310B	1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.20		
1/11/2012	8260C	1201111310B	1,1,1-Trichloroethane (TCA)	ND	ug/L	1.0	0.23		
1/11/2012	8260C	1201111310B	Vinyl Chloride	ND	ug/L	1.0	0.23		
1/11/2012	8260C	1201111310B	1,2-Dibromo-3-chloropropane (DBCP)	ND	ug/L	2.0	0.38		
1/11/2012	8260C	1201111310B	Benzene	ND	ug/L	1.0	0.21		
1/11/2012	8260C	1201111310B	Chloroethane	ND	ug/L	2.0	0.31		
1/11/2012	8260C	1201111310B	Chlorobenzene	ND	ug/L	1.0	0.20		
1/11/2012	8260C	1201111310B	Carbon Tetrachloride	ND	ug/L	1.0	0.27		
1/11/2012	8260C	1201111310B	Carbon Disulfide	ND	ug/L	1.0	0.20		
1/11/2012	8260C	1201111310B	Bromomethane	ND	ug/L	2.0	0.31		
1/11/2012	8260C	1201111310B	1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.20		
1/11/2012	8260C	1201111310B	Bromodichloromethane	ND	ug/L	1.0	0.20		
1/11/2012	8260C	1201111310B	2-Hexanone	ND	ug/L	5.0	0.35		
1/11/2012	8260C	1201111310B	Acrylonitrile	ND	ug/L	5.0	1.4		
1/11/2012	8260C	1201111310B	Acrolein	ND	ug/L	10	0.76		
1/11/2012	8260C	1201111310B	Acetonitrile	ND	ug/L	25	3.7		
1/11/2012	8260C	1201111310B	Acetone	ND	ug/L	10	0.98		
1/11/2012	8260C	1201111310B	4-Methyl-2-pentanone	ND	ug/L	5.0	0.27		
1/11/2012	8260C	1201111310B	3-Chloro-1-propene (Allyl Chloride)	ND	ug/L	2.0	0.29		
1/11/2012	8260C	1201111310B	2-Propanol	ND	ug/L	50	9.8		
1/11/2012	8260C	1201111310B	2-Methyl-1-propanol (Isobutyl Alcohol)	ND	ug/L	100	5.9		
1/11/2012	8260C	1201111310B	Bromoform	ND	ug/L	1.0	0.27		
1/11/2012	M-607	1201111311B	N-Nitroso-di-n-propylamine	82	%	NA	NA		
1/11/2012	TAP 01-040	1201111311B	N-Nitrosodimethylamine	ND	ug/L	0.0094	0.005	42	
1/11/2012	TAP 01-040	1201111311B	N-Nitrodimethylamine	ND	ug/L	0.0094	0.005	71	
1/11/2012	TAP 01-040	1201111311B	Bromacil	26.73	ug/L	0.0094	0.005	107	

1/11/2012	PARAMS	1201111320B	DTW	145.40	ft	NA	NA	
1/11/2012	PARAMS	1201111320B	Temperature	20.2	ºC	NA	NA	
1/11/2012	PARAMS	1201111320B	pH	8.57	NA	NA	NA	
1/11/2012	PARAMS	1201111320B	Turbidity	46.1	NTU	NA	NA	
1/11/2012	PARAMS	1201111320B	Conductivity	2460	µS/cm	NA	NA	
4/10/2012	PARAMS	1204100945	pH	8.78	NA	NA	NA	
4/10/2012	PARAMS	1204100945	Temperature	25.0	ºC	NA	NA	
4/10/2012	PARAMS	1204100945	Conductivity	2210	µS/cm	NA	NA	
4/10/2012	PARAMS	1204100945	Turbidity	44.6	NTU	NA	NA	
4/10/2012	8260C	1204101315	Ethyl Methacrylate	ND	ug/L	2.0	0.26	
4/10/2012	8260C	1204101315	Tetrachloroethene (PCE)	ND	ug/L	1.0	0.20	
4/10/2012	8260C	1204101315	Styrene	ND	ug/L	1.0	0.20	
4/10/2012	8260C	1204101315	Propionitrile	ND	ug/L	5.0	1.3	
4/10/2012	8260C	1204101315	Methylcyclohexane	ND	ug/L	10	0.25	
4/10/2012	8260C	1204101315	Methyl tert-Butyl Ether	ND	ug/L	10	0.20	
4/10/2012	8260C	1204101315	Methyl Methacrylate	ND	ug/L	2.0	0.36	
4/10/2012	8260C	1204101315	Methacrylonitrile	ND	ug/L	5.0	0.38	
4/10/2012	8260C	1204101315	Tetrahydrofuran (THF)	ND	ug/L	5.0	0.66	
4/10/2012	8260C	1204101315	Ethylbenzene	ND	ug/L	1.0	0.20	
4/10/2012	8260C	1204101315	Vinyl Chloride	ND	ug/L	1.0	0.23	
4/10/2012	8260C	1204101315	Dichloromethane	ND	ug/L	1.0	0.22	
4/10/2012	8260C	1204101315	Dichlorofluoromethane (CFC 21)	ND	ug/L	1.0	0.24	
4/10/2012	8260C	1204101315	Dichlorodifluoromethane (CFC 12)	ND	ug/L	1.0	0.56	
4/10/2012	8260C	1204101315	Dibromomethane	ND	ug/L	1.0	0.25	
4/10/2012	8260C	1204101315	Dibromochloromethane	ND	ug/L	1.0	0.20	
4/10/2012	8260C	1204101315	Iodomethane	ND	ug/L	5.0	0.39	
4/10/2012	8260C	1204101315	trans-1,2-Dichloroethene	ND	ug/L	1.0	0.20	
4/10/2012	8260C	1204101315	Cyclohexane	ND	ug/L	10	0.24	
4/10/2012	8260C	1204101315	Toluene-d8	103	%	NA	NA	
4/10/2012	8260C	1204101315	Dibromofluoromethane	95	%	NA	NA	
4/10/2012	8260C	1204101315	4-Bromofluorobenzene	95	%	NA	NA	
4/10/2012	8260C	1204101315	1,1,1-Trichloroethane (TCA)	ND	ug/L	1.0	0.23	
4/10/2012	8260C	1204101315	1,2-Dichloro-1,1,2-trifluoroethane (CFC 123a)	0.82	ug/L	1.0	0.35	J
4/10/2012	8260C	1204101315	Trichlorofluoromethane (CFC 11)	0.34	ug/L	1.0	0.20	J
4/10/2012	8260C	1204101315	trans-1,3-Dichloropropene	ND	ug/L	1.0	0.20	
4/10/2012	8260C	1204101315	Toluene	ND	ug/L	1.0	0.20	
4/10/2012	8260C	1204101315	o-Xylene	ND	ug/L	1.0	0.20	
4/10/2012	8260C	1204101315	m,p-Xylenes	ND	ug/L	2.0	0.20	
4/10/2012	8260C	1204101315	cis-1,3-Dichloropropene	ND	ug/L	1.0	0.20	
4/10/2012	8260C	1204101315	cis-1,2-Dichloroethene	ND	ug/L	1.0	0.20	
4/10/2012	8260C	1204101315	Vinyl Acetate	ND	ug/L	5.0	0.62	
4/10/2012	8260C	1204101315	Trichloroethene (TCE)	84	ug/L	1.0	0.23	

4/10/2012	8260C	1204101315	trans-1,4-Dichloro-2-butene	ND	ug/L	1.0	0.54		
4/10/2012	8260C	1204101315	1,2-Dibromo-3-chloropropane (DBCP)	ND	ug/L	2.0	0.38		
4/10/2012	8260C	1204101315	2-Hexanone	ND	ug/L	5.0	0.35		
4/10/2012	8260C	1204101315	2-Chloro-1,3-butadiene	ND	ug/L	1.0	0.20		
4/10/2012	8260C	1204101315	2-Butanone (MEK)	ND	ug/L	5.0	0.51		
4/10/2012	8260C	1204101315	2,2-Dichloro-1,1,1-trifluoroethane (CFC 123)	ND	ug/L	1.0	0.27		
4/10/2012	8260C	1204101315	1,4-Dioxane	ND	ug/L	100	13		
4/10/2012	8260C	1204101315	1,2-Dichloropropane	ND	ug/L	1.0	0.28		
4/10/2012	8260C	1204101315	2-Methyl-1-propanol (Isobutyl Alcohol)	ND	ug/L	100	5.9		
4/10/2012	8260C	1204101315	1,2-Dibromoethane	ND	ug/L	1.0	0.20		
4/10/2012	8260C	1204101315	1,2,3-Trichloropropane	ND	ug/L	1.0	0.46		
4/10/2012	8260C	1204101315	Chloromethane	ND	ug/L	2.0	0.24		
4/10/2012	8260C	1204101315	1,1-Dichloroethene	ND	ug/L	1.0	0.29		
4/10/2012	8260C	1204101315	1,1,2-Trichloroethane	ND	ug/L	1.0	0.23		
4/10/2012	8260C	1204101315	1,1,2-Trichloro-1,2,2-Trifluoroethane	27	ug/L	1.0	0.31		
4/10/2012	8260C	1204101315	1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.20		
4/10/2012	8260C	1204101315	1,1,1,2-Tetrachloroethane	ND	ug/L	1.0	0.20		
4/10/2012	8260C	1204101315	1,2-Dichloroethane	ND	ug/L	1.0	0.20		
4/10/2012	8260C	1204101315	Bromodichloromethane	ND	ug/L	1.0	0.20		
4/10/2012	8260C	1204101315	Chloroform	0.52	ug/L	1.0	0.22		J
4/10/2012	8260C	1204101315	1,1-Dichloroethane (1,1-DCA)	ND	ug/L	1.0	0.20		
4/10/2012	8260C	1204101315	Chloroethane	ND	ug/L	2.0	0.31		
4/10/2012	8260C	1204101315	Chlorobenzene	ND	ug/L	1.0	0.20		
4/10/2012	8260C	1204101315	Carbon Tetrachloride	ND	ug/L	1.0	0.27		
4/10/2012	8260C	1204101315	Carbon Disulfide	ND	ug/L	1.0	0.20		
4/10/2012	8260C	1204101315	2-Propanol	ND	ug/L	50	9.8		
4/10/2012	8260C	1204101315	Bromoform	ND	ug/L	1.0	0.27		
4/10/2012	8260C	1204101315	Benzene	ND	ug/L	1.0	0.21		
4/10/2012	8260C	1204101315	Acrylonitrile	ND	ug/L	5.0	1.4		
4/10/2012	8260C	1204101315	Acrolein	ND	ug/L	10	0.76		
4/10/2012	8260C	1204101315	Acetonitrile	ND	ug/L	25	3.7		
4/10/2012	8260C	1204101315	Acetone	ND	ug/L	10	0.98		
4/10/2012	8260C	1204101315	4-Methyl-2-pentanone	ND	ug/L	5.0	0.27		
4/10/2012	8260C	1204101315	3-Chloro-1-propene (Allyl Chloride)	ND	ug/L	2.0	0.29		
4/10/2012	8260C	1204101315	Bromomethane	ND	ug/L	2.0	0.31		
4/10/2012	TAP 01-040	1204101317	Bromacil	24	ug/L	0.038	0.019	100	D
4/10/2012	M-607	1204101317	N-Nitroso-di-n-propylamine	19	%	NA	NA		
4/10/2012	TAP 01-040	1204101317	N-Nitrosodimethylamine	ND	ug/L	0.038	0.019	75	
4/10/2012	TAP 01-040	1204101317	N-Nitrodimethylamine	ND	ug/L	0.038	0.019	112	
4/10/2012	8270D	1204101320	Dibenz(a,h)anthracene	ND	ug/L	0.045	0.045		
4/10/2012	8270D	1204101320	1,3,5-Trinitrobenzene	ND	ug/L	9.4	1.3		
4/10/2012	8270D	1204101320	1,2-Diphenylhydrazine	ND	ug/L	9.4	1.0		

4/10/2012	8270D	1204101320	1,2-Dichlorobenzene	ND	ug/L	9.4	1.5	
4/10/2012	8270D	1204101320	1,2,4-Trichlorobenzene	ND	ug/L	9.4	1.0	
4/10/2012	8270D	1204101320	1,2,4,5-Tetrachlorobenzene	ND	ug/L	9.4	1.1	
4/10/2012	8270D	1204101320	p-Terphenyl-d14	64	%	NA	NA	
4/10/2012	8270D	1204101320	Nitrobenzene-d5	66	%	NA	NA	
4/10/2012	8270D	1204101320	2-Fluorobiphenyl	63	%	NA	NA	
4/10/2012	8270D	1204101320	Acenaphthylene	ND	ug/L	0.076	0.076	
4/10/2012	8270D	1204101320	Hexachlorobenzene	ND	ug/L	0.035	0.035	
4/10/2012	8270D	1204101320	Chrysene	ND	ug/L	0.029	0.029	
4/10/2012	8270D	1204101320	Bis(2-ethylhexyl) Phthalate	ND	ug/L	0.50	0.23	
4/10/2012	8270D	1204101320	Benzo(k)fluoranthene	ND	ug/L	0.029	0.029	
4/10/2012	8270D	1204101320	Benzo(b)fluoranthene	ND	ug/L	0.026	0.026	A
4/10/2012	8270D	1204101320	Benzo(a)pyrene	ND	ug/L	0.042	0.042	
4/10/2012	8270D	1204101320	Benz(a)anthracene	ND	ug/L	0.041	0.041	
4/10/2012	8270D	1204101320	1,4-Dichlorobenzene	ND	ug/L	9.4	1.3	
4/10/2012	8270D	1204101320	Indeno(1,2,3-cd)pyrene	ND	ug/L	0.049	0.049	
4/10/2012	8270D	1204101320	Hexachloropropene	ND	ug/L	9.4	1.5	
4/10/2012	8270D	1204101320	Dibenzofuran	ND	ug/L	9.4	1.0	
4/10/2012	8270D	1204101320	N-Nitrosomorpholine	ND	ug/L	9.4	1.4	
4/10/2012	8270D	1204101320	N-Nitrosomethylethylamine	ND	ug/L	9.4	1.2	
4/10/2012	8270D	1204101320	N-Nitrosodiphenylamine	ND	ug/L	9.4	1.2	
4/10/2012	8270D	1204101320	N-Nitrosodimethylamine	ND	ug/L	9.4	1.0	
4/10/2012	8270D	1204101320	N-Nitrosodiethylamine	ND	ug/L	9.4	1.1	
4/10/2012	8270D	1204101320	N-Nitroso-N-Dipropylamine	ND	ug/L	9.4	1.6	
4/10/2012	8270D	1204101320	Methyl Parathion	ND	ug/L	9.4	1.1	
4/10/2012	8270D	1204101320	Methyl Methanesulfonate	ND	ug/L	9.4	1.0	
4/10/2012	8270D	1204101320	Methapyrilene	ND	ug/L	47	36	
4/10/2012	8270D	1204101320	Isosafrole	ND	ug/L	9.4	1.1	
4/10/2012	8270D	1204101320	N-Nitrosopyrrolidine	ND	ug/L	9.4	1.6	
4/10/2012	8270D	1204101320	Isodrin	ND	ug/L	9.4	1.0	
4/10/2012	8270D	1204101320	Naphthalene	ND	ug/L	9.4	1.1	
4/10/2012	8270D	1204101320	Hexachlorophene	ND	ug/L	470	370	
4/10/2012	8270D	1204101320	Hexachloroethane	ND	ug/L	9.4	1.3	
4/10/2012	8270D	1204101320	Hexachlorocyclopentadiene	ND	ug/L	9.4	2.0	
4/10/2012	8270D	1204101320	Hexachlorobutadiene	ND	ug/L	9.4	1.3	
4/10/2012	8270D	1204101320	Fluorene	ND	ug/L	9.4	1.1	
4/10/2012	8270D	1204101320	Fluoranthene	ND	ug/L	9.4	1.0	
4/10/2012	8270D	1204101320	Ethyl Methanesulfonate	ND	ug/L	9.4	1.3	
4/10/2012	8270D	1204101320	Disulfoton	ND	ug/L	9.4	1.5	
4/10/2012	8270D	1204101320	Diphenylamine	ND	ug/L	9.4	NA	*
4/10/2012	8270D	1204101320	Dimethyl Phthalate	ND	ug/L	9.4	0.65	
4/10/2012	8270D	1204101320	Dimethoate	ND	ug/L	47	12	
4/10/2012	8270D	1204101320	Diethyl Phthalate	ND	ug/L	9.4	1.0	

4/10/2012	8270D	1204101320	Isophorone	ND	ug/L	9.4	1.4		
4/10/2012	8270D	1204101320	Pyridine	ND	ug/L	47	19		
4/10/2012	8270D	1204101320	Bromacil	8	ug/L	NA	NA		TIC
4/10/2012	8270D	1204101320	p-Terphenyl-d14	87	%	NA	NA		
4/10/2012	8270D	1204101320	Phenol-d6	27	%	NA	NA		
4/10/2012	8270D	1204101320	Nitrobenzene-d5	80	%	NA	NA		
4/10/2012	8270D	1204101320	2-Fluorophenol	42	%	NA	NA		
4/10/2012	8270D	1204101320	2-Fluorobiphenyl	77	%	NA	NA		
4/10/2012	8270D	1204101320	2,4,6-Tribromophenol	82	%	NA	NA		
4/10/2012	8270D	1204101320	p-Dimethylaminoazobenzene	ND	ug/L	9.4	1.0		
4/10/2012	8270D	1204101320	o-Toluidine	ND	ug/L	9.4	1.2		
4/10/2012	8270D	1204101320	a,a-Dimethylphenethylamine	ND	ug/L	47	NA		*
4/10/2012	8270D	1204101320	Thionazin	ND	ug/L	9.4	1.8		
4/10/2012	8270D	1204101320	N-Nitrosopiperidine	ND	ug/L	9.4	1.6		
4/10/2012	8270D	1204101320	Safrole	ND	ug/L	9.4	1.3		
4/10/2012	8270D	1204101320	Parathion	ND	ug/L	9.4	1.0		
4/10/2012	8270D	1204101320	Pyrene	ND	ug/L	9.4	1.0		
4/10/2012	8270D	1204101320	Pronamide	ND	ug/L	9.4	1.1		
4/10/2012	8270D	1204101320	Phorate	ND	ug/L	9.4	1.4		
4/10/2012	8270D	1204101320	Phenol	ND	ug/L	9.4	1.0		
4/10/2012	8270D	1204101320	Phenanthrene	ND	ug/L	9.4	1.0		
4/10/2012	8270D	1204101320	Phenacetin	ND	ug/L	9.4	1.3		
4/10/2012	8270D	1204101320	Pentachloronitrobenzene (PCNB)	ND	ug/L	9.4	1.0		
4/10/2012	8270D	1204101320	1,3-Dichlorobenzene	ND	ug/L	9.4	1.3		
4/10/2012	8270D	1204101320	Pentachlorobenzene	ND	ug/L	9.4	1.2		
4/10/2012	8270D	1204101320	1,3-Dinitrobenzene	ND	ug/L	9.4	1.1		
4/10/2012	8270D	1204101320	O,O,O-Triethyl Phosphorothioate	ND	ug/L	9.4	1.5		
4/10/2012	8270D	1204101320	Nitrobenzene	ND	ug/L	9.4	1.3		
4/10/2012	8270D	1204101320	Sulfotep	ND	ug/L	9.4	1.7		
4/10/2012	8270D	1204101320	2,4-Dinitrotoluene	ND	ug/L	9.4	1.2		
4/10/2012	8270D	1204101320	3- and 4-Methylphenol Coelution	ND	ug/L	9.4	1.5		
4/10/2012	8270D	1204101320	3,3'-Dimethylbenzidine	ND	ug/L	47	37		
4/10/2012	8270D	1204101320	3,3'-Dichlorobenzidine	ND	ug/L	9.4	1.5		
4/10/2012	8270D	1204101320	2-Picoline	ND	ug/L	9.4	3.0		
4/10/2012	8270D	1204101320	2-Nitrophenol	ND	ug/L	9.4	1.2		
4/10/2012	8270D	1204101320	2-Naphthylamine	ND	ug/L	47	12		
4/10/2012	8270D	1204101320	2-Methylnaphthalene	ND	ug/L	9.4	1.0		
4/10/2012	8270D	1204101320	2-Methyl-5-nitroaniline (5-Nitro-o-toluidine)	ND	ug/L	9.4	1.8		
4/10/2012	8270D	1204101320	2-Chlorophenol	ND	ug/L	9.4	1.3		
4/10/2012	8270D	1204101320	2-Chloronaphthalene	ND	ug/L	9.4	1.0		
4/10/2012	8270D	1204101320	2-Acetylaminofluorene	ND	ug/L	9.4	1.0		
4/10/2012	8270D	1204101320	3-Methylcholanthrene	ND	ug/L	9.4	1.0		
4/10/2012	8270D	1204101320	2,6-Dichlorophenol	ND	ug/L	9.4	1.4		

4/10/2012	8270D	1204101320	2-Nitroaniline	ND	ug/L	47	14	
4/10/2012	8270D	1204101320	2,4-Dinitrophenol	ND	ug/L	47	34	
4/10/2012	8270D	1204101320	2,4-Dimethylphenol	ND	ug/L	9.4	1.6	
4/10/2012	8270D	1204101320	2,4-Dichlorophenol	ND	ug/L	9.4	1.0	
4/10/2012	8270D	1204101320	2,4,6-Trichlorophenol	ND	ug/L	9.4	1.1	
4/10/2012	8270D	1204101320	2,4,5-Trichlorophenol	ND	ug/L	9.4	1.2	
4/10/2012	8270D	1204101320	2,3,4,6-Tetrachlorophenol	ND	ug/L	9.4	1.8	
4/10/2012	8270D	1204101320	1-Naphthylamine	ND	ug/L	47	19	
4/10/2012	8270D	1204101320	1-Methylnaphthalene	ND	ug/L	9.4	1.2	
4/10/2012	8270D	1204101320	1,4-Phenylenediamine	ND	ug/L	47	NA	*
4/10/2012	8270D	1204101320	1,4-Naphthoquinone	ND	ug/L	47	35	
4/10/2012	8270D	1204101320	Diallate	ND	ug/L	9.4	1.0	
4/10/2012	8270D	1204101320	Pentachloroethane	ND	ug/L	9.4	1.3	
4/10/2012	8270D	1204101320	2,6-Dinitrotoluene	ND	ug/L	9.4	1.3	
4/10/2012	8270D	1204101320	Benzo(g,h,i)perylene	ND	ug/L	9.4	1.0	
4/10/2012	8270D	1204101320	Di-n-octyl Phthalate	ND	ug/L	9.4	1.1	
4/10/2012	8270D	1204101320	Di-n-butyl Phthalate	ND	ug/L	9.4	1.0	
4/10/2012	8270D	1204101320	Chlorobenzilate	ND	ug/L	9.4	1.0	
4/10/2012	8270D	1204101320	Butyl Benzyl Phthalate	ND	ug/L	9.4	1.0	
4/10/2012	8270D	1204101320	Bis(2-chloroethyl) Ether	ND	ug/L	9.4	1.3	
4/10/2012	8270D	1204101320	Bis(2-chloroethoxy)methane	ND	ug/L	9.4	1.0	
4/10/2012	8270D	1204101320	2-Methylphenol	ND	ug/L	9.4	1.0	
4/10/2012	8270D	1204101320	Benzyl Alcohol	ND	ug/L	9.4	1.1	
4/10/2012	8270D	1204101320	3-Nitroaniline	ND	ug/L	47	12	
4/10/2012	8270D	1204101320	Benzidine	ND	ug/L	94	53	
4/10/2012	8270D	1204101320	Aramite, Total	ND	ug/L	47	13	
4/10/2012	8270D	1204101320	Anthracene	ND	ug/L	9.4	1.0	
4/10/2012	8270D	1204101320	Aniline	ND	ug/L	9.4	1.3	
4/10/2012	8270D	1204101320	Acetophenone	ND	ug/L	9.4	2.1	
4/10/2012	8270D	1204101320	p-Chloroaniline	ND	ug/L	9.4	1.6	
4/10/2012	8270D	1204101320	4-Aminobiphenyl	ND	ug/L	47	9.6	
4/10/2012	8270D	1204101320	2,2'-Oxybis(1-chloropropane)	ND	ug/L	9.4	1.4	
4/10/2012	8270D	1204101320	Acenaphthylene	ND	ug/L	9.4	1.0	
4/10/2012	8270D	1204101320	4,6-Dinitro-2-methylphenol	ND	ug/L	47	22	
4/10/2012	8270D	1204101320	4-Chloro-3-methylphenol	ND	ug/L	9.4	1.0	
4/10/2012	8270D	1204101320	4-Chlorophenyl Phenyl Ether	ND	ug/L	9.4	1.0	
4/10/2012	8270D	1204101320	4-Nitroaniline	ND	ug/L	47	11	
4/10/2012	8270D	1204101320	4-Nitrophenol	ND	ug/L	47	9.4	
4/10/2012	8270D	1204101320	4-Nitroquinoline N-Oxide	ND	ug/L	47	38	
4/10/2012	8270D	1204101320	7,12-Dimethylbenz(a)anthracene	ND	ug/L	9.4	1.4	
4/10/2012	8270D	1204101320	Acenaphthene	ND	ug/L	9.4	1.2	
4/10/2012	8270D	1204101320	4-Bromophenyl Phenyl Ether	ND	ug/L	9.4	1.0	

4/10/2012	SW6010	1204101321	CALCIUM	250	MG/L	0.5	0.06	
4/10/2012	SW6010	1204101321	ALUMINUM	4.8	MG/L	0.1	0.026	
4/10/2012	SW7470	1204101321	MERCURY	ND	MG/L	0.0002	0.00006	
4/10/2012	SW6010	1204101321	CHROMIUM	0.015	MG/L	0.01	0.0006	
4/10/2012	SW6010	1204101321	SELENIUM	0.018	MG/L	0.005	0.0032	
4/10/2012	SW6010	1204101321	VANADIUM	0.0075	MG/L	0.01	0.0015	J
4/10/2012	SW6010	1204101321	BERYLLIUM	ND	MG/L	0.004	0.00018	
4/10/2012	SW6010	1204101321	MAGNESIUM	120	MG/L	0.5	0.06	
4/10/2012	SW6010	1204101321	MANGANESE	0.12	MG/L	0.01	0.0003	
4/10/2012	SW6010	1204101321	POTASSIUM	6.6	MG/L	1	0.09	
4/10/2012	SW6010	1204101321	MOLYBDENUM	0.0069	MG/L	0.01	0.0015	J
4/10/2012	SW6010	1204101321	LEAD	0.0024	MG/L	0.003	0.0009	J
4/10/2012	SW6010	1204101321	CADMIUM	ND	MG/L	0.005	0.0003	
4/10/2012	SW6010	1204101321	STRONTIUM	6	MG/L	0.01	0.0009	
4/10/2012	SW6010	1204101321	ZINC	0.036	MG/L	0.02	0.0015	
4/10/2012	SW6010	1204101321	ARSENIC	ND	MG/L	0.005	0.0015	
4/10/2012	SW6010	1204101321	BORON	0.58	MG/L	0.1	0.012	
4/10/2012	SW6020	1204101321	ANTIMONY	0.00018	MG/L	0.0003	0.00009	J
4/10/2012	SW6020	1204101321	THALLIUM	0.0001	MG/L	0.0002	0.00006	J
4/10/2012	SW6010	1204101321	IRON	4.3	MG/L	0.1	0.015	
4/10/2012	SW6010	1204101321	BARIUM	0.13	MG/L	0.01	0.0014	
4/10/2012	SW6010	1204101321	COBALT	0.001	MG/L	0.01	0.0006	J
4/10/2012	SW6010	1204101321	COPPER	0.011	MG/L	0.01	0.0006	
4/10/2012	SW6010	1204101321	NICKEL	0.0069	MG/L	0.02	0.0006	J
4/10/2012	SW6010	1204101321	SILVER	ND	MG/L	0.01	0.0012	
4/10/2012	SW6010	1204101321	SODIUM	130	MG/L	0.5	0.09	
4/10/2012	SW6010	1204101321	TIN	ND	MG/L	0.05	0.003	
4/10/2012	EPA300.0	1204101323	SULFATE	500	MG/L	20	6	
4/10/2012	EPA300.0	1204101323	CHLORIDE	310	MG/L	4	1.2	
4/10/2012	EPA160.1	1204101323	TOTAL DISSOLVED SOLIDS	1600	MG/L	40	NA	
4/10/2012	SM2320B	1204101323	CARBONATE AS CaCO3	ND	MG/L	20	NA	
4/10/2012	SM2320B	1204101323	TOTAL ALKALINITY AS CaCO3	210	MG/L	20	NA	
4/10/2012	SM2320B	1204101323	BICARBONATE AS CaCO3	210	MG/L	20	NA	
4/10/2012	EPA300.0	1204101323	FLUORIDE	1	MG/L	0.2	0.06	
4/10/2012	SW6010	1204101324	CADMIUM	ND	MG/L	0.005	0.0003	
4/10/2012	SW6010	1204101324	CALCIUM	260	MG/L	0.5	0.06	
4/10/2012	SW6010	1204101324	ALUMINUM	4.3	MG/L	0.1	0.026	
4/10/2012	SW6010	1204101324	CHROMIUM	0.013	MG/L	0.01	0.0006	
4/10/2012	SW6010	1204101324	SELENIUM	0.019	MG/L	0.005	0.0032	
4/10/2012	SW6010	1204101324	MOLYBDENUM	0.0073	MG/L	0.01	0.0015	J
4/10/2012	SW6010	1204101324	BERYLLIUM	ND	MG/L	0.004	0.00018	
4/10/2012	SW6010	1204101324	LEAD	0.0036	MG/L	0.003	0.0009	

4/10/2012	SW6010	1204101324	MAGNESIUM	120	MG/L	0.5	0.06	
4/10/2012	SW6010	1204101324	MANGANESE	0.12	MG/L	0.01	0.0003	
4/10/2012	SW6010	1204101324	POTASSIUM	6.5	MG/L	1	0.09	
4/10/2012	SW6010	1204101324	STRONTIUM	6	MG/L	0.01	0.0009	
4/10/2012	SW6010	1204101324	ARSENIC	0.0043	MG/L	0.005	0.0015	J RB
4/10/2012	SW6010	1204101324	VANADIUM	0.007	MG/L	0.01	0.0015	J
4/10/2012	SW6010	1204101324	TIN	ND	MG/L	0.05	0.003	
4/10/2012	SW7470	1204101324	MERCURY	ND	MG/L	0.0002	0.00006	
4/10/2012	SW6010	1204101324	BORON	0.58	MG/L	0.1	0.012	
4/10/2012	SW6020	1204101324	THALLIUM	0.00008	MG/L	0.0002	0.00006	J
4/10/2012	SW6010	1204101324	SODIUM	130	MG/L	0.5	0.09	
4/10/2012	SW6010	1204101324	IRON	3.8	MG/L	0.1	0.015	
4/10/2012	SW6010	1204101324	ZINC	0.032	MG/L	0.02	0.0015	
4/10/2012	SW6010	1204101324	BARIUM	0.11	MG/L	0.01	0.0014	
4/10/2012	SW6010	1204101324	COBALT	0.00063	MG/L	0.01	0.0006	J
4/10/2012	SW6010	1204101324	COPPER	0.01	MG/L	0.01	0.0006	
4/10/2012	SW6010	1204101324	NICKEL	0.0053	MG/L	0.02	0.0006	J
4/10/2012	SW6010	1204101324	SILVER	ND	MG/L	0.01	0.0012	
4/10/2012	SW6020	1204101324	ANTIMONY	0.00012	MG/L	0.0003	0.00009	J
4/10/2012	EPA 331.0	1204101325	Perchlorate	2.68	ug/L	0.4	0.1	
4/10/2012	EPA353.2	1204101326	NITRATE/NITRITE AS N	12	MG/L	0.1	0.03	
4/10/2012	PARAMS	1204101327	Conductivity	2250	µS/cm	NA	NA	
4/10/2012	PARAMS	1204101327	pH	8.12	NA	NA	NA	
4/10/2012	PARAMS	1204101327	Temperature	25.5	ºC	NA	NA	

Appendix D
Soil Gas Analytical Data

Soil Gas Results

Borehole	600-SGW-1	Depth (ft)	12.5	Depth (m)	3.81	Event Date	3/22/2012

Sample	1203220937	Sample Type	Soil Gas	Analysis Method	TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	612	310	98	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	612	310	98	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	612	310	98	
75-34-3	1,1-Dichloroethane	ND	ug/m3	612	310	100	
75-35-4	1,1-Dichloroethene	ND	ug/m3	612	310	100	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	612	310	150	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	612	310	98	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	612	310	92	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	612	310	100	
107-06-2	1,2-Dichloroethane	ND	ug/m3	612	310	120	
78-87-5	1,2-Dichloropropane	ND	ug/m3	612	310	100	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	612	310	100	
106-99-0	1,3-Butadiene	ND	ug/m3	612	310	130	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	612	310	100	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	612	310	98	
123-91-1	1,4-Dioxane	ND	ug/m3	612	310	100	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	612	310	100	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	612	3100	140	
591-78-6	2-Hexanone	ND	ug/m3	612	310	110	
67-63-0	2-Propanol	ND	ug/m3	612	610	240	
107-05-1	3-Chloropropene	ND	ug/m3	612	310	98	
622-96-8	4-Ethyltoluene	ND	ug/m3	612	310	100	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	612	310	86	
67-64-1	Acetone	ND	ug/m3	612	3100	540	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	612	310	92	
71-43-2	Benzene	ND	ug/m3	612	310	86	
75-27-4	Bromodichloromethane	ND	ug/m3	612	310	98	
75-25-2	Bromoform	ND	ug/m3	612	310	86	
74-83-9	Bromomethane	ND	ug/m3	612	310	120	
75-15-0	Carbon Disulfide	ND	ug/m3	612	3100	92	
56-23-5	Carbon Tetrachloride	ND	ug/m3	612	310	98	
108-90-7	Chlorobenzene	ND	ug/m3	612	310	98	
75-00-3	Chloroethane	ND	ug/m3	612	310	120	
67-66-3	Chloroform	ND	ug/m3	612	310	120	
74-87-3	Chloromethane	ND	ug/m3	612	310	120	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	612	310	110	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	612	310	86	
98-82-8	Cumene	ND	ug/m3	612	310	92	
110-82-7	Cyclohexane	ND	ug/m3	612	610	200	
124-48-1	Dibromochloromethane	ND	ug/m3	612	310	86	

64-17-5	Ethanol	ND	ug/m3	612	3100	980	
100-41-4	Ethyl Benzene	ND	ug/m3	612	310	92	
75-69-4	Freon 11	ND	ug/m3	612	310	98	
76-13-1	Freon 113	59000	ug/m3	612	310	98	
76-14-2	Freon 114	ND	ug/m3	612	310	100	
75-71-8	Freon 12	ND	ug/m3	612	310	110	
306-83-2	Freon 123	ND	ug/m3	612	310	150	
354-23-4	Freon 123a	19000	ug/m3	612	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	612	310	140	
142-82-5	Heptane	ND	ug/m3	612	310	98	
87-68-3	Hexachlorobutadiene	ND	ug/m3	612	310	110	
110-54-3	Hexane	ND	ug/m3	612	310	100	
179601-23-	m,p-Xylene	ND	ug/m3	612	610	180	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	612	310	92	
75-09-2	Methylene Chloride	110	ug/m3	612	310	92	J
95-47-6	o-Xylene	ND	ug/m3	612	310	86	
103-65-1	Propylbenzene	ND	ug/m3	612	310	92	
100-42-5	Styrene	ND	ug/m3	612	310	92	
127-18-4	Tetrachloroethene	ND	ug/m3	612	310	86	
109-99-9	Tetrahydrofuran	ND	ug/m3	612	310	130	
108-88-3	Toluene	ND	ug/m3	612	310	98	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	612	310	100	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	612	310	98	
79-01-6	Trichloroethene	1900	ug/m3	612	310	92	
75-01-4	Vinyl Chloride	ND	ug/m3	612	310	120	

Sample 1203241532 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	1185	590	190	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	1185	590	190	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	1185	590	190	
75-34-3	1,1-Dichloroethane	ND	ug/m3	1185	590	200	
75-35-4	1,1-Dichloroethene	ND	ug/m3	1185	590	200	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	1185	590	280	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	1185	590	190	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	1185	590	180	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	1185	590	200	
107-06-2	1,2-Dichloroethane	ND	ug/m3	1185	590	230	
78-87-5	1,2-Dichloropropane	ND	ug/m3	1185	590	200	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	1185	590	200	
106-99-0	1,3-Butadiene	ND	ug/m3	1185	590	250	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	1185	590	200	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	1185	590	190	
123-91-1	1,4-Dioxane	ND	ug/m3	1185	590	200	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	1185	590	200	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	1185	5900	270	

591-78-6	2-Hexanone	ND	ug/m3	1185	590	210	
67-63-0	2-Propanol	ND	ug/m3	1185	1200	470	
107-05-1	3-Chloropropene	ND	ug/m3	1185	590	190	
622-96-8	4-Ethyltoluene	ND	ug/m3	1185	590	200	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	1185	590	170	
67-64-1	Acetone	ND	ug/m3	1185	5900	1000	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	1185	590	180	
71-43-2	Benzene	ND	ug/m3	1185	590	170	
75-27-4	Bromodichloromethane	ND	ug/m3	1185	590	190	
75-25-2	Bromoform	ND	ug/m3	1185	590	170	
74-83-9	Bromomethane	ND	ug/m3	1185	590	230	
75-15-0	Carbon Disulfide	ND	ug/m3	1185	5900	180	
56-23-5	Carbon Tetrachloride	ND	ug/m3	1185	590	190	
108-90-7	Chlorobenzene	ND	ug/m3	1185	590	190	
75-00-3	Chloroethane	ND	ug/m3	1185	590	230	
67-66-3	Chloroform	ND	ug/m3	1185	590	230	
74-87-3	Chloromethane	ND	ug/m3	1185	590	230	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	1185	590	210	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	1185	590	170	
98-82-8	Cumene	ND	ug/m3	1185	590	180	
110-82-7	Cyclohexane	ND	ug/m3	1185	1200	390	
124-48-1	Dibromochloromethane	ND	ug/m3	1185	590	170	
64-17-5	Ethanol	ND	ug/m3	1185	5900	1900	
100-41-4	Ethyl Benzene	ND	ug/m3	1185	590	180	
75-69-4	Freon 11	ND	ug/m3	1185	590	190	
76-13-1	Freon 113	110000	ug/m3	1185	590	190	
76-14-2	Freon 114	ND	ug/m3	1185	590	200	
75-71-8	Freon 12	ND	ug/m3	1185	590	210	
306-83-2	Freon 123	ND	ug/m3	1185	590	280	
354-23-4	Freon 123a	84000	ug/m3	1185	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	1185	590	270	
142-82-5	Heptane	ND	ug/m3	1185	590	190	
87-68-3	Hexachlorobutadiene	ND	ug/m3	1185	590	210	
110-54-3	Hexane	ND	ug/m3	1185	590	200	
179601-23-	m,p-Xylene	ND	ug/m3	1185	1200	340	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	1185	590	180	
75-09-2	Methylene Chloride	210	ug/m3	1185	590	180	J
95-47-6	o-Xylene	ND	ug/m3	1185	590	170	
103-65-1	Propylbenzene	ND	ug/m3	1185	590	180	
100-42-5	Styrene	ND	ug/m3	1185	590	180	
127-18-4	Tetrachloroethene	ND	ug/m3	1185	590	170	
109-99-9	Tetrahydrofuran	ND	ug/m3	1185	590	260	
108-88-3	Toluene	ND	ug/m3	1185	590	190	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	1185	590	200	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	1185	590	190	
79-01-6	Trichloroethene	1700	ug/m3	1185	590	180	

75-01-4	Vinyl Chloride	ND	ug/m3	1185	590	230

Borehole	600-SGW-1	Depth (ft)	57	Depth (m)	17.37	Event Date	3/22/2012

Sample	1203220941	Sample Type	Soil Gas	Analysis Method	TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	15	ug/m3	54	27	8.6	J
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	54	27	8.6	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	54	27	8.6	
75-34-3	1,1-Dichloroethane	19	ug/m3	54	27	9.2	J
75-35-4	1,1-Dichloroethene	57	ug/m3	54	27	9.2	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	54	27	13	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	54	27	8.6	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	54	27	8.1	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	54	27	9.2	
107-06-2	1,2-Dichloroethane	ND	ug/m3	54	27	10	
78-87-5	1,2-Dichloropropane	ND	ug/m3	54	27	9.2	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	54	27	9.2	
106-99-0	1,3-Butadiene	ND	ug/m3	54	27	11	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	54	27	9.2	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	54	27	8.6	
123-91-1	1,4-Dioxane	ND	ug/m3	54	27	9.2	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	54	27	9.2	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	54	270	12	
591-78-6	2-Hexanone	ND	ug/m3	54	27	9.7	
67-63-0	2-Propanol	ND	ug/m3	54	54	22	
107-05-1	3-Chloropropene	ND	ug/m3	54	27	8.6	
622-96-8	4-Ethyltoluene	ND	ug/m3	54	27	9.2	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	54	27	7.6	
67-64-1	Acetone	ND	ug/m3	54	270	48	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	54	27	8.1	
71-43-2	Benzene	ND	ug/m3	54	27	7.6	
75-27-4	Bromodichloromethane	ND	ug/m3	54	27	8.6	
75-25-2	Bromoform	ND	ug/m3	54	27	7.6	
74-83-9	Bromomethane	ND	ug/m3	54	27	10	
75-15-0	Carbon Disulfide	ND	ug/m3	54	270	8.1	
56-23-5	Carbon Tetrachloride	ND	ug/m3	54	27	8.6	
108-90-7	Chlorobenzene	ND	ug/m3	54	27	8.6	
75-00-3	Chloroethane	ND	ug/m3	54	27	10	
67-66-3	Chloroform	93	ug/m3	54	27	10	
74-87-3	Chloromethane	ND	ug/m3	54	27	10	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	54	27	9.7	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	54	27	7.6	
98-82-8	Cumene	ND	ug/m3	54	27	8.1	
110-82-7	Cyclohexane	ND	ug/m3	54	54	18	
124-48-1	Dibromochloromethane	ND	ug/m3	54	27	7.6	
64-17-5	Ethanol	ND	ug/m3	54	270	86	

100-41-4	Ethyl Benzene	ND	ug/m3	54	27	8.1	
75-69-4	Freon 11	46	ug/m3	54	27	8.6	
76-13-1	Freon 113	65000	ug/m3	1620	810	260	D
76-14-2	Freon 114	ND	ug/m3	54	27	9.2	
75-71-8	Freon 12	ND	ug/m3	54	27	9.7	
306-83-2	Freon 123	23	ug/m3	54	27	13	J
NA	Freon 123a	24000	ug/m3	54	NA	NA	TIC
75-43-4	Freon 21	22	ug/m3	54	27	12	J
142-82-5	Heptane	ND	ug/m3	54	27	8.6	
87-68-3	Hexachlorobutadiene	ND	ug/m3	54	27	9.7	
110-54-3	Hexane	ND	ug/m3	54	27	9.2	
179601-23-	m,p-Xylene	ND	ug/m3	54	54	16	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	54	27	8.1	
75-09-2	Methylene Chloride	21	ug/m3	54	27	8.1	J
95-47-6	o-Xylene	ND	ug/m3	54	27	7.6	
103-65-1	Propylbenzene	ND	ug/m3	54	27	8.1	
100-42-5	Styrene	ND	ug/m3	54	27	8.1	
127-18-4	Tetrachloroethene	8.4	ug/m3	54	27	7.6	J
109-99-9	Tetrahydrofuran	ND	ug/m3	54	27	12	
108-88-3	Toluene	ND	ug/m3	54	27	8.6	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	54	27	9.2	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	54	27	8.6	
79-01-6	Trichloroethene	3400	ug/m3	54	27	8.1	
75-01-4	Vinyl Chloride	ND	ug/m3	54	27	10	

Sample 1203241536 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	844	420	140	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	844	420	140	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	844	420	140	
75-34-3	1,1-Dichloroethane	ND	ug/m3	844	420	140	
75-35-4	1,1-Dichloroethene	ND	ug/m3	844	420	140	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	844	420	200	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	844	420	140	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	844	420	130	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	844	420	140	
107-06-2	1,2-Dichloroethane	ND	ug/m3	844	420	160	
78-87-5	1,2-Dichloropropane	ND	ug/m3	844	420	140	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	844	420	140	
106-99-0	1,3-Butadiene	ND	ug/m3	844	420	180	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	844	420	140	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	844	420	140	
123-91-1	1,4-Dioxane	ND	ug/m3	844	420	140	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	844	420	140	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	844	4200	190	
591-78-6	2-Hexanone	ND	ug/m3	844	420	150	

67-63-0	2-Propanol	ND	ug/m3	844	840	340	
107-05-1	3-Chloropropene	ND	ug/m3	844	420	140	
622-96-8	4-Ethyltoluene	ND	ug/m3	844	420	140	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	844	420	120	
67-64-1	Acetone	ND	ug/m3	844	4200	740	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	844	420	130	
71-43-2	Benzene	ND	ug/m3	844	420	120	
75-27-4	Bromodichloromethane	ND	ug/m3	844	420	140	
75-25-2	Bromoform	ND	ug/m3	844	420	120	
74-83-9	Bromomethane	ND	ug/m3	844	420	160	
75-15-0	Carbon Disulfide	ND	ug/m3	844	4200	130	
56-23-5	Carbon Tetrachloride	ND	ug/m3	844	420	140	
108-90-7	Chlorobenzene	ND	ug/m3	844	420	140	
75-00-3	Chloroethane	ND	ug/m3	844	420	160	
67-66-3	Chloroform	ND	ug/m3	844	420	160	
74-87-3	Chloromethane	ND	ug/m3	844	420	160	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	844	420	150	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	844	420	120	
98-82-8	Cumene	ND	ug/m3	844	420	130	
110-82-7	Cyclohexane	ND	ug/m3	844	840	280	
124-48-1	Dibromochloromethane	ND	ug/m3	844	420	120	
64-17-5	Ethanol	ND	ug/m3	844	4200	1400	
100-41-4	Ethyl Benzene	ND	ug/m3	844	420	130	
75-69-4	Freon 11	ND	ug/m3	844	420	140	
76-13-1	Freon 113	72000	ug/m3	844	420	140	
76-14-2	Freon 114	ND	ug/m3	844	420	140	
75-71-8	Freon 12	ND	ug/m3	844	420	150	
306-83-2	Freon 123	ND	ug/m3	844	420	200	
354-23-4	Freon 123a	30000	ug/m3	844	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	844	420	190	
142-82-5	Heptane	ND	ug/m3	844	420	140	
87-68-3	Hexachlorobutadiene	ND	ug/m3	844	420	150	
110-54-3	Hexane	ND	ug/m3	844	420	140	
179601-23-	m,p-Xylene	ND	ug/m3	844	840	240	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	844	420	130	
75-09-2	Methylene Chloride	150	ug/m3	844	420	130	J
95-47-6	o-Xylene	ND	ug/m3	844	420	120	
103-65-1	Propylbenzene	ND	ug/m3	844	420	130	
100-42-5	Styrene	ND	ug/m3	844	420	130	
127-18-4	Tetrachloroethene	ND	ug/m3	844	420	120	
109-99-9	Tetrahydrofuran	ND	ug/m3	844	420	190	
108-88-3	Toluene	ND	ug/m3	844	420	140	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	844	420	140	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	844	420	140	
79-01-6	Trichloroethene	3100	ug/m3	844	420	130	
75-01-4	Vinyl Chloride	ND	ug/m3	844	420	160	

Borehole	600-SGW-1	Depth (ft)	117.5	Depth (m)	35.81	Event Date	3/22/2012

Sample	1203220947	Sample Type	Soil Gas	Analysis Method	TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	805	400	130	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	805	400	130	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	805	400	130	
75-34-3	1,1-Dichloroethane	ND	ug/m3	805	400	140	
75-35-4	1,1-Dichloroethene	ND	ug/m3	805	400	140	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	805	400	190	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	805	400	130	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	805	400	120	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	805	400	140	
107-06-2	1,2-Dichloroethane	ND	ug/m3	805	400	150	
78-87-5	1,2-Dichloropropane	ND	ug/m3	805	400	140	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	805	400	140	
106-99-0	1,3-Butadiene	ND	ug/m3	805	400	170	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	805	400	140	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	805	400	130	
123-91-1	1,4-Dioxane	ND	ug/m3	805	400	140	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	805	400	140	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	805	4000	190	
591-78-6	2-Hexanone	ND	ug/m3	805	400	140	
67-63-0	2-Propanol	ND	ug/m3	805	810	320	
107-05-1	3-Chloropropene	ND	ug/m3	805	400	130	
622-96-8	4-Ethyltoluene	ND	ug/m3	805	400	140	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	805	400	110	
67-64-1	Acetone	ND	ug/m3	805	4000	710	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	805	400	120	
71-43-2	Benzene	ND	ug/m3	805	400	110	
75-27-4	Bromodichloromethane	ND	ug/m3	805	400	130	
75-25-2	Bromoform	ND	ug/m3	805	400	110	
74-83-9	Bromomethane	ND	ug/m3	805	400	150	
75-15-0	Carbon Disulfide	ND	ug/m3	805	4000	120	
56-23-5	Carbon Tetrachloride	ND	ug/m3	805	400	130	
108-90-7	Chlorobenzene	ND	ug/m3	805	400	130	
75-00-3	Chloroethane	ND	ug/m3	805	400	150	
67-66-3	Chloroform	ND	ug/m3	805	400	150	
74-87-3	Chloromethane	ND	ug/m3	805	400	150	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	805	400	140	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	805	400	110	
98-82-8	Cumene	ND	ug/m3	805	400	120	
110-82-7	Cyclohexane	ND	ug/m3	805	810	270	
124-48-1	Dibromochloromethane	ND	ug/m3	805	400	110	
64-17-5	Ethanol	ND	ug/m3	805	4000	1300	

100-41-4	Ethyl Benzene	ND	ug/m3	805	400	120	
75-69-4	Freon 11	ND	ug/m3	805	400	130	
76-13-1	Freon 113	74000	ug/m3	805	400	130	
76-14-2	Freon 114	ND	ug/m3	805	400	140	
75-71-8	Freon 12	ND	ug/m3	805	400	140	
306-83-2	Freon 123	ND	ug/m3	805	400	190	
NA	Freon 123a	ND	ug/m3	805	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	805	400	190	
142-82-5	Heptane	ND	ug/m3	805	400	130	
87-68-3	Hexachlorobutadiene	ND	ug/m3	805	400	140	
110-54-3	Hexane	ND	ug/m3	805	400	140	
179601-23-	m,p-Xylene	ND	ug/m3	805	810	230	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	805	400	120	
75-09-2	Methylene Chloride	180	ug/m3	805	400	120	J
95-47-6	o-Xylene	ND	ug/m3	805	400	110	
103-65-1	Propylbenzene	ND	ug/m3	805	400	120	
100-42-5	Styrene	ND	ug/m3	805	400	120	
127-18-4	Tetrachloroethene	ND	ug/m3	805	400	110	
109-99-9	Tetrahydrofuran	ND	ug/m3	805	400	180	
108-88-3	Toluene	ND	ug/m3	805	400	130	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	805	400	140	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	805	400	130	
79-01-6	Trichloroethene	5300	ug/m3	805	400	120	
75-01-4	Vinyl Chloride	ND	ug/m3	805	400	150	

Sample 1203241545 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	1195	600	190	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	1195	600	190	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	1195	600	190	
75-34-3	1,1-Dichloroethane	ND	ug/m3	1195	600	200	
75-35-4	1,1-Dichloroethene	ND	ug/m3	1195	600	200	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	1195	600	290	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	1195	600	190	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	1195	600	180	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	1195	600	200	
107-06-2	1,2-Dichloroethane	ND	ug/m3	1195	600	230	
78-87-5	1,2-Dichloropropane	ND	ug/m3	1195	600	200	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	1195	600	200	
106-99-0	1,3-Butadiene	ND	ug/m3	1195	600	250	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	1195	600	200	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	1195	600	190	
123-91-1	1,4-Dioxane	ND	ug/m3	1195	600	200	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	1195	600	200	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	1195	6000	270	
591-78-6	2-Hexanone	ND	ug/m3	1195	600	220	

67-63-0	2-Propanol	ND	ug/m3	1195	1200	480	
107-05-1	3-Chloropropene	ND	ug/m3	1195	600	190	
622-96-8	4-Ethyltoluene	ND	ug/m3	1195	600	200	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	1195	600	170	
67-64-1	Acetone	ND	ug/m3	1195	6000	1100	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	1195	600	180	
71-43-2	Benzene	ND	ug/m3	1195	600	170	
75-27-4	Bromodichloromethane	ND	ug/m3	1195	600	190	
75-25-2	Bromoform	ND	ug/m3	1195	600	170	
74-83-9	Bromomethane	ND	ug/m3	1195	600	230	
75-15-0	Carbon Disulfide	ND	ug/m3	1195	6000	180	
56-23-5	Carbon Tetrachloride	ND	ug/m3	1195	600	190	
108-90-7	Chlorobenzene	ND	ug/m3	1195	600	190	
75-00-3	Chloroethane	ND	ug/m3	1195	600	230	
67-66-3	Chloroform	ND	ug/m3	1195	600	230	
74-87-3	Chloromethane	ND	ug/m3	1195	600	230	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	1195	600	220	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	1195	600	170	
98-82-8	Cumene	ND	ug/m3	1195	600	180	
110-82-7	Cyclohexane	ND	ug/m3	1195	1200	390	
124-48-1	Dibromochloromethane	ND	ug/m3	1195	600	170	
64-17-5	Ethanol	ND	ug/m3	1195	6000	1900	
100-41-4	Ethyl Benzene	ND	ug/m3	1195	600	180	
75-69-4	Freon 11	ND	ug/m3	1195	600	190	
76-13-1	Freon 113	110000	ug/m3	1195	600	190	
76-14-2	Freon 114	ND	ug/m3	1195	600	200	
75-71-8	Freon 12	ND	ug/m3	1195	600	220	
306-83-2	Freon 123	ND	ug/m3	1195	600	290	
354-23-4	Freon 123a	ND	ug/m3	1195	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	1195	600	270	
142-82-5	Heptane	ND	ug/m3	1195	600	190	
87-68-3	Hexachlorobutadiene	ND	ug/m3	1195	600	220	
110-54-3	Hexane	ND	ug/m3	1195	600	200	
179601-23-	m,p-Xylene	ND	ug/m3	1195	1200	350	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	1195	600	180	
75-09-2	Methylene Chloride	250	ug/m3	1195	600	180	J
95-47-6	o-Xylene	ND	ug/m3	1195	600	170	
103-65-1	Propylbenzene	ND	ug/m3	1195	600	180	
100-42-5	Styrene	ND	ug/m3	1195	600	180	
127-18-4	Tetrachloroethene	ND	ug/m3	1195	600	170	
109-99-9	Tetrahydrofuran	ND	ug/m3	1195	600	260	
108-88-3	Toluene	ND	ug/m3	1195	600	190	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	1195	600	200	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	1195	600	190	
79-01-6	Trichloroethene	6400	ug/m3	1195	600	180	
75-01-4	Vinyl Chloride	ND	ug/m3	1195	600	230	

Sample **1203241546** **Sample Type** **Soil Gas-D** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	220	ug/m3	1195	600	190	J
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	1195	600	190	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	1195	600	190	
75-34-3	1,1-Dichloroethane	ND	ug/m3	1195	600	200	
75-35-4	1,1-Dichloroethene	ND	ug/m3	1195	600	200	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	1195	600	290	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	1195	600	190	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	1195	600	180	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	1195	600	200	
107-06-2	1,2-Dichloroethane	ND	ug/m3	1195	600	230	
78-87-5	1,2-Dichloropropane	ND	ug/m3	1195	600	200	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	1195	600	200	
106-99-0	1,3-Butadiene	ND	ug/m3	1195	600	250	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	1195	600	200	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	1195	600	190	
123-91-1	1,4-Dioxane	ND	ug/m3	1195	600	200	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	1195	600	200	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	1195	6000	270	
591-78-6	2-Hexanone	ND	ug/m3	1195	600	220	
67-63-0	2-Propanol	ND	ug/m3	1195	1200	480	
107-05-1	3-Chloropropene	ND	ug/m3	1195	600	190	
622-96-8	4-Ethyltoluene	ND	ug/m3	1195	600	200	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	1195	600	170	
67-64-1	Acetone	ND	ug/m3	1195	6000	1100	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	1195	600	180	
71-43-2	Benzene	ND	ug/m3	1195	600	170	
75-27-4	Bromodichloromethane	ND	ug/m3	1195	600	190	
75-25-2	Bromoform	ND	ug/m3	1195	600	170	
74-83-9	Bromomethane	ND	ug/m3	1195	600	230	
75-15-0	Carbon Disulfide	ND	ug/m3	1195	6000	180	
56-23-5	Carbon Tetrachloride	ND	ug/m3	1195	600	190	
108-90-7	Chlorobenzene	ND	ug/m3	1195	600	190	
75-00-3	Chloroethane	ND	ug/m3	1195	600	230	
67-66-3	Chloroform	ND	ug/m3	1195	600	230	
74-87-3	Chloromethane	ND	ug/m3	1195	600	230	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	1195	600	220	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	1195	600	170	
98-82-8	Cumene	ND	ug/m3	1195	600	180	
110-82-7	Cyclohexane	ND	ug/m3	1195	1200	390	
124-48-1	Dibromochloromethane	ND	ug/m3	1195	600	170	
64-17-5	Ethanol	ND	ug/m3	1195	6000	1900	
100-41-4	Ethyl Benzene	ND	ug/m3	1195	600	180	
75-69-4	Freon 11	ND	ug/m3	1195	600	190	

76-13-1	Freon 113	100000	ug/m3	1195	600	190	
76-14-2	Freon 114	ND	ug/m3	1195	600	200	
75-71-8	Freon 12	ND	ug/m3	1195	600	220	
306-83-2	Freon 123	ND	ug/m3	1195	600	290	
354-23-4	Freon 123a	ND	ug/m3	1195	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	1195	600	270	
142-82-5	Heptane	ND	ug/m3	1195	600	190	
87-68-3	Hexachlorobutadiene	ND	ug/m3	1195	600	220	
110-54-3	Hexane	ND	ug/m3	1195	600	200	
179601-23-	m,p-Xylene	ND	ug/m3	1195	1200	350	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	1195	600	180	
75-09-2	Methylene Chloride	220	ug/m3	1195	600	180	J
95-47-6	o-Xylene	ND	ug/m3	1195	600	170	
103-65-1	Propylbenzene	ND	ug/m3	1195	600	180	
100-42-5	Styrene	ND	ug/m3	1195	600	180	
127-18-4	Tetrachloroethene	ND	ug/m3	1195	600	170	
109-99-9	Tetrahydrofuran	ND	ug/m3	1195	600	260	
108-88-3	Toluene	ND	ug/m3	1195	600	190	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	1195	600	200	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	1195	600	190	
79-01-6	Trichloroethene	5700	ug/m3	1195	600	180	
75-01-4	Vinyl Chloride	ND	ug/m3	1195	600	230	

Borehole	600-SGW-2	Depth (ft)	12.5	Depth (m)	3.81	Event Date	3/22/2012

Sample	1203220948	Sample Type	Soil Gas	Analysis Method	TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	506.67	250	81	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	506.67	250	81	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	506.67	250	81	
75-34-3	1,1-Dichloroethane	ND	ug/m3	506.67	250	86	
75-35-4	1,1-Dichloroethene	ND	ug/m3	506.67	250	86	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	506.67	250	120	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	506.67	250	81	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	506.67	250	76	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	506.67	250	86	
107-06-2	1,2-Dichloroethane	ND	ug/m3	506.67	250	96	
78-87-5	1,2-Dichloropropane	ND	ug/m3	506.67	250	86	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	506.67	250	86	
106-99-0	1,3-Butadiene	ND	ug/m3	506.67	250	110	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	506.67	250	86	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	506.67	250	81	
123-91-1	1,4-Dioxane	ND	ug/m3	506.67	250	86	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	506.67	250	86	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	506.67	2500	120	
591-78-6	2-Hexanone	ND	ug/m3	506.67	250	91	
67-63-0	2-Propanol	ND	ug/m3	506.67	510	200	
107-05-1	3-Chloropropene	ND	ug/m3	506.67	250	81	
622-96-8	4-Ethyltoluene	ND	ug/m3	506.67	250	86	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	506.67	250	71	
67-64-1	Acetone	ND	ug/m3	506.67	2500	450	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	506.67	250	76	
71-43-2	Benzene	ND	ug/m3	506.67	250	71	
75-27-4	Bromodichloromethane	ND	ug/m3	506.67	250	81	
75-25-2	Bromoform	ND	ug/m3	506.67	250	71	
74-83-9	Bromomethane	ND	ug/m3	506.67	250	96	
75-15-0	Carbon Disulfide	ND	ug/m3	506.67	2500	76	
56-23-5	Carbon Tetrachloride	ND	ug/m3	506.67	250	81	
108-90-7	Chlorobenzene	ND	ug/m3	506.67	250	81	
75-00-3	Chloroethane	ND	ug/m3	506.67	250	96	
67-66-3	Chloroform	ND	ug/m3	506.67	250	96	
74-87-3	Chloromethane	ND	ug/m3	506.67	250	96	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	506.67	250	91	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	506.67	250	71	
98-82-8	Cumene	ND	ug/m3	506.67	250	76	
110-82-7	Cyclohexane	ND	ug/m3	506.67	510	170	
124-48-1	Dibromochloromethane	ND	ug/m3	506.67	250	71	
64-17-5	Ethanol	ND	ug/m3	506.67	2500	810	

100-41-4	Ethyl Benzene	ND	ug/m3	506.67	250	76	
75-69-4	Freon 11	ND	ug/m3	506.67	250	81	
76-13-1	Freon 113	38000	ug/m3	506.67	250	81	
76-14-2	Freon 114	ND	ug/m3	506.67	250	86	
75-71-8	Freon 12	ND	ug/m3	506.67	250	91	
306-83-2	Freon 123	ND	ug/m3	506.67	250	120	
NA	Freon 123a	1400	ug/m3	506.67	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	506.67	250	120	
142-82-5	Heptane	ND	ug/m3	506.67	250	81	
87-68-3	Hexachlorobutadiene	ND	ug/m3	506.67	250	91	
110-54-3	Hexane	ND	ug/m3	506.67	250	86	
179601-23-	m,p-Xylene	ND	ug/m3	506.67	510	150	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	506.67	250	76	
75-09-2	Methylene Chloride	86	ug/m3	506.67	250	76	J
95-47-6	o-Xylene	ND	ug/m3	506.67	250	71	
103-65-1	Propylbenzene	ND	ug/m3	506.67	250	76	
100-42-5	Styrene	ND	ug/m3	506.67	250	76	
127-18-4	Tetrachloroethene	ND	ug/m3	506.67	250	71	
109-99-9	Tetrahydrofuran	ND	ug/m3	506.67	250	110	
108-88-3	Toluene	ND	ug/m3	506.67	250	81	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	506.67	250	86	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	506.67	250	81	
79-01-6	Trichloroethene	970	ug/m3	506.67	250	76	
75-01-4	Vinyl Chloride	ND	ug/m3	506.67	250	96	

Sample 1203241512 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	596	300	95	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	596	300	95	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	596	300	95	
75-34-3	1,1-Dichloroethane	ND	ug/m3	596	300	100	
75-35-4	1,1-Dichloroethene	ND	ug/m3	596	300	100	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	596	300	140	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	596	300	95	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	596	300	89	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	596	300	100	
107-06-2	1,2-Dichloroethane	ND	ug/m3	596	300	110	
78-87-5	1,2-Dichloropropane	ND	ug/m3	596	300	100	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	596	300	100	
106-99-0	1,3-Butadiene	ND	ug/m3	596	300	130	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	596	300	100	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	596	300	95	
123-91-1	1,4-Dioxane	ND	ug/m3	596	300	100	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	596	300	100	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	596	3000	140	
591-78-6	2-Hexanone	ND	ug/m3	596	300	110	

67-63-0	2-Propanol	ND	ug/m3	596	600	240	
107-05-1	3-Chloropropene	ND	ug/m3	596	300	95	
622-96-8	4-Ethyltoluene	ND	ug/m3	596	300	100	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	596	300	83	
67-64-1	Acetone	ND	ug/m3	596	3000	520	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	596	300	89	
71-43-2	Benzene	ND	ug/m3	596	300	83	
75-27-4	Bromodichloromethane	ND	ug/m3	596	300	95	
75-25-2	Bromoform	ND	ug/m3	596	300	83	
74-83-9	Bromomethane	ND	ug/m3	596	300	110	
75-15-0	Carbon Disulfide	ND	ug/m3	596	3000	89	
56-23-5	Carbon Tetrachloride	ND	ug/m3	596	300	95	
108-90-7	Chlorobenzene	ND	ug/m3	596	300	95	
75-00-3	Chloroethane	ND	ug/m3	596	300	110	
67-66-3	Chloroform	ND	ug/m3	596	300	110	
74-87-3	Chloromethane	ND	ug/m3	596	300	110	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	596	300	110	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	596	300	83	
98-82-8	Cumene	ND	ug/m3	596	300	89	
110-82-7	Cyclohexane	ND	ug/m3	596	600	200	
124-48-1	Dibromochloromethane	ND	ug/m3	596	300	83	
64-17-5	Ethanol	ND	ug/m3	596	3000	950	
100-41-4	Ethyl Benzene	ND	ug/m3	596	300	89	
75-69-4	Freon 11	ND	ug/m3	596	300	95	
76-13-1	Freon 113	49000	ug/m3	596	300	95	
76-14-2	Freon 114	ND	ug/m3	596	300	100	
75-71-8	Freon 12	ND	ug/m3	596	300	110	
306-83-2	Freon 123	ND	ug/m3	596	300	140	
354-23-4	Freon 123a	ND	ug/m3	596	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	596	300	140	
142-82-5	Heptane	ND	ug/m3	596	300	95	
87-68-3	Hexachlorobutadiene	ND	ug/m3	596	300	110	
110-54-3	Hexane	ND	ug/m3	596	300	100	
179601-23-	m,p-Xylene	ND	ug/m3	596	600	170	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	596	300	89	
75-09-2	Methylene Chloride	100	ug/m3	596	300	89	J
95-47-6	o-Xylene	ND	ug/m3	596	300	83	
103-65-1	Propylbenzene	ND	ug/m3	596	300	89	
100-42-5	Styrene	ND	ug/m3	596	300	89	
127-18-4	Tetrachloroethene	ND	ug/m3	596	300	83	
109-99-9	Tetrahydrofuran	ND	ug/m3	596	300	130	
108-88-3	Toluene	ND	ug/m3	596	300	95	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	596	300	100	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	596	300	95	
79-01-6	Trichloroethene	700	ug/m3	596	300	89	
75-01-4	Vinyl Chloride	ND	ug/m3	596	300	110	

Borehole	600-SGW-2	Depth (ft)	47.5	Depth (m)	14.48	Event Date	3/22/2012

Sample	1203220952	Sample Type	Soil Gas	Analysis Method	TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	1660	830	270	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	1660	830	270	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	1660	830	270	
75-34-3	1,1-Dichloroethane	ND	ug/m3	1660	830	280	
75-35-4	1,1-Dichloroethene	ND	ug/m3	1660	830	280	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	1660	830	400	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	1660	830	270	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	1660	830	250	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	1660	830	280	
107-06-2	1,2-Dichloroethane	ND	ug/m3	1660	830	320	
78-87-5	1,2-Dichloropropane	ND	ug/m3	1660	830	280	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	1660	830	280	
106-99-0	1,3-Butadiene	ND	ug/m3	1660	830	350	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	1660	830	280	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	1660	830	270	
123-91-1	1,4-Dioxane	ND	ug/m3	1660	830	280	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	1660	830	280	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	1660	8300	380	
591-78-6	2-Hexanone	ND	ug/m3	1660	830	300	
67-63-0	2-Propanol	ND	ug/m3	1660	1700	660	
107-05-1	3-Chloropropene	ND	ug/m3	1660	830	270	
622-96-8	4-Ethyltoluene	ND	ug/m3	1660	830	280	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	1660	830	230	
67-64-1	Acetone	ND	ug/m3	1660	8300	1500	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	1660	830	250	
71-43-2	Benzene	ND	ug/m3	1660	830	230	
75-27-4	Bromodichloromethane	ND	ug/m3	1660	830	270	
75-25-2	Bromoform	ND	ug/m3	1660	830	230	
74-83-9	Bromomethane	ND	ug/m3	1660	830	320	
75-15-0	Carbon Disulfide	ND	ug/m3	1660	8300	250	
56-23-5	Carbon Tetrachloride	ND	ug/m3	1660	830	270	
108-90-7	Chlorobenzene	ND	ug/m3	1660	830	270	
75-00-3	Chloroethane	ND	ug/m3	1660	830	320	
67-66-3	Chloroform	ND	ug/m3	1660	830	320	
74-87-3	Chloromethane	ND	ug/m3	1660	830	320	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	1660	830	300	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	1660	830	230	
98-82-8	Cumene	ND	ug/m3	1660	830	250	
110-82-7	Cyclohexane	ND	ug/m3	1660	1700	550	
124-48-1	Dibromochloromethane	ND	ug/m3	1660	830	230	
64-17-5	Ethanol	ND	ug/m3	1660	8300	2700	

100-41-4	Ethyl Benzene	ND	ug/m3	1660	830	250	
75-69-4	Freon 11	ND	ug/m3	1660	830	270	
76-13-1	Freon 113	120000	ug/m3	1660	830	270	
76-14-2	Freon 114	ND	ug/m3	1660	830	280	
75-71-8	Freon 12	ND	ug/m3	1660	830	300	
306-83-2	Freon 123	ND	ug/m3	1660	830	400	
NA	Freon 123a	ND	ug/m3	1660	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	1660	830	380	
142-82-5	Heptane	ND	ug/m3	1660	830	270	
87-68-3	Hexachlorobutadiene	ND	ug/m3	1660	830	300	
110-54-3	Hexane	ND	ug/m3	1660	830	280	
179601-23-	m,p-Xylene	ND	ug/m3	1660	1700	480	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	1660	830	250	
75-09-2	Methylene Chloride	290	ug/m3	1660	830	250	J
95-47-6	o-Xylene	ND	ug/m3	1660	830	230	
103-65-1	Propylbenzene	ND	ug/m3	1660	830	250	
100-42-5	Styrene	ND	ug/m3	1660	830	250	
127-18-4	Tetrachloroethene	ND	ug/m3	1660	830	230	
109-99-9	Tetrahydrofuran	ND	ug/m3	1660	830	370	
108-88-3	Toluene	ND	ug/m3	1660	830	270	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	1660	830	280	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	1660	830	270	
79-01-6	Trichloroethene	5700	ug/m3	1660	830	250	
75-01-4	Vinyl Chloride	ND	ug/m3	1660	830	320	

Sample 1203241516 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	1812.5	910	290	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	1812.5	910	290	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	1812.5	910	290	
75-34-3	1,1-Dichloroethane	ND	ug/m3	1812.5	910	310	
75-35-4	1,1-Dichloroethene	ND	ug/m3	1812.5	910	310	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	1812.5	910	440	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	1812.5	910	290	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	1812.5	910	270	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	1812.5	910	310	
107-06-2	1,2-Dichloroethane	ND	ug/m3	1812.5	910	340	
78-87-5	1,2-Dichloropropane	ND	ug/m3	1812.5	910	310	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	1812.5	910	310	
106-99-0	1,3-Butadiene	ND	ug/m3	1812.5	910	380	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	1812.5	910	310	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	1812.5	910	290	
123-91-1	1,4-Dioxane	ND	ug/m3	1812.5	910	310	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	1812.5	910	310	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	1812.5	9100	420	
591-78-6	2-Hexanone	ND	ug/m3	1812.5	910	330	

67-63-0	2-Propanol	ND	ug/m3	1812.5	1800	730	
107-05-1	3-Chloropropene	ND	ug/m3	1812.5	910	290	
622-96-8	4-Ethyltoluene	ND	ug/m3	1812.5	910	310	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	1812.5	910	250	
67-64-1	Acetone	ND	ug/m3	1812.5	9100	1600	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	1812.5	910	270	
71-43-2	Benzene	ND	ug/m3	1812.5	910	250	
75-27-4	Bromodichloromethane	ND	ug/m3	1812.5	910	290	
75-25-2	Bromoform	ND	ug/m3	1812.5	910	250	
74-83-9	Bromomethane	ND	ug/m3	1812.5	910	340	
75-15-0	Carbon Disulfide	ND	ug/m3	1812.5	9100	270	
56-23-5	Carbon Tetrachloride	ND	ug/m3	1812.5	910	290	
108-90-7	Chlorobenzene	ND	ug/m3	1812.5	910	290	
75-00-3	Chloroethane	ND	ug/m3	1812.5	910	340	
67-66-3	Chloroform	ND	ug/m3	1812.5	910	340	
74-87-3	Chloromethane	ND	ug/m3	1812.5	910	340	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	1812.5	910	330	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	1812.5	910	250	
98-82-8	Cumene	ND	ug/m3	1812.5	910	270	
110-82-7	Cyclohexane	ND	ug/m3	1812.5	1800	600	
124-48-1	Dibromochloromethane	ND	ug/m3	1812.5	910	250	
64-17-5	Ethanol	ND	ug/m3	1812.5	9100	2900	
100-41-4	Ethyl Benzene	ND	ug/m3	1812.5	910	270	
75-69-4	Freon 11	ND	ug/m3	1812.5	910	290	
76-13-1	Freon 113	140000	ug/m3	1812.5	910	290	
76-14-2	Freon 114	ND	ug/m3	1812.5	910	310	
75-71-8	Freon 12	ND	ug/m3	1812.5	910	330	
306-83-2	Freon 123	ND	ug/m3	1812.5	910	440	
354-23-4	Freon 123a	ND	ug/m3	1812.5	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	1812.5	910	420	
142-82-5	Heptane	ND	ug/m3	1812.5	910	290	
87-68-3	Hexachlorobutadiene	ND	ug/m3	1812.5	910	330	
110-54-3	Hexane	ND	ug/m3	1812.5	910	310	
179601-23-	m,p-Xylene	ND	ug/m3	1812.5	1800	530	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	1812.5	910	270	
75-09-2	Methylene Chloride	300	ug/m3	1812.5	910	270	J
95-47-6	o-Xylene	ND	ug/m3	1812.5	910	250	
103-65-1	Propylbenzene	ND	ug/m3	1812.5	910	270	
100-42-5	Styrene	ND	ug/m3	1812.5	910	270	
127-18-4	Tetrachloroethene	ND	ug/m3	1812.5	910	250	
109-99-9	Tetrahydrofuran	ND	ug/m3	1812.5	910	400	
108-88-3	Toluene	ND	ug/m3	1812.5	910	290	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	1812.5	910	310	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	1812.5	910	290	
79-01-6	Trichloroethene	4500	ug/m3	1812.5	910	270	
75-01-4	Vinyl Chloride	ND	ug/m3	1812.5	910	340	

Borehole	600-SGW-2	Depth (ft)	107.5	Depth (m)	32.76	Event Date	3/22/2012

Sample	1203220958	Sample Type	Soil Gas	Analysis Method	TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	2633.33	1300	420	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	2633.33	1300	420	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	2633.33	1300	420	
75-34-3	1,1-Dichloroethane	ND	ug/m3	2633.33	1300	450	
75-35-4	1,1-Dichloroethene	ND	ug/m3	2633.33	1300	450	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	2633.33	1300	630	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	2633.33	1300	420	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	2633.33	1300	400	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	2633.33	1300	450	
107-06-2	1,2-Dichloroethane	ND	ug/m3	2633.33	1300	500	
78-87-5	1,2-Dichloropropane	ND	ug/m3	2633.33	1300	450	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	2633.33	1300	450	
106-99-0	1,3-Butadiene	ND	ug/m3	2633.33	1300	550	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	2633.33	1300	450	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	2633.33	1300	420	
123-91-1	1,4-Dioxane	ND	ug/m3	2633.33	1300	450	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	2633.33	1300	450	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	2633.33	13000	610	
591-78-6	2-Hexanone	ND	ug/m3	2633.33	1300	470	
67-63-0	2-Propanol	ND	ug/m3	2633.33	2600	1100	
107-05-1	3-Chloropropene	ND	ug/m3	2633.33	1300	420	
622-96-8	4-Ethyltoluene	ND	ug/m3	2633.33	1300	450	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	2633.33	1300	370	
67-64-1	Acetone	ND	ug/m3	2633.33	13000	2300	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	2633.33	1300	400	
71-43-2	Benzene	ND	ug/m3	2633.33	1300	370	
75-27-4	Bromodichloromethane	ND	ug/m3	2633.33	1300	420	
75-25-2	Bromoform	ND	ug/m3	2633.33	1300	370	
74-83-9	Bromomethane	ND	ug/m3	2633.33	1300	500	
75-15-0	Carbon Disulfide	ND	ug/m3	2633.33	13000	400	
56-23-5	Carbon Tetrachloride	ND	ug/m3	2633.33	1300	420	
108-90-7	Chlorobenzene	ND	ug/m3	2633.33	1300	420	
75-00-3	Chloroethane	ND	ug/m3	2633.33	1300	500	
67-66-3	Chloroform	ND	ug/m3	2633.33	1300	500	
74-87-3	Chloromethane	ND	ug/m3	2633.33	1300	500	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	2633.33	1300	470	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	2633.33	1300	370	
98-82-8	Cumene	ND	ug/m3	2633.33	1300	400	
110-82-7	Cyclohexane	ND	ug/m3	2633.33	2600	870	
124-48-1	Dibromochloromethane	ND	ug/m3	2633.33	1300	370	
64-17-5	Ethanol	ND	ug/m3	2633.33	13000	4200	

100-41-4	Ethyl Benzene	ND	ug/m3	2633.33	1300	400	
75-69-4	Freon 11	ND	ug/m3	2633.33	1300	420	
76-13-1	Freon 113	250000	ug/m3	2633.33	1300	420	
76-14-2	Freon 114	ND	ug/m3	2633.33	1300	450	
75-71-8	Freon 12	ND	ug/m3	2633.33	1300	470	
306-83-2	Freon 123	ND	ug/m3	2633.33	1300	630	
NA	Freon 123a	ND	ug/m3	2633.33	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	2633.33	1300	610	
142-82-5	Heptane	ND	ug/m3	2633.33	1300	420	
87-68-3	Hexachlorobutadiene	ND	ug/m3	2633.33	1300	470	
110-54-3	Hexane	ND	ug/m3	2633.33	1300	450	
179601-23-	m,p-Xylene	ND	ug/m3	2633.33	2600	760	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	2633.33	1300	400	
75-09-2	Methylene Chloride	450	ug/m3	2633.33	1300	400	J
95-47-6	o-Xylene	ND	ug/m3	2633.33	1300	370	
103-65-1	Propylbenzene	ND	ug/m3	2633.33	1300	400	
100-42-5	Styrene	ND	ug/m3	2633.33	1300	400	
127-18-4	Tetrachloroethene	ND	ug/m3	2633.33	1300	370	
109-99-9	Tetrahydrofuran	ND	ug/m3	2633.33	1300	580	
108-88-3	Toluene	ND	ug/m3	2633.33	1300	420	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	2633.33	1300	450	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	2633.33	1300	420	
79-01-6	Trichloroethene	8500	ug/m3	2633.33	1300	400	
75-01-4	Vinyl Chloride	ND	ug/m3	2633.33	1300	500	

Sample 1203241522 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	2833.33	1400	450	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	2833.33	1400	450	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	2833.33	1400	450	
75-34-3	1,1-Dichloroethane	ND	ug/m3	2833.33	1400	480	
75-35-4	1,1-Dichloroethene	ND	ug/m3	2833.33	1400	480	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	2833.33	1400	680	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	2833.33	1400	450	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	2833.33	1400	430	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	2833.33	1400	480	
107-06-2	1,2-Dichloroethane	ND	ug/m3	2833.33	1400	540	
78-87-5	1,2-Dichloropropane	ND	ug/m3	2833.33	1400	480	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	2833.33	1400	480	
106-99-0	1,3-Butadiene	ND	ug/m3	2833.33	1400	600	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	2833.33	1400	480	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	2833.33	1400	450	
123-91-1	1,4-Dioxane	ND	ug/m3	2833.33	1400	480	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	2833.33	1400	480	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	2833.33	14000	650	
591-78-6	2-Hexanone	ND	ug/m3	2833.33	1400	510	

67-63-0	2-Propanol	ND	ug/m3	2833.33	2800	1100	
107-05-1	3-Chloropropene	ND	ug/m3	2833.33	1400	450	
622-96-8	4-Ethyltoluene	ND	ug/m3	2833.33	1400	480	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	2833.33	1400	400	
67-64-1	Acetone	ND	ug/m3	2833.33	14000	2500	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	2833.33	1400	430	
71-43-2	Benzene	ND	ug/m3	2833.33	1400	400	
75-27-4	Bromodichloromethane	ND	ug/m3	2833.33	1400	450	
75-25-2	Bromoform	ND	ug/m3	2833.33	1400	400	
74-83-9	Bromomethane	ND	ug/m3	2833.33	1400	540	
75-15-0	Carbon Disulfide	ND	ug/m3	2833.33	14000	430	
56-23-5	Carbon Tetrachloride	ND	ug/m3	2833.33	1400	450	
108-90-7	Chlorobenzene	ND	ug/m3	2833.33	1400	450	
75-00-3	Chloroethane	ND	ug/m3	2833.33	1400	540	
67-66-3	Chloroform	ND	ug/m3	2833.33	1400	540	
74-87-3	Chloromethane	ND	ug/m3	2833.33	1400	540	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	2833.33	1400	510	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	2833.33	1400	400	
98-82-8	Cumene	ND	ug/m3	2833.33	1400	430	
110-82-7	Cyclohexane	ND	ug/m3	2833.33	2800	940	
124-48-1	Dibromochloromethane	ND	ug/m3	2833.33	1400	400	
64-17-5	Ethanol	ND	ug/m3	2833.33	14000	4500	
100-41-4	Ethyl Benzene	ND	ug/m3	2833.33	1400	430	
75-69-4	Freon 11	ND	ug/m3	2833.33	1400	450	
76-13-1	Freon 113	280000	ug/m3	2833.33	1400	450	
76-14-2	Freon 114	ND	ug/m3	2833.33	1400	480	
75-71-8	Freon 12	ND	ug/m3	2833.33	1400	510	
306-83-2	Freon 123	ND	ug/m3	2833.33	1400	680	
354-23-4	Freon 123a	ND	ug/m3	2833.33	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	2833.33	1400	650	
142-82-5	Heptane	ND	ug/m3	2833.33	1400	450	
87-68-3	Hexachlorobutadiene	ND	ug/m3	2833.33	1400	510	
110-54-3	Hexane	ND	ug/m3	2833.33	1400	480	
179601-23-	m,p-Xylene	ND	ug/m3	2833.33	2800	820	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	2833.33	1400	430	
75-09-2	Methylene Chloride	480	ug/m3	2833.33	1400	430	J
95-47-6	o-Xylene	ND	ug/m3	2833.33	1400	400	
103-65-1	Propylbenzene	ND	ug/m3	2833.33	1400	430	
100-42-5	Styrene	ND	ug/m3	2833.33	1400	430	
127-18-4	Tetrachloroethene	ND	ug/m3	2833.33	1400	400	
109-99-9	Tetrahydrofuran	ND	ug/m3	2833.33	1400	620	
108-88-3	Toluene	ND	ug/m3	2833.33	1400	450	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	2833.33	1400	480	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	2833.33	1400	450	
79-01-6	Trichloroethene	6700	ug/m3	2833.33	1400	430	
75-01-4	Vinyl Chloride	ND	ug/m3	2833.33	1400	540	

