

# **FORMER QUICK AND CLEAN CLEANERS**

**Site # 130198**

**FINAL**

## **REMEDIAL INVESTIGATION REPORT (RIR)**

**PREPARED FOR:**

**380 ROCKAWAY TURNPIKE REALTY CORPORATION  
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**Attachment-C** (classified - submitted under separate cover)

**Attachment-D** (classified - submitted under separate cover)

**Attachment-E** (classified - submitted under separate cover)

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### DER-10 Certification

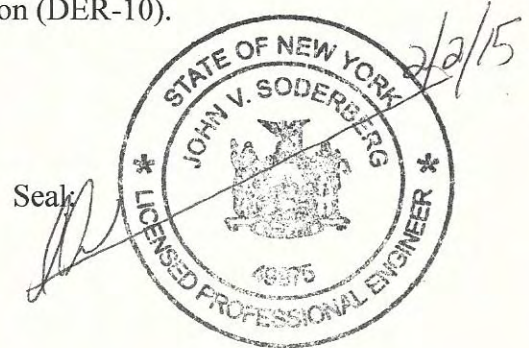
I, John V. Soderberg, certify that I am currently a NYS registered professional engineer [as defined in 6 NYCRR Part 375] , and that this Remedial Investigation Report (RIR) was prepared in accordance with all applicable statutes and regulations and is in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10).

John V. Soderberg P.E

Signature: \_\_\_\_\_

License number: 049975

Date: February 2<sup>nd</sup>, 2015





## **1.0 Introduction**

The following document is a Remedial Investigation Report (RIR) prepared by John V. Soderberg P.E (JVS) on behalf of 380 Rockaway Turnpike Corporation located at 380 Rockaway Turnpike, Cedarhurst, Nassau County, New York.

The Site is the location of the former Quick and Clean Cleaners, an on-site dry-cleaning service which operated on the premises from at least 1980 to 1991. Investigations performed by the Nassau County Department of Health (NCDOH) in 1980 and 1991 found that tetrachloroethene (PCE) had been released at the Site in discharge water and/or condensate (vapors).

The Site was assigned a "P" (potential) listing on the Inactive Hazardous Waste Site Registry by the New York Department of Environmental Conservation (NYSDEC) in 2009. The NYSDEC conducted a site characterization in July-August 2001 (SCR 8/10) and upgraded the registry listing to a Class 2 site in August 2011.

This RIR discusses the off-site groundwater investigation conducted in order to supplement the data characterized by the NYSDEC on December 8, 2009 through March 25, 2010 in order to fully define the nature and extent of the plume. The data derived from the Remedial Investigation Work Plan (RIWP) will also be used to enhance/complete the Conceptual Site Model (CSM) partially initiated by Environmental Assessment and Remediation (EAR) (NYSDEC contractor).

### **1.1 Site Location and Description**

The address for the subject property is 380 Rockaway Turnpike, Cedarhurst, NY. The subject property is designated as Section 39, Block 344, Lots 216 and 220 by the Nassau County Department of Assessment. The subject property is located within the Incorporated Village of Cedarhurst, Town of Hempstead, Nassau County, NY as shown in Figure-1. The lot has 123 feet of frontage on Rockaway Turnpike and is approximately 100 feet deep for a combined area of 0.318 acres (13,853 ft<sup>2</sup>). Figure-2.

The subject site is developed with a 3,984ft<sup>2</sup> 1-story masonry building, built in 1962 for commercial (retail) use. The site was recently renovated in order to occupy a walk-in medical facility. No structural renovations were made to the buildings foundation or frame work.

The elevation of the property ranges from approximately 10 to 13 feet above National Geodetic Vertical Datum (NGVD). The topography in the vicinity of the site generally slopes from southeast to northwest. The depth to groundwater beneath the site, as determined from field measurements, is approximately 4.5 to 5.0 feet below grade surface (bgs). Groundwater flow has been determined to be northwest based on the field survey conducted and the previously conducted investigation data indicating a northwesterly groundwater flow due to the nature of the findings northwest of the Site and/or source area.

The area surrounding the Site consists of retail “strip stores” and service stations along the east side of Rockaway Turnpike with single-family residential homes located adjacent to the east. Adjacent properties to the north include a former Cumberland Farms Service Station (CFSS) and an active Shell station. Adjacent properties to the south include a Sunoco, Getty and Gulf service stations. In total the subject property is flanked north and south by four (4) active and one (1) former service station. The west side of Rockaway Turnpike is characterized by larger shopping centers with industrial buildings/warehouses, major oil storage facilities (MOSF) and the Town of Hempstead incinerator plant adjacent to the west.

## 1.2 Site History

The environmental history of the subject lots was summarized in the SCR dated August 2010 as prepared by Environmental Assessment and Remediation (EAR) under contract to the NYSDEC. This summary consisted of a chronology of events based solely on NCDOH files. According to the SCR the NCDOH identified approximate PCE concentrations of 67,000 ppb in a sample of “industrial wastewater discharge” at the Site on 3/26/80. In 1991 NCDOH reported PCE concentrations of 1.3 million ug/kg in shallow soil (<2 ft) adjacent to a vapor discharge pipe in the rear of the building. This soil was successfully removed in 1992 by the operator under NCDOH oversight and the case was closed by NCDOH on 3/30/92. In 2009 the NYSDEC classified the site with a “P” designation for potential listing on the Inactive Hazardous Waste Site Registry.