Borehole	600-SGW-2	Depth (ft)	150	Depth (m)	45.72	Event Date	3/22/2012

Sample	1203221007	Sample Type	Soil Gas	Analysis Method	TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	3140	1600	500	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	3140	1600	500	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	3140	1600	500	
75-34-3	1,1-Dichloroethane	ND	ug/m3	3140	1600	530	
75-35-4	1,1-Dichloroethene	ND	ug/m3	3140	1600	530	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	3140	1600	750	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	3140	1600	500	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	3140	1600	470	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	3140	1600	530	
107-06-2	1,2-Dichloroethane	ND	ug/m3	3140	1600	600	
78-87-5	1,2-Dichloropropane	ND	ug/m3	3140	1600	530	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	3140	1600	530	
106-99-0	1,3-Butadiene	ND	ug/m3	3140	1600	660	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	3140	1600	530	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	3140	1600	500	
123-91-1	1,4-Dioxane	ND	ug/m3	3140	1600	530	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	3140	1600	530	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	3140	16000	720	
591-78-6	2-Hexanone	ND	ug/m3	3140	1600	570	
67-63-0	2-Propanol	ND	ug/m3	3140	3100	1300	
107-05-1	3-Chloropropene	ND	ug/m3	3140	1600	500	
622-96-8	4-Ethyltoluene	ND	ug/m3	3140	1600	530	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	3140	1600	440	
67-64-1	Acetone	ND	ug/m3	3140	16000	2800	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	3140	1600	470	
71-43-2	Benzene	ND	ug/m3	3140	1600	440	
75-27-4	Bromodichloromethane	ND	ug/m3	3140	1600	500	
75-25-2	Bromoform	ND	ug/m3	3140	1600	440	
74-83-9	Bromomethane	ND	ug/m3	3140	1600	600	
75-15-0	Carbon Disulfide	ND	ug/m3	3140	16000	470	
56-23-5	Carbon Tetrachloride	ND	ug/m3	3140	1600	500	
108-90-7	Chlorobenzene	ND	ug/m3	3140	1600	500	
75-00-3	Chloroethane	ND	ug/m3	3140	1600	600	
67-66-3	Chloroform	ND	ug/m3	3140	1600	600	
74-87-3	Chloromethane	ND	ug/m3	3140	1600	600	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	3140	1600	570	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	3140	1600	440	
98-82-8	Cumene	ND	ug/m3	3140	1600	470	
110-82-7	Cyclohexane	ND	ug/m3	3140	3100	1000	
124-48-1	Dibromochloromethane	ND	ug/m3	3140	1600	440	
64-17-5	Ethanol	ND	ug/m3	3140	16000	5000	

100-41-4	Ethyl Benzene	ND	ug/m3	3140	1600	470	
75-69-4	Freon 11	ND	ug/m3	3140	1600	500	
76-13-1	Freon 113	280000	ug/m3	3140	1600	500	
76-14-2	Freon 114	ND	ug/m3	3140	1600	530	
75-71-8	Freon 12	ND	ug/m3	3140	1600	570	
306-83-2	Freon 123	ND	ug/m3	3140	1600	750	
NA	Freon 123a	ND	ug/m3	3140	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	3140	1600	720	
142-82-5	Heptane	ND	ug/m3	3140	1600	500	
87-68-3	Hexachlorobutadiene	ND	ug/m3	3140	1600	570	
110-54-3	Hexane	ND	ug/m3	3140	1600	530	
179601-23-	m,p-Xylene	ND	ug/m3	3140	3100	910	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	3140	1600	470	
75-09-2	Methylene Chloride	550	ug/m3	3140	1600	470	J
95-47-6	o-Xylene	ND	ug/m3	3140	1600	440	
103-65-1	Propylbenzene	ND	ug/m3	3140	1600	470	
100-42-5	Styrene	ND	ug/m3	3140	1600	470	
127-18-4	Tetrachloroethene	ND	ug/m3	3140	1600	440	
109-99-9	Tetrahydrofuran	ND	ug/m3	3140	1600	690	
108-88-3	Toluene	ND	ug/m3	3140	1600	500	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	3140	1600	530	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	3140	1600	500	
79-01-6	Trichloroethene	9300	ug/m3	3140	1600	470	
75-01-4	Vinyl Chloride	ND	ug/m3	3140	1600	600	

Sample 1203241531 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	3720	1900	600	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	3720	1900	600	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	3720	1900	600	
75-34-3	1,1-Dichloroethane	ND	ug/m3	3720	1900	630	
75-35-4	1,1-Dichloroethene	ND	ug/m3	3720	1900	630	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	3720	1900	890	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	3720	1900	600	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	3720	1900	560	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	3720	1900	630	
107-06-2	1,2-Dichloroethane	ND	ug/m3	3720	1900	710	
78-87-5	1,2-Dichloropropane	ND	ug/m3	3720	1900	630	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	3720	1900	630	
106-99-0	1,3-Butadiene	ND	ug/m3	3720	1900	780	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	3720	1900	630	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	3720	1900	600	
123-91-1	1,4-Dioxane	ND	ug/m3	3720	1900	630	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	3720	1900	630	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	3720	19000	860	
591-78-6	2-Hexanone	ND	ug/m3	3720	1900	670	

67-63-0	2-Propanol	ND	ug/m3	3720	3700	1500	
107-05-1	3-Chloropropene	ND	ug/m3	3720	1900	600	
622-96-8	4-Ethyltoluene	ND	ug/m3	3720	1900	630	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	3720	1900	520	
67-64-1	Acetone	ND	ug/m3	3720	19000	3300	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	3720	1900	560	
71-43-2	Benzene	ND	ug/m3	3720	1900	520	
75-27-4	Bromodichloromethane	ND	ug/m3	3720	1900	600	
75-25-2	Bromoform	ND	ug/m3	3720	1900	520	
74-83-9	Bromomethane	ND	ug/m3	3720	1900	710	
75-15-0	Carbon Disulfide	ND	ug/m3	3720	19000	560	
56-23-5	Carbon Tetrachloride	ND	ug/m3	3720	1900	600	
108-90-7	Chlorobenzene	ND	ug/m3	3720	1900	600	
75-00-3	Chloroethane	ND	ug/m3	3720	1900	710	
67-66-3	Chloroform	ND	ug/m3	3720	1900	710	
74-87-3	Chloromethane	ND	ug/m3	3720	1900	710	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	3720	1900	670	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	3720	1900	520	
98-82-8	Cumene	ND	ug/m3	3720	1900	560	
110-82-7	Cyclohexane	ND	ug/m3	3720	3700	1200	
124-48-1	Dibromochloromethane	ND	ug/m3	3720	1900	520	
64-17-5	Ethanol	ND	ug/m3	3720	19000	6000	
100-41-4	Ethyl Benzene	ND	ug/m3	3720	1900	560	
75-69-4	Freon 11	ND	ug/m3	3720	1900	600	
76-13-1	Freon 113	280000	ug/m3	3720	1900	600	
76-14-2	Freon 114	ND	ug/m3	3720	1900	630	
75-71-8	Freon 12	ND	ug/m3	3720	1900	670	
306-83-2	Freon 123	ND	ug/m3	3720	1900	890	
354-23-4	Freon 123a	ND	ug/m3	3720	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	3720	1900	860	
142-82-5	Heptane	ND	ug/m3	3720	1900	600	
87-68-3	Hexachlorobutadiene	ND	ug/m3	3720	1900	670	
110-54-3	Hexane	ND	ug/m3	3720	1900	630	
179601-23-	m,p-Xylene	ND	ug/m3	3720	3700	1100	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	3720	1900	560	
75-09-2	Methylene Chloride	700	ug/m3	3720	1900	560	J
95-47-6	o-Xylene	ND	ug/m3	3720	1900	520	
103-65-1	Propylbenzene	ND	ug/m3	3720	1900	560	
100-42-5	Styrene	ND	ug/m3	3720	1900	560	
127-18-4	Tetrachloroethene	ND	ug/m3	3720	1900	520	
109-99-9	Tetrahydrofuran	ND	ug/m3	3720	1900	820	
108-88-3	Toluene	ND	ug/m3	3720	1900	600	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	3720	1900	630	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	3720	1900	600	
79-01-6	Trichloroethene	6700	ug/m3	3720	1900	560	
75-01-4	Vinyl Chloride	ND	ug/m3	3720	1900	710	

Borehole	600-SGW-3	Depth (ft)	12.5	Depth (m)	3.81	Event Date	3/22/2012

Sample	1203220838	Sample Type	Soil Gas	Analysis Method	TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	62.4	31	10	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	62.4	31	10	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	62.4	31	10	
75-34-3	1,1-Dichloroethane	ND	ug/m3	62.4	31	11	
75-35-4	1,1-Dichloroethene	ND	ug/m3	62.4	31	11	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	62.4	31	15	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	62.4	31	10	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	62.4	31	9.4	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	62.4	31	11	
107-06-2	1,2-Dichloroethane	ND	ug/m3	62.4	31	12	
78-87-5	1,2-Dichloropropane	ND	ug/m3	62.4	31	11	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	62.4	31	11	
106-99-0	1,3-Butadiene	ND	ug/m3	62.4	31	13	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	62.4	31	11	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	62.4	31	10	
123-91-1	1,4-Dioxane	ND	ug/m3	62.4	31	11	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	62.4	31	11	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	62.4	310	14	
591-78-6	2-Hexanone	ND	ug/m3	62.4	31	11	
67-63-0	2-Propanol	ND	ug/m3	62.4	62	25	
107-05-1	3-Chloropropene	ND	ug/m3	62.4	31	10	
622-96-8	4-Ethyltoluene	ND	ug/m3	62.4	31	11	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	62.4	31	8.7	
67-64-1	Acetone	ND	ug/m3	62.4	310	55	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	62.4	31	9.4	
71-43-2	Benzene	ND	ug/m3	62.4	31	8.7	
75-27-4	Bromodichloromethane	ND	ug/m3	62.4	31	10	
75-25-2	Bromoform	ND	ug/m3	62.4	31	8.7	
74-83-9	Bromomethane	ND	ug/m3	62.4	31	12	
75-15-0	Carbon Disulfide	ND	ug/m3	62.4	310	9.4	
56-23-5	Carbon Tetrachloride	ND	ug/m3	62.4	31	10	
108-90-7	Chlorobenzene	ND	ug/m3	62.4	31	10	
75-00-3	Chloroethane	ND	ug/m3	62.4	31	12	
67-66-3	Chloroform	29	ug/m3	62.4	31	12	J
74-87-3	Chloromethane	ND	ug/m3	62.4	31	12	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	62.4	31	11	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	62.4	31	8.7	
98-82-8	Cumene	ND	ug/m3	62.4	31	9.4	
110-82-7	Cyclohexane	ND	ug/m3	62.4	62	21	
124-48-1	Dibromochloromethane	ND	ug/m3	62.4	31	8.7	
64-17-5	Ethanol	ND	ug/m3	62.4	310	100	

100-41-4	Ethyl Benzene	ND	ug/m3	62.4	31	9.4	
75-69-4	Freon 11	ND	ug/m3	62.4	31	10	
76-13-1	Freon 113	4400	ug/m3	62.4	31	10	
76-14-2	Freon 114	ND	ug/m3	62.4	31	11	
75-71-8	Freon 12	ND	ug/m3	62.4	31	11	
306-83-2	Freon 123	ND	ug/m3	62.4	31	15	
354-23-4	Freon 123a	1800	ug/m3	62.4	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	62.4	31	14	
142-82-5	Heptane	ND	ug/m3	62.4	31	10	
87-68-3	Hexachlorobutadiene	ND	ug/m3	62.4	31	11	
110-54-3	Hexane	ND	ug/m3	62.4	31	11	
179601-23-	m,p-Xylene	ND	ug/m3	62.4	62	18	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	62.4	31	9.4	
75-09-2	Methylene Chloride	12	ug/m3	62.4	31	9.4	J
95-47-6	o-Xylene	ND	ug/m3	62.4	31	8.7	
103-65-1	Propylbenzene	ND	ug/m3	62.4	31	9.4	
100-42-5	Styrene	ND	ug/m3	62.4	31	9.4	
127-18-4	Tetrachloroethene	ND	ug/m3	62.4	31	8.7	
109-99-9	Tetrahydrofuran	ND	ug/m3	62.4	31	14	
108-88-3	Toluene	ND	ug/m3	62.4	31	10	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	62.4	31	11	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	62.4	31	10	
79-01-6	Trichloroethene	330	ug/m3	62.4	31	9.4	
75-01-4	Vinyl Chloride	ND	ug/m3	62.4	31	12	

Sample 1203221340 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	41.25	21	6.6	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	41.25	21	6.6	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	41.25	21	6.6	
75-34-3	1,1-Dichloroethane	ND	ug/m3	41.25	21	7	
75-35-4	1,1-Dichloroethene	ND	ug/m3	41.25	21	7	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	41.25	21	9.9	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	41.25	21	6.6	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	41.25	21	6.2	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	41.25	21	7	
107-06-2	1,2-Dichloroethane	ND	ug/m3	41.25	21	7.8	
78-87-5	1,2-Dichloropropane	ND	ug/m3	41.25	21	7	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	41.25	21	7	
106-99-0	1,3-Butadiene	ND	ug/m3	41.25	21	8.7	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	41.25	21	7	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	41.25	21	6.6	
123-91-1	1,4-Dioxane	ND	ug/m3	41.25	21	7	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	41.25	21	7	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	41.25	210	9.5	
591-78-6	2-Hexanone	ND	ug/m3	41.25	21	7.4	

67-63-0	2-Propanol	ND	ug/m3	41.25	41	17	
107-05-1	3-Chloropropene	ND	ug/m3	41.25	21	6.6	
622-96-8	4-Ethyltoluene	ND	ug/m3	41.25	21	7	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	41.25	21	5.8	
67-64-1	Acetone	ND	ug/m3	41.25	210	36	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	41.25	21	6.2	
71-43-2	Benzene	ND	ug/m3	41.25	21	5.8	
75-27-4	Bromodichloromethane	ND	ug/m3	41.25	21	6.6	
75-25-2	Bromoform	ND	ug/m3	41.25	21	5.8	
74-83-9	Bromomethane	ND	ug/m3	41.25	21	7.8	
75-15-0	Carbon Disulfide	ND	ug/m3	41.25	210	6.2	
56-23-5	Carbon Tetrachloride	ND	ug/m3	41.25	21	6.6	
108-90-7	Chlorobenzene	ND	ug/m3	41.25	21	6.6	
75-00-3	Chloroethane	ND	ug/m3	41.25	21	7.8	
67-66-3	Chloroform	33	ug/m3	41.25	21	7.8	
74-87-3	Chloromethane	ND	ug/m3	41.25	21	7.8	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	41.25	21	7.4	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	41.25	21	5.8	
98-82-8	Cumene	ND	ug/m3	41.25	21	6.2	
110-82-7	Cyclohexane	ND	ug/m3	41.25	41	14	
124-48-1	Dibromochloromethane	ND	ug/m3	41.25	21	5.8	
64-17-5	Ethanol	ND	ug/m3	41.25	210	66	
100-41-4	Ethyl Benzene	ND	ug/m3	41.25	21	6.2	
75-69-4	Freon 11	9.2	ug/m3	41.25	21	6.6	J
76-13-1	Freon 113	4100	ug/m3	41.25	21	6.6	
76-14-2	Freon 114	ND	ug/m3	41.25	21	7	
75-71-8	Freon 12	ND	ug/m3	41.25	21	7.4	
306-83-2	Freon 123	ND	ug/m3	41.25	21	9.9	
354-23-4	Freon 123a	2100	ug/m3	41.25	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	41.25	21	9.5	
142-82-5	Heptane	ND	ug/m3	41.25	21	6.6	
87-68-3	Hexachlorobutadiene	ND	ug/m3	41.25	21	7.4	
110-54-3	Hexane	ND	ug/m3	41.25	21	7	
179601-23-	m,p-Xylene	ND	ug/m3	41.25	41	12	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	41.25	21	6.2	
75-09-2	Methylene Chloride	7.5	ug/m3	41.25	21	6.2	J
95-47-6	o-Xylene	ND	ug/m3	41.25	21	5.8	
103-65-1	Propylbenzene	ND	ug/m3	41.25	21	6.2	
100-42-5	Styrene	ND	ug/m3	41.25	21	6.2	
127-18-4	Tetrachloroethene	ND	ug/m3	41.25	21	5.8	
109-99-9	Tetrahydrofuran	ND	ug/m3	41.25	21	9.1	
108-88-3	Toluene	ND	ug/m3	41.25	21	6.6	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	41.25	21	7	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	41.25	21	6.6	
79-01-6	Trichloroethene	400	ug/m3	41.25	21	6.2	
75-01-4	Vinyl Chloride	ND	ug/m3	41.25	21	7.8	

Sample **1203221536** **Sample Type** **Soil Gas** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	47.43	24	7.6	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	47.43	24	7.6	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	47.43	24	7.6	
75-34-3	1,1-Dichloroethane	ND	ug/m3	47.43	24	8.1	
75-35-4	1,1-Dichloroethene	ND	ug/m3	47.43	24	8.1	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	47.43	24	11	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	47.43	24	7.6	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	47.43	24	7.1	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	47.43	24	8.1	
107-06-2	1,2-Dichloroethane	ND	ug/m3	47.43	24	9	
78-87-5	1,2-Dichloropropane	ND	ug/m3	47.43	24	8.1	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	47.43	24	8.1	
106-99-0	1,3-Butadiene	ND	ug/m3	47.43	24	10	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	47.43	24	8.1	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	47.43	24	7.6	
123-91-1	1,4-Dioxane	ND	ug/m3	47.43	24	8.1	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	47.43	24	8.1	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	47.43	240	11	
591-78-6	2-Hexanone	ND	ug/m3	47.43	24	8.5	
67-63-0	2-Propanol	ND	ug/m3	47.43	47	19	
107-05-1	3-Chloropropene	ND	ug/m3	47.43	24	7.6	
622-96-8	4-Ethyltoluene	ND	ug/m3	47.43	24	8.1	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	47.43	24	6.6	
67-64-1	Acetone	ND	ug/m3	47.43	240	42	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	47.43	24	7.1	
71-43-2	Benzene	ND	ug/m3	47.43	24	6.6	
75-27-4	Bromodichloromethane	ND	ug/m3	47.43	24	7.6	
75-25-2	Bromoform	ND	ug/m3	47.43	24	6.6	
74-83-9	Bromomethane	ND	ug/m3	47.43	24	9	
75-15-0	Carbon Disulfide	ND	ug/m3	47.43	240	7.1	
56-23-5	Carbon Tetrachloride	ND	ug/m3	47.43	24	7.6	
108-90-7	Chlorobenzene	ND	ug/m3	47.43	24	7.6	
75-00-3	Chloroethane	ND	ug/m3	47.43	24	9	
67-66-3	Chloroform	28	ug/m3	47.43	24	9	
74-87-3	Chloromethane	ND	ug/m3	47.43	24	9	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	47.43	24	8.5	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	47.43	24	6.6	
98-82-8	Cumene	ND	ug/m3	47.43	24	7.1	
110-82-7	Cyclohexane	ND	ug/m3	47.43	47	16	
124-48-1	Dibromochloromethane	ND	ug/m3	47.43	24	6.6	
64-17-5	Ethanol	ND	ug/m3	47.43	240	76	
100-41-4	Ethyl Benzene	ND	ug/m3	47.43	24	7.1	
75-69-4	Freon 11	ND	ug/m3	47.43	24	7.6	

76-13-1	Freon 113	4300	ug/m3	47.43	24	7.6	
76-14-2	Freon 114	ND	ug/m3	47.43	24	8.1	
75-71-8	Freon 12	ND	ug/m3	47.43	24	8.5	
306-83-2	Freon 123	ND	ug/m3	47.43	24	11	
354-23-4	Freon 123a	1800	ug/m3	47.43	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	47.43	24	11	
142-82-5	Heptane	ND	ug/m3	47.43	24	7.6	
87-68-3	Hexachlorobutadiene	ND	ug/m3	47.43	24	8.5	
110-54-3	Hexane	ND	ug/m3	47.43	24	8.1	
179601-23-	m,p-Xylene	ND	ug/m3	47.43	47	14	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	47.43	24	7.1	
75-09-2	Methylene Chloride	9.1	ug/m3	47.43	24	7.1	J
95-47-6	o-Xylene	ND	ug/m3	47.43	24	6.6	
103-65-1	Propylbenzene	ND	ug/m3	47.43	24	7.1	
100-42-5	Styrene	ND	ug/m3	47.43	24	7.1	
127-18-4	Tetrachloroethene	ND	ug/m3	47.43	24	6.6	
109-99-9	Tetrahydrofuran	ND	ug/m3	47.43	24	10	
108-88-3	Toluene	ND	ug/m3	47.43	24	7.6	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	47.43	24	8.1	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	47.43	24	7.6	
79-01-6	Trichloroethene	310	ug/m3	47.43	24	7.1	
75-01-4	Vinyl Chloride	ND	ug/m3	47.43	24	9	

Sample 1203221710 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	33.8	17	5.4	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	33.8	17	5.4	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	33.8	17	5.4	
75-34-3	1,1-Dichloroethane	ND	ug/m3	33.8	17	5.7	
75-35-4	1,1-Dichloroethene	ND	ug/m3	33.8	17	5.7	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	33.8	17	8.1	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	33.8	17	5.4	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	33.8	17	5.1	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	33.8	17	5.7	
107-06-2	1,2-Dichloroethane	ND	ug/m3	33.8	17	6.4	
78-87-5	1,2-Dichloropropane	ND	ug/m3	33.8	17	5.7	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	33.8	17	5.7	
106-99-0	1,3-Butadiene	ND	ug/m3	33.8	17	7.1	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	33.8	17	5.7	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	33.8	17	5.4	
123-91-1	1,4-Dioxane	ND	ug/m3	33.8	17	5.7	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	33.8	17	5.7	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	33.8	170	7.8	
591-78-6	2-Hexanone	ND	ug/m3	33.8	17	6.1	
67-63-0	2-Propanol	ND	ug/m3	33.8	34	14	
107-05-1	3-Chloropropene	ND	ug/m3	33.8	17	5.4	

622-96-8	4-Ethyltoluene	ND	ug/m3	33.8	17	5.7	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	33.8	17	4.7	
67-64-1	Acetone	ND	ug/m3	33.8	170	30	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	33.8	17	5.1	
71-43-2	Benzene	ND	ug/m3	33.8	17	4.7	
75-27-4	Bromodichloromethane	ND	ug/m3	33.8	17	5.4	
75-25-2	Bromoform	ND	ug/m3	33.8	17	4.7	
74-83-9	Bromomethane	ND	ug/m3	33.8	17	6.4	
75-15-0	Carbon Disulfide	ND	ug/m3	33.8	170	5.1	
56-23-5	Carbon Tetrachloride	ND	ug/m3	33.8	17	5.4	
108-90-7	Chlorobenzene	ND	ug/m3	33.8	17	5.4	
75-00-3	Chloroethane	ND	ug/m3	33.8	17	6.4	
67-66-3	Chloroform	27	ug/m3	33.8	17	6.4	
74-87-3	Chloromethane	ND	ug/m3	33.8	17	6.4	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	33.8	17	6.1	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	33.8	17	4.7	
98-82-8	Cumene	ND	ug/m3	33.8	17	5.1	
110-82-7	Cyclohexane	ND	ug/m3	33.8	34	11	
124-48-1	Dibromochloromethane	ND	ug/m3	33.8	17	4.7	
64-17-5	Ethanol	ND	ug/m3	33.8	170	54	
100-41-4	Ethyl Benzene	ND	ug/m3	33.8	17	5.1	
75-69-4	Freon 11	8.2	ug/m3	33.8	17	5.4	J
76-13-1	Freon 113	3800	ug/m3	84.5	42	14	D
76-14-2	Freon 114	ND	ug/m3	33.8	17	5.7	
75-71-8	Freon 12	ND	ug/m3	33.8	17	6.1	
306-83-2	Freon 123	ND	ug/m3	33.8	17	8.1	
354-23-4	Freon 123a	2100	ug/m3	33.8	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	33.8	17	7.8	
142-82-5	Heptane	ND	ug/m3	33.8	17	5.4	
87-68-3	Hexachlorobutadiene	ND	ug/m3	33.8	17	6.1	
110-54-3	Hexane	ND	ug/m3	33.8	17	5.7	
179601-23-	m,p-Xylene	ND	ug/m3	33.8	34	9.8	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	33.8	17	5.1	
75-09-2	Methylene Chloride	6.8	ug/m3	33.8	17	5.1	J
95-47-6	o-Xylene	ND	ug/m3	33.8	17	4.7	
103-65-1	Propylbenzene	ND	ug/m3	33.8	17	5.1	
100-42-5	Styrene	ND	ug/m3	33.8	17	5.1	
127-18-4	Tetrachloroethene	ND	ug/m3	33.8	17	4.7	
109-99-9	Tetrahydrofuran	ND	ug/m3	33.8	17	7.4	
108-88-3	Toluene	ND	ug/m3	33.8	17	5.4	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	33.8	17	5.7	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	33.8	17	5.4	
79-01-6	Trichloroethene	300	ug/m3	33.8	17	5.1	
75-01-4	Vinyl Chloride	ND	ug/m3	33.8	17	6.4	

Sample **1203230945** **Sample Type** **Soil Gas** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	78.5	39	13	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	78.5	39	13	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	78.5	39	13	
75-34-3	1,1-Dichloroethane	ND	ug/m3	78.5	39	13	
75-35-4	1,1-Dichloroethene	ND	ug/m3	78.5	39	13	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	78.5	39	19	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	78.5	39	13	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	78.5	39	12	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	78.5	39	13	
107-06-2	1,2-Dichloroethane	ND	ug/m3	78.5	39	15	
78-87-5	1,2-Dichloropropane	ND	ug/m3	78.5	39	13	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	78.5	39	13	
106-99-0	1,3-Butadiene	ND	ug/m3	78.5	39	16	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	78.5	39	13	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	78.5	39	13	
123-91-1	1,4-Dioxane	ND	ug/m3	78.5	39	13	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	78.5	39	13	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	78.5	390	18	
591-78-6	2-Hexanone	ND	ug/m3	78.5	39	14	
67-63-0	2-Propanol	ND	ug/m3	78.5	79	31	
107-05-1	3-Chloropropene	ND	ug/m3	78.5	39	13	
622-96-8	4-Ethyltoluene	ND	ug/m3	78.5	39	13	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	78.5	39	11	
67-64-1	Acetone	ND	ug/m3	78.5	390	69	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	78.5	39	12	
71-43-2	Benzene	ND	ug/m3	78.5	39	11	
75-27-4	Bromodichloromethane	ND	ug/m3	78.5	39	13	
75-25-2	Bromoform	ND	ug/m3	78.5	39	11	
74-83-9	Bromomethane	ND	ug/m3	78.5	39	15	
75-15-0	Carbon Disulfide	ND	ug/m3	78.5	390	12	
56-23-5	Carbon Tetrachloride	ND	ug/m3	78.5	39	13	
108-90-7	Chlorobenzene	ND	ug/m3	78.5	39	13	
75-00-3	Chloroethane	ND	ug/m3	78.5	39	15	
67-66-3	Chloroform	26	ug/m3	78.5	39	15	J
74-87-3	Chloromethane	ND	ug/m3	78.5	39	15	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	78.5	39	14	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	78.5	39	11	
98-82-8	Cumene	ND	ug/m3	78.5	39	12	
110-82-7	Cyclohexane	ND	ug/m3	78.5	79	26	
124-48-1	Dibromochloromethane	ND	ug/m3	78.5	39	11	
64-17-5	Ethanol	ND	ug/m3	78.5	390	130	
100-41-4	Ethyl Benzene	ND	ug/m3	78.5	39	12	
75-69-4	Freon 11	18	ug/m3	78.5	39	13	J

76-13-1	Freon 113	6900	ug/m3	78.5	39	13	
76-14-2	Freon 114	ND	ug/m3	78.5	39	13	
75-71-8	Freon 12	ND	ug/m3	78.5	39	14	
306-83-2	Freon 123	ND	ug/m3	78.5	39	19	
354-23-4	Freon 123a	3300	ug/m3	78.5	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	78.5	39	18	
142-82-5	Heptane	ND	ug/m3	78.5	39	13	
87-68-3	Hexachlorobutadiene	ND	ug/m3	78.5	39	14	
110-54-3	Hexane	ND	ug/m3	78.5	39	13	
179601-23-	m,p-Xylene	ND	ug/m3	78.5	79	23	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	78.5	39	12	
75-09-2	Methylene Chloride	14	ug/m3	78.5	39	12	J
95-47-6	o-Xylene	ND	ug/m3	78.5	39	11	
103-65-1	Propylbenzene	ND	ug/m3	78.5	39	12	
100-42-5	Styrene	ND	ug/m3	78.5	39	12	
127-18-4	Tetrachloroethene	ND	ug/m3	78.5	39	11	
109-99-9	Tetrahydrofuran	ND	ug/m3	78.5	39	17	
108-88-3	Toluene	ND	ug/m3	78.5	39	13	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	78.5	39	13	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	78.5	39	13	
79-01-6	Trichloroethene	360	ug/m3	78.5	39	12	
75-01-4	Vinyl Chloride	ND	ug/m3	78.5	39	15	

Sample 1203231200 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	27	14	4.3	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	27	14	4.3	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	27	14	4.3	
75-34-3	1,1-Dichloroethane	ND	ug/m3	27	14	4.6	
75-35-4	1,1-Dichloroethene	ND	ug/m3	27	14	4.6	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	27	14	6.5	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	27	14	4.3	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	27	14	4.1	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	27	14	4.6	
107-06-2	1,2-Dichloroethane	ND	ug/m3	27	14	5.1	
78-87-5	1,2-Dichloropropane	ND	ug/m3	27	14	4.6	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	27	14	4.6	
106-99-0	1,3-Butadiene	ND	ug/m3	27	14	5.7	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	27	14	4.6	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	27	14	4.3	
123-91-1	1,4-Dioxane	ND	ug/m3	27	14	4.6	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	27	14	4.6	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	27	140	6.2	
591-78-6	2-Hexanone	ND	ug/m3	27	14	4.9	
67-63-0	2-Propanol	ND	ug/m3	27	27	11	
107-05-1	3-Chloropropene	ND	ug/m3	27	14	4.3	

622-96-8	4-Ethyltoluene	ND	ug/m3	27	14	4.6	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	27	14	3.8	
67-64-1	Acetone	ND	ug/m3	27	140	24	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	27	14	4.1	
71-43-2	Benzene	ND	ug/m3	27	14	3.8	
75-27-4	Bromodichloromethane	ND	ug/m3	27	14	4.3	
75-25-2	Bromoform	ND	ug/m3	27	14	3.8	
74-83-9	Bromomethane	ND	ug/m3	27	14	5.1	
75-15-0	Carbon Disulfide	ND	ug/m3	27	140	4.1	
56-23-5	Carbon Tetrachloride	ND	ug/m3	27	14	4.3	
108-90-7	Chlorobenzene	ND	ug/m3	27	14	4.3	
75-00-3	Chloroethane	ND	ug/m3	27	14	5.1	
67-66-3	Chloroform	23	ug/m3	27	14	5.1	
74-87-3	Chloromethane	ND	ug/m3	27	14	5.1	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	27	14	4.9	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	27	14	3.8	
98-82-8	Cumene	ND	ug/m3	27	14	4.1	
110-82-7	Cyclohexane	ND	ug/m3	27	27	8.9	
124-48-1	Dibromochloromethane	ND	ug/m3	27	14	3.8	
64-17-5	Ethanol	ND	ug/m3	27	140	43	
100-41-4	Ethyl Benzene	ND	ug/m3	27	14	4.1	
75-69-4	Freon 11	5.9	ug/m3	27	14	4.3	J
76-13-1	Freon 113	2300	ug/m3	27	14	4.3	
76-14-2	Freon 114	ND	ug/m3	27	14	4.6	
75-71-8	Freon 12	ND	ug/m3	27	14	4.9	
306-83-2	Freon 123	ND	ug/m3	27	14	6.5	
354-23-4	Freon 123a	2600	ug/m3	27	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	27	14	6.2	
142-82-5	Heptane	ND	ug/m3	27	14	4.3	
87-68-3	Hexachlorobutadiene	ND	ug/m3	27	14	4.9	
110-54-3	Hexane	ND	ug/m3	27	14	4.6	
179601-23-	m,p-Xylene	ND	ug/m3	27	27	7.8	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	27	14	4.1	
75-09-2	Methylene Chloride	5	ug/m3	27	14	4.1	J
95-47-6	o-Xylene	ND	ug/m3	27	14	3.8	
103-65-1	Propylbenzene	ND	ug/m3	27	14	4.1	
100-42-5	Styrene	ND	ug/m3	27	14	4.1	
127-18-4	Tetrachloroethene	ND	ug/m3	27	14	3.8	
109-99-9	Tetrahydrofuran	ND	ug/m3	27	14	5.9	
108-88-3	Toluene	ND	ug/m3	27	14	4.3	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	27	14	4.6	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	27	14	4.3	
79-01-6	Trichloroethene	220	ug/m3	27	14	4.1	
75-01-4	Vinyl Chloride	ND	ug/m3	27	14	5.1	

Sample **1203231756** **Sample Type** **Soil Gas** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	33.4	17	5.3	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	33.4	17	5.3	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	33.4	17	5.3	
75-34-3	1,1-Dichloroethane	ND	ug/m3	33.4	17	5.7	
75-35-4	1,1-Dichloroethene	ND	ug/m3	33.4	17	5.7	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	33.4	17	8	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	33.4	17	5.3	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	33.4	17	5	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	33.4	17	5.7	
107-06-2	1,2-Dichloroethane	ND	ug/m3	33.4	17	6.3	
78-87-5	1,2-Dichloropropane	ND	ug/m3	33.4	17	5.7	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	33.4	17	5.7	
106-99-0	1,3-Butadiene	ND	ug/m3	33.4	17	7	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	33.4	17	5.7	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	33.4	17	5.3	
123-91-1	1,4-Dioxane	ND	ug/m3	33.4	17	5.7	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	33.4	17	5.7	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	33.4	170	7.7	
591-78-6	2-Hexanone	ND	ug/m3	33.4	17	6	
67-63-0	2-Propanol	ND	ug/m3	33.4	33	13	
107-05-1	3-Chloropropene	ND	ug/m3	33.4	17	5.3	
622-96-8	4-Ethyltoluene	ND	ug/m3	33.4	17	5.7	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	33.4	17	4.7	
67-64-1	Acetone	54	ug/m3	33.4	170	29	J
100-44-7	alpha-Chlorotoluene	ND	ug/m3	33.4	17	5	
71-43-2	Benzene	ND	ug/m3	33.4	17	4.7	
75-27-4	Bromodichloromethane	ND	ug/m3	33.4	17	5.3	
75-25-2	Bromoform	ND	ug/m3	33.4	17	4.7	
74-83-9	Bromomethane	ND	ug/m3	33.4	17	6.3	
75-15-0	Carbon Disulfide	7.7	ug/m3	33.4	170	5	J
56-23-5	Carbon Tetrachloride	ND	ug/m3	33.4	17	5.3	
108-90-7	Chlorobenzene	ND	ug/m3	33.4	17	5.3	
75-00-3	Chloroethane	ND	ug/m3	33.4	17	6.3	
67-66-3	Chloroform	24	ug/m3	33.4	17	6.3	
74-87-3	Chloromethane	ND	ug/m3	33.4	17	6.3	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	33.4	17	6	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	33.4	17	4.7	
98-82-8	Cumene	ND	ug/m3	33.4	17	5	
110-82-7	Cyclohexane	ND	ug/m3	33.4	33	11	
124-48-1	Dibromochloromethane	ND	ug/m3	33.4	17	4.7	
64-17-5	Ethanol	ND	ug/m3	33.4	170	53	
100-41-4	Ethyl Benzene	ND	ug/m3	33.4	17	5	
75-69-4	Freon 11	7.3	ug/m3	33.4	17	5.3	J

76-13-1	Freon 113	3000	ug/m3	33.4	17	5.3	
76-14-2	Freon 114	ND	ug/m3	33.4	17	5.7	
75-71-8	Freon 12	ND	ug/m3	33.4	17	6	
306-83-2	Freon 123	ND	ug/m3	33.4	17	8	
354-23-4	Freon 123a	2200	ug/m3	33.4	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	33.4	17	7.7	
142-82-5	Heptane	ND	ug/m3	33.4	17	5.3	
87-68-3	Hexachlorobutadiene	ND	ug/m3	33.4	17	6	
110-54-3	Hexane	ND	ug/m3	33.4	17	5.7	
179601-23-	m,p-Xylene	ND	ug/m3	33.4	33	9.7	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	33.4	17	5	
75-09-2	Methylene Chloride	6	ug/m3	33.4	17	5	J
95-47-6	o-Xylene	ND	ug/m3	33.4	17	4.7	
103-65-1	Propylbenzene	ND	ug/m3	33.4	17	5	
100-42-5	Styrene	ND	ug/m3	33.4	17	5	
127-18-4	Tetrachloroethene	ND	ug/m3	33.4	17	4.7	
109-99-9	Tetrahydrofuran	ND	ug/m3	33.4	17	7.3	
108-88-3	Toluene	ND	ug/m3	33.4	17	5.3	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	33.4	17	5.7	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	33.4	17	5.3	
79-01-6	Trichloroethene	260	ug/m3	33.4	17	5	
75-01-4	Vinyl Chloride	ND	ug/m3	33.4	17	6.3	

Sample 1203241435 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	32.2	16	5.2	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	32.2	16	5.2	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	32.2	16	5.2	
75-34-3	1,1-Dichloroethane	ND	ug/m3	32.2	16	5.5	
75-35-4	1,1-Dichloroethene	ND	ug/m3	32.2	16	5.5	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	32.2	16	7.7	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	32.2	16	5.2	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	32.2	16	4.8	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	32.2	16	5.5	
107-06-2	1,2-Dichloroethane	ND	ug/m3	32.2	16	6.1	
78-87-5	1,2-Dichloropropane	ND	ug/m3	32.2	16	5.5	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	32.2	16	5.5	
106-99-0	1,3-Butadiene	ND	ug/m3	32.2	16	6.8	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	32.2	16	5.5	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	32.2	16	5.2	
123-91-1	1,4-Dioxane	ND	ug/m3	32.2	16	5.5	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	32.2	16	5.5	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	32.2	160	7.4	
591-78-6	2-Hexanone	ND	ug/m3	32.2	16	5.8	
67-63-0	2-Propanol	ND	ug/m3	32.2	32	13	
107-05-1	3-Chloropropene	ND	ug/m3	32.2	16	5.2	

622-96-8	4-Ethyltoluene	ND	ug/m3	32.2	16	5.5	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	32.2	16	4.5	
67-64-1	Acetone	ND	ug/m3	32.2	160	28	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	32.2	16	4.8	
71-43-2	Benzene	ND	ug/m3	32.2	16	4.5	
75-27-4	Bromodichloromethane	ND	ug/m3	32.2	16	5.2	
75-25-2	Bromoform	ND	ug/m3	32.2	16	4.5	
74-83-9	Bromomethane	ND	ug/m3	32.2	16	6.1	
75-15-0	Carbon Disulfide	ND	ug/m3	32.2	160	4.8	
56-23-5	Carbon Tetrachloride	ND	ug/m3	32.2	16	5.2	
108-90-7	Chlorobenzene	ND	ug/m3	32.2	16	5.2	
75-00-3	Chloroethane	ND	ug/m3	32.2	16	6.1	
67-66-3	Chloroform	25	ug/m3	32.2	16	6.1	
74-87-3	Chloromethane	ND	ug/m3	32.2	16	6.1	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	32.2	16	5.8	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	32.2	16	4.5	
98-82-8	Cumene	ND	ug/m3	32.2	16	4.8	
110-82-7	Cyclohexane	ND	ug/m3	32.2	32	11	
124-48-1	Dibromochloromethane	ND	ug/m3	32.2	16	4.5	
64-17-5	Ethanol	ND	ug/m3	32.2	160	52	
100-41-4	Ethyl Benzene	ND	ug/m3	32.2	16	4.8	
75-69-4	Freon 11	7.5	ug/m3	32.2	16	5.2	J
76-13-1	Freon 113	3400	ug/m3	80.5	40	13	D
76-14-2	Freon 114	ND	ug/m3	32.2	16	5.5	
75-71-8	Freon 12	ND	ug/m3	32.2	16	5.8	
306-83-2	Freon 123	ND	ug/m3	32.2	16	7.7	
354-23-4	Freon 123a	2100	ug/m3	32.2	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	32.2	16	7.4	
142-82-5	Heptane	ND	ug/m3	32.2	16	5.2	
87-68-3	Hexachlorobutadiene	ND	ug/m3	32.2	16	5.8	
110-54-3	Hexane	ND	ug/m3	32.2	16	5.5	
179601-23-	m,p-Xylene	ND	ug/m3	32.2	32	9.3	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	32.2	16	4.8	
75-09-2	Methylene Chloride	6.2	ug/m3	32.2	16	4.8	J
95-47-6	o-Xylene	ND	ug/m3	32.2	16	4.5	
103-65-1	Propylbenzene	ND	ug/m3	32.2	16	4.8	
100-42-5	Styrene	ND	ug/m3	32.2	16	4.8	
127-18-4	Tetrachloroethene	ND	ug/m3	32.2	16	4.5	
109-99-9	Tetrahydrofuran	ND	ug/m3	32.2	16	7.1	
108-88-3	Toluene	ND	ug/m3	32.2	16	5.2	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	32.2	16	5.5	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	32.2	16	5.2	
79-01-6	Trichloroethene	290	ug/m3	32.2	16	4.8	
75-01-4	Vinyl Chloride	ND	ug/m3	32.2	16	6.1	

Borehole	600-SGW-3	Depth (ft)	57.5	Depth (m)	17.53	Event Date	3/22/2012

Sample	1203220842	Sample Type	Soil Gas	Analysis Method	TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	104	52	17	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	104	52	17	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	104	52	17	
75-34-3	1,1-Dichloroethane	ND	ug/m3	104	52	18	
75-35-4	1,1-Dichloroethene	ND	ug/m3	104	52	18	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	104	52	25	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	104	52	17	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	104	52	16	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	104	52	18	
107-06-2	1,2-Dichloroethane	ND	ug/m3	104	52	20	
78-87-5	1,2-Dichloropropane	ND	ug/m3	104	52	18	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	104	52	18	
106-99-0	1,3-Butadiene	ND	ug/m3	104	52	22	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	104	52	18	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	104	52	17	
123-91-1	1,4-Dioxane	ND	ug/m3	104	52	18	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	104	52	18	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	104	520	24	
591-78-6	2-Hexanone	ND	ug/m3	104	52	19	
67-63-0	2-Propanol	ND	ug/m3	104	100	42	
107-05-1	3-Chloropropene	ND	ug/m3	104	52	17	
622-96-8	4-Ethyltoluene	ND	ug/m3	104	52	18	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	104	52	15	
67-64-1	Acetone	ND	ug/m3	104	520	92	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	104	52	16	
71-43-2	Benzene	ND	ug/m3	104	52	15	
75-27-4	Bromodichloromethane	ND	ug/m3	104	52	17	
75-25-2	Bromoform	ND	ug/m3	104	52	15	
74-83-9	Bromomethane	ND	ug/m3	104	52	20	
75-15-0	Carbon Disulfide	ND	ug/m3	104	520	16	
56-23-5	Carbon Tetrachloride	ND	ug/m3	104	52	17	
108-90-7	Chlorobenzene	ND	ug/m3	104	52	17	
75-00-3	Chloroethane	ND	ug/m3	104	52	20	
67-66-3	Chloroform	83	ug/m3	104	52	20	
74-87-3	Chloromethane	ND	ug/m3	104	52	20	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	104	52	19	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	104	52	15	
98-82-8	Cumene	ND	ug/m3	104	52	16	
110-82-7	Cyclohexane	ND	ug/m3	104	100	34	
124-48-1	Dibromochloromethane	ND	ug/m3	104	52	15	
64-17-5	Ethanol	ND	ug/m3	104	520	170	

100-41-4	Ethyl Benzene	ND	ug/m3	104	52	16	
75-69-4	Freon 11	ND	ug/m3	104	52	17	
76-13-1	Freon 113	9000	ug/m3	104	52	17	
76-14-2	Freon 114	ND	ug/m3	104	52	18	
75-71-8	Freon 12	ND	ug/m3	104	52	19	
306-83-2	Freon 123	ND	ug/m3	104	52	25	
354-23-4	Freon 123a	880	ug/m3	104	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	104	52	24	
142-82-5	Heptane	ND	ug/m3	104	52	17	
87-68-3	Hexachlorobutadiene	ND	ug/m3	104	52	19	
110-54-3	Hexane	ND	ug/m3	104	52	18	
179601-23-	m,p-Xylene	ND	ug/m3	104	100	30	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	104	52	16	
75-09-2	Methylene Chloride	17	ug/m3	104	52	16	J
95-47-6	o-Xylene	ND	ug/m3	104	52	15	
103-65-1	Propylbenzene	ND	ug/m3	104	52	16	
100-42-5	Styrene	ND	ug/m3	104	52	16	
127-18-4	Tetrachloroethene	ND	ug/m3	104	52	15	
109-99-9	Tetrahydrofuran	ND	ug/m3	104	52	23	
108-88-3	Toluene	ND	ug/m3	104	52	17	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	104	52	18	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	104	52	17	
79-01-6	Trichloroethene	1000	ug/m3	104	52	16	
75-01-4	Vinyl Chloride	ND	ug/m3	104	52	20	

Sample 1203221344 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	110	55	18	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	110	55	18	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	110	55	18	
75-34-3	1,1-Dichloroethane	ND	ug/m3	110	55	19	
75-35-4	1,1-Dichloroethene	ND	ug/m3	110	55	19	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	110	55	26	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	110	55	18	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	110	55	17	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	110	55	19	
107-06-2	1,2-Dichloroethane	ND	ug/m3	110	55	21	
78-87-5	1,2-Dichloropropane	ND	ug/m3	110	55	19	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	110	55	19	
106-99-0	1,3-Butadiene	ND	ug/m3	110	55	23	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	110	55	19	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	110	55	18	
123-91-1	1,4-Dioxane	ND	ug/m3	110	55	19	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	110	55	19	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	110	550	25	
591-78-6	2-Hexanone	ND	ug/m3	110	55	20	

67-63-0	2-Propanol	ND	ug/m3	110	110	44	
107-05-1	3-Chloropropene	ND	ug/m3	110	55	18	
622-96-8	4-Ethyltoluene	ND	ug/m3	110	55	19	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	110	55	15	
67-64-1	Acetone	ND	ug/m3	110	550	97	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	110	55	17	
71-43-2	Benzene	ND	ug/m3	110	55	15	
75-27-4	Bromodichloromethane	ND	ug/m3	110	55	18	
75-25-2	Bromoform	ND	ug/m3	110	55	15	
74-83-9	Bromomethane	ND	ug/m3	110	55	21	
75-15-0	Carbon Disulfide	ND	ug/m3	110	550	17	
56-23-5	Carbon Tetrachloride	ND	ug/m3	110	55	18	
108-90-7	Chlorobenzene	ND	ug/m3	110	55	18	
75-00-3	Chloroethane	ND	ug/m3	110	55	21	
67-66-3	Chloroform	80	ug/m3	110	55	21	
74-87-3	Chloromethane	ND	ug/m3	110	55	21	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	110	55	20	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	110	55	15	
98-82-8	Cumene	ND	ug/m3	110	55	17	
110-82-7	Cyclohexane	ND	ug/m3	110	110	36	
124-48-1	Dibromochloromethane	ND	ug/m3	110	55	15	
64-17-5	Ethanol	ND	ug/m3	110	550	180	
100-41-4	Ethyl Benzene	ND	ug/m3	110	55	17	
75-69-4	Freon 11	ND	ug/m3	110	55	18	
76-13-1	Freon 113	7600	ug/m3	110	55	18	
76-14-2	Freon 114	ND	ug/m3	110	55	19	
75-71-8	Freon 12	ND	ug/m3	110	55	20	
306-83-2	Freon 123	ND	ug/m3	110	55	26	
354-23-4	Freon 123a	910	ug/m3	110	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	110	55	25	
142-82-5	Heptane	ND	ug/m3	110	55	18	
87-68-3	Hexachlorobutadiene	ND	ug/m3	110	55	20	
110-54-3	Hexane	ND	ug/m3	110	55	19	
179601-23-	m,p-Xylene	ND	ug/m3	110	110	32	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	110	55	17	
75-09-2	Methylene Chloride	20	ug/m3	110	55	17	J
95-47-6	o-Xylene	ND	ug/m3	110	55	15	
103-65-1	Propylbenzene	ND	ug/m3	110	55	17	
100-42-5	Styrene	ND	ug/m3	110	55	17	
127-18-4	Tetrachloroethene	ND	ug/m3	110	55	15	
109-99-9	Tetrahydrofuran	ND	ug/m3	110	55	24	
108-88-3	Toluene	ND	ug/m3	110	55	18	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	110	55	19	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	110	55	18	
79-01-6	Trichloroethene	1100	ug/m3	110	55	17	
75-01-4	Vinyl Chloride	ND	ug/m3	110	55	21	

Sample **1203221345** **Sample Type** **Soil Gas-D** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	111.33	56	18	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	111.33	56	18	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	111.33	56	18	
75-34-3	1,1-Dichloroethane	ND	ug/m3	111.33	56	19	
75-35-4	1,1-Dichloroethene	ND	ug/m3	111.33	56	19	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	111.33	56	27	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	111.33	56	18	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	111.33	56	17	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	111.33	56	19	
107-06-2	1,2-Dichloroethane	ND	ug/m3	111.33	56	21	
78-87-5	1,2-Dichloropropane	ND	ug/m3	111.33	56	19	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	111.33	56	19	
106-99-0	1,3-Butadiene	ND	ug/m3	111.33	56	23	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	111.33	56	19	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	111.33	56	18	
123-91-1	1,4-Dioxane	ND	ug/m3	111.33	56	19	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	111.33	56	19	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	111.33	560	26	
591-78-6	2-Hexanone	ND	ug/m3	111.33	56	20	
67-63-0	2-Propanol	ND	ug/m3	111.33	110	45	
107-05-1	3-Chloropropene	ND	ug/m3	111.33	56	18	
622-96-8	4-Ethyltoluene	ND	ug/m3	111.33	56	19	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	111.33	56	16	
67-64-1	Acetone	ND	ug/m3	111.33	560	98	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	111.33	56	17	
71-43-2	Benzene	ND	ug/m3	111.33	56	16	
75-27-4	Bromodichloromethane	ND	ug/m3	111.33	56	18	
75-25-2	Bromoform	ND	ug/m3	111.33	56	16	
74-83-9	Bromomethane	ND	ug/m3	111.33	56	21	
75-15-0	Carbon Disulfide	ND	ug/m3	111.33	560	17	
56-23-5	Carbon Tetrachloride	ND	ug/m3	111.33	56	18	
108-90-7	Chlorobenzene	ND	ug/m3	111.33	56	18	
75-00-3	Chloroethane	ND	ug/m3	111.33	56	21	
67-66-3	Chloroform	94	ug/m3	111.33	56	21	
74-87-3	Chloromethane	ND	ug/m3	111.33	56	21	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	111.33	56	20	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	111.33	56	16	
98-82-8	Cumene	ND	ug/m3	111.33	56	17	
110-82-7	Cyclohexane	ND	ug/m3	111.33	110	37	
124-48-1	Dibromochloromethane	ND	ug/m3	111.33	56	16	
64-17-5	Ethanol	ND	ug/m3	111.33	560	180	
100-41-4	Ethyl Benzene	ND	ug/m3	111.33	56	17	
75-69-4	Freon 11	ND	ug/m3	111.33	56	18	

76-13-1	Freon 113	9000	ug/m3	111.33	56	18	
76-14-2	Freon 114	ND	ug/m3	111.33	56	19	
75-71-8	Freon 12	ND	ug/m3	111.33	56	20	
306-83-2	Freon 123	ND	ug/m3	111.33	56	27	
354-23-4	Freon 123a	1000	ug/m3	111.33	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	111.33	56	26	
142-82-5	Heptane	ND	ug/m3	111.33	56	18	
87-68-3	Hexachlorobutadiene	ND	ug/m3	111.33	56	20	
110-54-3	Hexane	ND	ug/m3	111.33	56	19	
179601-23-	m,p-Xylene	ND	ug/m3	111.33	110	32	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	111.33	56	17	
75-09-2	Methylene Chloride	21	ug/m3	111.33	56	17	J
95-47-6	o-Xylene	ND	ug/m3	111.33	56	16	
103-65-1	Propylbenzene	ND	ug/m3	111.33	56	17	
100-42-5	Styrene	ND	ug/m3	111.33	56	17	
127-18-4	Tetrachloroethene	ND	ug/m3	111.33	56	16	
109-99-9	Tetrahydrofuran	ND	ug/m3	111.33	56	24	
108-88-3	Toluene	ND	ug/m3	111.33	56	18	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	111.33	56	19	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	111.33	56	18	
79-01-6	Trichloroethene	1200	ug/m3	111.33	56	17	
75-01-4	Vinyl Chloride	ND	ug/m3	111.33	56	21	

Sample 1203221540 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	113.33	57	18	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	113.33	57	18	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	113.33	57	18	
75-34-3	1,1-Dichloroethane	ND	ug/m3	113.33	57	19	
75-35-4	1,1-Dichloroethene	ND	ug/m3	113.33	57	19	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	113.33	57	27	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	113.33	57	18	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	113.33	57	17	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	113.33	57	19	
107-06-2	1,2-Dichloroethane	ND	ug/m3	113.33	57	22	
78-87-5	1,2-Dichloropropane	ND	ug/m3	113.33	57	19	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	113.33	57	19	
106-99-0	1,3-Butadiene	ND	ug/m3	113.33	57	24	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	113.33	57	19	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	113.33	57	18	
123-91-1	1,4-Dioxane	ND	ug/m3	113.33	57	19	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	113.33	57	19	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	113.33	570	26	
591-78-6	2-Hexanone	ND	ug/m3	113.33	57	20	
67-63-0	2-Propanol	ND	ug/m3	113.33	110	45	
107-05-1	3-Chloropropene	ND	ug/m3	113.33	57	18	

622-96-8	4-Ethyltoluene	ND	ug/m3	113.33	57	19	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	113.33	57	16	
67-64-1	Acetone	ND	ug/m3	113.33	570	100	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	113.33	57	17	
71-43-2	Benzene	ND	ug/m3	113.33	57	16	
75-27-4	Bromodichloromethane	ND	ug/m3	113.33	57	18	
75-25-2	Bromoform	ND	ug/m3	113.33	57	16	
74-83-9	Bromomethane	ND	ug/m3	113.33	57	22	
75-15-0	Carbon Disulfide	ND	ug/m3	113.33	570	17	
56-23-5	Carbon Tetrachloride	ND	ug/m3	113.33	57	18	
108-90-7	Chlorobenzene	ND	ug/m3	113.33	57	18	
75-00-3	Chloroethane	ND	ug/m3	113.33	57	22	
67-66-3	Chloroform	79	ug/m3	113.33	57	22	
74-87-3	Chloromethane	ND	ug/m3	113.33	57	22	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	113.33	57	20	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	113.33	57	16	
98-82-8	Cumene	ND	ug/m3	113.33	57	17	
110-82-7	Cyclohexane	ND	ug/m3	113.33	110	37	
124-48-1	Dibromochloromethane	ND	ug/m3	113.33	57	16	
64-17-5	Ethanol	ND	ug/m3	113.33	570	180	
100-41-4	Ethyl Benzene	ND	ug/m3	113.33	57	17	
75-69-4	Freon 11	ND	ug/m3	113.33	57	18	
76-13-1	Freon 113	8500	ug/m3	113.33	57	18	
76-14-2	Freon 114	ND	ug/m3	113.33	57	19	
75-71-8	Freon 12	ND	ug/m3	113.33	57	20	
306-83-2	Freon 123	ND	ug/m3	113.33	57	27	
354-23-4	Freon 123a	820	ug/m3	113.33	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	113.33	57	26	
142-82-5	Heptane	ND	ug/m3	113.33	57	18	
87-68-3	Hexachlorobutadiene	ND	ug/m3	113.33	57	20	
110-54-3	Hexane	ND	ug/m3	113.33	57	19	
179601-23-	m,p-Xylene	ND	ug/m3	113.33	110	33	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	113.33	57	17	
75-09-2	Methylene Chloride	22	ug/m3	113.33	57	17	J
95-47-6	o-Xylene	ND	ug/m3	113.33	57	16	
103-65-1	Propylbenzene	ND	ug/m3	113.33	57	17	
100-42-5	Styrene	ND	ug/m3	113.33	57	17	
127-18-4	Tetrachloroethene	ND	ug/m3	113.33	57	16	
109-99-9	Tetrahydrofuran	ND	ug/m3	113.33	57	25	
108-88-3	Toluene	ND	ug/m3	113.33	57	18	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	113.33	57	19	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	113.33	57	18	
79-01-6	Trichloroethene	970	ug/m3	113.33	57	17	
75-01-4	Vinyl Chloride	ND	ug/m3	113.33	57	22	

Sample **1203221714** **Sample Type** **Soil Gas** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	112.67	56	18	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	112.67	56	18	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	112.67	56	18	
75-34-3	1,1-Dichloroethane	ND	ug/m3	112.67	56	19	
75-35-4	1,1-Dichloroethene	ND	ug/m3	112.67	56	19	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	112.67	56	27	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	112.67	56	18	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	112.67	56	17	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	112.67	56	19	
107-06-2	1,2-Dichloroethane	ND	ug/m3	112.67	56	21	
78-87-5	1,2-Dichloropropane	ND	ug/m3	112.67	56	19	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	112.67	56	19	
106-99-0	1,3-Butadiene	ND	ug/m3	112.67	56	24	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	112.67	56	19	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	112.67	56	18	
123-91-1	1,4-Dioxane	ND	ug/m3	112.67	56	19	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	112.67	56	19	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	112.67	560	26	
591-78-6	2-Hexanone	ND	ug/m3	112.67	56	20	
67-63-0	2-Propanol	ND	ug/m3	112.67	110	45	
107-05-1	3-Chloropropene	ND	ug/m3	112.67	56	18	
622-96-8	4-Ethyltoluene	ND	ug/m3	112.67	56	19	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	112.67	56	16	
67-64-1	Acetone	ND	ug/m3	112.67	560	99	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	112.67	56	17	
71-43-2	Benzene	ND	ug/m3	112.67	56	16	
75-27-4	Bromodichloromethane	ND	ug/m3	112.67	56	18	
75-25-2	Bromoform	ND	ug/m3	112.67	56	16	
74-83-9	Bromomethane	ND	ug/m3	112.67	56	21	
75-15-0	Carbon Disulfide	ND	ug/m3	112.67	560	17	
56-23-5	Carbon Tetrachloride	ND	ug/m3	112.67	56	18	
108-90-7	Chlorobenzene	ND	ug/m3	112.67	56	18	
75-00-3	Chloroethane	ND	ug/m3	112.67	56	21	
67-66-3	Chloroform	76	ug/m3	112.67	56	21	
74-87-3	Chloromethane	ND	ug/m3	112.67	56	21	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	112.67	56	20	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	112.67	56	16	
98-82-8	Cumene	ND	ug/m3	112.67	56	17	
110-82-7	Cyclohexane	ND	ug/m3	112.67	110	37	
124-48-1	Dibromochloromethane	ND	ug/m3	112.67	56	16	
64-17-5	Ethanol	ND	ug/m3	112.67	560	180	
100-41-4	Ethyl Benzene	ND	ug/m3	112.67	56	17	
75-69-4	Freon 11	ND	ug/m3	112.67	56	18	

76-13-1	Freon 113	8500	ug/m3	112.67	56	18	
76-14-2	Freon 114	ND	ug/m3	112.67	56	19	
75-71-8	Freon 12	ND	ug/m3	112.67	56	20	
306-83-2	Freon 123	ND	ug/m3	112.67	56	27	
354-23-4	Freon 123a	800	ug/m3	112.67	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	112.67	56	26	
142-82-5	Heptane	ND	ug/m3	112.67	56	18	
87-68-3	Hexachlorobutadiene	ND	ug/m3	112.67	56	20	
110-54-3	Hexane	ND	ug/m3	112.67	56	19	
179601-23-	m,p-Xylene	ND	ug/m3	112.67	110	33	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	112.67	56	17	
75-09-2	Methylene Chloride	22	ug/m3	112.67	56	17	J
95-47-6	o-Xylene	ND	ug/m3	112.67	56	16	
103-65-1	Propylbenzene	ND	ug/m3	112.67	56	17	
100-42-5	Styrene	ND	ug/m3	112.67	56	17	
127-18-4	Tetrachloroethene	ND	ug/m3	112.67	56	16	
109-99-9	Tetrahydrofuran	ND	ug/m3	112.67	56	25	
108-88-3	Toluene	ND	ug/m3	112.67	56	18	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	112.67	56	19	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	112.67	56	18	
79-01-6	Trichloroethene	1000	ug/m3	112.67	56	17	
75-01-4	Vinyl Chloride	ND	ug/m3	112.67	56	21	

Sample 1203230949 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	108	54	17	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	108	54	17	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	108	54	17	
75-34-3	1,1-Dichloroethane	ND	ug/m3	108	54	18	
75-35-4	1,1-Dichloroethene	ND	ug/m3	108	54	18	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	108	54	26	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	108	54	17	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	108	54	16	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	108	54	18	
107-06-2	1,2-Dichloroethane	ND	ug/m3	108	54	21	
78-87-5	1,2-Dichloropropane	ND	ug/m3	108	54	18	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	108	54	18	
106-99-0	1,3-Butadiene	ND	ug/m3	108	54	23	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	108	54	18	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	108	54	17	
123-91-1	1,4-Dioxane	ND	ug/m3	108	54	18	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	108	54	18	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	108	540	25	
591-78-6	2-Hexanone	ND	ug/m3	108	54	19	
67-63-0	2-Propanol	ND	ug/m3	108	110	43	
107-05-1	3-Chloropropene	ND	ug/m3	108	54	17	

622-96-8	4-Ethyltoluene	ND	ug/m3	108	54	18	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	108	54	15	
67-64-1	Acetone	ND	ug/m3	108	540	95	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	108	54	16	
71-43-2	Benzene	ND	ug/m3	108	54	15	
75-27-4	Bromodichloromethane	ND	ug/m3	108	54	17	
75-25-2	Bromoform	ND	ug/m3	108	54	15	
74-83-9	Bromomethane	ND	ug/m3	108	54	21	
75-15-0	Carbon Disulfide	ND	ug/m3	108	540	16	
56-23-5	Carbon Tetrachloride	ND	ug/m3	108	54	17	
108-90-7	Chlorobenzene	ND	ug/m3	108	54	17	
75-00-3	Chloroethane	ND	ug/m3	108	54	21	
67-66-3	Chloroform	96	ug/m3	108	54	21	
74-87-3	Chloromethane	ND	ug/m3	108	54	21	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	108	54	19	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	108	54	15	
98-82-8	Cumene	ND	ug/m3	108	54	16	
110-82-7	Cyclohexane	ND	ug/m3	108	110	36	
124-48-1	Dibromochloromethane	ND	ug/m3	108	54	15	
64-17-5	Ethanol	ND	ug/m3	108	540	170	
100-41-4	Ethyl Benzene	ND	ug/m3	108	54	16	
75-69-4	Freon 11	ND	ug/m3	108	54	17	
76-13-1	Freon 113	8600	ug/m3	108	54	17	
76-14-2	Freon 114	ND	ug/m3	108	54	18	
75-71-8	Freon 12	ND	ug/m3	108	54	19	
306-83-2	Freon 123	ND	ug/m3	108	54	26	
354-23-4	Freon 123a	970	ug/m3	108	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	108	54	25	
142-82-5	Heptane	ND	ug/m3	108	54	17	
87-68-3	Hexachlorobutadiene	ND	ug/m3	108	54	19	
110-54-3	Hexane	ND	ug/m3	108	54	18	
179601-23-	m,p-Xylene	ND	ug/m3	108	110	31	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	108	54	16	
75-09-2	Methylene Chloride	20	ug/m3	108	54	16	J
95-47-6	o-Xylene	ND	ug/m3	108	54	15	
103-65-1	Propylbenzene	ND	ug/m3	108	54	16	
100-42-5	Styrene	ND	ug/m3	108	54	16	
127-18-4	Tetrachloroethene	ND	ug/m3	108	54	15	
109-99-9	Tetrahydrofuran	ND	ug/m3	108	54	24	
108-88-3	Toluene	ND	ug/m3	108	54	17	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	108	54	18	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	108	54	17	
79-01-6	Trichloroethene	1300	ug/m3	108	54	16	
75-01-4	Vinyl Chloride	ND	ug/m3	108	54	21	

Sample **1203231204** **Sample Type** **Soil Gas** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	64.4	32	10	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	64.4	32	10	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	64.4	32	10	
75-34-3	1,1-Dichloroethane	ND	ug/m3	64.4	32	11	
75-35-4	1,1-Dichloroethene	ND	ug/m3	64.4	32	11	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	64.4	32	15	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	64.4	32	10	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	64.4	32	9.7	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	64.4	32	11	
107-06-2	1,2-Dichloroethane	ND	ug/m3	64.4	32	12	
78-87-5	1,2-Dichloropropane	ND	ug/m3	64.4	32	11	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	64.4	32	11	
106-99-0	1,3-Butadiene	ND	ug/m3	64.4	32	14	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	64.4	32	11	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	64.4	32	10	
123-91-1	1,4-Dioxane	ND	ug/m3	64.4	32	11	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	64.4	32	11	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	64.4	320	15	
591-78-6	2-Hexanone	ND	ug/m3	64.4	32	12	
67-63-0	2-Propanol	ND	ug/m3	64.4	64	26	
107-05-1	3-Chloropropene	ND	ug/m3	64.4	32	10	
622-96-8	4-Ethyltoluene	ND	ug/m3	64.4	32	11	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	64.4	32	9	
67-64-1	Acetone	ND	ug/m3	64.4	320	57	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	64.4	32	9.7	
71-43-2	Benzene	ND	ug/m3	64.4	32	9	
75-27-4	Bromodichloromethane	ND	ug/m3	64.4	32	10	
75-25-2	Bromoform	ND	ug/m3	64.4	32	9	
74-83-9	Bromomethane	ND	ug/m3	64.4	32	12	
75-15-0	Carbon Disulfide	ND	ug/m3	64.4	320	9.7	
56-23-5	Carbon Tetrachloride	ND	ug/m3	64.4	32	10	
108-90-7	Chlorobenzene	ND	ug/m3	64.4	32	10	
75-00-3	Chloroethane	ND	ug/m3	64.4	32	12	
67-66-3	Chloroform	71	ug/m3	64.4	32	12	
74-87-3	Chloromethane	ND	ug/m3	64.4	32	12	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	64.4	32	12	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	64.4	32	9	
98-82-8	Cumene	ND	ug/m3	64.4	32	9.7	
110-82-7	Cyclohexane	ND	ug/m3	64.4	64	21	
124-48-1	Dibromochloromethane	ND	ug/m3	64.4	32	9	
64-17-5	Ethanol	ND	ug/m3	64.4	320	100	
100-41-4	Ethyl Benzene	ND	ug/m3	64.4	32	9.7	
75-69-4	Freon 11	ND	ug/m3	64.4	32	10	

76-13-1	Freon 113	6500	ug/m3	64.4	32	10	
76-14-2	Freon 114	ND	ug/m3	64.4	32	11	
75-71-8	Freon 12	ND	ug/m3	64.4	32	12	
306-83-2	Freon 123	ND	ug/m3	64.4	32	15	
354-23-4	Freon 123a	730	ug/m3	64.4	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	64.4	32	15	
142-82-5	Heptane	ND	ug/m3	64.4	32	10	
87-68-3	Hexachlorobutadiene	ND	ug/m3	64.4	32	12	
110-54-3	Hexane	ND	ug/m3	64.4	32	11	
179601-23-	m,p-Xylene	ND	ug/m3	64.4	64	19	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	64.4	32	9.7	
75-09-2	Methylene Chloride	11	ug/m3	64.4	32	9.7	J
95-47-6	o-Xylene	ND	ug/m3	64.4	32	9	
103-65-1	Propylbenzene	ND	ug/m3	64.4	32	9.7	
100-42-5	Styrene	ND	ug/m3	64.4	32	9.7	
127-18-4	Tetrachloroethene	ND	ug/m3	64.4	32	9	
109-99-9	Tetrahydrofuran	ND	ug/m3	64.4	32	14	
108-88-3	Toluene	ND	ug/m3	64.4	32	10	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	64.4	32	11	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	64.4	32	10	
79-01-6	Trichloroethene	880	ug/m3	64.4	32	9.7	
75-01-4	Vinyl Chloride	ND	ug/m3	64.4	32	12	

Sample 1203231800 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	81	41	13	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	81	41	13	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	81	41	13	
75-34-3	1,1-Dichloroethane	ND	ug/m3	81	41	14	
75-35-4	1,1-Dichloroethene	ND	ug/m3	81	41	14	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	81	41	19	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	81	41	13	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	81	41	12	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	81	41	14	
107-06-2	1,2-Dichloroethane	ND	ug/m3	81	41	15	
78-87-5	1,2-Dichloropropane	ND	ug/m3	81	41	14	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	81	41	14	
106-99-0	1,3-Butadiene	ND	ug/m3	81	41	17	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	81	41	14	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	81	41	13	
123-91-1	1,4-Dioxane	ND	ug/m3	81	41	14	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	81	41	14	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	81	410	19	
591-78-6	2-Hexanone	ND	ug/m3	81	41	15	
67-63-0	2-Propanol	ND	ug/m3	81	81	32	
107-05-1	3-Chloropropene	ND	ug/m3	81	41	13	

622-96-8	4-Ethyltoluene	ND	ug/m3	81	41	14	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	81	41	11	
67-64-1	Acetone	160	ug/m3	81	410	71	J
100-44-7	alpha-Chlorotoluene	ND	ug/m3	81	41	12	
71-43-2	Benzene	ND	ug/m3	81	41	11	
75-27-4	Bromodichloromethane	ND	ug/m3	81	41	13	
75-25-2	Bromoform	ND	ug/m3	81	41	11	
74-83-9	Bromomethane	ND	ug/m3	81	41	15	
75-15-0	Carbon Disulfide	ND	ug/m3	81	410	12	
56-23-5	Carbon Tetrachloride	ND	ug/m3	81	41	13	
108-90-7	Chlorobenzene	ND	ug/m3	81	41	13	
75-00-3	Chloroethane	ND	ug/m3	81	41	15	
67-66-3	Chloroform	74	ug/m3	81	41	15	
74-87-3	Chloromethane	ND	ug/m3	81	41	15	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	81	41	15	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	81	41	11	
98-82-8	Cumene	ND	ug/m3	81	41	12	
110-82-7	Cyclohexane	ND	ug/m3	81	81	27	
124-48-1	Dibromochloromethane	ND	ug/m3	81	41	11	
64-17-5	Ethanol	ND	ug/m3	81	410	130	
100-41-4	Ethyl Benzene	ND	ug/m3	81	41	12	
75-69-4	Freon 11	ND	ug/m3	81	41	13	
76-13-1	Freon 113	6800	ug/m3	81	41	13	
76-14-2	Freon 114	ND	ug/m3	81	41	14	
75-71-8	Freon 12	ND	ug/m3	81	41	15	
306-83-2	Freon 123	ND	ug/m3	81	41	19	
354-23-4	Freon 123a	900	ug/m3	81	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	81	41	19	
142-82-5	Heptane	ND	ug/m3	81	41	13	
87-68-3	Hexachlorobutadiene	ND	ug/m3	81	41	15	
110-54-3	Hexane	ND	ug/m3	81	41	14	
179601-23-	m,p-Xylene	ND	ug/m3	81	81	23	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	81	41	12	
75-09-2	Methylene Chloride	15	ug/m3	81	41	12	J
95-47-6	o-Xylene	ND	ug/m3	81	41	11	
103-65-1	Propylbenzene	ND	ug/m3	81	41	12	
100-42-5	Styrene	ND	ug/m3	81	41	12	
127-18-4	Tetrachloroethene	ND	ug/m3	81	41	11	
109-99-9	Tetrahydrofuran	ND	ug/m3	81	41	18	
108-88-3	Toluene	ND	ug/m3	81	41	13	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	81	41	14	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	81	41	13	
79-01-6	Trichloroethene	920	ug/m3	81	41	12	
75-01-4	Vinyl Chloride	ND	ug/m3	81	41	15	

Sample **1203241439** **Sample Type** **Soil Gas** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	66.8	33	11	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	66.8	33	11	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	66.8	33	11	
75-34-3	1,1-Dichloroethane	ND	ug/m3	66.8	33	11	
75-35-4	1,1-Dichloroethene	ND	ug/m3	66.8	33	11	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	66.8	33	16	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	66.8	33	11	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	66.8	33	10	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	66.8	33	11	
107-06-2	1,2-Dichloroethane	ND	ug/m3	66.8	33	13	
78-87-5	1,2-Dichloropropane	ND	ug/m3	66.8	33	11	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	66.8	33	11	
106-99-0	1,3-Butadiene	ND	ug/m3	66.8	33	14	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	66.8	33	11	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	66.8	33	11	
123-91-1	1,4-Dioxane	ND	ug/m3	66.8	33	11	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	66.8	33	11	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	66.8	330	15	
591-78-6	2-Hexanone	ND	ug/m3	66.8	33	12	
67-63-0	2-Propanol	ND	ug/m3	66.8	67	27	
107-05-1	3-Chloropropene	ND	ug/m3	66.8	33	11	
622-96-8	4-Ethyltoluene	ND	ug/m3	66.8	33	11	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	66.8	33	9.4	
67-64-1	Acetone	ND	ug/m3	66.8	330	59	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	66.8	33	10	
71-43-2	Benzene	ND	ug/m3	66.8	33	9.4	
75-27-4	Bromodichloromethane	ND	ug/m3	66.8	33	11	
75-25-2	Bromoform	ND	ug/m3	66.8	33	9.4	
74-83-9	Bromomethane	ND	ug/m3	66.8	33	13	
75-15-0	Carbon Disulfide	ND	ug/m3	66.8	330	10	
56-23-5	Carbon Tetrachloride	ND	ug/m3	66.8	33	11	
108-90-7	Chlorobenzene	ND	ug/m3	66.8	33	11	
75-00-3	Chloroethane	ND	ug/m3	66.8	33	13	
67-66-3	Chloroform	79	ug/m3	66.8	33	13	
74-87-3	Chloromethane	ND	ug/m3	66.8	33	13	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	66.8	33	12	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	66.8	33	9.4	
98-82-8	Cumene	ND	ug/m3	66.8	33	10	
110-82-7	Cyclohexane	ND	ug/m3	66.8	67	22	
124-48-1	Dibromochloromethane	ND	ug/m3	66.8	33	9.4	
64-17-5	Ethanol	ND	ug/m3	66.8	330	110	
100-41-4	Ethyl Benzene	ND	ug/m3	66.8	33	10	
75-69-4	Freon 11	11	ug/m3	66.8	33	11	J

76-13-1	Freon 113	7200	ug/m3	111.33	56	18	D
76-14-2	Freon 114	ND	ug/m3	66.8	33	11	
75-71-8	Freon 12	ND	ug/m3	66.8	33	12	
306-83-2	Freon 123	ND	ug/m3	66.8	33	16	
354-23-4	Freon 123a	790	ug/m3	66.8	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	66.8	33	15	
142-82-5	Heptane	ND	ug/m3	66.8	33	11	
87-68-3	Hexachlorobutadiene	ND	ug/m3	66.8	33	12	
110-54-3	Hexane	ND	ug/m3	66.8	33	11	
179601-23-	m,p-Xylene	ND	ug/m3	66.8	67	19	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	66.8	33	10	
75-09-2	Methylene Chloride	12	ug/m3	66.8	33	10	J
95-47-6	o-Xylene	ND	ug/m3	66.8	33	9.4	
103-65-1	Propylbenzene	ND	ug/m3	66.8	33	10	
100-42-5	Styrene	ND	ug/m3	66.8	33	10	
127-18-4	Tetrachloroethene	ND	ug/m3	66.8	33	9.4	
109-99-9	Tetrahydrofuran	ND	ug/m3	66.8	33	15	
108-88-3	Toluene	ND	ug/m3	66.8	33	11	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	66.8	33	11	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	66.8	33	11	
79-01-6	Trichloroethene	980	ug/m3	66.8	33	10	
75-01-4	Vinyl Chloride	ND	ug/m3	66.8	33	13	

Borehole	600-SGW-3	Depth (ft)	107.5	Depth (m)	32.76	Event Date	3/22/2012

Sample	1203220848	Sample Type	Soil Gas	Analysis Method	TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	107.33	54	17	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	107.33	54	17	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	107.33	54	17	
75-34-3	1,1-Dichloroethane	ND	ug/m3	107.33	54	18	
75-35-4	1,1-Dichloroethene	ND	ug/m3	107.33	54	18	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	107.33	54	26	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	107.33	54	17	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	107.33	54	16	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	107.33	54	18	
107-06-2	1,2-Dichloroethane	ND	ug/m3	107.33	54	20	
78-87-5	1,2-Dichloropropane	ND	ug/m3	107.33	54	18	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	107.33	54	18	
106-99-0	1,3-Butadiene	ND	ug/m3	107.33	54	23	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	107.33	54	18	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	107.33	54	17	
123-91-1	1,4-Dioxane	ND	ug/m3	107.33	54	18	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	107.33	54	18	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	107.33	540	25	
591-78-6	2-Hexanone	ND	ug/m3	107.33	54	19	
67-63-0	2-Propanol	ND	ug/m3	107.33	110	43	
107-05-1	3-Chloropropene	ND	ug/m3	107.33	54	17	
622-96-8	4-Ethyltoluene	ND	ug/m3	107.33	54	18	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	107.33	54	15	
67-64-1	Acetone	ND	ug/m3	107.33	540	94	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	107.33	54	16	
71-43-2	Benzene	ND	ug/m3	107.33	54	15	
75-27-4	Bromodichloromethane	ND	ug/m3	107.33	54	17	
75-25-2	Bromoform	ND	ug/m3	107.33	54	15	
74-83-9	Bromomethane	ND	ug/m3	107.33	54	20	
75-15-0	Carbon Disulfide	ND	ug/m3	107.33	540	16	
56-23-5	Carbon Tetrachloride	ND	ug/m3	107.33	54	17	
108-90-7	Chlorobenzene	ND	ug/m3	107.33	54	17	
75-00-3	Chloroethane	ND	ug/m3	107.33	54	20	
67-66-3	Chloroform	46	ug/m3	107.33	54	20	J
74-87-3	Chloromethane	ND	ug/m3	107.33	54	20	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	107.33	54	19	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	107.33	54	15	
98-82-8	Cumene	ND	ug/m3	107.33	54	16	
110-82-7	Cyclohexane	ND	ug/m3	107.33	110	35	
124-48-1	Dibromochloromethane	ND	ug/m3	107.33	54	15	
64-17-5	Ethanol	ND	ug/m3	107.33	540	170	

100-41-4	Ethyl Benzene	ND	ug/m3	107.33	54	16	
75-69-4	Freon 11	ND	ug/m3	107.33	54	17	
76-13-1	Freon 113	8600	ug/m3	107.33	54	17	
76-14-2	Freon 114	ND	ug/m3	107.33	54	18	
75-71-8	Freon 12	ND	ug/m3	107.33	54	19	
306-83-2	Freon 123	ND	ug/m3	107.33	54	26	
354-23-4	Freon 123a	ND	ug/m3	107.33	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	107.33	54	25	
142-82-5	Heptane	ND	ug/m3	107.33	54	17	
87-68-3	Hexachlorobutadiene	ND	ug/m3	107.33	54	19	
110-54-3	Hexane	ND	ug/m3	107.33	54	18	
179601-23-	m,p-Xylene	ND	ug/m3	107.33	110	31	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	107.33	54	16	
75-09-2	Methylene Chloride	21	ug/m3	107.33	54	16	J
95-47-6	o-Xylene	ND	ug/m3	107.33	54	15	
103-65-1	Propylbenzene	ND	ug/m3	107.33	54	16	
100-42-5	Styrene	ND	ug/m3	107.33	54	16	
127-18-4	Tetrachloroethene	ND	ug/m3	107.33	54	15	
109-99-9	Tetrahydrofuran	ND	ug/m3	107.33	54	24	
108-88-3	Toluene	ND	ug/m3	107.33	54	17	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	107.33	54	18	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	107.33	54	17	
79-01-6	Trichloroethene	830	ug/m3	107.33	54	16	
75-01-4	Vinyl Chloride	ND	ug/m3	107.33	54	20	

Sample 1203221351 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	42	21	6.7	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	42	21	6.7	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	42	21	6.7	
75-34-3	1,1-Dichloroethane	ND	ug/m3	42	21	7.1	
75-35-4	1,1-Dichloroethene	ND	ug/m3	42	21	7.1	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	42	21	10	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	42	21	6.7	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	42	21	6.3	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	42	21	7.1	
107-06-2	1,2-Dichloroethane	ND	ug/m3	42	21	8	
78-87-5	1,2-Dichloropropane	ND	ug/m3	42	21	7.1	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	42	21	7.1	
106-99-0	1,3-Butadiene	ND	ug/m3	42	21	8.8	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	42	21	7.1	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	42	21	6.7	
123-91-1	1,4-Dioxane	ND	ug/m3	42	21	7.1	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	42	21	7.1	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	42	210	9.7	
591-78-6	2-Hexanone	ND	ug/m3	42	21	7.6	

67-63-0	2-Propanol	ND	ug/m3	42	42	17	
107-05-1	3-Chloropropene	ND	ug/m3	42	21	6.7	
622-96-8	4-Ethyltoluene	ND	ug/m3	42	21	7.1	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	42	21	5.9	
67-64-1	Acetone	ND	ug/m3	42	210	37	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	42	21	6.3	
71-43-2	Benzene	ND	ug/m3	42	21	5.9	
75-27-4	Bromodichloromethane	ND	ug/m3	42	21	6.7	
75-25-2	Bromoform	ND	ug/m3	42	21	5.9	
74-83-9	Bromomethane	ND	ug/m3	42	21	8	
75-15-0	Carbon Disulfide	ND	ug/m3	42	210	6.3	
56-23-5	Carbon Tetrachloride	ND	ug/m3	42	21	6.7	
108-90-7	Chlorobenzene	ND	ug/m3	42	21	6.7	
75-00-3	Chloroethane	ND	ug/m3	42	21	8	
67-66-3	Chloroform	ND	ug/m3	42	21	8	
74-87-3	Chloromethane	ND	ug/m3	42	21	8	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	42	21	7.6	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	42	21	5.9	
98-82-8	Cumene	ND	ug/m3	42	21	6.3	
110-82-7	Cyclohexane	ND	ug/m3	42	42	14	
124-48-1	Dibromochloromethane	ND	ug/m3	42	21	5.9	
64-17-5	Ethanol	ND	ug/m3	42	210	67	
100-41-4	Ethyl Benzene	ND	ug/m3	42	21	6.3	
75-69-4	Freon 11	7.9	ug/m3	42	21	6.7	J
76-13-1	Freon 113	3500	ug/m3	42	21	6.7	
76-14-2	Freon 114	ND	ug/m3	42	21	7.1	
75-71-8	Freon 12	ND	ug/m3	42	21	7.6	
306-83-2	Freon 123	ND	ug/m3	42	21	10	
354-23-4	Freon 123a	140	ug/m3	42	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	42	21	9.7	
142-82-5	Heptane	ND	ug/m3	42	21	6.7	
87-68-3	Hexachlorobutadiene	ND	ug/m3	42	21	7.6	
110-54-3	Hexane	ND	ug/m3	42	21	7.1	
179601-23-	m,p-Xylene	ND	ug/m3	42	42	12	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	42	21	6.3	
75-09-2	Methylene Chloride	8.3	ug/m3	42	21	6.3	J
95-47-6	o-Xylene	ND	ug/m3	42	21	5.9	
103-65-1	Propylbenzene	ND	ug/m3	42	21	6.3	
100-42-5	Styrene	ND	ug/m3	42	21	6.3	
127-18-4	Tetrachloroethene	ND	ug/m3	42	21	5.9	
109-99-9	Tetrahydrofuran	ND	ug/m3	42	21	9.2	
108-88-3	Toluene	ND	ug/m3	42	21	6.7	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	42	21	7.1	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	42	21	6.7	
79-01-6	Trichloroethene	ND	ug/m3	42	21	6.3	
75-01-4	Vinyl Chloride	ND	ug/m3	42	21	8	

Sample **1203221546** **Sample Type** **Soil Gas** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	86.5	43	14	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	86.5	43	14	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	86.5	43	14	
75-34-3	1,1-Dichloroethane	ND	ug/m3	86.5	43	15	
75-35-4	1,1-Dichloroethene	ND	ug/m3	86.5	43	15	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	86.5	43	21	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	86.5	43	14	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	86.5	43	13	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	86.5	43	15	
107-06-2	1,2-Dichloroethane	ND	ug/m3	86.5	43	16	
78-87-5	1,2-Dichloropropane	ND	ug/m3	86.5	43	15	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	86.5	43	15	
106-99-0	1,3-Butadiene	ND	ug/m3	86.5	43	18	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	86.5	43	15	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	86.5	43	14	
123-91-1	1,4-Dioxane	ND	ug/m3	86.5	43	15	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	86.5	43	15	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	86.5	430	20	
591-78-6	2-Hexanone	ND	ug/m3	86.5	43	16	
67-63-0	2-Propanol	ND	ug/m3	86.5	87	35	
107-05-1	3-Chloropropene	ND	ug/m3	86.5	43	14	
622-96-8	4-Ethyltoluene	ND	ug/m3	86.5	43	15	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	86.5	43	12	
67-64-1	Acetone	ND	ug/m3	86.5	430	76	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	86.5	43	13	
71-43-2	Benzene	ND	ug/m3	86.5	43	12	
75-27-4	Bromodichloromethane	ND	ug/m3	86.5	43	14	
75-25-2	Bromoform	ND	ug/m3	86.5	43	12	
74-83-9	Bromomethane	ND	ug/m3	86.5	43	16	
75-15-0	Carbon Disulfide	ND	ug/m3	86.5	430	13	
56-23-5	Carbon Tetrachloride	ND	ug/m3	86.5	43	14	
108-90-7	Chlorobenzene	ND	ug/m3	86.5	43	14	
75-00-3	Chloroethane	ND	ug/m3	86.5	43	16	
67-66-3	Chloroform	45	ug/m3	86.5	43	16	
74-87-3	Chloromethane	ND	ug/m3	86.5	43	16	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	86.5	43	16	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	86.5	43	12	
98-82-8	Cumene	ND	ug/m3	86.5	43	13	
110-82-7	Cyclohexane	ND	ug/m3	86.5	87	29	
124-48-1	Dibromochloromethane	ND	ug/m3	86.5	43	12	
64-17-5	Ethanol	ND	ug/m3	86.5	430	140	
100-41-4	Ethyl Benzene	ND	ug/m3	86.5	43	13	
75-69-4	Freon 11	ND	ug/m3	86.5	43	14	

76-13-1	Freon 113	8600	ug/m3	86.5	43	14	
76-14-2	Freon 114	ND	ug/m3	86.5	43	15	
75-71-8	Freon 12	ND	ug/m3	86.5	43	16	
306-83-2	Freon 123	ND	ug/m3	86.5	43	21	
354-23-4	Freon 123a	220	ug/m3	86.5	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	86.5	43	20	
142-82-5	Heptane	ND	ug/m3	86.5	43	14	
87-68-3	Hexachlorobutadiene	ND	ug/m3	86.5	43	16	
110-54-3	Hexane	ND	ug/m3	86.5	43	15	
179601-23-	m,p-Xylene	ND	ug/m3	86.5	87	25	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	86.5	43	13	
75-09-2	Methylene Chloride	16	ug/m3	86.5	43	13	J
95-47-6	o-Xylene	ND	ug/m3	86.5	43	12	
103-65-1	Propylbenzene	ND	ug/m3	86.5	43	13	
100-42-5	Styrene	ND	ug/m3	86.5	43	13	
127-18-4	Tetrachloroethene	220	ug/m3	86.5	43	12	
109-99-9	Tetrahydrofuran	ND	ug/m3	86.5	43	19	
108-88-3	Toluene	ND	ug/m3	86.5	43	14	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	86.5	43	15	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	86.5	43	14	
79-01-6	Trichloroethene	640	ug/m3	86.5	43	13	
75-01-4	Vinyl Chloride	ND	ug/m3	86.5	43	16	

Sample 1203221720 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	85	43	14	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	85	43	14	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	85	43	14	
75-34-3	1,1-Dichloroethane	ND	ug/m3	85	43	14	
75-35-4	1,1-Dichloroethene	ND	ug/m3	85	43	14	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	85	43	20	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	85	43	14	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	85	43	13	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	85	43	14	
107-06-2	1,2-Dichloroethane	ND	ug/m3	85	43	16	
78-87-5	1,2-Dichloropropane	ND	ug/m3	85	43	14	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	85	43	14	
106-99-0	1,3-Butadiene	ND	ug/m3	85	43	18	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	85	43	14	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	85	43	14	
123-91-1	1,4-Dioxane	ND	ug/m3	85	43	14	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	85	43	14	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	85	430	20	
591-78-6	2-Hexanone	ND	ug/m3	85	43	15	
67-63-0	2-Propanol	ND	ug/m3	85	85	34	
107-05-1	3-Chloropropene	ND	ug/m3	85	43	14	

622-96-8	4-Ethyltoluene	ND	ug/m3	85	43	14	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	85	43	12	
67-64-1	Acetone	ND	ug/m3	85	430	75	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	85	43	13	
71-43-2	Benzene	ND	ug/m3	85	43	12	
75-27-4	Bromodichloromethane	ND	ug/m3	85	43	14	
75-25-2	Bromoform	ND	ug/m3	85	43	12	
74-83-9	Bromomethane	ND	ug/m3	85	43	16	
75-15-0	Carbon Disulfide	ND	ug/m3	85	430	13	
56-23-5	Carbon Tetrachloride	ND	ug/m3	85	43	14	
108-90-7	Chlorobenzene	ND	ug/m3	85	43	14	
75-00-3	Chloroethane	ND	ug/m3	85	43	16	
67-66-3	Chloroform	42	ug/m3	85	43	16	J
74-87-3	Chloromethane	ND	ug/m3	85	43	16	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	85	43	15	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	85	43	12	
98-82-8	Cumene	ND	ug/m3	85	43	13	
110-82-7	Cyclohexane	ND	ug/m3	85	85	28	
124-48-1	Dibromochloromethane	ND	ug/m3	85	43	12	
64-17-5	Ethanol	ND	ug/m3	85	430	140	
100-41-4	Ethyl Benzene	ND	ug/m3	85	43	13	
75-69-4	Freon 11	ND	ug/m3	85	43	14	
76-13-1	Freon 113	8300	ug/m3	85	43	14	
76-14-2	Freon 114	ND	ug/m3	85	43	14	
75-71-8	Freon 12	ND	ug/m3	85	43	15	
306-83-2	Freon 123	ND	ug/m3	85	43	20	
354-23-4	Freon 123a	ND	ug/m3	85	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	85	43	20	
142-82-5	Heptane	ND	ug/m3	85	43	14	
87-68-3	Hexachlorobutadiene	ND	ug/m3	85	43	15	
110-54-3	Hexane	ND	ug/m3	85	43	14	
179601-23-	m,p-Xylene	ND	ug/m3	85	85	25	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	85	43	13	
75-09-2	Methylene Chloride	17	ug/m3	85	43	13	J
95-47-6	o-Xylene	ND	ug/m3	85	43	12	
103-65-1	Propylbenzene	ND	ug/m3	85	43	13	
100-42-5	Styrene	ND	ug/m3	85	43	13	
127-18-4	Tetrachloroethene	ND	ug/m3	85	43	12	
109-99-9	Tetrahydrofuran	ND	ug/m3	85	43	19	
108-88-3	Toluene	ND	ug/m3	85	43	14	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	85	43	14	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	85	43	14	
79-01-6	Trichloroethene	790	ug/m3	85	43	13	
75-01-4	Vinyl Chloride	ND	ug/m3	85	43	16	

Sample **1203230955** **Sample Type** **Soil Gas** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	111.33	56	18	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	111.33	56	18	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	111.33	56	18	
75-34-3	1,1-Dichloroethane	ND	ug/m3	111.33	56	19	
75-35-4	1,1-Dichloroethene	ND	ug/m3	111.33	56	19	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	111.33	56	27	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	111.33	56	18	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	111.33	56	17	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	111.33	56	19	
107-06-2	1,2-Dichloroethane	ND	ug/m3	111.33	56	21	
78-87-5	1,2-Dichloropropane	ND	ug/m3	111.33	56	19	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	111.33	56	19	
106-99-0	1,3-Butadiene	ND	ug/m3	111.33	56	23	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	111.33	56	19	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	111.33	56	18	
123-91-1	1,4-Dioxane	ND	ug/m3	111.33	56	19	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	111.33	56	19	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	111.33	560	26	
591-78-6	2-Hexanone	ND	ug/m3	111.33	56	20	
67-63-0	2-Propanol	ND	ug/m3	111.33	110	45	
107-05-1	3-Chloropropene	ND	ug/m3	111.33	56	18	
622-96-8	4-Ethyltoluene	ND	ug/m3	111.33	56	19	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	111.33	56	16	
67-64-1	Acetone	ND	ug/m3	111.33	560	98	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	111.33	56	17	
71-43-2	Benzene	ND	ug/m3	111.33	56	16	
75-27-4	Bromodichloromethane	ND	ug/m3	111.33	56	18	
75-25-2	Bromoform	ND	ug/m3	111.33	56	16	
74-83-9	Bromomethane	ND	ug/m3	111.33	56	21	
75-15-0	Carbon Disulfide	ND	ug/m3	111.33	560	17	
56-23-5	Carbon Tetrachloride	ND	ug/m3	111.33	56	18	
108-90-7	Chlorobenzene	ND	ug/m3	111.33	56	18	
75-00-3	Chloroethane	ND	ug/m3	111.33	56	21	
67-66-3	Chloroform	50	ug/m3	111.33	56	21	J
74-87-3	Chloromethane	ND	ug/m3	111.33	56	21	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	111.33	56	20	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	111.33	56	16	
98-82-8	Cumene	ND	ug/m3	111.33	56	17	
110-82-7	Cyclohexane	ND	ug/m3	111.33	110	37	
124-48-1	Dibromochloromethane	ND	ug/m3	111.33	56	16	
64-17-5	Ethanol	ND	ug/m3	111.33	560	180	
100-41-4	Ethyl Benzene	ND	ug/m3	111.33	56	17	
75-69-4	Freon 11	ND	ug/m3	111.33	56	18	

76-13-1	Freon 113	8400	ug/m3	111.33	56	18	
76-14-2	Freon 114	ND	ug/m3	111.33	56	19	
75-71-8	Freon 12	ND	ug/m3	111.33	56	20	
306-83-2	Freon 123	ND	ug/m3	111.33	56	27	
354-23-4	Freon 123a	ND	ug/m3	111.33	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	111.33	56	26	
142-82-5	Heptane	ND	ug/m3	111.33	56	18	
87-68-3	Hexachlorobutadiene	ND	ug/m3	111.33	56	20	
110-54-3	Hexane	ND	ug/m3	111.33	56	19	
179601-23-	m,p-Xylene	ND	ug/m3	111.33	110	32	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	111.33	56	17	
75-09-2	Methylene Chloride	21	ug/m3	111.33	56	17	J
95-47-6	o-Xylene	ND	ug/m3	111.33	56	16	
103-65-1	Propylbenzene	ND	ug/m3	111.33	56	17	
100-42-5	Styrene	ND	ug/m3	111.33	56	17	
127-18-4	Tetrachloroethene	ND	ug/m3	111.33	56	16	
109-99-9	Tetrahydrofuran	ND	ug/m3	111.33	56	24	
108-88-3	Toluene	ND	ug/m3	111.33	56	18	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	111.33	56	19	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	111.33	56	18	
79-01-6	Trichloroethene	1000	ug/m3	111.33	56	17	
75-01-4	Vinyl Chloride	ND	ug/m3	111.33	56	21	

Sample 1203231806 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	83	42	13	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	83	42	13	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	83	42	13	
75-34-3	1,1-Dichloroethane	ND	ug/m3	83	42	14	
75-35-4	1,1-Dichloroethene	ND	ug/m3	83	42	14	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	83	42	20	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	83	42	13	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	83	42	12	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	83	42	14	
107-06-2	1,2-Dichloroethane	ND	ug/m3	83	42	16	
78-87-5	1,2-Dichloropropane	ND	ug/m3	83	42	14	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	83	42	14	
106-99-0	1,3-Butadiene	ND	ug/m3	83	42	17	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	83	42	14	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	83	42	13	
123-91-1	1,4-Dioxane	ND	ug/m3	83	42	14	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	83	42	14	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	83	420	19	
591-78-6	2-Hexanone	ND	ug/m3	83	42	15	
67-63-0	2-Propanol	ND	ug/m3	83	83	33	
107-05-1	3-Chloropropene	ND	ug/m3	83	42	13	

622-96-8	4-Ethyltoluene	ND	ug/m3	83	42	14	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	83	42	12	
67-64-1	Acetone	ND	ug/m3	83	420	73	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	83	42	12	
71-43-2	Benzene	ND	ug/m3	83	42	12	
75-27-4	Bromodichloromethane	ND	ug/m3	83	42	13	
75-25-2	Bromoform	ND	ug/m3	83	42	12	
74-83-9	Bromomethane	ND	ug/m3	83	42	16	
75-15-0	Carbon Disulfide	ND	ug/m3	83	420	12	
56-23-5	Carbon Tetrachloride	ND	ug/m3	83	42	13	
108-90-7	Chlorobenzene	ND	ug/m3	83	42	13	
75-00-3	Chloroethane	ND	ug/m3	83	42	16	
67-66-3	Chloroform	41	ug/m3	83	42	16	J
74-87-3	Chloromethane	ND	ug/m3	83	42	16	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	83	42	15	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	83	42	12	
98-82-8	Cumene	ND	ug/m3	83	42	12	
110-82-7	Cyclohexane	ND	ug/m3	83	83	27	
124-48-1	Dibromochloromethane	ND	ug/m3	83	42	12	
64-17-5	Ethanol	ND	ug/m3	83	420	130	
100-41-4	Ethyl Benzene	ND	ug/m3	83	42	12	
75-69-4	Freon 11	ND	ug/m3	83	42	13	
76-13-1	Freon 113	6600	ug/m3	83	42	13	
76-14-2	Freon 114	ND	ug/m3	83	42	14	
75-71-8	Freon 12	ND	ug/m3	83	42	15	
306-83-2	Freon 123	ND	ug/m3	83	42	20	
354-23-4	Freon 123a	ND	ug/m3	83	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	83	42	19	
142-82-5	Heptane	ND	ug/m3	83	42	13	
87-68-3	Hexachlorobutadiene	ND	ug/m3	83	42	15	
110-54-3	Hexane	ND	ug/m3	83	42	14	
179601-23-	m,p-Xylene	ND	ug/m3	83	83	24	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	83	42	12	
75-09-2	Methylene Chloride	14	ug/m3	83	42	12	J
95-47-6	o-Xylene	ND	ug/m3	83	42	12	
103-65-1	Propylbenzene	ND	ug/m3	83	42	12	
100-42-5	Styrene	ND	ug/m3	83	42	12	
127-18-4	Tetrachloroethene	ND	ug/m3	83	42	12	
109-99-9	Tetrahydrofuran	ND	ug/m3	83	42	18	
108-88-3	Toluene	ND	ug/m3	83	42	13	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	83	42	14	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	83	42	13	
79-01-6	Trichloroethene	750	ug/m3	83	42	12	
75-01-4	Vinyl Chloride	ND	ug/m3	83	42	16	

Sample **1203241445** **Sample Type** **Soil Gas** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	70.8	35	11	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	70.8	35	11	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	70.8	35	11	
75-34-3	1,1-Dichloroethane	ND	ug/m3	70.8	35	12	
75-35-4	1,1-Dichloroethene	ND	ug/m3	70.8	35	12	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	70.8	35	17	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	70.8	35	11	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	70.8	35	11	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	70.8	35	12	
107-06-2	1,2-Dichloroethane	ND	ug/m3	70.8	35	13	
78-87-5	1,2-Dichloropropane	ND	ug/m3	70.8	35	12	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	70.8	35	12	
106-99-0	1,3-Butadiene	ND	ug/m3	70.8	35	15	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	70.8	35	12	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	70.8	35	11	
123-91-1	1,4-Dioxane	ND	ug/m3	70.8	35	12	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	70.8	35	12	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	70.8	350	16	
591-78-6	2-Hexanone	ND	ug/m3	70.8	35	13	
67-63-0	2-Propanol	ND	ug/m3	70.8	71	28	
107-05-1	3-Chloropropene	ND	ug/m3	70.8	35	11	
622-96-8	4-Ethyltoluene	ND	ug/m3	70.8	35	12	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	70.8	35	9.9	
67-64-1	Acetone	ND	ug/m3	70.8	350	62	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	70.8	35	11	
71-43-2	Benzene	ND	ug/m3	70.8	35	9.9	
75-27-4	Bromodichloromethane	ND	ug/m3	70.8	35	11	
75-25-2	Bromoform	ND	ug/m3	70.8	35	9.9	
74-83-9	Bromomethane	ND	ug/m3	70.8	35	13	
75-15-0	Carbon Disulfide	ND	ug/m3	70.8	350	11	
56-23-5	Carbon Tetrachloride	ND	ug/m3	70.8	35	11	
108-90-7	Chlorobenzene	ND	ug/m3	70.8	35	11	
75-00-3	Chloroethane	ND	ug/m3	70.8	35	13	
67-66-3	Chloroform	45	ug/m3	70.8	35	13	
74-87-3	Chloromethane	ND	ug/m3	70.8	35	13	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	70.8	35	13	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	70.8	35	9.9	
98-82-8	Cumene	ND	ug/m3	70.8	35	11	
110-82-7	Cyclohexane	ND	ug/m3	70.8	71	23	
124-48-1	Dibromochloromethane	ND	ug/m3	70.8	35	9.9	
64-17-5	Ethanol	ND	ug/m3	70.8	350	110	
100-41-4	Ethyl Benzene	ND	ug/m3	70.8	35	11	
75-69-4	Freon 11	ND	ug/m3	70.8	35	11	

76-13-1	Freon 113	7500	ug/m3	118	59	19	D
76-14-2	Freon 114	ND	ug/m3	70.8	35	12	
75-71-8	Freon 12	ND	ug/m3	70.8	35	13	
306-83-2	Freon 123	ND	ug/m3	70.8	35	17	
354-23-4	Freon 123a	210	ug/m3	70.8	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	70.8	35	16	
142-82-5	Heptane	ND	ug/m3	70.8	35	11	
87-68-3	Hexachlorobutadiene	ND	ug/m3	70.8	35	13	
110-54-3	Hexane	ND	ug/m3	70.8	35	12	
179601-23-	m,p-Xylene	ND	ug/m3	70.8	71	21	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	70.8	35	11	
75-09-2	Methylene Chloride	13	ug/m3	70.8	35	11	J
95-47-6	o-Xylene	ND	ug/m3	70.8	35	9.9	
103-65-1	Propylbenzene	ND	ug/m3	70.8	35	11	
100-42-5	Styrene	ND	ug/m3	70.8	35	11	
127-18-4	Tetrachloroethene	ND	ug/m3	70.8	35	9.9	
109-99-9	Tetrahydrofuran	ND	ug/m3	70.8	35	16	
108-88-3	Toluene	ND	ug/m3	70.8	35	11	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	70.8	35	12	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	70.8	35	11	
79-01-6	Trichloroethene	820	ug/m3	70.8	35	11	
75-01-4	Vinyl Chloride	ND	ug/m3	70.8	35	13	

Borehole	600-SGW-3	Depth (ft)	137.5	Depth (m)	41.91	Event Date	3/22/2012

Sample	1203220856	Sample Type	Soil Gas	Analysis Method	TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	3200	1600	510	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	3200	1600	510	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	3200	1600	510	
75-34-3	1,1-Dichloroethane	ND	ug/m3	3200	1600	540	
75-35-4	1,1-Dichloroethene	ND	ug/m3	3200	1600	540	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	3200	1600	770	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	3200	1600	510	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	3200	1600	480	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	3200	1600	540	
107-06-2	1,2-Dichloroethane	ND	ug/m3	3200	1600	610	
78-87-5	1,2-Dichloropropane	ND	ug/m3	3200	1600	540	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	3200	1600	540	
106-99-0	1,3-Butadiene	ND	ug/m3	3200	1600	670	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	3200	1600	540	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	3200	1600	510	
123-91-1	1,4-Dioxane	ND	ug/m3	3200	1600	540	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	3200	1600	540	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	3200	16000	740	
591-78-6	2-Hexanone	ND	ug/m3	3200	1600	580	
67-63-0	2-Propanol	ND	ug/m3	3200	3200	1300	
107-05-1	3-Chloropropene	ND	ug/m3	3200	1600	510	
622-96-8	4-Ethyltoluene	ND	ug/m3	3200	1600	540	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	3200	1600	450	
67-64-1	Acetone	ND	ug/m3	3200	16000	2800	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	3200	1600	480	
71-43-2	Benzene	ND	ug/m3	3200	1600	450	
75-27-4	Bromodichloromethane	ND	ug/m3	3200	1600	510	
75-25-2	Bromoform	ND	ug/m3	3200	1600	450	
74-83-9	Bromomethane	ND	ug/m3	3200	1600	610	
75-15-0	Carbon Disulfide	ND	ug/m3	3200	16000	480	
56-23-5	Carbon Tetrachloride	ND	ug/m3	3200	1600	510	
108-90-7	Chlorobenzene	ND	ug/m3	3200	1600	510	
75-00-3	Chloroethane	ND	ug/m3	3200	1600	610	
67-66-3	Chloroform	ND	ug/m3	3200	1600	610	
74-87-3	Chloromethane	ND	ug/m3	3200	1600	610	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	3200	1600	580	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	3200	1600	450	
98-82-8	Cumene	ND	ug/m3	3200	1600	480	
110-82-7	Cyclohexane	ND	ug/m3	3200	3200	1100	
124-48-1	Dibromochloromethane	ND	ug/m3	3200	1600	450	
64-17-5	Ethanol	ND	ug/m3	3200	16000	5100	

100-41-4	Ethyl Benzene	ND	ug/m3	3200	1600	480	
75-69-4	Freon 11	1200	ug/m3	3200	1600	510	J
76-13-1	Freon 113	330000	ug/m3	3200	1600	510	
76-14-2	Freon 114	ND	ug/m3	3200	1600	540	
75-71-8	Freon 12	ND	ug/m3	3200	1600	580	
306-83-2	Freon 123	ND	ug/m3	3200	1600	770	
354-23-4	Freon 123a	ND	ug/m3	3200	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	3200	1600	740	
142-82-5	Heptane	ND	ug/m3	3200	1600	510	
87-68-3	Hexachlorobutadiene	ND	ug/m3	3200	1600	580	
110-54-3	Hexane	ND	ug/m3	3200	1600	540	
179601-23-	m,p-Xylene	ND	ug/m3	3200	3200	930	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	3200	1600	480	
75-09-2	Methylene Chloride	550	ug/m3	3200	1600	480	J
95-47-6	o-Xylene	ND	ug/m3	3200	1600	450	
103-65-1	Propylbenzene	ND	ug/m3	3200	1600	480	
100-42-5	Styrene	ND	ug/m3	3200	1600	480	
127-18-4	Tetrachloroethene	ND	ug/m3	3200	1600	450	
109-99-9	Tetrahydrofuran	ND	ug/m3	3200	1600	700	
108-88-3	Toluene	ND	ug/m3	3200	1600	510	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	3200	1600	540	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	3200	1600	510	
79-01-6	Trichloroethene	2900	ug/m3	3200	1600	480	
75-01-4	Vinyl Chloride	ND	ug/m3	3200	1600	610	

Sample 1203221359 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	2716.67	1400	430	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	2716.67	1400	430	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	2716.67	1400	430	
75-34-3	1,1-Dichloroethane	ND	ug/m3	2716.67	1400	460	
75-35-4	1,1-Dichloroethene	ND	ug/m3	2716.67	1400	460	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	2716.67	1400	650	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	2716.67	1400	430	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	2716.67	1400	410	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	2716.67	1400	460	
107-06-2	1,2-Dichloroethane	ND	ug/m3	2716.67	1400	520	
78-87-5	1,2-Dichloropropane	ND	ug/m3	2716.67	1400	460	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	2716.67	1400	460	
106-99-0	1,3-Butadiene	ND	ug/m3	2716.67	1400	570	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	2716.67	1400	460	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	2716.67	1400	430	
123-91-1	1,4-Dioxane	ND	ug/m3	2716.67	1400	460	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	2716.67	1400	460	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	2716.67	14000	620	
591-78-6	2-Hexanone	ND	ug/m3	2716.67	1400	490	

67-63-0	2-Propanol	ND	ug/m3	2716.67	2700	1100	
107-05-1	3-Chloropropene	ND	ug/m3	2716.67	1400	430	
622-96-8	4-Ethyltoluene	ND	ug/m3	2716.67	1400	460	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	2716.67	1400	380	
67-64-1	Acetone	ND	ug/m3	2716.67	14000	2400	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	2716.67	1400	410	
71-43-2	Benzene	ND	ug/m3	2716.67	1400	380	
75-27-4	Bromodichloromethane	ND	ug/m3	2716.67	1400	430	
75-25-2	Bromoform	ND	ug/m3	2716.67	1400	380	
74-83-9	Bromomethane	ND	ug/m3	2716.67	1400	520	
75-15-0	Carbon Disulfide	ND	ug/m3	2716.67	14000	410	
56-23-5	Carbon Tetrachloride	ND	ug/m3	2716.67	1400	430	
108-90-7	Chlorobenzene	ND	ug/m3	2716.67	1400	430	
75-00-3	Chloroethane	ND	ug/m3	2716.67	1400	520	
67-66-3	Chloroform	ND	ug/m3	2716.67	1400	520	
74-87-3	Chloromethane	ND	ug/m3	2716.67	1400	520	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	2716.67	1400	490	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	2716.67	1400	380	
98-82-8	Cumene	ND	ug/m3	2716.67	1400	410	
110-82-7	Cyclohexane	ND	ug/m3	2716.67	2700	900	
124-48-1	Dibromochloromethane	ND	ug/m3	2716.67	1400	380	
64-17-5	Ethanol	ND	ug/m3	2716.67	14000	4300	
100-41-4	Ethyl Benzene	ND	ug/m3	2716.67	1400	410	
75-69-4	Freon 11	990	ug/m3	2716.67	1400	430	J
76-13-1	Freon 113	230000	ug/m3	2716.67	1400	430	
76-14-2	Freon 114	ND	ug/m3	2716.67	1400	460	
75-71-8	Freon 12	ND	ug/m3	2716.67	1400	490	
306-83-2	Freon 123	ND	ug/m3	2716.67	1400	650	
354-23-4	Freon 123a	ND	ug/m3	2716.67	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	2716.67	1400	620	
142-82-5	Heptane	ND	ug/m3	2716.67	1400	430	
87-68-3	Hexachlorobutadiene	ND	ug/m3	2716.67	1400	490	
110-54-3	Hexane	ND	ug/m3	2716.67	1400	460	
179601-23-	m,p-Xylene	ND	ug/m3	2716.67	2700	790	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	2716.67	1400	410	
75-09-2	Methylene Chloride	520	ug/m3	2716.67	1400	410	J
95-47-6	o-Xylene	ND	ug/m3	2716.67	1400	380	
103-65-1	Propylbenzene	ND	ug/m3	2716.67	1400	410	
100-42-5	Styrene	ND	ug/m3	2716.67	1400	410	
127-18-4	Tetrachloroethene	ND	ug/m3	2716.67	1400	380	
109-99-9	Tetrahydrofuran	ND	ug/m3	2716.67	1400	600	
108-88-3	Toluene	ND	ug/m3	2716.67	1400	430	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	2716.67	1400	460	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	2716.67	1400	430	
79-01-6	Trichloroethene	2600	ug/m3	2716.67	1400	410	
75-01-4	Vinyl Chloride	ND	ug/m3	2716.67	1400	520	

Sample **1203221554** **Sample Type** **Soil Gas** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	530	270	85	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	530	270	85	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	530	270	85	
75-34-3	1,1-Dichloroethane	ND	ug/m3	530	270	90	
75-35-4	1,1-Dichloroethene	ND	ug/m3	530	270	90	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	530	270	130	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	530	270	85	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	530	270	80	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	530	270	90	
107-06-2	1,2-Dichloroethane	ND	ug/m3	530	270	100	
78-87-5	1,2-Dichloropropane	ND	ug/m3	530	270	90	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	530	270	90	
106-99-0	1,3-Butadiene	ND	ug/m3	530	270	110	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	530	270	90	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	530	270	85	
123-91-1	1,4-Dioxane	ND	ug/m3	530	270	90	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	530	270	90	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	530	2700	120	
591-78-6	2-Hexanone	ND	ug/m3	530	270	95	
67-63-0	2-Propanol	ND	ug/m3	530	530	210	
107-05-1	3-Chloropropene	ND	ug/m3	530	270	85	
622-96-8	4-Ethyltoluene	ND	ug/m3	530	270	90	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	530	270	74	
67-64-1	Acetone	ND	ug/m3	530	2700	470	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	530	270	80	
71-43-2	Benzene	ND	ug/m3	530	270	74	
75-27-4	Bromodichloromethane	ND	ug/m3	530	270	85	
75-25-2	Bromoform	ND	ug/m3	530	270	74	
74-83-9	Bromomethane	ND	ug/m3	530	270	100	
75-15-0	Carbon Disulfide	ND	ug/m3	530	2700	80	
56-23-5	Carbon Tetrachloride	ND	ug/m3	530	270	85	
108-90-7	Chlorobenzene	ND	ug/m3	530	270	85	
75-00-3	Chloroethane	ND	ug/m3	530	270	100	
67-66-3	Chloroform	ND	ug/m3	530	270	100	
74-87-3	Chloromethane	ND	ug/m3	530	270	100	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	530	270	95	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	530	270	74	
98-82-8	Cumene	ND	ug/m3	530	270	80	
110-82-7	Cyclohexane	ND	ug/m3	530	530	170	
124-48-1	Dibromochloromethane	ND	ug/m3	530	270	74	
64-17-5	Ethanol	ND	ug/m3	530	2700	850	
100-41-4	Ethyl Benzene	ND	ug/m3	530	270	80	
75-69-4	Freon 11	210	ug/m3	530	270	85	J

76-13-1	Freon 113	51000	ug/m3	1590	800	250	D
76-14-2	Freon 114	ND	ug/m3	530	270	90	
75-71-8	Freon 12	ND	ug/m3	530	270	95	
306-83-2	Freon 123	ND	ug/m3	530	270	130	
354-23-4	Freon 123a	ND	ug/m3	530	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	530	270	120	
142-82-5	Heptane	ND	ug/m3	530	270	85	
87-68-3	Hexachlorobutadiene	ND	ug/m3	530	270	95	
110-54-3	Hexane	ND	ug/m3	530	270	90	
179601-23-	m,p-Xylene	ND	ug/m3	530	530	150	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	530	270	80	
75-09-2	Methylene Chloride	93	ug/m3	530	270	80	J
95-47-6	o-Xylene	ND	ug/m3	530	270	74	
103-65-1	Propylbenzene	ND	ug/m3	530	270	80	
100-42-5	Styrene	ND	ug/m3	530	270	80	
127-18-4	Tetrachloroethene	ND	ug/m3	530	270	74	
109-99-9	Tetrahydrofuran	ND	ug/m3	530	270	120	
108-88-3	Toluene	ND	ug/m3	530	270	85	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	530	270	90	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	530	270	85	
79-01-6	Trichloroethene	530	ug/m3	530	270	80	
75-01-4	Vinyl Chloride	ND	ug/m3	530	270	100	

Sample 1203221728 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	3360	1700	540	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	3360	1700	540	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	3360	1700	540	
75-34-3	1,1-Dichloroethane	ND	ug/m3	3360	1700	570	
75-35-4	1,1-Dichloroethene	ND	ug/m3	3360	1700	570	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	3360	1700	810	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	3360	1700	540	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	3360	1700	500	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	3360	1700	570	
107-06-2	1,2-Dichloroethane	ND	ug/m3	3360	1700	640	
78-87-5	1,2-Dichloropropane	ND	ug/m3	3360	1700	570	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	3360	1700	570	
106-99-0	1,3-Butadiene	ND	ug/m3	3360	1700	710	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	3360	1700	570	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	3360	1700	540	
123-91-1	1,4-Dioxane	ND	ug/m3	3360	1700	570	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	3360	1700	570	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	3360	17000	770	
591-78-6	2-Hexanone	ND	ug/m3	3360	1700	600	
67-63-0	2-Propanol	ND	ug/m3	3360	3400	1300	
107-05-1	3-Chloropropene	ND	ug/m3	3360	1700	540	

622-96-8	4-Ethyltoluene	ND	ug/m3	3360	1700	570	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	3360	1700	470	
67-64-1	Acetone	ND	ug/m3	3360	17000	3000	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	3360	1700	500	
71-43-2	Benzene	ND	ug/m3	3360	1700	470	
75-27-4	Bromodichloromethane	ND	ug/m3	3360	1700	540	
75-25-2	Bromoform	ND	ug/m3	3360	1700	470	
74-83-9	Bromomethane	ND	ug/m3	3360	1700	640	
75-15-0	Carbon Disulfide	ND	ug/m3	3360	17000	500	
56-23-5	Carbon Tetrachloride	ND	ug/m3	3360	1700	540	
108-90-7	Chlorobenzene	ND	ug/m3	3360	1700	540	
75-00-3	Chloroethane	ND	ug/m3	3360	1700	640	
67-66-3	Chloroform	ND	ug/m3	3360	1700	640	
74-87-3	Chloromethane	ND	ug/m3	3360	1700	640	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	3360	1700	600	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	3360	1700	470	
98-82-8	Cumene	ND	ug/m3	3360	1700	500	
110-82-7	Cyclohexane	ND	ug/m3	3360	3400	1100	
124-48-1	Dibromochloromethane	ND	ug/m3	3360	1700	470	
64-17-5	Ethanol	ND	ug/m3	3360	17000	5400	
100-41-4	Ethyl Benzene	ND	ug/m3	3360	1700	500	
75-69-4	Freon 11	1100	ug/m3	3360	1700	540	J
76-13-1	Freon 113	310000	ug/m3	3360	1700	540	
76-14-2	Freon 114	ND	ug/m3	3360	1700	570	
75-71-8	Freon 12	ND	ug/m3	3360	1700	600	
306-83-2	Freon 123	ND	ug/m3	3360	1700	810	
354-23-4	Freon 123a	ND	ug/m3	3360	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	3360	1700	770	
142-82-5	Heptane	ND	ug/m3	3360	1700	540	
87-68-3	Hexachlorobutadiene	ND	ug/m3	3360	1700	600	
110-54-3	Hexane	ND	ug/m3	3360	1700	570	
179601-23-	m,p-Xylene	ND	ug/m3	3360	3400	970	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	3360	1700	500	
75-09-2	Methylene Chloride	570	ug/m3	3360	1700	500	J
95-47-6	o-Xylene	ND	ug/m3	3360	1700	470	
103-65-1	Propylbenzene	ND	ug/m3	3360	1700	500	
100-42-5	Styrene	ND	ug/m3	3360	1700	500	
127-18-4	Tetrachloroethene	ND	ug/m3	3360	1700	470	
109-99-9	Tetrahydrofuran	ND	ug/m3	3360	1700	740	
108-88-3	Toluene	ND	ug/m3	3360	1700	540	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	3360	1700	570	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	3360	1700	540	
79-01-6	Trichloroethene	2700	ug/m3	3360	1700	500	
75-01-4	Vinyl Chloride	ND	ug/m3	3360	1700	640	

Sample **1203231003** **Sample Type** **Soil Gas** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	2342.86	1200	370	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	2342.86	1200	370	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	2342.86	1200	370	
75-34-3	1,1-Dichloroethane	ND	ug/m3	2342.86	1200	400	
75-35-4	1,1-Dichloroethene	ND	ug/m3	2342.86	1200	400	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	2342.86	1200	560	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	2342.86	1200	370	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	2342.86	1200	350	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	2342.86	1200	400	
107-06-2	1,2-Dichloroethane	ND	ug/m3	2342.86	1200	450	
78-87-5	1,2-Dichloropropane	ND	ug/m3	2342.86	1200	400	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	2342.86	1200	400	
106-99-0	1,3-Butadiene	ND	ug/m3	2342.86	1200	490	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	2342.86	1200	400	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	2342.86	1200	370	
123-91-1	1,4-Dioxane	ND	ug/m3	2342.86	1200	400	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	2342.86	1200	400	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	2342.86	12000	540	
591-78-6	2-Hexanone	ND	ug/m3	2342.86	1200	420	
67-63-0	2-Propanol	ND	ug/m3	2342.86	2300	940	
107-05-1	3-Chloropropene	ND	ug/m3	2342.86	1200	370	
622-96-8	4-Ethyltoluene	ND	ug/m3	2342.86	1200	400	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	2342.86	1200	330	
67-64-1	Acetone	ND	ug/m3	2342.86	12000	2100	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	2342.86	1200	350	
71-43-2	Benzene	ND	ug/m3	2342.86	1200	330	
75-27-4	Bromodichloromethane	ND	ug/m3	2342.86	1200	370	
75-25-2	Bromoform	ND	ug/m3	2342.86	1200	330	
74-83-9	Bromomethane	ND	ug/m3	2342.86	1200	450	
75-15-0	Carbon Disulfide	ND	ug/m3	2342.86	12000	350	
56-23-5	Carbon Tetrachloride	ND	ug/m3	2342.86	1200	370	
108-90-7	Chlorobenzene	ND	ug/m3	2342.86	1200	370	
75-00-3	Chloroethane	ND	ug/m3	2342.86	1200	450	
67-66-3	Chloroform	ND	ug/m3	2342.86	1200	450	
74-87-3	Chloromethane	ND	ug/m3	2342.86	1200	450	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	2342.86	1200	420	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	2342.86	1200	330	
98-82-8	Cumene	ND	ug/m3	2342.86	1200	350	
110-82-7	Cyclohexane	ND	ug/m3	2342.86	2300	770	
124-48-1	Dibromochloromethane	ND	ug/m3	2342.86	1200	330	
64-17-5	Ethanol	ND	ug/m3	2342.86	12000	3700	
100-41-4	Ethyl Benzene	ND	ug/m3	2342.86	1200	350	
75-69-4	Freon 11	1000	ug/m3	2342.86	1200	370	J

76-13-1	Freon 113	240000	ug/m3	2342.86	1200	370	
76-14-2	Freon 114	ND	ug/m3	2342.86	1200	400	
75-71-8	Freon 12	ND	ug/m3	2342.86	1200	420	
306-83-2	Freon 123	ND	ug/m3	2342.86	1200	560	
354-23-4	Freon 123a	ND	ug/m3	2342.86	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	2342.86	1200	540	
142-82-5	Heptane	ND	ug/m3	2342.86	1200	370	
87-68-3	Hexachlorobutadiene	ND	ug/m3	2342.86	1200	420	
110-54-3	Hexane	ND	ug/m3	2342.86	1200	400	
179601-23-	m,p-Xylene	ND	ug/m3	2342.86	2300	680	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	2342.86	1200	350	
75-09-2	Methylene Chloride	420	ug/m3	2342.86	1200	350	J
95-47-6	o-Xylene	ND	ug/m3	2342.86	1200	330	
103-65-1	Propylbenzene	ND	ug/m3	2342.86	1200	350	
100-42-5	Styrene	ND	ug/m3	2342.86	1200	350	
127-18-4	Tetrachloroethene	ND	ug/m3	2342.86	1200	330	
109-99-9	Tetrahydrofuran	ND	ug/m3	2342.86	1200	520	
108-88-3	Toluene	ND	ug/m3	2342.86	1200	370	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	2342.86	1200	400	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	2342.86	1200	370	
79-01-6	Trichloroethene	3200	ug/m3	2342.86	1200	350	
75-01-4	Vinyl Chloride	ND	ug/m3	2342.86	1200	450	

Sample 1203231814 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	2850	1400	460	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	2850	1400	460	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	2850	1400	460	
75-34-3	1,1-Dichloroethane	ND	ug/m3	2850	1400	480	
75-35-4	1,1-Dichloroethene	ND	ug/m3	2850	1400	480	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	2850	1400	680	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	2850	1400	460	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	2850	1400	430	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	2850	1400	480	
107-06-2	1,2-Dichloroethane	ND	ug/m3	2850	1400	540	
78-87-5	1,2-Dichloropropane	ND	ug/m3	2850	1400	480	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	2850	1400	480	
106-99-0	1,3-Butadiene	ND	ug/m3	2850	1400	600	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	2850	1400	480	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	2850	1400	460	
123-91-1	1,4-Dioxane	ND	ug/m3	2850	1400	480	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	2850	1400	480	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	2850	14000	660	
591-78-6	2-Hexanone	ND	ug/m3	2850	1400	510	
67-63-0	2-Propanol	ND	ug/m3	2850	2900	1100	
107-05-1	3-Chloropropene	ND	ug/m3	2850	1400	460	

622-96-8	4-Ethyltoluene	ND	ug/m3	2850	1400	480	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	2850	1400	400	
67-64-1	Acetone	ND	ug/m3	2850	14000	2500	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	2850	1400	430	
71-43-2	Benzene	ND	ug/m3	2850	1400	400	
75-27-4	Bromodichloromethane	ND	ug/m3	2850	1400	460	
75-25-2	Bromoform	ND	ug/m3	2850	1400	400	
74-83-9	Bromomethane	ND	ug/m3	2850	1400	540	
75-15-0	Carbon Disulfide	ND	ug/m3	2850	14000	430	
56-23-5	Carbon Tetrachloride	ND	ug/m3	2850	1400	460	
108-90-7	Chlorobenzene	ND	ug/m3	2850	1400	460	
75-00-3	Chloroethane	ND	ug/m3	2850	1400	540	
67-66-3	Chloroform	ND	ug/m3	2850	1400	540	
74-87-3	Chloromethane	ND	ug/m3	2850	1400	540	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	2850	1400	510	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	2850	1400	400	
98-82-8	Cumene	ND	ug/m3	2850	1400	430	
110-82-7	Cyclohexane	ND	ug/m3	2850	2900	940	
124-48-1	Dibromochloromethane	ND	ug/m3	2850	1400	400	
64-17-5	Ethanol	ND	ug/m3	2850	14000	4600	
100-41-4	Ethyl Benzene	ND	ug/m3	2850	1400	430	
75-69-4	Freon 11	1100	ug/m3	2850	1400	460	J
76-13-1	Freon 113	250000	ug/m3	2850	1400	460	
76-14-2	Freon 114	ND	ug/m3	2850	1400	480	
75-71-8	Freon 12	ND	ug/m3	2850	1400	510	
306-83-2	Freon 123	ND	ug/m3	2850	1400	680	
354-23-4	Freon 123a	ND	ug/m3	2850	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	2850	1400	660	
142-82-5	Heptane	ND	ug/m3	2850	1400	460	
87-68-3	Hexachlorobutadiene	ND	ug/m3	2850	1400	510	
110-54-3	Hexane	ND	ug/m3	2850	1400	480	
179601-23-	m,p-Xylene	ND	ug/m3	2850	2900	830	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	2850	1400	430	
75-09-2	Methylene Chloride	460	ug/m3	2850	1400	430	J
95-47-6	o-Xylene	ND	ug/m3	2850	1400	400	
103-65-1	Propylbenzene	ND	ug/m3	2850	1400	430	
100-42-5	Styrene	ND	ug/m3	2850	1400	430	
127-18-4	Tetrachloroethene	ND	ug/m3	2850	1400	400	
109-99-9	Tetrahydrofuran	ND	ug/m3	2850	1400	630	
108-88-3	Toluene	ND	ug/m3	2850	1400	460	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	2850	1400	480	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	2850	1400	460	
79-01-6	Trichloroethene	3700	ug/m3	2850	1400	430	
75-01-4	Vinyl Chloride	ND	ug/m3	2850	1400	540	

Sample **1203241453** **Sample Type** **Soil Gas** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	3500	1800	560	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	3500	1800	560	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	3500	1800	560	
75-34-3	1,1-Dichloroethane	ND	ug/m3	3500	1800	600	
75-35-4	1,1-Dichloroethene	ND	ug/m3	3500	1800	600	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	3500	1800	840	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	3500	1800	560	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	3500	1800	530	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	3500	1800	600	
107-06-2	1,2-Dichloroethane	ND	ug/m3	3500	1800	670	
78-87-5	1,2-Dichloropropane	ND	ug/m3	3500	1800	600	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	3500	1800	600	
106-99-0	1,3-Butadiene	ND	ug/m3	3500	1800	740	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	3500	1800	600	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	3500	1800	560	
123-91-1	1,4-Dioxane	ND	ug/m3	3500	1800	600	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	3500	1800	600	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	3500	18000	810	
591-78-6	2-Hexanone	ND	ug/m3	3500	1800	630	
67-63-0	2-Propanol	ND	ug/m3	3500	3500	1400	
107-05-1	3-Chloropropene	ND	ug/m3	3500	1800	560	
622-96-8	4-Ethyltoluene	ND	ug/m3	3500	1800	600	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	3500	1800	490	
67-64-1	Acetone	ND	ug/m3	3500	18000	3100	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	3500	1800	530	
71-43-2	Benzene	ND	ug/m3	3500	1800	490	
75-27-4	Bromodichloromethane	ND	ug/m3	3500	1800	560	
75-25-2	Bromoform	ND	ug/m3	3500	1800	490	
74-83-9	Bromomethane	ND	ug/m3	3500	1800	670	
75-15-0	Carbon Disulfide	ND	ug/m3	3500	18000	530	
56-23-5	Carbon Tetrachloride	ND	ug/m3	3500	1800	560	
108-90-7	Chlorobenzene	ND	ug/m3	3500	1800	560	
75-00-3	Chloroethane	ND	ug/m3	3500	1800	670	
67-66-3	Chloroform	ND	ug/m3	3500	1800	670	
74-87-3	Chloromethane	ND	ug/m3	3500	1800	670	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	3500	1800	630	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	3500	1800	490	
98-82-8	Cumene	ND	ug/m3	3500	1800	530	
110-82-7	Cyclohexane	ND	ug/m3	3500	3500	1200	
124-48-1	Dibromochloromethane	ND	ug/m3	3500	1800	490	
64-17-5	Ethanol	ND	ug/m3	3500	18000	5600	
100-41-4	Ethyl Benzene	ND	ug/m3	3500	1800	530	
75-69-4	Freon 11	1100	ug/m3	3500	1800	560	J

76-13-1	Freon 113	300000	ug/m3	3500	1800	560	
76-14-2	Freon 114	ND	ug/m3	3500	1800	600	
75-71-8	Freon 12	ND	ug/m3	3500	1800	630	
306-83-2	Freon 123	ND	ug/m3	3500	1800	840	
354-23-4	Freon 123a	ND	ug/m3	3500	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	3500	1800	810	
142-82-5	Heptane	ND	ug/m3	3500	1800	560	
87-68-3	Hexachlorobutadiene	ND	ug/m3	3500	1800	630	
110-54-3	Hexane	ND	ug/m3	3500	1800	600	
179601-23-	m,p-Xylene	ND	ug/m3	3500	3500	1000	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	3500	1800	530	
75-09-2	Methylene Chloride	610	ug/m3	3500	1800	530	J
95-47-6	o-Xylene	ND	ug/m3	3500	1800	490	
103-65-1	Propylbenzene	ND	ug/m3	3500	1800	530	
100-42-5	Styrene	ND	ug/m3	3500	1800	530	
127-18-4	Tetrachloroethene	ND	ug/m3	3500	1800	490	
109-99-9	Tetrahydrofuran	ND	ug/m3	3500	1800	770	
108-88-3	Toluene	ND	ug/m3	3500	1800	560	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	3500	1800	600	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	3500	1800	560	
79-01-6	Trichloroethene	2600	ug/m3	3500	1800	530	
75-01-4	Vinyl Chloride	ND	ug/m3	3500	1800	670	

Sample 1203241454 Sample Type Soil Gas-D Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	4225	2100	680	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	4225	2100	680	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	4225	2100	680	
75-34-3	1,1-Dichloroethane	ND	ug/m3	4225	2100	720	
75-35-4	1,1-Dichloroethene	ND	ug/m3	4225	2100	720	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	4225	2100	1000	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	4225	2100	680	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	4225	2100	630	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	4225	2100	720	
107-06-2	1,2-Dichloroethane	ND	ug/m3	4225	2100	800	
78-87-5	1,2-Dichloropropane	ND	ug/m3	4225	2100	720	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	4225	2100	720	
106-99-0	1,3-Butadiene	ND	ug/m3	4225	2100	890	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	4225	2100	720	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	4225	2100	680	
123-91-1	1,4-Dioxane	ND	ug/m3	4225	2100	720	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	4225	2100	720	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	4225	21000	970	
591-78-6	2-Hexanone	ND	ug/m3	4225	2100	760	
67-63-0	2-Propanol	ND	ug/m3	4225	4200	1700	
107-05-1	3-Chloropropene	ND	ug/m3	4225	2100	680	

622-96-8	4-Ethyltoluene	ND	ug/m3	4225	2100	720	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	4225	2100	590	
67-64-1	Acetone	ND	ug/m3	4225	21000	3700	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	4225	2100	630	
71-43-2	Benzene	ND	ug/m3	4225	2100	590	
75-27-4	Bromodichloromethane	ND	ug/m3	4225	2100	680	
75-25-2	Bromoform	ND	ug/m3	4225	2100	590	
74-83-9	Bromomethane	ND	ug/m3	4225	2100	800	
75-15-0	Carbon Disulfide	ND	ug/m3	4225	21000	630	
56-23-5	Carbon Tetrachloride	ND	ug/m3	4225	2100	680	
108-90-7	Chlorobenzene	ND	ug/m3	4225	2100	680	
75-00-3	Chloroethane	ND	ug/m3	4225	2100	800	
67-66-3	Chloroform	ND	ug/m3	4225	2100	800	
74-87-3	Chloromethane	ND	ug/m3	4225	2100	800	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	4225	2100	760	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	4225	2100	590	
98-82-8	Cumene	ND	ug/m3	4225	2100	630	
110-82-7	Cyclohexane	ND	ug/m3	4225	4200	1400	
124-48-1	Dibromochloromethane	ND	ug/m3	4225	2100	590	
64-17-5	Ethanol	ND	ug/m3	4225	21000	6800	
100-41-4	Ethyl Benzene	ND	ug/m3	4225	2100	630	
75-69-4	Freon 11	1100	ug/m3	4225	2100	680	J
76-13-1	Freon 113	290000	ug/m3	4225	2100	680	
76-14-2	Freon 114	ND	ug/m3	4225	2100	720	
75-71-8	Freon 12	ND	ug/m3	4225	2100	760	
306-83-2	Freon 123	ND	ug/m3	4225	2100	1000	
354-23-4	Freon 123a	ND	ug/m3	4225	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	4225	2100	970	
142-82-5	Heptane	ND	ug/m3	4225	2100	680	
87-68-3	Hexachlorobutadiene	ND	ug/m3	4225	2100	760	
110-54-3	Hexane	ND	ug/m3	4225	2100	720	
179601-23-	m,p-Xylene	ND	ug/m3	4225	4200	1200	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	4225	2100	630	
75-09-2	Methylene Chloride	720	ug/m3	4225	2100	630	J
95-47-6	o-Xylene	ND	ug/m3	4225	2100	590	
103-65-1	Propylbenzene	ND	ug/m3	4225	2100	630	
100-42-5	Styrene	ND	ug/m3	4225	2100	630	
127-18-4	Tetrachloroethene	ND	ug/m3	4225	2100	590	
109-99-9	Tetrahydrofuran	ND	ug/m3	4225	2100	930	
108-88-3	Toluene	ND	ug/m3	4225	2100	680	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	4225	2100	720	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	4225	2100	680	
79-01-6	Trichloroethene	2600	ug/m3	4225	2100	630	
75-01-4	Vinyl Chloride	ND	ug/m3	4225	2100	800	

Borehole	600-SGW-4	Depth (ft)	12.5	Depth (m)	3.81	Event Date	3/22/2012

Sample	1203220918	Sample Type	Soil Gas	Analysis Method	TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	162	81	26	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	162	81	26	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	162	81	26	
75-34-3	1,1-Dichloroethane	ND	ug/m3	162	81	28	
75-35-4	1,1-Dichloroethene	ND	ug/m3	162	81	28	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	162	81	39	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	162	81	26	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	162	81	24	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	162	81	28	
107-06-2	1,2-Dichloroethane	ND	ug/m3	162	81	31	
78-87-5	1,2-Dichloropropane	ND	ug/m3	162	81	28	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	162	81	28	
106-99-0	1,3-Butadiene	ND	ug/m3	162	81	34	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	162	81	28	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	162	81	26	
123-91-1	1,4-Dioxane	ND	ug/m3	162	81	28	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	162	81	28	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	162	810	37	
591-78-6	2-Hexanone	ND	ug/m3	162	81	29	
67-63-0	2-Propanol	ND	ug/m3	162	160	65	
107-05-1	3-Chloropropene	ND	ug/m3	162	81	26	
622-96-8	4-Ethyltoluene	ND	ug/m3	162	81	28	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	162	81	23	
67-64-1	Acetone	ND	ug/m3	162	810	140	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	162	81	24	
71-43-2	Benzene	ND	ug/m3	162	81	23	
75-27-4	Bromodichloromethane	ND	ug/m3	162	81	26	
75-25-2	Bromoform	ND	ug/m3	162	81	23	
74-83-9	Bromomethane	ND	ug/m3	162	81	31	
75-15-0	Carbon Disulfide	ND	ug/m3	162	810	24	
56-23-5	Carbon Tetrachloride	ND	ug/m3	162	81	26	
108-90-7	Chlorobenzene	ND	ug/m3	162	81	26	
75-00-3	Chloroethane	ND	ug/m3	162	81	31	
67-66-3	Chloroform	ND	ug/m3	162	81	31	
74-87-3	Chloromethane	ND	ug/m3	162	81	31	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	162	81	29	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	162	81	23	
98-82-8	Cumene	ND	ug/m3	162	81	24	
110-82-7	Cyclohexane	ND	ug/m3	162	160	53	
124-48-1	Dibromochloromethane	ND	ug/m3	162	81	23	
64-17-5	Ethanol	ND	ug/m3	162	810	260	

100-41-4	Ethyl Benzene	ND	ug/m3	162	81	24	
75-69-4	Freon 11	ND	ug/m3	162	81	26	
76-13-1	Freon 113	11000	ug/m3	162	81	26	
76-14-2	Freon 114	ND	ug/m3	162	81	28	
75-71-8	Freon 12	ND	ug/m3	162	81	29	
306-83-2	Freon 123	ND	ug/m3	162	81	39	
354-23-4	Freon 123a	630	ug/m3	162	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	162	81	37	
142-82-5	Heptane	ND	ug/m3	162	81	26	
87-68-3	Hexachlorobutadiene	ND	ug/m3	162	81	29	
110-54-3	Hexane	ND	ug/m3	162	81	28	
179601-23-	m,p-Xylene	ND	ug/m3	162	160	47	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	162	81	24	
75-09-2	Methylene Chloride	54	ug/m3	162	81	24	J
95-47-6	o-Xylene	ND	ug/m3	162	81	23	
103-65-1	Propylbenzene	ND	ug/m3	162	81	24	
100-42-5	Styrene	ND	ug/m3	162	81	24	
127-18-4	Tetrachloroethene	ND	ug/m3	162	81	23	
109-99-9	Tetrahydrofuran	ND	ug/m3	162	81	36	
108-88-3	Toluene	ND	ug/m3	162	81	26	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	162	81	28	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	162	81	26	
79-01-6	Trichloroethene	360	ug/m3	162	81	24	
75-01-4	Vinyl Chloride	ND	ug/m3	162	81	31	

Sample 1203241455 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	168	84	27	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	168	84	27	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	168	84	27	
75-34-3	1,1-Dichloroethane	ND	ug/m3	168	84	29	
75-35-4	1,1-Dichloroethene	ND	ug/m3	168	84	29	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	168	84	40	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	168	84	27	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	168	84	25	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	168	84	29	
107-06-2	1,2-Dichloroethane	ND	ug/m3	168	84	32	
78-87-5	1,2-Dichloropropane	ND	ug/m3	168	84	29	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	168	84	29	
106-99-0	1,3-Butadiene	ND	ug/m3	168	84	35	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	168	84	29	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	168	84	27	
123-91-1	1,4-Dioxane	ND	ug/m3	168	84	29	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	168	84	29	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	168	840	39	
591-78-6	2-Hexanone	ND	ug/m3	168	84	30	

67-63-0	2-Propanol	ND	ug/m3	168	170	67	
107-05-1	3-Chloropropene	ND	ug/m3	168	84	27	
622-96-8	4-Ethyltoluene	ND	ug/m3	168	84	29	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	168	84	24	
67-64-1	Acetone	ND	ug/m3	168	840	150	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	168	84	25	
71-43-2	Benzene	ND	ug/m3	168	84	24	
75-27-4	Bromodichloromethane	ND	ug/m3	168	84	27	
75-25-2	Bromoform	ND	ug/m3	168	84	24	
74-83-9	Bromomethane	ND	ug/m3	168	84	32	
75-15-0	Carbon Disulfide	ND	ug/m3	168	840	25	
56-23-5	Carbon Tetrachloride	ND	ug/m3	168	84	27	
108-90-7	Chlorobenzene	ND	ug/m3	168	84	27	
75-00-3	Chloroethane	ND	ug/m3	168	84	32	
67-66-3	Chloroform	ND	ug/m3	168	84	32	
74-87-3	Chloromethane	ND	ug/m3	168	84	32	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	168	84	30	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	168	84	24	
98-82-8	Cumene	ND	ug/m3	168	84	25	
110-82-7	Cyclohexane	ND	ug/m3	168	170	55	
124-48-1	Dibromochloromethane	ND	ug/m3	168	84	24	
64-17-5	Ethanol	ND	ug/m3	168	840	270	
100-41-4	Ethyl Benzene	ND	ug/m3	168	84	25	
75-69-4	Freon 11	ND	ug/m3	168	84	27	
76-13-1	Freon 113	11000	ug/m3	168	84	27	
76-14-2	Freon 114	ND	ug/m3	168	84	29	
75-71-8	Freon 12	ND	ug/m3	168	84	30	
306-83-2	Freon 123	ND	ug/m3	168	84	40	
354-23-4	Freon 123a	600	ug/m3	168	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	168	84	39	
142-82-5	Heptane	ND	ug/m3	168	84	27	
87-68-3	Hexachlorobutadiene	ND	ug/m3	168	84	30	
110-54-3	Hexane	ND	ug/m3	168	84	29	
179601-23-	m,p-Xylene	ND	ug/m3	168	170	49	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	168	84	25	
75-09-2	Methylene Chloride	53	ug/m3	168	84	25	J
95-47-6	o-Xylene	ND	ug/m3	168	84	24	
103-65-1	Propylbenzene	ND	ug/m3	168	84	25	
100-42-5	Styrene	ND	ug/m3	168	84	25	
127-18-4	Tetrachloroethene	ND	ug/m3	168	84	24	
109-99-9	Tetrahydrofuran	ND	ug/m3	168	84	37	
108-88-3	Toluene	ND	ug/m3	168	84	27	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	168	84	29	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	168	84	27	
79-01-6	Trichloroethene	350	ug/m3	168	84	25	
75-01-4	Vinyl Chloride	ND	ug/m3	168	84	32	

Borehole	600-SGW-4	Depth (ft)	47.5	Depth (m)	14.48	Event Date	3/22/2012

Sample	1203220922	Sample Type	Soil Gas	Analysis Method	TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	106	53	17	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	106	53	17	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	106	53	17	
75-34-3	1,1-Dichloroethane	ND	ug/m3	106	53	18	
75-35-4	1,1-Dichloroethene	ND	ug/m3	106	53	18	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	106	53	25	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	106	53	17	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	106	53	16	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	106	53	18	
107-06-2	1,2-Dichloroethane	ND	ug/m3	106	53	20	
78-87-5	1,2-Dichloropropane	ND	ug/m3	106	53	18	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	106	53	18	
106-99-0	1,3-Butadiene	ND	ug/m3	106	53	22	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	106	53	18	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	106	53	17	
123-91-1	1,4-Dioxane	ND	ug/m3	106	53	18	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	106	53	18	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	106	530	24	
591-78-6	2-Hexanone	ND	ug/m3	106	53	19	
67-63-0	2-Propanol	ND	ug/m3	106	110	42	
107-05-1	3-Chloropropene	ND	ug/m3	106	53	17	
622-96-8	4-Ethyltoluene	ND	ug/m3	106	53	18	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	106	53	15	
67-64-1	Acetone	ND	ug/m3	106	530	93	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	106	53	16	
71-43-2	Benzene	ND	ug/m3	106	53	15	
75-27-4	Bromodichloromethane	ND	ug/m3	106	53	17	
75-25-2	Bromoform	ND	ug/m3	106	53	15	
74-83-9	Bromomethane	ND	ug/m3	106	53	20	
75-15-0	Carbon Disulfide	ND	ug/m3	106	530	16	
56-23-5	Carbon Tetrachloride	ND	ug/m3	106	53	17	
108-90-7	Chlorobenzene	ND	ug/m3	106	53	17	
75-00-3	Chloroethane	ND	ug/m3	106	53	20	
67-66-3	Chloroform	ND	ug/m3	106	53	20	
74-87-3	Chloromethane	ND	ug/m3	106	53	20	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	106	53	19	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	106	53	15	
98-82-8	Cumene	ND	ug/m3	106	53	16	
110-82-7	Cyclohexane	ND	ug/m3	106	110	35	
124-48-1	Dibromochloromethane	ND	ug/m3	106	53	15	
64-17-5	Ethanol	ND	ug/m3	106	530	170	

100-41-4	Ethyl Benzene	ND	ug/m3	106	53	16	
75-69-4	Freon 11	ND	ug/m3	106	53	17	
76-13-1	Freon 113	8900	ug/m3	318	160	51	D
76-14-2	Freon 114	ND	ug/m3	106	53	18	
75-71-8	Freon 12	ND	ug/m3	106	53	19	
306-83-2	Freon 123	ND	ug/m3	106	53	25	
354-23-4	Freon 123a	420	ug/m3	106	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	106	53	24	
142-82-5	Heptane	ND	ug/m3	106	53	17	
87-68-3	Hexachlorobutadiene	ND	ug/m3	106	53	19	
110-54-3	Hexane	ND	ug/m3	106	53	18	
179601-23-	m,p-Xylene	ND	ug/m3	106	110	31	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	106	53	16	
75-09-2	Methylene Chloride	24	ug/m3	106	53	16	J
95-47-6	o-Xylene	ND	ug/m3	106	53	15	
103-65-1	Propylbenzene	ND	ug/m3	106	53	16	
100-42-5	Styrene	ND	ug/m3	106	53	16	
127-18-4	Tetrachloroethene	ND	ug/m3	106	53	15	
109-99-9	Tetrahydrofuran	ND	ug/m3	106	53	23	
108-88-3	Toluene	ND	ug/m3	106	53	17	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	106	53	18	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	106	53	17	
79-01-6	Trichloroethene	610	ug/m3	106	53	16	
75-01-4	Vinyl Chloride	ND	ug/m3	106	53	20	

Sample 1203241456 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	107.33	54	17	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	107.33	54	17	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	107.33	54	17	
75-34-3	1,1-Dichloroethane	ND	ug/m3	107.33	54	18	
75-35-4	1,1-Dichloroethene	ND	ug/m3	107.33	54	18	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	107.33	54	26	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	107.33	54	17	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	107.33	54	16	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	107.33	54	18	
107-06-2	1,2-Dichloroethane	ND	ug/m3	107.33	54	20	
78-87-5	1,2-Dichloropropane	ND	ug/m3	107.33	54	18	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	107.33	54	18	
106-99-0	1,3-Butadiene	ND	ug/m3	107.33	54	23	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	107.33	54	18	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	107.33	54	17	
123-91-1	1,4-Dioxane	ND	ug/m3	107.33	54	18	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	107.33	54	18	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	107.33	540	25	
591-78-6	2-Hexanone	ND	ug/m3	107.33	54	19	

67-63-0	2-Propanol	ND	ug/m3	107.33	110	43	
107-05-1	3-Chloropropene	ND	ug/m3	107.33	54	17	
622-96-8	4-Ethyltoluene	ND	ug/m3	107.33	54	18	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	107.33	54	15	
67-64-1	Acetone	ND	ug/m3	107.33	540	94	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	107.33	54	16	
71-43-2	Benzene	ND	ug/m3	107.33	54	15	
75-27-4	Bromodichloromethane	ND	ug/m3	107.33	54	17	
75-25-2	Bromoform	ND	ug/m3	107.33	54	15	
74-83-9	Bromomethane	ND	ug/m3	107.33	54	20	
75-15-0	Carbon Disulfide	ND	ug/m3	107.33	540	16	
56-23-5	Carbon Tetrachloride	ND	ug/m3	107.33	54	17	
108-90-7	Chlorobenzene	ND	ug/m3	107.33	54	17	
75-00-3	Chloroethane	ND	ug/m3	107.33	54	20	
67-66-3	Chloroform	ND	ug/m3	107.33	54	20	
74-87-3	Chloromethane	ND	ug/m3	107.33	54	20	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	107.33	54	19	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	107.33	54	15	
98-82-8	Cumene	ND	ug/m3	107.33	54	16	
110-82-7	Cyclohexane	ND	ug/m3	107.33	110	35	
124-48-1	Dibromochloromethane	ND	ug/m3	107.33	54	15	
64-17-5	Ethanol	ND	ug/m3	107.33	540	170	
100-41-4	Ethyl Benzene	ND	ug/m3	107.33	54	16	
75-69-4	Freon 11	ND	ug/m3	107.33	54	17	
76-13-1	Freon 113	9100	ug/m3	322	160	52	D
76-14-2	Freon 114	ND	ug/m3	107.33	54	18	
75-71-8	Freon 12	ND	ug/m3	107.33	54	19	
306-83-2	Freon 123	ND	ug/m3	107.33	54	26	
354-23-4	Freon 123a	410	ug/m3	107.33	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	107.33	54	25	
142-82-5	Heptane	ND	ug/m3	107.33	54	17	
87-68-3	Hexachlorobutadiene	ND	ug/m3	107.33	54	19	
110-54-3	Hexane	ND	ug/m3	107.33	54	18	
179601-23-	m,p-Xylene	ND	ug/m3	107.33	110	31	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	107.33	54	16	
75-09-2	Methylene Chloride	24	ug/m3	107.33	54	16	J
95-47-6	o-Xylene	ND	ug/m3	107.33	54	15	
103-65-1	Propylbenzene	ND	ug/m3	107.33	54	16	
100-42-5	Styrene	ND	ug/m3	107.33	54	16	
127-18-4	Tetrachloroethene	ND	ug/m3	107.33	54	15	
109-99-9	Tetrahydrofuran	ND	ug/m3	107.33	54	24	
108-88-3	Toluene	ND	ug/m3	107.33	54	17	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	107.33	54	18	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	107.33	54	17	
79-01-6	Trichloroethene	580	ug/m3	107.33	54	16	
75-01-4	Vinyl Chloride	ND	ug/m3	107.33	54	20	

Sample **1203241457** **Sample Type** **Soil Gas-D** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	113.33	57	18	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	113.33	57	18	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	113.33	57	18	
75-34-3	1,1-Dichloroethane	ND	ug/m3	113.33	57	19	
75-35-4	1,1-Dichloroethene	ND	ug/m3	113.33	57	19	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	113.33	57	27	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	113.33	57	18	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	113.33	57	17	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	113.33	57	19	
107-06-2	1,2-Dichloroethane	ND	ug/m3	113.33	57	22	
78-87-5	1,2-Dichloropropane	ND	ug/m3	113.33	57	19	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	113.33	57	19	
106-99-0	1,3-Butadiene	ND	ug/m3	113.33	57	24	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	113.33	57	19	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	113.33	57	18	
123-91-1	1,4-Dioxane	ND	ug/m3	113.33	57	19	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	113.33	57	19	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	113.33	570	26	
591-78-6	2-Hexanone	ND	ug/m3	113.33	57	20	
67-63-0	2-Propanol	ND	ug/m3	113.33	110	45	
107-05-1	3-Chloropropene	ND	ug/m3	113.33	57	18	
622-96-8	4-Ethyltoluene	ND	ug/m3	113.33	57	19	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	113.33	57	16	
67-64-1	Acetone	ND	ug/m3	113.33	570	100	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	113.33	57	17	
71-43-2	Benzene	ND	ug/m3	113.33	57	16	
75-27-4	Bromodichloromethane	ND	ug/m3	113.33	57	18	
75-25-2	Bromoform	ND	ug/m3	113.33	57	16	
74-83-9	Bromomethane	ND	ug/m3	113.33	57	22	
75-15-0	Carbon Disulfide	ND	ug/m3	113.33	570	17	
56-23-5	Carbon Tetrachloride	ND	ug/m3	113.33	57	18	
108-90-7	Chlorobenzene	ND	ug/m3	113.33	57	18	
75-00-3	Chloroethane	ND	ug/m3	113.33	57	22	
67-66-3	Chloroform	ND	ug/m3	113.33	57	22	
74-87-3	Chloromethane	ND	ug/m3	113.33	57	22	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	113.33	57	20	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	113.33	57	16	
98-82-8	Cumene	ND	ug/m3	113.33	57	17	
110-82-7	Cyclohexane	ND	ug/m3	113.33	110	37	
124-48-1	Dibromochloromethane	ND	ug/m3	113.33	57	16	
64-17-5	Ethanol	ND	ug/m3	113.33	570	180	
100-41-4	Ethyl Benzene	ND	ug/m3	113.33	57	17	
75-69-4	Freon 11	ND	ug/m3	113.33	57	18	

76-13-1	Freon 113	9200	ug/m3	340	170	54	D
76-14-2	Freon 114	ND	ug/m3	113.33	57	19	
75-71-8	Freon 12	ND	ug/m3	113.33	57	20	
306-83-2	Freon 123	ND	ug/m3	113.33	57	27	
354-23-4	Freon 123a	440	ug/m3	113.33	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	113.33	57	26	
142-82-5	Heptane	ND	ug/m3	113.33	57	18	
87-68-3	Hexachlorobutadiene	ND	ug/m3	113.33	57	20	
110-54-3	Hexane	ND	ug/m3	113.33	57	19	
179601-23-	m,p-Xylene	ND	ug/m3	113.33	110	33	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	113.33	57	17	
75-09-2	Methylene Chloride	27	ug/m3	113.33	57	17	J
95-47-6	o-Xylene	ND	ug/m3	113.33	57	16	
103-65-1	Propylbenzene	ND	ug/m3	113.33	57	17	
100-42-5	Styrene	ND	ug/m3	113.33	57	17	
127-18-4	Tetrachloroethene	ND	ug/m3	113.33	57	16	
109-99-9	Tetrahydrofuran	ND	ug/m3	113.33	57	25	
108-88-3	Toluene	ND	ug/m3	113.33	57	18	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	113.33	57	19	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	113.33	57	18	
79-01-6	Trichloroethene	640	ug/m3	113.33	57	17	
75-01-4	Vinyl Chloride	ND	ug/m3	113.33	57	22	

Borehole	600-SGW-4	Depth (ft)	107.5	Depth (m)	32.76	Event Date	3/22/2012

Sample	1203220928	Sample Type	Soil Gas	Analysis Method	TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	104	52	17	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	104	52	17	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	104	52	17	
75-34-3	1,1-Dichloroethane	ND	ug/m3	104	52	18	
75-35-4	1,1-Dichloroethene	ND	ug/m3	104	52	18	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	104	52	25	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	104	52	17	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	104	52	16	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	104	52	18	
107-06-2	1,2-Dichloroethane	ND	ug/m3	104	52	20	
78-87-5	1,2-Dichloropropane	ND	ug/m3	104	52	18	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	104	52	18	
106-99-0	1,3-Butadiene	ND	ug/m3	104	52	22	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	104	52	18	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	104	52	17	
123-91-1	1,4-Dioxane	ND	ug/m3	104	52	18	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	104	52	18	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	104	520	24	
591-78-6	2-Hexanone	ND	ug/m3	104	52	19	
67-63-0	2-Propanol	ND	ug/m3	104	100	42	
107-05-1	3-Chloropropene	ND	ug/m3	104	52	17	
622-96-8	4-Ethyltoluene	ND	ug/m3	104	52	18	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	104	52	15	
67-64-1	Acetone	ND	ug/m3	104	520	92	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	104	52	16	
71-43-2	Benzene	ND	ug/m3	104	52	15	
75-27-4	Bromodichloromethane	ND	ug/m3	104	52	17	
75-25-2	Bromoform	ND	ug/m3	104	52	15	
74-83-9	Bromomethane	ND	ug/m3	104	52	20	
75-15-0	Carbon Disulfide	ND	ug/m3	104	520	16	
56-23-5	Carbon Tetrachloride	ND	ug/m3	104	52	17	
108-90-7	Chlorobenzene	ND	ug/m3	104	52	17	
75-00-3	Chloroethane	ND	ug/m3	104	52	20	
67-66-3	Chloroform	ND	ug/m3	104	52	20	
74-87-3	Chloromethane	ND	ug/m3	104	52	20	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	104	52	19	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	104	52	15	
98-82-8	Cumene	ND	ug/m3	104	52	16	
110-82-7	Cyclohexane	ND	ug/m3	104	100	34	
124-48-1	Dibromochloromethane	ND	ug/m3	104	52	15	
64-17-5	Ethanol	ND	ug/m3	104	520	170	

100-41-4	Ethyl Benzene	ND	ug/m3	104	52	16	
75-69-4	Freon 11	ND	ug/m3	104	52	17	
76-13-1	Freon 113	8700	ug/m3	312	160	50	D
76-14-2	Freon 114	ND	ug/m3	104	52	18	
75-71-8	Freon 12	ND	ug/m3	104	52	19	
306-83-2	Freon 123	ND	ug/m3	104	52	25	
354-23-4	Freon 123a	ND	ug/m3	104	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	104	52	24	
142-82-5	Heptane	ND	ug/m3	104	52	17	
87-68-3	Hexachlorobutadiene	ND	ug/m3	104	52	19	
110-54-3	Hexane	ND	ug/m3	104	52	18	
179601-23-	m,p-Xylene	ND	ug/m3	104	100	30	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	104	52	16	
75-09-2	Methylene Chloride	21	ug/m3	104	52	16	J
95-47-6	o-Xylene	ND	ug/m3	104	52	15	
103-65-1	Propylbenzene	ND	ug/m3	104	52	16	
100-42-5	Styrene	ND	ug/m3	104	52	16	
127-18-4	Tetrachloroethene	ND	ug/m3	104	52	15	
109-99-9	Tetrahydrofuran	ND	ug/m3	104	52	23	
108-88-3	Toluene	ND	ug/m3	104	52	17	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	104	52	18	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	104	52	17	
79-01-6	Trichloroethene	580	ug/m3	104	52	16	
75-01-4	Vinyl Chloride	ND	ug/m3	104	52	20	

Sample 1203241503 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	111.33	56	18	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	111.33	56	18	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	111.33	56	18	
75-34-3	1,1-Dichloroethane	ND	ug/m3	111.33	56	19	
75-35-4	1,1-Dichloroethene	ND	ug/m3	111.33	56	19	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	111.33	56	27	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	111.33	56	18	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	111.33	56	17	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	111.33	56	19	
107-06-2	1,2-Dichloroethane	ND	ug/m3	111.33	56	21	
78-87-5	1,2-Dichloropropane	ND	ug/m3	111.33	56	19	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	111.33	56	19	
106-99-0	1,3-Butadiene	ND	ug/m3	111.33	56	23	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	111.33	56	19	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	111.33	56	18	
123-91-1	1,4-Dioxane	ND	ug/m3	111.33	56	19	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	111.33	56	19	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	111.33	560	26	
591-78-6	2-Hexanone	ND	ug/m3	111.33	56	20	

67-63-0	2-Propanol	ND	ug/m3	111.33	110	45	
107-05-1	3-Chloropropene	ND	ug/m3	111.33	56	18	
622-96-8	4-Ethyltoluene	ND	ug/m3	111.33	56	19	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	111.33	56	16	
67-64-1	Acetone	ND	ug/m3	111.33	560	98	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	111.33	56	17	
71-43-2	Benzene	ND	ug/m3	111.33	56	16	
75-27-4	Bromodichloromethane	ND	ug/m3	111.33	56	18	
75-25-2	Bromoform	ND	ug/m3	111.33	56	16	
74-83-9	Bromomethane	ND	ug/m3	111.33	56	21	
75-15-0	Carbon Disulfide	ND	ug/m3	111.33	560	17	
56-23-5	Carbon Tetrachloride	ND	ug/m3	111.33	56	18	
108-90-7	Chlorobenzene	ND	ug/m3	111.33	56	18	
75-00-3	Chloroethane	ND	ug/m3	111.33	56	21	
67-66-3	Chloroform	ND	ug/m3	111.33	56	21	
74-87-3	Chloromethane	ND	ug/m3	111.33	56	21	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	111.33	56	20	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	111.33	56	16	
98-82-8	Cumene	ND	ug/m3	111.33	56	17	
110-82-7	Cyclohexane	ND	ug/m3	111.33	110	37	
124-48-1	Dibromochloromethane	ND	ug/m3	111.33	56	16	
64-17-5	Ethanol	ND	ug/m3	111.33	560	180	
100-41-4	Ethyl Benzene	ND	ug/m3	111.33	56	17	
75-69-4	Freon 11	ND	ug/m3	111.33	56	18	
76-13-1	Freon 113	9600	ug/m3	334	170	53	D
76-14-2	Freon 114	ND	ug/m3	111.33	56	19	
75-71-8	Freon 12	ND	ug/m3	111.33	56	20	
306-83-2	Freon 123	ND	ug/m3	111.33	56	27	
354-23-4	Freon 123a	ND	ug/m3	111.33	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	111.33	56	26	
142-82-5	Heptane	ND	ug/m3	111.33	56	18	
87-68-3	Hexachlorobutadiene	ND	ug/m3	111.33	56	20	
110-54-3	Hexane	ND	ug/m3	111.33	56	19	
179601-23-	m,p-Xylene	ND	ug/m3	111.33	110	32	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	111.33	56	17	
75-09-2	Methylene Chloride	22	ug/m3	111.33	56	17	J
95-47-6	o-Xylene	ND	ug/m3	111.33	56	16	
103-65-1	Propylbenzene	ND	ug/m3	111.33	56	17	
100-42-5	Styrene	ND	ug/m3	111.33	56	17	
127-18-4	Tetrachloroethene	ND	ug/m3	111.33	56	16	
109-99-9	Tetrahydrofuran	ND	ug/m3	111.33	56	24	
108-88-3	Toluene	ND	ug/m3	111.33	56	18	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	111.33	56	19	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	111.33	56	18	
79-01-6	Trichloroethene	620	ug/m3	111.33	56	17	
75-01-4	Vinyl Chloride	ND	ug/m3	111.33	56	21	

Borehole	600-SGW-4	Depth (ft)	142.5	Depth (m)	43.43	Event Date	3/22/2012

Sample	1203220936	Sample Type	Soil Gas	Analysis Method	TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	690	ug/m3	3200	1600	510	J
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	3200	1600	510	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	3200	1600	510	
75-34-3	1,1-Dichloroethane	ND	ug/m3	3200	1600	540	
75-35-4	1,1-Dichloroethene	ND	ug/m3	3200	1600	540	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	3200	1600	770	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	3200	1600	510	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	3200	1600	480	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	3200	1600	540	
107-06-2	1,2-Dichloroethane	ND	ug/m3	3200	1600	610	
78-87-5	1,2-Dichloropropane	ND	ug/m3	3200	1600	540	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	3200	1600	540	
106-99-0	1,3-Butadiene	ND	ug/m3	3200	1600	670	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	3200	1600	540	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	3200	1600	510	
123-91-1	1,4-Dioxane	ND	ug/m3	3200	1600	540	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	3200	1600	540	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	3200	16000	740	
591-78-6	2-Hexanone	ND	ug/m3	3200	1600	580	
67-63-0	2-Propanol	ND	ug/m3	3200	3200	1300	
107-05-1	3-Chloropropene	ND	ug/m3	3200	1600	510	
622-96-8	4-Ethyltoluene	ND	ug/m3	3200	1600	540	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	3200	1600	450	
67-64-1	Acetone	ND	ug/m3	3200	16000	2800	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	3200	1600	480	
71-43-2	Benzene	ND	ug/m3	3200	1600	450	
75-27-4	Bromodichloromethane	ND	ug/m3	3200	1600	510	
75-25-2	Bromoform	ND	ug/m3	3200	1600	450	
74-83-9	Bromomethane	ND	ug/m3	3200	1600	610	
75-15-0	Carbon Disulfide	ND	ug/m3	3200	16000	480	
56-23-5	Carbon Tetrachloride	ND	ug/m3	3200	1600	510	
108-90-7	Chlorobenzene	ND	ug/m3	3200	1600	510	
75-00-3	Chloroethane	ND	ug/m3	3200	1600	610	
67-66-3	Chloroform	ND	ug/m3	3200	1600	610	
74-87-3	Chloromethane	ND	ug/m3	3200	1600	610	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	3200	1600	580	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	3200	1600	450	
98-82-8	Cumene	ND	ug/m3	3200	1600	480	
110-82-7	Cyclohexane	ND	ug/m3	3200	3200	1100	
124-48-1	Dibromochloromethane	ND	ug/m3	3200	1600	450	
64-17-5	Ethanol	ND	ug/m3	3200	16000	5100	

100-41-4	Ethyl Benzene	ND	ug/m3	3200	1600	480	
75-69-4	Freon 11	ND	ug/m3	3200	1600	510	
76-13-1	Freon 113	320000	ug/m3	5333.33	2700	850	D
76-14-2	Freon 114	ND	ug/m3	3200	1600	540	
75-71-8	Freon 12	ND	ug/m3	3200	1600	580	
306-83-2	Freon 123	ND	ug/m3	3200	1600	770	
354-23-4	Freon 123a	ND	ug/m3	3200	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	3200	1600	740	
142-82-5	Heptane	ND	ug/m3	3200	1600	510	
87-68-3	Hexachlorobutadiene	ND	ug/m3	3200	1600	580	
110-54-3	Hexane	ND	ug/m3	3200	1600	540	
179601-23-	m,p-Xylene	ND	ug/m3	3200	3200	930	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	3200	1600	480	
75-09-2	Methylene Chloride	ND	ug/m3	3200	1600	480	
95-47-6	o-Xylene	ND	ug/m3	3200	1600	450	
103-65-1	Propylbenzene	ND	ug/m3	3200	1600	480	
100-42-5	Styrene	ND	ug/m3	3200	1600	480	
127-18-4	Tetrachloroethene	ND	ug/m3	3200	1600	450	
109-99-9	Tetrahydrofuran	ND	ug/m3	3200	1600	700	
108-88-3	Toluene	ND	ug/m3	3200	1600	510	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	3200	1600	540	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	3200	1600	510	
79-01-6	Trichloroethene	1900	ug/m3	3200	1600	480	
75-01-4	Vinyl Chloride	ND	ug/m3	3200	1600	610	

Sample 1203241511 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	4175	2100	670	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	4175	2100	670	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	4175	2100	670	
75-34-3	1,1-Dichloroethane	ND	ug/m3	4175	2100	710	
75-35-4	1,1-Dichloroethene	ND	ug/m3	4175	2100	710	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	4175	2100	1000	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	4175	2100	670	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	4175	2100	630	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	4175	2100	710	
107-06-2	1,2-Dichloroethane	ND	ug/m3	4175	2100	790	
78-87-5	1,2-Dichloropropane	ND	ug/m3	4175	2100	710	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	4175	2100	710	
106-99-0	1,3-Butadiene	ND	ug/m3	4175	2100	880	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	4175	2100	710	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	4175	2100	670	
123-91-1	1,4-Dioxane	ND	ug/m3	4175	2100	710	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	4175	2100	710	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	4175	21000	960	
591-78-6	2-Hexanone	ND	ug/m3	4175	2100	750	

67-63-0	2-Propanol	ND	ug/m3	4175	4200	1700	
107-05-1	3-Chloropropene	ND	ug/m3	4175	2100	670	
622-96-8	4-Ethyltoluene	ND	ug/m3	4175	2100	710	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	4175	2100	580	
67-64-1	Acetone	ND	ug/m3	4175	21000	3700	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	4175	2100	630	
71-43-2	Benzene	ND	ug/m3	4175	2100	580	
75-27-4	Bromodichloromethane	ND	ug/m3	4175	2100	670	
75-25-2	Bromoform	ND	ug/m3	4175	2100	580	
74-83-9	Bromomethane	ND	ug/m3	4175	2100	790	
75-15-0	Carbon Disulfide	ND	ug/m3	4175	21000	630	
56-23-5	Carbon Tetrachloride	ND	ug/m3	4175	2100	670	
108-90-7	Chlorobenzene	ND	ug/m3	4175	2100	670	
75-00-3	Chloroethane	ND	ug/m3	4175	2100	790	
67-66-3	Chloroform	ND	ug/m3	4175	2100	790	
74-87-3	Chloromethane	ND	ug/m3	4175	2100	790	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	4175	2100	750	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	4175	2100	580	
98-82-8	Cumene	ND	ug/m3	4175	2100	630	
110-82-7	Cyclohexane	ND	ug/m3	4175	4200	1400	
124-48-1	Dibromochloromethane	ND	ug/m3	4175	2100	580	
64-17-5	Ethanol	ND	ug/m3	4175	21000	6700	
100-41-4	Ethyl Benzene	ND	ug/m3	4175	2100	630	
75-69-4	Freon 11	ND	ug/m3	4175	2100	670	
76-13-1	Freon 113	320000	ug/m3	4175	2100	670	
76-14-2	Freon 114	ND	ug/m3	4175	2100	710	
75-71-8	Freon 12	ND	ug/m3	4175	2100	750	
306-83-2	Freon 123	ND	ug/m3	4175	2100	1000	
354-23-4	Freon 123a	ND	ug/m3	4175	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	4175	2100	960	
142-82-5	Heptane	ND	ug/m3	4175	2100	670	
87-68-3	Hexachlorobutadiene	ND	ug/m3	4175	2100	750	
110-54-3	Hexane	ND	ug/m3	4175	2100	710	
179601-23-	m,p-Xylene	ND	ug/m3	4175	4200	1200	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	4175	2100	630	
75-09-2	Methylene Chloride	750	ug/m3	4175	2100	630	J
95-47-6	o-Xylene	ND	ug/m3	4175	2100	580	
103-65-1	Propylbenzene	ND	ug/m3	4175	2100	630	
100-42-5	Styrene	ND	ug/m3	4175	2100	630	
127-18-4	Tetrachloroethene	ND	ug/m3	4175	2100	580	
109-99-9	Tetrahydrofuran	ND	ug/m3	4175	2100	920	
108-88-3	Toluene	ND	ug/m3	4175	2100	670	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	4175	2100	710	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	4175	2100	670	
79-01-6	Trichloroethene	2000	ug/m3	4175	2100	630	J
75-01-4	Vinyl Chloride	ND	ug/m3	4175	2100	790	