## 1.3 Summary of Site Characterization Report

The field investigation portion of the SCR was conducted at the site from December 8, 2009 through March 25, 2010 and consisted of the collection and analysis of 7 soil samples from 7 boring locations, 28 groundwater samples from 10 on-site locations, 39 groundwater samples from 9 off-site locations and 6 soil gas samples from 4 on-site and 2 off-site locations. All soil and groundwater samples were collected with GeoProbe®-type direct push equipment and tooling.

According to logs contained in the SCR, soil samples were collected for the first 8 feet through a 4 ft macro-core sampler using the single-tube method and then using a 4 ft large bore sampler for the remainder of the boring to a maximum of 20 ft. On-site groundwater sampling performed in December 2009 were collected through a 2 ft mill slotted rod which was driven to multiple depths ranging from 10 to 70 feet with samples collected in 10 foot intervals. Off-site samples collected in March 2010 utilized a 2 ft wire wrap discrete sampler. Purge volumes varied considerably ranging from 0 to 0.5 gallons per sample for the mill slot sampler to 0.10 to 3 gallons for the wire wrap sampler.

The results of this investigation did not identify any chlorinated compounds above unrestricted soil clean up objectives (SCOs) in any of the soil samples collected. However, petroleum VOCs including ethylbenzene, toluene and xylene were reported in 5 of 7 soil samples at concentrations significantly above unrestricted and groundwater protection SCOs. Total petroleum VOCs in soil ranged from 2,550 ug/kg at location EP7 (12-14 ft) to 107,000 ug/kg at EP5 (12-14 ft). EP5 is located near the south property line adjacent to the Sunoco service station.

On-site groundwater samples reported elevated concentrations of both chlorinated VOCs (CVOCs) and petroleum VOCs (PVOCs) at every sampling location. With the exception of EP7 the highest concentrations of both CVOCs and PVOCs were reported in the shallowest samples. EP7 reported the highest detections of both CVOCs and PVOCs in the 70-72 ft interval and had the highest PVOC concentrations reported with a total of 185,426 ug/L.

CVOC detections in the shallow intervals ranged from low concentrations (<20 ug/L) at EP5 (20-22 ft) to 14,830 ug/L at EP9 (10-12 ft). In addition to EP9, the highest CVOC concentrations were reported at locations MW7, EP8 (10-12 ft) and EP3 (10-12 ft). On-site CVOC totals were comprised almost entirely of cis-dichloroethene (c-DCE) and vinyl chloride (VC). The highest tetrachloroethene (PCE) and trichloroethene (TCE) concentrations were reported as 595 and 217 ug/L, respectively, in EP8 (20-22 ft). On-site CVOC concentrations were generally highest at the rear (east) and north side of the building.

PVOC concentrations in shallow samples ranged from 2,907 ug/L at location EP1 (20-22 ft) to 30,821 ug/L at EP3 (10-12 ft). In almost all cases PVOC concentrations were considerably higher than the CVOC concentrations. The anomalously high CVOC and PVOC concentrations reported at EP7 (70-72 ft) were not explained in the SCR and are likely attributed to deficiencies in the method of sampling.

Off-site CVOC concentrations were highest in samples from the 30-32 ft interval and ranged from 51 ug/L at location EP10 (west of the subject site) to 21,149 ug/L at location EP15. Off-site CVOC concentrations were comprised for the most part of PCE with only small amounts of TCE and the other parameters. Off-site PVOC detections were generally low and ranged from non-detect to 162 ug/L with the highest detections reported in the 50-52 interval. CVOC detections in soil gas ranged from 11 ug/m<sup>3</sup> to 5,717 ug/m<sup>3</sup> with the highest concentrations occurring in SP2 and SP5 located at the north property line. The main constituent in the soil gas at these locations was cis-DCE.

#### 1.4 Site Geology / Hydrogeology

According to boring logs included in the SCR, subsurface materials at the site consist of medium to coarse sand and gravel for the upper 10 feet followed by fine to medium sand to 18 feet below grade. A 1 to 2 ft layer of silt and clay was reported at some locations. Soils deeper than 20 feet were not characterized though silt and clay zones were suspected at 34 feet to 52 feet based on limited groundwater recharge and clogging of the groundwater sampling tools with silt and clay. The boring log from location EP7 shows that this condition continued to a final depth of 72 feet.

The depth to groundwater was not measured at the site during the site characterization though it is reported in the drill logs at a depth of 11 feet below the surface. However, this is inconsistent with water level measurements made in monitoring wells at the adjacent property to the north that report the depth to water ranging from 3.61 to 4.89 feet. The groundwater flow direction has been confirmed to be in a northwesterly direction as per the field survey conducted at the site.