Borehole	600-SGW-5	Depth (ft)	7.5	Depth (m)	2.29	Event Date	3/22/2012

Sample	1203221008	Sample Type	Soil Gas	Analysis Method	TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	4.1	2.1	0.66	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	4.1	2.1	0.66	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	4.1	2.1	0.66	
75-34-3	1,1-Dichloroethane	ND	ug/m3	4.1	2.1	0.7	
75-35-4	1,1-Dichloroethene	ND	ug/m3	4.1	2.1	0.7	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	4.1	2.1	0.98	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	4.1	2.1	0.66	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	4.1	2.1	0.62	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	4.1	2.1	0.7	
107-06-2	1,2-Dichloroethane	ND	ug/m3	4.1	2.1	0.78	
78-87-5	1,2-Dichloropropane	ND	ug/m3	4.1	2.1	0.7	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	4.1	2.1	0.7	
106-99-0	1,3-Butadiene	ND	ug/m3	4.1	2.1	0.86	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	4.1	2.1	0.7	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	4.1	2.1	0.66	
123-91-1	1,4-Dioxane	ND	ug/m3	4.1	2.1	0.7	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	4.1	2.1	0.7	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	4	ug/m3	4.1	21	0.94	J
591-78-6	2-Hexanone	ND	ug/m3	4.1	2.1	0.74	
67-63-0	2-Propanol	ND	ug/m3	4.1	4.1	1.6	
107-05-1	3-Chloropropene	ND	ug/m3	4.1	2.1	0.66	
622-96-8	4-Ethyltoluene	ND	ug/m3	4.1	2.1	0.7	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	4.1	2.1	0.57	
67-64-1	Acetone	15	ug/m3	4.1	21	3.6	J
100-44-7	alpha-Chlorotoluene	ND	ug/m3	4.1	2.1	0.62	
71-43-2	Benzene	ND	ug/m3	4.1	2.1	0.57	
75-27-4	Bromodichloromethane	ND	ug/m3	4.1	2.1	0.66	
75-25-2	Bromoform	ND	ug/m3	4.1	2.1	0.57	
74-83-9	Bromomethane	ND	ug/m3	4.1	2.1	0.78	
75-15-0	Carbon Disulfide	0.82	ug/m3	4.1	21	0.62	J
56-23-5	Carbon Tetrachloride	ND	ug/m3	4.1	2.1	0.66	
108-90-7	Chlorobenzene	ND	ug/m3	4.1	2.1	0.66	
75-00-3	Chloroethane	ND	ug/m3	4.1	2.1	0.78	
67-66-3	Chloroform	2.6	ug/m3	4.1	2.1	0.78	
74-87-3	Chloromethane	ND	ug/m3	4.1	2.1	0.78	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	4.1	2.1	0.74	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	4.1	2.1	0.57	
98-82-8	Cumene	ND	ug/m3	4.1	2.1	0.62	
110-82-7	Cyclohexane	ND	ug/m3	4.1	4.1	1.4	
124-48-1	Dibromochloromethane	ND	ug/m3	4.1	2.1	0.57	
64-17-5	Ethanol	ND	ug/m3	4.1	21	6.6	

100-41-4	Ethyl Benzene	ND	ug/m3	4.1	2.1	0.62	
75-69-4	Freon 11	2.7	ug/m3	4.1	2.1	0.66	
76-13-1	Freon 113	870	ug/m3	41	21	6.6	D
76-14-2	Freon 114	ND	ug/m3	4.1	2.1	0.7	
75-71-8	Freon 12	2	ug/m3	4.1	2.1	0.74	J
306-83-2	Freon 123	ND	ug/m3	4.1	2.1	0.98	
NA	Freon 123a	120	ug/m3	4.1	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	4.1	2.1	0.94	
142-82-5	Heptane	ND	ug/m3	4.1	2.1	0.66	
87-68-3	Hexachlorobutadiene	ND	ug/m3	4.1	2.1	0.74	
110-54-3	Hexane	ND	ug/m3	4.1	2.1	0.7	
179601-23-	m,p-Xylene	ND	ug/m3	4.1	4.1	1.2	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	4.1	2.1	0.62	
75-09-2	Methylene Chloride	0.7	ug/m3	4.1	2.1	0.62	J RB
95-47-6	o-Xylene	ND	ug/m3	4.1	2.1	0.57	
103-65-1	Propylbenzene	ND	ug/m3	4.1	2.1	0.62	
100-42-5	Styrene	ND	ug/m3	4.1	2.1	0.62	
127-18-4	Tetrachloroethene	ND	ug/m3	4.1	2.1	0.57	
109-99-9	Tetrahydrofuran	ND	ug/m3	4.1	2.1	0.9	
108-88-3	Toluene	ND	ug/m3	4.1	2.1	0.66	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	4.1	2.1	0.7	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	4.1	2.1	0.66	
79-01-6	Trichloroethene	92	ug/m3	4.1	2.1	0.62	
75-01-4	Vinyl Chloride	ND	ug/m3	4.1	2.1	0.78	

Sample 1203221400 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	12.62	6.3	2	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	12.62	6.3	2	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	12.62	6.3	2	
75-34-3	1,1-Dichloroethane	ND	ug/m3	12.62	6.3	2.1	
75-35-4	1,1-Dichloroethene	ND	ug/m3	12.62	6.3	2.1	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	12.62	6.3	3	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	12.62	6.3	2	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	12.62	6.3	1.9	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	12.62	6.3	2.1	
107-06-2	1,2-Dichloroethane	ND	ug/m3	12.62	6.3	2.4	
78-87-5	1,2-Dichloropropane	ND	ug/m3	12.62	6.3	2.1	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	12.62	6.3	2.1	
106-99-0	1,3-Butadiene	ND	ug/m3	12.62	6.3	2.6	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	12.62	6.3	2.1	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	12.62	6.3	2	
123-91-1	1,4-Dioxane	ND	ug/m3	12.62	6.3	2.1	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	12.62	6.3	2.1	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	7.5	ug/m3	12.62	63	2.9	J
591-78-6	2-Hexanone	ND	ug/m3	12.62	6.3	2.3	

67-63-0	2-Propanol	ND	ug/m3	12.62	13	5	
107-05-1	3-Chloropropene	ND	ug/m3	12.62	6.3	2	
622-96-8	4-Ethyltoluene	ND	ug/m3	12.62	6.3	2.1	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	12.62	6.3	1.8	
67-64-1	Acetone	24	ug/m3	12.62	63	11	J
100-44-7	alpha-Chlorotoluene	ND	ug/m3	12.62	6.3	1.9	
71-43-2	Benzene	ND	ug/m3	12.62	6.3	1.8	
75-27-4	Bromodichloromethane	ND	ug/m3	12.62	6.3	2	
75-25-2	Bromoform	ND	ug/m3	12.62	6.3	1.8	
74-83-9	Bromomethane	ND	ug/m3	12.62	6.3	2.4	
75-15-0	Carbon Disulfide	ND	ug/m3	12.62	63	1.9	
56-23-5	Carbon Tetrachloride	ND	ug/m3	12.62	6.3	2	
108-90-7	Chlorobenzene	ND	ug/m3	12.62	6.3	2	
75-00-3	Chloroethane	ND	ug/m3	12.62	6.3	2.4	
67-66-3	Chloroform	3.3	ug/m3	12.62	6.3	2.4	J
74-87-3	Chloromethane	ND	ug/m3	12.62	6.3	2.4	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	12.62	6.3	2.3	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	12.62	6.3	1.8	
98-82-8	Cumene	ND	ug/m3	12.62	6.3	1.9	
110-82-7	Cyclohexane	ND	ug/m3	12.62	13	4.2	
124-48-1	Dibromochloromethane	ND	ug/m3	12.62	6.3	1.8	
64-17-5	Ethanol	ND	ug/m3	12.62	63	20	
100-41-4	Ethyl Benzene	ND	ug/m3	12.62	6.3	1.9	
75-69-4	Freon 11	3	ug/m3	12.62	6.3	2	J
76-13-1	Freon 113	1000	ug/m3	12.62	6.3	2	
76-14-2	Freon 114	ND	ug/m3	12.62	6.3	2.1	
75-71-8	Freon 12	ND	ug/m3	12.62	6.3	2.3	
306-83-2	Freon 123	ND	ug/m3	12.62	6.3	3	
354-23-4	Freon 123a	ND	ug/m3	12.62	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	12.62	6.3	2.9	
142-82-5	Heptane	ND	ug/m3	12.62	6.3	2	
87-68-3	Hexachlorobutadiene	ND	ug/m3	12.62	6.3	2.3	
110-54-3	Hexane	ND	ug/m3	12.62	6.3	2.1	
179601-23-	m,p-Xylene	ND	ug/m3	12.62	13	3.7	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	12.62	6.3	1.9	
75-09-2	Methylene Chloride	2.3	ug/m3	12.62	6.3	1.9	J
95-47-6	o-Xylene	ND	ug/m3	12.62	6.3	1.8	
103-65-1	Propylbenzene	ND	ug/m3	12.62	6.3	1.9	
100-42-5	Styrene	ND	ug/m3	12.62	6.3	1.9	
127-18-4	Tetrachloroethene	ND	ug/m3	12.62	6.3	1.8	
109-99-9	Tetrahydrofuran	ND	ug/m3	12.62	6.3	2.8	
108-88-3	Toluene	ND	ug/m3	12.62	6.3	2	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	12.62	6.3	2.1	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	12.62	6.3	2	
79-01-6	Trichloroethene	110	ug/m3	12.62	6.3	1.9	
75-01-4	Vinyl Chloride	ND	ug/m3	12.62	6.3	2.4	

Sample **1203221517** **Sample Type** **Soil Gas** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	25.38	13	4.1	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	25.38	13	4.1	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	25.38	13	4.1	
75-34-3	1,1-Dichloroethane	ND	ug/m3	25.38	13	4.3	
75-35-4	1,1-Dichloroethene	ND	ug/m3	25.38	13	4.3	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	25.38	13	6.1	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	25.38	13	4.1	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	25.38	13	3.8	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	25.38	13	4.3	
107-06-2	1,2-Dichloroethane	ND	ug/m3	25.38	13	4.8	
78-87-5	1,2-Dichloropropane	ND	ug/m3	25.38	13	4.3	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	25.38	13	4.3	
106-99-0	1,3-Butadiene	ND	ug/m3	25.38	13	5.3	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	25.38	13	4.3	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	25.38	13	4.1	
123-91-1	1,4-Dioxane	ND	ug/m3	25.38	13	4.3	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	25.38	13	4.3	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	25.38	130	5.8	
591-78-6	2-Hexanone	ND	ug/m3	25.38	13	4.6	
67-63-0	2-Propanol	ND	ug/m3	25.38	25	10	
107-05-1	3-Chloropropene	ND	ug/m3	25.38	13	4.1	
622-96-8	4-Ethyltoluene	ND	ug/m3	25.38	13	4.3	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	25.38	13	3.6	
67-64-1	Acetone	ND	ug/m3	25.38	130	22	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	25.38	13	3.8	
71-43-2	Benzene	ND	ug/m3	25.38	13	3.6	
75-27-4	Bromodichloromethane	ND	ug/m3	25.38	13	4.1	
75-25-2	Bromoform	ND	ug/m3	25.38	13	3.6	
74-83-9	Bromomethane	ND	ug/m3	25.38	13	4.8	
75-15-0	Carbon Disulfide	ND	ug/m3	25.38	130	3.8	
56-23-5	Carbon Tetrachloride	ND	ug/m3	25.38	13	4.1	
108-90-7	Chlorobenzene	ND	ug/m3	25.38	13	4.1	
75-00-3	Chloroethane	ND	ug/m3	25.38	13	4.8	
67-66-3	Chloroform	ND	ug/m3	25.38	13	4.8	
74-87-3	Chloromethane	ND	ug/m3	25.38	13	4.8	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	25.38	13	4.6	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	25.38	13	3.6	
98-82-8	Cumene	ND	ug/m3	25.38	13	3.8	
110-82-7	Cyclohexane	ND	ug/m3	25.38	25	8.4	
124-48-1	Dibromochloromethane	ND	ug/m3	25.38	13	3.6	
64-17-5	Ethanol	ND	ug/m3	25.38	130	41	
100-41-4	Ethyl Benzene	ND	ug/m3	25.38	13	3.8	
75-69-4	Freon 11	6.3	ug/m3	25.38	13	4.1	J

76-13-1	Freon 113	2300	ug/m3	25.38	13	4.1	
76-14-2	Freon 114	ND	ug/m3	25.38	13	4.3	
75-71-8	Freon 12	ND	ug/m3	25.38	13	4.6	
306-83-2	Freon 123	ND	ug/m3	25.38	13	6.1	
354-23-4	Freon 123a	130	ug/m3	25.38	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	25.38	13	5.8	
142-82-5	Heptane	ND	ug/m3	25.38	13	4.1	
87-68-3	Hexachlorobutadiene	ND	ug/m3	25.38	13	4.6	
110-54-3	Hexane	ND	ug/m3	25.38	13	4.3	
179601-23-	m,p-Xylene	ND	ug/m3	25.38	25	7.4	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	25.38	13	3.8	
75-09-2	Methylene Chloride	5	ug/m3	25.38	13	3.8	J
95-47-6	o-Xylene	ND	ug/m3	25.38	13	3.6	
103-65-1	Propylbenzene	ND	ug/m3	25.38	13	3.8	
100-42-5	Styrene	ND	ug/m3	25.38	13	3.8	
127-18-4	Tetrachloroethene	ND	ug/m3	25.38	13	3.6	
109-99-9	Tetrahydrofuran	ND	ug/m3	25.38	13	5.6	
108-88-3	Toluene	8.2	ug/m3	25.38	13	4.1	J
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	25.38	13	4.3	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	25.38	13	4.1	
79-01-6	Trichloroethene	95	ug/m3	25.38	13	3.8	
75-01-4	Vinyl Chloride	ND	ug/m3	25.38	13	4.8	

Sample 1203221651 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	32.4	16	5.2	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	32.4	16	5.2	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	32.4	16	5.2	
75-34-3	1,1-Dichloroethane	ND	ug/m3	32.4	16	5.5	
75-35-4	1,1-Dichloroethene	ND	ug/m3	32.4	16	5.5	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	32.4	16	7.8	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	32.4	16	5.2	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	32.4	16	4.9	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	32.4	16	5.5	
107-06-2	1,2-Dichloroethane	ND	ug/m3	32.4	16	6.2	
78-87-5	1,2-Dichloropropane	ND	ug/m3	32.4	16	5.5	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	32.4	16	5.5	
106-99-0	1,3-Butadiene	ND	ug/m3	32.4	16	6.8	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	32.4	16	5.5	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	32.4	16	5.2	
123-91-1	1,4-Dioxane	ND	ug/m3	32.4	16	5.5	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	32.4	16	5.5	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	32.4	160	7.5	
591-78-6	2-Hexanone	ND	ug/m3	32.4	16	5.8	
67-63-0	2-Propanol	ND	ug/m3	32.4	32	13	
107-05-1	3-Chloropropene	ND	ug/m3	32.4	16	5.2	

622-96-8	4-Ethyltoluene	ND	ug/m3	32.4	16	5.5	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	32.4	16	4.5	
67-64-1	Acetone	ND	ug/m3	32.4	160	29	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	32.4	16	4.9	
71-43-2	Benzene	ND	ug/m3	32.4	16	4.5	
75-27-4	Bromodichloromethane	ND	ug/m3	32.4	16	5.2	
75-25-2	Bromoform	ND	ug/m3	32.4	16	4.5	
74-83-9	Bromomethane	ND	ug/m3	32.4	16	6.2	
75-15-0	Carbon Disulfide	7.3	ug/m3	32.4	160	4.9	J
56-23-5	Carbon Tetrachloride	ND	ug/m3	32.4	16	5.2	
108-90-7	Chlorobenzene	ND	ug/m3	32.4	16	5.2	
75-00-3	Chloroethane	ND	ug/m3	32.4	16	6.2	
67-66-3	Chloroform	ND	ug/m3	32.4	16	6.2	
74-87-3	Chloromethane	ND	ug/m3	32.4	16	6.2	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	32.4	16	5.8	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	32.4	16	4.5	
98-82-8	Cumene	ND	ug/m3	32.4	16	4.9	
110-82-7	Cyclohexane	ND	ug/m3	32.4	32	11	
124-48-1	Dibromochloromethane	ND	ug/m3	32.4	16	4.5	
64-17-5	Ethanol	ND	ug/m3	32.4	160	52	
100-41-4	Ethyl Benzene	ND	ug/m3	32.4	16	4.9	
75-69-4	Freon 11	14	ug/m3	32.4	16	5.2	J
76-13-1	Freon 113	3400	ug/m3	81	41	13	D
76-14-2	Freon 114	ND	ug/m3	32.4	16	5.5	
75-71-8	Freon 12	ND	ug/m3	32.4	16	5.8	
306-83-2	Freon 123	ND	ug/m3	32.4	16	7.8	
354-23-4	Freon 123a	95	ug/m3	32.4	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	32.4	16	7.5	
142-82-5	Heptane	ND	ug/m3	32.4	16	5.2	
87-68-3	Hexachlorobutadiene	ND	ug/m3	32.4	16	5.8	
110-54-3	Hexane	ND	ug/m3	32.4	16	5.5	
179601-23-	m,p-Xylene	ND	ug/m3	32.4	32	9.4	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	32.4	16	4.9	
75-09-2	Methylene Chloride	5.2	ug/m3	32.4	16	4.9	J
95-47-6	o-Xylene	ND	ug/m3	32.4	16	4.5	
103-65-1	Propylbenzene	ND	ug/m3	32.4	16	4.9	
100-42-5	Styrene	ND	ug/m3	32.4	16	4.9	
127-18-4	Tetrachloroethene	ND	ug/m3	32.4	16	4.5	
109-99-9	Tetrahydrofuran	ND	ug/m3	32.4	16	7.1	
108-88-3	Toluene	ND	ug/m3	32.4	16	5.2	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	32.4	16	5.5	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	32.4	16	5.2	
79-01-6	Trichloroethene	81	ug/m3	32.4	16	4.9	
75-01-4	Vinyl Chloride	ND	ug/m3	32.4	16	6.2	

Sample **1203230926** **Sample Type** **Soil Gas** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	4.03	2	0.64	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	4.03	2	0.64	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	4.03	2	0.64	
75-34-3	1,1-Dichloroethane	ND	ug/m3	4.03	2	0.68	
75-35-4	1,1-Dichloroethene	ND	ug/m3	4.03	2	0.68	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	4.03	2	0.97	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	4.03	2	0.64	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	4.03	2	0.6	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	4.03	2	0.68	
107-06-2	1,2-Dichloroethane	ND	ug/m3	4.03	2	0.76	
78-87-5	1,2-Dichloropropane	ND	ug/m3	4.03	2	0.68	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	4.03	2	0.68	
106-99-0	1,3-Butadiene	ND	ug/m3	4.03	2	0.85	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	4.03	2	0.68	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	4.03	2	0.64	
123-91-1	1,4-Dioxane	ND	ug/m3	4.03	2	0.68	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	4.03	2	0.68	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	1.6	ug/m3	4.03	20	0.93	J
591-78-6	2-Hexanone	ND	ug/m3	4.03	2	0.72	
67-63-0	2-Propanol	ND	ug/m3	4.03	4	1.6	
107-05-1	3-Chloropropene	ND	ug/m3	4.03	2	0.64	
622-96-8	4-Ethyltoluene	ND	ug/m3	4.03	2	0.68	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	4.03	2	0.56	
67-64-1	Acetone	6.4	ug/m3	4.03	20	3.5	J
100-44-7	alpha-Chlorotoluene	ND	ug/m3	4.03	2	0.6	
71-43-2	Benzene	ND	ug/m3	4.03	2	0.56	
75-27-4	Bromodichloromethane	ND	ug/m3	4.03	2	0.64	
75-25-2	Bromoform	ND	ug/m3	4.03	2	0.56	
74-83-9	Bromomethane	ND	ug/m3	4.03	2	0.76	
75-15-0	Carbon Disulfide	ND	ug/m3	4.03	20	0.6	
56-23-5	Carbon Tetrachloride	ND	ug/m3	4.03	2	0.64	
108-90-7	Chlorobenzene	ND	ug/m3	4.03	2	0.64	
75-00-3	Chloroethane	ND	ug/m3	4.03	2	0.76	
67-66-3	Chloroform	ND	ug/m3	4.03	2	0.76	
74-87-3	Chloromethane	ND	ug/m3	4.03	2	0.76	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	4.03	2	0.72	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	4.03	2	0.56	
98-82-8	Cumene	ND	ug/m3	4.03	2	0.6	
110-82-7	Cyclohexane	ND	ug/m3	4.03	4	1.3	
124-48-1	Dibromochloromethane	ND	ug/m3	4.03	2	0.56	
64-17-5	Ethanol	ND	ug/m3	4.03	20	6.4	
100-41-4	Ethyl Benzene	ND	ug/m3	4.03	2	0.6	
75-69-4	Freon 11	1.3	ug/m3	4.03	2	0.64	J

76-13-1	Freon 113	120	ug/m3	4.03	2	0.64	
76-14-2	Freon 114	ND	ug/m3	4.03	2	0.68	
75-71-8	Freon 12	1.9	ug/m3	4.03	2	0.72	J
306-83-2	Freon 123	ND	ug/m3	4.03	2	0.97	
354-23-4	Freon 123a	ND	ug/m3	4.03	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	4.03	2	0.93	
142-82-5	Heptane	ND	ug/m3	4.03	2	0.64	
87-68-3	Hexachlorobutadiene	ND	ug/m3	4.03	2	0.72	
110-54-3	Hexane	ND	ug/m3	4.03	2	0.68	
179601-23-	m,p-Xylene	ND	ug/m3	4.03	4	1.2	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	4.03	2	0.6	
75-09-2	Methylene Chloride	0.79	ug/m3	4.03	2	0.6	J RB
95-47-6	o-Xylene	ND	ug/m3	4.03	2	0.56	
103-65-1	Propylbenzene	ND	ug/m3	4.03	2	0.6	
100-42-5	Styrene	ND	ug/m3	4.03	2	0.6	
127-18-4	Tetrachloroethene	ND	ug/m3	4.03	2	0.56	
109-99-9	Tetrahydrofuran	ND	ug/m3	4.03	2	0.89	
108-88-3	Toluene	ND	ug/m3	4.03	2	0.64	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	4.03	2	0.68	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	4.03	2	0.64	
79-01-6	Trichloroethene	30	ug/m3	4.03	2	0.6	
75-01-4	Vinyl Chloride	ND	ug/m3	4.03	2	0.76	

Sample 1203231141 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	23.43	12	3.7	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	23.43	12	3.7	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	23.43	12	3.7	
75-34-3	1,1-Dichloroethane	ND	ug/m3	23.43	12	4	
75-35-4	1,1-Dichloroethene	ND	ug/m3	23.43	12	4	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	23.43	12	5.6	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	23.43	12	3.7	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	23.43	12	3.5	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	23.43	12	4	
107-06-2	1,2-Dichloroethane	ND	ug/m3	23.43	12	4.5	
78-87-5	1,2-Dichloropropane	ND	ug/m3	23.43	12	4	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	23.43	12	4	
106-99-0	1,3-Butadiene	ND	ug/m3	23.43	12	4.9	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	23.43	12	4	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	23.43	12	3.7	
123-91-1	1,4-Dioxane	ND	ug/m3	23.43	12	4	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	23.43	12	4	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	23.43	120	5.4	
591-78-6	2-Hexanone	ND	ug/m3	23.43	12	4.2	
67-63-0	2-Propanol	ND	ug/m3	23.43	23	9.4	
107-05-1	3-Chloropropene	ND	ug/m3	23.43	12	3.7	

622-96-8	4-Ethyltoluene	ND	ug/m3	23.43	12	4	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	23.43	12	3.3	
67-64-1	Acetone	ND	ug/m3	23.43	120	21	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	23.43	12	3.5	
71-43-2	Benzene	ND	ug/m3	23.43	12	3.3	
75-27-4	Bromodichloromethane	ND	ug/m3	23.43	12	3.7	
75-25-2	Bromoform	ND	ug/m3	23.43	12	3.3	
74-83-9	Bromomethane	ND	ug/m3	23.43	12	4.5	
75-15-0	Carbon Disulfide	ND	ug/m3	23.43	120	3.5	
56-23-5	Carbon Tetrachloride	ND	ug/m3	23.43	12	3.7	
108-90-7	Chlorobenzene	ND	ug/m3	23.43	12	3.7	
75-00-3	Chloroethane	ND	ug/m3	23.43	12	4.5	
67-66-3	Chloroform	ND	ug/m3	23.43	12	4.5	
74-87-3	Chloromethane	ND	ug/m3	23.43	12	4.5	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	23.43	12	4.2	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	23.43	12	3.3	
98-82-8	Cumene	ND	ug/m3	23.43	12	3.5	
110-82-7	Cyclohexane	ND	ug/m3	23.43	23	7.7	
124-48-1	Dibromochloromethane	ND	ug/m3	23.43	12	3.3	
64-17-5	Ethanol	ND	ug/m3	23.43	120	37	
100-41-4	Ethyl Benzene	ND	ug/m3	23.43	12	3.5	
75-69-4	Freon 11	9.7	ug/m3	23.43	12	3.7	J
76-13-1	Freon 113	2200	ug/m3	23.43	12	3.7	
76-14-2	Freon 114	ND	ug/m3	23.43	12	4	
75-71-8	Freon 12	ND	ug/m3	23.43	12	4.2	
306-83-2	Freon 123	ND	ug/m3	23.43	12	5.6	
354-23-4	Freon 123a	60	ug/m3	23.43	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	23.43	12	5.4	
142-82-5	Heptane	ND	ug/m3	23.43	12	3.7	
87-68-3	Hexachlorobutadiene	ND	ug/m3	23.43	12	4.2	
110-54-3	Hexane	ND	ug/m3	23.43	12	4	
179601-23-	m,p-Xylene	ND	ug/m3	23.43	23	6.8	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	23.43	12	3.5	
75-09-2	Methylene Chloride	4.2	ug/m3	23.43	12	3.5	J
95-47-6	o-Xylene	ND	ug/m3	23.43	12	3.3	
103-65-1	Propylbenzene	ND	ug/m3	23.43	12	3.5	
100-42-5	Styrene	ND	ug/m3	23.43	12	3.5	
127-18-4	Tetrachloroethene	ND	ug/m3	23.43	12	3.3	
109-99-9	Tetrahydrofuran	ND	ug/m3	23.43	12	5.2	
108-88-3	Toluene	ND	ug/m3	23.43	12	3.7	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	23.43	12	4	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	23.43	12	3.7	
79-01-6	Trichloroethene	58	ug/m3	23.43	12	3.5	
75-01-4	Vinyl Chloride	ND	ug/m3	23.43	12	4.5	

Sample **1203231737** **Sample Type** **Soil Gas** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	4.05	2	0.65	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	4.05	2	0.65	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	4.05	2	0.65	
75-34-3	1,1-Dichloroethane	ND	ug/m3	4.05	2	0.69	
75-35-4	1,1-Dichloroethene	ND	ug/m3	4.05	2	0.69	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	4.05	2	0.97	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	4.05	2	0.65	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	4.05	2	0.61	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	4.05	2	0.69	
107-06-2	1,2-Dichloroethane	ND	ug/m3	4.05	2	0.77	
78-87-5	1,2-Dichloropropane	ND	ug/m3	4.05	2	0.69	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	4.05	2	0.69	
106-99-0	1,3-Butadiene	ND	ug/m3	4.05	2	0.85	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	4.05	2	0.69	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	4.05	2	0.65	
123-91-1	1,4-Dioxane	ND	ug/m3	4.05	2	0.69	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	4.05	2	0.69	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	4.1	ug/m3	4.05	20	0.93	J
591-78-6	2-Hexanone	1.1	ug/m3	4.05	2	0.73	J
67-63-0	2-Propanol	ND	ug/m3	4.05	4.1	1.6	
107-05-1	3-Chloropropene	ND	ug/m3	4.05	2	0.65	
622-96-8	4-Ethyltoluene	ND	ug/m3	4.05	2	0.69	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	4.05	2	0.57	
67-64-1	Acetone	15	ug/m3	4.05	20	3.6	J
100-44-7	alpha-Chlorotoluene	ND	ug/m3	4.05	2	0.61	
71-43-2	Benzene	ND	ug/m3	4.05	2	0.57	
75-27-4	Bromodichloromethane	ND	ug/m3	4.05	2	0.65	
75-25-2	Bromoform	ND	ug/m3	4.05	2	0.57	
74-83-9	Bromomethane	ND	ug/m3	4.05	2	0.77	
75-15-0	Carbon Disulfide	0.88	ug/m3	4.05	20	0.61	J
56-23-5	Carbon Tetrachloride	ND	ug/m3	4.05	2	0.65	
108-90-7	Chlorobenzene	ND	ug/m3	4.05	2	0.65	
75-00-3	Chloroethane	ND	ug/m3	4.05	2	0.77	
67-66-3	Chloroform	2.6	ug/m3	4.05	2	0.77	
74-87-3	Chloromethane	ND	ug/m3	4.05	2	0.77	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	4.05	2	0.73	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	4.05	2	0.57	
98-82-8	Cumene	ND	ug/m3	4.05	2	0.61	
110-82-7	Cyclohexane	ND	ug/m3	4.05	4.1	1.3	
124-48-1	Dibromochloromethane	ND	ug/m3	4.05	2	0.57	
64-17-5	Ethanol	ND	ug/m3	4.05	20	6.5	
100-41-4	Ethyl Benzene	ND	ug/m3	4.05	2	0.61	
75-69-4	Freon 11	3.3	ug/m3	4.05	2	0.65	

76-13-1	Freon 113	950	ug/m3	40.5	20	6.5	D
76-14-2	Freon 114	ND	ug/m3	4.05	2	0.69	
75-71-8	Freon 12	2.1	ug/m3	4.05	2	0.73	
306-83-2	Freon 123	ND	ug/m3	4.05	2	0.97	
354-23-4	Freon 123a	110	ug/m3	4.05	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	4.05	2	0.93	
142-82-5	Heptane	ND	ug/m3	4.05	2	0.65	
87-68-3	Hexachlorobutadiene	ND	ug/m3	4.05	2	0.73	
110-54-3	Hexane	ND	ug/m3	4.05	2	0.69	
179601-23-	m,p-Xylene	ND	ug/m3	4.05	4.1	1.2	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	4.05	2	0.61	
75-09-2	Methylene Chloride	0.77	ug/m3	4.05	2	0.61	J RB
95-47-6	o-Xylene	ND	ug/m3	4.05	2	0.57	
103-65-1	Propylbenzene	ND	ug/m3	4.05	2	0.61	
100-42-5	Styrene	ND	ug/m3	4.05	2	0.61	
127-18-4	Tetrachloroethene	ND	ug/m3	4.05	2	0.57	
109-99-9	Tetrahydrofuran	ND	ug/m3	4.05	2	0.89	
108-88-3	Toluene	ND	ug/m3	4.05	2	0.65	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	4.05	2	0.69	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	4.05	2	0.65	
79-01-6	Trichloroethene	78	ug/m3	4.05	2	0.61	
75-01-4	Vinyl Chloride	ND	ug/m3	4.05	2	0.77	

Sample 1203241416 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	4.1	2.1	0.66	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	4.1	2.1	0.66	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	4.1	2.1	0.66	
75-34-3	1,1-Dichloroethane	ND	ug/m3	4.1	2.1	0.7	
75-35-4	1,1-Dichloroethene	ND	ug/m3	4.1	2.1	0.7	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	4.1	2.1	0.98	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	4.1	2.1	0.66	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	4.1	2.1	0.62	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	4.1	2.1	0.7	
107-06-2	1,2-Dichloroethane	ND	ug/m3	4.1	2.1	0.78	
78-87-5	1,2-Dichloropropane	ND	ug/m3	4.1	2.1	0.7	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	4.1	2.1	0.7	
106-99-0	1,3-Butadiene	ND	ug/m3	4.1	2.1	0.86	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	4.1	2.1	0.7	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	4.1	2.1	0.66	
123-91-1	1,4-Dioxane	ND	ug/m3	4.1	2.1	0.7	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	4.1	2.1	0.7	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	1.3	ug/m3	4.1	21	0.94	J
591-78-6	2-Hexanone	ND	ug/m3	4.1	2.1	0.74	
67-63-0	2-Propanol	ND	ug/m3	4.1	4.1	1.6	
107-05-1	3-Chloropropene	ND	ug/m3	4.1	2.1	0.66	

622-96-8	4-Ethyltoluene	ND	ug/m3	4.1	2.1	0.7	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	4.1	2.1	0.57	
67-64-1	Acetone	8	ug/m3	4.1	21	3.6	J
100-44-7	alpha-Chlorotoluene	ND	ug/m3	4.1	2.1	0.62	
71-43-2	Benzene	ND	ug/m3	4.1	2.1	0.57	
75-27-4	Bromodichloromethane	ND	ug/m3	4.1	2.1	0.66	
75-25-2	Bromoform	ND	ug/m3	4.1	2.1	0.57	
74-83-9	Bromomethane	ND	ug/m3	4.1	2.1	0.78	
75-15-0	Carbon Disulfide	ND	ug/m3	4.1	21	0.62	
56-23-5	Carbon Tetrachloride	ND	ug/m3	4.1	2.1	0.66	
108-90-7	Chlorobenzene	ND	ug/m3	4.1	2.1	0.66	
75-00-3	Chloroethane	ND	ug/m3	4.1	2.1	0.78	
67-66-3	Chloroform	2.6	ug/m3	4.1	2.1	0.78	
74-87-3	Chloromethane	ND	ug/m3	4.1	2.1	0.78	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	4.1	2.1	0.74	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	4.1	2.1	0.57	
98-82-8	Cumene	ND	ug/m3	4.1	2.1	0.62	
110-82-7	Cyclohexane	ND	ug/m3	4.1	4.1	1.4	
124-48-1	Dibromochloromethane	ND	ug/m3	4.1	2.1	0.57	
64-17-5	Ethanol	ND	ug/m3	4.1	21	6.6	
100-41-4	Ethyl Benzene	ND	ug/m3	4.1	2.1	0.62	
75-69-4	Freon 11	2.4	ug/m3	4.1	2.1	0.66	
76-13-1	Freon 113	800	ug/m3	41	21	6.6	D
76-14-2	Freon 114	ND	ug/m3	4.1	2.1	0.7	
75-71-8	Freon 12	2.1	ug/m3	4.1	2.1	0.74	
306-83-2	Freon 123	ND	ug/m3	4.1	2.1	0.98	
354-23-4	Freon 123a	96	ug/m3	4.1	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	4.1	2.1	0.94	
142-82-5	Heptane	ND	ug/m3	4.1	2.1	0.66	
87-68-3	Hexachlorobutadiene	ND	ug/m3	4.1	2.1	0.74	
110-54-3	Hexane	ND	ug/m3	4.1	2.1	0.7	
179601-23-	m,p-Xylene	ND	ug/m3	4.1	4.1	1.2	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	4.1	2.1	0.62	
75-09-2	Methylene Chloride	0.68	ug/m3	4.1	2.1	0.62	J RB
95-47-6	o-Xylene	ND	ug/m3	4.1	2.1	0.57	
103-65-1	Propylbenzene	ND	ug/m3	4.1	2.1	0.62	
100-42-5	Styrene	ND	ug/m3	4.1	2.1	0.62	
127-18-4	Tetrachloroethene	ND	ug/m3	4.1	2.1	0.57	
109-99-9	Tetrahydrofuran	ND	ug/m3	4.1	2.1	0.9	
108-88-3	Toluene	ND	ug/m3	4.1	2.1	0.66	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	4.1	2.1	0.7	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	4.1	2.1	0.66	
79-01-6	Trichloroethene	83	ug/m3	4.1	2.1	0.62	
75-01-4	Vinyl Chloride	ND	ug/m3	4.1	2.1	0.78	

Borehole	600-SGW-5	Depth (ft)	52.5	Depth (m)	16.00	Event Date	3/22/2012

Sample	1203221012	Sample Type	Soil Gas	Analysis Method	TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	159	80	25	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	159	80	25	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	159	80	25	
75-34-3	1,1-Dichloroethane	ND	ug/m3	159	80	27	
75-35-4	1,1-Dichloroethene	ND	ug/m3	159	80	27	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	159	80	38	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	159	80	25	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	159	80	24	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	159	80	27	
107-06-2	1,2-Dichloroethane	ND	ug/m3	159	80	30	
78-87-5	1,2-Dichloropropane	ND	ug/m3	159	80	27	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	159	80	27	
106-99-0	1,3-Butadiene	ND	ug/m3	159	80	33	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	159	80	27	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	159	80	25	
123-91-1	1,4-Dioxane	ND	ug/m3	159	80	27	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	159	80	27	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	159	800	37	
591-78-6	2-Hexanone	ND	ug/m3	159	80	29	
67-63-0	2-Propanol	ND	ug/m3	159	160	64	
107-05-1	3-Chloropropene	ND	ug/m3	159	80	25	
622-96-8	4-Ethyltoluene	ND	ug/m3	159	80	27	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	159	80	22	
67-64-1	Acetone	ND	ug/m3	159	800	140	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	159	80	24	
71-43-2	Benzene	ND	ug/m3	159	80	22	
75-27-4	Bromodichloromethane	ND	ug/m3	159	80	25	
75-25-2	Bromoform	ND	ug/m3	159	80	22	
74-83-9	Bromomethane	ND	ug/m3	159	80	30	
75-15-0	Carbon Disulfide	ND	ug/m3	159	800	24	
56-23-5	Carbon Tetrachloride	ND	ug/m3	159	80	25	
108-90-7	Chlorobenzene	ND	ug/m3	159	80	25	
75-00-3	Chloroethane	ND	ug/m3	159	80	30	
67-66-3	Chloroform	82	ug/m3	159	80	30	
74-87-3	Chloromethane	ND	ug/m3	159	80	30	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	159	80	29	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	159	80	22	
98-82-8	Cumene	ND	ug/m3	159	80	24	
110-82-7	Cyclohexane	ND	ug/m3	159	160	52	
124-48-1	Dibromochloromethane	ND	ug/m3	159	80	22	
64-17-5	Ethanol	ND	ug/m3	159	800	250	

100-41-4	Ethyl Benzene	ND	ug/m3	159	80	24	
75-69-4	Freon 11	ND	ug/m3	159	80	25	
76-13-1	Freon 113	11000	ug/m3	159	80	25	
76-14-2	Freon 114	ND	ug/m3	159	80	27	
75-71-8	Freon 12	ND	ug/m3	159	80	29	
306-83-2	Freon 123	ND	ug/m3	159	80	38	
NA	Freon 123a	560	ug/m3	159	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	159	80	37	
142-82-5	Heptane	ND	ug/m3	159	80	25	
87-68-3	Hexachlorobutadiene	ND	ug/m3	159	80	29	
110-54-3	Hexane	ND	ug/m3	159	80	27	
179601-23-	m,p-Xylene	ND	ug/m3	159	160	46	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	159	80	24	
75-09-2	Methylene Chloride	28	ug/m3	159	80	24	J
95-47-6	o-Xylene	ND	ug/m3	159	80	22	
103-65-1	Propylbenzene	ND	ug/m3	159	80	24	
100-42-5	Styrene	ND	ug/m3	159	80	24	
127-18-4	Tetrachloroethene	ND	ug/m3	159	80	22	
109-99-9	Tetrahydrofuran	ND	ug/m3	159	80	35	
108-88-3	Toluene	ND	ug/m3	159	80	25	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	159	80	27	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	159	80	25	
79-01-6	Trichloroethene	1900	ug/m3	159	80	24	
75-01-4	Vinyl Chloride	ND	ug/m3	159	80	30	

Sample 1203221404 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	128.46	64	21	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	128.46	64	21	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	128.46	64	21	
75-34-3	1,1-Dichloroethane	ND	ug/m3	128.46	64	22	
75-35-4	1,1-Dichloroethene	ND	ug/m3	128.46	64	22	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	128.46	64	31	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	128.46	64	21	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	128.46	64	19	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	128.46	64	22	
107-06-2	1,2-Dichloroethane	ND	ug/m3	128.46	64	24	
78-87-5	1,2-Dichloropropane	ND	ug/m3	128.46	64	22	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	128.46	64	22	
106-99-0	1,3-Butadiene	ND	ug/m3	128.46	64	27	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	128.46	64	22	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	128.46	64	21	
123-91-1	1,4-Dioxane	ND	ug/m3	128.46	64	22	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	128.46	64	22	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	128.46	640	30	
591-78-6	2-Hexanone	ND	ug/m3	128.46	64	23	

67-63-0	2-Propanol	ND	ug/m3	128.46	130	51	
107-05-1	3-Chloropropene	ND	ug/m3	128.46	64	21	
622-96-8	4-Ethyltoluene	ND	ug/m3	128.46	64	22	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	128.46	64	18	
67-64-1	Acetone	ND	ug/m3	128.46	640	110	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	128.46	64	19	
71-43-2	Benzene	ND	ug/m3	128.46	64	18	
75-27-4	Bromodichloromethane	ND	ug/m3	128.46	64	21	
75-25-2	Bromoform	ND	ug/m3	128.46	64	18	
74-83-9	Bromomethane	ND	ug/m3	128.46	64	24	
75-15-0	Carbon Disulfide	ND	ug/m3	128.46	640	19	
56-23-5	Carbon Tetrachloride	ND	ug/m3	128.46	64	21	
108-90-7	Chlorobenzene	ND	ug/m3	128.46	64	21	
75-00-3	Chloroethane	ND	ug/m3	128.46	64	24	
67-66-3	Chloroform	75	ug/m3	128.46	64	24	
74-87-3	Chloromethane	ND	ug/m3	128.46	64	24	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	128.46	64	23	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	128.46	64	18	
98-82-8	Cumene	ND	ug/m3	128.46	64	19	
110-82-7	Cyclohexane	ND	ug/m3	128.46	130	42	
124-48-1	Dibromochloromethane	ND	ug/m3	128.46	64	18	
64-17-5	Ethanol	ND	ug/m3	128.46	640	210	
100-41-4	Ethyl Benzene	ND	ug/m3	128.46	64	19	
75-69-4	Freon 11	ND	ug/m3	128.46	64	21	
76-13-1	Freon 113	10000	ug/m3	128.46	64	21	
76-14-2	Freon 114	ND	ug/m3	128.46	64	22	
75-71-8	Freon 12	ND	ug/m3	128.46	64	23	
306-83-2	Freon 123	ND	ug/m3	128.46	64	31	
354-23-4	Freon 123a	590	ug/m3	128.46	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	128.46	64	30	
142-82-5	Heptane	ND	ug/m3	128.46	64	21	
87-68-3	Hexachlorobutadiene	ND	ug/m3	128.46	64	23	
110-54-3	Hexane	ND	ug/m3	128.46	64	22	
179601-23-	m,p-Xylene	ND	ug/m3	128.46	130	37	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	128.46	64	19	
75-09-2	Methylene Chloride	24	ug/m3	128.46	64	19	J
95-47-6	o-Xylene	ND	ug/m3	128.46	64	18	
103-65-1	Propylbenzene	ND	ug/m3	128.46	64	19	
100-42-5	Styrene	ND	ug/m3	128.46	64	19	
127-18-4	Tetrachloroethene	ND	ug/m3	128.46	64	18	
109-99-9	Tetrahydrofuran	ND	ug/m3	128.46	64	28	
108-88-3	Toluene	ND	ug/m3	128.46	64	21	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	128.46	64	22	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	128.46	64	21	
79-01-6	Trichloroethene	1800	ug/m3	128.46	64	19	
75-01-4	Vinyl Chloride	ND	ug/m3	128.46	64	24	

Sample **1203221521** **Sample Type** **Soil Gas** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	110.67	55	18	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	110.67	55	18	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	110.67	55	18	
75-34-3	1,1-Dichloroethane	ND	ug/m3	110.67	55	19	
75-35-4	1,1-Dichloroethene	ND	ug/m3	110.67	55	19	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	110.67	55	27	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	110.67	55	18	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	110.67	55	17	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	110.67	55	19	
107-06-2	1,2-Dichloroethane	ND	ug/m3	110.67	55	21	
78-87-5	1,2-Dichloropropane	ND	ug/m3	110.67	55	19	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	110.67	55	19	
106-99-0	1,3-Butadiene	ND	ug/m3	110.67	55	23	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	110.67	55	19	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	110.67	55	18	
123-91-1	1,4-Dioxane	ND	ug/m3	110.67	55	19	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	110.67	55	19	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	110.67	550	25	
591-78-6	2-Hexanone	ND	ug/m3	110.67	55	20	
67-63-0	2-Propanol	ND	ug/m3	110.67	110	44	
107-05-1	3-Chloropropene	ND	ug/m3	110.67	55	18	
622-96-8	4-Ethyltoluene	ND	ug/m3	110.67	55	19	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	110.67	55	15	
67-64-1	Acetone	ND	ug/m3	110.67	550	97	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	110.67	55	17	
71-43-2	Benzene	ND	ug/m3	110.67	55	15	
75-27-4	Bromodichloromethane	ND	ug/m3	110.67	55	18	
75-25-2	Bromoform	ND	ug/m3	110.67	55	15	
74-83-9	Bromomethane	ND	ug/m3	110.67	55	21	
75-15-0	Carbon Disulfide	ND	ug/m3	110.67	550	17	
56-23-5	Carbon Tetrachloride	ND	ug/m3	110.67	55	18	
108-90-7	Chlorobenzene	ND	ug/m3	110.67	55	18	
75-00-3	Chloroethane	ND	ug/m3	110.67	55	21	
67-66-3	Chloroform	91	ug/m3	110.67	55	21	
74-87-3	Chloromethane	ND	ug/m3	110.67	55	21	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	110.67	55	20	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	110.67	55	15	
98-82-8	Cumene	ND	ug/m3	110.67	55	17	
110-82-7	Cyclohexane	ND	ug/m3	110.67	110	37	
124-48-1	Dibromochloromethane	ND	ug/m3	110.67	55	15	
64-17-5	Ethanol	ND	ug/m3	110.67	550	180	
100-41-4	Ethyl Benzene	ND	ug/m3	110.67	55	17	
75-69-4	Freon 11	ND	ug/m3	110.67	55	18	

76-13-1	Freon 113	12000	ug/m3	207.5	100	33	D
76-14-2	Freon 114	ND	ug/m3	110.67	55	19	
75-71-8	Freon 12	ND	ug/m3	110.67	55	20	
306-83-2	Freon 123	ND	ug/m3	110.67	55	27	
354-23-4	Freon 123a	620	ug/m3	110.67	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	110.67	55	25	
142-82-5	Heptane	ND	ug/m3	110.67	55	18	
87-68-3	Hexachlorobutadiene	ND	ug/m3	110.67	55	20	
110-54-3	Hexane	ND	ug/m3	110.67	55	19	
179601-23-	m,p-Xylene	ND	ug/m3	110.67	110	32	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	110.67	55	17	
75-09-2	Methylene Chloride	19	ug/m3	110.67	55	17	J
95-47-6	o-Xylene	ND	ug/m3	110.67	55	15	
103-65-1	Propylbenzene	ND	ug/m3	110.67	55	17	
100-42-5	Styrene	ND	ug/m3	110.67	55	17	
127-18-4	Tetrachloroethene	ND	ug/m3	110.67	55	15	
109-99-9	Tetrahydrofuran	ND	ug/m3	110.67	55	24	
108-88-3	Toluene	ND	ug/m3	110.67	55	18	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	110.67	55	19	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	110.67	55	18	
79-01-6	Trichloroethene	2100	ug/m3	110.67	55	17	
75-01-4	Vinyl Chloride	ND	ug/m3	110.67	55	21	

Sample 1203221655 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	106.67	53	17	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	106.67	53	17	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	106.67	53	17	
75-34-3	1,1-Dichloroethane	ND	ug/m3	106.67	53	18	
75-35-4	1,1-Dichloroethene	ND	ug/m3	106.67	53	18	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	106.67	53	26	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	106.67	53	17	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	106.67	53	16	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	106.67	53	18	
107-06-2	1,2-Dichloroethane	ND	ug/m3	106.67	53	20	
78-87-5	1,2-Dichloropropane	ND	ug/m3	106.67	53	18	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	106.67	53	18	
106-99-0	1,3-Butadiene	ND	ug/m3	106.67	53	22	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	106.67	53	18	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	106.67	53	17	
123-91-1	1,4-Dioxane	ND	ug/m3	106.67	53	18	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	106.67	53	18	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	106.67	530	25	
591-78-6	2-Hexanone	ND	ug/m3	106.67	53	19	
67-63-0	2-Propanol	ND	ug/m3	106.67	110	43	
107-05-1	3-Chloropropene	ND	ug/m3	106.67	53	17	

622-96-8	4-Ethyltoluene	ND	ug/m3	106.67	53	18	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	106.67	53	15	
67-64-1	Acetone	ND	ug/m3	106.67	530	94	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	106.67	53	16	
71-43-2	Benzene	ND	ug/m3	106.67	53	15	
75-27-4	Bromodichloromethane	ND	ug/m3	106.67	53	17	
75-25-2	Bromoform	ND	ug/m3	106.67	53	15	
74-83-9	Bromomethane	ND	ug/m3	106.67	53	20	
75-15-0	Carbon Disulfide	ND	ug/m3	106.67	530	16	
56-23-5	Carbon Tetrachloride	ND	ug/m3	106.67	53	17	
108-90-7	Chlorobenzene	ND	ug/m3	106.67	53	17	
75-00-3	Chloroethane	ND	ug/m3	106.67	53	20	
67-66-3	Chloroform	84	ug/m3	106.67	53	20	
74-87-3	Chloromethane	ND	ug/m3	106.67	53	20	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	106.67	53	19	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	106.67	53	15	
98-82-8	Cumene	ND	ug/m3	106.67	53	16	
110-82-7	Cyclohexane	ND	ug/m3	106.67	110	35	
124-48-1	Dibromochloromethane	ND	ug/m3	106.67	53	15	
64-17-5	Ethanol	ND	ug/m3	106.67	530	170	
100-41-4	Ethyl Benzene	ND	ug/m3	106.67	53	16	
75-69-4	Freon 11	ND	ug/m3	106.67	53	17	
76-13-1	Freon 113	11000	ug/m3	320	160	51	D
76-14-2	Freon 114	ND	ug/m3	106.67	53	18	
75-71-8	Freon 12	ND	ug/m3	106.67	53	19	
306-83-2	Freon 123	ND	ug/m3	106.67	53	26	
354-23-4	Freon 123a	590	ug/m3	106.67	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	106.67	53	25	
142-82-5	Heptane	ND	ug/m3	106.67	53	17	
87-68-3	Hexachlorobutadiene	ND	ug/m3	106.67	53	19	
110-54-3	Hexane	ND	ug/m3	106.67	53	18	
179601-23-	m,p-Xylene	ND	ug/m3	106.67	110	31	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	106.67	53	16	
75-09-2	Methylene Chloride	20	ug/m3	106.67	53	16	J
95-47-6	o-Xylene	ND	ug/m3	106.67	53	15	
103-65-1	Propylbenzene	ND	ug/m3	106.67	53	16	
100-42-5	Styrene	ND	ug/m3	106.67	53	16	
127-18-4	Tetrachloroethene	ND	ug/m3	106.67	53	15	
109-99-9	Tetrahydrofuran	ND	ug/m3	106.67	53	23	
108-88-3	Toluene	ND	ug/m3	106.67	53	17	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	106.67	53	18	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	106.67	53	17	
79-01-6	Trichloroethene	2000	ug/m3	106.67	53	16	
75-01-4	Vinyl Chloride	ND	ug/m3	106.67	53	20	

Sample **1203230930** **Sample Type** **Soil Gas** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	107.33	54	17	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	107.33	54	17	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	107.33	54	17	
75-34-3	1,1-Dichloroethane	ND	ug/m3	107.33	54	18	
75-35-4	1,1-Dichloroethene	ND	ug/m3	107.33	54	18	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	107.33	54	26	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	107.33	54	17	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	107.33	54	16	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	107.33	54	18	
107-06-2	1,2-Dichloroethane	ND	ug/m3	107.33	54	20	
78-87-5	1,2-Dichloropropane	ND	ug/m3	107.33	54	18	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	107.33	54	18	
106-99-0	1,3-Butadiene	ND	ug/m3	107.33	54	23	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	107.33	54	18	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	107.33	54	17	
123-91-1	1,4-Dioxane	ND	ug/m3	107.33	54	18	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	107.33	54	18	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	107.33	540	25	
591-78-6	2-Hexanone	ND	ug/m3	107.33	54	19	
67-63-0	2-Propanol	ND	ug/m3	107.33	110	43	
107-05-1	3-Chloropropene	ND	ug/m3	107.33	54	17	
622-96-8	4-Ethyltoluene	ND	ug/m3	107.33	54	18	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	107.33	54	15	
67-64-1	Acetone	ND	ug/m3	107.33	540	94	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	107.33	54	16	
71-43-2	Benzene	ND	ug/m3	107.33	54	15	
75-27-4	Bromodichloromethane	ND	ug/m3	107.33	54	17	
75-25-2	Bromoform	ND	ug/m3	107.33	54	15	
74-83-9	Bromomethane	ND	ug/m3	107.33	54	20	
75-15-0	Carbon Disulfide	ND	ug/m3	107.33	540	16	
56-23-5	Carbon Tetrachloride	ND	ug/m3	107.33	54	17	
108-90-7	Chlorobenzene	ND	ug/m3	107.33	54	17	
75-00-3	Chloroethane	ND	ug/m3	107.33	54	20	
67-66-3	Chloroform	67	ug/m3	107.33	54	20	
74-87-3	Chloromethane	ND	ug/m3	107.33	54	20	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	107.33	54	19	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	107.33	54	15	
98-82-8	Cumene	ND	ug/m3	107.33	54	16	
110-82-7	Cyclohexane	ND	ug/m3	107.33	110	35	
124-48-1	Dibromochloromethane	ND	ug/m3	107.33	54	15	
64-17-5	Ethanol	ND	ug/m3	107.33	540	170	
100-41-4	Ethyl Benzene	ND	ug/m3	107.33	54	16	
75-69-4	Freon 11	ND	ug/m3	107.33	54	17	

76-13-1	Freon 113	9200	ug/m3	107.33	54	17	
76-14-2	Freon 114	ND	ug/m3	107.33	54	18	
75-71-8	Freon 12	ND	ug/m3	107.33	54	19	
306-83-2	Freon 123	ND	ug/m3	107.33	54	26	
354-23-4	Freon 123a	500	ug/m3	107.33	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	107.33	54	25	
142-82-5	Heptane	ND	ug/m3	107.33	54	17	
87-68-3	Hexachlorobutadiene	ND	ug/m3	107.33	54	19	
110-54-3	Hexane	ND	ug/m3	107.33	54	18	
179601-23-	m,p-Xylene	ND	ug/m3	107.33	110	31	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	107.33	54	16	
75-09-2	Methylene Chloride	21	ug/m3	107.33	54	16	J
95-47-6	o-Xylene	ND	ug/m3	107.33	54	15	
103-65-1	Propylbenzene	ND	ug/m3	107.33	54	16	
100-42-5	Styrene	ND	ug/m3	107.33	54	16	
127-18-4	Tetrachloroethene	ND	ug/m3	107.33	54	15	
109-99-9	Tetrahydrofuran	ND	ug/m3	107.33	54	24	
108-88-3	Toluene	ND	ug/m3	107.33	54	17	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	107.33	54	18	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	107.33	54	17	
79-01-6	Trichloroethene	1600	ug/m3	107.33	54	16	
75-01-4	Vinyl Chloride	ND	ug/m3	107.33	54	20	

Sample 1203231145 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	162	81	26	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	162	81	26	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	162	81	26	
75-34-3	1,1-Dichloroethane	ND	ug/m3	162	81	28	
75-35-4	1,1-Dichloroethene	ND	ug/m3	162	81	28	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	162	81	39	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	162	81	26	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	162	81	24	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	162	81	28	
107-06-2	1,2-Dichloroethane	ND	ug/m3	162	81	31	
78-87-5	1,2-Dichloropropane	ND	ug/m3	162	81	28	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	162	81	28	
106-99-0	1,3-Butadiene	ND	ug/m3	162	81	34	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	162	81	28	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	162	81	26	
123-91-1	1,4-Dioxane	ND	ug/m3	162	81	28	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	162	81	28	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	162	810	37	
591-78-6	2-Hexanone	ND	ug/m3	162	81	29	
67-63-0	2-Propanol	ND	ug/m3	162	160	65	
107-05-1	3-Chloropropene	ND	ug/m3	162	81	26	

622-96-8	4-Ethyltoluene	ND	ug/m3	162	81	28	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	162	81	23	
67-64-1	Acetone	ND	ug/m3	162	810	140	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	162	81	24	
71-43-2	Benzene	ND	ug/m3	162	81	23	
75-27-4	Bromodichloromethane	ND	ug/m3	162	81	26	
75-25-2	Bromoform	ND	ug/m3	162	81	23	
74-83-9	Bromomethane	ND	ug/m3	162	81	31	
75-15-0	Carbon Disulfide	ND	ug/m3	162	810	24	
56-23-5	Carbon Tetrachloride	ND	ug/m3	162	81	26	
108-90-7	Chlorobenzene	ND	ug/m3	162	81	26	
75-00-3	Chloroethane	ND	ug/m3	162	81	31	
67-66-3	Chloroform	83	ug/m3	162	81	31	
74-87-3	Chloromethane	ND	ug/m3	162	81	31	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	162	81	29	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	162	81	23	
98-82-8	Cumene	ND	ug/m3	162	81	24	
110-82-7	Cyclohexane	ND	ug/m3	162	160	53	
124-48-1	Dibromochloromethane	ND	ug/m3	162	81	23	
64-17-5	Ethanol	ND	ug/m3	162	810	260	
100-41-4	Ethyl Benzene	ND	ug/m3	162	81	24	
75-69-4	Freon 11	ND	ug/m3	162	81	26	
76-13-1	Freon 113	12000	ug/m3	162	81	26	
76-14-2	Freon 114	ND	ug/m3	162	81	28	
75-71-8	Freon 12	ND	ug/m3	162	81	29	
306-83-2	Freon 123	ND	ug/m3	162	81	39	
354-23-4	Freon 123a	570	ug/m3	162	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	162	81	37	
142-82-5	Heptane	ND	ug/m3	162	81	26	
87-68-3	Hexachlorobutadiene	ND	ug/m3	162	81	29	
110-54-3	Hexane	ND	ug/m3	162	81	28	
179601-23-	m,p-Xylene	ND	ug/m3	162	160	47	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	162	81	24	
75-09-2	Methylene Chloride	32	ug/m3	162	81	24	J
95-47-6	o-Xylene	ND	ug/m3	162	81	23	
103-65-1	Propylbenzene	ND	ug/m3	162	81	24	
100-42-5	Styrene	ND	ug/m3	162	81	24	
127-18-4	Tetrachloroethene	ND	ug/m3	162	81	23	
109-99-9	Tetrahydrofuran	ND	ug/m3	162	81	36	
108-88-3	Toluene	ND	ug/m3	162	81	26	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	162	81	28	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	162	81	26	
79-01-6	Trichloroethene	2000	ug/m3	162	81	24	
75-01-4	Vinyl Chloride	ND	ug/m3	162	81	31	

Sample **1203231741** **Sample Type** **Soil Gas** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	146.36	73	23	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	146.36	73	23	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	146.36	73	23	
75-34-3	1,1-Dichloroethane	ND	ug/m3	146.36	73	25	
75-35-4	1,1-Dichloroethene	ND	ug/m3	146.36	73	25	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	146.36	73	35	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	146.36	73	23	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	146.36	73	22	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	146.36	73	25	
107-06-2	1,2-Dichloroethane	ND	ug/m3	146.36	73	28	
78-87-5	1,2-Dichloropropane	ND	ug/m3	146.36	73	25	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	146.36	73	25	
106-99-0	1,3-Butadiene	ND	ug/m3	146.36	73	31	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	146.36	73	25	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	146.36	73	23	
123-91-1	1,4-Dioxane	ND	ug/m3	146.36	73	25	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	146.36	73	25	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	146.36	730	34	
591-78-6	2-Hexanone	ND	ug/m3	146.36	73	26	
67-63-0	2-Propanol	ND	ug/m3	146.36	150	59	
107-05-1	3-Chloropropene	ND	ug/m3	146.36	73	23	
622-96-8	4-Ethyltoluene	ND	ug/m3	146.36	73	25	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	146.36	73	20	
67-64-1	Acetone	ND	ug/m3	146.36	730	130	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	146.36	73	22	
71-43-2	Benzene	ND	ug/m3	146.36	73	20	
75-27-4	Bromodichloromethane	ND	ug/m3	146.36	73	23	
75-25-2	Bromoform	ND	ug/m3	146.36	73	20	
74-83-9	Bromomethane	ND	ug/m3	146.36	73	28	
75-15-0	Carbon Disulfide	ND	ug/m3	146.36	730	22	
56-23-5	Carbon Tetrachloride	ND	ug/m3	146.36	73	23	
108-90-7	Chlorobenzene	ND	ug/m3	146.36	73	23	
75-00-3	Chloroethane	ND	ug/m3	146.36	73	28	
67-66-3	Chloroform	80	ug/m3	146.36	73	28	
74-87-3	Chloromethane	ND	ug/m3	146.36	73	28	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	146.36	73	26	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	146.36	73	20	
98-82-8	Cumene	ND	ug/m3	146.36	73	22	
110-82-7	Cyclohexane	ND	ug/m3	146.36	150	48	
124-48-1	Dibromochloromethane	ND	ug/m3	146.36	73	20	
64-17-5	Ethanol	ND	ug/m3	146.36	730	230	
100-41-4	Ethyl Benzene	ND	ug/m3	146.36	73	22	
75-69-4	Freon 11	ND	ug/m3	146.36	73	23	

76-13-1	Freon 113	11000	ug/m3	146.36	73	23	
76-14-2	Freon 114	ND	ug/m3	146.36	73	25	
75-71-8	Freon 12	ND	ug/m3	146.36	73	26	
306-83-2	Freon 123	ND	ug/m3	146.36	73	35	
354-23-4	Freon 123a	550	ug/m3	146.36	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	146.36	73	34	
142-82-5	Heptane	ND	ug/m3	146.36	73	23	
87-68-3	Hexachlorobutadiene	ND	ug/m3	146.36	73	26	
110-54-3	Hexane	ND	ug/m3	146.36	73	25	
179601-23-	m,p-Xylene	ND	ug/m3	146.36	150	42	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	146.36	73	22	
75-09-2	Methylene Chloride	25	ug/m3	146.36	73	22	J
95-47-6	o-Xylene	ND	ug/m3	146.36	73	20	
103-65-1	Propylbenzene	ND	ug/m3	146.36	73	22	
100-42-5	Styrene	ND	ug/m3	146.36	73	22	
127-18-4	Tetrachloroethene	ND	ug/m3	146.36	73	20	
109-99-9	Tetrahydrofuran	ND	ug/m3	146.36	73	32	
108-88-3	Toluene	ND	ug/m3	146.36	73	23	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	146.36	73	25	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	146.36	73	23	
79-01-6	Trichloroethene	1900	ug/m3	146.36	73	22	
75-01-4	Vinyl Chloride	ND	ug/m3	146.36	73	28	

Sample 1203241420 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	2.5	1.3	0.4	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	2.5	1.3	0.4	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	2.5	1.3	0.4	
75-34-3	1,1-Dichloroethane	ND	ug/m3	2.5	1.3	0.43	
75-35-4	1,1-Dichloroethene	ND	ug/m3	2.5	1.3	0.43	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	2.5	1.3	0.6	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	2.5	1.3	0.4	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	2.5	1.3	0.38	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	2.5	1.3	0.43	
107-06-2	1,2-Dichloroethane	ND	ug/m3	2.5	1.3	0.48	
78-87-5	1,2-Dichloropropane	ND	ug/m3	2.5	1.3	0.43	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	2.5	1.3	0.43	
106-99-0	1,3-Butadiene	ND	ug/m3	2.5	1.3	0.53	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	2.5	1.3	0.43	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	2.5	1.3	0.4	
123-91-1	1,4-Dioxane	ND	ug/m3	2.5	1.3	0.43	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	2.5	1.3	0.43	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	0.73	ug/m3	2.5	13	0.58	J
591-78-6	2-Hexanone	ND	ug/m3	2.5	1.3	0.45	
67-63-0	2-Propanol	ND	ug/m3	2.5	2.5	1	
107-05-1	3-Chloropropene	ND	ug/m3	2.5	1.3	0.4	

622-96-8	4-Ethyltoluene	ND	ug/m3	2.5	1.3	0.43	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	2.5	1.3	0.35	
67-64-1	Acetone	5.9	ug/m3	2.5	13	2.2	J
100-44-7	alpha-Chlorotoluene	ND	ug/m3	2.5	1.3	0.38	
71-43-2	Benzene	ND	ug/m3	2.5	1.3	0.35	
75-27-4	Bromodichloromethane	ND	ug/m3	2.5	1.3	0.4	
75-25-2	Bromoform	ND	ug/m3	2.5	1.3	0.35	
74-83-9	Bromomethane	ND	ug/m3	2.5	1.3	0.48	
75-15-0	Carbon Disulfide	ND	ug/m3	2.5	13	0.38	
56-23-5	Carbon Tetrachloride	ND	ug/m3	2.5	1.3	0.4	
108-90-7	Chlorobenzene	ND	ug/m3	2.5	1.3	0.4	
75-00-3	Chloroethane	ND	ug/m3	2.5	1.3	0.48	
67-66-3	Chloroform	ND	ug/m3	2.5	1.3	0.48	
74-87-3	Chloromethane	ND	ug/m3	2.5	1.3	0.48	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	2.5	1.3	0.45	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	2.5	1.3	0.35	
98-82-8	Cumene	ND	ug/m3	2.5	1.3	0.38	
110-82-7	Cyclohexane	ND	ug/m3	2.5	2.5	0.83	
124-48-1	Dibromochloromethane	ND	ug/m3	2.5	1.3	0.35	
64-17-5	Ethanol	ND	ug/m3	2.5	13	4	
100-41-4	Ethyl Benzene	ND	ug/m3	2.5	1.3	0.38	
75-69-4	Freon 11	ND	ug/m3	2.5	1.3	0.4	
76-13-1	Freon 113	24	ug/m3	2.5	1.3	0.4	
76-14-2	Freon 114	ND	ug/m3	2.5	1.3	0.43	
75-71-8	Freon 12	ND	ug/m3	2.5	1.3	0.45	
306-83-2	Freon 123	ND	ug/m3	2.5	1.3	0.6	
354-23-4	Freon 123a	ND	ug/m3	2.5	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	2.5	1.3	0.58	
142-82-5	Heptane	ND	ug/m3	2.5	1.3	0.4	
87-68-3	Hexachlorobutadiene	ND	ug/m3	2.5	1.3	0.45	
110-54-3	Hexane	ND	ug/m3	2.5	1.3	0.43	
179601-23-	m,p-Xylene	ND	ug/m3	2.5	2.5	0.73	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	2.5	1.3	0.38	
75-09-2	Methylene Chloride	0.44	ug/m3	2.5	1.3	0.38	J RB
95-47-6	o-Xylene	ND	ug/m3	2.5	1.3	0.35	
103-65-1	Propylbenzene	ND	ug/m3	2.5	1.3	0.38	
100-42-5	Styrene	ND	ug/m3	2.5	1.3	0.38	
127-18-4	Tetrachloroethene	ND	ug/m3	2.5	1.3	0.35	
109-99-9	Tetrahydrofuran	ND	ug/m3	2.5	1.3	0.55	
108-88-3	Toluene	ND	ug/m3	2.5	1.3	0.4	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	2.5	1.3	0.43	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	2.5	1.3	0.4	
79-01-6	Trichloroethene	3.6	ug/m3	2.5	1.3	0.38	
75-01-4	Vinyl Chloride	ND	ug/m3	2.5	1.3	0.48	

Borehole	600-SGW-5	Depth (ft)	102.5	Depth (m)	31.24	Event Date	3/22/2012

Sample	1203221018	Sample Type	Soil Gas	Analysis Method	TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	161	81	26	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	161	81	26	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	161	81	26	
75-34-3	1,1-Dichloroethane	ND	ug/m3	161	81	27	
75-35-4	1,1-Dichloroethene	ND	ug/m3	161	81	27	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	161	81	39	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	161	81	26	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	161	81	24	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	161	81	27	
107-06-2	1,2-Dichloroethane	ND	ug/m3	161	81	31	
78-87-5	1,2-Dichloropropane	ND	ug/m3	161	81	27	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	161	81	27	
106-99-0	1,3-Butadiene	ND	ug/m3	161	81	34	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	161	81	27	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	161	81	26	
123-91-1	1,4-Dioxane	ND	ug/m3	161	81	27	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	161	81	27	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	161	810	37	
591-78-6	2-Hexanone	ND	ug/m3	161	81	29	
67-63-0	2-Propanol	ND	ug/m3	161	160	64	
107-05-1	3-Chloropropene	ND	ug/m3	161	81	26	
622-96-8	4-Ethyltoluene	ND	ug/m3	161	81	27	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	161	81	23	
67-64-1	Acetone	ND	ug/m3	161	810	140	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	161	81	24	
71-43-2	Benzene	ND	ug/m3	161	81	23	
75-27-4	Bromodichloromethane	ND	ug/m3	161	81	26	
75-25-2	Bromoform	ND	ug/m3	161	81	23	
74-83-9	Bromomethane	ND	ug/m3	161	81	31	
75-15-0	Carbon Disulfide	ND	ug/m3	161	810	24	
56-23-5	Carbon Tetrachloride	ND	ug/m3	161	81	26	
108-90-7	Chlorobenzene	ND	ug/m3	161	81	26	
75-00-3	Chloroethane	ND	ug/m3	161	81	31	
67-66-3	Chloroform	78	ug/m3	161	81	31	J
74-87-3	Chloromethane	ND	ug/m3	161	81	31	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	161	81	29	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	161	81	23	
98-82-8	Cumene	ND	ug/m3	161	81	24	
110-82-7	Cyclohexane	ND	ug/m3	161	160	53	
124-48-1	Dibromochloromethane	ND	ug/m3	161	81	23	
64-17-5	Ethanol	ND	ug/m3	161	810	260	

100-41-4	Ethyl Benzene	ND	ug/m3	161	81	24	
75-69-4	Freon 11	ND	ug/m3	161	81	26	
76-13-1	Freon 113	15000	ug/m3	161	81	26	
76-14-2	Freon 114	ND	ug/m3	161	81	27	
75-71-8	Freon 12	ND	ug/m3	161	81	29	
306-83-2	Freon 123	ND	ug/m3	161	81	39	
NA	Freon 123a	470	ug/m3	161	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	161	81	37	
142-82-5	Heptane	ND	ug/m3	161	81	26	
87-68-3	Hexachlorobutadiene	ND	ug/m3	161	81	29	
110-54-3	Hexane	ND	ug/m3	161	81	27	
179601-23-	m,p-Xylene	ND	ug/m3	161	160	47	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	161	81	24	
75-09-2	Methylene Chloride	32	ug/m3	161	81	24	J
95-47-6	o-Xylene	ND	ug/m3	161	81	23	
103-65-1	Propylbenzene	ND	ug/m3	161	81	24	
100-42-5	Styrene	ND	ug/m3	161	81	24	
127-18-4	Tetrachloroethene	ND	ug/m3	161	81	23	
109-99-9	Tetrahydrofuran	ND	ug/m3	161	81	35	
108-88-3	Toluene	ND	ug/m3	161	81	26	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	161	81	27	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	161	81	26	
79-01-6	Trichloroethene	2100	ug/m3	161	81	24	
75-01-4	Vinyl Chloride	ND	ug/m3	161	81	31	

Sample 1203221410 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	109.33	55	17	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	109.33	55	17	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	109.33	55	17	
75-34-3	1,1-Dichloroethane	ND	ug/m3	109.33	55	19	
75-35-4	1,1-Dichloroethene	ND	ug/m3	109.33	55	19	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	109.33	55	26	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	109.33	55	17	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	109.33	55	16	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	109.33	55	19	
107-06-2	1,2-Dichloroethane	ND	ug/m3	109.33	55	21	
78-87-5	1,2-Dichloropropane	ND	ug/m3	109.33	55	19	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	109.33	55	19	
106-99-0	1,3-Butadiene	ND	ug/m3	109.33	55	23	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	109.33	55	19	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	109.33	55	17	
123-91-1	1,4-Dioxane	ND	ug/m3	109.33	55	19	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	109.33	55	19	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	109.33	550	25	
591-78-6	2-Hexanone	ND	ug/m3	109.33	55	20	

67-63-0	2-Propanol	ND	ug/m3	109.33	110	44	
107-05-1	3-Chloropropene	ND	ug/m3	109.33	55	17	
622-96-8	4-Ethyltoluene	ND	ug/m3	109.33	55	19	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	109.33	55	15	
67-64-1	Acetone	ND	ug/m3	109.33	550	96	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	109.33	55	16	
71-43-2	Benzene	ND	ug/m3	109.33	55	15	
75-27-4	Bromodichloromethane	ND	ug/m3	109.33	55	17	
75-25-2	Bromoform	ND	ug/m3	109.33	55	15	
74-83-9	Bromomethane	ND	ug/m3	109.33	55	21	
75-15-0	Carbon Disulfide	ND	ug/m3	109.33	550	16	
56-23-5	Carbon Tetrachloride	ND	ug/m3	109.33	55	17	
108-90-7	Chlorobenzene	ND	ug/m3	109.33	55	17	
75-00-3	Chloroethane	ND	ug/m3	109.33	55	21	
67-66-3	Chloroform	42	ug/m3	109.33	55	21	J
74-87-3	Chloromethane	ND	ug/m3	109.33	55	21	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	109.33	55	20	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	109.33	55	15	
98-82-8	Cumene	ND	ug/m3	109.33	55	16	
110-82-7	Cyclohexane	ND	ug/m3	109.33	110	36	
124-48-1	Dibromochloromethane	ND	ug/m3	109.33	55	15	
64-17-5	Ethanol	ND	ug/m3	109.33	550	170	
100-41-4	Ethyl Benzene	ND	ug/m3	109.33	55	16	
75-69-4	Freon 11	ND	ug/m3	109.33	55	17	
76-13-1	Freon 113	7700	ug/m3	109.33	55	17	
76-14-2	Freon 114	ND	ug/m3	109.33	55	19	
75-71-8	Freon 12	ND	ug/m3	109.33	55	20	
306-83-2	Freon 123	ND	ug/m3	109.33	55	26	
354-23-4	Freon 123a	ND	ug/m3	109.33	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	109.33	55	25	
142-82-5	Heptane	ND	ug/m3	109.33	55	17	
87-68-3	Hexachlorobutadiene	ND	ug/m3	109.33	55	20	
110-54-3	Hexane	ND	ug/m3	109.33	55	19	
179601-23-	m,p-Xylene	ND	ug/m3	109.33	110	32	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	109.33	55	16	
75-09-2	Methylene Chloride	20	ug/m3	109.33	55	16	J
95-47-6	o-Xylene	ND	ug/m3	109.33	55	15	
103-65-1	Propylbenzene	ND	ug/m3	109.33	55	16	
100-42-5	Styrene	ND	ug/m3	109.33	55	16	
127-18-4	Tetrachloroethene	ND	ug/m3	109.33	55	15	
109-99-9	Tetrahydrofuran	ND	ug/m3	109.33	55	24	
108-88-3	Toluene	ND	ug/m3	109.33	55	17	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	109.33	55	19	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	109.33	55	17	
79-01-6	Trichloroethene	1100	ug/m3	109.33	55	16	
75-01-4	Vinyl Chloride	ND	ug/m3	109.33	55	21	

Sample **1203221527** **Sample Type** **Soil Gas** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	222.5	110	36	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	222.5	110	36	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	222.5	110	36	
75-34-3	1,1-Dichloroethane	ND	ug/m3	222.5	110	38	
75-35-4	1,1-Dichloroethene	ND	ug/m3	222.5	110	38	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	222.5	110	53	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	222.5	110	36	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	222.5	110	33	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	222.5	110	38	
107-06-2	1,2-Dichloroethane	ND	ug/m3	222.5	110	42	
78-87-5	1,2-Dichloropropane	ND	ug/m3	222.5	110	38	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	222.5	110	38	
106-99-0	1,3-Butadiene	ND	ug/m3	222.5	110	47	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	222.5	110	38	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	222.5	110	36	
123-91-1	1,4-Dioxane	ND	ug/m3	222.5	110	38	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	222.5	110	38	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	222.5	1100	51	
591-78-6	2-Hexanone	ND	ug/m3	222.5	110	40	
67-63-0	2-Propanol	ND	ug/m3	222.5	220	89	
107-05-1	3-Chloropropene	ND	ug/m3	222.5	110	36	
622-96-8	4-Ethyltoluene	ND	ug/m3	222.5	110	38	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	222.5	110	31	
67-64-1	Acetone	ND	ug/m3	222.5	1100	200	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	222.5	110	33	
71-43-2	Benzene	ND	ug/m3	222.5	110	31	
75-27-4	Bromodichloromethane	ND	ug/m3	222.5	110	36	
75-25-2	Bromoform	ND	ug/m3	222.5	110	31	
74-83-9	Bromomethane	ND	ug/m3	222.5	110	42	
75-15-0	Carbon Disulfide	ND	ug/m3	222.5	1100	33	
56-23-5	Carbon Tetrachloride	ND	ug/m3	222.5	110	36	
108-90-7	Chlorobenzene	ND	ug/m3	222.5	110	36	
75-00-3	Chloroethane	ND	ug/m3	222.5	110	42	
67-66-3	Chloroform	77	ug/m3	222.5	110	42	J
74-87-3	Chloromethane	ND	ug/m3	222.5	110	42	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	222.5	110	40	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	222.5	110	31	
98-82-8	Cumene	ND	ug/m3	222.5	110	33	
110-82-7	Cyclohexane	ND	ug/m3	222.5	220	73	
124-48-1	Dibromochloromethane	ND	ug/m3	222.5	110	31	
64-17-5	Ethanol	ND	ug/m3	222.5	1100	360	
100-41-4	Ethyl Benzene	ND	ug/m3	222.5	110	33	
75-69-4	Freon 11	ND	ug/m3	222.5	110	36	

76-13-1	Freon 113	15000	ug/m3	222.5	110	36	
76-14-2	Freon 114	ND	ug/m3	222.5	110	38	
75-71-8	Freon 12	ND	ug/m3	222.5	110	40	
306-83-2	Freon 123	ND	ug/m3	222.5	110	53	
354-23-4	Freon 123a	ND	ug/m3	222.5	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	222.5	110	51	
142-82-5	Heptane	ND	ug/m3	222.5	110	36	
87-68-3	Hexachlorobutadiene	ND	ug/m3	222.5	110	40	
110-54-3	Hexane	ND	ug/m3	222.5	110	38	
179601-23-	m,p-Xylene	ND	ug/m3	222.5	220	65	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	222.5	110	33	
75-09-2	Methylene Chloride	39	ug/m3	222.5	110	33	J
95-47-6	o-Xylene	ND	ug/m3	222.5	110	31	
103-65-1	Propylbenzene	ND	ug/m3	222.5	110	33	
100-42-5	Styrene	ND	ug/m3	222.5	110	33	
127-18-4	Tetrachloroethene	ND	ug/m3	222.5	110	31	
109-99-9	Tetrahydrofuran	ND	ug/m3	222.5	110	49	
108-88-3	Toluene	ND	ug/m3	222.5	110	36	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	222.5	110	38	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	222.5	110	36	
79-01-6	Trichloroethene	1900	ug/m3	222.5	110	33	
75-01-4	Vinyl Chloride	ND	ug/m3	222.5	110	42	

Sample 1203221701 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	203.75	100	33	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	203.75	100	33	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	203.75	100	33	
75-34-3	1,1-Dichloroethane	ND	ug/m3	203.75	100	35	
75-35-4	1,1-Dichloroethene	ND	ug/m3	203.75	100	35	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	203.75	100	49	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	203.75	100	33	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	203.75	100	31	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	203.75	100	35	
107-06-2	1,2-Dichloroethane	ND	ug/m3	203.75	100	39	
78-87-5	1,2-Dichloropropane	ND	ug/m3	203.75	100	35	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	203.75	100	35	
106-99-0	1,3-Butadiene	ND	ug/m3	203.75	100	43	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	203.75	100	35	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	203.75	100	33	
123-91-1	1,4-Dioxane	ND	ug/m3	203.75	100	35	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	203.75	100	35	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	203.75	1000	47	
591-78-6	2-Hexanone	ND	ug/m3	203.75	100	37	
67-63-0	2-Propanol	ND	ug/m3	203.75	200	82	
107-05-1	3-Chloropropene	ND	ug/m3	203.75	100	33	

622-96-8	4-Ethyltoluene	ND	ug/m3	203.75	100	35	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	203.75	100	29	
67-64-1	Acetone	ND	ug/m3	203.75	1000	180	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	203.75	100	31	
71-43-2	Benzene	ND	ug/m3	203.75	100	29	
75-27-4	Bromodichloromethane	ND	ug/m3	203.75	100	33	
75-25-2	Bromoform	ND	ug/m3	203.75	100	29	
74-83-9	Bromomethane	ND	ug/m3	203.75	100	39	
75-15-0	Carbon Disulfide	ND	ug/m3	203.75	1000	31	
56-23-5	Carbon Tetrachloride	ND	ug/m3	203.75	100	33	
108-90-7	Chlorobenzene	ND	ug/m3	203.75	100	33	
75-00-3	Chloroethane	ND	ug/m3	203.75	100	39	
67-66-3	Chloroform	72	ug/m3	203.75	100	39	J
74-87-3	Chloromethane	ND	ug/m3	203.75	100	39	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	203.75	100	37	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	203.75	100	29	
98-82-8	Cumene	ND	ug/m3	203.75	100	31	
110-82-7	Cyclohexane	ND	ug/m3	203.75	200	67	
124-48-1	Dibromochloromethane	ND	ug/m3	203.75	100	29	
64-17-5	Ethanol	ND	ug/m3	203.75	1000	330	
100-41-4	Ethyl Benzene	ND	ug/m3	203.75	100	31	
75-69-4	Freon 11	ND	ug/m3	203.75	100	33	
76-13-1	Freon 113	15000	ug/m3	203.75	100	33	
76-14-2	Freon 114	ND	ug/m3	203.75	100	35	
75-71-8	Freon 12	ND	ug/m3	203.75	100	37	
306-83-2	Freon 123	ND	ug/m3	203.75	100	49	
354-23-4	Freon 123a	ND	ug/m3	203.75	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	203.75	100	47	
142-82-5	Heptane	ND	ug/m3	203.75	100	33	
87-68-3	Hexachlorobutadiene	ND	ug/m3	203.75	100	37	
110-54-3	Hexane	ND	ug/m3	203.75	100	35	
179601-23-	m,p-Xylene	ND	ug/m3	203.75	200	59	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	203.75	100	31	
75-09-2	Methylene Chloride	36	ug/m3	203.75	100	31	J
95-47-6	o-Xylene	ND	ug/m3	203.75	100	29	
103-65-1	Propylbenzene	ND	ug/m3	203.75	100	31	
100-42-5	Styrene	ND	ug/m3	203.75	100	31	
127-18-4	Tetrachloroethene	ND	ug/m3	203.75	100	29	
109-99-9	Tetrahydrofuran	ND	ug/m3	203.75	100	45	
108-88-3	Toluene	ND	ug/m3	203.75	100	33	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	203.75	100	35	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	203.75	100	33	
79-01-6	Trichloroethene	1800	ug/m3	203.75	100	31	
75-01-4	Vinyl Chloride	ND	ug/m3	203.75	100	39	

Sample **1203230936** **Sample Type** **Soil Gas** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	164	82	26	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	164	82	26	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	164	82	26	
75-34-3	1,1-Dichloroethane	ND	ug/m3	164	82	28	
75-35-4	1,1-Dichloroethene	ND	ug/m3	164	82	28	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	164	82	39	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	164	82	26	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	164	82	25	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	164	82	28	
107-06-2	1,2-Dichloroethane	ND	ug/m3	164	82	31	
78-87-5	1,2-Dichloropropane	ND	ug/m3	164	82	28	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	164	82	28	
106-99-0	1,3-Butadiene	ND	ug/m3	164	82	34	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	164	82	28	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	164	82	26	
123-91-1	1,4-Dioxane	ND	ug/m3	164	82	28	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	164	82	28	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	164	820	38	
591-78-6	2-Hexanone	ND	ug/m3	164	82	30	
67-63-0	2-Propanol	ND	ug/m3	164	160	66	
107-05-1	3-Chloropropene	ND	ug/m3	164	82	26	
622-96-8	4-Ethyltoluene	ND	ug/m3	164	82	28	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	164	82	23	
67-64-1	Acetone	ND	ug/m3	164	820	140	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	164	82	25	
71-43-2	Benzene	ND	ug/m3	164	82	23	
75-27-4	Bromodichloromethane	ND	ug/m3	164	82	26	
75-25-2	Bromoform	ND	ug/m3	164	82	23	
74-83-9	Bromomethane	ND	ug/m3	164	82	31	
75-15-0	Carbon Disulfide	ND	ug/m3	164	820	25	
56-23-5	Carbon Tetrachloride	ND	ug/m3	164	82	26	
108-90-7	Chlorobenzene	ND	ug/m3	164	82	26	
75-00-3	Chloroethane	ND	ug/m3	164	82	31	
67-66-3	Chloroform	73	ug/m3	164	82	31	J
74-87-3	Chloromethane	ND	ug/m3	164	82	31	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	164	82	30	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	164	82	23	
98-82-8	Cumene	ND	ug/m3	164	82	25	
110-82-7	Cyclohexane	ND	ug/m3	164	160	54	
124-48-1	Dibromochloromethane	ND	ug/m3	164	82	23	
64-17-5	Ethanol	ND	ug/m3	164	820	260	
100-41-4	Ethyl Benzene	ND	ug/m3	164	82	25	
75-69-4	Freon 11	ND	ug/m3	164	82	26	

76-13-1	Freon 113	13000	ug/m3	164	82	26	
76-14-2	Freon 114	ND	ug/m3	164	82	28	
75-71-8	Freon 12	ND	ug/m3	164	82	30	
306-83-2	Freon 123	ND	ug/m3	164	82	39	
354-23-4	Freon 123a	500	ug/m3	164	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	164	82	38	
142-82-5	Heptane	ND	ug/m3	164	82	26	
87-68-3	Hexachlorobutadiene	ND	ug/m3	164	82	30	
110-54-3	Hexane	ND	ug/m3	164	82	28	
179601-23-	m,p-Xylene	ND	ug/m3	164	160	48	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	164	82	25	
75-09-2	Methylene Chloride	35	ug/m3	164	82	25	J
95-47-6	o-Xylene	ND	ug/m3	164	82	23	
103-65-1	Propylbenzene	ND	ug/m3	164	82	25	
100-42-5	Styrene	ND	ug/m3	164	82	25	
127-18-4	Tetrachloroethene	30	ug/m3	164	82	23	J
109-99-9	Tetrahydrofuran	ND	ug/m3	164	82	36	
108-88-3	Toluene	ND	ug/m3	164	82	26	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	164	82	28	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	164	82	26	
79-01-6	Trichloroethene	1900	ug/m3	164	82	25	
75-01-4	Vinyl Chloride	ND	ug/m3	164	82	31	

Sample 1203231151 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	200	100	32	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	200	100	32	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	200	100	32	
75-34-3	1,1-Dichloroethane	ND	ug/m3	200	100	34	
75-35-4	1,1-Dichloroethene	ND	ug/m3	200	100	34	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	200	100	48	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	200	100	32	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	200	100	30	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	200	100	34	
107-06-2	1,2-Dichloroethane	ND	ug/m3	200	100	38	
78-87-5	1,2-Dichloropropane	ND	ug/m3	200	100	34	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	200	100	34	
106-99-0	1,3-Butadiene	ND	ug/m3	200	100	42	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	200	100	34	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	200	100	32	
123-91-1	1,4-Dioxane	ND	ug/m3	200	100	34	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	200	100	34	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	200	1000	46	
591-78-6	2-Hexanone	ND	ug/m3	200	100	36	
67-63-0	2-Propanol	ND	ug/m3	200	200	80	
107-05-1	3-Chloropropene	ND	ug/m3	200	100	32	

622-96-8	4-Ethyltoluene	ND	ug/m3	200	100	34	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	200	100	28	
67-64-1	Acetone	ND	ug/m3	200	1000	180	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	200	100	30	
71-43-2	Benzene	ND	ug/m3	200	100	28	
75-27-4	Bromodichloromethane	ND	ug/m3	200	100	32	
75-25-2	Bromoform	ND	ug/m3	200	100	28	
74-83-9	Bromomethane	ND	ug/m3	200	100	38	
75-15-0	Carbon Disulfide	ND	ug/m3	200	1000	30	
56-23-5	Carbon Tetrachloride	ND	ug/m3	200	100	32	
108-90-7	Chlorobenzene	ND	ug/m3	200	100	32	
75-00-3	Chloroethane	ND	ug/m3	200	100	38	
67-66-3	Chloroform	76	ug/m3	200	100	38	J
74-87-3	Chloromethane	ND	ug/m3	200	100	38	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	200	100	36	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	200	100	28	
98-82-8	Cumene	ND	ug/m3	200	100	30	
110-82-7	Cyclohexane	ND	ug/m3	200	200	66	
124-48-1	Dibromochloromethane	ND	ug/m3	200	100	28	
64-17-5	Ethanol	ND	ug/m3	200	1000	320	
100-41-4	Ethyl Benzene	ND	ug/m3	200	100	30	
75-69-4	Freon 11	ND	ug/m3	200	100	32	
76-13-1	Freon 113	15000	ug/m3	200	100	32	
76-14-2	Freon 114	ND	ug/m3	200	100	34	
75-71-8	Freon 12	ND	ug/m3	200	100	36	
306-83-2	Freon 123	ND	ug/m3	200	100	48	
354-23-4	Freon 123a	ND	ug/m3	200	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	200	100	46	
142-82-5	Heptane	ND	ug/m3	200	100	32	
87-68-3	Hexachlorobutadiene	ND	ug/m3	200	100	36	
110-54-3	Hexane	ND	ug/m3	200	100	34	
179601-23-	m,p-Xylene	ND	ug/m3	200	200	58	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	200	100	30	
75-09-2	Methylene Chloride	37	ug/m3	200	100	30	J
95-47-6	o-Xylene	ND	ug/m3	200	100	28	
103-65-1	Propylbenzene	ND	ug/m3	200	100	30	
100-42-5	Styrene	ND	ug/m3	200	100	30	
127-18-4	Tetrachloroethene	ND	ug/m3	200	100	28	
109-99-9	Tetrahydrofuran	ND	ug/m3	200	100	44	
108-88-3	Toluene	ND	ug/m3	200	100	32	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	200	100	34	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	200	100	32	
79-01-6	Trichloroethene	2000	ug/m3	200	100	30	
75-01-4	Vinyl Chloride	ND	ug/m3	200	100	38	

Sample **1203231747** **Sample Type** **Soil Gas** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	182.22	91	29	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	182.22	91	29	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	182.22	91	29	
75-34-3	1,1-Dichloroethane	ND	ug/m3	182.22	91	31	
75-35-4	1,1-Dichloroethene	ND	ug/m3	182.22	91	31	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	182.22	91	44	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	182.22	91	29	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	182.22	91	27	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	182.22	91	31	
107-06-2	1,2-Dichloroethane	ND	ug/m3	182.22	91	35	
78-87-5	1,2-Dichloropropane	ND	ug/m3	182.22	91	31	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	182.22	91	31	
106-99-0	1,3-Butadiene	ND	ug/m3	182.22	91	38	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	182.22	91	31	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	182.22	91	29	
123-91-1	1,4-Dioxane	ND	ug/m3	182.22	91	31	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	182.22	91	31	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	182.22	910	42	
591-78-6	2-Hexanone	ND	ug/m3	182.22	91	33	
67-63-0	2-Propanol	ND	ug/m3	182.22	180	73	
107-05-1	3-Chloropropene	ND	ug/m3	182.22	91	29	
622-96-8	4-Ethyltoluene	ND	ug/m3	182.22	91	31	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	182.22	91	26	
67-64-1	Acetone	ND	ug/m3	182.22	910	160	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	182.22	91	27	
71-43-2	Benzene	ND	ug/m3	182.22	91	26	
75-27-4	Bromodichloromethane	ND	ug/m3	182.22	91	29	
75-25-2	Bromoform	ND	ug/m3	182.22	91	26	
74-83-9	Bromomethane	ND	ug/m3	182.22	91	35	
75-15-0	Carbon Disulfide	ND	ug/m3	182.22	910	27	
56-23-5	Carbon Tetrachloride	ND	ug/m3	182.22	91	29	
108-90-7	Chlorobenzene	ND	ug/m3	182.22	91	29	
75-00-3	Chloroethane	ND	ug/m3	182.22	91	35	
67-66-3	Chloroform	77	ug/m3	182.22	91	35	J
74-87-3	Chloromethane	ND	ug/m3	182.22	91	35	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	182.22	91	33	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	182.22	91	26	
98-82-8	Cumene	ND	ug/m3	182.22	91	27	
110-82-7	Cyclohexane	ND	ug/m3	182.22	180	60	
124-48-1	Dibromochloromethane	ND	ug/m3	182.22	91	26	
64-17-5	Ethanol	ND	ug/m3	182.22	910	290	
100-41-4	Ethyl Benzene	ND	ug/m3	182.22	91	27	
75-69-4	Freon 11	ND	ug/m3	182.22	91	29	

76-13-1	Freon 113	15000	ug/m3	182.22	91	29	
76-14-2	Freon 114	ND	ug/m3	182.22	91	31	
75-71-8	Freon 12	ND	ug/m3	182.22	91	33	
306-83-2	Freon 123	ND	ug/m3	182.22	91	44	
354-23-4	Freon 123a	ND	ug/m3	182.22	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	182.22	91	42	
142-82-5	Heptane	ND	ug/m3	182.22	91	29	
87-68-3	Hexachlorobutadiene	ND	ug/m3	182.22	91	33	
110-54-3	Hexane	ND	ug/m3	182.22	91	31	
179601-23-	m,p-Xylene	ND	ug/m3	182.22	180	53	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	182.22	91	27	
75-09-2	Methylene Chloride	34	ug/m3	182.22	91	27	J
95-47-6	o-Xylene	ND	ug/m3	182.22	91	26	
103-65-1	Propylbenzene	ND	ug/m3	182.22	91	27	
100-42-5	Styrene	ND	ug/m3	182.22	91	27	
127-18-4	Tetrachloroethene	ND	ug/m3	182.22	91	26	
109-99-9	Tetrahydrofuran	ND	ug/m3	182.22	91	40	
108-88-3	Toluene	ND	ug/m3	182.22	91	29	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	182.22	91	31	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	182.22	91	29	
79-01-6	Trichloroethene	2000	ug/m3	182.22	91	27	
75-01-4	Vinyl Chloride	ND	ug/m3	182.22	91	35	

Sample 1203241426 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	163	82	26	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	163	82	26	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	163	82	26	
75-34-3	1,1-Dichloroethane	ND	ug/m3	163	82	28	
75-35-4	1,1-Dichloroethene	ND	ug/m3	163	82	28	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	163	82	39	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	163	82	26	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	163	82	24	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	163	82	28	
107-06-2	1,2-Dichloroethane	ND	ug/m3	163	82	31	
78-87-5	1,2-Dichloropropane	ND	ug/m3	163	82	28	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	163	82	28	
106-99-0	1,3-Butadiene	ND	ug/m3	163	82	34	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	163	82	28	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	163	82	26	
123-91-1	1,4-Dioxane	ND	ug/m3	163	82	28	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	163	82	28	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	163	820	37	
591-78-6	2-Hexanone	ND	ug/m3	163	82	29	
67-63-0	2-Propanol	ND	ug/m3	163	160	65	
107-05-1	3-Chloropropene	ND	ug/m3	163	82	26	

622-96-8	4-Ethyltoluene	ND	ug/m3	163	82	28	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	163	82	23	
67-64-1	Acetone	ND	ug/m3	163	820	140	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	163	82	24	
71-43-2	Benzene	ND	ug/m3	163	82	23	
75-27-4	Bromodichloromethane	ND	ug/m3	163	82	26	
75-25-2	Bromoform	ND	ug/m3	163	82	23	
74-83-9	Bromomethane	ND	ug/m3	163	82	31	
75-15-0	Carbon Disulfide	ND	ug/m3	163	820	24	
56-23-5	Carbon Tetrachloride	ND	ug/m3	163	82	26	
108-90-7	Chlorobenzene	ND	ug/m3	163	82	26	
75-00-3	Chloroethane	ND	ug/m3	163	82	31	
67-66-3	Chloroform	73	ug/m3	163	82	31	J
74-87-3	Chloromethane	ND	ug/m3	163	82	31	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	163	82	29	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	163	82	23	
98-82-8	Cumene	ND	ug/m3	163	82	24	
110-82-7	Cyclohexane	ND	ug/m3	163	160	54	
124-48-1	Dibromochloromethane	ND	ug/m3	163	82	23	
64-17-5	Ethanol	ND	ug/m3	163	820	260	
100-41-4	Ethyl Benzene	ND	ug/m3	163	82	24	
75-69-4	Freon 11	ND	ug/m3	163	82	26	
76-13-1	Freon 113	16000	ug/m3	163	82	26	
76-14-2	Freon 114	ND	ug/m3	163	82	28	
75-71-8	Freon 12	ND	ug/m3	163	82	29	
306-83-2	Freon 123	ND	ug/m3	163	82	39	
354-23-4	Freon 123a	420	ug/m3	163	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	163	82	37	
142-82-5	Heptane	ND	ug/m3	163	82	26	
87-68-3	Hexachlorobutadiene	ND	ug/m3	163	82	29	
110-54-3	Hexane	ND	ug/m3	163	82	28	
179601-23-	m,p-Xylene	ND	ug/m3	163	160	47	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	163	82	24	
75-09-2	Methylene Chloride	29	ug/m3	163	82	24	J
95-47-6	o-Xylene	ND	ug/m3	163	82	23	
103-65-1	Propylbenzene	ND	ug/m3	163	82	24	
100-42-5	Styrene	ND	ug/m3	163	82	24	
127-18-4	Tetrachloroethene	ND	ug/m3	163	82	23	
109-99-9	Tetrahydrofuran	ND	ug/m3	163	82	36	
108-88-3	Toluene	ND	ug/m3	163	82	26	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	163	82	28	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	163	82	26	
79-01-6	Trichloroethene	1800	ug/m3	163	82	24	
75-01-4	Vinyl Chloride	ND	ug/m3	163	82	31	

Borehole	600-SGW-5	Depth (ft)	137.5	Depth (m)	41.91	Event Date	3/22/2012

Sample	1203221026	Sample Type	Soil Gas	Analysis Method	TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	4050	2000	650	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	4050	2000	650	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	4050	2000	650	
75-34-3	1,1-Dichloroethane	ND	ug/m3	4050	2000	690	
75-35-4	1,1-Dichloroethene	ND	ug/m3	4050	2000	690	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	4050	2000	970	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	4050	2000	650	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	4050	2000	610	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	4050	2000	690	
107-06-2	1,2-Dichloroethane	ND	ug/m3	4050	2000	770	
78-87-5	1,2-Dichloropropane	ND	ug/m3	4050	2000	690	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	4050	2000	690	
106-99-0	1,3-Butadiene	ND	ug/m3	4050	2000	850	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	4050	2000	690	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	4050	2000	650	
123-91-1	1,4-Dioxane	ND	ug/m3	4050	2000	690	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	4050	2000	690	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	4050	20000	930	
591-78-6	2-Hexanone	ND	ug/m3	4050	2000	730	
67-63-0	2-Propanol	ND	ug/m3	4050	4100	1600	
107-05-1	3-Chloropropene	ND	ug/m3	4050	2000	650	
622-96-8	4-Ethyltoluene	ND	ug/m3	4050	2000	690	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	4050	2000	570	
67-64-1	Acetone	ND	ug/m3	4050	20000	3600	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	4050	2000	610	
71-43-2	Benzene	ND	ug/m3	4050	2000	570	
75-27-4	Bromodichloromethane	ND	ug/m3	4050	2000	650	
75-25-2	Bromoform	ND	ug/m3	4050	2000	570	
74-83-9	Bromomethane	ND	ug/m3	4050	2000	770	
75-15-0	Carbon Disulfide	ND	ug/m3	4050	20000	610	
56-23-5	Carbon Tetrachloride	ND	ug/m3	4050	2000	650	
108-90-7	Chlorobenzene	ND	ug/m3	4050	2000	650	
75-00-3	Chloroethane	ND	ug/m3	4050	2000	770	
67-66-3	Chloroform	ND	ug/m3	4050	2000	770	
74-87-3	Chloromethane	ND	ug/m3	4050	2000	770	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	4050	2000	730	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	4050	2000	570	
98-82-8	Cumene	ND	ug/m3	4050	2000	610	
110-82-7	Cyclohexane	ND	ug/m3	4050	4100	1300	
124-48-1	Dibromochloromethane	ND	ug/m3	4050	2000	570	
64-17-5	Ethanol	ND	ug/m3	4050	20000	6500	

100-41-4	Ethyl Benzene	ND	ug/m3	4050	2000	610	
75-69-4	Freon 11	990	ug/m3	4050	2000	650	J
76-13-1	Freon 113	340000	ug/m3	4050	2000	650	
76-14-2	Freon 114	ND	ug/m3	4050	2000	690	
75-71-8	Freon 12	ND	ug/m3	4050	2000	730	
306-83-2	Freon 123	ND	ug/m3	4050	2000	970	
NA	Freon 123a	ND	ug/m3	4050	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	4050	2000	930	
142-82-5	Heptane	ND	ug/m3	4050	2000	650	
87-68-3	Hexachlorobutadiene	ND	ug/m3	4050	2000	730	
110-54-3	Hexane	ND	ug/m3	4050	2000	690	
179601-23-	m,p-Xylene	ND	ug/m3	4050	4100	1200	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	4050	2000	610	
75-09-2	Methylene Chloride	700	ug/m3	4050	2000	610	J
95-47-6	o-Xylene	ND	ug/m3	4050	2000	570	
103-65-1	Propylbenzene	ND	ug/m3	4050	2000	610	
100-42-5	Styrene	ND	ug/m3	4050	2000	610	
127-18-4	Tetrachloroethene	ND	ug/m3	4050	2000	570	
109-99-9	Tetrahydrofuran	ND	ug/m3	4050	2000	890	
108-88-3	Toluene	ND	ug/m3	4050	2000	650	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	4050	2000	690	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	4050	2000	650	
79-01-6	Trichloroethene	11000	ug/m3	4050	2000	610	
75-01-4	Vinyl Chloride	ND	ug/m3	4050	2000	770	

Sample 1203221418 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	4300	2200	690	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	4300	2200	690	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	4300	2200	690	
75-34-3	1,1-Dichloroethane	ND	ug/m3	4300	2200	730	
75-35-4	1,1-Dichloroethene	ND	ug/m3	4300	2200	730	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	4300	2200	1000	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	4300	2200	690	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	4300	2200	650	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	4300	2200	730	
107-06-2	1,2-Dichloroethane	ND	ug/m3	4300	2200	820	
78-87-5	1,2-Dichloropropane	ND	ug/m3	4300	2200	730	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	4300	2200	730	
106-99-0	1,3-Butadiene	ND	ug/m3	4300	2200	900	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	4300	2200	730	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	4300	2200	690	
123-91-1	1,4-Dioxane	ND	ug/m3	4300	2200	730	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	4300	2200	730	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	4300	22000	990	
591-78-6	2-Hexanone	ND	ug/m3	4300	2200	770	

67-63-0	2-Propanol	ND	ug/m3	4300	4300	1700	
107-05-1	3-Chloropropene	ND	ug/m3	4300	2200	690	
622-96-8	4-Ethyltoluene	ND	ug/m3	4300	2200	730	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	4300	2200	600	
67-64-1	Acetone	ND	ug/m3	4300	22000	3800	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	4300	2200	650	
71-43-2	Benzene	ND	ug/m3	4300	2200	600	
75-27-4	Bromodichloromethane	ND	ug/m3	4300	2200	690	
75-25-2	Bromoform	ND	ug/m3	4300	2200	600	
74-83-9	Bromomethane	ND	ug/m3	4300	2200	820	
75-15-0	Carbon Disulfide	ND	ug/m3	4300	22000	650	
56-23-5	Carbon Tetrachloride	ND	ug/m3	4300	2200	690	
108-90-7	Chlorobenzene	ND	ug/m3	4300	2200	690	
75-00-3	Chloroethane	ND	ug/m3	4300	2200	820	
67-66-3	Chloroform	ND	ug/m3	4300	2200	820	
74-87-3	Chloromethane	ND	ug/m3	4300	2200	820	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	4300	2200	770	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	4300	2200	600	
98-82-8	Cumene	ND	ug/m3	4300	2200	650	
110-82-7	Cyclohexane	ND	ug/m3	4300	4300	1400	
124-48-1	Dibromochloromethane	ND	ug/m3	4300	2200	600	
64-17-5	Ethanol	ND	ug/m3	4300	22000	6900	
100-41-4	Ethyl Benzene	ND	ug/m3	4300	2200	650	
75-69-4	Freon 11	840	ug/m3	4300	2200	690	J
76-13-1	Freon 113	290000	ug/m3	4300	2200	690	
76-14-2	Freon 114	ND	ug/m3	4300	2200	730	
75-71-8	Freon 12	ND	ug/m3	4300	2200	770	
306-83-2	Freon 123	ND	ug/m3	4300	2200	1000	
354-23-4	Freon 123a	ND	ug/m3	4300	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	4300	2200	990	
142-82-5	Heptane	ND	ug/m3	4300	2200	690	
87-68-3	Hexachlorobutadiene	ND	ug/m3	4300	2200	770	
110-54-3	Hexane	ND	ug/m3	4300	2200	730	
179601-23-	m,p-Xylene	ND	ug/m3	4300	4300	1200	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	4300	2200	650	
75-09-2	Methylene Chloride	830	ug/m3	4300	2200	650	J
95-47-6	o-Xylene	ND	ug/m3	4300	2200	600	
103-65-1	Propylbenzene	ND	ug/m3	4300	2200	650	
100-42-5	Styrene	ND	ug/m3	4300	2200	650	
127-18-4	Tetrachloroethene	ND	ug/m3	4300	2200	600	
109-99-9	Tetrahydrofuran	ND	ug/m3	4300	2200	950	
108-88-3	Toluene	ND	ug/m3	4300	2200	690	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	4300	2200	730	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	4300	2200	690	
79-01-6	Trichloroethene	8900	ug/m3	4300	2200	650	
75-01-4	Vinyl Chloride	ND	ug/m3	4300	2200	820	

Sample **1203221535** **Sample Type** **Soil Gas** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	4375	2200	700	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	4375	2200	700	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	4375	2200	700	
75-34-3	1,1-Dichloroethane	ND	ug/m3	4375	2200	740	
75-35-4	1,1-Dichloroethene	ND	ug/m3	4375	2200	740	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	4375	2200	1100	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	4375	2200	700	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	4375	2200	660	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	4375	2200	740	
107-06-2	1,2-Dichloroethane	ND	ug/m3	4375	2200	830	
78-87-5	1,2-Dichloropropane	ND	ug/m3	4375	2200	740	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	4375	2200	740	
106-99-0	1,3-Butadiene	ND	ug/m3	4375	2200	920	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	4375	2200	740	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	4375	2200	700	
123-91-1	1,4-Dioxane	ND	ug/m3	4375	2200	740	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	4375	2200	740	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	4375	22000	1000	
591-78-6	2-Hexanone	ND	ug/m3	4375	2200	790	
67-63-0	2-Propanol	ND	ug/m3	4375	4400	1800	
107-05-1	3-Chloropropene	ND	ug/m3	4375	2200	700	
622-96-8	4-Ethyltoluene	ND	ug/m3	4375	2200	740	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	4375	2200	610	
67-64-1	Acetone	ND	ug/m3	4375	22000	3900	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	4375	2200	660	
71-43-2	Benzene	ND	ug/m3	4375	2200	610	
75-27-4	Bromodichloromethane	ND	ug/m3	4375	2200	700	
75-25-2	Bromoform	ND	ug/m3	4375	2200	610	
74-83-9	Bromomethane	ND	ug/m3	4375	2200	830	
75-15-0	Carbon Disulfide	ND	ug/m3	4375	22000	660	
56-23-5	Carbon Tetrachloride	ND	ug/m3	4375	2200	700	
108-90-7	Chlorobenzene	ND	ug/m3	4375	2200	700	
75-00-3	Chloroethane	ND	ug/m3	4375	2200	830	
67-66-3	Chloroform	ND	ug/m3	4375	2200	830	
74-87-3	Chloromethane	ND	ug/m3	4375	2200	830	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	4375	2200	790	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	4375	2200	610	
98-82-8	Cumene	ND	ug/m3	4375	2200	660	
110-82-7	Cyclohexane	ND	ug/m3	4375	4400	1400	
124-48-1	Dibromochloromethane	ND	ug/m3	4375	2200	610	
64-17-5	Ethanol	ND	ug/m3	4375	22000	7000	
100-41-4	Ethyl Benzene	ND	ug/m3	4375	2200	660	
75-69-4	Freon 11	990	ug/m3	4375	2200	700	J

76-13-1	Freon 113	400000	ug/m3	4375	2200	700	
76-14-2	Freon 114	ND	ug/m3	4375	2200	740	
75-71-8	Freon 12	ND	ug/m3	4375	2200	790	
306-83-2	Freon 123	ND	ug/m3	4375	2200	1100	
354-23-4	Freon 123a	ND	ug/m3	4375	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	4375	2200	1000	
142-82-5	Heptane	ND	ug/m3	4375	2200	700	
87-68-3	Hexachlorobutadiene	ND	ug/m3	4375	2200	790	
110-54-3	Hexane	ND	ug/m3	4375	2200	740	
179601-23-	m,p-Xylene	ND	ug/m3	4375	4400	1300	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	4375	2200	660	
75-09-2	Methylene Chloride	770	ug/m3	4375	2200	660	J
95-47-6	o-Xylene	ND	ug/m3	4375	2200	610	
103-65-1	Propylbenzene	ND	ug/m3	4375	2200	660	
100-42-5	Styrene	ND	ug/m3	4375	2200	660	
127-18-4	Tetrachloroethene	ND	ug/m3	4375	2200	610	
109-99-9	Tetrahydrofuran	ND	ug/m3	4375	2200	960	
108-88-3	Toluene	ND	ug/m3	4375	2200	700	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	4375	2200	740	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	4375	2200	700	
79-01-6	Trichloroethene	10000	ug/m3	4375	2200	660	
75-01-4	Vinyl Chloride	ND	ug/m3	4375	2200	830	

Sample 1203221709 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	4200	2100	670	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	4200	2100	670	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	4200	2100	670	
75-34-3	1,1-Dichloroethane	ND	ug/m3	4200	2100	710	
75-35-4	1,1-Dichloroethene	ND	ug/m3	4200	2100	710	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	4200	2100	1000	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	4200	2100	670	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	4200	2100	630	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	4200	2100	710	
107-06-2	1,2-Dichloroethane	ND	ug/m3	4200	2100	800	
78-87-5	1,2-Dichloropropane	ND	ug/m3	4200	2100	710	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	4200	2100	710	
106-99-0	1,3-Butadiene	ND	ug/m3	4200	2100	880	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	4200	2100	710	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	4200	2100	670	
123-91-1	1,4-Dioxane	ND	ug/m3	4200	2100	710	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	4200	2100	710	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	4200	21000	970	
591-78-6	2-Hexanone	ND	ug/m3	4200	2100	760	
67-63-0	2-Propanol	ND	ug/m3	4200	4200	1700	
107-05-1	3-Chloropropene	ND	ug/m3	4200	2100	670	

622-96-8	4-Ethyltoluene	ND	ug/m3	4200	2100	710	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	4200	2100	590	
67-64-1	Acetone	ND	ug/m3	4200	21000	3700	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	4200	2100	630	
71-43-2	Benzene	ND	ug/m3	4200	2100	590	
75-27-4	Bromodichloromethane	ND	ug/m3	4200	2100	670	
75-25-2	Bromoform	ND	ug/m3	4200	2100	590	
74-83-9	Bromomethane	ND	ug/m3	4200	2100	800	
75-15-0	Carbon Disulfide	ND	ug/m3	4200	21000	630	
56-23-5	Carbon Tetrachloride	ND	ug/m3	4200	2100	670	
108-90-7	Chlorobenzene	ND	ug/m3	4200	2100	670	
75-00-3	Chloroethane	ND	ug/m3	4200	2100	800	
67-66-3	Chloroform	ND	ug/m3	4200	2100	800	
74-87-3	Chloromethane	ND	ug/m3	4200	2100	800	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	4200	2100	760	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	4200	2100	590	
98-82-8	Cumene	ND	ug/m3	4200	2100	630	
110-82-7	Cyclohexane	ND	ug/m3	4200	4200	1400	
124-48-1	Dibromochloromethane	ND	ug/m3	4200	2100	590	
64-17-5	Ethanol	ND	ug/m3	4200	21000	6700	
100-41-4	Ethyl Benzene	ND	ug/m3	4200	2100	630	
75-69-4	Freon 11	890	ug/m3	4200	2100	670	J
76-13-1	Freon 113	370000	ug/m3	4200	2100	670	
76-14-2	Freon 114	ND	ug/m3	4200	2100	710	
75-71-8	Freon 12	ND	ug/m3	4200	2100	760	
306-83-2	Freon 123	ND	ug/m3	4200	2100	1000	
354-23-4	Freon 123a	ND	ug/m3	4200	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	4200	2100	970	
142-82-5	Heptane	ND	ug/m3	4200	2100	670	
87-68-3	Hexachlorobutadiene	ND	ug/m3	4200	2100	760	
110-54-3	Hexane	ND	ug/m3	4200	2100	710	
179601-23-	m,p-Xylene	ND	ug/m3	4200	4200	1200	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	4200	2100	630	
75-09-2	Methylene Chloride	730	ug/m3	4200	2100	630	J
95-47-6	o-Xylene	ND	ug/m3	4200	2100	590	
103-65-1	Propylbenzene	ND	ug/m3	4200	2100	630	
100-42-5	Styrene	ND	ug/m3	4200	2100	630	
127-18-4	Tetrachloroethene	ND	ug/m3	4200	2100	590	
109-99-9	Tetrahydrofuran	ND	ug/m3	4200	2100	920	
108-88-3	Toluene	ND	ug/m3	4200	2100	670	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	4200	2100	710	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	4200	2100	670	
79-01-6	Trichloroethene	10000	ug/m3	4200	2100	630	
75-01-4	Vinyl Chloride	ND	ug/m3	4200	2100	800	

Sample **1203230944** **Sample Type** **Soil Gas** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	3320	1700	530	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	3320	1700	530	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	3320	1700	530	
75-34-3	1,1-Dichloroethane	ND	ug/m3	3320	1700	560	
75-35-4	1,1-Dichloroethene	ND	ug/m3	3320	1700	560	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	3320	1700	800	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	3320	1700	530	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	3320	1700	500	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	3320	1700	560	
107-06-2	1,2-Dichloroethane	ND	ug/m3	3320	1700	630	
78-87-5	1,2-Dichloropropane	ND	ug/m3	3320	1700	560	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	3320	1700	560	
106-99-0	1,3-Butadiene	ND	ug/m3	3320	1700	700	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	3320	1700	560	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	3320	1700	530	
123-91-1	1,4-Dioxane	ND	ug/m3	3320	1700	560	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	3320	1700	560	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	3320	17000	760	
591-78-6	2-Hexanone	ND	ug/m3	3320	1700	600	
67-63-0	2-Propanol	ND	ug/m3	3320	3300	1300	
107-05-1	3-Chloropropene	ND	ug/m3	3320	1700	530	
622-96-8	4-Ethyltoluene	ND	ug/m3	3320	1700	560	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	3320	1700	460	
67-64-1	Acetone	ND	ug/m3	3320	17000	2900	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	3320	1700	500	
71-43-2	Benzene	ND	ug/m3	3320	1700	460	
75-27-4	Bromodichloromethane	ND	ug/m3	3320	1700	530	
75-25-2	Bromoform	ND	ug/m3	3320	1700	460	
74-83-9	Bromomethane	ND	ug/m3	3320	1700	630	
75-15-0	Carbon Disulfide	ND	ug/m3	3320	17000	500	
56-23-5	Carbon Tetrachloride	ND	ug/m3	3320	1700	530	
108-90-7	Chlorobenzene	ND	ug/m3	3320	1700	530	
75-00-3	Chloroethane	ND	ug/m3	3320	1700	630	
67-66-3	Chloroform	ND	ug/m3	3320	1700	630	
74-87-3	Chloromethane	ND	ug/m3	3320	1700	630	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	3320	1700	600	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	3320	1700	460	
98-82-8	Cumene	ND	ug/m3	3320	1700	500	
110-82-7	Cyclohexane	ND	ug/m3	3320	3300	1100	
124-48-1	Dibromochloromethane	ND	ug/m3	3320	1700	460	
64-17-5	Ethanol	ND	ug/m3	3320	17000	5300	
100-41-4	Ethyl Benzene	ND	ug/m3	3320	1700	500	
75-69-4	Freon 11	800	ug/m3	3320	1700	530	J

76-13-1	Freon 113	280000	ug/m3	3320	1700	530	
76-14-2	Freon 114	ND	ug/m3	3320	1700	560	
75-71-8	Freon 12	ND	ug/m3	3320	1700	600	
306-83-2	Freon 123	ND	ug/m3	3320	1700	800	
354-23-4	Freon 123a	ND	ug/m3	3320	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	3320	1700	760	
142-82-5	Heptane	ND	ug/m3	3320	1700	530	
87-68-3	Hexachlorobutadiene	ND	ug/m3	3320	1700	600	
110-54-3	Hexane	ND	ug/m3	3320	1700	560	
179601-23-	m,p-Xylene	ND	ug/m3	3320	3300	960	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	3320	1700	500	
75-09-2	Methylene Chloride	600	ug/m3	3320	1700	500	J
95-47-6	o-Xylene	ND	ug/m3	3320	1700	460	
103-65-1	Propylbenzene	ND	ug/m3	3320	1700	500	
100-42-5	Styrene	ND	ug/m3	3320	1700	500	
127-18-4	Tetrachloroethene	ND	ug/m3	3320	1700	460	
109-99-9	Tetrahydrofuran	ND	ug/m3	3320	1700	730	
108-88-3	Toluene	ND	ug/m3	3320	1700	530	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	3320	1700	560	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	3320	1700	530	
79-01-6	Trichloroethene	10000	ug/m3	3320	1700	500	
75-01-4	Vinyl Chloride	ND	ug/m3	3320	1700	630	

Sample 1203231159 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	553.33	280	89	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	553.33	280	89	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	553.33	280	89	
75-34-3	1,1-Dichloroethane	ND	ug/m3	553.33	280	94	
75-35-4	1,1-Dichloroethene	ND	ug/m3	553.33	280	94	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	553.33	280	130	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	553.33	280	89	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	553.33	280	83	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	553.33	280	94	
107-06-2	1,2-Dichloroethane	ND	ug/m3	553.33	280	110	
78-87-5	1,2-Dichloropropane	ND	ug/m3	553.33	280	94	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	553.33	280	94	
106-99-0	1,3-Butadiene	ND	ug/m3	553.33	280	120	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	553.33	280	94	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	553.33	280	89	
123-91-1	1,4-Dioxane	ND	ug/m3	553.33	280	94	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	553.33	280	94	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	553.33	2800	130	
591-78-6	2-Hexanone	ND	ug/m3	553.33	280	100	
67-63-0	2-Propanol	ND	ug/m3	553.33	550	220	
107-05-1	3-Chloropropene	ND	ug/m3	553.33	280	89	

622-96-8	4-Ethyltoluene	ND	ug/m3	553.33	280	94	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	553.33	280	77	
67-64-1	Acetone	ND	ug/m3	553.33	2800	490	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	553.33	280	83	
71-43-2	Benzene	ND	ug/m3	553.33	280	77	
75-27-4	Bromodichloromethane	ND	ug/m3	553.33	280	89	
75-25-2	Bromoform	ND	ug/m3	553.33	280	77	
74-83-9	Bromomethane	ND	ug/m3	553.33	280	110	
75-15-0	Carbon Disulfide	ND	ug/m3	553.33	2800	83	
56-23-5	Carbon Tetrachloride	ND	ug/m3	553.33	280	89	
108-90-7	Chlorobenzene	ND	ug/m3	553.33	280	89	
75-00-3	Chloroethane	ND	ug/m3	553.33	280	110	
67-66-3	Chloroform	140	ug/m3	553.33	280	110	J
74-87-3	Chloromethane	ND	ug/m3	553.33	280	110	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	553.33	280	100	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	553.33	280	77	
98-82-8	Cumene	ND	ug/m3	553.33	280	83	
110-82-7	Cyclohexane	ND	ug/m3	553.33	550	180	
124-48-1	Dibromochloromethane	ND	ug/m3	553.33	280	77	
64-17-5	Ethanol	ND	ug/m3	553.33	2800	890	
100-41-4	Ethyl Benzene	ND	ug/m3	553.33	280	83	
75-69-4	Freon 11	1000	ug/m3	553.33	280	89	
76-13-1	Freon 113	310000	ug/m3	5533.33	2800	890	D
76-14-2	Freon 114	ND	ug/m3	553.33	280	94	
75-71-8	Freon 12	ND	ug/m3	553.33	280	100	
306-83-2	Freon 123	ND	ug/m3	553.33	280	130	
354-23-4	Freon 123a	3200	ug/m3	553.33	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	553.33	280	130	
142-82-5	Heptane	ND	ug/m3	553.33	280	89	
87-68-3	Hexachlorobutadiene	ND	ug/m3	553.33	280	100	
110-54-3	Hexane	ND	ug/m3	553.33	280	94	
179601-23-	m,p-Xylene	ND	ug/m3	553.33	550	160	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	553.33	280	83	
75-09-2	Methylene Chloride	94	ug/m3	553.33	280	83	J
95-47-6	o-Xylene	ND	ug/m3	553.33	280	77	
103-65-1	Propylbenzene	ND	ug/m3	553.33	280	83	
100-42-5	Styrene	ND	ug/m3	553.33	280	83	
127-18-4	Tetrachloroethene	ND	ug/m3	553.33	280	77	
109-99-9	Tetrahydrofuran	ND	ug/m3	553.33	280	120	
108-88-3	Toluene	ND	ug/m3	553.33	280	89	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	553.33	280	94	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	553.33	280	89	
79-01-6	Trichloroethene	14000	ug/m3	553.33	280	83	
75-01-4	Vinyl Chloride	ND	ug/m3	553.33	280	110	

Sample **1203231755** **Sample Type** **Soil Gas** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	3360	1700	540	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	3360	1700	540	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	3360	1700	540	
75-34-3	1,1-Dichloroethane	ND	ug/m3	3360	1700	570	
75-35-4	1,1-Dichloroethene	ND	ug/m3	3360	1700	570	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	3360	1700	810	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	3360	1700	540	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	3360	1700	500	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	3360	1700	570	
107-06-2	1,2-Dichloroethane	ND	ug/m3	3360	1700	640	
78-87-5	1,2-Dichloropropane	ND	ug/m3	3360	1700	570	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	3360	1700	570	
106-99-0	1,3-Butadiene	ND	ug/m3	3360	1700	710	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	3360	1700	570	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	3360	1700	540	
123-91-1	1,4-Dioxane	ND	ug/m3	3360	1700	570	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	3360	1700	570	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	3360	17000	770	
591-78-6	2-Hexanone	ND	ug/m3	3360	1700	600	
67-63-0	2-Propanol	ND	ug/m3	3360	3400	1300	
107-05-1	3-Chloropropene	ND	ug/m3	3360	1700	540	
622-96-8	4-Ethyltoluene	ND	ug/m3	3360	1700	570	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	3360	1700	470	
67-64-1	Acetone	ND	ug/m3	3360	17000	3000	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	3360	1700	500	
71-43-2	Benzene	ND	ug/m3	3360	1700	470	
75-27-4	Bromodichloromethane	ND	ug/m3	3360	1700	540	
75-25-2	Bromoform	ND	ug/m3	3360	1700	470	
74-83-9	Bromomethane	ND	ug/m3	3360	1700	640	
75-15-0	Carbon Disulfide	ND	ug/m3	3360	17000	500	
56-23-5	Carbon Tetrachloride	ND	ug/m3	3360	1700	540	
108-90-7	Chlorobenzene	ND	ug/m3	3360	1700	540	
75-00-3	Chloroethane	ND	ug/m3	3360	1700	640	
67-66-3	Chloroform	ND	ug/m3	3360	1700	640	
74-87-3	Chloromethane	ND	ug/m3	3360	1700	640	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	3360	1700	600	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	3360	1700	470	
98-82-8	Cumene	ND	ug/m3	3360	1700	500	
110-82-7	Cyclohexane	ND	ug/m3	3360	3400	1100	
124-48-1	Dibromochloromethane	ND	ug/m3	3360	1700	470	
64-17-5	Ethanol	ND	ug/m3	3360	17000	5400	
100-41-4	Ethyl Benzene	ND	ug/m3	3360	1700	500	
75-69-4	Freon 11	930	ug/m3	3360	1700	540	J

76-13-1	Freon 113	300000	ug/m3	3360	1700	540	
76-14-2	Freon 114	ND	ug/m3	3360	1700	570	
75-71-8	Freon 12	ND	ug/m3	3360	1700	600	
306-83-2	Freon 123	ND	ug/m3	3360	1700	810	
354-23-4	Freon 123a	ND	ug/m3	3360	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	3360	1700	770	
142-82-5	Heptane	ND	ug/m3	3360	1700	540	
87-68-3	Hexachlorobutadiene	ND	ug/m3	3360	1700	600	
110-54-3	Hexane	ND	ug/m3	3360	1700	570	
179601-23-	m,p-Xylene	ND	ug/m3	3360	3400	970	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	3360	1700	500	
75-09-2	Methylene Chloride	600	ug/m3	3360	1700	500	J
95-47-6	o-Xylene	ND	ug/m3	3360	1700	470	
103-65-1	Propylbenzene	ND	ug/m3	3360	1700	500	
100-42-5	Styrene	ND	ug/m3	3360	1700	500	
127-18-4	Tetrachloroethene	ND	ug/m3	3360	1700	470	
109-99-9	Tetrahydrofuran	ND	ug/m3	3360	1700	740	
108-88-3	Toluene	ND	ug/m3	3360	1700	540	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	3360	1700	570	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	3360	1700	540	
79-01-6	Trichloroethene	13000	ug/m3	3360	1700	500	
75-01-4	Vinyl Chloride	ND	ug/m3	3360	1700	640	

Sample 1203241434 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	4100	2100	660	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	4100	2100	660	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	4100	2100	660	
75-34-3	1,1-Dichloroethane	ND	ug/m3	4100	2100	700	
75-35-4	1,1-Dichloroethene	ND	ug/m3	4100	2100	700	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	4100	2100	980	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	4100	2100	660	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	4100	2100	620	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	4100	2100	700	
107-06-2	1,2-Dichloroethane	ND	ug/m3	4100	2100	780	
78-87-5	1,2-Dichloropropane	ND	ug/m3	4100	2100	700	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	4100	2100	700	
106-99-0	1,3-Butadiene	ND	ug/m3	4100	2100	860	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	4100	2100	700	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	4100	2100	660	
123-91-1	1,4-Dioxane	ND	ug/m3	4100	2100	700	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	4100	2100	700	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	4100	21000	940	
591-78-6	2-Hexanone	ND	ug/m3	4100	2100	740	
67-63-0	2-Propanol	ND	ug/m3	4100	4100	1600	
107-05-1	3-Chloropropene	ND	ug/m3	4100	2100	660	

622-96-8	4-Ethyltoluene	ND	ug/m3	4100	2100	700	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	4100	2100	570	
67-64-1	Acetone	ND	ug/m3	4100	21000	3600	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	4100	2100	620	
71-43-2	Benzene	ND	ug/m3	4100	2100	570	
75-27-4	Bromodichloromethane	ND	ug/m3	4100	2100	660	
75-25-2	Bromoform	ND	ug/m3	4100	2100	570	
74-83-9	Bromomethane	ND	ug/m3	4100	2100	780	
75-15-0	Carbon Disulfide	ND	ug/m3	4100	21000	620	
56-23-5	Carbon Tetrachloride	ND	ug/m3	4100	2100	660	
108-90-7	Chlorobenzene	ND	ug/m3	4100	2100	660	
75-00-3	Chloroethane	ND	ug/m3	4100	2100	780	
67-66-3	Chloroform	ND	ug/m3	4100	2100	780	
74-87-3	Chloromethane	ND	ug/m3	4100	2100	780	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	4100	2100	740	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	4100	2100	570	
98-82-8	Cumene	ND	ug/m3	4100	2100	620	
110-82-7	Cyclohexane	ND	ug/m3	4100	4100	1400	
124-48-1	Dibromochloromethane	ND	ug/m3	4100	2100	570	
64-17-5	Ethanol	ND	ug/m3	4100	21000	6600	
100-41-4	Ethyl Benzene	ND	ug/m3	4100	2100	620	
75-69-4	Freon 11	890	ug/m3	4100	2100	660	J
76-13-1	Freon 113	350000	ug/m3	4100	2100	660	
76-14-2	Freon 114	ND	ug/m3	4100	2100	700	
75-71-8	Freon 12	ND	ug/m3	4100	2100	740	
306-83-2	Freon 123	ND	ug/m3	4100	2100	980	
354-23-4	Freon 123a	ND	ug/m3	4100	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	4100	2100	940	
142-82-5	Heptane	ND	ug/m3	4100	2100	660	
87-68-3	Hexachlorobutadiene	ND	ug/m3	4100	2100	740	
110-54-3	Hexane	ND	ug/m3	4100	2100	700	
179601-23-	m,p-Xylene	ND	ug/m3	4100	4100	1200	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	4100	2100	620	
75-09-2	Methylene Chloride	ND	ug/m3	4100	2100	620	
95-47-6	o-Xylene	ND	ug/m3	4100	2100	570	
103-65-1	Propylbenzene	ND	ug/m3	4100	2100	620	
100-42-5	Styrene	ND	ug/m3	4100	2100	620	
127-18-4	Tetrachloroethene	ND	ug/m3	4100	2100	570	
109-99-9	Tetrahydrofuran	ND	ug/m3	4100	2100	900	
108-88-3	Toluene	ND	ug/m3	4100	2100	660	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	4100	2100	700	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	4100	2100	660	
79-01-6	Trichloroethene	10000	ug/m3	4100	2100	620	
75-01-4	Vinyl Chloride	ND	ug/m3	4100	2100	780	

Borehole	600-SGW-8	Depth (ft)	7.5	Depth (m)	2.29	Event Date	3/22/2012

Sample	1203220857	Sample Type	Soil Gas	Analysis Method	TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	3.78	1.9	0.6	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	3.78	1.9	0.6	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	3.78	1.9	0.6	
75-34-3	1,1-Dichloroethane	ND	ug/m3	3.78	1.9	0.64	
75-35-4	1,1-Dichloroethene	ND	ug/m3	3.78	1.9	0.64	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	3.78	1.9	0.91	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	3.78	1.9	0.6	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	3.78	1.9	0.57	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	3.78	1.9	0.64	
107-06-2	1,2-Dichloroethane	ND	ug/m3	3.78	1.9	0.72	
78-87-5	1,2-Dichloropropane	ND	ug/m3	3.78	1.9	0.64	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	3.78	1.9	0.64	
106-99-0	1,3-Butadiene	ND	ug/m3	3.78	1.9	0.79	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	3.78	1.9	0.64	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	3.78	1.9	0.6	
123-91-1	1,4-Dioxane	ND	ug/m3	3.78	1.9	0.64	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	3.78	1.9	0.64	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	3.78	19	0.87	
591-78-6	2-Hexanone	ND	ug/m3	3.78	1.9	0.68	
67-63-0	2-Propanol	2.4	ug/m3	3.78	3.8	1.5	J
107-05-1	3-Chloropropene	ND	ug/m3	3.78	1.9	0.6	
622-96-8	4-Ethyltoluene	ND	ug/m3	3.78	1.9	0.64	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	3.78	1.9	0.53	
67-64-1	Acetone	6.7	ug/m3	3.78	19	3.3	J
100-44-7	alpha-Chlorotoluene	ND	ug/m3	3.78	1.9	0.57	
71-43-2	Benzene	ND	ug/m3	3.78	1.9	0.53	
75-27-4	Bromodichloromethane	ND	ug/m3	3.78	1.9	0.6	
75-25-2	Bromoform	ND	ug/m3	3.78	1.9	0.53	
74-83-9	Bromomethane	ND	ug/m3	3.78	1.9	0.72	
75-15-0	Carbon Disulfide	1	ug/m3	3.78	19	0.57	J RB
56-23-5	Carbon Tetrachloride	ND	ug/m3	3.78	1.9	0.6	
108-90-7	Chlorobenzene	ND	ug/m3	3.78	1.9	0.6	
75-00-3	Chloroethane	ND	ug/m3	3.78	1.9	0.72	
67-66-3	Chloroform	ND	ug/m3	3.78	1.9	0.72	
74-87-3	Chloromethane	ND	ug/m3	3.78	1.9	0.72	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	3.78	1.9	0.68	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	3.78	1.9	0.53	
98-82-8	Cumene	ND	ug/m3	3.78	1.9	0.57	
110-82-7	Cyclohexane	ND	ug/m3	3.78	3.8	1.2	
124-48-1	Dibromochloromethane	ND	ug/m3	3.78	1.9	0.53	
64-17-5	Ethanol	ND	ug/m3	3.78	19	6	

100-41-4	Ethyl Benzene	ND	ug/m3	3.78	1.9	0.57	
75-69-4	Freon 11	1.2	ug/m3	3.78	1.9	0.6	J
76-13-1	Freon 113	12	ug/m3	3.78	1.9	0.6	
76-14-2	Freon 114	ND	ug/m3	3.78	1.9	0.64	
75-71-8	Freon 12	2.2	ug/m3	3.78	1.9	0.68	
306-83-2	Freon 123	ND	ug/m3	3.78	1.9	0.91	
354-23-4	Freon 123a	ND	ug/m3	3.78	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	3.78	1.9	0.87	
142-82-5	Heptane	ND	ug/m3	3.78	1.9	0.6	
87-68-3	Hexachlorobutadiene	ND	ug/m3	3.78	1.9	0.68	
110-54-3	Hexane	ND	ug/m3	3.78	1.9	0.64	
179601-23-	m,p-Xylene	ND	ug/m3	3.78	3.8	1.1	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	3.78	1.9	0.57	
75-09-2	Methylene Chloride	0.72	ug/m3	3.78	1.9	0.57	J RB
95-47-6	o-Xylene	ND	ug/m3	3.78	1.9	0.53	
103-65-1	Propylbenzene	ND	ug/m3	3.78	1.9	0.57	
100-42-5	Styrene	ND	ug/m3	3.78	1.9	0.57	
127-18-4	Tetrachloroethene	ND	ug/m3	3.78	1.9	0.53	
109-99-9	Tetrahydrofuran	ND	ug/m3	3.78	1.9	0.83	
108-88-3	Toluene	ND	ug/m3	3.78	1.9	0.6	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	3.78	1.9	0.64	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	3.78	1.9	0.6	
79-01-6	Trichloroethene	1.2	ug/m3	3.78	1.9	0.57	J
75-01-4	Vinyl Chloride	ND	ug/m3	3.78	1.9	0.72	

Sample 1203241547 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	1.53	0.77	0.24	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	1.53	0.77	0.24	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	1.53	0.77	0.24	
75-34-3	1,1-Dichloroethane	ND	ug/m3	1.53	0.77	0.26	
75-35-4	1,1-Dichloroethene	0.34	ug/m3	1.53	0.77	0.26	J
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	1.53	0.77	0.37	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	1.53	0.77	0.24	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	1.53	0.77	0.23	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	1.53	0.77	0.26	
107-06-2	1,2-Dichloroethane	ND	ug/m3	1.53	0.77	0.29	
78-87-5	1,2-Dichloropropane	ND	ug/m3	1.53	0.77	0.26	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	1.53	0.77	0.26	
106-99-0	1,3-Butadiene	ND	ug/m3	1.53	0.77	0.32	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	1.53	0.77	0.26	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	1.53	0.77	0.24	
123-91-1	1,4-Dioxane	ND	ug/m3	1.53	0.77	0.26	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	1.53	0.77	0.26	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	0.48	ug/m3	1.53	7.7	0.35	J
591-78-6	2-Hexanone	ND	ug/m3	1.53	0.77	0.28	

67-63-0	2-Propanol	ND	ug/m3	1.53	1.5	0.61	
107-05-1	3-Chloropropene	ND	ug/m3	1.53	0.77	0.24	
622-96-8	4-Ethyltoluene	ND	ug/m3	1.53	0.77	0.26	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	1.53	0.77	0.21	
67-64-1	Acetone	3.2	ug/m3	1.53	7.7	1.3	J
100-44-7	alpha-Chlorotoluene	ND	ug/m3	1.53	0.77	0.23	
71-43-2	Benzene	ND	ug/m3	1.53	0.77	0.21	
75-27-4	Bromodichloromethane	ND	ug/m3	1.53	0.77	0.24	
75-25-2	Bromoform	ND	ug/m3	1.53	0.77	0.21	
74-83-9	Bromomethane	ND	ug/m3	1.53	0.77	0.29	
75-15-0	Carbon Disulfide	0.4	ug/m3	1.53	7.7	0.23	J
56-23-5	Carbon Tetrachloride	ND	ug/m3	1.53	0.77	0.24	
108-90-7	Chlorobenzene	ND	ug/m3	1.53	0.77	0.24	
75-00-3	Chloroethane	ND	ug/m3	1.53	0.77	0.29	
67-66-3	Chloroform	0.3	ug/m3	1.53	0.77	0.29	J
74-87-3	Chloromethane	ND	ug/m3	1.53	0.77	0.29	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	1.53	0.77	0.28	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	1.53	0.77	0.21	
98-82-8	Cumene	ND	ug/m3	1.53	0.77	0.23	
110-82-7	Cyclohexane	ND	ug/m3	1.53	1.5	0.5	
124-48-1	Dibromochloromethane	ND	ug/m3	1.53	0.77	0.21	
64-17-5	Ethanol	ND	ug/m3	1.53	7.7	2.4	
100-41-4	Ethyl Benzene	ND	ug/m3	1.53	0.77	0.23	
75-69-4	Freon 11	2	ug/m3	1.53	0.77	0.24	
76-13-1	Freon 113	260	ug/m3	15.3	7.7	2.4	D
76-14-2	Freon 114	ND	ug/m3	1.53	0.77	0.26	
75-71-8	Freon 12	2.4	ug/m3	1.53	0.77	0.28	
306-83-2	Freon 123	ND	ug/m3	1.53	0.77	0.37	
354-23-4	Freon 123a	18	ug/m3	1.53	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	1.53	0.77	0.35	
142-82-5	Heptane	ND	ug/m3	1.53	0.77	0.24	
87-68-3	Hexachlorobutadiene	ND	ug/m3	1.53	0.77	0.28	
110-54-3	Hexane	ND	ug/m3	1.53	0.77	0.26	
179601-23-	m,p-Xylene	ND	ug/m3	1.53	1.5	0.44	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	1.53	0.77	0.23	
75-09-2	Methylene Chloride	0.34	ug/m3	1.53	0.77	0.23	J RB
95-47-6	o-Xylene	ND	ug/m3	1.53	0.77	0.21	
103-65-1	Propylbenzene	ND	ug/m3	1.53	0.77	0.23	
100-42-5	Styrene	ND	ug/m3	1.53	0.77	0.23	
127-18-4	Tetrachloroethene	ND	ug/m3	1.53	0.77	0.21	
109-99-9	Tetrahydrofuran	ND	ug/m3	1.53	0.77	0.34	
108-88-3	Toluene	0.5	ug/m3	1.53	0.77	0.24	J
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	1.53	0.77	0.26	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	1.53	0.77	0.24	
79-01-6	Trichloroethene	17	ug/m3	1.53	0.77	0.23	
75-01-4	Vinyl Chloride	ND	ug/m3	1.53	0.77	0.29	

Borehole	600-SGW-8	Depth (ft)	52.5	Depth (m)	16.00	Event Date	3/22/2012

Sample	1203220901	Sample Type	Soil Gas	Analysis Method	TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	3.83	1.9	0.61	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	3.83	1.9	0.61	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	3.83	1.9	0.61	
75-34-3	1,1-Dichloroethane	ND	ug/m3	3.83	1.9	0.65	
75-35-4	1,1-Dichloroethene	ND	ug/m3	3.83	1.9	0.65	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	3.83	1.9	0.92	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	3.83	1.9	0.61	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	3.83	1.9	0.57	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	3.83	1.9	0.65	
107-06-2	1,2-Dichloroethane	ND	ug/m3	3.83	1.9	0.73	
78-87-5	1,2-Dichloropropane	ND	ug/m3	3.83	1.9	0.65	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	3.83	1.9	0.65	
106-99-0	1,3-Butadiene	ND	ug/m3	3.83	1.9	0.8	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	3.83	1.9	0.65	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	3.83	1.9	0.61	
123-91-1	1,4-Dioxane	ND	ug/m3	3.83	1.9	0.65	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	3.83	1.9	0.65	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	1.7	ug/m3	3.83	19	0.88	J
591-78-6	2-Hexanone	0.72	ug/m3	3.83	1.9	0.69	J
67-63-0	2-Propanol	2.1	ug/m3	3.83	3.8	1.5	J
107-05-1	3-Chloropropene	ND	ug/m3	3.83	1.9	0.61	
622-96-8	4-Ethyltoluene	ND	ug/m3	3.83	1.9	0.65	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	3.83	1.9	0.54	
67-64-1	Acetone	7.7	ug/m3	3.83	19	3.4	J
100-44-7	alpha-Chlorotoluene	ND	ug/m3	3.83	1.9	0.57	
71-43-2	Benzene	ND	ug/m3	3.83	1.9	0.54	
75-27-4	Bromodichloromethane	ND	ug/m3	3.83	1.9	0.61	
75-25-2	Bromoform	ND	ug/m3	3.83	1.9	0.54	
74-83-9	Bromomethane	ND	ug/m3	3.83	1.9	0.73	
75-15-0	Carbon Disulfide	ND	ug/m3	3.83	19	0.57	
56-23-5	Carbon Tetrachloride	ND	ug/m3	3.83	1.9	0.61	
108-90-7	Chlorobenzene	ND	ug/m3	3.83	1.9	0.61	
75-00-3	Chloroethane	ND	ug/m3	3.83	1.9	0.73	
67-66-3	Chloroform	ND	ug/m3	3.83	1.9	0.73	
74-87-3	Chloromethane	ND	ug/m3	3.83	1.9	0.73	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	3.83	1.9	0.69	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	3.83	1.9	0.54	
98-82-8	Cumene	ND	ug/m3	3.83	1.9	0.57	
110-82-7	Cyclohexane	ND	ug/m3	3.83	3.8	1.3	
124-48-1	Dibromochloromethane	ND	ug/m3	3.83	1.9	0.54	
64-17-5	Ethanol	ND	ug/m3	3.83	19	6.1	

100-41-4	Ethyl Benzene	ND	ug/m3	3.83	1.9	0.57	
75-69-4	Freon 11	3.2	ug/m3	3.83	1.9	0.61	
76-13-1	Freon 113	180	ug/m3	3.83	1.9	0.61	
76-14-2	Freon 114	ND	ug/m3	3.83	1.9	0.65	
75-71-8	Freon 12	2.2	ug/m3	3.83	1.9	0.69	
306-83-2	Freon 123	ND	ug/m3	3.83	1.9	0.92	
354-23-4	Freon 123a	43	ug/m3	3.83	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	3.83	1.9	0.88	
142-82-5	Heptane	ND	ug/m3	3.83	1.9	0.61	
87-68-3	Hexachlorobutadiene	ND	ug/m3	3.83	1.9	0.69	
110-54-3	Hexane	ND	ug/m3	3.83	1.9	0.65	
179601-23-	m,p-Xylene	ND	ug/m3	3.83	3.8	1.1	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	3.83	1.9	0.57	
75-09-2	Methylene Chloride	0.76	ug/m3	3.83	1.9	0.57	J RB
95-47-6	o-Xylene	ND	ug/m3	3.83	1.9	0.54	
103-65-1	Propylbenzene	ND	ug/m3	3.83	1.9	0.57	
100-42-5	Styrene	ND	ug/m3	3.83	1.9	0.57	
127-18-4	Tetrachloroethene	ND	ug/m3	3.83	1.9	0.54	
109-99-9	Tetrahydrofuran	ND	ug/m3	3.83	1.9	0.84	
108-88-3	Toluene	ND	ug/m3	3.83	1.9	0.61	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	3.83	1.9	0.65	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	3.83	1.9	0.61	
79-01-6	Trichloroethene	3.6	ug/m3	3.83	1.9	0.57	
75-01-4	Vinyl Chloride	ND	ug/m3	3.83	1.9	0.73	

Sample 1203241551 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	1.57	0.79	0.25	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	1.57	0.79	0.25	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	1.57	0.79	0.25	
75-34-3	1,1-Dichloroethane	ND	ug/m3	1.57	0.79	0.27	
75-35-4	1,1-Dichloroethene	ND	ug/m3	1.57	0.79	0.27	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	1.57	0.79	0.38	
95-63-6	1,2,4-Trimethylbenzene	0.46	ug/m3	1.57	0.79	0.25	J
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	1.57	0.79	0.24	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	1.57	0.79	0.27	
107-06-2	1,2-Dichloroethane	ND	ug/m3	1.57	0.79	0.3	
78-87-5	1,2-Dichloropropane	ND	ug/m3	1.57	0.79	0.27	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	1.57	0.79	0.27	
106-99-0	1,3-Butadiene	ND	ug/m3	1.57	0.79	0.33	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	1.57	0.79	0.27	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	1.57	0.79	0.25	
123-91-1	1,4-Dioxane	ND	ug/m3	1.57	0.79	0.27	
540-84-1	2,2,4-Trimethylpentane	1.1	ug/m3	1.57	0.79	0.27	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	1.5	ug/m3	1.57	7.9	0.36	J
591-78-6	2-Hexanone	0.53	ug/m3	1.57	0.79	0.28	J

67-63-0	2-Propanol	ND	ug/m3	1.57	1.6	0.63	
107-05-1	3-Chloropropene	ND	ug/m3	1.57	0.79	0.25	
622-96-8	4-Ethyltoluene	ND	ug/m3	1.57	0.79	0.27	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	1.57	0.79	0.22	
67-64-1	Acetone	6.6	ug/m3	1.57	7.9	1.4	J
100-44-7	alpha-Chlorotoluene	ND	ug/m3	1.57	0.79	0.24	
71-43-2	Benzene	ND	ug/m3	1.57	0.79	0.22	
75-27-4	Bromodichloromethane	ND	ug/m3	1.57	0.79	0.25	
75-25-2	Bromoform	ND	ug/m3	1.57	0.79	0.22	
74-83-9	Bromomethane	ND	ug/m3	1.57	0.79	0.3	
75-15-0	Carbon Disulfide	0.29	ug/m3	1.57	7.9	0.24	J
56-23-5	Carbon Tetrachloride	ND	ug/m3	1.57	0.79	0.25	
108-90-7	Chlorobenzene	ND	ug/m3	1.57	0.79	0.25	
75-00-3	Chloroethane	ND	ug/m3	1.57	0.79	0.3	
67-66-3	Chloroform	0.49	ug/m3	1.57	0.79	0.3	J
74-87-3	Chloromethane	ND	ug/m3	1.57	0.79	0.3	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	1.57	0.79	0.28	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	1.57	0.79	0.22	
98-82-8	Cumene	ND	ug/m3	1.57	0.79	0.24	
110-82-7	Cyclohexane	ND	ug/m3	1.57	1.6	0.52	
124-48-1	Dibromochloromethane	ND	ug/m3	1.57	0.79	0.22	
64-17-5	Ethanol	ND	ug/m3	1.57	7.9	2.5	
100-41-4	Ethyl Benzene	ND	ug/m3	1.57	0.79	0.24	
75-69-4	Freon 11	3.8	ug/m3	1.57	0.79	0.25	
76-13-1	Freon 113	210	ug/m3	15.7	7.9	2.5	D
76-14-2	Freon 114	ND	ug/m3	1.57	0.79	0.27	
75-71-8	Freon 12	2.6	ug/m3	1.57	0.79	0.28	
306-83-2	Freon 123	ND	ug/m3	1.57	0.79	0.38	
354-23-4	Freon 123a	49	ug/m3	1.57	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	1.57	0.79	0.36	
142-82-5	Heptane	ND	ug/m3	1.57	0.79	0.25	
87-68-3	Hexachlorobutadiene	ND	ug/m3	1.57	0.79	0.28	
110-54-3	Hexane	0.47	ug/m3	1.57	0.79	0.27	J
179601-23-	m,p-Xylene	ND	ug/m3	1.57	1.6	0.46	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	1.57	0.79	0.24	
75-09-2	Methylene Chloride	0.28	ug/m3	1.57	0.79	0.24	J RB
95-47-6	o-Xylene	ND	ug/m3	1.57	0.79	0.22	
103-65-1	Propylbenzene	ND	ug/m3	1.57	0.79	0.24	
100-42-5	Styrene	ND	ug/m3	1.57	0.79	0.24	
127-18-4	Tetrachloroethene	ND	ug/m3	1.57	0.79	0.22	
109-99-9	Tetrahydrofuran	ND	ug/m3	1.57	0.79	0.35	
108-88-3	Toluene	0.28	ug/m3	1.57	0.79	0.25	J
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	1.57	0.79	0.27	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	1.57	0.79	0.25	
79-01-6	Trichloroethene	5.2	ug/m3	1.57	0.79	0.24	
75-01-4	Vinyl Chloride	ND	ug/m3	1.57	0.79	0.3	

Borehole	600-SGW-8	Depth (ft)	102.5	Depth (m)	31.24	Event Date	3/22/2012

Sample	1203220907	Sample Type	Soil Gas	Analysis Method	TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	3.95	2	0.63	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	3.95	2	0.63	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	3.95	2	0.63	
75-34-3	1,1-Dichloroethane	ND	ug/m3	3.95	2	0.67	
75-35-4	1,1-Dichloroethene	ND	ug/m3	3.95	2	0.67	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	3.95	2	0.95	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	3.95	2	0.63	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	3.95	2	0.59	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	3.95	2	0.67	
107-06-2	1,2-Dichloroethane	ND	ug/m3	3.95	2	0.75	
78-87-5	1,2-Dichloropropane	ND	ug/m3	3.95	2	0.67	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	3.95	2	0.67	
106-99-0	1,3-Butadiene	ND	ug/m3	3.95	2	0.83	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	3.95	2	0.67	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	3.95	2	0.63	
123-91-1	1,4-Dioxane	ND	ug/m3	3.95	2	0.67	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	3.95	2	0.67	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	1.1	ug/m3	3.95	20	0.91	J
591-78-6	2-Hexanone	ND	ug/m3	3.95	2	0.71	
67-63-0	2-Propanol	ND	ug/m3	3.95	4	1.6	
107-05-1	3-Chloropropene	ND	ug/m3	3.95	2	0.63	
622-96-8	4-Ethyltoluene	ND	ug/m3	3.95	2	0.67	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	3.95	2	0.55	
67-64-1	Acetone	7.8	ug/m3	3.95	20	3.5	J
100-44-7	alpha-Chlorotoluene	ND	ug/m3	3.95	2	0.59	
71-43-2	Benzene	ND	ug/m3	3.95	2	0.55	
75-27-4	Bromodichloromethane	ND	ug/m3	3.95	2	0.63	
75-25-2	Bromoform	ND	ug/m3	3.95	2	0.55	
74-83-9	Bromomethane	ND	ug/m3	3.95	2	0.75	
75-15-0	Carbon Disulfide	1.1	ug/m3	3.95	20	0.59	J RB
56-23-5	Carbon Tetrachloride	ND	ug/m3	3.95	2	0.63	
108-90-7	Chlorobenzene	ND	ug/m3	3.95	2	0.63	
75-00-3	Chloroethane	ND	ug/m3	3.95	2	0.75	
67-66-3	Chloroform	ND	ug/m3	3.95	2	0.75	
74-87-3	Chloromethane	ND	ug/m3	3.95	2	0.75	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	3.95	2	0.71	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	3.95	2	0.55	
98-82-8	Cumene	ND	ug/m3	3.95	2	0.59	
110-82-7	Cyclohexane	ND	ug/m3	3.95	4	1.3	
124-48-1	Dibromochloromethane	ND	ug/m3	3.95	2	0.55	
64-17-5	Ethanol	19	ug/m3	3.95	20	6.3	J

100-41-4	Ethyl Benzene	ND	ug/m3	3.95	2	0.59	
75-69-4	Freon 11	3.8	ug/m3	3.95	2	0.63	
76-13-1	Freon 113	110	ug/m3	3.95	2	0.63	
76-14-2	Freon 114	ND	ug/m3	3.95	2	0.67	
75-71-8	Freon 12	2.3	ug/m3	3.95	2	0.71	
306-83-2	Freon 123	ND	ug/m3	3.95	2	0.95	
354-23-4	Freon 123a	ND	ug/m3	3.95	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	3.95	2	0.91	
142-82-5	Heptane	ND	ug/m3	3.95	2	0.63	
87-68-3	Hexachlorobutadiene	ND	ug/m3	3.95	2	0.71	
110-54-3	Hexane	ND	ug/m3	3.95	2	0.67	
179601-23-	m,p-Xylene	ND	ug/m3	3.95	4	1.1	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	3.95	2	0.59	
75-09-2	Methylene Chloride	0.78	ug/m3	3.95	2	0.59	J RB
95-47-6	o-Xylene	ND	ug/m3	3.95	2	0.55	
103-65-1	Propylbenzene	ND	ug/m3	3.95	2	0.59	
100-42-5	Styrene	ND	ug/m3	3.95	2	0.59	
127-18-4	Tetrachloroethene	ND	ug/m3	3.95	2	0.55	
109-99-9	Tetrahydrofuran	ND	ug/m3	3.95	2	0.87	
108-88-3	Toluene	2.6	ug/m3	3.95	2	0.63	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	3.95	2	0.67	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	3.95	2	0.63	
79-01-6	Trichloroethene	1.3	ug/m3	3.95	2	0.59	J
75-01-4	Vinyl Chloride	ND	ug/m3	3.95	2	0.75	

Sample 1203241557 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	1.45	0.73	0.23	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	1.45	0.73	0.23	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	1.45	0.73	0.23	
75-34-3	1,1-Dichloroethane	ND	ug/m3	1.45	0.73	0.25	
75-35-4	1,1-Dichloroethene	ND	ug/m3	1.45	0.73	0.25	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	1.45	0.73	0.35	
95-63-6	1,2,4-Trimethylbenzene	0.35	ug/m3	1.45	0.73	0.23	J
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	1.45	0.73	0.22	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	1.45	0.73	0.25	
107-06-2	1,2-Dichloroethane	ND	ug/m3	1.45	0.73	0.28	
78-87-5	1,2-Dichloropropane	ND	ug/m3	1.45	0.73	0.25	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	1.45	0.73	0.25	
106-99-0	1,3-Butadiene	ND	ug/m3	1.45	0.73	0.3	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	1.45	0.73	0.25	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	1.45	0.73	0.23	
123-91-1	1,4-Dioxane	ND	ug/m3	1.45	0.73	0.25	
540-84-1	2,2,4-Trimethylpentane	0.87	ug/m3	1.45	0.73	0.25	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	7.2	ug/m3	1.45	7.3	0.33	J
591-78-6	2-Hexanone	0.41	ug/m3	1.45	0.73	0.26	J

67-63-0	2-Propanol	4.3	ug/m3	1.45	1.5	0.58	
107-05-1	3-Chloropropene	ND	ug/m3	1.45	0.73	0.23	
622-96-8	4-Ethyltoluene	ND	ug/m3	1.45	0.73	0.25	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	1.45	0.73	0.2	
67-64-1	Acetone	8.1	ug/m3	1.45	7.3	1.3	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	1.45	0.73	0.22	
71-43-2	Benzene	0.81	ug/m3	1.45	0.73	0.2	
75-27-4	Bromodichloromethane	ND	ug/m3	1.45	0.73	0.23	
75-25-2	Bromoform	ND	ug/m3	1.45	0.73	0.2	
74-83-9	Bromomethane	ND	ug/m3	1.45	0.73	0.28	
75-15-0	Carbon Disulfide	0.7	ug/m3	1.45	7.3	0.22	J
56-23-5	Carbon Tetrachloride	ND	ug/m3	1.45	0.73	0.23	
108-90-7	Chlorobenzene	ND	ug/m3	1.45	0.73	0.23	
75-00-3	Chloroethane	ND	ug/m3	1.45	0.73	0.28	
67-66-3	Chloroform	ND	ug/m3	1.45	0.73	0.28	
74-87-3	Chloromethane	ND	ug/m3	1.45	0.73	0.28	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	1.45	0.73	0.26	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	1.45	0.73	0.2	
98-82-8	Cumene	ND	ug/m3	1.45	0.73	0.22	
110-82-7	Cyclohexane	1.1	ug/m3	1.45	1.5	0.48	J
124-48-1	Dibromochloromethane	ND	ug/m3	1.45	0.73	0.2	
64-17-5	Ethanol	15	ug/m3	1.45	7.3	2.3	
100-41-4	Ethyl Benzene	0.84	ug/m3	1.45	0.73	0.22	
75-69-4	Freon 11	3.4	ug/m3	1.45	0.73	0.23	
76-13-1	Freon 113	93	ug/m3	1.45	0.73	0.23	
76-14-2	Freon 114	ND	ug/m3	1.45	0.73	0.25	
75-71-8	Freon 12	2.5	ug/m3	1.45	0.73	0.26	
306-83-2	Freon 123	ND	ug/m3	1.45	0.73	0.35	
354-23-4	Freon 123a	ND	ug/m3	1.45	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	1.45	0.73	0.33	
142-82-5	Heptane	1.3	ug/m3	1.45	0.73	0.23	
87-68-3	Hexachlorobutadiene	ND	ug/m3	1.45	0.73	0.26	
110-54-3	Hexane	1	ug/m3	1.45	0.73	0.25	
179601-23-	m,p-Xylene	1.3	ug/m3	1.45	1.5	0.42	J
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	1.45	0.73	0.22	
75-09-2	Methylene Chloride	0.59	ug/m3	1.45	0.73	0.22	J RB
95-47-6	o-Xylene	0.46	ug/m3	1.45	0.73	0.2	J
103-65-1	Propylbenzene	ND	ug/m3	1.45	0.73	0.22	
100-42-5	Styrene	0.34	ug/m3	1.45	0.73	0.22	J
127-18-4	Tetrachloroethene	0.48	ug/m3	1.45	0.73	0.2	J
109-99-9	Tetrahydrofuran	ND	ug/m3	1.45	0.73	0.32	
108-88-3	Toluene	48	ug/m3	1.45	0.73	0.23	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	1.45	0.73	0.25	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	1.45	0.73	0.23	
79-01-6	Trichloroethene	1.3	ug/m3	1.45	0.73	0.22	
75-01-4	Vinyl Chloride	ND	ug/m3	1.45	0.73	0.28	

Sample **1203241558** **Sample Type** **Soil Gas-D** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	1.45	0.73	0.23	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	1.45	0.73	0.23	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	1.45	0.73	0.23	
75-34-3	1,1-Dichloroethane	ND	ug/m3	1.45	0.73	0.25	
75-35-4	1,1-Dichloroethene	ND	ug/m3	1.45	0.73	0.25	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	1.45	0.73	0.35	
95-63-6	1,2,4-Trimethylbenzene	0.31	ug/m3	1.45	0.73	0.23	J
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	1.45	0.73	0.22	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	1.45	0.73	0.25	
107-06-2	1,2-Dichloroethane	ND	ug/m3	1.45	0.73	0.28	
78-87-5	1,2-Dichloropropane	ND	ug/m3	1.45	0.73	0.25	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	1.45	0.73	0.25	
106-99-0	1,3-Butadiene	ND	ug/m3	1.45	0.73	0.3	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	1.45	0.73	0.25	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	1.45	0.73	0.23	
123-91-1	1,4-Dioxane	ND	ug/m3	1.45	0.73	0.25	
540-84-1	2,2,4-Trimethylpentane	0.78	ug/m3	1.45	0.73	0.25	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	7.3	ug/m3	1.45	7.3	0.33	
591-78-6	2-Hexanone	ND	ug/m3	1.45	0.73	0.26	
67-63-0	2-Propanol	4.3	ug/m3	1.45	1.5	0.58	
107-05-1	3-Chloropropene	ND	ug/m3	1.45	0.73	0.23	
622-96-8	4-Ethyltoluene	ND	ug/m3	1.45	0.73	0.25	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	1.45	0.73	0.2	
67-64-1	Acetone	8.2	ug/m3	1.45	7.3	1.3	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	1.45	0.73	0.22	
71-43-2	Benzene	0.83	ug/m3	1.45	0.73	0.2	
75-27-4	Bromodichloromethane	ND	ug/m3	1.45	0.73	0.23	
75-25-2	Bromoform	ND	ug/m3	1.45	0.73	0.2	
74-83-9	Bromomethane	ND	ug/m3	1.45	0.73	0.28	
75-15-0	Carbon Disulfide	0.72	ug/m3	1.45	7.3	0.22	J
56-23-5	Carbon Tetrachloride	ND	ug/m3	1.45	0.73	0.23	
108-90-7	Chlorobenzene	ND	ug/m3	1.45	0.73	0.23	
75-00-3	Chloroethane	ND	ug/m3	1.45	0.73	0.28	
67-66-3	Chloroform	ND	ug/m3	1.45	0.73	0.28	
74-87-3	Chloromethane	ND	ug/m3	1.45	0.73	0.28	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	1.45	0.73	0.26	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	1.45	0.73	0.2	
98-82-8	Cumene	ND	ug/m3	1.45	0.73	0.22	
110-82-7	Cyclohexane	1.2	ug/m3	1.45	1.5	0.48	J
124-48-1	Dibromochloromethane	ND	ug/m3	1.45	0.73	0.2	
64-17-5	Ethanol	16	ug/m3	1.45	7.3	2.3	
100-41-4	Ethyl Benzene	0.86	ug/m3	1.45	0.73	0.22	
75-69-4	Freon 11	3.6	ug/m3	1.45	0.73	0.23	

76-13-1	Freon 113	95	ug/m3	1.45	0.73	0.23	
76-14-2	Freon 114	ND	ug/m3	1.45	0.73	0.25	
75-71-8	Freon 12	2.5	ug/m3	1.45	0.73	0.26	
306-83-2	Freon 123	ND	ug/m3	1.45	0.73	0.35	
354-23-4	Freon 123a	ND	ug/m3	1.45	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	1.45	0.73	0.33	
142-82-5	Heptane	1.4	ug/m3	1.45	0.73	0.23	
87-68-3	Hexachlorobutadiene	ND	ug/m3	1.45	0.73	0.26	
110-54-3	Hexane	1	ug/m3	1.45	0.73	0.25	
179601-23-	m,p-Xylene	1.3	ug/m3	1.45	1.5	0.42	J
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	1.45	0.73	0.22	
75-09-2	Methylene Chloride	0.64	ug/m3	1.45	0.73	0.22	J RB
95-47-6	o-Xylene	0.45	ug/m3	1.45	0.73	0.2	J
103-65-1	Propylbenzene	ND	ug/m3	1.45	0.73	0.22	
100-42-5	Styrene	0.35	ug/m3	1.45	0.73	0.22	J
127-18-4	Tetrachloroethene	0.48	ug/m3	1.45	0.73	0.2	J
109-99-9	Tetrahydrofuran	ND	ug/m3	1.45	0.73	0.32	
108-88-3	Toluene	49	ug/m3	1.45	0.73	0.23	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	1.45	0.73	0.25	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	1.45	0.73	0.23	
79-01-6	Trichloroethene	1.3	ug/m3	1.45	0.73	0.22	
75-01-4	Vinyl Chloride	ND	ug/m3	1.45	0.73	0.28	

Borehole	600-SGW-8	Depth (ft)	145.5	Depth (m)	44.35	Event Date	3/22/2012

Sample	1203220916	Sample Type	Soil Gas	Analysis Method	TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	78.5	39	13	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	78.5	39	13	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	78.5	39	13	
75-34-3	1,1-Dichloroethane	ND	ug/m3	78.5	39	13	
75-35-4	1,1-Dichloroethene	ND	ug/m3	78.5	39	13	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	78.5	39	19	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	78.5	39	13	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	78.5	39	12	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	78.5	39	13	
107-06-2	1,2-Dichloroethane	ND	ug/m3	78.5	39	15	
78-87-5	1,2-Dichloropropane	ND	ug/m3	78.5	39	13	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	78.5	39	13	
106-99-0	1,3-Butadiene	ND	ug/m3	78.5	39	16	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	78.5	39	13	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	78.5	39	13	
123-91-1	1,4-Dioxane	ND	ug/m3	78.5	39	13	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	78.5	39	13	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	78.5	390	18	
591-78-6	2-Hexanone	ND	ug/m3	78.5	39	14	
67-63-0	2-Propanol	ND	ug/m3	78.5	79	31	
107-05-1	3-Chloropropene	ND	ug/m3	78.5	39	13	
622-96-8	4-Ethyltoluene	ND	ug/m3	78.5	39	13	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	78.5	39	11	
67-64-1	Acetone	ND	ug/m3	78.5	390	69	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	78.5	39	12	
71-43-2	Benzene	ND	ug/m3	78.5	39	11	
75-27-4	Bromodichloromethane	ND	ug/m3	78.5	39	13	
75-25-2	Bromoform	ND	ug/m3	78.5	39	11	
74-83-9	Bromomethane	ND	ug/m3	78.5	39	15	
75-15-0	Carbon Disulfide	ND	ug/m3	78.5	390	12	
56-23-5	Carbon Tetrachloride	ND	ug/m3	78.5	39	13	
108-90-7	Chlorobenzene	ND	ug/m3	78.5	39	13	
75-00-3	Chloroethane	ND	ug/m3	78.5	39	15	
67-66-3	Chloroform	ND	ug/m3	78.5	39	15	
74-87-3	Chloromethane	ND	ug/m3	78.5	39	15	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	78.5	39	14	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	78.5	39	11	
98-82-8	Cumene	ND	ug/m3	78.5	39	12	
110-82-7	Cyclohexane	ND	ug/m3	78.5	79	26	
124-48-1	Dibromochloromethane	ND	ug/m3	78.5	39	11	
64-17-5	Ethanol	ND	ug/m3	78.5	390	130	

100-41-4	Ethyl Benzene	ND	ug/m3	78.5	39	12	
75-69-4	Freon 11	15	ug/m3	78.5	39	13	J
76-13-1	Freon 113	6800	ug/m3	78.5	39	13	
76-14-2	Freon 114	ND	ug/m3	78.5	39	13	
75-71-8	Freon 12	ND	ug/m3	78.5	39	14	
306-83-2	Freon 123	ND	ug/m3	78.5	39	19	
354-23-4	Freon 123a	ND	ug/m3	78.5	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	78.5	39	18	
142-82-5	Heptane	ND	ug/m3	78.5	39	13	
87-68-3	Hexachlorobutadiene	ND	ug/m3	78.5	39	14	
110-54-3	Hexane	ND	ug/m3	78.5	39	13	
179601-23-	m,p-Xylene	ND	ug/m3	78.5	79	23	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	78.5	39	12	
75-09-2	Methylene Chloride	14	ug/m3	78.5	39	12	J
95-47-6	o-Xylene	ND	ug/m3	78.5	39	11	
103-65-1	Propylbenzene	ND	ug/m3	78.5	39	12	
100-42-5	Styrene	ND	ug/m3	78.5	39	12	
127-18-4	Tetrachloroethene	ND	ug/m3	78.5	39	11	
109-99-9	Tetrahydrofuran	ND	ug/m3	78.5	39	17	
108-88-3	Toluene	ND	ug/m3	78.5	39	13	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	78.5	39	13	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	78.5	39	13	
79-01-6	Trichloroethene	ND	ug/m3	78.5	39	12	
75-01-4	Vinyl Chloride	ND	ug/m3	78.5	39	15	

Sample 1203241608 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	147	74	24	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	147	74	24	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	147	74	24	
75-34-3	1,1-Dichloroethane	ND	ug/m3	147	74	25	
75-35-4	1,1-Dichloroethene	ND	ug/m3	147	74	25	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	147	74	35	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	147	74	24	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	147	74	22	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	147	74	25	
107-06-2	1,2-Dichloroethane	ND	ug/m3	147	74	28	
78-87-5	1,2-Dichloropropane	ND	ug/m3	147	74	25	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	147	74	25	
106-99-0	1,3-Butadiene	ND	ug/m3	147	74	31	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	147	74	25	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	147	74	24	
123-91-1	1,4-Dioxane	ND	ug/m3	147	74	25	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	147	74	25	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	147	740	34	
591-78-6	2-Hexanone	ND	ug/m3	147	74	26	