### 1.5 Conceptual Site Model (CSM)

The source of the on-site CVOC contamination has been identified as a former shallow PCE impacted soil area at the rear of the building near the southeast corner of the property. Based on NCDOH reports and follow-up investigations the source area consisted of a 12 ft x 12 ft area which extended 3 to 3.5 feet deep. The area was exposed and covered at the surface with a layer of gravel. Precipitation recharging through this impacted soil would become contaminated with PCE transporting it to the shallow water table as a dissolved component and forming a contaminant plume. The plume would then migrate in the direction of groundwater flow.

The presence of high concentrations of petroleum (gasoline) constituents in soil and groundwater along the south property line and near the southeast corner indicates past migration from the known gasoline spill at the adjacent Sunoco S/S to the south.

According to the modeling figures previously drafted during the initial site characterization, PCE was shown to be almost exclusively present off-site with almost no transformation products present. After analyzing more recent data collected as part of RIWP, it appears that PCE and daughter breakdown products are also present on-site at elevated concentrations above groundwater standards.

CVOCs have been documented on the former CFSS property to the north including the far northwest corner of the property. The CFSS was known to include an auto repair shop with shallow recharge structures present across the property. PCE is also historically and extensively used in automobile brake cleaning and engine degreasing products. It is therefore possible that there may be other sources of PCE responsible for the off-site groundwater contamination reported in the SCR.

In the absence of some induced vertical transport condition such as that created by a pumping well, there does not appear to be any mechanism to account for contaminant migration to the deeper zones of the aquifer. The fact that both CVOCs and PVOCs were found at depths combined with the description of silts, clays and limited recharge of groundwater to sampling equipment points, the possibility exists that PVOC and CVOC contamination may have been transported to deeper depths via sample tooling. In sampling groundwater through highly heterogeneous zones and formations of low permeability, leakage can occur around the borehole and through the threaded connections of the rods themselves, which can transport contamination vertically. An additional boring sampled to a depth of 72' bgs, located up gradient from the source area (south of former cleaners), will help determine the quantity of PVOC contamination found at this depth, if any at all. Since petroleum constituents are considered to be LNAPL's it is highly

unlikely that petroleum impacts to groundwater at 72' bgs are conclusive. If in fact a petroleum related plume is present at this depth the performance of an up gradient boring to a depth of 72' bgs should provide conclusive evidence as to whether or not the on-site petroleum related impacts occurred naturally via vertical migration. More information regarding additional up gradient sampling locations is discussed later in the report.

## 1.6 Remedial Action Objectives

Based upon contamination discovered on and off-site above regulatory standards for groundwater the following Generic Remedial Action Objectives (RAOs) will apply during the remedial phase in order to protect the environment and the interest of the public's health:

- prevent ingestion of groundwater with contaminant levels exceeding drinking water standards;
- prevent contact with, or inhalation of volatiles, from contaminated groundwater;
- restore groundwater aquifer to pre-disposal/pre-release conditions, to the extent practicable;
- remove the source of ground or surface water contamination

Based upon the potential for Soil Vapor Intrusion (SVI) due to groundwater contamination present on and off-site, the following RAOs apply for the protection of the environment and the interest of the public's health:

- mitigate impacts to public health resulting from existing, or the potential for, soil vapor intrusion into buildings at a site

More information regarding future remedial work in order to comply with the generic RAOs established for the site is discussed within section 6.0 of this report.

An Interim Remedial Measure (IRM) to address vapor intrusion in the form of a Sub-slab Depressurization System (SSDS) in order to protect the health interest of on-site workers has been developed and approved by the Department on July 23, 2015. An IRM Construction Completion Report (CCR) will be issued to the Department documenting all installation activities.

## 2.0 **Remedial Investigation Report (RIR)**

The data derived from the RIWP is being used to supplement the data-set collected during the Site Characterization in order to fill data gaps and complete the CSM. The following data was collected as part of the RIWP conducted during April, June and October of 2013.

- ▶ vertical and horizontal sampling was conducted off-site to the northwest of the subject site (near Chase Bank) and off-site to the east, south east and south of the source area in order to complete delineation.
- ▶ Supplemental sampling of former CSM locations in order to vertically delineate contamination at EP-13, 15 and 18.
- ▶ Five (5) groundwater samples were collected in the vicinity of the former source area (GW-01-05) to assess vertical migration of DNAPL.
- ▶ Soil vapor study that consisted of sampling all adjacent and surrounding properties in order to analyze sub-slab, outdoor and indoor air conditions as compared to the NYSDOH Guidance for Soil Vapor Intrusion, 2006.
- ▶ Installation of three (3) on-site groundwater monitoring wells used to determine groundwater flow direction.

## 2.1 Groundwater Sampling Procedure

Multiple off-site locations were analyzed in order to complete the vertical and horizontal delineation of CVOC related groundwater impacts emanating from the site. Sample collection locations and depths are depicted in Figure-3.