67-63-0	2-Propanol	ND	ug/m3	147	150	59	
107-05-1	3-Chloropropene	ND	ug/m3	147	74	24	
622-96-8	4-Ethyltoluene	ND	ug/m3	147	74	25	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	147	74	21	
67-64-1	Acetone	ND	ug/m3	147	740	130	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	147	74	22	
71-43-2	Benzene	ND	ug/m3	147	74	21	
75-27-4	Bromodichloromethane	ND	ug/m3	147	74	24	
75-25-2	Bromoform	ND	ug/m3	147	74	21	
74-83-9	Bromomethane	ND	ug/m3	147	74	28	
75-15-0	Carbon Disulfide	ND	ug/m3	147	740	22	
56-23-5	Carbon Tetrachloride	ND	ug/m3	147	74	24	
108-90-7	Chlorobenzene	ND	ug/m3	147	74	24	
75-00-3	Chloroethane	ND	ug/m3	147	74	28	
67-66-3	Chloroform	ND	ug/m3	147	74	28	
74-87-3	Chloromethane	ND	ug/m3	147	74	28	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	147	74	26	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	147	74	21	
98-82-8	Cumene	ND	ug/m3	147	74	22	
110-82-7	Cyclohexane	ND	ug/m3	147	150	49	
124-48-1	Dibromochloromethane	ND	ug/m3	147	74	21	
64-17-5	Ethanol	ND	ug/m3	147	740	240	
100-41-4	Ethyl Benzene	ND	ug/m3	147	74	22	
75-69-4	Freon 11	ND	ug/m3	147	74	24	
76-13-1	Freon 113	8500	ug/m3	147	74	24	
76-14-2	Freon 114	ND	ug/m3	147	74	25	
75-71-8	Freon 12	ND	ug/m3	147	74	26	
306-83-2	Freon 123	ND	ug/m3	147	74	35	
354-23-4	Freon 123a	ND	ug/m3	147	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	147	74	34	
142-82-5	Heptane	ND	ug/m3	147	74	24	
87-68-3	Hexachlorobutadiene	ND	ug/m3	147	74	26	
110-54-3	Hexane	ND	ug/m3	147	74	25	
179601-23-	m,p-Xylene	ND	ug/m3	147	150	43	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	147	74	22	
75-09-2	Methylene Chloride	23	ug/m3	147	74	22	J
95-47-6	o-Xylene	ND	ug/m3	147	74	21	
103-65-1	Propylbenzene	ND	ug/m3	147	74	22	
100-42-5	Styrene	ND	ug/m3	147	74	22	
127-18-4	Tetrachloroethene	ND	ug/m3	147	74	21	
109-99-9	Tetrahydrofuran	ND	ug/m3	147	74	32	
108-88-3	Toluene	ND	ug/m3	147	74	24	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	147	74	25	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	147	74	24	
79-01-6	Trichloroethene	ND	ug/m3	147	74	22	
75-01-4	Vinyl Chloride	ND	ug/m3	147	74	28	

Borehole	600-SVE-1	Depth (ft)	40	Depth (m)	12.19	Event Date	3/22/2012

Sample	1203221140	Sample Type	Soil Gas	Analysis Method	TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	32.6	16	5.2	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	32.6	16	5.2	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	32.6	16	5.2	
75-34-3	1,1-Dichloroethane	ND	ug/m3	32.6	16	5.5	
75-35-4	1,1-Dichloroethene	ND	ug/m3	32.6	16	5.5	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	32.6	16	7.8	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	32.6	16	5.2	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	32.6	16	4.9	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	32.6	16	5.5	
107-06-2	1,2-Dichloroethane	ND	ug/m3	32.6	16	6.2	
78-87-5	1,2-Dichloropropane	ND	ug/m3	32.6	16	5.5	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	32.6	16	5.5	
106-99-0	1,3-Butadiene	ND	ug/m3	32.6	16	6.8	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	32.6	16	5.5	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	32.6	16	5.2	
123-91-1	1,4-Dioxane	ND	ug/m3	32.6	16	5.5	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	32.6	16	5.5	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	2200	ug/m3	32.6	160	7.5	
591-78-6	2-Hexanone	ND	ug/m3	32.6	16	5.9	
67-63-0	2-Propanol	ND	ug/m3	32.6	33	13	
107-05-1	3-Chloropropene	ND	ug/m3	32.6	16	5.2	
622-96-8	4-Ethyltoluene	ND	ug/m3	32.6	16	5.5	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	32.6	16	4.6	
67-64-1	Acetone	940	ug/m3	32.6	160	29	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	32.6	16	4.9	
71-43-2	Benzene	ND	ug/m3	32.6	16	4.6	
75-27-4	Bromodichloromethane	ND	ug/m3	32.6	16	5.2	
75-25-2	Bromoform	ND	ug/m3	32.6	16	4.6	
74-83-9	Bromomethane	ND	ug/m3	32.6	16	6.2	
75-15-0	Carbon Disulfide	9.9	ug/m3	32.6	160	4.9	J
56-23-5	Carbon Tetrachloride	ND	ug/m3	32.6	16	5.2	
108-90-7	Chlorobenzene	ND	ug/m3	32.6	16	5.2	
75-00-3	Chloroethane	ND	ug/m3	32.6	16	6.2	
67-66-3	Chloroform	8	ug/m3	32.6	16	6.2	J
74-87-3	Chloromethane	ND	ug/m3	32.6	16	6.2	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	32.6	16	5.9	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	32.6	16	4.6	
98-82-8	Cumene	ND	ug/m3	32.6	16	4.9	
110-82-7	Cyclohexane	ND	ug/m3	32.6	33	11	
124-48-1	Dibromochloromethane	ND	ug/m3	32.6	16	4.6	
64-17-5	Ethanol	ND	ug/m3	32.6	160	52	

100-41-4	Ethyl Benzene	ND	ug/m3	32.6	16	4.9	
75-69-4	Freon 11	ND	ug/m3	32.6	16	5.2	
76-13-1	Freon 113	320	ug/m3	32.6	16	5.2	
76-14-2	Freon 114	ND	ug/m3	32.6	16	5.5	
75-71-8	Freon 12	ND	ug/m3	32.6	16	5.9	
306-83-2	Freon 123	ND	ug/m3	32.6	16	7.8	
NA	Freon 123a	ND	ug/m3	32.6	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	32.6	16	7.5	
142-82-5	Heptane	ND	ug/m3	32.6	16	5.2	
87-68-3	Hexachlorobutadiene	ND	ug/m3	32.6	16	5.9	
110-54-3	Hexane	ND	ug/m3	32.6	16	5.5	
179601-23-	m,p-Xylene	ND	ug/m3	32.6	33	9.5	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	32.6	16	4.9	
75-09-2	Methylene Chloride	5.9	ug/m3	32.6	16	4.9	J
95-47-6	o-Xylene	ND	ug/m3	32.6	16	4.6	
103-65-1	Propylbenzene	ND	ug/m3	32.6	16	4.9	
100-42-5	Styrene	ND	ug/m3	32.6	16	4.9	
127-18-4	Tetrachloroethene	1100	ug/m3	32.6	16	4.6	
109-99-9	Tetrahydrofuran	3000	ug/m3	32.6	16	7.2	
108-88-3	Toluene	ND	ug/m3	32.6	16	5.2	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	32.6	16	5.5	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	32.6	16	5.2	
79-01-6	Trichloroethene	140	ug/m3	32.6	16	4.9	
75-01-4	Vinyl Chloride	ND	ug/m3	32.6	16	6.2	

Sample 1203221150 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	171	86	27	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	171	86	27	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	171	86	27	
75-34-3	1,1-Dichloroethane	ND	ug/m3	171	86	29	
75-35-4	1,1-Dichloroethene	ND	ug/m3	171	86	29	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	171	86	41	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	171	86	27	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	171	86	26	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	171	86	29	
107-06-2	1,2-Dichloroethane	ND	ug/m3	171	86	32	
78-87-5	1,2-Dichloropropane	ND	ug/m3	171	86	29	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	171	86	29	
106-99-0	1,3-Butadiene	ND	ug/m3	171	86	36	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	171	86	29	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	171	86	27	
123-91-1	1,4-Dioxane	ND	ug/m3	171	86	29	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	171	86	29	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	171	860	39	
591-78-6	2-Hexanone	ND	ug/m3	171	86	31	

67-63-0	2-Propanol	ND	ug/m3	171	170	68	
107-05-1	3-Chloropropene	ND	ug/m3	171	86	27	
622-96-8	4-Ethyltoluene	ND	ug/m3	171	86	29	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	171	86	24	
67-64-1	Acetone	ND	ug/m3	171	860	150	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	171	86	26	
71-43-2	Benzene	ND	ug/m3	171	86	24	
75-27-4	Bromodichloromethane	ND	ug/m3	171	86	27	
75-25-2	Bromoform	ND	ug/m3	171	86	24	
74-83-9	Bromomethane	ND	ug/m3	171	86	32	
75-15-0	Carbon Disulfide	ND	ug/m3	171	860	26	
56-23-5	Carbon Tetrachloride	ND	ug/m3	171	86	27	
108-90-7	Chlorobenzene	ND	ug/m3	171	86	27	
75-00-3	Chloroethane	ND	ug/m3	171	86	32	
67-66-3	Chloroform	88	ug/m3	171	86	32	
74-87-3	Chloromethane	ND	ug/m3	171	86	32	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	171	86	31	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	171	86	24	
98-82-8	Cumene	ND	ug/m3	171	86	26	
110-82-7	Cyclohexane	ND	ug/m3	171	170	56	
124-48-1	Dibromochloromethane	ND	ug/m3	171	86	24	
64-17-5	Ethanol	ND	ug/m3	171	860	270	
100-41-4	Ethyl Benzene	ND	ug/m3	171	86	26	
75-69-4	Freon 11	ND	ug/m3	171	86	27	
76-13-1	Freon 113	11000	ug/m3	171	86	27	
76-14-2	Freon 114	ND	ug/m3	171	86	29	
75-71-8	Freon 12	ND	ug/m3	171	86	31	
306-83-2	Freon 123	ND	ug/m3	171	86	41	
NA	Freon 123a	1300	ug/m3	171	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	171	86	39	
142-82-5	Heptane	ND	ug/m3	171	86	27	
87-68-3	Hexachlorobutadiene	ND	ug/m3	171	86	31	
110-54-3	Hexane	ND	ug/m3	171	86	29	
179601-23-	m,p-Xylene	ND	ug/m3	171	170	50	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	171	86	26	
75-09-2	Methylene Chloride	32	ug/m3	171	86	26	J
95-47-6	o-Xylene	ND	ug/m3	171	86	24	
103-65-1	Propylbenzene	ND	ug/m3	171	86	26	
100-42-5	Styrene	ND	ug/m3	171	86	26	
127-18-4	Tetrachloroethene	69	ug/m3	171	86	24	J
109-99-9	Tetrahydrofuran	66	ug/m3	171	86	38	J
108-88-3	Toluene	ND	ug/m3	171	86	27	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	171	86	29	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	171	86	27	
79-01-6	Trichloroethene	1500	ug/m3	171	86	26	
75-01-4	Vinyl Chloride	ND	ug/m3	171	86	32	

Sample **1203221155** **Sample Type** **Soil Gas** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	172	86	28	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	172	86	28	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	172	86	28	
75-34-3	1,1-Dichloroethane	ND	ug/m3	172	86	29	
75-35-4	1,1-Dichloroethene	ND	ug/m3	172	86	29	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	172	86	41	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	172	86	28	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	172	86	26	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	172	86	29	
107-06-2	1,2-Dichloroethane	ND	ug/m3	172	86	33	
78-87-5	1,2-Dichloropropane	ND	ug/m3	172	86	29	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	172	86	29	
106-99-0	1,3-Butadiene	ND	ug/m3	172	86	36	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	172	86	29	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	172	86	28	
123-91-1	1,4-Dioxane	ND	ug/m3	172	86	29	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	172	86	29	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	43	ug/m3	172	860	40	J
591-78-6	2-Hexanone	ND	ug/m3	172	86	31	
67-63-0	2-Propanol	ND	ug/m3	172	170	69	
107-05-1	3-Chloropropene	ND	ug/m3	172	86	28	
622-96-8	4-Ethyltoluene	ND	ug/m3	172	86	29	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	172	86	24	
67-64-1	Acetone	ND	ug/m3	172	860	150	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	172	86	26	
71-43-2	Benzene	ND	ug/m3	172	86	24	
75-27-4	Bromodichloromethane	ND	ug/m3	172	86	28	
75-25-2	Bromoform	ND	ug/m3	172	86	24	
74-83-9	Bromomethane	ND	ug/m3	172	86	33	
75-15-0	Carbon Disulfide	ND	ug/m3	172	860	26	
56-23-5	Carbon Tetrachloride	ND	ug/m3	172	86	28	
108-90-7	Chlorobenzene	ND	ug/m3	172	86	28	
75-00-3	Chloroethane	ND	ug/m3	172	86	33	
67-66-3	Chloroform	90	ug/m3	172	86	33	
74-87-3	Chloromethane	ND	ug/m3	172	86	33	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	172	86	31	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	172	86	24	
98-82-8	Cumene	ND	ug/m3	172	86	26	
110-82-7	Cyclohexane	ND	ug/m3	172	170	57	
124-48-1	Dibromochloromethane	ND	ug/m3	172	86	24	
64-17-5	Ethanol	ND	ug/m3	172	860	280	
100-41-4	Ethyl Benzene	ND	ug/m3	172	86	26	
75-69-4	Freon 11	ND	ug/m3	172	86	28	

76-13-1	Freon 113	11000	ug/m3	172	86	28	
76-14-2	Freon 114	ND	ug/m3	172	86	29	
75-71-8	Freon 12	ND	ug/m3	172	86	31	
306-83-2	Freon 123	ND	ug/m3	172	86	41	
NA	Freon 123a	1300	ug/m3	172	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	172	86	40	
142-82-5	Heptane	ND	ug/m3	172	86	28	
87-68-3	Hexachlorobutadiene	ND	ug/m3	172	86	31	
110-54-3	Hexane	ND	ug/m3	172	86	29	
179601-23-	m,p-Xylene	ND	ug/m3	172	170	50	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	172	86	26	
75-09-2	Methylene Chloride	33	ug/m3	172	86	26	J
95-47-6	o-Xylene	ND	ug/m3	172	86	24	
103-65-1	Propylbenzene	ND	ug/m3	172	86	26	
100-42-5	Styrene	ND	ug/m3	172	86	26	
127-18-4	Tetrachloroethene	35	ug/m3	172	86	24	J
109-99-9	Tetrahydrofuran	44	ug/m3	172	86	38	J
108-88-3	Toluene	ND	ug/m3	172	86	28	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	172	86	29	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	172	86	28	
79-01-6	Trichloroethene	1500	ug/m3	172	86	26	
75-01-4	Vinyl Chloride	ND	ug/m3	172	86	33	

Sample 1203221200 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	113.33	57	18	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	113.33	57	18	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	113.33	57	18	
75-34-3	1,1-Dichloroethane	ND	ug/m3	113.33	57	19	
75-35-4	1,1-Dichloroethene	ND	ug/m3	113.33	57	19	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	113.33	57	27	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	113.33	57	18	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	113.33	57	17	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	113.33	57	19	
107-06-2	1,2-Dichloroethane	ND	ug/m3	113.33	57	22	
78-87-5	1,2-Dichloropropane	ND	ug/m3	113.33	57	19	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	113.33	57	19	
106-99-0	1,3-Butadiene	ND	ug/m3	113.33	57	24	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	113.33	57	19	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	113.33	57	18	
123-91-1	1,4-Dioxane	ND	ug/m3	113.33	57	19	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	113.33	57	19	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	113.33	570	26	
591-78-6	2-Hexanone	ND	ug/m3	113.33	57	20	
67-63-0	2-Propanol	ND	ug/m3	113.33	110	45	
107-05-1	3-Chloropropene	ND	ug/m3	113.33	57	18	

622-96-8	4-Ethyltoluene	ND	ug/m3	113.33	57	19	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	113.33	57	16	
67-64-1	Acetone	ND	ug/m3	113.33	570	100	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	113.33	57	17	
71-43-2	Benzene	ND	ug/m3	113.33	57	16	
75-27-4	Bromodichloromethane	ND	ug/m3	113.33	57	18	
75-25-2	Bromoform	ND	ug/m3	113.33	57	16	
74-83-9	Bromomethane	ND	ug/m3	113.33	57	22	
75-15-0	Carbon Disulfide	ND	ug/m3	113.33	570	17	
56-23-5	Carbon Tetrachloride	ND	ug/m3	113.33	57	18	
108-90-7	Chlorobenzene	ND	ug/m3	113.33	57	18	
75-00-3	Chloroethane	ND	ug/m3	113.33	57	22	
67-66-3	Chloroform	100	ug/m3	113.33	57	22	
74-87-3	Chloromethane	ND	ug/m3	113.33	57	22	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	113.33	57	20	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	113.33	57	16	
98-82-8	Cumene	ND	ug/m3	113.33	57	17	
110-82-7	Cyclohexane	ND	ug/m3	113.33	110	37	
124-48-1	Dibromochloromethane	ND	ug/m3	113.33	57	16	
64-17-5	Ethanol	ND	ug/m3	113.33	570	180	
100-41-4	Ethyl Benzene	ND	ug/m3	113.33	57	17	
75-69-4	Freon 11	ND	ug/m3	113.33	57	18	
76-13-1	Freon 113	11000	ug/m3	113.33	57	18	
76-14-2	Freon 114	ND	ug/m3	113.33	57	19	
75-71-8	Freon 12	ND	ug/m3	113.33	57	20	
306-83-2	Freon 123	ND	ug/m3	113.33	57	27	
354-23-4	Freon 123a	1400	ug/m3	113.33	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	113.33	57	26	
142-82-5	Heptane	ND	ug/m3	113.33	57	18	
87-68-3	Hexachlorobutadiene	ND	ug/m3	113.33	57	20	
110-54-3	Hexane	ND	ug/m3	113.33	57	19	
179601-23-	m,p-Xylene	ND	ug/m3	113.33	110	33	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	113.33	57	17	
75-09-2	Methylene Chloride	23	ug/m3	113.33	57	17	J
95-47-6	o-Xylene	ND	ug/m3	113.33	57	16	
103-65-1	Propylbenzene	ND	ug/m3	113.33	57	17	
100-42-5	Styrene	ND	ug/m3	113.33	57	17	
127-18-4	Tetrachloroethene	19	ug/m3	113.33	57	16	J
109-99-9	Tetrahydrofuran	41	ug/m3	113.33	57	25	J
108-88-3	Toluene	ND	ug/m3	113.33	57	18	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	113.33	57	19	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	113.33	57	18	
79-01-6	Trichloroethene	1700	ug/m3	113.33	57	17	
75-01-4	Vinyl Chloride	ND	ug/m3	113.33	57	22	

Sample **1203221215** **Sample Type** **Soil Gas** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	133.08	67	21	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	133.08	67	21	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	133.08	67	21	
75-34-3	1,1-Dichloroethane	ND	ug/m3	133.08	67	23	
75-35-4	1,1-Dichloroethene	ND	ug/m3	133.08	67	23	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	133.08	67	32	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	133.08	67	21	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	133.08	67	20	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	133.08	67	23	
107-06-2	1,2-Dichloroethane	ND	ug/m3	133.08	67	25	
78-87-5	1,2-Dichloropropane	ND	ug/m3	133.08	67	23	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	133.08	67	23	
106-99-0	1,3-Butadiene	ND	ug/m3	133.08	67	28	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	133.08	67	23	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	133.08	67	21	
123-91-1	1,4-Dioxane	ND	ug/m3	133.08	67	23	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	133.08	67	23	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	133.08	670	31	
591-78-6	2-Hexanone	ND	ug/m3	133.08	67	24	
67-63-0	2-Propanol	ND	ug/m3	133.08	130	53	
107-05-1	3-Chloropropene	ND	ug/m3	133.08	67	21	
622-96-8	4-Ethyltoluene	ND	ug/m3	133.08	67	23	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	133.08	67	19	
67-64-1	Acetone	ND	ug/m3	133.08	670	120	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	133.08	67	20	
71-43-2	Benzene	ND	ug/m3	133.08	67	19	
75-27-4	Bromodichloromethane	ND	ug/m3	133.08	67	21	
75-25-2	Bromoform	ND	ug/m3	133.08	67	19	
74-83-9	Bromomethane	ND	ug/m3	133.08	67	25	
75-15-0	Carbon Disulfide	ND	ug/m3	133.08	670	20	
56-23-5	Carbon Tetrachloride	ND	ug/m3	133.08	67	21	
108-90-7	Chlorobenzene	ND	ug/m3	133.08	67	21	
75-00-3	Chloroethane	ND	ug/m3	133.08	67	25	
67-66-3	Chloroform	89	ug/m3	133.08	67	25	
74-87-3	Chloromethane	ND	ug/m3	133.08	67	25	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	133.08	67	24	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	133.08	67	19	
98-82-8	Cumene	ND	ug/m3	133.08	67	20	
110-82-7	Cyclohexane	ND	ug/m3	133.08	130	44	
124-48-1	Dibromochloromethane	ND	ug/m3	133.08	67	19	
64-17-5	Ethanol	ND	ug/m3	133.08	670	210	
100-41-4	Ethyl Benzene	ND	ug/m3	133.08	67	20	
75-69-4	Freon 11	ND	ug/m3	133.08	67	21	

76-13-1	Freon 113	10000	ug/m3	133.08	67	21	
76-14-2	Freon 114	ND	ug/m3	133.08	67	23	
75-71-8	Freon 12	ND	ug/m3	133.08	67	24	
306-83-2	Freon 123	ND	ug/m3	133.08	67	32	
354-23-4	Freon 123a	1300	ug/m3	133.08	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	133.08	67	31	
142-82-5	Heptane	ND	ug/m3	133.08	67	21	
87-68-3	Hexachlorobutadiene	ND	ug/m3	133.08	67	24	
110-54-3	Hexane	ND	ug/m3	133.08	67	23	
179601-23-	m,p-Xylene	ND	ug/m3	133.08	130	39	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	133.08	67	20	
75-09-2	Methylene Chloride	28	ug/m3	133.08	67	20	J
95-47-6	o-Xylene	ND	ug/m3	133.08	67	19	
103-65-1	Propylbenzene	ND	ug/m3	133.08	67	20	
100-42-5	Styrene	ND	ug/m3	133.08	67	20	
127-18-4	Tetrachloroethene	ND	ug/m3	133.08	67	19	
109-99-9	Tetrahydrofuran	34	ug/m3	133.08	67	29	J
108-88-3	Toluene	ND	ug/m3	133.08	67	21	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	133.08	67	23	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	133.08	67	21	
79-01-6	Trichloroethene	1500	ug/m3	133.08	67	20	
75-01-4	Vinyl Chloride	ND	ug/m3	133.08	67	25	

Sample 1203221230 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	138.46	69	22	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	138.46	69	22	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	138.46	69	22	
75-34-3	1,1-Dichloroethane	ND	ug/m3	138.46	69	24	
75-35-4	1,1-Dichloroethene	ND	ug/m3	138.46	69	24	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	138.46	69	33	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	138.46	69	22	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	138.46	69	21	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	138.46	69	24	
107-06-2	1,2-Dichloroethane	ND	ug/m3	138.46	69	26	
78-87-5	1,2-Dichloropropane	ND	ug/m3	138.46	69	24	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	138.46	69	24	
106-99-0	1,3-Butadiene	ND	ug/m3	138.46	69	29	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	138.46	69	24	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	138.46	69	22	
123-91-1	1,4-Dioxane	ND	ug/m3	138.46	69	24	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	138.46	69	24	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	33	ug/m3	138.46	690	32	J
591-78-6	2-Hexanone	ND	ug/m3	138.46	69	25	
67-63-0	2-Propanol	ND	ug/m3	138.46	140	55	
107-05-1	3-Chloropropene	ND	ug/m3	138.46	69	22	

622-96-8	4-Ethyltoluene	ND	ug/m3	138.46	69	24	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	138.46	69	19	
67-64-1	Acetone	ND	ug/m3	138.46	690	120	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	138.46	69	21	
71-43-2	Benzene	ND	ug/m3	138.46	69	19	
75-27-4	Bromodichloromethane	ND	ug/m3	138.46	69	22	
75-25-2	Bromoform	ND	ug/m3	138.46	69	19	
74-83-9	Bromomethane	ND	ug/m3	138.46	69	26	
75-15-0	Carbon Disulfide	310	ug/m3	138.46	690	21	J
56-23-5	Carbon Tetrachloride	ND	ug/m3	138.46	69	22	
108-90-7	Chlorobenzene	ND	ug/m3	138.46	69	22	
75-00-3	Chloroethane	ND	ug/m3	138.46	69	26	
67-66-3	Chloroform	95	ug/m3	138.46	69	26	
74-87-3	Chloromethane	ND	ug/m3	138.46	69	26	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	138.46	69	25	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	138.46	69	19	
98-82-8	Cumene	ND	ug/m3	138.46	69	21	
110-82-7	Cyclohexane	ND	ug/m3	138.46	140	46	
124-48-1	Dibromochloromethane	ND	ug/m3	138.46	69	19	
64-17-5	Ethanol	ND	ug/m3	138.46	690	220	
100-41-4	Ethyl Benzene	ND	ug/m3	138.46	69	21	
75-69-4	Freon 11	ND	ug/m3	138.46	69	22	
76-13-1	Freon 113	11000	ug/m3	138.46	69	22	
76-14-2	Freon 114	ND	ug/m3	138.46	69	24	
75-71-8	Freon 12	ND	ug/m3	138.46	69	25	
306-83-2	Freon 123	ND	ug/m3	138.46	69	33	
354-23-4	Freon 123a	ND	ug/m3	138.46	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	138.46	69	32	
142-82-5	Heptane	ND	ug/m3	138.46	69	22	
87-68-3	Hexachlorobutadiene	ND	ug/m3	138.46	69	25	
110-54-3	Hexane	ND	ug/m3	138.46	69	24	
179601-23-	m,p-Xylene	ND	ug/m3	138.46	140	40	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	138.46	69	21	
75-09-2	Methylene Chloride	29	ug/m3	138.46	69	21	J
95-47-6	o-Xylene	ND	ug/m3	138.46	69	19	
103-65-1	Propylbenzene	ND	ug/m3	138.46	69	21	
100-42-5	Styrene	ND	ug/m3	138.46	69	21	
127-18-4	Tetrachloroethene	ND	ug/m3	138.46	69	19	
109-99-9	Tetrahydrofuran	38	ug/m3	138.46	69	30	J
108-88-3	Toluene	ND	ug/m3	138.46	69	22	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	138.46	69	24	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	138.46	69	22	
79-01-6	Trichloroethene	1600	ug/m3	138.46	69	21	
75-01-4	Vinyl Chloride	ND	ug/m3	138.46	69	26	

Sample **1203221231** **Sample Type** **Soil Gas-D** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	145.38	73	23	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	145.38	73	23	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	145.38	73	23	
75-34-3	1,1-Dichloroethane	ND	ug/m3	145.38	73	25	
75-35-4	1,1-Dichloroethene	ND	ug/m3	145.38	73	25	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	145.38	73	35	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	145.38	73	23	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	145.38	73	22	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	145.38	73	25	
107-06-2	1,2-Dichloroethane	ND	ug/m3	145.38	73	28	
78-87-5	1,2-Dichloropropane	ND	ug/m3	145.38	73	25	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	145.38	73	25	
106-99-0	1,3-Butadiene	ND	ug/m3	145.38	73	31	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	145.38	73	25	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	145.38	73	23	
123-91-1	1,4-Dioxane	ND	ug/m3	145.38	73	25	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	145.38	73	25	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	145.38	730	33	
591-78-6	2-Hexanone	ND	ug/m3	145.38	73	26	
67-63-0	2-Propanol	ND	ug/m3	145.38	150	58	
107-05-1	3-Chloropropene	ND	ug/m3	145.38	73	23	
622-96-8	4-Ethyltoluene	ND	ug/m3	145.38	73	25	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	145.38	73	20	
67-64-1	Acetone	ND	ug/m3	145.38	730	130	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	145.38	73	22	
71-43-2	Benzene	ND	ug/m3	145.38	73	20	
75-27-4	Bromodichloromethane	ND	ug/m3	145.38	73	23	
75-25-2	Bromoform	ND	ug/m3	145.38	73	20	
74-83-9	Bromomethane	ND	ug/m3	145.38	73	28	
75-15-0	Carbon Disulfide	ND	ug/m3	145.38	730	22	
56-23-5	Carbon Tetrachloride	ND	ug/m3	145.38	73	23	
108-90-7	Chlorobenzene	ND	ug/m3	145.38	73	23	
75-00-3	Chloroethane	ND	ug/m3	145.38	73	28	
67-66-3	Chloroform	91	ug/m3	145.38	73	28	
74-87-3	Chloromethane	ND	ug/m3	145.38	73	28	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	145.38	73	26	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	145.38	73	20	
98-82-8	Cumene	ND	ug/m3	145.38	73	22	
110-82-7	Cyclohexane	ND	ug/m3	145.38	150	48	
124-48-1	Dibromochloromethane	ND	ug/m3	145.38	73	20	
64-17-5	Ethanol	ND	ug/m3	145.38	730	230	
100-41-4	Ethyl Benzene	ND	ug/m3	145.38	73	22	
75-69-4	Freon 11	ND	ug/m3	145.38	73	23	

76-13-1	Freon 113	11000	ug/m3	145.38	73	23	
76-14-2	Freon 114	ND	ug/m3	145.38	73	25	
75-71-8	Freon 12	ND	ug/m3	145.38	73	26	
306-83-2	Freon 123	ND	ug/m3	145.38	73	35	
354-23-4	Freon 123a	ND	ug/m3	145.38	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	145.38	73	33	
142-82-5	Heptane	ND	ug/m3	145.38	73	23	
87-68-3	Hexachlorobutadiene	ND	ug/m3	145.38	73	26	
110-54-3	Hexane	ND	ug/m3	145.38	73	25	
179601-23-	m,p-Xylene	ND	ug/m3	145.38	150	42	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	145.38	73	22	
75-09-2	Methylene Chloride	29	ug/m3	145.38	73	22	J
95-47-6	o-Xylene	ND	ug/m3	145.38	73	20	
103-65-1	Propylbenzene	ND	ug/m3	145.38	73	22	
100-42-5	Styrene	ND	ug/m3	145.38	73	22	
127-18-4	Tetrachloroethene	ND	ug/m3	145.38	73	20	
109-99-9	Tetrahydrofuran	39	ug/m3	145.38	73	32	J
108-88-3	Toluene	ND	ug/m3	145.38	73	23	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	145.38	73	25	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	145.38	73	23	
79-01-6	Trichloroethene	1600	ug/m3	145.38	73	22	
75-01-4	Vinyl Chloride	ND	ug/m3	145.38	73	28	

Sample 1203221245 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	130.77	65	21	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	130.77	65	21	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	130.77	65	21	
75-34-3	1,1-Dichloroethane	ND	ug/m3	130.77	65	22	
75-35-4	1,1-Dichloroethene	ND	ug/m3	130.77	65	22	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	130.77	65	31	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	130.77	65	21	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	130.77	65	20	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	130.77	65	22	
107-06-2	1,2-Dichloroethane	ND	ug/m3	130.77	65	25	
78-87-5	1,2-Dichloropropane	ND	ug/m3	130.77	65	22	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	130.77	65	22	
106-99-0	1,3-Butadiene	ND	ug/m3	130.77	65	27	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	130.77	65	22	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	130.77	65	21	
123-91-1	1,4-Dioxane	ND	ug/m3	130.77	65	22	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	130.77	65	22	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	130.77	650	30	
591-78-6	2-Hexanone	ND	ug/m3	130.77	65	24	
67-63-0	2-Propanol	ND	ug/m3	130.77	130	52	
107-05-1	3-Chloropropene	ND	ug/m3	130.77	65	21	

622-96-8	4-Ethyltoluene	ND	ug/m3	130.77	65	22	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	130.77	65	18	
67-64-1	Acetone	ND	ug/m3	130.77	650	120	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	130.77	65	20	
71-43-2	Benzene	ND	ug/m3	130.77	65	18	
75-27-4	Bromodichloromethane	ND	ug/m3	130.77	65	21	
75-25-2	Bromoform	ND	ug/m3	130.77	65	18	
74-83-9	Bromomethane	ND	ug/m3	130.77	65	25	
75-15-0	Carbon Disulfide	ND	ug/m3	130.77	650	20	
56-23-5	Carbon Tetrachloride	ND	ug/m3	130.77	65	21	
108-90-7	Chlorobenzene	ND	ug/m3	130.77	65	21	
75-00-3	Chloroethane	ND	ug/m3	130.77	65	25	
67-66-3	Chloroform	91	ug/m3	130.77	65	25	
74-87-3	Chloromethane	ND	ug/m3	130.77	65	25	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	130.77	65	24	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	130.77	65	18	
98-82-8	Cumene	ND	ug/m3	130.77	65	20	
110-82-7	Cyclohexane	ND	ug/m3	130.77	130	43	
124-48-1	Dibromochloromethane	ND	ug/m3	130.77	65	18	
64-17-5	Ethanol	ND	ug/m3	130.77	650	210	
100-41-4	Ethyl Benzene	ND	ug/m3	130.77	65	20	
75-69-4	Freon 11	ND	ug/m3	130.77	65	21	
76-13-1	Freon 113	11000	ug/m3	130.77	65	21	
76-14-2	Freon 114	ND	ug/m3	130.77	65	22	
75-71-8	Freon 12	ND	ug/m3	130.77	65	24	
306-83-2	Freon 123	ND	ug/m3	130.77	65	31	
354-23-4	Freon 123a	1300	ug/m3	130.77	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	130.77	65	30	
142-82-5	Heptane	ND	ug/m3	130.77	65	21	
87-68-3	Hexachlorobutadiene	ND	ug/m3	130.77	65	24	
110-54-3	Hexane	ND	ug/m3	130.77	65	22	
179601-23-	m,p-Xylene	ND	ug/m3	130.77	130	38	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	130.77	65	20	
75-09-2	Methylene Chloride	27	ug/m3	130.77	65	20	J
95-47-6	o-Xylene	ND	ug/m3	130.77	65	18	
103-65-1	Propylbenzene	ND	ug/m3	130.77	65	20	
100-42-5	Styrene	ND	ug/m3	130.77	65	20	
127-18-4	Tetrachloroethene	ND	ug/m3	130.77	65	18	
109-99-9	Tetrahydrofuran	ND	ug/m3	130.77	65	29	
108-88-3	Toluene	ND	ug/m3	130.77	65	21	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	130.77	65	22	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	130.77	65	21	
79-01-6	Trichloroethene	1600	ug/m3	130.77	65	20	
75-01-4	Vinyl Chloride	ND	ug/m3	130.77	65	25	

Sample **1203221515** **Sample Type** **Soil Gas** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	121.33	61	19	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	121.33	61	19	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	121.33	61	19	
75-34-3	1,1-Dichloroethane	ND	ug/m3	121.33	61	21	
75-35-4	1,1-Dichloroethene	ND	ug/m3	121.33	61	21	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	121.33	61	29	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	121.33	61	19	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	121.33	61	18	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	121.33	61	21	
107-06-2	1,2-Dichloroethane	ND	ug/m3	121.33	61	23	
78-87-5	1,2-Dichloropropane	ND	ug/m3	121.33	61	21	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	121.33	61	21	
106-99-0	1,3-Butadiene	ND	ug/m3	121.33	61	25	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	121.33	61	21	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	121.33	61	19	
123-91-1	1,4-Dioxane	ND	ug/m3	121.33	61	21	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	121.33	61	21	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	121.33	610	28	
591-78-6	2-Hexanone	ND	ug/m3	121.33	61	22	
67-63-0	2-Propanol	ND	ug/m3	121.33	120	49	
107-05-1	3-Chloropropene	ND	ug/m3	121.33	61	19	
622-96-8	4-Ethyltoluene	ND	ug/m3	121.33	61	21	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	121.33	61	17	
67-64-1	Acetone	ND	ug/m3	121.33	610	110	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	121.33	61	18	
71-43-2	Benzene	ND	ug/m3	121.33	61	17	
75-27-4	Bromodichloromethane	ND	ug/m3	121.33	61	19	
75-25-2	Bromoform	ND	ug/m3	121.33	61	17	
74-83-9	Bromomethane	ND	ug/m3	121.33	61	23	
75-15-0	Carbon Disulfide	ND	ug/m3	121.33	610	18	
56-23-5	Carbon Tetrachloride	ND	ug/m3	121.33	61	19	
108-90-7	Chlorobenzene	ND	ug/m3	121.33	61	19	
75-00-3	Chloroethane	ND	ug/m3	121.33	61	23	
67-66-3	Chloroform	110	ug/m3	121.33	61	23	
74-87-3	Chloromethane	ND	ug/m3	121.33	61	23	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	121.33	61	22	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	121.33	61	17	
98-82-8	Cumene	ND	ug/m3	121.33	61	18	
110-82-7	Cyclohexane	ND	ug/m3	121.33	120	40	
124-48-1	Dibromochloromethane	ND	ug/m3	121.33	61	17	
64-17-5	Ethanol	ND	ug/m3	121.33	610	190	
100-41-4	Ethyl Benzene	ND	ug/m3	121.33	61	18	
75-69-4	Freon 11	ND	ug/m3	121.33	61	19	

76-13-1	Freon 113	13000	ug/m3	364	180	58	D
76-14-2	Freon 114	ND	ug/m3	121.33	61	21	
75-71-8	Freon 12	ND	ug/m3	121.33	61	22	
306-83-2	Freon 123	ND	ug/m3	121.33	61	29	
354-23-4	Freon 123a	1500	ug/m3	121.33	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	121.33	61	28	
142-82-5	Heptane	ND	ug/m3	121.33	61	19	
87-68-3	Hexachlorobutadiene	ND	ug/m3	121.33	61	22	
110-54-3	Hexane	ND	ug/m3	121.33	61	21	
179601-23-	m,p-Xylene	ND	ug/m3	121.33	120	35	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	121.33	61	18	
75-09-2	Methylene Chloride	28	ug/m3	121.33	61	18	J
95-47-6	o-Xylene	ND	ug/m3	121.33	61	17	
103-65-1	Propylbenzene	ND	ug/m3	121.33	61	18	
100-42-5	Styrene	ND	ug/m3	121.33	61	18	
127-18-4	Tetrachloroethene	ND	ug/m3	121.33	61	17	
109-99-9	Tetrahydrofuran	ND	ug/m3	121.33	61	27	
108-88-3	Toluene	ND	ug/m3	121.33	61	19	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	121.33	61	21	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	121.33	61	19	
79-01-6	Trichloroethene	2000	ug/m3	121.33	61	18	
75-01-4	Vinyl Chloride	ND	ug/m3	121.33	61	23	

Sample 1203221650 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	98	49	16	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	98	49	16	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	98	49	16	
75-34-3	1,1-Dichloroethane	ND	ug/m3	98	49	17	
75-35-4	1,1-Dichloroethene	ND	ug/m3	98	49	17	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	98	49	24	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	98	49	16	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	98	49	15	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	98	49	17	
107-06-2	1,2-Dichloroethane	ND	ug/m3	98	49	19	
78-87-5	1,2-Dichloropropane	ND	ug/m3	98	49	17	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	98	49	17	
106-99-0	1,3-Butadiene	ND	ug/m3	98	49	21	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	98	49	17	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	98	49	16	
123-91-1	1,4-Dioxane	ND	ug/m3	98	49	17	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	98	49	17	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	98	490	23	
591-78-6	2-Hexanone	ND	ug/m3	98	49	18	
67-63-0	2-Propanol	ND	ug/m3	98	98	39	
107-05-1	3-Chloropropene	ND	ug/m3	98	49	16	

622-96-8	4-Ethyltoluene	ND	ug/m3	98	49	17	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	98	49	14	
67-64-1	Acetone	ND	ug/m3	98	490	86	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	98	49	15	
71-43-2	Benzene	ND	ug/m3	98	49	14	
75-27-4	Bromodichloromethane	ND	ug/m3	98	49	16	
75-25-2	Bromoform	ND	ug/m3	98	49	14	
74-83-9	Bromomethane	ND	ug/m3	98	49	19	
75-15-0	Carbon Disulfide	ND	ug/m3	98	490	15	
56-23-5	Carbon Tetrachloride	ND	ug/m3	98	49	16	
108-90-7	Chlorobenzene	ND	ug/m3	98	49	16	
75-00-3	Chloroethane	ND	ug/m3	98	49	19	
67-66-3	Chloroform	72	ug/m3	98	49	19	
74-87-3	Chloromethane	ND	ug/m3	98	49	19	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	98	49	18	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	98	49	14	
98-82-8	Cumene	ND	ug/m3	98	49	15	
110-82-7	Cyclohexane	ND	ug/m3	98	98	32	
124-48-1	Dibromochloromethane	ND	ug/m3	98	49	14	
64-17-5	Ethanol	ND	ug/m3	98	490	160	
100-41-4	Ethyl Benzene	ND	ug/m3	98	49	15	
75-69-4	Freon 11	ND	ug/m3	98	49	16	
76-13-1	Freon 113	9900	ug/m3	294	150	47	D
76-14-2	Freon 114	ND	ug/m3	98	49	17	
75-71-8	Freon 12	ND	ug/m3	98	49	18	
306-83-2	Freon 123	ND	ug/m3	98	49	24	
354-23-4	Freon 123a	850	ug/m3	98	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	98	49	23	
142-82-5	Heptane	ND	ug/m3	98	49	16	
87-68-3	Hexachlorobutadiene	ND	ug/m3	98	49	18	
110-54-3	Hexane	ND	ug/m3	98	49	17	
179601-23-	m,p-Xylene	ND	ug/m3	98	98	28	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	98	49	15	
75-09-2	Methylene Chloride	18	ug/m3	98	49	15	J
95-47-6	o-Xylene	ND	ug/m3	98	49	14	
103-65-1	Propylbenzene	ND	ug/m3	98	49	15	
100-42-5	Styrene	ND	ug/m3	98	49	15	
127-18-4	Tetrachloroethene	ND	ug/m3	98	49	14	
109-99-9	Tetrahydrofuran	ND	ug/m3	98	49	22	
108-88-3	Toluene	ND	ug/m3	98	49	16	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	98	49	17	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	98	49	16	
79-01-6	Trichloroethene	1300	ug/m3	98	49	15	
75-01-4	Vinyl Chloride	ND	ug/m3	98	49	19	

Sample **1203230925** **Sample Type** **Soil Gas** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	165.83	83	27	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	165.83	83	27	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	165.83	83	27	
75-34-3	1,1-Dichloroethane	ND	ug/m3	165.83	83	28	
75-35-4	1,1-Dichloroethene	ND	ug/m3	165.83	83	28	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	165.83	83	40	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	165.83	83	27	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	165.83	83	25	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	165.83	83	28	
107-06-2	1,2-Dichloroethane	ND	ug/m3	165.83	83	32	
78-87-5	1,2-Dichloropropane	ND	ug/m3	165.83	83	28	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	165.83	83	28	
106-99-0	1,3-Butadiene	ND	ug/m3	165.83	83	35	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	165.83	83	28	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	165.83	83	27	
123-91-1	1,4-Dioxane	ND	ug/m3	165.83	83	28	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	165.83	83	28	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	165.83	830	38	
591-78-6	2-Hexanone	ND	ug/m3	165.83	83	30	
67-63-0	2-Propanol	ND	ug/m3	165.83	170	66	
107-05-1	3-Chloropropene	ND	ug/m3	165.83	83	27	
622-96-8	4-Ethyltoluene	ND	ug/m3	165.83	83	28	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	165.83	83	23	
67-64-1	Acetone	ND	ug/m3	165.83	830	150	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	165.83	83	25	
71-43-2	Benzene	ND	ug/m3	165.83	83	23	
75-27-4	Bromodichloromethane	ND	ug/m3	165.83	83	27	
75-25-2	Bromoform	ND	ug/m3	165.83	83	23	
74-83-9	Bromomethane	ND	ug/m3	165.83	83	32	
75-15-0	Carbon Disulfide	ND	ug/m3	165.83	830	25	
56-23-5	Carbon Tetrachloride	ND	ug/m3	165.83	83	27	
108-90-7	Chlorobenzene	ND	ug/m3	165.83	83	27	
75-00-3	Chloroethane	ND	ug/m3	165.83	83	32	
67-66-3	Chloroform	91	ug/m3	165.83	83	32	
74-87-3	Chloromethane	ND	ug/m3	165.83	83	32	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	165.83	83	30	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	165.83	83	23	
98-82-8	Cumene	ND	ug/m3	165.83	83	25	
110-82-7	Cyclohexane	ND	ug/m3	165.83	170	55	
124-48-1	Dibromochloromethane	ND	ug/m3	165.83	83	23	
64-17-5	Ethanol	ND	ug/m3	165.83	830	270	
100-41-4	Ethyl Benzene	ND	ug/m3	165.83	83	25	
75-69-4	Freon 11	ND	ug/m3	165.83	83	27	

76-13-1	Freon 113	13000	ug/m3	165.83	83	27	
76-14-2	Freon 114	ND	ug/m3	165.83	83	28	
75-71-8	Freon 12	ND	ug/m3	165.83	83	30	
306-83-2	Freon 123	ND	ug/m3	165.83	83	40	
354-23-4	Freon 123a	1200	ug/m3	165.83	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	165.83	83	38	
142-82-5	Heptane	ND	ug/m3	165.83	83	27	
87-68-3	Hexachlorobutadiene	ND	ug/m3	165.83	83	30	
110-54-3	Hexane	ND	ug/m3	165.83	83	28	
179601-23-	m,p-Xylene	ND	ug/m3	165.83	170	48	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	165.83	83	25	
75-09-2	Methylene Chloride	33	ug/m3	165.83	83	25	J
95-47-6	o-Xylene	ND	ug/m3	165.83	83	23	
103-65-1	Propylbenzene	ND	ug/m3	165.83	83	25	
100-42-5	Styrene	ND	ug/m3	165.83	83	25	
127-18-4	Tetrachloroethene	ND	ug/m3	165.83	83	23	
109-99-9	Tetrahydrofuran	ND	ug/m3	165.83	83	36	
108-88-3	Toluene	ND	ug/m3	165.83	83	27	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	165.83	83	28	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	165.83	83	27	
79-01-6	Trichloroethene	1800	ug/m3	165.83	83	25	
75-01-4	Vinyl Chloride	ND	ug/m3	165.83	83	32	

Borehole	600-SVE-1	Depth (ft)	90	Depth (m)	27.43	Event Date	3/23/2012

Sample	1203231040	Sample Type	Soil Gas	Analysis Method	TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	163	82	26	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	163	82	26	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	163	82	26	
75-34-3	1,1-Dichloroethane	ND	ug/m3	163	82	28	
75-35-4	1,1-Dichloroethene	ND	ug/m3	163	82	28	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	163	82	39	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	163	82	26	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	163	82	24	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	163	82	28	
107-06-2	1,2-Dichloroethane	ND	ug/m3	163	82	31	
78-87-5	1,2-Dichloropropane	ND	ug/m3	163	82	28	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	163	82	28	
106-99-0	1,3-Butadiene	ND	ug/m3	163	82	34	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	163	82	28	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	163	82	26	
123-91-1	1,4-Dioxane	ND	ug/m3	163	82	28	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	163	82	28	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	510	ug/m3	163	820	37	J
591-78-6	2-Hexanone	ND	ug/m3	163	82	29	
67-63-0	2-Propanol	ND	ug/m3	163	160	65	
107-05-1	3-Chloropropene	ND	ug/m3	163	82	26	
622-96-8	4-Ethyltoluene	ND	ug/m3	163	82	28	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	163	82	23	
67-64-1	Acetone	280	ug/m3	163	820	140	J
100-44-7	alpha-Chlorotoluene	ND	ug/m3	163	82	24	
71-43-2	Benzene	ND	ug/m3	163	82	23	
75-27-4	Bromodichloromethane	ND	ug/m3	163	82	26	
75-25-2	Bromoform	ND	ug/m3	163	82	23	
74-83-9	Bromomethane	ND	ug/m3	163	82	31	
75-15-0	Carbon Disulfide	ND	ug/m3	163	820	24	
56-23-5	Carbon Tetrachloride	ND	ug/m3	163	82	26	
108-90-7	Chlorobenzene	ND	ug/m3	163	82	26	
75-00-3	Chloroethane	ND	ug/m3	163	82	31	
67-66-3	Chloroform	87	ug/m3	163	82	31	
74-87-3	Chloromethane	ND	ug/m3	163	82	31	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	163	82	29	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	163	82	23	
98-82-8	Cumene	ND	ug/m3	163	82	24	
110-82-7	Cyclohexane	ND	ug/m3	163	160	54	
124-48-1	Dibromochloromethane	ND	ug/m3	163	82	23	
64-17-5	Ethanol	ND	ug/m3	163	820	260	

100-41-4	Ethyl Benzene	ND	ug/m3	163	82	24	
75-69-4	Freon 11	ND	ug/m3	163	82	26	
76-13-1	Freon 113	14000	ug/m3	163	82	26	
76-14-2	Freon 114	ND	ug/m3	163	82	28	
75-71-8	Freon 12	ND	ug/m3	163	82	29	
306-83-2	Freon 123	ND	ug/m3	163	82	39	
354-23-4	Freon 123a	ND	ug/m3	163	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	163	82	37	
142-82-5	Heptane	ND	ug/m3	163	82	26	
87-68-3	Hexachlorobutadiene	ND	ug/m3	163	82	29	
110-54-3	Hexane	ND	ug/m3	163	82	28	
179601-23-	m,p-Xylene	ND	ug/m3	163	160	47	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	163	82	24	
75-09-2	Methylene Chloride	32	ug/m3	163	82	24	J
95-47-6	o-Xylene	ND	ug/m3	163	82	23	
103-65-1	Propylbenzene	ND	ug/m3	163	82	24	
100-42-5	Styrene	ND	ug/m3	163	82	24	
127-18-4	Tetrachloroethene	320	ug/m3	163	82	23	
109-99-9	Tetrahydrofuran	590	ug/m3	163	82	36	
108-88-3	Toluene	ND	ug/m3	163	82	26	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	163	82	28	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	163	82	26	
79-01-6	Trichloroethene	1700	ug/m3	163	82	24	
75-01-4	Vinyl Chloride	ND	ug/m3	163	82	31	

Sample 1203231045 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	197.5	99	32	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	197.5	99	32	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	197.5	99	32	
75-34-3	1,1-Dichloroethane	ND	ug/m3	197.5	99	34	
75-35-4	1,1-Dichloroethene	ND	ug/m3	197.5	99	34	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	197.5	99	47	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	197.5	99	32	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	197.5	99	30	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	197.5	99	34	
107-06-2	1,2-Dichloroethane	ND	ug/m3	197.5	99	38	
78-87-5	1,2-Dichloropropane	ND	ug/m3	197.5	99	34	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	197.5	99	34	
106-99-0	1,3-Butadiene	ND	ug/m3	197.5	99	41	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	197.5	99	34	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	197.5	99	32	
123-91-1	1,4-Dioxane	ND	ug/m3	197.5	99	34	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	197.5	99	34	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	197.5	990	45	
591-78-6	2-Hexanone	ND	ug/m3	197.5	99	36	

67-63-0	2-Propanol	ND	ug/m3	197.5	200	79	
107-05-1	3-Chloropropene	ND	ug/m3	197.5	99	32	
622-96-8	4-Ethyltoluene	ND	ug/m3	197.5	99	34	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	197.5	99	28	
67-64-1	Acetone	ND	ug/m3	197.5	990	170	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	197.5	99	30	
71-43-2	Benzene	ND	ug/m3	197.5	99	28	
75-27-4	Bromodichloromethane	ND	ug/m3	197.5	99	32	
75-25-2	Bromoform	ND	ug/m3	197.5	99	28	
74-83-9	Bromomethane	ND	ug/m3	197.5	99	38	
75-15-0	Carbon Disulfide	ND	ug/m3	197.5	990	30	
56-23-5	Carbon Tetrachloride	ND	ug/m3	197.5	99	32	
108-90-7	Chlorobenzene	ND	ug/m3	197.5	99	32	
75-00-3	Chloroethane	ND	ug/m3	197.5	99	38	
67-66-3	Chloroform	64	ug/m3	197.5	99	38	J
74-87-3	Chloromethane	ND	ug/m3	197.5	99	38	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	197.5	99	36	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	197.5	99	28	
98-82-8	Cumene	ND	ug/m3	197.5	99	30	
110-82-7	Cyclohexane	ND	ug/m3	197.5	200	65	
124-48-1	Dibromochloromethane	ND	ug/m3	197.5	99	28	
64-17-5	Ethanol	ND	ug/m3	197.5	990	320	
100-41-4	Ethyl Benzene	ND	ug/m3	197.5	99	30	
75-69-4	Freon 11	ND	ug/m3	197.5	99	32	
76-13-1	Freon 113	15000	ug/m3	197.5	99	32	
76-14-2	Freon 114	ND	ug/m3	197.5	99	34	
75-71-8	Freon 12	ND	ug/m3	197.5	99	36	
306-83-2	Freon 123	ND	ug/m3	197.5	99	47	
354-23-4	Freon 123a	640	ug/m3	197.5	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	197.5	99	45	
142-82-5	Heptane	ND	ug/m3	197.5	99	32	
87-68-3	Hexachlorobutadiene	ND	ug/m3	197.5	99	36	
110-54-3	Hexane	ND	ug/m3	197.5	99	34	
179601-23-	m,p-Xylene	ND	ug/m3	197.5	200	57	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	197.5	99	30	
75-09-2	Methylene Chloride	39	ug/m3	197.5	99	30	J
95-47-6	o-Xylene	ND	ug/m3	197.5	99	28	
103-65-1	Propylbenzene	ND	ug/m3	197.5	99	30	
100-42-5	Styrene	ND	ug/m3	197.5	99	30	
127-18-4	Tetrachloroethene	ND	ug/m3	197.5	99	28	
109-99-9	Tetrahydrofuran	84	ug/m3	197.5	99	43	J
108-88-3	Toluene	ND	ug/m3	197.5	99	32	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	197.5	99	34	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	197.5	99	32	
79-01-6	Trichloroethene	1700	ug/m3	197.5	99	30	
75-01-4	Vinyl Chloride	ND	ug/m3	197.5	99	38	

Sample **1203231050** **Sample Type** **Soil Gas** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	166	83	27	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	166	83	27	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	166	83	27	
75-34-3	1,1-Dichloroethane	ND	ug/m3	166	83	28	
75-35-4	1,1-Dichloroethene	28	ug/m3	166	83	28	J
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	166	83	40	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	166	83	27	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	166	83	25	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	166	83	28	
107-06-2	1,2-Dichloroethane	ND	ug/m3	166	83	32	
78-87-5	1,2-Dichloropropane	ND	ug/m3	166	83	28	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	166	83	28	
106-99-0	1,3-Butadiene	ND	ug/m3	166	83	35	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	166	83	28	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	166	83	27	
123-91-1	1,4-Dioxane	ND	ug/m3	166	83	28	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	166	83	28	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	166	830	38	
591-78-6	2-Hexanone	ND	ug/m3	166	83	30	
67-63-0	2-Propanol	ND	ug/m3	166	170	66	
107-05-1	3-Chloropropene	ND	ug/m3	166	83	27	
622-96-8	4-Ethyltoluene	ND	ug/m3	166	83	28	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	166	83	23	
67-64-1	Acetone	ND	ug/m3	166	830	150	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	166	83	25	
71-43-2	Benzene	ND	ug/m3	166	83	23	
75-27-4	Bromodichloromethane	ND	ug/m3	166	83	27	
75-25-2	Bromoform	ND	ug/m3	166	83	23	
74-83-9	Bromomethane	ND	ug/m3	166	83	32	
75-15-0	Carbon Disulfide	ND	ug/m3	166	830	25	
56-23-5	Carbon Tetrachloride	ND	ug/m3	166	83	27	
108-90-7	Chlorobenzene	ND	ug/m3	166	83	27	
75-00-3	Chloroethane	ND	ug/m3	166	83	32	
67-66-3	Chloroform	77	ug/m3	166	83	32	J
74-87-3	Chloromethane	ND	ug/m3	166	83	32	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	166	83	30	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	166	83	23	
98-82-8	Cumene	ND	ug/m3	166	83	25	
110-82-7	Cyclohexane	ND	ug/m3	166	170	55	
124-48-1	Dibromochloromethane	ND	ug/m3	166	83	23	
64-17-5	Ethanol	ND	ug/m3	166	830	270	
100-41-4	Ethyl Benzene	ND	ug/m3	166	83	25	
75-69-4	Freon 11	ND	ug/m3	166	83	27	

76-13-1	Freon 113	17000	ug/m3	166	83	27	
76-14-2	Freon 114	ND	ug/m3	166	83	28	
75-71-8	Freon 12	ND	ug/m3	166	83	30	
306-83-2	Freon 123	ND	ug/m3	166	83	40	
354-23-4	Freon 123a	740	ug/m3	166	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	166	83	38	
142-82-5	Heptane	ND	ug/m3	166	83	27	
87-68-3	Hexachlorobutadiene	ND	ug/m3	166	83	30	
110-54-3	Hexane	ND	ug/m3	166	83	28	
179601-23-	m,p-Xylene	ND	ug/m3	166	170	48	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	166	83	25	
75-09-2	Methylene Chloride	35	ug/m3	166	83	25	J
95-47-6	o-Xylene	ND	ug/m3	166	83	23	
103-65-1	Propylbenzene	ND	ug/m3	166	83	25	
100-42-5	Styrene	ND	ug/m3	166	83	25	
127-18-4	Tetrachloroethene	ND	ug/m3	166	83	23	
109-99-9	Tetrahydrofuran	62	ug/m3	166	83	37	J
108-88-3	Toluene	ND	ug/m3	166	83	27	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	166	83	28	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	166	83	27	
79-01-6	Trichloroethene	2000	ug/m3	166	83	25	
75-01-4	Vinyl Chloride	ND	ug/m3	166	83	32	

Sample 1203231055 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	210	110	34	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	210	110	34	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	210	110	34	
75-34-3	1,1-Dichloroethane	ND	ug/m3	210	110	36	
75-35-4	1,1-Dichloroethene	ND	ug/m3	210	110	36	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	210	110	50	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	210	110	34	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	210	110	32	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	210	110	36	
107-06-2	1,2-Dichloroethane	ND	ug/m3	210	110	40	
78-87-5	1,2-Dichloropropane	ND	ug/m3	210	110	36	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	210	110	36	
106-99-0	1,3-Butadiene	ND	ug/m3	210	110	44	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	210	110	36	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	210	110	34	
123-91-1	1,4-Dioxane	ND	ug/m3	210	110	36	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	210	110	36	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	210	1100	48	
591-78-6	2-Hexanone	ND	ug/m3	210	110	38	
67-63-0	2-Propanol	ND	ug/m3	210	210	84	
107-05-1	3-Chloropropene	ND	ug/m3	210	110	34	

622-96-8	4-Ethyltoluene	ND	ug/m3	210	110	36	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	210	110	29	
67-64-1	Acetone	ND	ug/m3	210	1100	180	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	210	110	32	
71-43-2	Benzene	ND	ug/m3	210	110	29	
75-27-4	Bromodichloromethane	ND	ug/m3	210	110	34	
75-25-2	Bromoform	ND	ug/m3	210	110	29	
74-83-9	Bromomethane	ND	ug/m3	210	110	40	
75-15-0	Carbon Disulfide	ND	ug/m3	210	1100	32	
56-23-5	Carbon Tetrachloride	ND	ug/m3	210	110	34	
108-90-7	Chlorobenzene	ND	ug/m3	210	110	34	
75-00-3	Chloroethane	ND	ug/m3	210	110	40	
67-66-3	Chloroform	69	ug/m3	210	110	40	J
74-87-3	Chloromethane	ND	ug/m3	210	110	40	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	210	110	38	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	210	110	29	
98-82-8	Cumene	ND	ug/m3	210	110	32	
110-82-7	Cyclohexane	ND	ug/m3	210	210	69	
124-48-1	Dibromochloromethane	ND	ug/m3	210	110	29	
64-17-5	Ethanol	ND	ug/m3	210	1100	340	
100-41-4	Ethyl Benzene	ND	ug/m3	210	110	32	
75-69-4	Freon 11	ND	ug/m3	210	110	34	
76-13-1	Freon 113	15000	ug/m3	210	110	34	
76-14-2	Freon 114	ND	ug/m3	210	110	36	
75-71-8	Freon 12	ND	ug/m3	210	110	38	
306-83-2	Freon 123	ND	ug/m3	210	110	50	
354-23-4	Freon 123a	660	ug/m3	210	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	210	110	48	
142-82-5	Heptane	ND	ug/m3	210	110	34	
87-68-3	Hexachlorobutadiene	ND	ug/m3	210	110	38	
110-54-3	Hexane	ND	ug/m3	210	110	36	
179601-23-	m,p-Xylene	ND	ug/m3	210	210	61	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	210	110	32	
75-09-2	Methylene Chloride	43	ug/m3	210	110	32	J
95-47-6	o-Xylene	ND	ug/m3	210	110	29	
103-65-1	Propylbenzene	ND	ug/m3	210	110	32	
100-42-5	Styrene	ND	ug/m3	210	110	32	
127-18-4	Tetrachloroethene	ND	ug/m3	210	110	29	
109-99-9	Tetrahydrofuran	53	ug/m3	210	110	46	J
108-88-3	Toluene	ND	ug/m3	210	110	34	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	210	110	36	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	210	110	34	
79-01-6	Trichloroethene	1700	ug/m3	210	110	32	
75-01-4	Vinyl Chloride	ND	ug/m3	210	110	40	

Sample **1203231110** **Sample Type** **Soil Gas** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	237.14	120	38	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	237.14	120	38	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	237.14	120	38	
75-34-3	1,1-Dichloroethane	ND	ug/m3	237.14	120	40	
75-35-4	1,1-Dichloroethene	ND	ug/m3	237.14	120	40	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	237.14	120	57	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	237.14	120	38	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	237.14	120	36	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	237.14	120	40	
107-06-2	1,2-Dichloroethane	ND	ug/m3	237.14	120	45	
78-87-5	1,2-Dichloropropane	ND	ug/m3	237.14	120	40	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	237.14	120	40	
106-99-0	1,3-Butadiene	ND	ug/m3	237.14	120	50	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	237.14	120	40	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	237.14	120	38	
123-91-1	1,4-Dioxane	ND	ug/m3	237.14	120	40	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	237.14	120	40	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	237.14	1200	55	
591-78-6	2-Hexanone	ND	ug/m3	237.14	120	43	
67-63-0	2-Propanol	ND	ug/m3	237.14	240	95	
107-05-1	3-Chloropropene	ND	ug/m3	237.14	120	38	
622-96-8	4-Ethyltoluene	ND	ug/m3	237.14	120	40	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	237.14	120	33	
67-64-1	Acetone	ND	ug/m3	237.14	1200	210	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	237.14	120	36	
71-43-2	Benzene	ND	ug/m3	237.14	120	33	
75-27-4	Bromodichloromethane	ND	ug/m3	237.14	120	38	
75-25-2	Bromoform	ND	ug/m3	237.14	120	33	
74-83-9	Bromomethane	ND	ug/m3	237.14	120	45	
75-15-0	Carbon Disulfide	ND	ug/m3	237.14	1200	36	
56-23-5	Carbon Tetrachloride	ND	ug/m3	237.14	120	38	
108-90-7	Chlorobenzene	ND	ug/m3	237.14	120	38	
75-00-3	Chloroethane	ND	ug/m3	237.14	120	45	
67-66-3	Chloroform	81	ug/m3	237.14	120	45	J
74-87-3	Chloromethane	ND	ug/m3	237.14	120	45	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	237.14	120	43	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	237.14	120	33	
98-82-8	Cumene	ND	ug/m3	237.14	120	36	
110-82-7	Cyclohexane	ND	ug/m3	237.14	240	78	
124-48-1	Dibromochloromethane	ND	ug/m3	237.14	120	33	
64-17-5	Ethanol	ND	ug/m3	237.14	1200	380	
100-41-4	Ethyl Benzene	ND	ug/m3	237.14	120	36	
75-69-4	Freon 11	ND	ug/m3	237.14	120	38	

76-13-1	Freon 113	18000	ug/m3	237.14	120	38	
76-14-2	Freon 114	ND	ug/m3	237.14	120	40	
75-71-8	Freon 12	ND	ug/m3	237.14	120	43	
306-83-2	Freon 123	ND	ug/m3	237.14	120	57	
354-23-4	Freon 123a	820	ug/m3	237.14	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	237.14	120	55	
142-82-5	Heptane	ND	ug/m3	237.14	120	38	
87-68-3	Hexachlorobutadiene	ND	ug/m3	237.14	120	43	
110-54-3	Hexane	ND	ug/m3	237.14	120	40	
179601-23-	m,p-Xylene	ND	ug/m3	237.14	240	69	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	237.14	120	36	
75-09-2	Methylene Chloride	49	ug/m3	237.14	120	36	J
95-47-6	o-Xylene	ND	ug/m3	237.14	120	33	
103-65-1	Propylbenzene	ND	ug/m3	237.14	120	36	
100-42-5	Styrene	ND	ug/m3	237.14	120	36	
127-18-4	Tetrachloroethene	ND	ug/m3	237.14	120	33	
109-99-9	Tetrahydrofuran	ND	ug/m3	237.14	120	52	
108-88-3	Toluene	ND	ug/m3	237.14	120	38	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	237.14	120	40	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	237.14	120	38	
79-01-6	Trichloroethene	2100	ug/m3	237.14	120	36	
75-01-4	Vinyl Chloride	ND	ug/m3	237.14	120	45	

Sample 1203231125 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	275	140	44	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	275	140	44	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	275	140	44	
75-34-3	1,1-Dichloroethane	ND	ug/m3	275	140	47	
75-35-4	1,1-Dichloroethene	ND	ug/m3	275	140	47	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	275	140	66	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	275	140	44	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	275	140	41	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	275	140	47	
107-06-2	1,2-Dichloroethane	ND	ug/m3	275	140	52	
78-87-5	1,2-Dichloropropane	ND	ug/m3	275	140	47	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	275	140	47	
106-99-0	1,3-Butadiene	ND	ug/m3	275	140	58	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	275	140	47	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	275	140	44	
123-91-1	1,4-Dioxane	ND	ug/m3	275	140	47	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	275	140	47	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	275	1400	63	
591-78-6	2-Hexanone	ND	ug/m3	275	140	50	
67-63-0	2-Propanol	ND	ug/m3	275	280	110	
107-05-1	3-Chloropropene	ND	ug/m3	275	140	44	

622-96-8	4-Ethyltoluene	ND	ug/m3	275	140	47	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	275	140	39	
67-64-1	Acetone	ND	ug/m3	275	1400	240	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	275	140	41	
71-43-2	Benzene	ND	ug/m3	275	140	39	
75-27-4	Bromodichloromethane	ND	ug/m3	275	140	44	
75-25-2	Bromoform	ND	ug/m3	275	140	39	
74-83-9	Bromomethane	ND	ug/m3	275	140	52	
75-15-0	Carbon Disulfide	ND	ug/m3	275	1400	41	
56-23-5	Carbon Tetrachloride	ND	ug/m3	275	140	44	
108-90-7	Chlorobenzene	ND	ug/m3	275	140	44	
75-00-3	Chloroethane	ND	ug/m3	275	140	52	
67-66-3	Chloroform	79	ug/m3	275	140	52	J
74-87-3	Chloromethane	ND	ug/m3	275	140	52	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	275	140	50	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	275	140	39	
98-82-8	Cumene	ND	ug/m3	275	140	41	
110-82-7	Cyclohexane	ND	ug/m3	275	280	91	
124-48-1	Dibromochloromethane	ND	ug/m3	275	140	39	
64-17-5	Ethanol	ND	ug/m3	275	1400	440	
100-41-4	Ethyl Benzene	ND	ug/m3	275	140	41	
75-69-4	Freon 11	ND	ug/m3	275	140	44	
76-13-1	Freon 113	18000	ug/m3	275	140	44	
76-14-2	Freon 114	ND	ug/m3	275	140	47	
75-71-8	Freon 12	ND	ug/m3	275	140	50	
306-83-2	Freon 123	ND	ug/m3	275	140	66	
354-23-4	Freon 123a	ND	ug/m3	275	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	275	140	63	
142-82-5	Heptane	ND	ug/m3	275	140	44	
87-68-3	Hexachlorobutadiene	ND	ug/m3	275	140	50	
110-54-3	Hexane	ND	ug/m3	275	140	47	
179601-23-	m,p-Xylene	ND	ug/m3	275	280	80	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	275	140	41	
75-09-2	Methylene Chloride	57	ug/m3	275	140	41	J
95-47-6	o-Xylene	ND	ug/m3	275	140	39	
103-65-1	Propylbenzene	ND	ug/m3	275	140	41	
100-42-5	Styrene	ND	ug/m3	275	140	41	
127-18-4	Tetrachloroethene	ND	ug/m3	275	140	39	
109-99-9	Tetrahydrofuran	ND	ug/m3	275	140	61	
108-88-3	Toluene	ND	ug/m3	275	140	44	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	275	140	47	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	275	140	44	
79-01-6	Trichloroethene	2000	ug/m3	275	140	41	
75-01-4	Vinyl Chloride	ND	ug/m3	275	140	52	

Sample **1203231140** **Sample Type** **Soil Gas** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	283.33	140	45	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	283.33	140	45	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	283.33	140	45	
75-34-3	1,1-Dichloroethane	ND	ug/m3	283.33	140	48	
75-35-4	1,1-Dichloroethene	ND	ug/m3	283.33	140	48	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	283.33	140	68	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	283.33	140	45	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	283.33	140	43	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	283.33	140	48	
107-06-2	1,2-Dichloroethane	ND	ug/m3	283.33	140	54	
78-87-5	1,2-Dichloropropane	ND	ug/m3	283.33	140	48	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	283.33	140	48	
106-99-0	1,3-Butadiene	ND	ug/m3	283.33	140	60	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	283.33	140	48	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	283.33	140	45	
123-91-1	1,4-Dioxane	ND	ug/m3	283.33	140	48	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	283.33	140	48	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	283.33	1400	65	
591-78-6	2-Hexanone	ND	ug/m3	283.33	140	51	
67-63-0	2-Propanol	ND	ug/m3	283.33	280	110	
107-05-1	3-Chloropropene	ND	ug/m3	283.33	140	45	
622-96-8	4-Ethyltoluene	ND	ug/m3	283.33	140	48	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	283.33	140	40	
67-64-1	Acetone	ND	ug/m3	283.33	1400	250	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	283.33	140	43	
71-43-2	Benzene	ND	ug/m3	283.33	140	40	
75-27-4	Bromodichloromethane	ND	ug/m3	283.33	140	45	
75-25-2	Bromoform	ND	ug/m3	283.33	140	40	
74-83-9	Bromomethane	ND	ug/m3	283.33	140	54	
75-15-0	Carbon Disulfide	ND	ug/m3	283.33	1400	43	
56-23-5	Carbon Tetrachloride	ND	ug/m3	283.33	140	45	
108-90-7	Chlorobenzene	ND	ug/m3	283.33	140	45	
75-00-3	Chloroethane	ND	ug/m3	283.33	140	54	
67-66-3	Chloroform	87	ug/m3	283.33	140	54	J
74-87-3	Chloromethane	ND	ug/m3	283.33	140	54	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	283.33	140	51	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	283.33	140	40	
98-82-8	Cumene	ND	ug/m3	283.33	140	43	
110-82-7	Cyclohexane	ND	ug/m3	283.33	280	94	
124-48-1	Dibromochloromethane	ND	ug/m3	283.33	140	40	
64-17-5	Ethanol	ND	ug/m3	283.33	1400	450	
100-41-4	Ethyl Benzene	ND	ug/m3	283.33	140	43	
75-69-4	Freon 11	ND	ug/m3	283.33	140	45	

76-13-1	Freon 113	21000	ug/m3	283.33	140	45	
76-14-2	Freon 114	ND	ug/m3	283.33	140	48	
75-71-8	Freon 12	ND	ug/m3	283.33	140	51	
306-83-2	Freon 123	ND	ug/m3	283.33	140	68	
354-23-4	Freon 123a	750	ug/m3	283.33	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	283.33	140	65	
142-82-5	Heptane	ND	ug/m3	283.33	140	45	
87-68-3	Hexachlorobutadiene	ND	ug/m3	283.33	140	51	
110-54-3	Hexane	ND	ug/m3	283.33	140	48	
179601-23-	m,p-Xylene	ND	ug/m3	283.33	280	82	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	283.33	140	43	
75-09-2	Methylene Chloride	52	ug/m3	283.33	140	43	J
95-47-6	o-Xylene	ND	ug/m3	283.33	140	40	
103-65-1	Propylbenzene	ND	ug/m3	283.33	140	43	
100-42-5	Styrene	ND	ug/m3	283.33	140	43	
127-18-4	Tetrachloroethene	ND	ug/m3	283.33	140	40	
109-99-9	Tetrahydrofuran	ND	ug/m3	283.33	140	62	
108-88-3	Toluene	ND	ug/m3	283.33	140	45	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	283.33	140	48	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	283.33	140	45	
79-01-6	Trichloroethene	2300	ug/m3	283.33	140	43	
75-01-4	Vinyl Chloride	ND	ug/m3	283.33	140	54	

Sample 1203231315 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	236	120	38	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	236	120	38	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	236	120	38	
75-34-3	1,1-Dichloroethane	ND	ug/m3	236	120	40	
75-35-4	1,1-Dichloroethene	ND	ug/m3	236	120	40	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	236	120	57	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	236	120	38	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	236	120	35	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	236	120	40	
107-06-2	1,2-Dichloroethane	ND	ug/m3	236	120	45	
78-87-5	1,2-Dichloropropane	ND	ug/m3	236	120	40	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	236	120	40	
106-99-0	1,3-Butadiene	ND	ug/m3	236	120	50	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	236	120	40	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	236	120	38	
123-91-1	1,4-Dioxane	ND	ug/m3	236	120	40	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	236	120	40	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	236	1200	54	
591-78-6	2-Hexanone	ND	ug/m3	236	120	42	
67-63-0	2-Propanol	ND	ug/m3	236	240	94	
107-05-1	3-Chloropropene	ND	ug/m3	236	120	38	

622-96-8	4-Ethyltoluene	ND	ug/m3	236	120	40	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	236	120	33	
67-64-1	Acetone	ND	ug/m3	236	1200	210	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	236	120	35	
71-43-2	Benzene	ND	ug/m3	236	120	33	
75-27-4	Bromodichloromethane	ND	ug/m3	236	120	38	
75-25-2	Bromoform	ND	ug/m3	236	120	33	
74-83-9	Bromomethane	ND	ug/m3	236	120	45	
75-15-0	Carbon Disulfide	ND	ug/m3	236	1200	35	
56-23-5	Carbon Tetrachloride	ND	ug/m3	236	120	38	
108-90-7	Chlorobenzene	ND	ug/m3	236	120	38	
75-00-3	Chloroethane	ND	ug/m3	236	120	45	
67-66-3	Chloroform	92	ug/m3	236	120	45	J
74-87-3	Chloromethane	ND	ug/m3	236	120	45	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	236	120	42	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	236	120	33	
98-82-8	Cumene	ND	ug/m3	236	120	35	
110-82-7	Cyclohexane	ND	ug/m3	236	240	78	
124-48-1	Dibromochloromethane	ND	ug/m3	236	120	33	
64-17-5	Ethanol	ND	ug/m3	236	1200	380	
100-41-4	Ethyl Benzene	ND	ug/m3	236	120	35	
75-69-4	Freon 11	ND	ug/m3	236	120	38	
76-13-1	Freon 113	22000	ug/m3	236	120	38	
76-14-2	Freon 114	ND	ug/m3	236	120	40	
75-71-8	Freon 12	ND	ug/m3	236	120	42	
306-83-2	Freon 123	ND	ug/m3	236	120	57	
354-23-4	Freon 123a	780	ug/m3	236	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	236	120	54	
142-82-5	Heptane	ND	ug/m3	236	120	38	
87-68-3	Hexachlorobutadiene	ND	ug/m3	236	120	42	
110-54-3	Hexane	ND	ug/m3	236	120	40	
179601-23-	m,p-Xylene	ND	ug/m3	236	240	68	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	236	120	35	
75-09-2	Methylene Chloride	43	ug/m3	236	120	35	J
95-47-6	o-Xylene	ND	ug/m3	236	120	33	
103-65-1	Propylbenzene	ND	ug/m3	236	120	35	
100-42-5	Styrene	ND	ug/m3	236	120	35	
127-18-4	Tetrachloroethene	ND	ug/m3	236	120	33	
109-99-9	Tetrahydrofuran	ND	ug/m3	236	120	52	
108-88-3	Toluene	ND	ug/m3	236	120	38	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	236	120	40	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	236	120	38	
79-01-6	Trichloroethene	2400	ug/m3	236	120	35	
75-01-4	Vinyl Chloride	ND	ug/m3	236	120	45	

Sample **1203231420** **Sample Type** **Soil Gas** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	315	160	50	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	315	160	50	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	315	160	50	
75-34-3	1,1-Dichloroethane	ND	ug/m3	315	160	54	
75-35-4	1,1-Dichloroethene	ND	ug/m3	315	160	54	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	315	160	76	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	315	160	50	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	315	160	47	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	315	160	54	
107-06-2	1,2-Dichloroethane	ND	ug/m3	315	160	60	
78-87-5	1,2-Dichloropropane	ND	ug/m3	315	160	54	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	315	160	54	
106-99-0	1,3-Butadiene	ND	ug/m3	315	160	66	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	315	160	54	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	315	160	50	
123-91-1	1,4-Dioxane	ND	ug/m3	315	160	54	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	315	160	54	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	315	1600	72	
591-78-6	2-Hexanone	ND	ug/m3	315	160	57	
67-63-0	2-Propanol	ND	ug/m3	315	320	130	
107-05-1	3-Chloropropene	ND	ug/m3	315	160	50	
622-96-8	4-Ethyltoluene	ND	ug/m3	315	160	54	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	315	160	44	
67-64-1	Acetone	ND	ug/m3	315	1600	280	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	315	160	47	
71-43-2	Benzene	ND	ug/m3	315	160	44	
75-27-4	Bromodichloromethane	ND	ug/m3	315	160	50	
75-25-2	Bromoform	ND	ug/m3	315	160	44	
74-83-9	Bromomethane	ND	ug/m3	315	160	60	
75-15-0	Carbon Disulfide	ND	ug/m3	315	1600	47	
56-23-5	Carbon Tetrachloride	ND	ug/m3	315	160	50	
108-90-7	Chlorobenzene	ND	ug/m3	315	160	50	
75-00-3	Chloroethane	ND	ug/m3	315	160	60	
67-66-3	Chloroform	97	ug/m3	315	160	60	J
74-87-3	Chloromethane	ND	ug/m3	315	160	60	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	315	160	57	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	315	160	44	
98-82-8	Cumene	ND	ug/m3	315	160	47	
110-82-7	Cyclohexane	ND	ug/m3	315	320	100	
124-48-1	Dibromochloromethane	ND	ug/m3	315	160	44	
64-17-5	Ethanol	ND	ug/m3	315	1600	500	
100-41-4	Ethyl Benzene	ND	ug/m3	315	160	47	
75-69-4	Freon 11	ND	ug/m3	315	160	50	

76-13-1	Freon 113	22000	ug/m3	315	160	50	
76-14-2	Freon 114	ND	ug/m3	315	160	54	
75-71-8	Freon 12	ND	ug/m3	315	160	57	
306-83-2	Freon 123	ND	ug/m3	315	160	76	
354-23-4	Freon 123a	ND	ug/m3	315	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	315	160	72	
142-82-5	Heptane	ND	ug/m3	315	160	50	
87-68-3	Hexachlorobutadiene	ND	ug/m3	315	160	57	
110-54-3	Hexane	ND	ug/m3	315	160	54	
179601-23-	m,p-Xylene	ND	ug/m3	315	320	91	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	315	160	47	
75-09-2	Methylene Chloride	61	ug/m3	315	160	47	J
95-47-6	o-Xylene	ND	ug/m3	315	160	44	
103-65-1	Propylbenzene	ND	ug/m3	315	160	47	
100-42-5	Styrene	ND	ug/m3	315	160	47	
127-18-4	Tetrachloroethene	ND	ug/m3	315	160	44	
109-99-9	Tetrahydrofuran	ND	ug/m3	315	160	69	
108-88-3	Toluene	ND	ug/m3	315	160	50	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	315	160	54	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	315	160	50	
79-01-6	Trichloroethene	2400	ug/m3	315	160	47	
75-01-4	Vinyl Chloride	ND	ug/m3	315	160	60	

Sample 1203231525 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	340	170	54	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	340	170	54	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	340	170	54	
75-34-3	1,1-Dichloroethane	ND	ug/m3	340	170	58	
75-35-4	1,1-Dichloroethene	ND	ug/m3	340	170	58	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	340	170	82	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	340	170	54	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	340	170	51	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	340	170	58	
107-06-2	1,2-Dichloroethane	ND	ug/m3	340	170	65	
78-87-5	1,2-Dichloropropane	ND	ug/m3	340	170	58	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	340	170	58	
106-99-0	1,3-Butadiene	ND	ug/m3	340	170	71	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	340	170	58	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	340	170	54	
123-91-1	1,4-Dioxane	ND	ug/m3	340	170	58	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	340	170	58	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	340	1700	78	
591-78-6	2-Hexanone	ND	ug/m3	340	170	61	
67-63-0	2-Propanol	ND	ug/m3	340	340	140	
107-05-1	3-Chloropropene	ND	ug/m3	340	170	54	

622-96-8	4-Ethyltoluene	ND	ug/m3	340	170	58	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	340	170	48	
67-64-1	Acetone	ND	ug/m3	340	1700	300	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	340	170	51	
71-43-2	Benzene	ND	ug/m3	340	170	48	
75-27-4	Bromodichloromethane	ND	ug/m3	340	170	54	
75-25-2	Bromoform	ND	ug/m3	340	170	48	
74-83-9	Bromomethane	ND	ug/m3	340	170	65	
75-15-0	Carbon Disulfide	ND	ug/m3	340	1700	51	
56-23-5	Carbon Tetrachloride	ND	ug/m3	340	170	54	
108-90-7	Chlorobenzene	ND	ug/m3	340	170	54	
75-00-3	Chloroethane	ND	ug/m3	340	170	65	
67-66-3	Chloroform	96	ug/m3	340	170	65	J
74-87-3	Chloromethane	ND	ug/m3	340	170	65	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	340	170	61	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	340	170	48	
98-82-8	Cumene	ND	ug/m3	340	170	51	
110-82-7	Cyclohexane	ND	ug/m3	340	340	110	
124-48-1	Dibromochloromethane	ND	ug/m3	340	170	48	
64-17-5	Ethanol	ND	ug/m3	340	1700	540	
100-41-4	Ethyl Benzene	ND	ug/m3	340	170	51	
75-69-4	Freon 11	ND	ug/m3	340	170	54	
76-13-1	Freon 113	24000	ug/m3	340	170	54	
76-14-2	Freon 114	ND	ug/m3	340	170	58	
75-71-8	Freon 12	ND	ug/m3	340	170	61	
306-83-2	Freon 123	ND	ug/m3	340	170	82	
354-23-4	Freon 123a	ND	ug/m3	340	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	340	170	78	
142-82-5	Heptane	ND	ug/m3	340	170	54	
87-68-3	Hexachlorobutadiene	ND	ug/m3	340	170	61	
110-54-3	Hexane	ND	ug/m3	340	170	58	
179601-23-	m,p-Xylene	ND	ug/m3	340	340	99	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	340	170	51	
75-09-2	Methylene Chloride	60	ug/m3	340	170	51	J
95-47-6	o-Xylene	ND	ug/m3	340	170	48	
103-65-1	Propylbenzene	ND	ug/m3	340	170	51	
100-42-5	Styrene	ND	ug/m3	340	170	51	
127-18-4	Tetrachloroethene	ND	ug/m3	340	170	48	
109-99-9	Tetrahydrofuran	ND	ug/m3	340	170	75	
108-88-3	Toluene	ND	ug/m3	340	170	54	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	340	170	58	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	340	170	54	
79-01-6	Trichloroethene	2500	ug/m3	340	170	51	
75-01-4	Vinyl Chloride	ND	ug/m3	340	170	65	

Sample **1203231630** **Sample Type** **Soil Gas** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	271.25	140	43	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	271.25	140	43	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	271.25	140	43	
75-34-3	1,1-Dichloroethane	ND	ug/m3	271.25	140	46	
75-35-4	1,1-Dichloroethene	ND	ug/m3	271.25	140	46	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	271.25	140	65	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	271.25	140	43	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	271.25	140	41	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	271.25	140	46	
107-06-2	1,2-Dichloroethane	ND	ug/m3	271.25	140	52	
78-87-5	1,2-Dichloropropane	ND	ug/m3	271.25	140	46	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	271.25	140	46	
106-99-0	1,3-Butadiene	ND	ug/m3	271.25	140	57	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	271.25	140	46	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	271.25	140	43	
123-91-1	1,4-Dioxane	ND	ug/m3	271.25	140	46	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	271.25	140	46	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	271.25	1400	62	
591-78-6	2-Hexanone	ND	ug/m3	271.25	140	49	
67-63-0	2-Propanol	ND	ug/m3	271.25	270	110	
107-05-1	3-Chloropropene	ND	ug/m3	271.25	140	43	
622-96-8	4-Ethyltoluene	ND	ug/m3	271.25	140	46	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	271.25	140	38	
67-64-1	Acetone	ND	ug/m3	271.25	1400	240	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	271.25	140	41	
71-43-2	Benzene	ND	ug/m3	271.25	140	38	
75-27-4	Bromodichloromethane	ND	ug/m3	271.25	140	43	
75-25-2	Bromoform	ND	ug/m3	271.25	140	38	
74-83-9	Bromomethane	ND	ug/m3	271.25	140	52	
75-15-0	Carbon Disulfide	ND	ug/m3	271.25	1400	41	
56-23-5	Carbon Tetrachloride	ND	ug/m3	271.25	140	43	
108-90-7	Chlorobenzene	ND	ug/m3	271.25	140	43	
75-00-3	Chloroethane	ND	ug/m3	271.25	140	52	
67-66-3	Chloroform	100	ug/m3	271.25	140	52	J
74-87-3	Chloromethane	ND	ug/m3	271.25	140	52	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	271.25	140	49	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	271.25	140	38	
98-82-8	Cumene	ND	ug/m3	271.25	140	41	
110-82-7	Cyclohexane	ND	ug/m3	271.25	270	90	
124-48-1	Dibromochloromethane	ND	ug/m3	271.25	140	38	
64-17-5	Ethanol	ND	ug/m3	271.25	1400	430	
100-41-4	Ethyl Benzene	ND	ug/m3	271.25	140	41	
75-69-4	Freon 11	ND	ug/m3	271.25	140	43	

76-13-1	Freon 113	25000	ug/m3	271.25	140	43	
76-14-2	Freon 114	ND	ug/m3	271.25	140	46	
75-71-8	Freon 12	ND	ug/m3	271.25	140	49	
306-83-2	Freon 123	ND	ug/m3	271.25	140	65	
354-23-4	Freon 123a	790	ug/m3	271.25	NA	NA	TIC
75-43-4	Freon 21	ND	ug/m3	271.25	140	62	
142-82-5	Heptane	ND	ug/m3	271.25	140	43	
87-68-3	Hexachlorobutadiene	ND	ug/m3	271.25	140	49	
110-54-3	Hexane	ND	ug/m3	271.25	140	46	
179601-23-	m,p-Xylene	ND	ug/m3	271.25	270	79	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	271.25	140	41	
75-09-2	Methylene Chloride	49	ug/m3	271.25	140	41	J
95-47-6	o-Xylene	ND	ug/m3	271.25	140	38	
103-65-1	Propylbenzene	ND	ug/m3	271.25	140	41	
100-42-5	Styrene	ND	ug/m3	271.25	140	41	
127-18-4	Tetrachloroethene	ND	ug/m3	271.25	140	38	
109-99-9	Tetrahydrofuran	ND	ug/m3	271.25	140	60	
108-88-3	Toluene	ND	ug/m3	271.25	140	43	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	271.25	140	46	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	271.25	140	43	
79-01-6	Trichloroethene	2600	ug/m3	271.25	140	41	
75-01-4	Vinyl Chloride	ND	ug/m3	271.25	140	52	

Sample 1203231735 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	5.85	2.9	0.94	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	5.85	2.9	0.94	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	5.85	2.9	0.94	
75-34-3	1,1-Dichloroethane	ND	ug/m3	5.85	2.9	0.99	
75-35-4	1,1-Dichloroethene	ND	ug/m3	5.85	2.9	0.99	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	5.85	2.9	1.4	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	5.85	2.9	0.94	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	5.85	2.9	0.88	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	5.85	2.9	0.99	
107-06-2	1,2-Dichloroethane	ND	ug/m3	5.85	2.9	1.1	
78-87-5	1,2-Dichloropropane	ND	ug/m3	5.85	2.9	0.99	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	5.85	2.9	0.99	
106-99-0	1,3-Butadiene	ND	ug/m3	5.85	2.9	1.2	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	5.85	2.9	0.99	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	5.85	2.9	0.94	
123-91-1	1,4-Dioxane	ND	ug/m3	5.85	2.9	0.99	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	5.85	2.9	0.99	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	5.85	29	1.3	
591-78-6	2-Hexanone	ND	ug/m3	5.85	2.9	1.1	
67-63-0	2-Propanol	ND	ug/m3	5.85	5.9	2.3	
107-05-1	3-Chloropropene	ND	ug/m3	5.85	2.9	0.94	

622-96-8	4-Ethyltoluene	ND	ug/m3	5.85	2.9	0.99	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	5.85	2.9	0.82	
67-64-1	Acetone	ND	ug/m3	5.85	29	5.1	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	5.85	2.9	0.88	
71-43-2	Benzene	ND	ug/m3	5.85	2.9	0.82	
75-27-4	Bromodichloromethane	ND	ug/m3	5.85	2.9	0.94	
75-25-2	Bromoform	ND	ug/m3	5.85	2.9	0.82	
74-83-9	Bromomethane	ND	ug/m3	5.85	2.9	1.1	
75-15-0	Carbon Disulfide	ND	ug/m3	5.85	29	0.88	
56-23-5	Carbon Tetrachloride	ND	ug/m3	5.85	2.9	0.94	
108-90-7	Chlorobenzene	ND	ug/m3	5.85	2.9	0.94	
75-00-3	Chloroethane	ND	ug/m3	5.85	2.9	1.1	
67-66-3	Chloroform	ND	ug/m3	5.85	2.9	1.1	
74-87-3	Chloromethane	ND	ug/m3	5.85	2.9	1.1	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	5.85	2.9	1.1	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	5.85	2.9	0.82	
98-82-8	Cumene	ND	ug/m3	5.85	2.9	0.88	
110-82-7	Cyclohexane	ND	ug/m3	5.85	5.9	1.9	
124-48-1	Dibromochloromethane	ND	ug/m3	5.85	2.9	0.82	
64-17-5	Ethanol	ND	ug/m3	5.85	29	9.4	
100-41-4	Ethyl Benzene	ND	ug/m3	5.85	2.9	0.88	
75-69-4	Freon 11	ND	ug/m3	5.85	2.9	0.94	
76-13-1	Freon 113	ND	ug/m3	5.85	2.9	0.94	QD
76-14-2	Freon 114	ND	ug/m3	5.85	2.9	0.99	
75-71-8	Freon 12	1.7	ug/m3	5.85	2.9	1.1	J
306-83-2	Freon 123	ND	ug/m3	5.85	2.9	1.4	
354-23-4	Freon 123a	ND	ug/m3	5.85	NA	NA	* QD
75-43-4	Freon 21	ND	ug/m3	5.85	2.9	1.3	
142-82-5	Heptane	ND	ug/m3	5.85	2.9	0.94	
87-68-3	Hexachlorobutadiene	ND	ug/m3	5.85	2.9	1.1	
110-54-3	Hexane	ND	ug/m3	5.85	2.9	0.99	
179601-23-	m,p-Xylene	ND	ug/m3	5.85	5.9	1.7	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	5.85	2.9	0.88	
75-09-2	Methylene Chloride	1.1	ug/m3	5.85	2.9	0.88	J
95-47-6	o-Xylene	ND	ug/m3	5.85	2.9	0.82	
103-65-1	Propylbenzene	ND	ug/m3	5.85	2.9	0.88	
100-42-5	Styrene	ND	ug/m3	5.85	2.9	0.88	
127-18-4	Tetrachloroethene	ND	ug/m3	5.85	2.9	0.82	
109-99-9	Tetrahydrofuran	ND	ug/m3	5.85	2.9	1.3	
108-88-3	Toluene	ND	ug/m3	5.85	2.9	0.94	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	5.85	2.9	0.99	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	5.85	2.9	0.94	
79-01-6	Trichloroethene	ND	ug/m3	5.85	2.9	0.88	QD
75-01-4	Vinyl Chloride	ND	ug/m3	5.85	2.9	1.1	

Sample **1203231736** **Sample Type** **Soil Gas-D** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	246.67	120	39	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	246.67	120	39	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	246.67	120	39	
75-34-3	1,1-Dichloroethane	ND	ug/m3	246.67	120	42	
75-35-4	1,1-Dichloroethene	ND	ug/m3	246.67	120	42	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	246.67	120	59	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	246.67	120	39	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	246.67	120	37	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	246.67	120	42	
107-06-2	1,2-Dichloroethane	ND	ug/m3	246.67	120	47	
78-87-5	1,2-Dichloropropane	ND	ug/m3	246.67	120	42	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	246.67	120	42	
106-99-0	1,3-Butadiene	ND	ug/m3	246.67	120	52	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	246.67	120	42	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	246.67	120	39	
123-91-1	1,4-Dioxane	ND	ug/m3	246.67	120	42	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	246.67	120	42	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	246.67	1200	57	
591-78-6	2-Hexanone	ND	ug/m3	246.67	120	44	
67-63-0	2-Propanol	ND	ug/m3	246.67	250	99	
107-05-1	3-Chloropropene	ND	ug/m3	246.67	120	39	
622-96-8	4-Ethyltoluene	ND	ug/m3	246.67	120	42	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	246.67	120	35	
67-64-1	Acetone	ND	ug/m3	246.67	1200	220	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	246.67	120	37	
71-43-2	Benzene	ND	ug/m3	246.67	120	35	
75-27-4	Bromodichloromethane	ND	ug/m3	246.67	120	39	
75-25-2	Bromoform	ND	ug/m3	246.67	120	35	
74-83-9	Bromomethane	ND	ug/m3	246.67	120	47	
75-15-0	Carbon Disulfide	ND	ug/m3	246.67	1200	37	
56-23-5	Carbon Tetrachloride	ND	ug/m3	246.67	120	39	
108-90-7	Chlorobenzene	ND	ug/m3	246.67	120	39	
75-00-3	Chloroethane	ND	ug/m3	246.67	120	47	
67-66-3	Chloroform	98	ug/m3	246.67	120	47	J
74-87-3	Chloromethane	ND	ug/m3	246.67	120	47	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	246.67	120	44	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	246.67	120	35	
98-82-8	Cumene	ND	ug/m3	246.67	120	37	
110-82-7	Cyclohexane	ND	ug/m3	246.67	250	81	
124-48-1	Dibromochloromethane	ND	ug/m3	246.67	120	35	
64-17-5	Ethanol	ND	ug/m3	246.67	1200	390	
100-41-4	Ethyl Benzene	ND	ug/m3	246.67	120	37	
75-69-4	Freon 11	ND	ug/m3	246.67	120	39	

76-13-1	Freon 113	25000	ug/m3	246.67	120	39	QD
76-14-2	Freon 114	ND	ug/m3	246.67	120	42	
75-71-8	Freon 12	ND	ug/m3	246.67	120	44	
306-83-2	Freon 123	ND	ug/m3	246.67	120	59	
354-23-4	Freon 123a	740	ug/m3	246.67	NA	NA	TIC QD
75-43-4	Freon 21	ND	ug/m3	246.67	120	57	
142-82-5	Heptane	ND	ug/m3	246.67	120	39	
87-68-3	Hexachlorobutadiene	ND	ug/m3	246.67	120	44	
110-54-3	Hexane	ND	ug/m3	246.67	120	42	
179601-23-	m,p-Xylene	ND	ug/m3	246.67	250	72	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	246.67	120	37	
75-09-2	Methylene Chloride	46	ug/m3	246.67	120	37	J
95-47-6	o-Xylene	ND	ug/m3	246.67	120	35	
103-65-1	Propylbenzene	ND	ug/m3	246.67	120	37	
100-42-5	Styrene	ND	ug/m3	246.67	120	37	
127-18-4	Tetrachloroethene	ND	ug/m3	246.67	120	35	
109-99-9	Tetrahydrofuran	ND	ug/m3	246.67	120	54	
108-88-3	Toluene	ND	ug/m3	246.67	120	39	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	246.67	120	42	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	246.67	120	39	
79-01-6	Trichloroethene	2600	ug/m3	246.67	120	37	QD
75-01-4	Vinyl Chloride	ND	ug/m3	246.67	120	47	

Borehole	600-SVE-1	Depth (ft)	130	Depth (m)	39.62	Event Date	3/24/2012

Sample	1203240745	Sample Type	Soil Gas	Analysis Method	TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	37.75	19	6	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	37.75	19	6	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	37.75	19	6	
75-34-3	1,1-Dichloroethane	ND	ug/m3	37.75	19	6.4	
75-35-4	1,1-Dichloroethene	6.7	ug/m3	37.75	19	6.4	J
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	37.75	19	9.1	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	37.75	19	6	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	37.75	19	5.7	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	37.75	19	6.4	
107-06-2	1,2-Dichloroethane	ND	ug/m3	37.75	19	7.2	
78-87-5	1,2-Dichloropropane	ND	ug/m3	37.75	19	6.4	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	37.75	19	6.4	
106-99-0	1,3-Butadiene	ND	ug/m3	37.75	19	7.9	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	37.75	19	6.4	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	37.75	19	6	
123-91-1	1,4-Dioxane	ND	ug/m3	37.75	19	6.4	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	37.75	19	6.4	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	830	ug/m3	37.75	190	8.7	
591-78-6	2-Hexanone	ND	ug/m3	37.75	19	6.8	
67-63-0	2-Propanol	ND	ug/m3	37.75	38	15	
107-05-1	3-Chloropropene	ND	ug/m3	37.75	19	6	
622-96-8	4-Ethyltoluene	ND	ug/m3	37.75	19	6.4	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	37.75	19	5.3	
67-64-1	Acetone	400	ug/m3	37.75	190	33	FB
100-44-7	alpha-Chlorotoluene	ND	ug/m3	37.75	19	5.7	
71-43-2	Benzene	ND	ug/m3	37.75	19	5.3	
75-27-4	Bromodichloromethane	ND	ug/m3	37.75	19	6	
75-25-2	Bromoform	ND	ug/m3	37.75	19	5.3	
74-83-9	Bromomethane	ND	ug/m3	37.75	19	7.2	
75-15-0	Carbon Disulfide	ND	ug/m3	37.75	190	5.7	
56-23-5	Carbon Tetrachloride	ND	ug/m3	37.75	19	6	
108-90-7	Chlorobenzene	ND	ug/m3	37.75	19	6	
75-00-3	Chloroethane	ND	ug/m3	37.75	19	7.2	
67-66-3	Chloroform	25	ug/m3	37.75	19	7.2	
74-87-3	Chloromethane	ND	ug/m3	37.75	19	7.2	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	37.75	19	6.8	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	37.75	19	5.3	
98-82-8	Cumene	ND	ug/m3	37.75	19	5.7	
110-82-7	Cyclohexane	ND	ug/m3	37.75	38	12	
124-48-1	Dibromochloromethane	ND	ug/m3	37.75	19	5.3	
64-17-5	Ethanol	ND	ug/m3	37.75	190	60	

100-41-4	Ethyl Benzene	ND	ug/m3	37.75	19	5.7	
75-69-4	Freon 11	ND	ug/m3	37.75	19	6	
76-13-1	Freon 113	3100	ug/m3	37.75	19	6	
76-14-2	Freon 114	ND	ug/m3	37.75	19	6.4	
75-71-8	Freon 12	ND	ug/m3	37.75	19	6.8	
306-83-2	Freon 123	ND	ug/m3	37.75	19	9.1	
354-23-4	Freon 123a	ND	ug/m3	37.75	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	37.75	19	8.7	
142-82-5	Heptane	ND	ug/m3	37.75	19	6	
87-68-3	Hexachlorobutadiene	ND	ug/m3	37.75	19	6.8	
110-54-3	Hexane	ND	ug/m3	37.75	19	6.4	
179601-23-	m,p-Xylene	ND	ug/m3	37.75	38	11	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	37.75	19	5.7	
75-09-2	Methylene Chloride	8.1	ug/m3	37.75	19	5.7	J FB
95-47-6	o-Xylene	ND	ug/m3	37.75	19	5.3	
103-65-1	Propylbenzene	ND	ug/m3	37.75	19	5.7	
100-42-5	Styrene	ND	ug/m3	37.75	19	5.7	
127-18-4	Tetrachloroethene	590	ug/m3	37.75	19	5.3	
109-99-9	Tetrahydrofuran	1200	ug/m3	37.75	19	8.3	
108-88-3	Toluene	ND	ug/m3	37.75	19	6	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	37.75	19	6.4	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	37.75	19	6	
79-01-6	Trichloroethene	1100	ug/m3	37.75	19	5.7	
75-01-4	Vinyl Chloride	ND	ug/m3	37.75	19	7.2	

Sample 1203240750 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	357.78	180	57	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	357.78	180	57	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	357.78	180	57	
75-34-3	1,1-Dichloroethane	ND	ug/m3	357.78	180	61	
75-35-4	1,1-Dichloroethene	ND	ug/m3	357.78	180	61	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	357.78	180	86	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	357.78	180	57	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	357.78	180	54	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	357.78	180	61	
107-06-2	1,2-Dichloroethane	ND	ug/m3	357.78	180	68	
78-87-5	1,2-Dichloropropane	ND	ug/m3	357.78	180	61	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	357.78	180	61	
106-99-0	1,3-Butadiene	ND	ug/m3	357.78	180	75	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	357.78	180	61	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	357.78	180	57	
123-91-1	1,4-Dioxane	ND	ug/m3	357.78	180	61	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	357.78	180	61	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	390	ug/m3	357.78	1800	82	J
591-78-6	2-Hexanone	ND	ug/m3	357.78	180	64	

67-63-0	2-Propanol	ND	ug/m3	357.78	360	140	
107-05-1	3-Chloropropene	ND	ug/m3	357.78	180	57	
622-96-8	4-Ethyltoluene	ND	ug/m3	357.78	180	61	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	357.78	180	50	
67-64-1	Acetone	500	ug/m3	357.78	1800	310	J
100-44-7	alpha-Chlorotoluene	ND	ug/m3	357.78	180	54	
71-43-2	Benzene	ND	ug/m3	357.78	180	50	
75-27-4	Bromodichloromethane	ND	ug/m3	357.78	180	57	
75-25-2	Bromoform	ND	ug/m3	357.78	180	50	
74-83-9	Bromomethane	ND	ug/m3	357.78	180	68	
75-15-0	Carbon Disulfide	ND	ug/m3	357.78	1800	54	
56-23-5	Carbon Tetrachloride	ND	ug/m3	357.78	180	57	
108-90-7	Chlorobenzene	ND	ug/m3	357.78	180	57	
75-00-3	Chloroethane	ND	ug/m3	357.78	180	68	
67-66-3	Chloroform	79	ug/m3	357.78	180	68	J
74-87-3	Chloromethane	ND	ug/m3	357.78	180	68	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	357.78	180	64	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	357.78	180	50	
98-82-8	Cumene	ND	ug/m3	357.78	180	54	
110-82-7	Cyclohexane	ND	ug/m3	357.78	360	120	
124-48-1	Dibromochloromethane	ND	ug/m3	357.78	180	50	
64-17-5	Ethanol	ND	ug/m3	357.78	1800	570	
100-41-4	Ethyl Benzene	ND	ug/m3	357.78	180	54	
75-69-4	Freon 11	ND	ug/m3	357.78	180	57	
76-13-1	Freon 113	26000	ug/m3	357.78	180	57	
76-14-2	Freon 114	ND	ug/m3	357.78	180	61	
75-71-8	Freon 12	ND	ug/m3	357.78	180	64	
306-83-2	Freon 123	ND	ug/m3	357.78	180	86	
354-23-4	Freon 123a	ND	ug/m3	357.78	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	357.78	180	82	
142-82-5	Heptane	ND	ug/m3	357.78	180	57	
87-68-3	Hexachlorobutadiene	ND	ug/m3	357.78	180	64	
110-54-3	Hexane	ND	ug/m3	357.78	180	61	
179601-23-	m,p-Xylene	ND	ug/m3	357.78	360	100	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	357.78	180	54	
75-09-2	Methylene Chloride	73	ug/m3	357.78	180	54	J FB
95-47-6	o-Xylene	ND	ug/m3	357.78	180	50	
103-65-1	Propylbenzene	ND	ug/m3	357.78	180	54	
100-42-5	Styrene	ND	ug/m3	357.78	180	54	
127-18-4	Tetrachloroethene	ND	ug/m3	357.78	180	50	
109-99-9	Tetrahydrofuran	1100	ug/m3	357.78	180	79	
108-88-3	Toluene	ND	ug/m3	357.78	180	57	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	357.78	180	61	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	357.78	180	57	
79-01-6	Trichloroethene	3200	ug/m3	357.78	180	54	
75-01-4	Vinyl Chloride	ND	ug/m3	357.78	180	68	

Sample **1203240755** **Sample Type** **Soil Gas** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	314	160	50	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	314	160	50	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	314	160	50	
75-34-3	1,1-Dichloroethane	ND	ug/m3	314	160	53	
75-35-4	1,1-Dichloroethene	ND	ug/m3	314	160	53	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	314	160	75	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	314	160	50	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	314	160	47	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	314	160	53	
107-06-2	1,2-Dichloroethane	ND	ug/m3	314	160	60	
78-87-5	1,2-Dichloropropane	ND	ug/m3	314	160	53	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	314	160	53	
106-99-0	1,3-Butadiene	ND	ug/m3	314	160	66	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	314	160	53	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	314	160	50	
123-91-1	1,4-Dioxane	ND	ug/m3	314	160	53	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	314	160	53	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	300	ug/m3	314	1600	72	J
591-78-6	2-Hexanone	ND	ug/m3	314	160	57	
67-63-0	2-Propanol	ND	ug/m3	314	310	130	
107-05-1	3-Chloropropene	ND	ug/m3	314	160	50	
622-96-8	4-Ethyltoluene	ND	ug/m3	314	160	53	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	314	160	44	
67-64-1	Acetone	410	ug/m3	314	1600	280	J FB
100-44-7	alpha-Chlorotoluene	ND	ug/m3	314	160	47	
71-43-2	Benzene	ND	ug/m3	314	160	44	
75-27-4	Bromodichloromethane	ND	ug/m3	314	160	50	
75-25-2	Bromoform	ND	ug/m3	314	160	44	
74-83-9	Bromomethane	ND	ug/m3	314	160	60	
75-15-0	Carbon Disulfide	ND	ug/m3	314	1600	47	
56-23-5	Carbon Tetrachloride	ND	ug/m3	314	160	50	
108-90-7	Chlorobenzene	ND	ug/m3	314	160	50	
75-00-3	Chloroethane	ND	ug/m3	314	160	60	
67-66-3	Chloroform	82	ug/m3	314	160	60	J
74-87-3	Chloromethane	ND	ug/m3	314	160	60	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	314	160	57	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	314	160	44	
98-82-8	Cumene	ND	ug/m3	314	160	47	
110-82-7	Cyclohexane	ND	ug/m3	314	310	100	
124-48-1	Dibromochloromethane	ND	ug/m3	314	160	44	
64-17-5	Ethanol	ND	ug/m3	314	1600	500	
100-41-4	Ethyl Benzene	ND	ug/m3	314	160	47	
75-69-4	Freon 11	ND	ug/m3	314	160	50	

76-13-1	Freon 113	27000	ug/m3	314	160	50	
76-14-2	Freon 114	ND	ug/m3	314	160	53	
75-71-8	Freon 12	ND	ug/m3	314	160	57	
306-83-2	Freon 123	ND	ug/m3	314	160	75	
354-23-4	Freon 123a	ND	ug/m3	314	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	314	160	72	
142-82-5	Heptane	ND	ug/m3	314	160	50	
87-68-3	Hexachlorobutadiene	ND	ug/m3	314	160	57	
110-54-3	Hexane	ND	ug/m3	314	160	53	
179601-23-	m,p-Xylene	ND	ug/m3	314	310	91	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	314	160	47	
75-09-2	Methylene Chloride	65	ug/m3	314	160	47	J FB
95-47-6	o-Xylene	ND	ug/m3	314	160	44	
103-65-1	Propylbenzene	ND	ug/m3	314	160	47	
100-42-5	Styrene	ND	ug/m3	314	160	47	
127-18-4	Tetrachloroethene	ND	ug/m3	314	160	44	
109-99-9	Tetrahydrofuran	820	ug/m3	314	160	69	
108-88-3	Toluene	ND	ug/m3	314	160	50	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	314	160	53	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	314	160	50	
79-01-6	Trichloroethene	3200	ug/m3	314	160	47	
75-01-4	Vinyl Chloride	ND	ug/m3	314	160	60	

Sample 1203240800 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	324	160	52	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	324	160	52	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	324	160	52	
75-34-3	1,1-Dichloroethane	ND	ug/m3	324	160	55	
75-35-4	1,1-Dichloroethene	ND	ug/m3	324	160	55	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	324	160	78	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	324	160	52	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	324	160	49	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	324	160	55	
107-06-2	1,2-Dichloroethane	ND	ug/m3	324	160	62	
78-87-5	1,2-Dichloropropane	ND	ug/m3	324	160	55	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	324	160	55	
106-99-0	1,3-Butadiene	ND	ug/m3	324	160	68	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	324	160	55	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	324	160	52	
123-91-1	1,4-Dioxane	ND	ug/m3	324	160	55	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	324	160	55	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	190	ug/m3	324	1600	75	J
591-78-6	2-Hexanone	ND	ug/m3	324	160	58	
67-63-0	2-Propanol	ND	ug/m3	324	320	130	
107-05-1	3-Chloropropene	ND	ug/m3	324	160	52	

622-96-8	4-Ethyltoluene	ND	ug/m3	324	160	55	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	324	160	45	
67-64-1	Acetone	310	ug/m3	324	1600	290	J FB
100-44-7	alpha-Chlorotoluene	ND	ug/m3	324	160	49	
71-43-2	Benzene	ND	ug/m3	324	160	45	
75-27-4	Bromodichloromethane	ND	ug/m3	324	160	52	
75-25-2	Bromoform	ND	ug/m3	324	160	45	
74-83-9	Bromomethane	ND	ug/m3	324	160	62	
75-15-0	Carbon Disulfide	ND	ug/m3	324	1600	49	
56-23-5	Carbon Tetrachloride	ND	ug/m3	324	160	52	
108-90-7	Chlorobenzene	ND	ug/m3	324	160	52	
75-00-3	Chloroethane	ND	ug/m3	324	160	62	
67-66-3	Chloroform	86	ug/m3	324	160	62	J
74-87-3	Chloromethane	ND	ug/m3	324	160	62	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	324	160	58	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	324	160	45	
98-82-8	Cumene	ND	ug/m3	324	160	49	
110-82-7	Cyclohexane	ND	ug/m3	324	320	110	
124-48-1	Dibromochloromethane	ND	ug/m3	324	160	45	
64-17-5	Ethanol	ND	ug/m3	324	1600	520	
100-41-4	Ethyl Benzene	ND	ug/m3	324	160	49	
75-69-4	Freon 11	ND	ug/m3	324	160	52	
76-13-1	Freon 113	29000	ug/m3	324	160	52	
76-14-2	Freon 114	ND	ug/m3	324	160	55	
75-71-8	Freon 12	ND	ug/m3	324	160	58	
306-83-2	Freon 123	ND	ug/m3	324	160	78	
354-23-4	Freon 123a	ND	ug/m3	324	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	324	160	75	
142-82-5	Heptane	ND	ug/m3	324	160	52	
87-68-3	Hexachlorobutadiene	ND	ug/m3	324	160	58	
110-54-3	Hexane	ND	ug/m3	324	160	55	
179601-23-	m,p-Xylene	ND	ug/m3	324	320	94	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	324	160	49	
75-09-2	Methylene Chloride	64	ug/m3	324	160	49	J FB
95-47-6	o-Xylene	ND	ug/m3	324	160	45	
103-65-1	Propylbenzene	ND	ug/m3	324	160	49	
100-42-5	Styrene	ND	ug/m3	324	160	49	
127-18-4	Tetrachloroethene	ND	ug/m3	324	160	45	
109-99-9	Tetrahydrofuran	530	ug/m3	324	160	71	
108-88-3	Toluene	ND	ug/m3	324	160	52	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	324	160	55	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	324	160	52	
79-01-6	Trichloroethene	3500	ug/m3	324	160	49	
75-01-4	Vinyl Chloride	ND	ug/m3	324	160	62	

Sample **1203240815** **Sample Type** **Soil Gas** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	402.5	200	64	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	402.5	200	64	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	402.5	200	64	
75-34-3	1,1-Dichloroethane	ND	ug/m3	402.5	200	68	
75-35-4	1,1-Dichloroethene	ND	ug/m3	402.5	200	68	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	402.5	200	97	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	402.5	200	64	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	402.5	200	60	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	402.5	200	68	
107-06-2	1,2-Dichloroethane	ND	ug/m3	402.5	200	76	
78-87-5	1,2-Dichloropropane	ND	ug/m3	402.5	200	68	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	402.5	200	68	
106-99-0	1,3-Butadiene	ND	ug/m3	402.5	200	85	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	402.5	200	68	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	402.5	200	64	
123-91-1	1,4-Dioxane	ND	ug/m3	402.5	200	68	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	402.5	200	68	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	402.5	2000	93	
591-78-6	2-Hexanone	ND	ug/m3	402.5	200	72	
67-63-0	2-Propanol	ND	ug/m3	402.5	400	160	
107-05-1	3-Chloropropene	ND	ug/m3	402.5	200	64	
622-96-8	4-Ethyltoluene	ND	ug/m3	402.5	200	68	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	402.5	200	56	
67-64-1	Acetone	ND	ug/m3	402.5	2000	350	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	402.5	200	60	
71-43-2	Benzene	ND	ug/m3	402.5	200	56	
75-27-4	Bromodichloromethane	ND	ug/m3	402.5	200	64	
75-25-2	Bromoform	ND	ug/m3	402.5	200	56	
74-83-9	Bromomethane	ND	ug/m3	402.5	200	76	
75-15-0	Carbon Disulfide	ND	ug/m3	402.5	2000	60	
56-23-5	Carbon Tetrachloride	ND	ug/m3	402.5	200	64	
108-90-7	Chlorobenzene	ND	ug/m3	402.5	200	64	
75-00-3	Chloroethane	ND	ug/m3	402.5	200	76	
67-66-3	Chloroform	89	ug/m3	402.5	200	76	J
74-87-3	Chloromethane	ND	ug/m3	402.5	200	76	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	402.5	200	72	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	402.5	200	56	
98-82-8	Cumene	ND	ug/m3	402.5	200	60	
110-82-7	Cyclohexane	ND	ug/m3	402.5	400	130	
124-48-1	Dibromochloromethane	ND	ug/m3	402.5	200	56	
64-17-5	Ethanol	ND	ug/m3	402.5	2000	640	
100-41-4	Ethyl Benzene	ND	ug/m3	402.5	200	60	
75-69-4	Freon 11	ND	ug/m3	402.5	200	64	

76-13-1	Freon 113	31000	ug/m3	402.5	200	64	
76-14-2	Freon 114	ND	ug/m3	402.5	200	68	
75-71-8	Freon 12	ND	ug/m3	402.5	200	72	
306-83-2	Freon 123	ND	ug/m3	402.5	200	97	
354-23-4	Freon 123a	ND	ug/m3	402.5	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	402.5	200	93	
142-82-5	Heptane	ND	ug/m3	402.5	200	64	
87-68-3	Hexachlorobutadiene	ND	ug/m3	402.5	200	72	
110-54-3	Hexane	ND	ug/m3	402.5	200	68	
179601-23-	m,p-Xylene	ND	ug/m3	402.5	400	120	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	402.5	200	60	
75-09-2	Methylene Chloride	84	ug/m3	402.5	200	60	J FB
95-47-6	o-Xylene	ND	ug/m3	402.5	200	56	
103-65-1	Propylbenzene	ND	ug/m3	402.5	200	60	
100-42-5	Styrene	ND	ug/m3	402.5	200	60	
127-18-4	Tetrachloroethene	ND	ug/m3	402.5	200	56	
109-99-9	Tetrahydrofuran	250	ug/m3	402.5	200	89	
108-88-3	Toluene	ND	ug/m3	402.5	200	64	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	402.5	200	68	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	402.5	200	64	
79-01-6	Trichloroethene	3600	ug/m3	402.5	200	60	
75-01-4	Vinyl Chloride	ND	ug/m3	402.5	200	76	

Sample 1203240830 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	364.44	180	58	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	364.44	180	58	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	364.44	180	58	
75-34-3	1,1-Dichloroethane	ND	ug/m3	364.44	180	62	
75-35-4	1,1-Dichloroethene	ND	ug/m3	364.44	180	62	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	364.44	180	87	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	364.44	180	58	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	364.44	180	55	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	364.44	180	62	
107-06-2	1,2-Dichloroethane	ND	ug/m3	364.44	180	69	
78-87-5	1,2-Dichloropropane	ND	ug/m3	364.44	180	62	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	364.44	180	62	
106-99-0	1,3-Butadiene	ND	ug/m3	364.44	180	77	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	364.44	180	62	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	364.44	180	58	
123-91-1	1,4-Dioxane	ND	ug/m3	364.44	180	62	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	364.44	180	62	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	364.44	1800	84	
591-78-6	2-Hexanone	ND	ug/m3	364.44	180	66	
67-63-0	2-Propanol	ND	ug/m3	364.44	360	150	
107-05-1	3-Chloropropene	ND	ug/m3	364.44	180	58	

622-96-8	4-Ethyltoluene	ND	ug/m3	364.44	180	62	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	364.44	180	51	
67-64-1	Acetone	ND	ug/m3	364.44	1800	320	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	364.44	180	55	
71-43-2	Benzene	ND	ug/m3	364.44	180	51	
75-27-4	Bromodichloromethane	ND	ug/m3	364.44	180	58	
75-25-2	Bromoform	ND	ug/m3	364.44	180	51	
74-83-9	Bromomethane	ND	ug/m3	364.44	180	69	
75-15-0	Carbon Disulfide	ND	ug/m3	364.44	1800	55	
56-23-5	Carbon Tetrachloride	ND	ug/m3	364.44	180	58	
108-90-7	Chlorobenzene	ND	ug/m3	364.44	180	58	
75-00-3	Chloroethane	ND	ug/m3	364.44	180	69	
67-66-3	Chloroform	89	ug/m3	364.44	180	69	J
74-87-3	Chloromethane	ND	ug/m3	364.44	180	69	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	364.44	180	66	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	364.44	180	51	
98-82-8	Cumene	ND	ug/m3	364.44	180	55	
110-82-7	Cyclohexane	ND	ug/m3	364.44	360	120	
124-48-1	Dibromochloromethane	ND	ug/m3	364.44	180	51	
64-17-5	Ethanol	ND	ug/m3	364.44	1800	580	
100-41-4	Ethyl Benzene	ND	ug/m3	364.44	180	55	
75-69-4	Freon 11	ND	ug/m3	364.44	180	58	
76-13-1	Freon 113	32000	ug/m3	364.44	180	58	
76-14-2	Freon 114	ND	ug/m3	364.44	180	62	
75-71-8	Freon 12	ND	ug/m3	364.44	180	66	
306-83-2	Freon 123	ND	ug/m3	364.44	180	87	
354-23-4	Freon 123a	ND	ug/m3	364.44	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	364.44	180	84	
142-82-5	Heptane	ND	ug/m3	364.44	180	58	
87-68-3	Hexachlorobutadiene	ND	ug/m3	364.44	180	66	
110-54-3	Hexane	ND	ug/m3	364.44	180	62	
179601-23-	m,p-Xylene	ND	ug/m3	364.44	360	110	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	364.44	180	55	
75-09-2	Methylene Chloride	75	ug/m3	364.44	180	55	J FB
95-47-6	o-Xylene	ND	ug/m3	364.44	180	51	
103-65-1	Propylbenzene	ND	ug/m3	364.44	180	55	
100-42-5	Styrene	ND	ug/m3	364.44	180	55	
127-18-4	Tetrachloroethene	ND	ug/m3	364.44	180	51	
109-99-9	Tetrahydrofuran	120	ug/m3	364.44	180	80	J
108-88-3	Toluene	ND	ug/m3	364.44	180	58	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	364.44	180	62	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	364.44	180	58	
79-01-6	Trichloroethene	3700	ug/m3	364.44	180	55	
75-01-4	Vinyl Chloride	ND	ug/m3	364.44	180	69	

Sample 1203240845 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	402.5	200	64	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	402.5	200	64	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	402.5	200	64	
75-34-3	1,1-Dichloroethane	ND	ug/m3	402.5	200	68	
75-35-4	1,1-Dichloroethene	ND	ug/m3	402.5	200	68	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	402.5	200	97	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	402.5	200	64	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	402.5	200	60	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	402.5	200	68	
107-06-2	1,2-Dichloroethane	ND	ug/m3	402.5	200	76	
78-87-5	1,2-Dichloropropane	ND	ug/m3	402.5	200	68	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	402.5	200	68	
106-99-0	1,3-Butadiene	ND	ug/m3	402.5	200	85	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	402.5	200	68	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	402.5	200	64	
123-91-1	1,4-Dioxane	ND	ug/m3	402.5	200	68	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	402.5	200	68	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	402.5	2000	93	
591-78-6	2-Hexanone	ND	ug/m3	402.5	200	72	
67-63-0	2-Propanol	ND	ug/m3	402.5	400	160	
107-05-1	3-Chloropropene	ND	ug/m3	402.5	200	64	
622-96-8	4-Ethyltoluene	ND	ug/m3	402.5	200	68	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	402.5	200	56	
67-64-1	Acetone	ND	ug/m3	402.5	2000	350	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	402.5	200	60	
71-43-2	Benzene	ND	ug/m3	402.5	200	56	
75-27-4	Bromodichloromethane	ND	ug/m3	402.5	200	64	
75-25-2	Bromoform	ND	ug/m3	402.5	200	56	
74-83-9	Bromomethane	ND	ug/m3	402.5	200	76	
75-15-0	Carbon Disulfide	ND	ug/m3	402.5	2000	60	
56-23-5	Carbon Tetrachloride	ND	ug/m3	402.5	200	64	
108-90-7	Chlorobenzene	ND	ug/m3	402.5	200	64	
75-00-3	Chloroethane	ND	ug/m3	402.5	200	76	
67-66-3	Chloroform	90	ug/m3	402.5	200	76	J
74-87-3	Chloromethane	ND	ug/m3	402.5	200	76	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	402.5	200	72	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	402.5	200	56	
98-82-8	Cumene	ND	ug/m3	402.5	200	60	
110-82-7	Cyclohexane	ND	ug/m3	402.5	400	130	
124-48-1	Dibromochloromethane	ND	ug/m3	402.5	200	56	
64-17-5	Ethanol	ND	ug/m3	402.5	2000	640	
100-41-4	Ethyl Benzene	ND	ug/m3	402.5	200	60	
75-69-4	Freon 11	ND	ug/m3	402.5	200	64	

76-13-1	Freon 113	33000	ug/m3	402.5	200	64	
76-14-2	Freon 114	ND	ug/m3	402.5	200	68	
75-71-8	Freon 12	ND	ug/m3	402.5	200	72	
306-83-2	Freon 123	ND	ug/m3	402.5	200	97	
354-23-4	Freon 123a	ND	ug/m3	402.5	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	402.5	200	93	
142-82-5	Heptane	ND	ug/m3	402.5	200	64	
87-68-3	Hexachlorobutadiene	ND	ug/m3	402.5	200	72	
110-54-3	Hexane	ND	ug/m3	402.5	200	68	
179601-23-	m,p-Xylene	ND	ug/m3	402.5	400	120	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	402.5	200	60	
75-09-2	Methylene Chloride	85	ug/m3	402.5	200	60	J FB
95-47-6	o-Xylene	ND	ug/m3	402.5	200	56	
103-65-1	Propylbenzene	ND	ug/m3	402.5	200	60	
100-42-5	Styrene	ND	ug/m3	402.5	200	60	
127-18-4	Tetrachloroethene	ND	ug/m3	402.5	200	56	
109-99-9	Tetrahydrofuran	140	ug/m3	402.5	200	89	J
108-88-3	Toluene	ND	ug/m3	402.5	200	64	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	402.5	200	68	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	402.5	200	64	
79-01-6	Trichloroethene	3700	ug/m3	402.5	200	60	
75-01-4	Vinyl Chloride	ND	ug/m3	402.5	200	76	

Sample 1203240846 Sample Type Soil Gas-D Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	468.57	230	75	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	468.57	230	75	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	468.57	230	75	
75-34-3	1,1-Dichloroethane	ND	ug/m3	468.57	230	80	
75-35-4	1,1-Dichloroethene	ND	ug/m3	468.57	230	80	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	468.57	230	110	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	468.57	230	75	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	468.57	230	70	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	468.57	230	80	
107-06-2	1,2-Dichloroethane	ND	ug/m3	468.57	230	89	
78-87-5	1,2-Dichloropropane	ND	ug/m3	468.57	230	80	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	468.57	230	80	
106-99-0	1,3-Butadiene	ND	ug/m3	468.57	230	98	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	468.57	230	80	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	468.57	230	75	
123-91-1	1,4-Dioxane	ND	ug/m3	468.57	230	80	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	468.57	230	80	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	468.57	2300	110	
591-78-6	2-Hexanone	ND	ug/m3	468.57	230	84	
67-63-0	2-Propanol	ND	ug/m3	468.57	470	190	
107-05-1	3-Chloropropene	ND	ug/m3	468.57	230	75	

622-96-8	4-Ethyltoluene	ND	ug/m3	468.57	230	80	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	468.57	230	66	
67-64-1	Acetone	ND	ug/m3	468.57	2300	410	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	468.57	230	70	
71-43-2	Benzene	ND	ug/m3	468.57	230	66	
75-27-4	Bromodichloromethane	ND	ug/m3	468.57	230	75	
75-25-2	Bromoform	ND	ug/m3	468.57	230	66	
74-83-9	Bromomethane	ND	ug/m3	468.57	230	89	
75-15-0	Carbon Disulfide	ND	ug/m3	468.57	2300	70	
56-23-5	Carbon Tetrachloride	ND	ug/m3	468.57	230	75	
108-90-7	Chlorobenzene	ND	ug/m3	468.57	230	75	
75-00-3	Chloroethane	ND	ug/m3	468.57	230	89	
67-66-3	Chloroform	ND	ug/m3	468.57	230	89	
74-87-3	Chloromethane	ND	ug/m3	468.57	230	89	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	468.57	230	84	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	468.57	230	66	
98-82-8	Cumene	ND	ug/m3	468.57	230	70	
110-82-7	Cyclohexane	ND	ug/m3	468.57	470	150	
124-48-1	Dibromochloromethane	ND	ug/m3	468.57	230	66	
64-17-5	Ethanol	ND	ug/m3	468.57	2300	750	
100-41-4	Ethyl Benzene	ND	ug/m3	468.57	230	70	
75-69-4	Freon 11	ND	ug/m3	468.57	230	75	
76-13-1	Freon 113	33000	ug/m3	468.57	230	75	
76-14-2	Freon 114	ND	ug/m3	468.57	230	80	
75-71-8	Freon 12	ND	ug/m3	468.57	230	84	
306-83-2	Freon 123	ND	ug/m3	468.57	230	110	
354-23-4	Freon 123a	ND	ug/m3	468.57	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	468.57	230	110	
142-82-5	Heptane	ND	ug/m3	468.57	230	75	
87-68-3	Hexachlorobutadiene	ND	ug/m3	468.57	230	84	
110-54-3	Hexane	ND	ug/m3	468.57	230	80	
179601-23-	m,p-Xylene	ND	ug/m3	468.57	470	140	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	468.57	230	70	
75-09-2	Methylene Chloride	97	ug/m3	468.57	230	70	J FB
95-47-6	o-Xylene	ND	ug/m3	468.57	230	66	
103-65-1	Propylbenzene	ND	ug/m3	468.57	230	70	
100-42-5	Styrene	ND	ug/m3	468.57	230	70	
127-18-4	Tetrachloroethene	ND	ug/m3	468.57	230	66	
109-99-9	Tetrahydrofuran	100	ug/m3	468.57	230	100	J
108-88-3	Toluene	ND	ug/m3	468.57	230	75	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	468.57	230	80	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	468.57	230	75	
79-01-6	Trichloroethene	3600	ug/m3	468.57	230	70	
75-01-4	Vinyl Chloride	ND	ug/m3	468.57	230	89	

Sample **1203240950** **Sample Type** **Soil Gas** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	425	210	68	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	425	210	68	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	425	210	68	
75-34-3	1,1-Dichloroethane	ND	ug/m3	425	210	72	
75-35-4	1,1-Dichloroethene	ND	ug/m3	425	210	72	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	425	210	100	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	425	210	68	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	425	210	64	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	425	210	72	
107-06-2	1,2-Dichloroethane	ND	ug/m3	425	210	81	
78-87-5	1,2-Dichloropropane	ND	ug/m3	425	210	72	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	425	210	72	
106-99-0	1,3-Butadiene	ND	ug/m3	425	210	89	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	425	210	72	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	425	210	68	
123-91-1	1,4-Dioxane	ND	ug/m3	425	210	72	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	425	210	72	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	425	2100	98	
591-78-6	2-Hexanone	ND	ug/m3	425	210	77	
67-63-0	2-Propanol	ND	ug/m3	425	430	170	
107-05-1	3-Chloropropene	ND	ug/m3	425	210	68	
622-96-8	4-Ethyltoluene	ND	ug/m3	425	210	72	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	425	210	60	
67-64-1	Acetone	ND	ug/m3	425	2100	370	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	425	210	64	
71-43-2	Benzene	ND	ug/m3	425	210	60	
75-27-4	Bromodichloromethane	ND	ug/m3	425	210	68	
75-25-2	Bromoform	ND	ug/m3	425	210	60	
74-83-9	Bromomethane	ND	ug/m3	425	210	81	
75-15-0	Carbon Disulfide	ND	ug/m3	425	2100	64	
56-23-5	Carbon Tetrachloride	ND	ug/m3	425	210	68	
108-90-7	Chlorobenzene	ND	ug/m3	425	210	68	
75-00-3	Chloroethane	ND	ug/m3	425	210	81	
67-66-3	Chloroform	90	ug/m3	425	210	81	J
74-87-3	Chloromethane	ND	ug/m3	425	210	81	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	425	210	77	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	425	210	60	
98-82-8	Cumene	ND	ug/m3	425	210	64	
110-82-7	Cyclohexane	ND	ug/m3	425	430	140	
124-48-1	Dibromochloromethane	ND	ug/m3	425	210	60	
64-17-5	Ethanol	ND	ug/m3	425	2100	680	
100-41-4	Ethyl Benzene	ND	ug/m3	425	210	64	
75-69-4	Freon 11	ND	ug/m3	425	210	68	

76-13-1	Freon 113	34000	ug/m3	425	210	68	
76-14-2	Freon 114	ND	ug/m3	425	210	72	
75-71-8	Freon 12	ND	ug/m3	425	210	77	
306-83-2	Freon 123	ND	ug/m3	425	210	100	
354-23-4	Freon 123a	ND	ug/m3	425	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	425	210	98	
142-82-5	Heptane	ND	ug/m3	425	210	68	
87-68-3	Hexachlorobutadiene	ND	ug/m3	425	210	77	
110-54-3	Hexane	ND	ug/m3	425	210	72	
179601-23-	m,p-Xylene	ND	ug/m3	425	430	120	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	425	210	64	
75-09-2	Methylene Chloride	86	ug/m3	425	210	64	J FB
95-47-6	o-Xylene	ND	ug/m3	425	210	60	
103-65-1	Propylbenzene	ND	ug/m3	425	210	64	
100-42-5	Styrene	ND	ug/m3	425	210	64	
127-18-4	Tetrachloroethene	ND	ug/m3	425	210	60	
109-99-9	Tetrahydrofuran	150	ug/m3	425	210	94	J
108-88-3	Toluene	ND	ug/m3	425	210	68	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	425	210	72	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	425	210	68	
79-01-6	Trichloroethene	3600	ug/m3	425	210	64	
75-01-4	Vinyl Chloride	ND	ug/m3	425	210	81	

Sample 1203241055 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	364	180	58	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	364	180	58	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	364	180	58	
75-34-3	1,1-Dichloroethane	ND	ug/m3	364	180	62	
75-35-4	1,1-Dichloroethene	ND	ug/m3	364	180	62	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	364	180	87	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	364	180	58	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	364	180	55	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	364	180	62	
107-06-2	1,2-Dichloroethane	ND	ug/m3	364	180	69	
78-87-5	1,2-Dichloropropane	ND	ug/m3	364	180	62	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	364	180	62	
106-99-0	1,3-Butadiene	ND	ug/m3	364	180	76	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	364	180	62	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	364	180	58	
123-91-1	1,4-Dioxane	ND	ug/m3	364	180	62	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	364	180	62	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	364	1800	84	
591-78-6	2-Hexanone	ND	ug/m3	364	180	66	
67-63-0	2-Propanol	ND	ug/m3	364	360	150	
107-05-1	3-Chloropropene	ND	ug/m3	364	180	58	

622-96-8	4-Ethyltoluene	ND	ug/m3	364	180	62	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	364	180	51	
67-64-1	Acetone	ND	ug/m3	364	1800	320	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	364	180	55	
71-43-2	Benzene	ND	ug/m3	364	180	51	
75-27-4	Bromodichloromethane	ND	ug/m3	364	180	58	
75-25-2	Bromoform	ND	ug/m3	364	180	51	
74-83-9	Bromomethane	ND	ug/m3	364	180	69	
75-15-0	Carbon Disulfide	ND	ug/m3	364	1800	55	
56-23-5	Carbon Tetrachloride	ND	ug/m3	364	180	58	
108-90-7	Chlorobenzene	ND	ug/m3	364	180	58	
75-00-3	Chloroethane	ND	ug/m3	364	180	69	
67-66-3	Chloroform	88	ug/m3	364	180	69	J
74-87-3	Chloromethane	ND	ug/m3	364	180	69	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	364	180	66	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	364	180	51	
98-82-8	Cumene	ND	ug/m3	364	180	55	
110-82-7	Cyclohexane	ND	ug/m3	364	360	120	
124-48-1	Dibromochloromethane	ND	ug/m3	364	180	51	
64-17-5	Ethanol	ND	ug/m3	364	1800	580	
100-41-4	Ethyl Benzene	ND	ug/m3	364	180	55	
75-69-4	Freon 11	ND	ug/m3	364	180	58	
76-13-1	Freon 113	34000	ug/m3	364	180	58	
76-14-2	Freon 114	ND	ug/m3	364	180	62	
75-71-8	Freon 12	ND	ug/m3	364	180	66	
306-83-2	Freon 123	ND	ug/m3	364	180	87	
354-23-4	Freon 123a	ND	ug/m3	364	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	364	180	84	
142-82-5	Heptane	ND	ug/m3	364	180	58	
87-68-3	Hexachlorobutadiene	ND	ug/m3	364	180	66	
110-54-3	Hexane	ND	ug/m3	364	180	62	
179601-23-	m,p-Xylene	ND	ug/m3	364	360	110	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	364	180	55	
75-09-2	Methylene Chloride	71	ug/m3	364	180	55	J FB
95-47-6	o-Xylene	ND	ug/m3	364	180	51	
103-65-1	Propylbenzene	ND	ug/m3	364	180	55	
100-42-5	Styrene	ND	ug/m3	364	180	55	
127-18-4	Tetrachloroethene	ND	ug/m3	364	180	51	
109-99-9	Tetrahydrofuran	ND	ug/m3	364	180	80	
108-88-3	Toluene	ND	ug/m3	364	180	58	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	364	180	62	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	364	180	58	
79-01-6	Trichloroethene	3500	ug/m3	364	180	55	
75-01-4	Vinyl Chloride	ND	ug/m3	364	180	69	

Sample **1203241200** **Sample Type** **Soil Gas** **Analysis Method** **TO-15**

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	398	200	64	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	398	200	64	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	398	200	64	
75-34-3	1,1-Dichloroethane	ND	ug/m3	398	200	68	
75-35-4	1,1-Dichloroethene	ND	ug/m3	398	200	68	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	398	200	96	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	398	200	64	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	398	200	60	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	398	200	68	
107-06-2	1,2-Dichloroethane	ND	ug/m3	398	200	76	
78-87-5	1,2-Dichloropropane	ND	ug/m3	398	200	68	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	398	200	68	
106-99-0	1,3-Butadiene	ND	ug/m3	398	200	84	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	398	200	68	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	398	200	64	
123-91-1	1,4-Dioxane	ND	ug/m3	398	200	68	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	398	200	68	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	398	2000	92	
591-78-6	2-Hexanone	ND	ug/m3	398	200	72	
67-63-0	2-Propanol	ND	ug/m3	398	400	160	
107-05-1	3-Chloropropene	ND	ug/m3	398	200	64	
622-96-8	4-Ethyltoluene	ND	ug/m3	398	200	68	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	398	200	56	
67-64-1	Acetone	ND	ug/m3	398	2000	350	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	398	200	60	
71-43-2	Benzene	ND	ug/m3	398	200	56	
75-27-4	Bromodichloromethane	ND	ug/m3	398	200	64	
75-25-2	Bromoform	ND	ug/m3	398	200	56	
74-83-9	Bromomethane	ND	ug/m3	398	200	76	
75-15-0	Carbon Disulfide	ND	ug/m3	398	2000	60	
56-23-5	Carbon Tetrachloride	ND	ug/m3	398	200	64	
108-90-7	Chlorobenzene	ND	ug/m3	398	200	64	
75-00-3	Chloroethane	ND	ug/m3	398	200	76	
67-66-3	Chloroform	88	ug/m3	398	200	76	J
74-87-3	Chloromethane	ND	ug/m3	398	200	76	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	398	200	72	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	398	200	56	
98-82-8	Cumene	ND	ug/m3	398	200	60	
110-82-7	Cyclohexane	ND	ug/m3	398	400	130	
124-48-1	Dibromochloromethane	ND	ug/m3	398	200	56	
64-17-5	Ethanol	ND	ug/m3	398	2000	640	
100-41-4	Ethyl Benzene	ND	ug/m3	398	200	60	
75-69-4	Freon 11	ND	ug/m3	398	200	64	

76-13-1	Freon 113	33000	ug/m3	398	200	64	
76-14-2	Freon 114	ND	ug/m3	398	200	68	
75-71-8	Freon 12	ND	ug/m3	398	200	72	
306-83-2	Freon 123	ND	ug/m3	398	200	96	
354-23-4	Freon 123a	ND	ug/m3	398	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	398	200	92	
142-82-5	Heptane	ND	ug/m3	398	200	64	
87-68-3	Hexachlorobutadiene	ND	ug/m3	398	200	72	
110-54-3	Hexane	ND	ug/m3	398	200	68	
179601-23-	m,p-Xylene	ND	ug/m3	398	400	120	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	398	200	60	
75-09-2	Methylene Chloride	86	ug/m3	398	200	60	J FB
95-47-6	o-Xylene	ND	ug/m3	398	200	56	
103-65-1	Propylbenzene	ND	ug/m3	398	200	60	
100-42-5	Styrene	ND	ug/m3	398	200	60	
127-18-4	Tetrachloroethene	ND	ug/m3	398	200	56	
109-99-9	Tetrahydrofuran	ND	ug/m3	398	200	88	
108-88-3	Toluene	ND	ug/m3	398	200	64	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	398	200	68	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	398	200	64	
79-01-6	Trichloroethene	3300	ug/m3	398	200	60	
75-01-4	Vinyl Chloride	ND	ug/m3	398	200	76	

Sample 1203241310 Sample Type Soil Gas Analysis Method TO-15

CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	468.89	230	75	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	468.89	230	75	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	468.89	230	75	
75-34-3	1,1-Dichloroethane	ND	ug/m3	468.89	230	80	
75-35-4	1,1-Dichloroethene	ND	ug/m3	468.89	230	80	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	468.89	230	110	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	468.89	230	75	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	468.89	230	70	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	468.89	230	80	
107-06-2	1,2-Dichloroethane	ND	ug/m3	468.89	230	89	
78-87-5	1,2-Dichloropropane	ND	ug/m3	468.89	230	80	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	468.89	230	80	
106-99-0	1,3-Butadiene	ND	ug/m3	468.89	230	98	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	468.89	230	80	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	468.89	230	75	
123-91-1	1,4-Dioxane	ND	ug/m3	468.89	230	80	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	468.89	230	80	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	468.89	2300	110	
591-78-6	2-Hexanone	ND	ug/m3	468.89	230	84	
67-63-0	2-Propanol	ND	ug/m3	468.89	470	190	
107-05-1	3-Chloropropene	ND	ug/m3	468.89	230	75	

622-96-8	4-Ethyltoluene	ND	ug/m3	468.89	230	80	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	468.89	230	66	
67-64-1	Acetone	ND	ug/m3	468.89	2300	410	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	468.89	230	70	
71-43-2	Benzene	ND	ug/m3	468.89	230	66	
75-27-4	Bromodichloromethane	ND	ug/m3	468.89	230	75	
75-25-2	Bromoform	ND	ug/m3	468.89	230	66	
74-83-9	Bromomethane	ND	ug/m3	468.89	230	89	
75-15-0	Carbon Disulfide	ND	ug/m3	468.89	2300	70	
56-23-5	Carbon Tetrachloride	ND	ug/m3	468.89	230	75	
108-90-7	Chlorobenzene	ND	ug/m3	468.89	230	75	
75-00-3	Chloroethane	ND	ug/m3	468.89	230	89	
67-66-3	Chloroform	ND	ug/m3	468.89	230	89	
74-87-3	Chloromethane	ND	ug/m3	468.89	230	89	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	468.89	230	84	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	468.89	230	66	
98-82-8	Cumene	ND	ug/m3	468.89	230	70	
110-82-7	Cyclohexane	ND	ug/m3	468.89	470	150	
124-48-1	Dibromochloromethane	ND	ug/m3	468.89	230	66	
64-17-5	Ethanol	ND	ug/m3	468.89	2300	750	
100-41-4	Ethyl Benzene	ND	ug/m3	468.89	230	70	
75-69-4	Freon 11	ND	ug/m3	468.89	230	75	
76-13-1	Freon 113	32000	ug/m3	468.89	230	75	
76-14-2	Freon 114	ND	ug/m3	468.89	230	80	
75-71-8	Freon 12	ND	ug/m3	468.89	230	84	
306-83-2	Freon 123	ND	ug/m3	468.89	230	110	
354-23-4	Freon 123a	ND	ug/m3	468.89	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	468.89	230	110	
142-82-5	Heptane	ND	ug/m3	468.89	230	75	
87-68-3	Hexachlorobutadiene	ND	ug/m3	468.89	230	84	
110-54-3	Hexane	ND	ug/m3	468.89	230	80	
179601-23-	m,p-Xylene	ND	ug/m3	468.89	470	140	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	468.89	230	70	
75-09-2	Methylene Chloride	93	ug/m3	468.89	230	70	J FB
95-47-6	o-Xylene	ND	ug/m3	468.89	230	66	
103-65-1	Propylbenzene	ND	ug/m3	468.89	230	70	
100-42-5	Styrene	ND	ug/m3	468.89	230	70	
127-18-4	Tetrachloroethene	ND	ug/m3	468.89	230	66	
109-99-9	Tetrahydrofuran	ND	ug/m3	468.89	230	100	
108-88-3	Toluene	ND	ug/m3	468.89	230	75	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	468.89	230	80	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	468.89	230	75	
79-01-6	Trichloroethene	3200	ug/m3	468.89	230	70	
75-01-4	Vinyl Chloride	ND	ug/m3	468.89	230	89	

Sample **1203241415** **Sample Type** **Soil Gas** **Analysis Method** **TO-15**

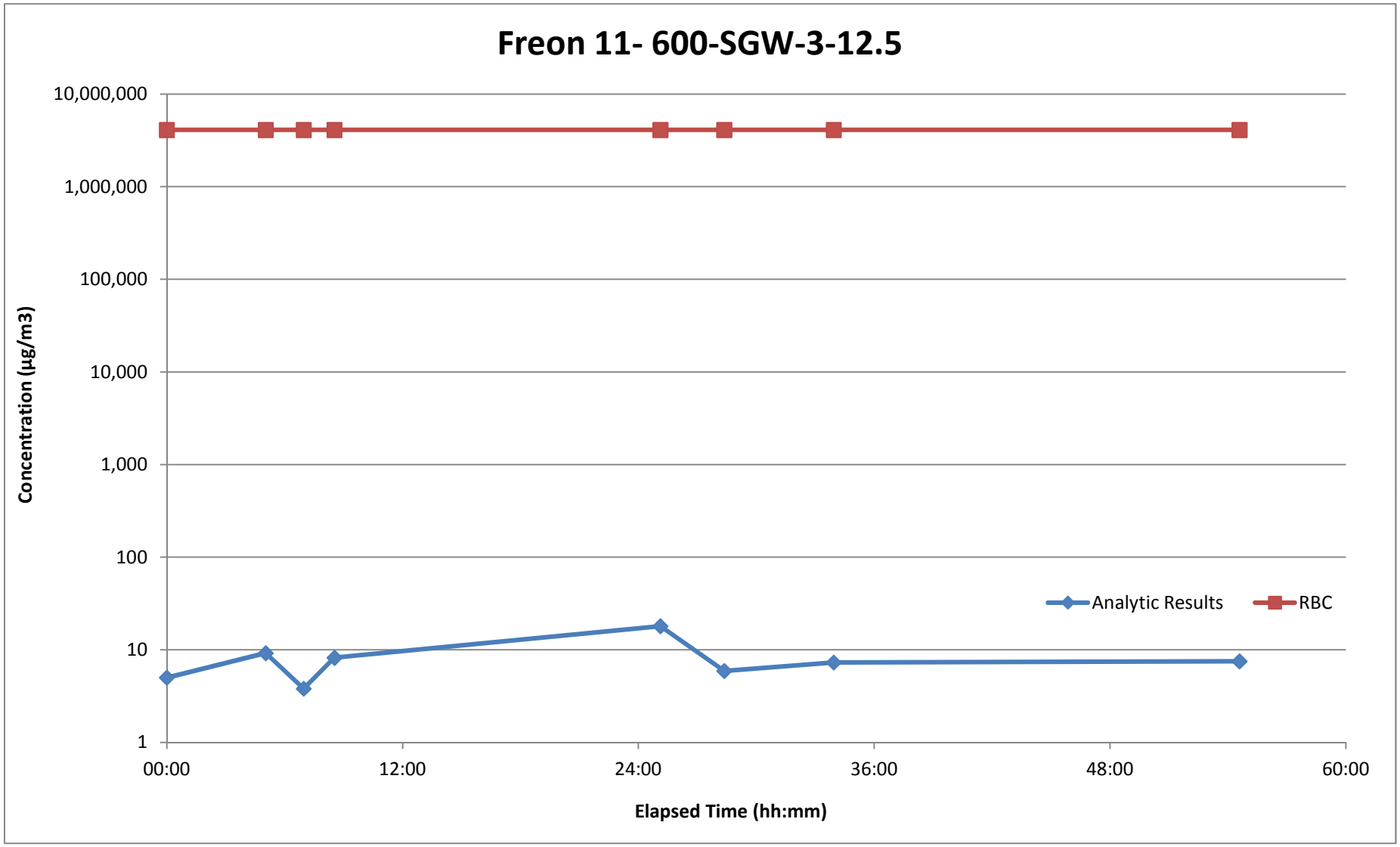
CAS No	Analyte	Result	Units	Dilution Factor	Report Limit	Detection Limit	QA Flag
71-55-6	1,1,1-Trichloroethane	ND	ug/m3	403.33	200	65	
79-34-5	1,1,2,2-Tetrachloroethane	ND	ug/m3	403.33	200	65	
79-00-5	1,1,2-Trichloroethane	ND	ug/m3	403.33	200	65	
75-34-3	1,1-Dichloroethane	ND	ug/m3	403.33	200	69	
75-35-4	1,1-Dichloroethene	ND	ug/m3	403.33	200	69	
120-82-1	1,2,4-Trichlorobenzene	ND	ug/m3	403.33	200	97	
95-63-6	1,2,4-Trimethylbenzene	ND	ug/m3	403.33	200	65	
106-93-4	1,2-Dibromoethane (EDB)	ND	ug/m3	403.33	200	61	
95-50-1	1,2-Dichlorobenzene	ND	ug/m3	403.33	200	69	
107-06-2	1,2-Dichloroethane	ND	ug/m3	403.33	200	77	
78-87-5	1,2-Dichloropropane	ND	ug/m3	403.33	200	69	
108-67-8	1,3,5-Trimethylbenzene	ND	ug/m3	403.33	200	69	
106-99-0	1,3-Butadiene	ND	ug/m3	403.33	200	85	
541-73-1	1,3-Dichlorobenzene	ND	ug/m3	403.33	200	69	
106-46-7	1,4-Dichlorobenzene	ND	ug/m3	403.33	200	65	
123-91-1	1,4-Dioxane	ND	ug/m3	403.33	200	69	
540-84-1	2,2,4-Trimethylpentane	ND	ug/m3	403.33	200	69	
78-93-3	2-Butanone (Methyl Ethyl Ketone)	ND	ug/m3	403.33	2000	93	
591-78-6	2-Hexanone	ND	ug/m3	403.33	200	73	
67-63-0	2-Propanol	ND	ug/m3	403.33	400	160	
107-05-1	3-Chloropropene	ND	ug/m3	403.33	200	65	
622-96-8	4-Ethyltoluene	ND	ug/m3	403.33	200	69	
108-10-1	4-Methyl-2-pentanone	ND	ug/m3	403.33	200	56	
67-64-1	Acetone	ND	ug/m3	403.33	2000	350	
100-44-7	alpha-Chlorotoluene	ND	ug/m3	403.33	200	61	
71-43-2	Benzene	ND	ug/m3	403.33	200	56	
75-27-4	Bromodichloromethane	ND	ug/m3	403.33	200	65	
75-25-2	Bromoform	ND	ug/m3	403.33	200	56	
74-83-9	Bromomethane	ND	ug/m3	403.33	200	77	
75-15-0	Carbon Disulfide	ND	ug/m3	403.33	2000	61	
56-23-5	Carbon Tetrachloride	ND	ug/m3	403.33	200	65	
108-90-7	Chlorobenzene	ND	ug/m3	403.33	200	65	
75-00-3	Chloroethane	ND	ug/m3	403.33	200	77	
67-66-3	Chloroform	87	ug/m3	403.33	200	77	J
74-87-3	Chloromethane	ND	ug/m3	403.33	200	77	
156-59-2	cis-1,2-Dichloroethene	ND	ug/m3	403.33	200	73	
10061-01-5	cis-1,3-Dichloropropene	ND	ug/m3	403.33	200	56	
98-82-8	Cumene	ND	ug/m3	403.33	200	61	
110-82-7	Cyclohexane	ND	ug/m3	403.33	400	130	
124-48-1	Dibromochloromethane	ND	ug/m3	403.33	200	56	
64-17-5	Ethanol	ND	ug/m3	403.33	2000	650	
100-41-4	Ethyl Benzene	ND	ug/m3	403.33	200	61	
75-69-4	Freon 11	ND	ug/m3	403.33	200	65	

76-13-1	Freon 113	32000	ug/m3	403.33	200	65	
76-14-2	Freon 114	ND	ug/m3	403.33	200	69	
75-71-8	Freon 12	ND	ug/m3	403.33	200	73	
306-83-2	Freon 123	ND	ug/m3	403.33	200	97	
354-23-4	Freon 123a	ND	ug/m3	403.33	NA	NA	*
75-43-4	Freon 21	ND	ug/m3	403.33	200	93	
142-82-5	Heptane	ND	ug/m3	403.33	200	65	
87-68-3	Hexachlorobutadiene	ND	ug/m3	403.33	200	73	
110-54-3	Hexane	ND	ug/m3	403.33	200	69	
179601-23-	m,p-Xylene	ND	ug/m3	403.33	400	120	
1634-04-4	Methyl tert-butyl ether	ND	ug/m3	403.33	200	61	
75-09-2	Methylene Chloride	81	ug/m3	403.33	200	61	J FB
95-47-6	o-Xylene	ND	ug/m3	403.33	200	56	
103-65-1	Propylbenzene	ND	ug/m3	403.33	200	61	
100-42-5	Styrene	ND	ug/m3	403.33	200	61	
127-18-4	Tetrachloroethene	ND	ug/m3	403.33	200	56	
109-99-9	Tetrahydrofuran	ND	ug/m3	403.33	200	89	
108-88-3	Toluene	ND	ug/m3	403.33	200	65	
156-60-5	trans-1,2-Dichloroethene	ND	ug/m3	403.33	200	69	
10061-02-6	trans-1,3-Dichloropropene	ND	ug/m3	403.33	200	65	
79-01-6	Trichloroethene	3200	ug/m3	403.33	200	61	
75-01-4	Vinyl Chloride	ND	ug/m3	403.33	200	77	

Appendix E

Graphs of COCs vs. RBCs

(600-SGW-3 and 600 SGW-5)


Freon 11- 600-SGW-3-12.5
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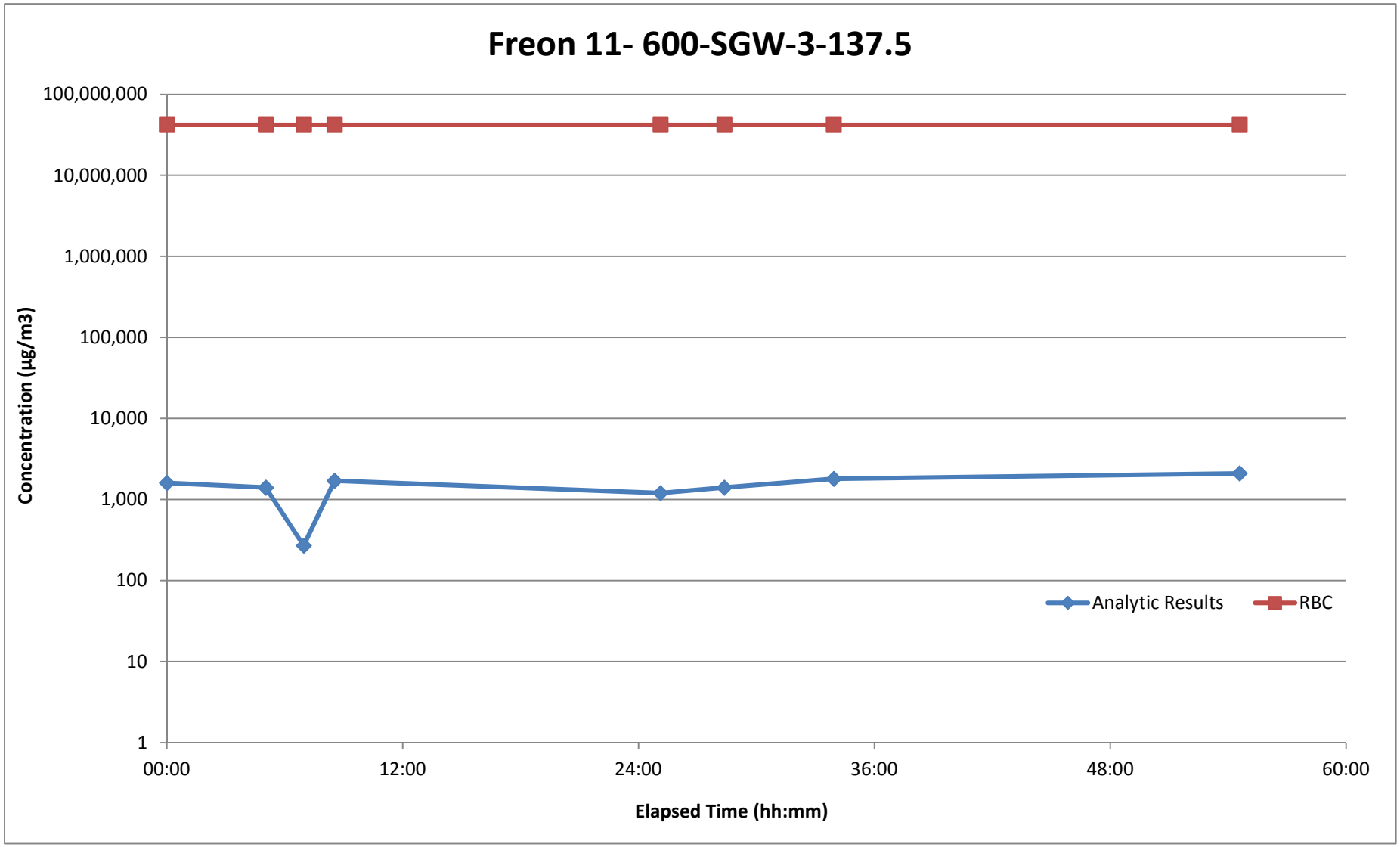
1,000,000
100,000
10,000
1,000
100
10
1
Concentration (µg/m3)
00:00
12:00
24:00
36:00
48:00
60:00
Elapsed Time (hh:mm)
Analytic Results
RBC


Freon 11- 600-SGW-3-137.5
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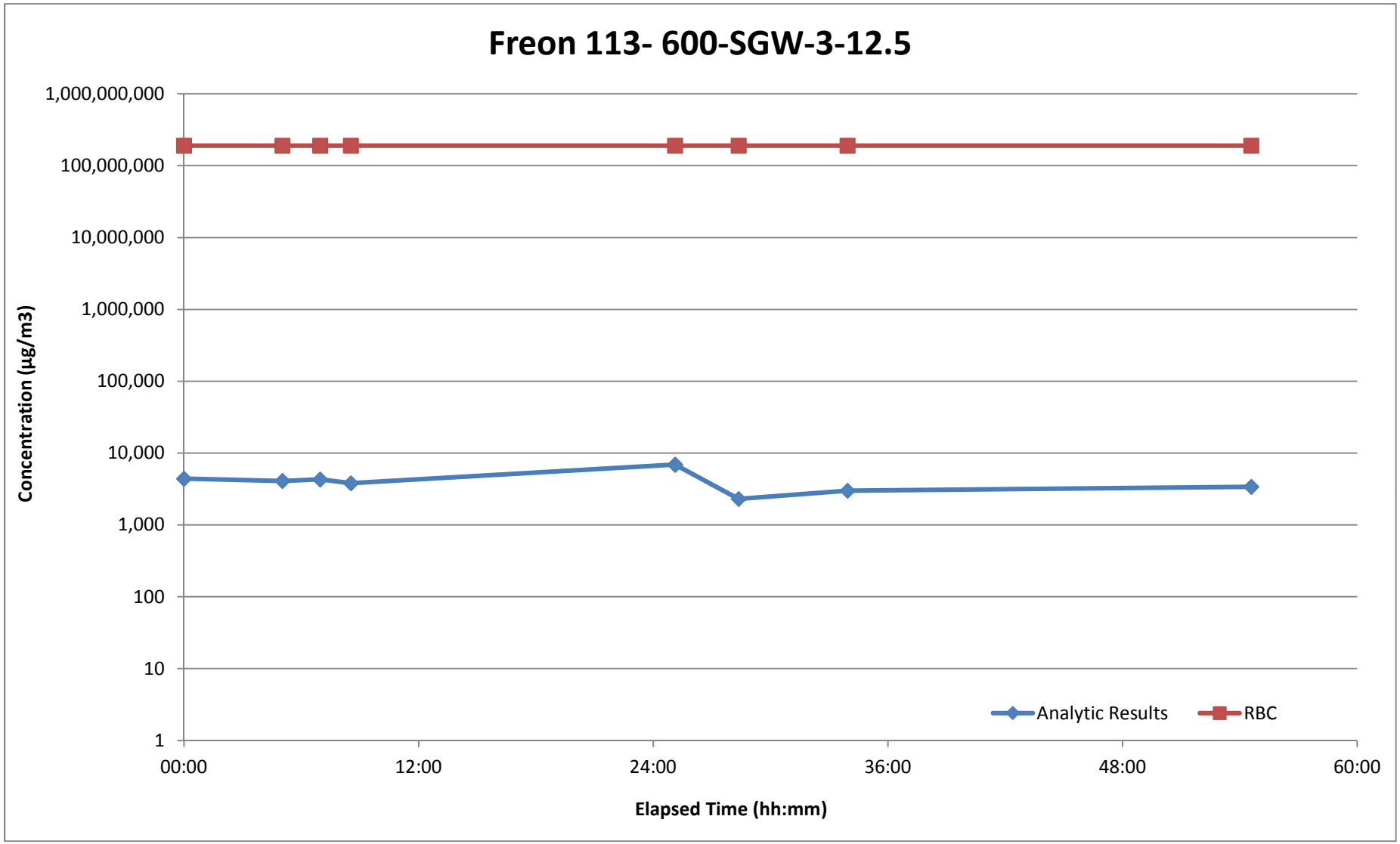
10,000,000
1,000,000
100,000
10,000
1,000
100
10
1
Concentration (µg/m3)
00:00
12:00
24:00
36:00
48:00
60:00
Elapsed Time (hh:mm)
Analytic Results
RBC


Freon 113- 600-SGW-3-12.5
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100,000,000
10,000,000
1,000,000
100,000
10,000
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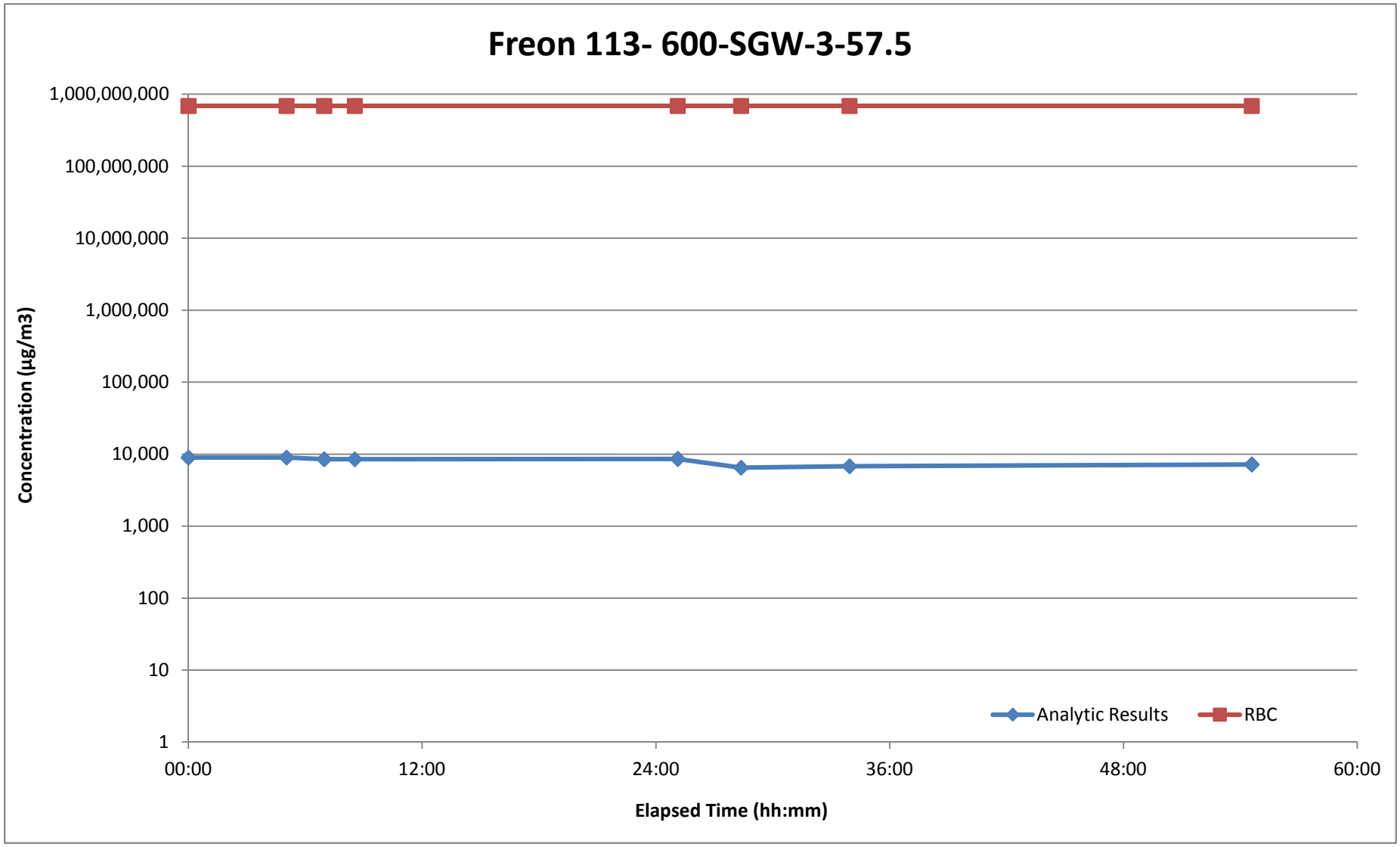
100
10
1
Concentration (µg/m3)
00:00
12:00
24:00
36:00
48:00
60:00
Elapsed Time (hh:mm)
Analytic Results
RBC


Freon 113- 600-SGW-3-57.5
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100,000,000
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100,000
10,000
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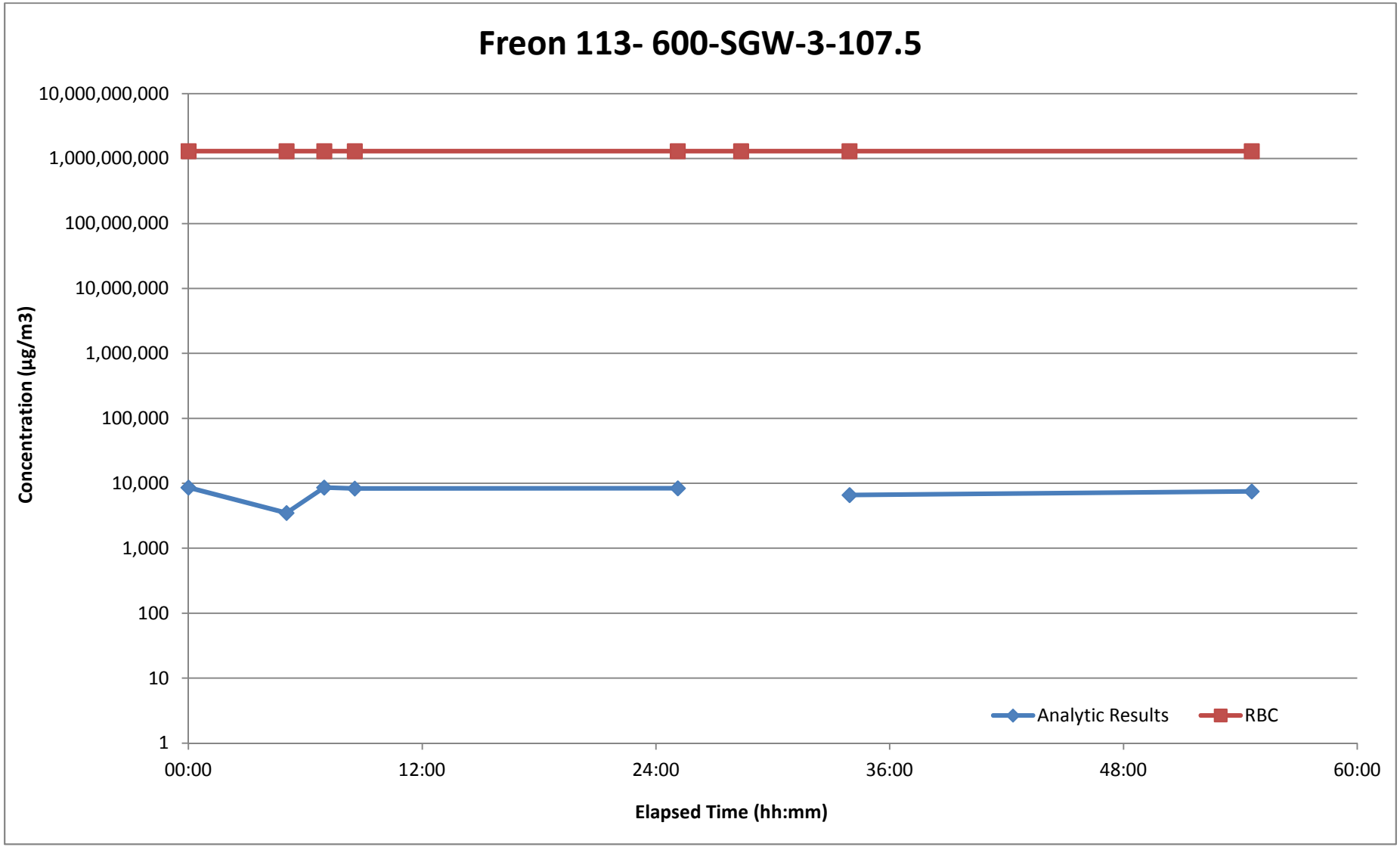
100
10
1
Concentration (µg/m3)
00:00
12:00
24:00
36:00
48:00
60:00
Elapsed Time (hh:mm)
Analytic Results
RBC