A GeoProbe® 6610 equipped with a 4 foot temporary well screen sampling tool (screen point 16 or SP-16), was directly pushed into the aquifer zone to acquire sample collection at multiple depths. Since PCE is a DNAPL, groundwater grab samples were collected from the bottom of the SP-16 well screen. This was achieved by lowering new poly tubing through the probe rods to the bottom of the slotted screen with purging and sampling using a peristaltic pump with a low flow rate (less than 100 ml/minute). Sample procurement was achieved through the use of dedicated polyethylene tubing and a peristaltic pump. Multi-depth samples at each selected boring location were collected from the deepest target point in the aquifer first with the shallowest interval collected last. This bottom-up method was used with the SP-16 in order to limit the amount of boreholes to just one (1) per location when conducting the multi-depth sampling procedure. It also minimizes the chances for cross contamination.

All groundwater sampling activities were recorded in the project dedicated field book. This includes a description of:

- ▶ Date and time of sample collection
- ▶ Sample location
- ▶ Purging time, duration and volume
- ▶ Sample appearance

### *2.1.1 Off-site Groundwater Sampling Locations and Intervals*

In order to fill data gaps and complete the delineation of chlorinated solvents to satisfy the previously conducted CSM, the following areas were investigated as part of the RIWP: north, west and east of the Chase Bank located northwest of the subject site. Previous locations EP-13, 15 and 18 were sampled in order to complete vertical delineation. The objective is to complete data gaps where PCE (and breakdown products) were not fully delineated in groundwater to the northwest with regard to meeting regulatory standards. Finally, southeast of the source area, where 1, 2 DCE has not been fully delineated, multiple borings were conducted (directly south and east of the former cleaners) in order to complete the CSM. Figure-3 shows all the locations of the borings conducted and the multiple depths at which groundwater samples were collected.

Three (3) previous sampling locations EP-13, 15 and 18, located on Figure-3 were sampled in order to vertically delineate chlorinated contamination discovered in these locations. PCE impacts as high as 4,620 ppb were discovered at EP-15 from 50-52' but no data beyond this depth was collected before the RIWP. EP-13 and 18 also show PCE impacts at 50-52', not nearly as significant as EP-15, but concentrations do exceed SGVs. Sampling at these three locations has been conducted to a depth of 60' bgs.

Four (4) groundwater samples were collected during October 2013 to the north, east and west of the Chase Bank located across the street from the former cleaners on the west side of Rockaway Turnpike. The sampling intervals were as follows: 20-24', 30-34', 40-44', 50-54' and 60-64'.

The third and final area of the off-site investigation was located south and east of the former dry cleaning building. As depicted in Figure-3 five (5) boring locations were conducted in order to complete the delineation of 1, 2 DCE both horizontally and vertically. One (1) of these up-gradient borings extended to a depth of 74' bgs in order to determine if PVOCs and CVOCs discovered at this depth (in a previously conducted boring labeled EP-7) occurred as a result of natural migration processes or were manufactured via penetration of a confining layer. This boring was sampled at multiple intervals including; 15-19', 30-34', 40-44', 50-54', 60-64' and 70-74' bgs. The remaining four (4) borings located in Figure-3 were collected at the following depths: 10-12', 20-22' and 30-32'.

According to the SCR, conducted by EAR, a majority of the 1, 2 DCE was found in and around the source area to a depth of approximately 25' bgs with the absolute highest concentrations found in the upper portion of the aquifer. It does not appear necessary to probe beyond a depth of 29' bgs in this area and risk puncturing a confining layer, which could result in the release of DNAPL to deeper depths. The rationale behind the one (1) selected boring that extends to a depth of 74' bgs is that it will be located far enough up-gradient, outside of the immediate source area, where 1, 2 DCE concentrations should be significantly lower preventing the transport of any significant concentrations to deeper depths via sample tooling. The sampling procedure included the use of o-rings (rubber gaskets applied to rods at connection points) to prevent the leakage of contaminated groundwater through the threaded connection points.

### *2.1.2 Laboratory Analysis and Sample Collection*

All groundwater samples collected were analyzed by EPA Method 8260 (VOCs) with a Category – B deliverable package provided for third party data validation purposes. Samples were submitted to the laboratory for a standard turnaround time, which is one to two weeks. Samples were transported under strict chain of custody to an ELAP New York State certified laboratory. For sample collection two (2) pre-preserved 40 milliliter glass vials were filled to overflow so no air bubbles get entrapped in the vial. Samples were immediately placed in an ice filled cooler to maintain a temperature of approximately 4 degrees C (39 degrees F). Each sample was properly labeled and recorded on the chain of custody form. The required trip blanks, method blanks and matrix spike/ matrix spike duplicates were collected as per the DER-10 sampling protocol. More information regarding laboratory analysis and sampling collection is discussed in the Quality Assurance and Quality Control section 3.0. Validated lab data for the entire investigation is included as Attachment- G.

## 2.2 Remedial Investigation Results

In order to further delineate vertical chlorinated contamination in previously conducted groundwater sampling locations EP-13, 15 and 18, groundwater samples were collected at these boring locations from 60-64' bgs. Lab results for EP-13 @ 60-62' indicated PCE concentrations of 16 ppb. Previous samples conducted in this same location detected PCE concentrations of 76.8 ppb at 50-52'. EP-15 @ 60-64' detected PCE at a concentration of 29 J ppb as this sample location previously detected PCE at 4,620 ppb from 50-52'. EP-18 @ 60-62' detected PCE at 35 ppb and previously detected PCE at 111 ppb from 50-52'. Please refer to Figures-8a-11b depicting the supplemental data added to the CSM. The CSM offers an aerial and vertical profile view of PCE and its transformation products present within the plume. Additional groundwater sampling locations were conducted to the northwest of the previous locations (EP-13, 15 and 18) in order to fill in data gaps within the CSM. A total of four (4) boring locations were selected to the north of the Chase Bank building located northwest of the site. Samples GW-06, GW-07, GW-08 and GW-09 were all collected from the following depths in order to delineate off-site groundwater contamination: 20-24', 30-34', 40-44', 50-54' and 60-64'. GW-06 collected to the southwest of the Chase Bank did not detect any significant PCE from 20-64'. PCE was detected at 2 ppb from 20-24' and 6 ppb from 30-34'. GW-07 detected PCE in the shallower depths from 30-34' at a concentration of 53 ppb and non-detect for all other depths sampled. GW-08, located to the north of the Chase, detected PCE at 10 ppb from 20-24'. All other depths sampled from this location exhibited non-detect readings. GW-09 from 20-24' detected PCE at 33 ppb and 7 ppb from 30-34'. No PCE was detected above TOGS standards below 34'. As seen in Figures-8a-11b the CSM demonstrates delineation vertically and the significant concentration reductions from an aerial and cross-sectional perspective.

A total of five (5) groundwater samples were collected in the vicinity of the former source area (GW-01-05). GW-01 was collected due south of the southeast corner of the building and sampled from the following depths: 15-19', 30-34', 40-44', 50-54', 60-64' and 70-74' bgs. The purpose of this sample was to evaluate the potential for migration of DNAPL to deeper depths. GW-01 at 15-19' detected PCE at 650 ppb, TCE at 8 ppb and 1, 2 DCE at 240 ppb. GW-01 collected from 30-34' detected PCE at 58 ppb and 1, 2 DCE at 2 J. GW-01 collected at 40-44'



detected PCE at 20 ppb and 1, 2 DCE at 2 J. GW-01 collected from 50-54' detected PCE at 17 ppb and 1, 2 DCE at 1 J. GW-01 from 60-64' detected concentrations of PCE at 64 ppb and 1, 2 DCE at 3 J. At the deepest depth from 70-74', GW-01 detected PCE at 350 ppb, TCE at 5 ppb and 1, 2 DCE at 35. GW-02 was located to the southwest of the gate leading to the backyard area. GW-02 was collected from the following depths: 10-12', 20-22' and 30-32'. GW-02 at 10-12' detected PCE at 10 ppb, TCE at 3 J and 1,2 DCE at 2,400 ppb. At 20-22' PCE was detected at 3 J, DCE at 65 J and from 30-32' PCE was detected at 2 J and 1, 2 DCE at 15 J. GW-03 was collected at the southeast portion of the property and sampled from the following depths: 11-13', 20-22' and 30-32'. GW-03, collected from 11-13', detected PCE at 3 J and TCE and DCE were not detected. From 20-22' PCE was detected at 15 ppb, TCE at 4 J and DCE at 920 ppb. GW-03 collected from 30-32' detected PCE at 5 ppb and DCE at 82 ppb. GW-04 was located along the eastern property boundary at the eastern side of the building in close proximity to the point source area. GW-04 was collected at the following depths: 10-12', 20-22' and 30-32' bgs. GW-04 at 10-12' detected PCE at a concentration of 5 ppb, TCE at 3 J and DCE at 17 ppb. GW-04 collected from 20-22' detected PCE at 4 J, TCE at 1 J and DCE at 350 ppb. GW-04 at 30-32' detected PCE at 2 J and DCE at 87 J. GW-5 was collected in the backyard of the 321 Rugby Road residence located to the northeast of the subject site. Samples were collected from the following depths at the GW-05 location: 10-12', 20-22' and 30-32'. GW-05 from 10-12' detected PCE at 16 ppb, TCE at 11 ppb and DCE at 27 ppb. Sample collection conducted from 20-22' detected PCE concentrations of 7 ppb, TCE at 5 J and DCE at 250 ppb. PCE and TCE were not detected from 30-32' in GW-05 but DCE was detected at a concentration of 8 ppb. Figures-8a-11b show the on-site data incorporated into the CSM in an aerial and vertical profile view. See Attachment-H for tabulated lab data.

### 2.3 Monitoring Well Installation and Groundwater Flow

Three (3) monitoring wells were installed throughout the subject property with the use of a track mounted GeoProbe® 6610. Wells were installed using the direct push method in order to define the hydraulic characteristics of the aquifer beneath the site. The three (3) monitoring wells were surveyed in order to retrieve casing elevation data from the northern side of the casing within 0.01 ft. Depth to water (DTW) measurements were recorded from the north side of the casing within 0.01 ft. and angular readings were recorded from the transit for well placement. A groundwater survey/map is included as Figure- 6.