Freon 113- 600-SGW-3-107.5
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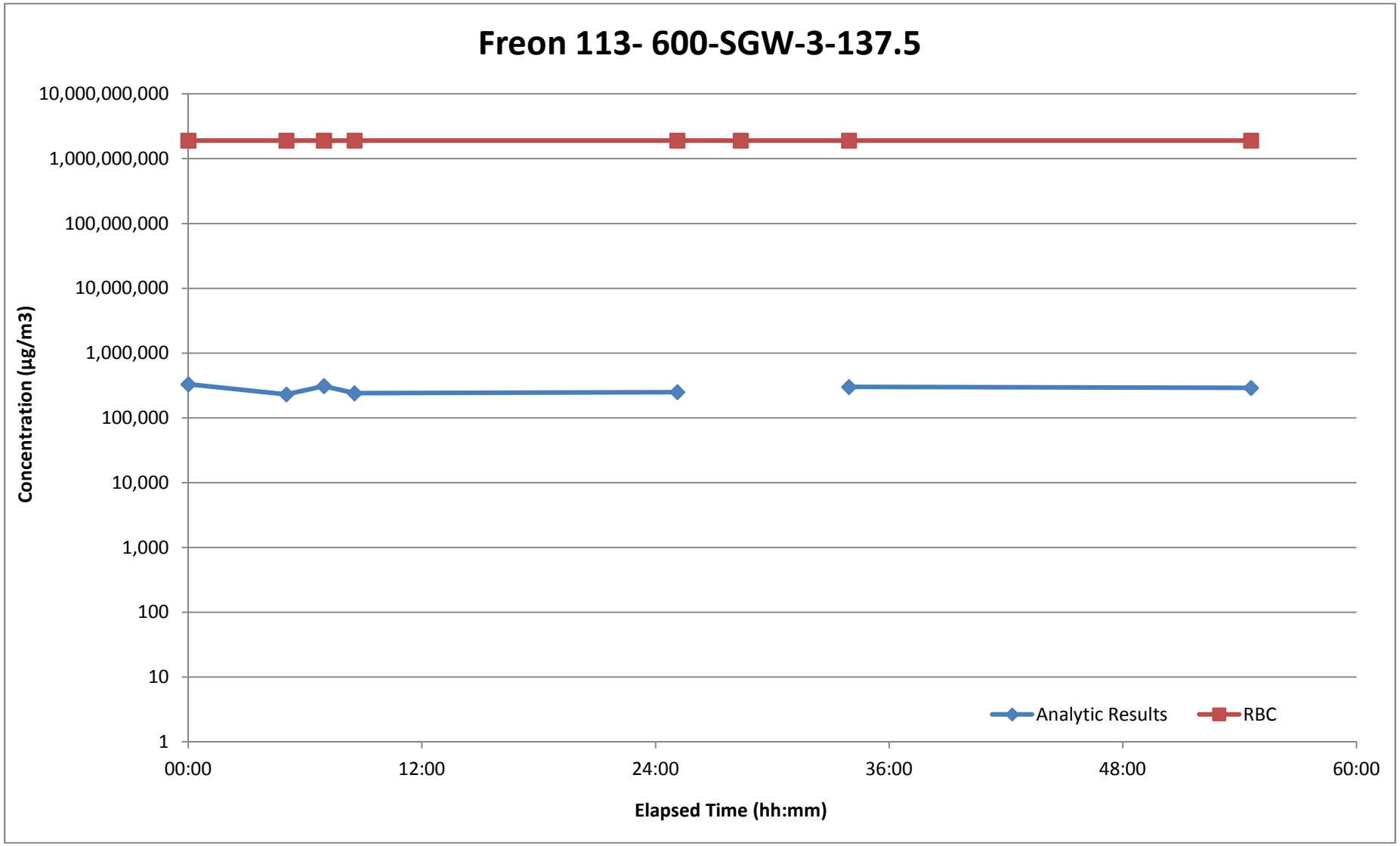
1,000,000,000
100,000,000
10,000,000
1,000,000
100,000
10,000
1,000
100
10
1
Concentration (µg/m3)
00:00
12:00
24:00
36:00
48:00
60:00
Elapsed Time (hh:mm)
Analytic Results
RBC


Freon 113- 600-SGW-3-137.5
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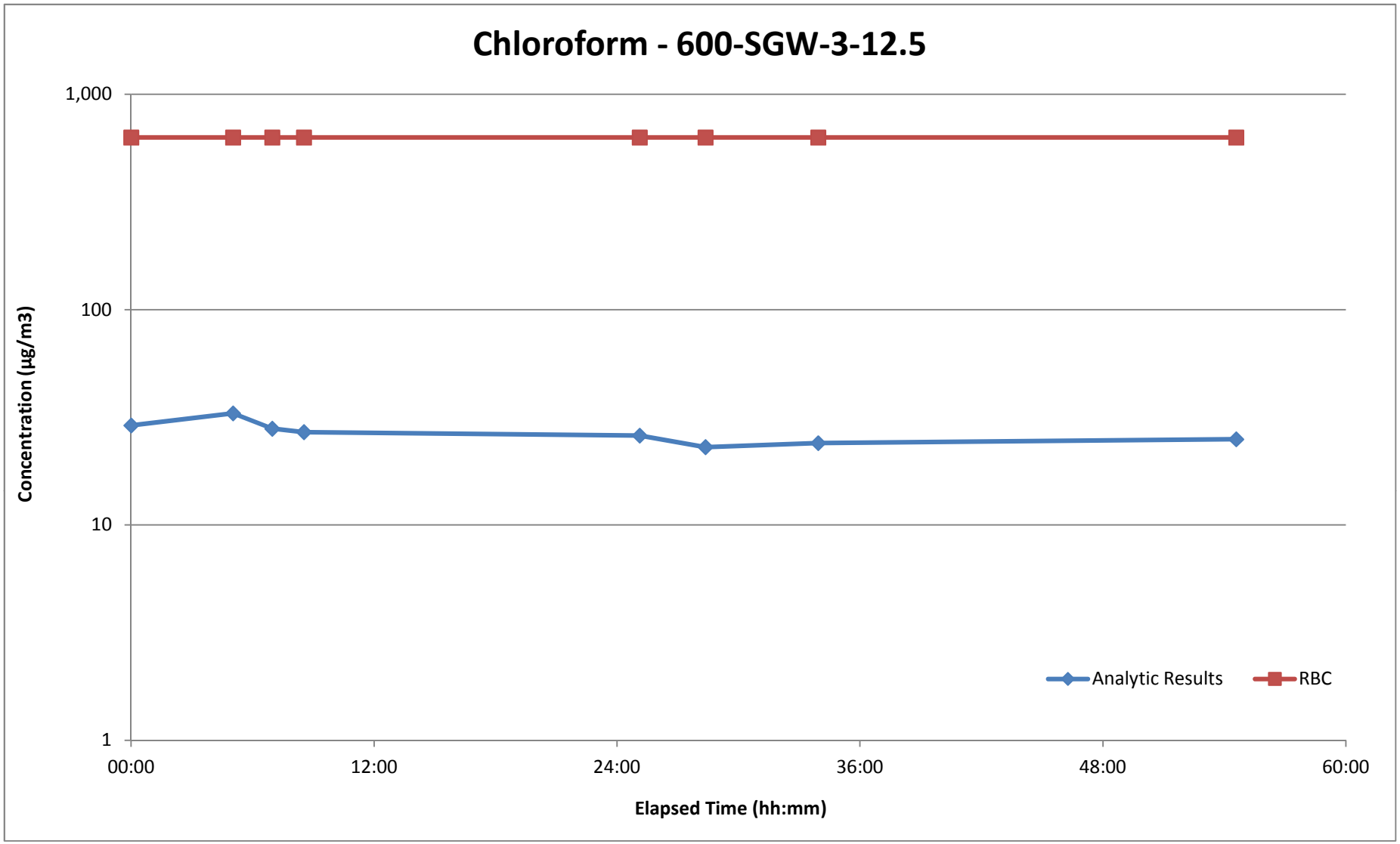
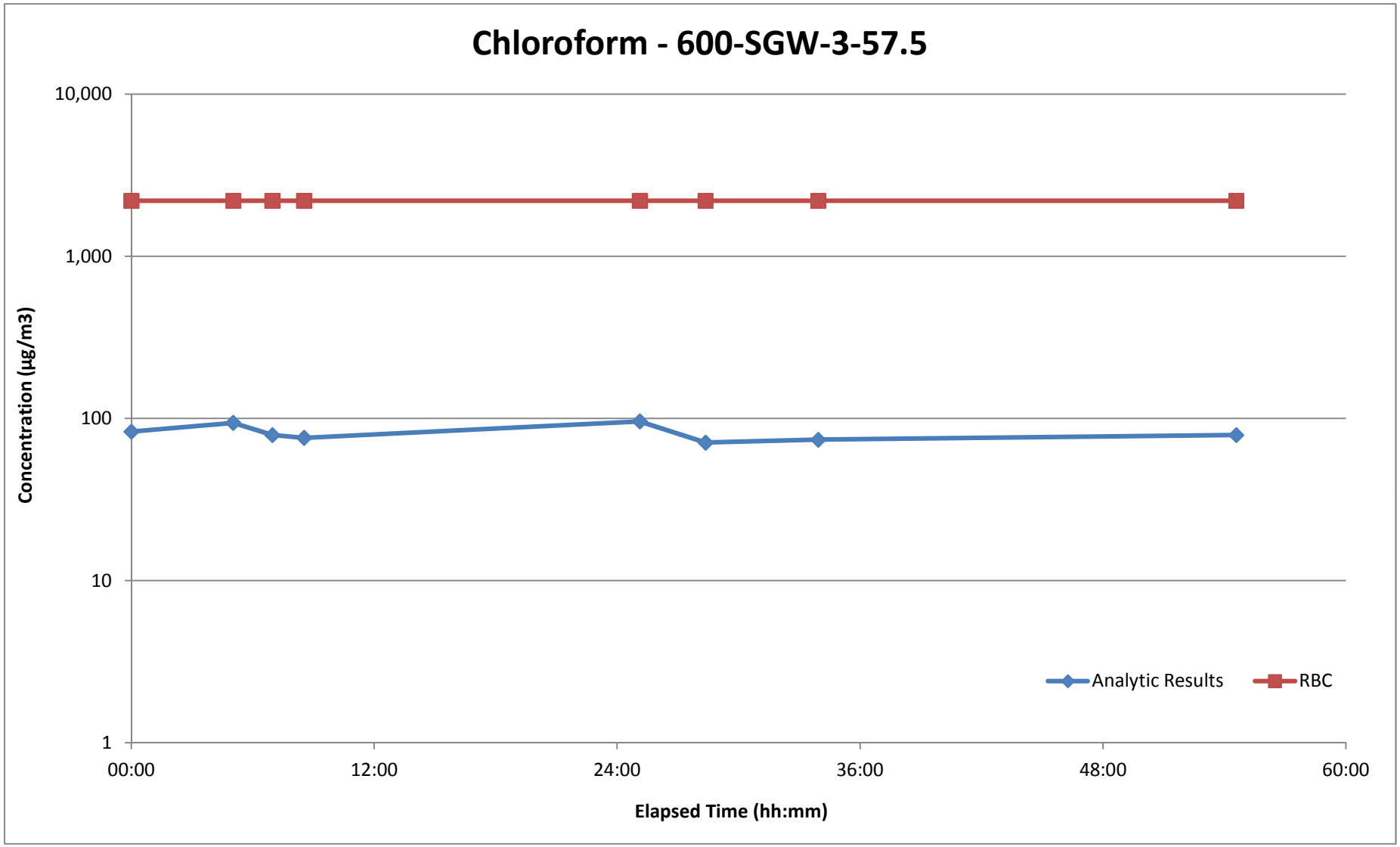
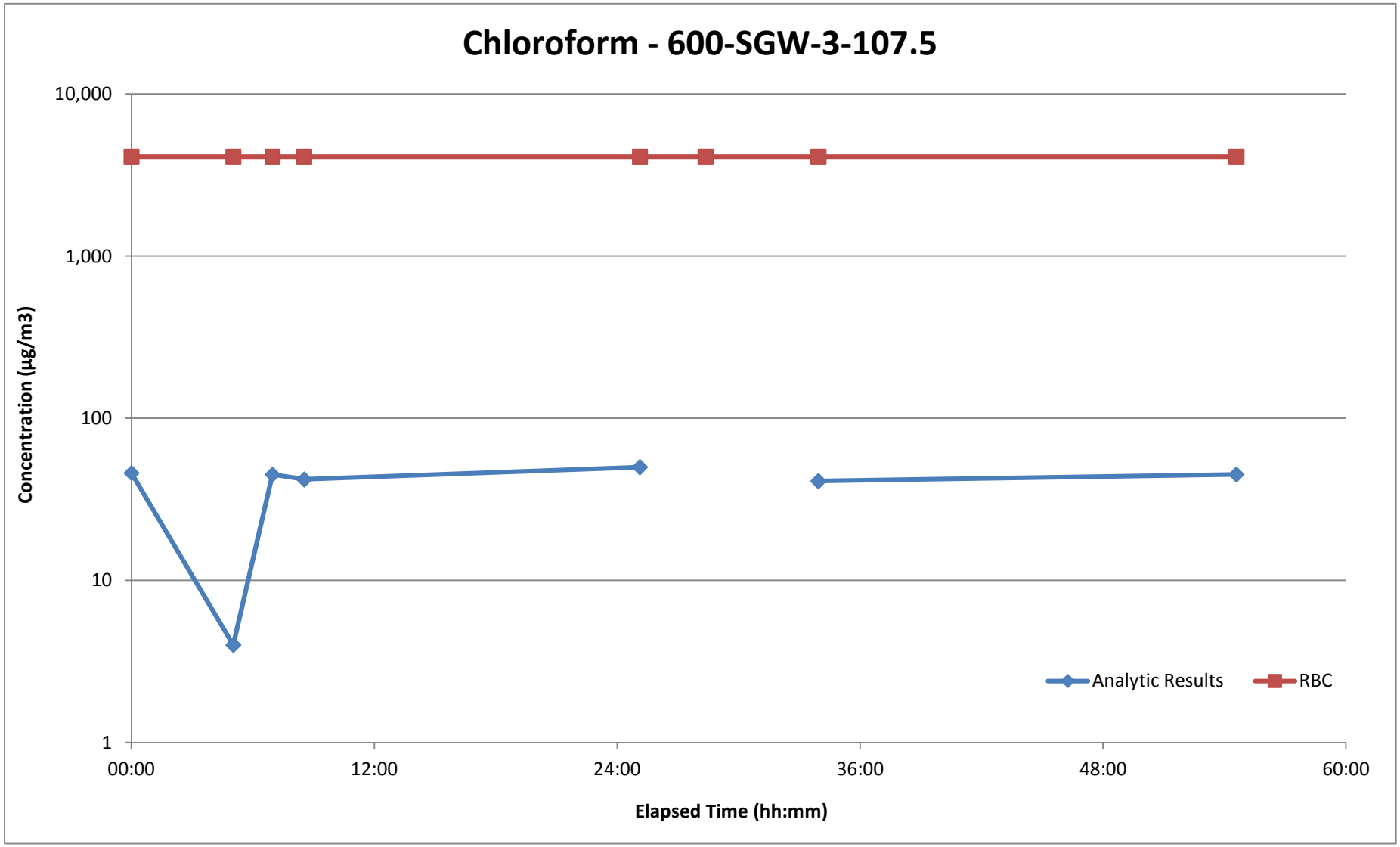
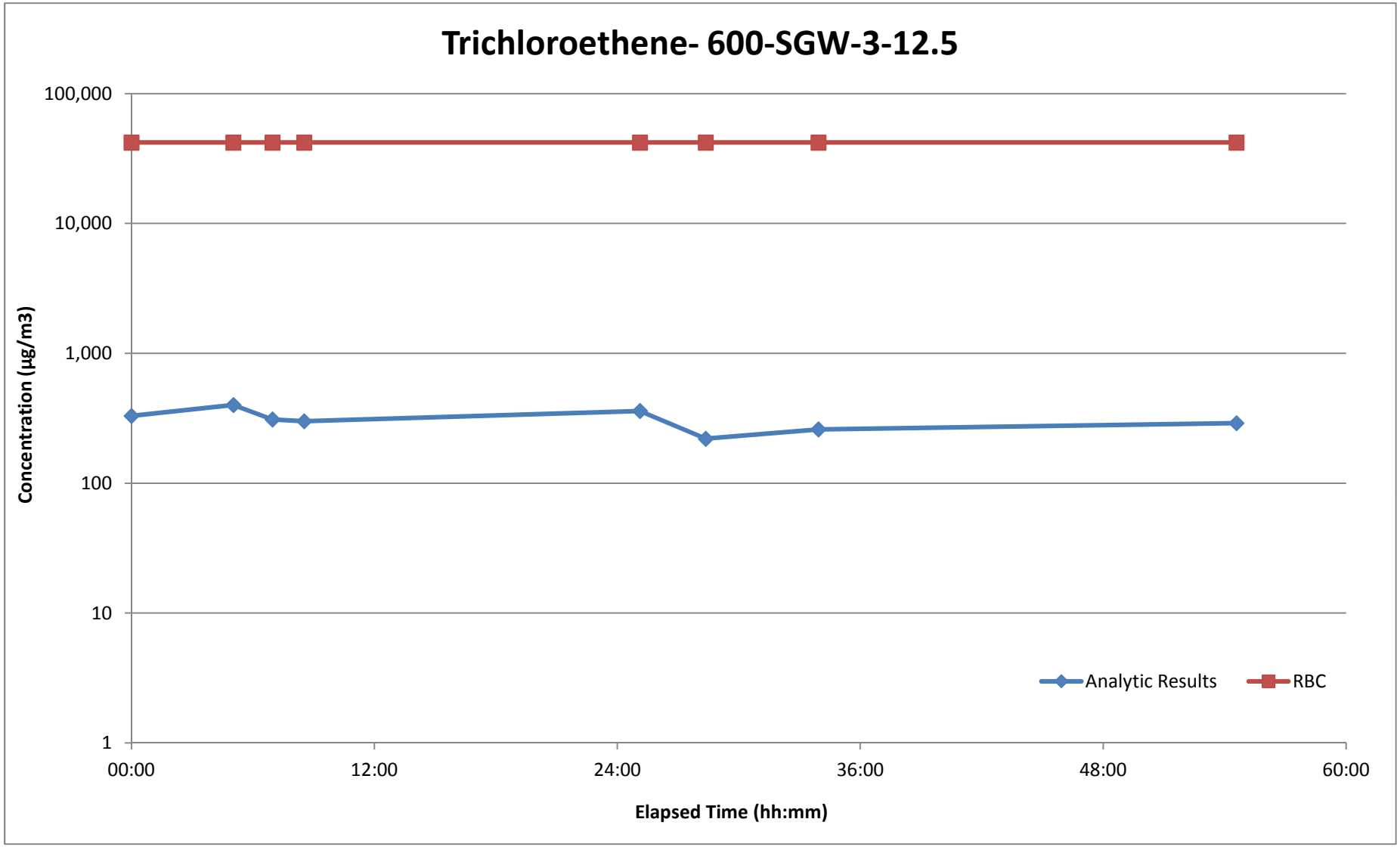
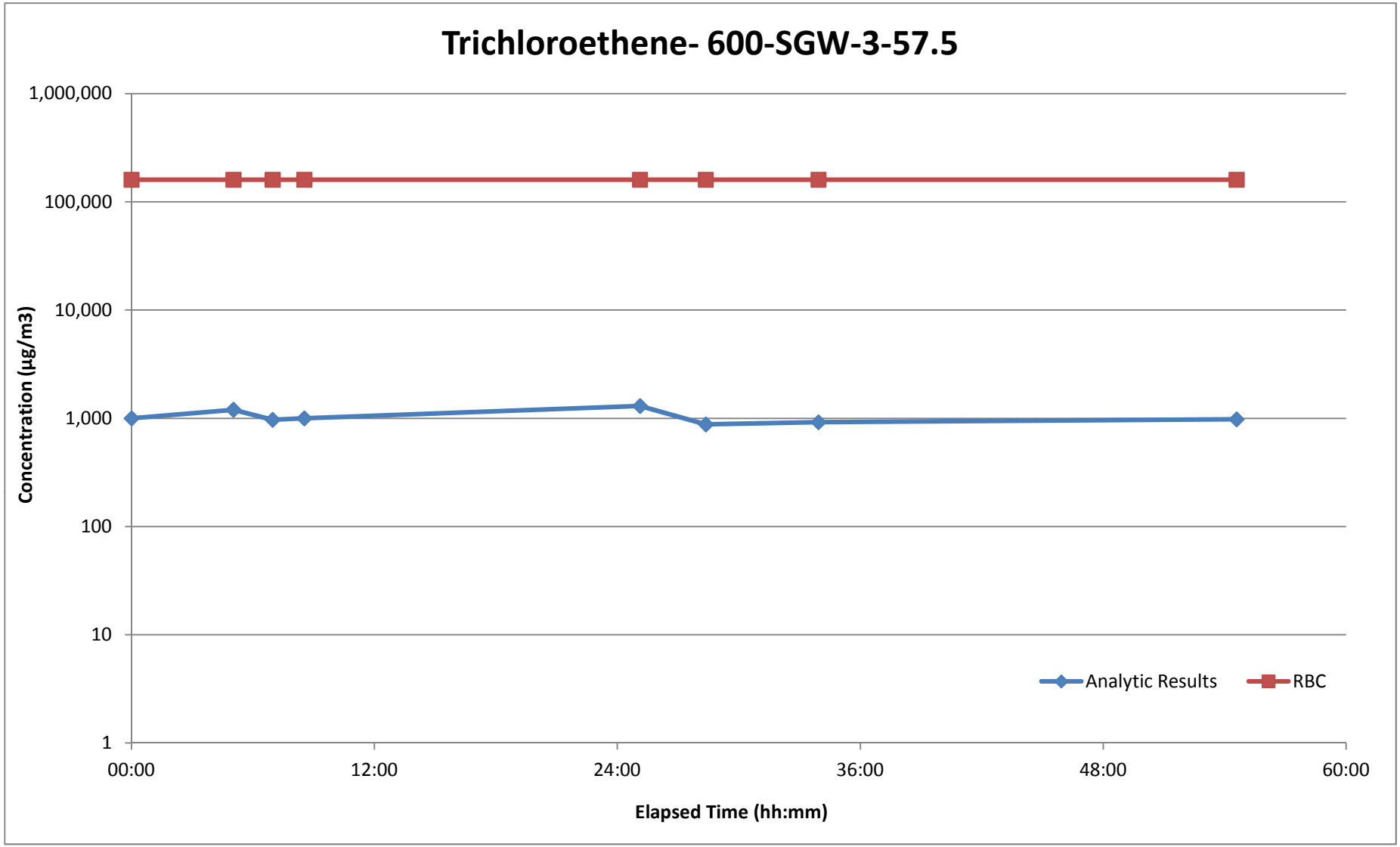
1,000,000,000
100,000,000
10,000,000
1,000,000
100,000
10,000
1,000
100
10
1
Concentration (µg/m3)
00:00
12:00
24:00
36:00
48:00
60:00
Elapsed Time (hh:mm)
Analytic Results
RBC

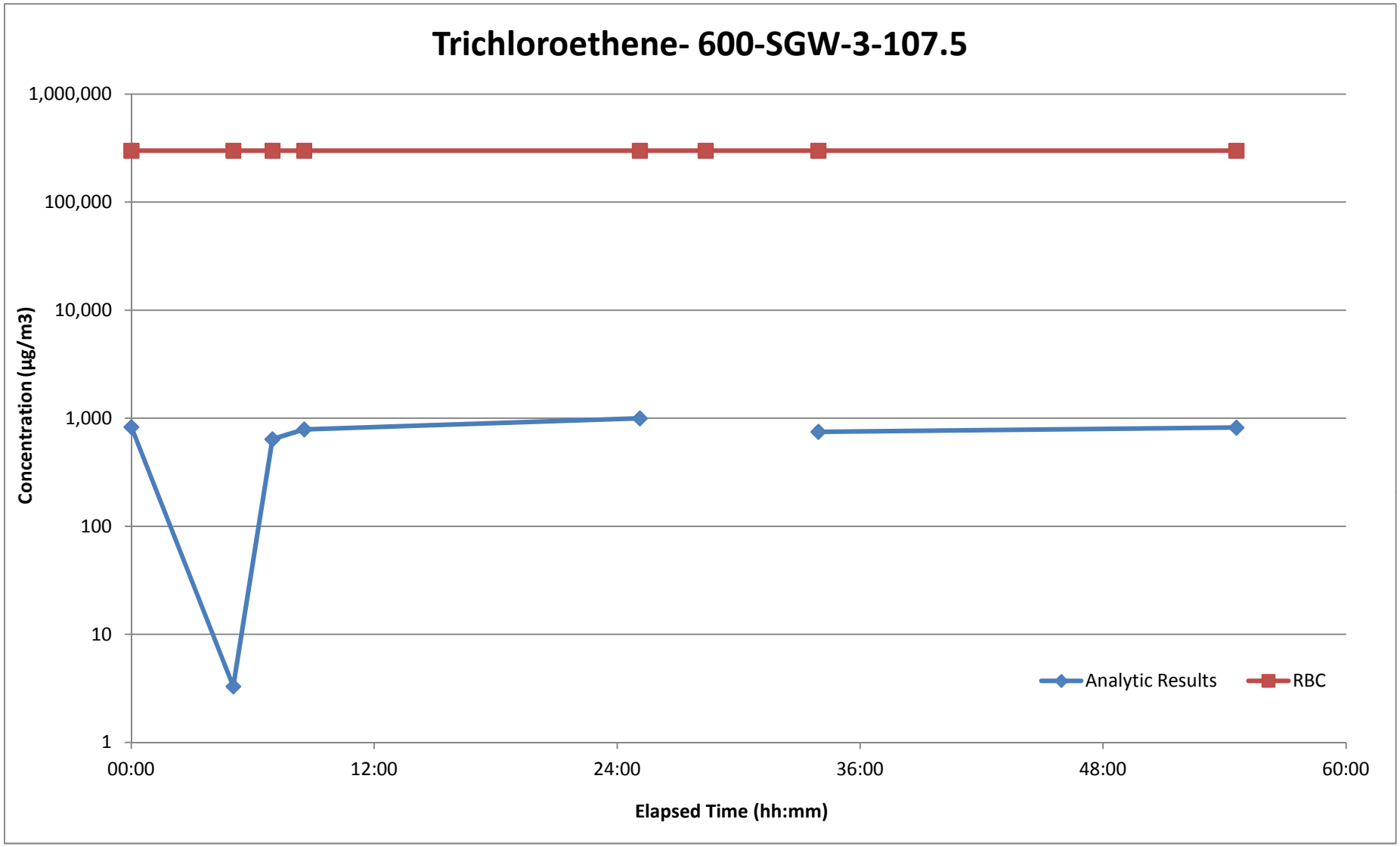

Chloroform - 600-SGW-3-12.5
1,000
100
10
1
Concentration (µg/m3)
00:00
12:00
24:00
36:00
48:00
60:00
Elapsed Time (hh:mm)
Analytic Results
RBC

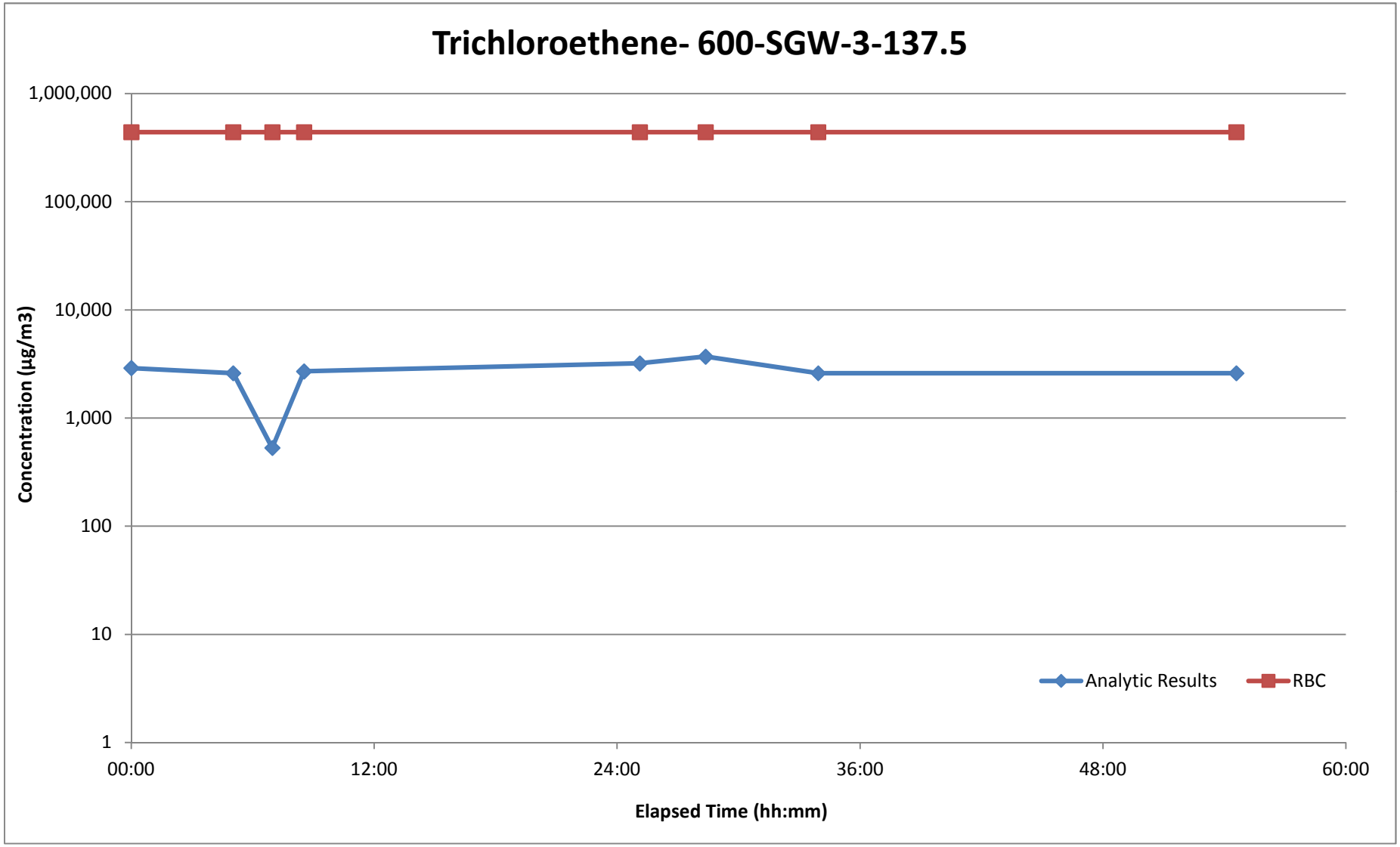

Chloroform - 600-SGW-3-57.5
10,000
1,000
100
10
1
Concentration (µg/m3)
00:00
12:00
24:00
36:00
48:00
60:00
Elapsed Time (hh:mm)
Analytic Results
RBC

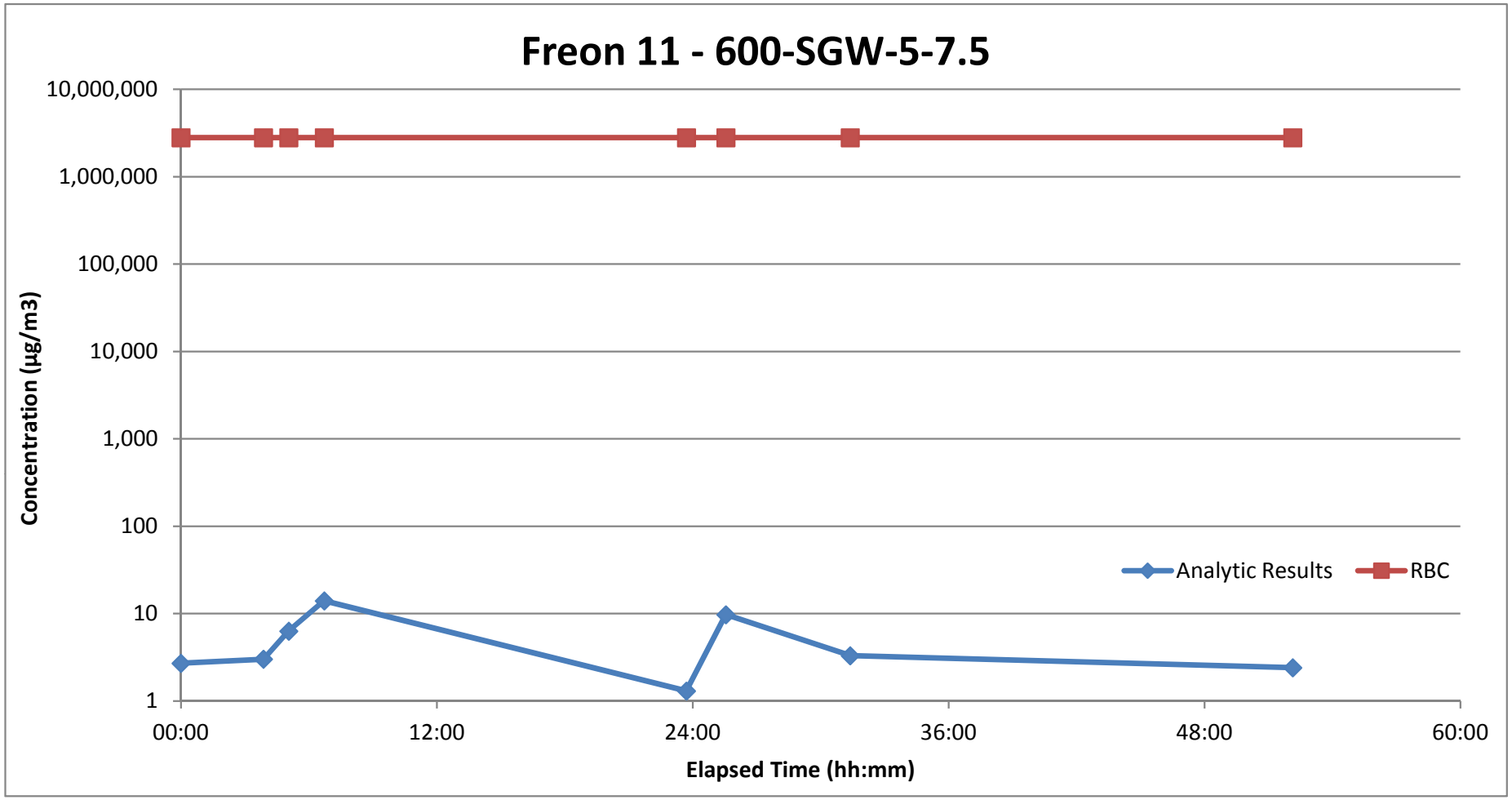

Chloroform - 600-SGW-3-107.5
10,000
1,000
100
10
1
Concentration (µg/m3)
00:00
12:00
24:00
36:00
48:00
60:00
Elapsed Time (hh:mm)
Analytic Results
RBC


Trichloroethene- 600-SGW-3-12.5
100,000
10,000
1,000
100
10
1
Concentration (µg/m3)
00:00
12:00
24:00
36:00
48:00
60:00
Elapsed Time (hh:mm)
Analytic Results
RBC


Trichloroethene- 600-SGW-3-57.5
1,000,000
100,000
10,000
1,000
100
10
1
Concentration (µg/m3)
00:00
12:00
24:00
36:00
48:00
60:00
Elapsed Time (hh:mm)
Analytic Results
RBC


Trichloroethene- 600-SGW-3-107.5
1,000,000
100,000
10,000
1,000
100
10
1
Concentration (µg/m3)
00:00
12:00
24:00
36:00
48:00
60:00
Elapsed Time (hh:mm)
Analytic Results
RBC


Trichloroethene- 600-SGW-3-137.5
1,000,000
100,000
10,000
1,000
100
10
1
Concentration (µg/m3)
00:00
12:00
24:00
36:00
48:00
60:00
Elapsed Time (hh:mm)
Analytic Results
RBC


Freon 11 - 600-SGW-5-7.5
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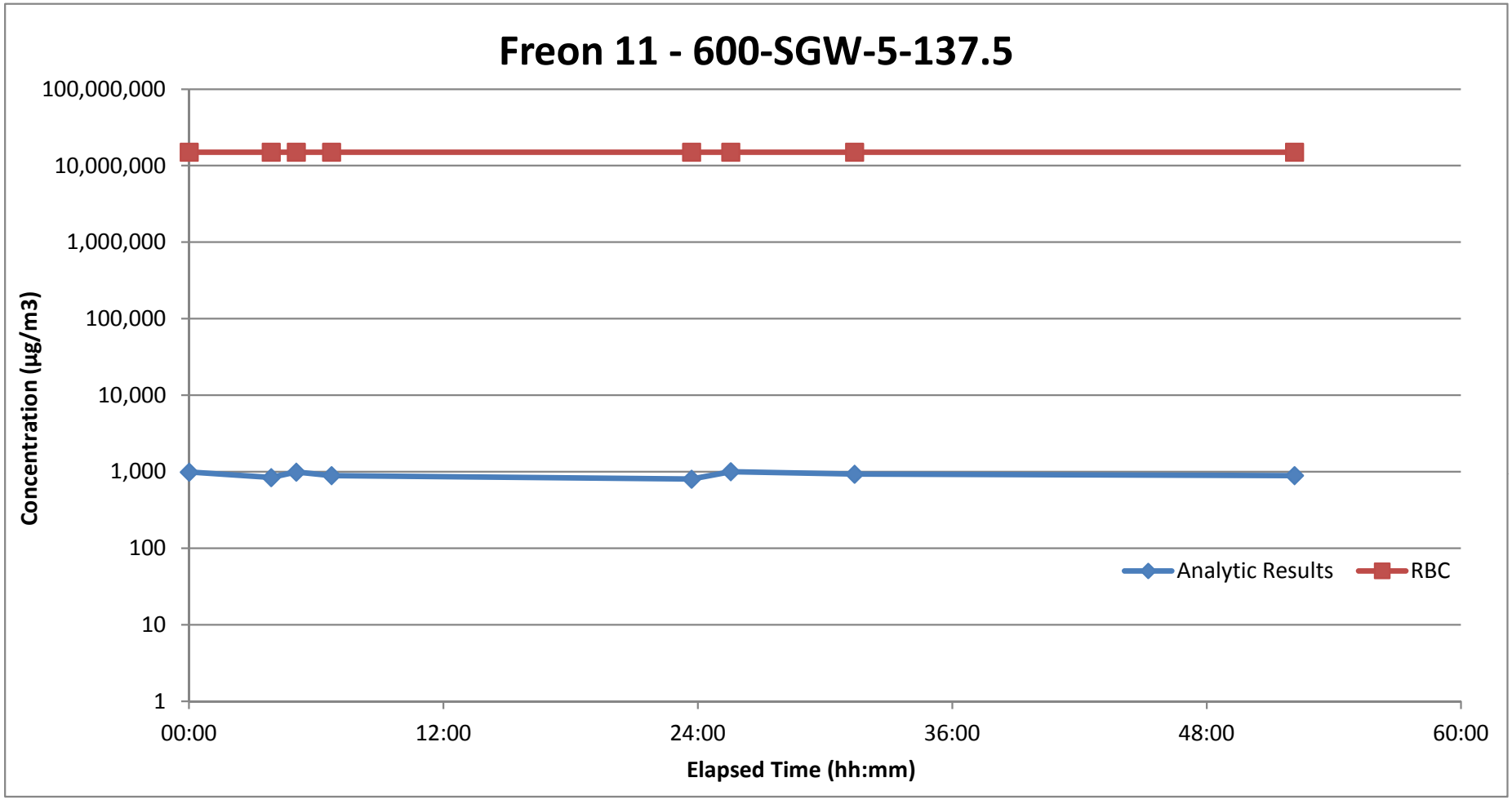
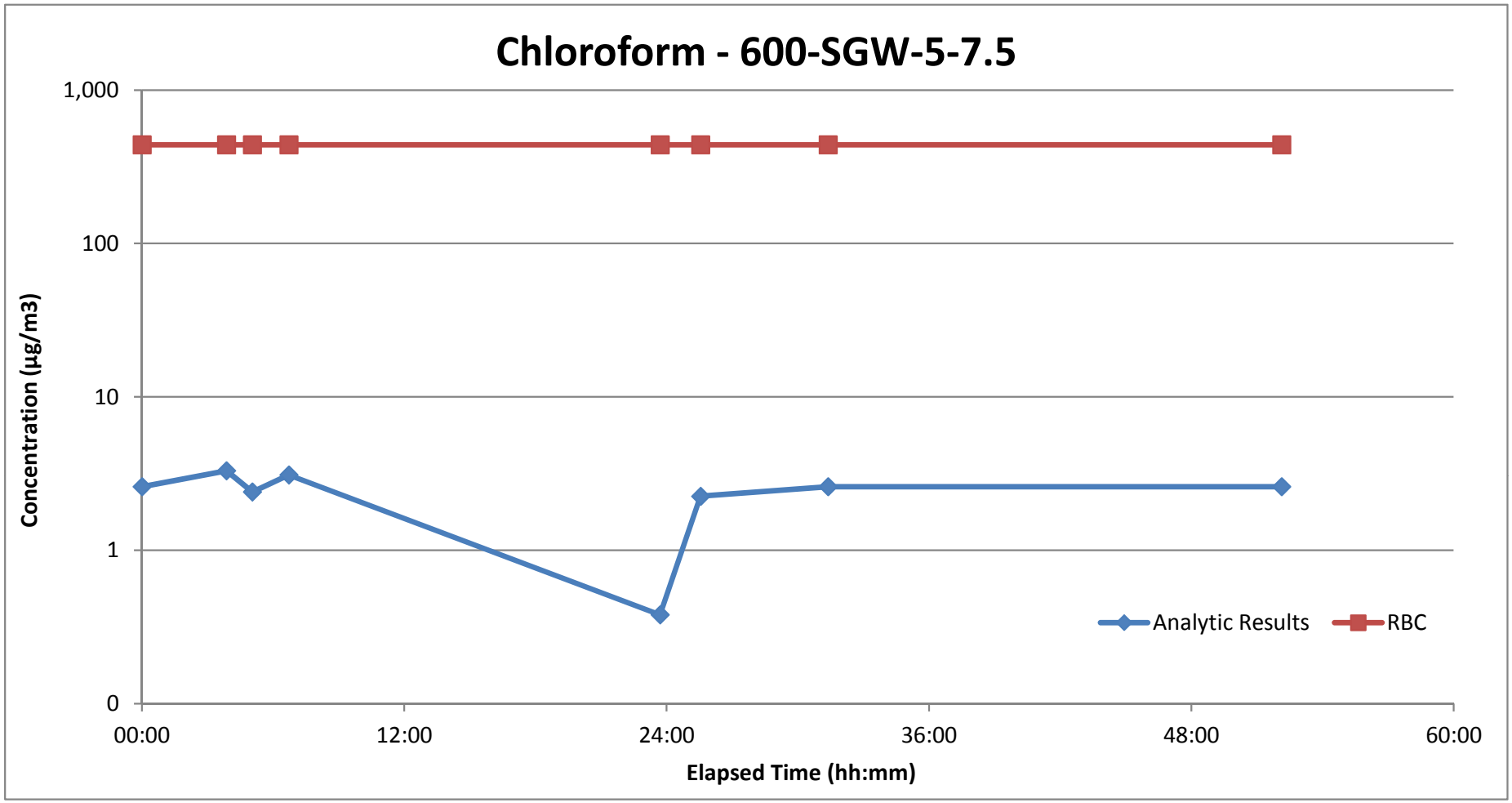
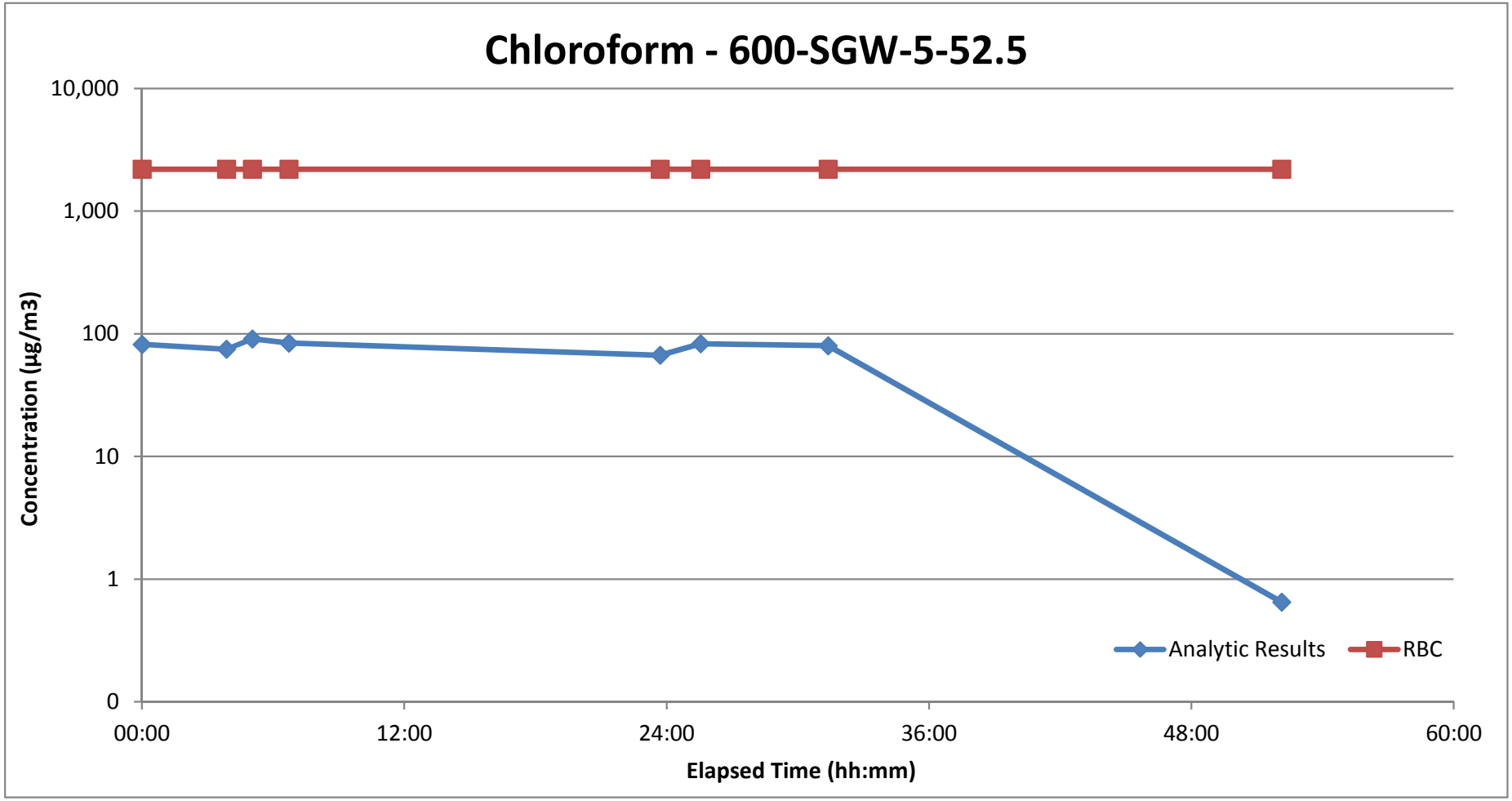
1,000,000
100,000
10,000
1,000
100
10
1
Concentration (µg/m3)
00:00
12:00
24:00
36:00
48:00
60:00
Elapsed Time (hh:mm)
Analytic Results
RBC


Freon 11 - 600-SGW-5-137.5
100,000,000
10,000,000
1,000,000
100,000
10,000
1,000
100
10
1
Concentration (µg/m3)
00:00
12:00
24:00
36:00
48:00
60:00
Elapsed Time (hh:mm)
Analytic Results
RBC


Chloroform - 600-SGW-5-7.5
1,000
100
10
1
0
Concentration (µg/m3)
00:00
12:00
24:00
36:00
48:00
60:00
Elapsed Time (hh:mm)
Analytic Results
RBC


Chloroform - 600-SGW-5-52.5
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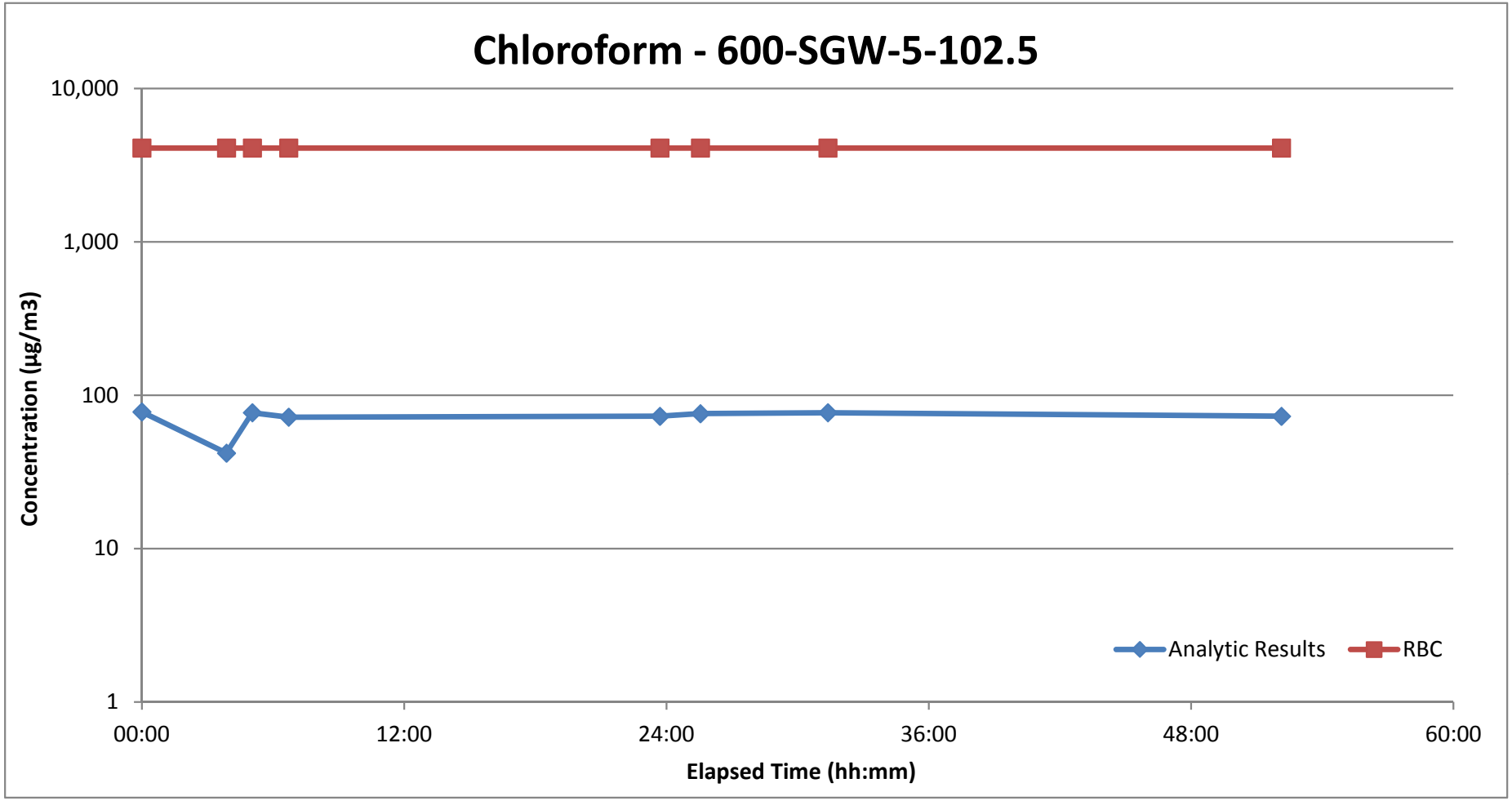
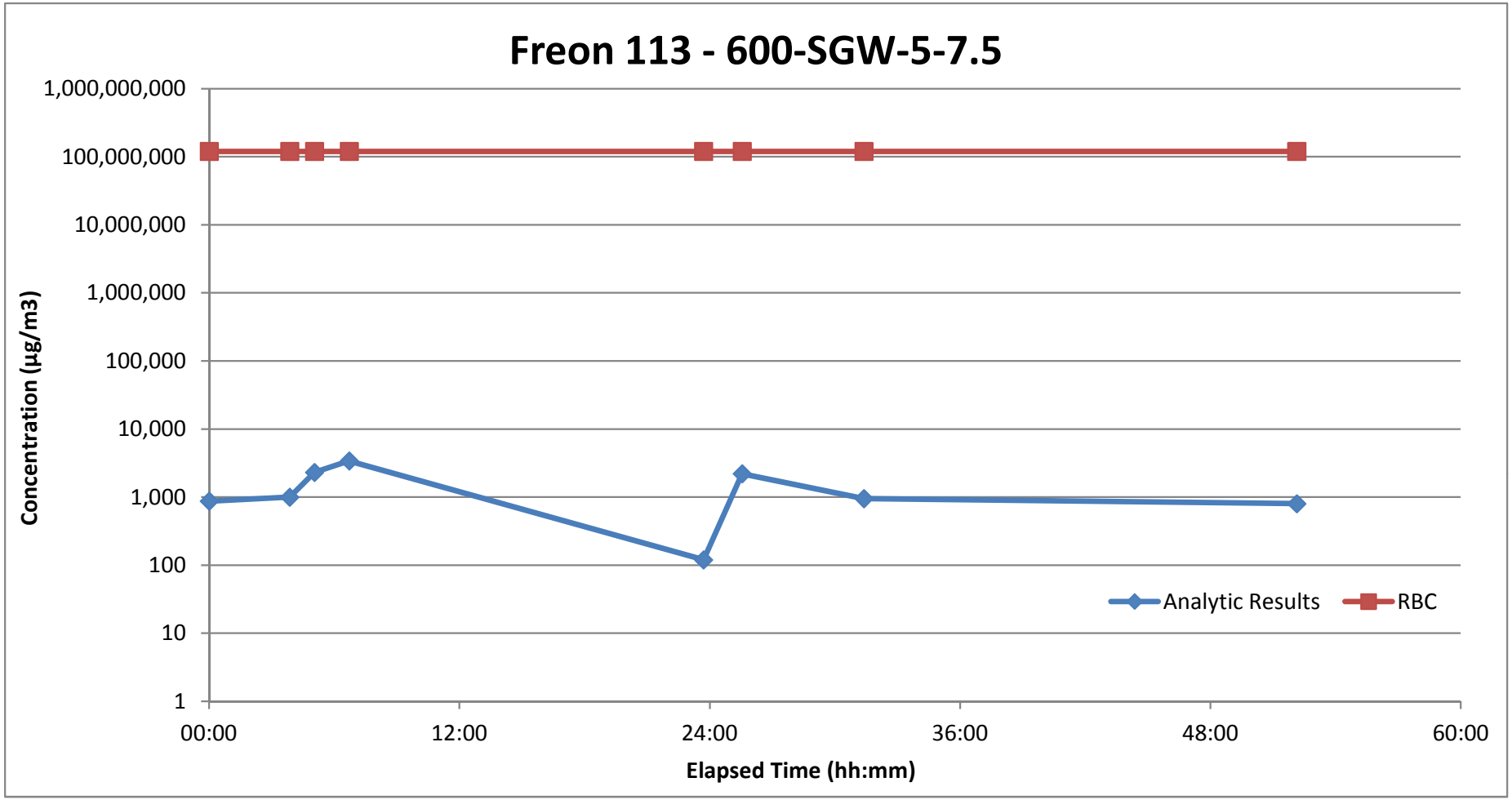
1,000
100
10
1
0
Concentration (µg/m3)
00:00
12:00
24:00
36:00
48:00
60:00
Elapsed Time (hh:mm)
Analytic Results
RBC


Chloroform - 600-SGW-5-102.5
10,000
1,000
100
10
1
Concentration (µg/m3)
00:00
12:00
24:00
36:00
48:00
60:00
Elapsed Time (hh:mm)
Analytic Results
RBC


Freon 113 - 600-SGW-5-7.5
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100,000,000
10,000,000
1,000,000
100,000
10,000
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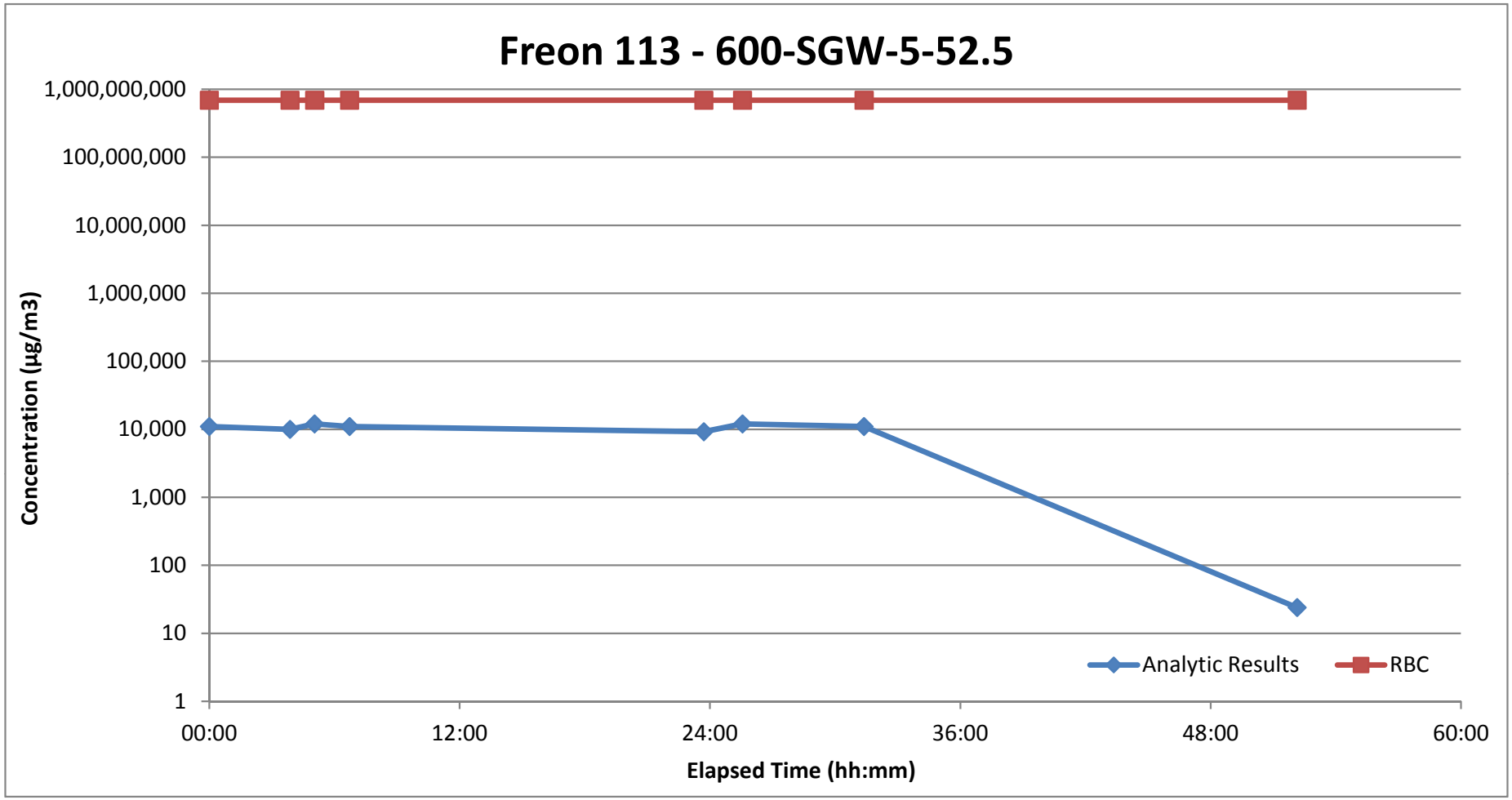
100
10
1
Concentration (µg/m3)
00:00
12:00
24:00
36:00
48:00
60:00
Elapsed Time (hh:mm)
Analytic Results
RBC


Freon 113 - 600-SGW-5-52.5
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100,000,000
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10,000
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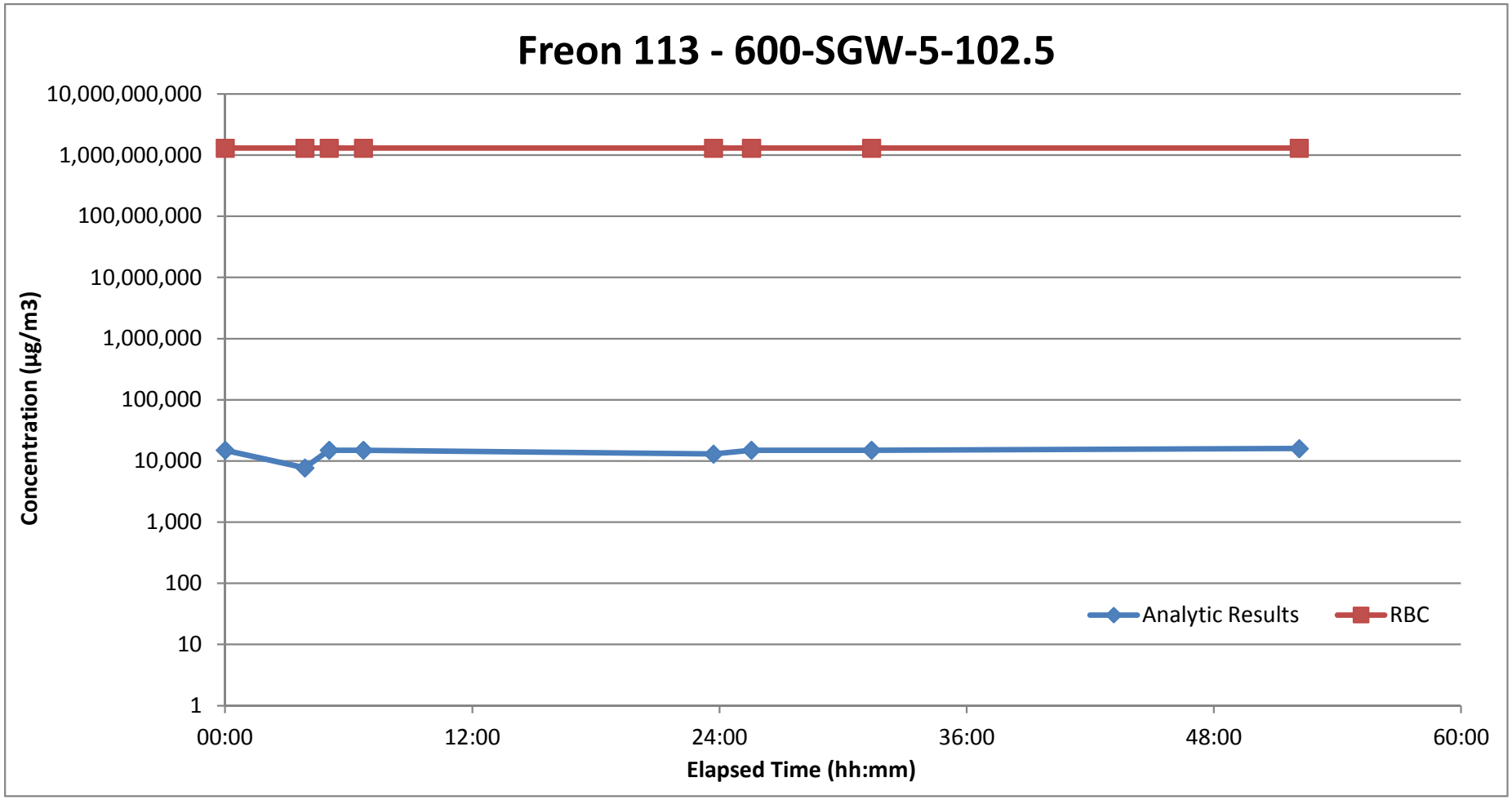
100
10
1
Concentration (µg/m3)
00:00
12:00
24:00
36:00
48:00
60:00
Elapsed Time (hh:mm)
Analytic Results
RBC


Freon 113 - 600-SGW-5-102.5
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100,000,000
10,000,000
1,000,000
100,000
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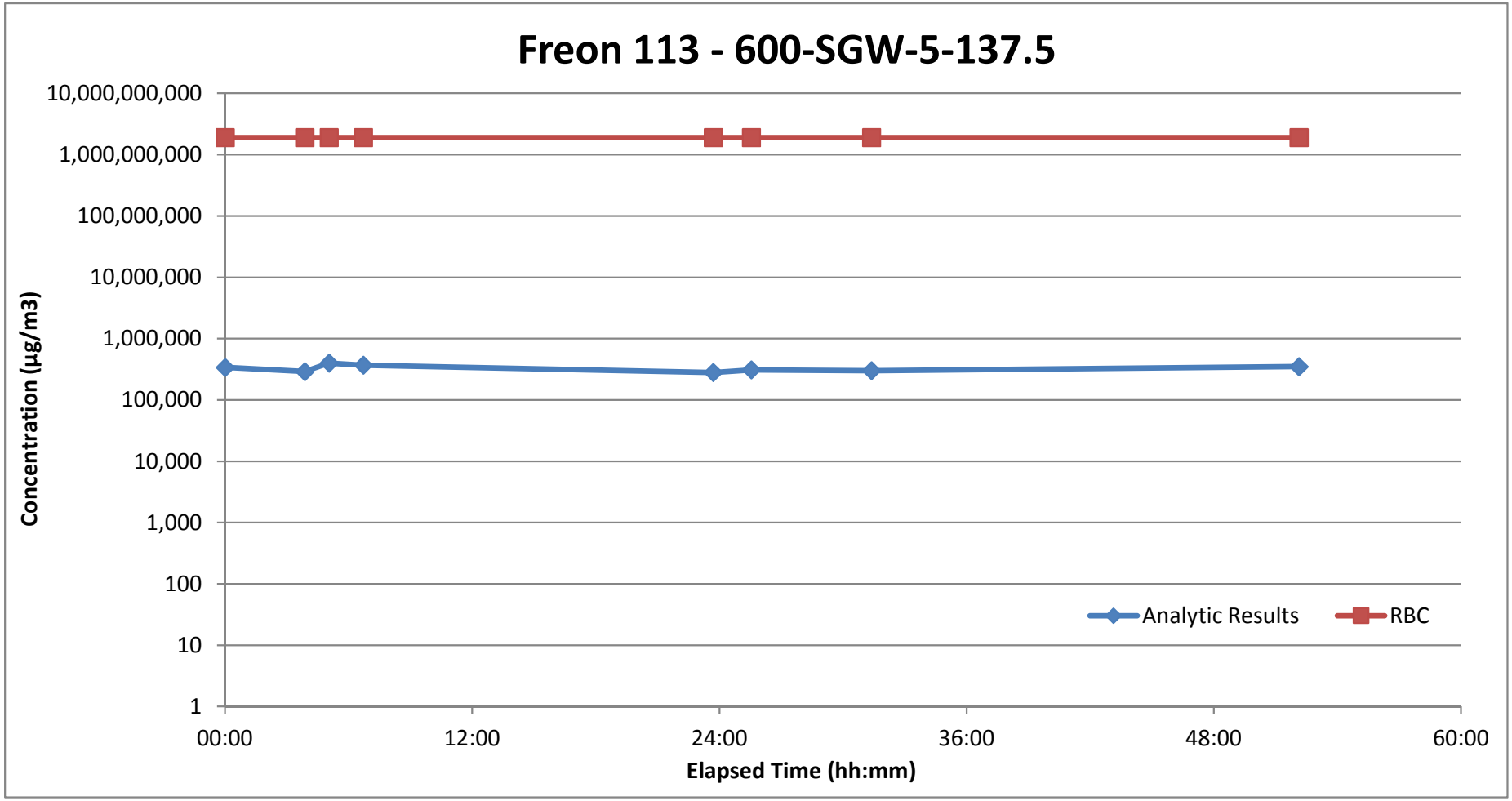
1,000
100
10
1
Concentration (µg/m3)
00:00
12:00
24:00
36:00
48:00
60:00
Elapsed Time (hh:mm)
Analytic Results
RBC


Freon 113 - 600-SGW-5-137.5
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1,000,000,000
100,000,000
10,000,000
1,000,000
100,000
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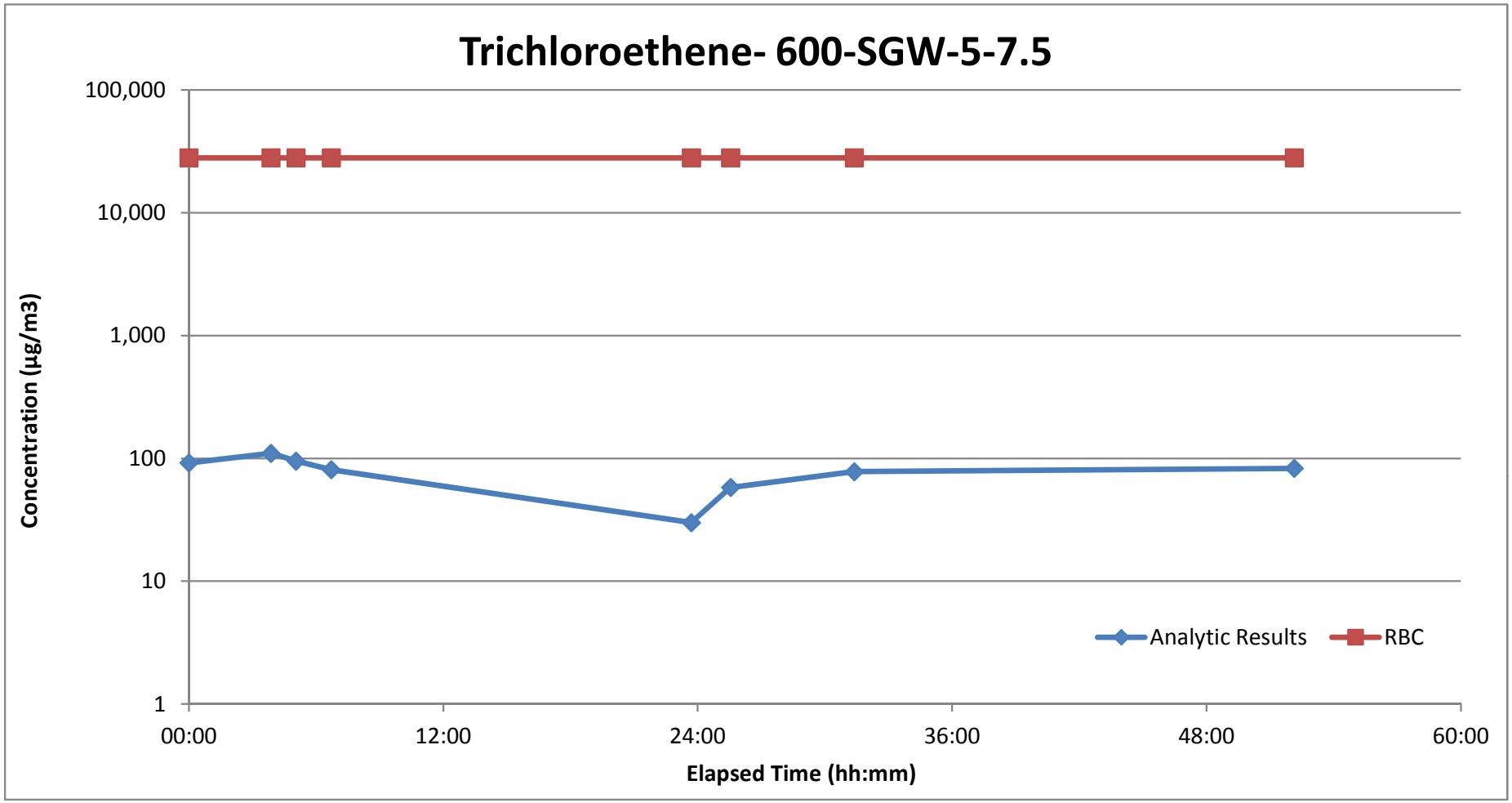
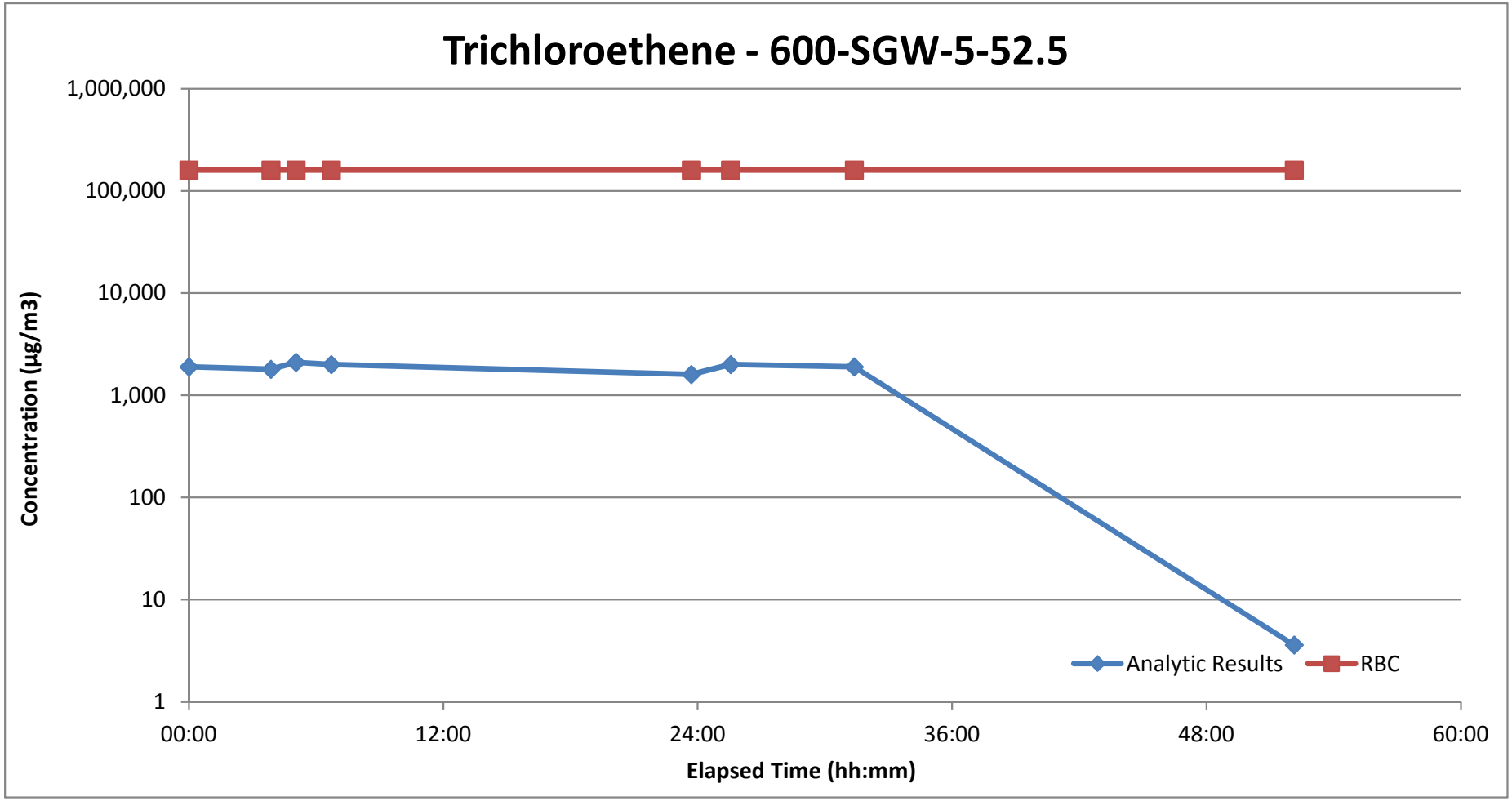
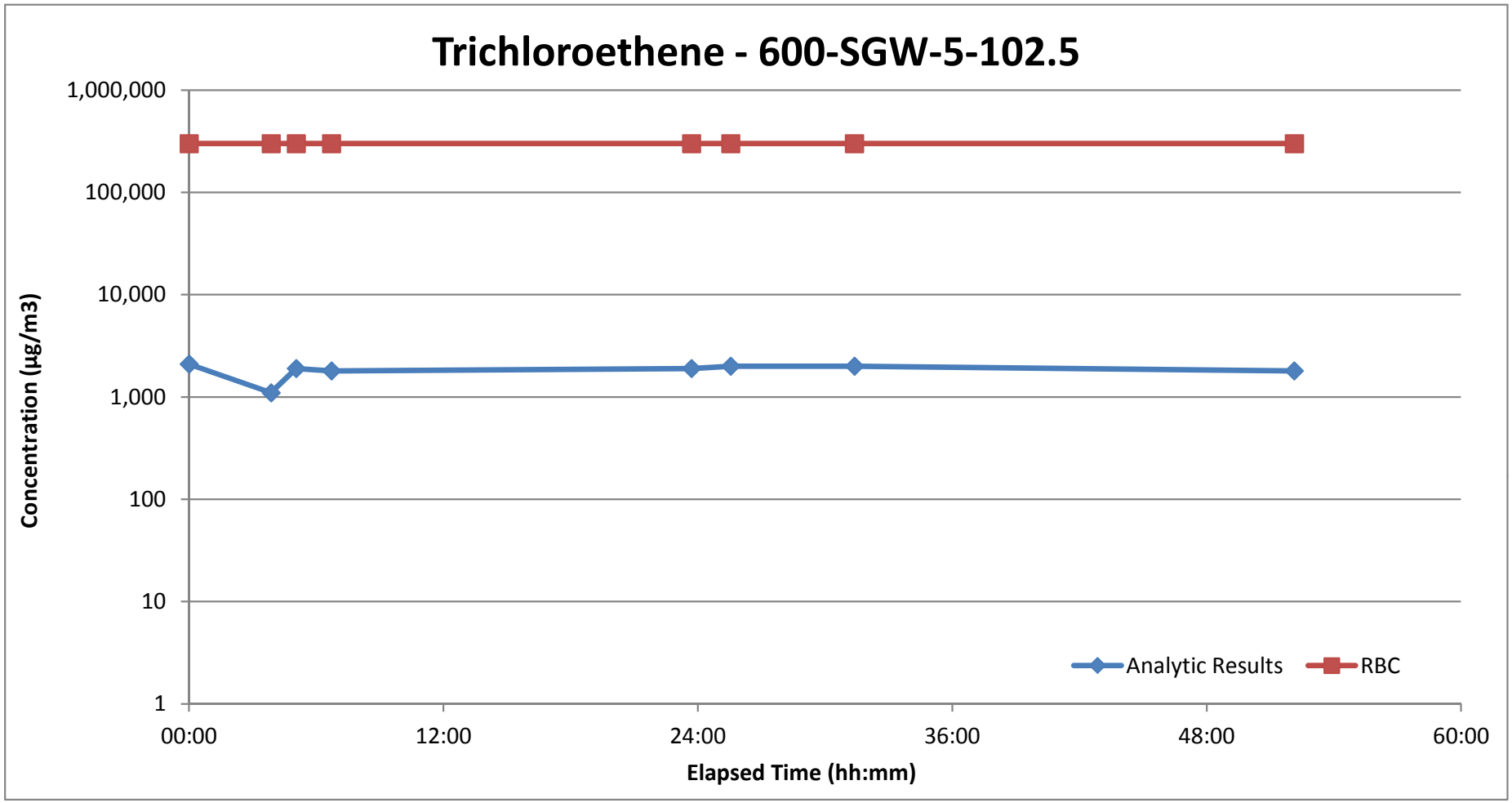
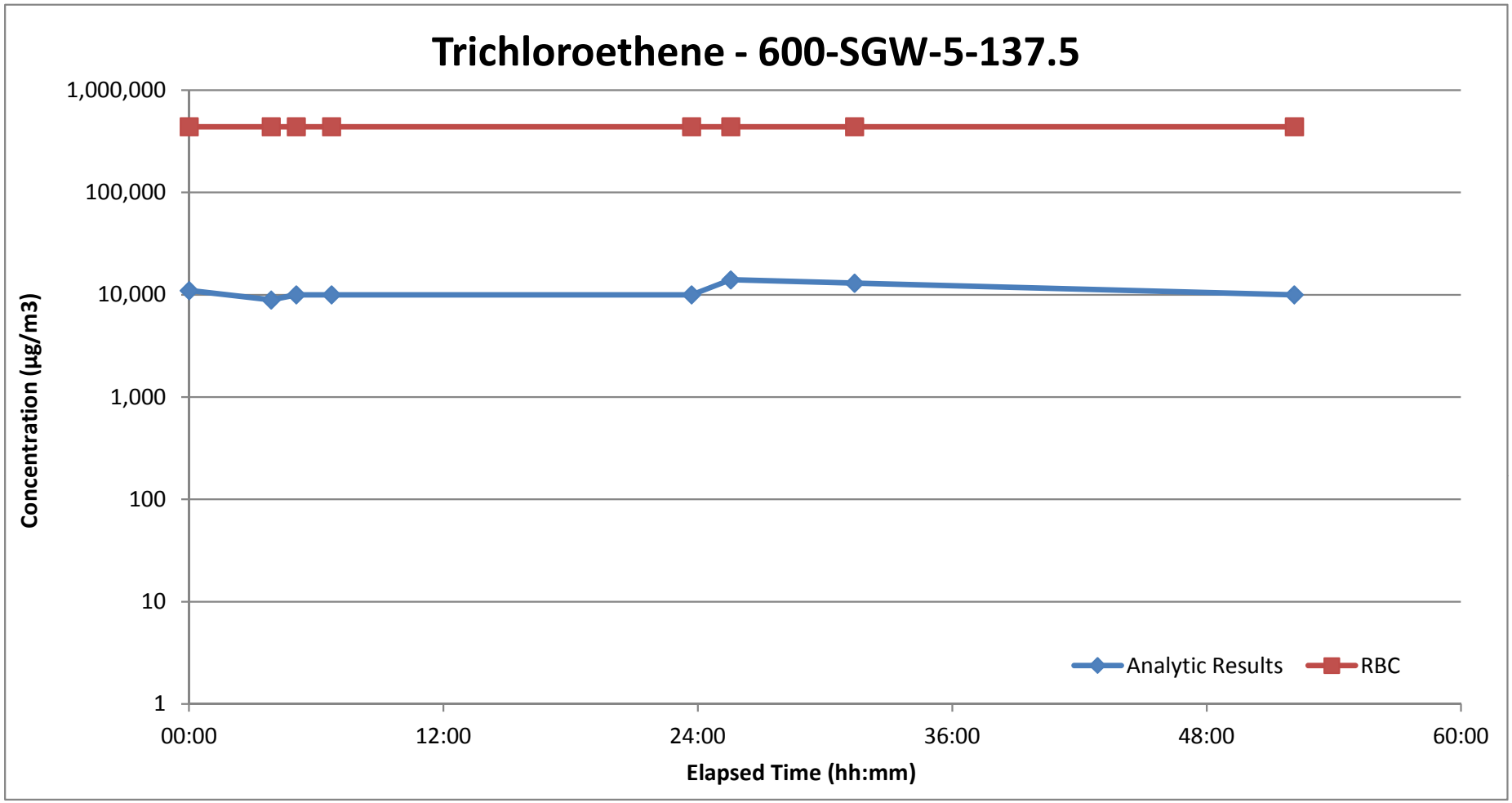
1,000
100
10
1
Concentration (µg/m3)
00:00
12:00
24:00
36:00
48:00
60:00
Elapsed Time (hh:mm)
Analytic Results
RBC


Trichloroethene- 600-SGW-5-7.5
100,000
10,000
1,000
100
10
1
Concentration (µg/m3)
00:00
12:00
24:00
36:00
48:00
60:00
Elapsed Time (hh:mm)
Analytic Results
RBC


Trichloroethene - 600-SGW-5-52.5
1,000,000
100,000
10,000
1,000
100
10
1
Concentration (µg/m3)
00:00
12:00
24:00
36:00
48:00
60:00
Elapsed Time (hh:mm)
Analytic Results
RBC


Trichloroethene - 600-SGW-5-102.5
1,000,000
100,000
10,000
1,000
100
10
1
Concentration (µg/m3)
00:00
12:00
24:00
36:00
48:00
60:00
Elapsed Time (hh:mm)
Analytic Results
RBC


Trichloroethene - 600-SGW-5-137.5
1,000,000
100,000
10,000
1,000
100
10
1
Concentration (µg/m3)
00:00
12:00
24:00
36:00
48:00
60:00
Elapsed Time (hh:mm)
Analytic Results
RBC