The specifications for the monitoring wells are as follows: 10' of 2" diameter PVC 0.02" slot screen; 2'(3' for MW-3) of 2" diameter PVC riser pipe to finish well to grade. Monitoring wells also contain a bentonite seal above the well screen in order to prevent surface run-off from entering the well. All wells have been secured with a 5" cast iron manhole cover flush mounted, sealed and cemented in place. Please see Figure-5a-c for construction logs.

The monitoring wells were used for surveying and groundwater flow calculation and will also be utilized for future monitoring and sampling activities. The wells may also be sampled in order to gather technical data that pertains to reductive dechlorination for remediation purposes. Dechlorination parameters include: oxidation/reduction potential (ORP), terminal electron acceptors (TEA), pH, conductivity, temperature, total organic carbon (TOC) and total dissolved carbon (TDC).

## 2.4 Soil Vapor Intrusion Study

The phrase "soil vapor intrusion" refers to the process by which volatile chemicals migrate from a subsurface source into the indoor air of buildings. Soil vapor, also referred to as soil gas, is the air found in the pore spaces between soil particles. Primarily because of a difference between interior and exterior pressures, soil vapor can enter a building through cracks or perforations in slabs or basement floors and walls, and through openings around sump pumps or where pipes and electrical wires go through the foundation. For example, heating, ventilation or air-conditioning (HVAC) systems and/or the operation of large mechanical appliances (e.g., exhaust fans, dryers, etc.) may create a negative pressure that can draw soil vapor into the building. This intrusion is similar to how radon gas enters buildings from the subsurface. Soil vapor can become contaminated when chemicals evaporate from subsurface sources. If contaminated soil vapors enter a building, indoor air quality may become affected. (NYSDOH Guidance for Soil Vapor Intrusion, October 2006)

In order to identify potential impacts to indoor air at the subject site and residences/buildings that surround the subject site a soil vapor intrusion study was conducted during the 2013 heating season. Since many of the surrounding homes and businesses are off-site, access agreements were issued in order to perform the necessary testing. Permission letters included a description of the testing to be performed, information regarding soil vapor intrusion, PCE and TCE fact sheets and the anticipated schedule of work.

A total of four (4) locations (including subject property) were evaluated for soil vapor intrusion out of the intended eleven (11) locations proposed. Seven (7) of the eleven (11) locations did not grant access to perform the SVI study after multiple attempts were made to gain access. Refer to Figure-3 for the sampling locations conducted during March 2013.

One (1) sub-slab and one (1) indoor air sample was collected at each residence (including the site) during March of 2013. One (1) outdoor ambient air sample was also collected based upon the weather conditions encountered on the day of the sampling event. SVI result letters were drafted and approved by the NYSDOH upon receipt of the validated lab data and issued to the property owners.

Six (6) liter laboratory cleaned and certified summa canisters were used for indoor, sub-slab and outdoor sample collection. All summa containers were affixed with a 24 hour dedicated regulator with a maximum flow rate of 0.02 liters per minute. Indoor and outdoor air samples were collected at a height of 3-5' feet above the grade surface in order to collect samples representative of the everyday breathing zone. NYSDOH fact sheets were completed at the time of the sample collection in order to gather information on the building characteristics and product inventory.

Six (6) liter summa canisters were also used for the collection of sub-slab samples. Installation of the sub-slab samples involved boring a small diameter hole in the sub-grade cement floor for insertion of a temporary soil vapor probe approximately 2" inches below the bottom of the slab. The vapor probe was connected to a 3/8" diameter piece of poly-tubing, which is of laboratory and food grade quality. Gravel pack filled the void and annular space around the probe and the remaining void was sealed with bentonite clay at the surface. After construction of the temporary vapor point was completed purging was conducted in order to stimulate air flow to the summa.

The poly-tubing was then connected to the summa canister post purging. After the summa canister was disconnected from the vapor probe, PID readings were collected and recorded. Figure-7 illustrates typical construction of the temporary vapor probes.

#### *2.4.1 SVI Results*

A total of four (4) SVI sampling locations were analyzed during the 2013 heating season in order to evaluate air quality conditions at residences surrounding the site. The samples collected mainly focused on the presence of PCE and TCE in indoor air at residences surrounding the site, although a broad range of VOC's were analyzed by EPA TO-15. Validated lab data indicated that non-detect readings for PCE and TCE were observed at two (2) of the nearby residences. One (1) additional residence detected PCE and TCE in the indoor air at 4.88 ug/m<sup>3</sup> and 1.24 ug/m<sup>3</sup> respectively and PCE and TCE at 15.9 ug/m<sup>3</sup> and 3.60 ug/m<sup>3</sup> respectively. PCE and TCE was not detected in the indoor air sample (IA-QC13) collected within the site building. An outdoor air sample was collected at the former cleaners site which exhibited non-detect readings for PCE and TCE. Sub-slab sampling at nearby residences indicated PCE and TCE concentrations of 0.88 J and non-detect respectively. Other residences detected PCE at 1.15 ug/m<sup>3</sup> and TCE was not detected. Additional sub-slab samples detected PCE at 6.71 ug/m<sup>3</sup> and TCE at 11.8 ug/m<sup>3</sup>. PCE in the sub-slab beneath the site detected PCE at 124 ug/m<sup>3</sup> and TCE at 5.37 ug/m<sup>3</sup>. Re-testing was conducted at one (1) nearby residence during the 2014 heating season. An Interim Remedial Measure was also submitted to the Department which proposes the construction of an active Sub-Slab Depressurization System (SSDS) at the site.

#### 2.5 Rising Head (slug test) and Analysis

To assist in the evaluation and development of remedial alternatives a rising head aquifer (slug) test was performed on select location on the site. The test was performed using a GeoProbe® level logger (GW 1600) pressure transducer/data logger. The GeoProbe® slug test kit used a pneumatic method to displace groundwater in place of a manual slug. The procedure involved placing the transducer approximately 18-24 inches below the surface of the water table. Using a laptop computer an initial baseline reading of the water column was taken prior to conducting the test.

The hydraulic conductivity (K) for the chosen test location was calculated using the Bouwer-Rice unconfined solution formula which is included as part of the pre-programmed software offered by GeoProbe® Systems (Slug Test Analysis Software; STA version 1.0) Please see Attachment-F for slug test logging data.

#### 2.6 Management of Investigation Derived Wastes

Investigation derived wastes include contaminated soil, groundwater and disposable sampling equipment generated during the remedial investigation. Soil from pre-clearing activities was returned to their original location. Contaminated soil and groundwater was drummed for future disposal. Disposable sampling equipment (gloves, tubing, acetate liners, etc.) was placed in

heavy-duty plastic bags for disposal. No excess soils were generated during the sampling and monitoring well installations as the direct push method does not produce cuttings.

### **3.0 Exposure Assessment**

Site conditions have been characterized in order to evaluate whether the site poses an existing or potential hazard to the exposed or potentially exposed population. Site characterization involves a review of sampling data for exposed media and an evaluation of the physical conditions of the contaminant sources or physical hazards near the site which may pose an additional health risk to the community. If the original source is unknown, the environmental media (soil, air, water, etc.) is evaluated at its point of exposure. The data is evaluated in a three-step process in the performance of a qualitative exposure assessment. The first step in this analysis was the identification of potential exposure pathways. Second, concentrations of the chemicals of concern are assigned to the exposure points for each pathway based on the site data. Third, if applicable, the exposure point concentrations are compared to acceptable levels to determine if those concentrations could pose an unacceptable risk to human health.

Prior investigation activities and historic data indicate that in 1991 the NCDOH reported PCE concentrations of 1.3 million ug/kg in shallow soil (<2 ft) adjacent to a vapor discharge pipe in the rear of the building. This soil was successfully removed in 1992 by the operator under NCDOH oversight and the case was closed by NCDOH on 3/30/92. In 2009 the NYSDEC classified the site with a "P" designation for potential listing on the Inactive Hazardous Waste Site Registry.

The field investigation portion of the SCR was conducted at the site from December 8, 2009 through March 25, 2010 and consisted of the collection and analysis of 7 soil samples from 7 boring locations, 28 groundwater samples from 10 on-site locations, 39 groundwater samples from 9 off-site locations and 6 soil gas samples from 4 on-site and 2 off-site locations.

During April, June and October JVS conducted a supplemental investigation in order to execute the completion of the CSM and delineate off-site contamination in groundwater. Vertical and horizontal sampling was conducted off-site to the northwest of the subject site (near Chase Bank) and off-site to the east, south east and south of the source area in order to complete delineation. Supplemental sampling was also performed at former CSM locations in order to vertically delineate contamination at previously sampled locations EP-13, 15 and 18. Five (5) groundwater samples were collected in the vicinity of the former source area (GW-01-05) to assess vertical migration of DNAPL. A soil vapor intrusion study was conducted during March of 2013 and consisted of sampling all adjacent and surrounding properties in order to analyze sub-slab, outdoor and indoor air conditions as compared to the NYSDOH Guidance for Soil Vapor Intrusion, 2006.

An Interim Remedial Measure Work Plan (IRMWP) has since been developed and submitted to the Department for review to address on-site soil vapor and groundwater contamination. The

plan proposes to install a sub-slab depressurization system (SSDS) within the site building and also treatment of on-site groundwater contamination via bio-remediation.

### 3.1 Exposure Pathways Analysis

An exposure pathway describes the means by which an individual may be exposed to contaminants originating from a site. An exposure pathway has five elements: (1) a contaminant source; (2) contaminant release and transport mechanisms; (3) a point of exposure; (4) a route of exposure; and (5) a receptor population.

An exposure pathway is complete when all five elements of an exposure pathway are documented; a potential exposure pathway exists when any one or more of the five elements comprising an exposure pathway is not documented. Potential exposure pathways for the chlorinated solvents such as those associated with dry cleaning operations include: 1) inhalation of indoor air containing VOCs that volatilized from underlying soils and/or groundwater; 2) ingestion of groundwater; 3) discharge of groundwater to surface water with subsequent exposures; (4) direct contact with contaminated soil and discharge of groundwater to a surface water pathway. An exposure pathway may be eliminated from further evaluation when any one of the five elements comprising an exposure pathway has not existed in the past, does not exist in the present and will never exist in the future.

At this time, the known site media containing contaminants is the presence of on-site residual contamination in the area of the former excavation in groundwater, off-site groundwater contamination found northwest of the site along Rockaway Turnpike and sub-slab vapors beneath the site building. Potential receptors for each of these exposure pathways are identified below.

### 3.2 Soil Contact Exposure Pathways

The transport mechanism of contaminants through soil is by gravity drainage near its release source until contact with groundwater or proximate surface water. Contaminant transport by advection and diffusion in groundwater or surface water can respectively cause additional soil or sediment contamination on- and off-site. This is limited however, to a zone of soil/sediment in contact with groundwater/surface water.

Previous investigations identified concentrations of VOCs in the shallow subsurface soils at approximately < 2ft bgs in 1991. This soil was successfully removed in 1992 under the direction of the NCDOH. Access to this area is limited and soil contact is not feasible due to the construction of the asphalt cap.

No significant contact with the site soils is expected beneath the building or the asphalt-paved parking areas under current conditions or in the future. If the building is razed or expansion requiring additional foundation structures made, exposure to these soils is possible, but no other

source areas are of concern. Based upon the 1992 soil excavation and disposal activities, the soil contact exposure pathway is not considered a completed pathway. Although no soil contact exposure is anticipated currently or in the future, the potential for this pathway still exists.

### 3.3 Inhalation Exposure Pathways

For inhalation exposures, potential receptors under current and future conditions would include workers and patrons at the site as well as possible occupants of several down gradient commercial businesses and residential homes. The building is constructed as a slab on grade with no basement or crawl space, this eliminates interior confined spaces. The potential exposure pathway at the site itself is the inhalation of indoor and outdoor air by site workers and business customers. The building foundation itself was observed to be in good condition and a portion of the property (front, side and rear) is asphalt-paved. The southern portion of the property is covered with grass and is only accessible to the workers. The 1992 excavation of contaminated soils has greatly reduced the possibility and severity of any exposures within and outside of the building. Sub-slab and indoor air sampling was conducted at the site in order to assess the possibility of vapor intrusion.. The sub-slab results indicated the presence of elevated VOCs, mainly PCE, at a concentration of 124 ug/m<sup>3</sup>. TCE in the sub-slab was detected at 5.37 ug/m<sup>3</sup>. Despite moderately elevated PCE concentrations in the sub-slab, indoor air concentrations were not detected within the building. An Interim Remedial Measure (IRM) Work Plan has been developed, which proposes the construction of a Sub-Slab Depressurization System (SSDS) designed to remove the sub-slab vapors from beneath the building. Although much of the source material at the rear of the building has been removed, inhalation exposures still potentially exist due to the presence of residual contamination in groundwater and sub-slab vapor contamination.

The nearest potential down gradient receptors are occupants of commercial businesses and a residential neighborhood located north, east and west of the former cleaners. A soil vapor intrusion (SVI) study was conducted during March of 2013 which included air quality testings at nearby residences and the site. Sampling results did not indicate any significant issues with air quality at the nearby residences. PCE concentrations at one (1) additional residence was found above the Matrix II guidelines which prompted re-testing at the end of the 2014 heating season. The indoor air results did not exceed the NYSDOH guideline of 30 ug/m<sup>3</sup> and sub-slab concentrations for PCE and TCE were each less than <12 ug/m<sup>3</sup>. Winter 2014 air quality results for the additional residence have concluded that additional monitoring and testing will be conducted during the 2015 heating season at the discretion of the property owner. IAQ result letters were issued to the homeowners along with NYSDOH fact sheets, inventory forms and validated laboratory data.

Although SVI sampling was conducted to prove concentrations were all within their respective NYSDOH guidelines, the inhalation exposure threat still potentially exists due to the presence of on-site and off-site residual, shallow groundwater contamination. It should also be noted that SVI sampling was proposed at eleven (11) offsite locations but only four (4) locations granted access to perform SVI testing.

### 3.4 Groundwater Ingestion Pathway

It has been confirmed that potable water is supplied to the area by New York American Water Company. New York American Water supplies many cities in the southwestern Nassau County area including Cedarhurst, NY. Due to the distance between the potable water supply areas and the study site, no potentially affected down gradient potable water supply has been identified at this time. It is unknown if any down gradient private potable water supply wells exist. Although ingestion of groundwater is not a completed pathway at this time, the potential still exists based upon the shallow nature of the water table off-site.

### 3.5 Discharge of Groundwater to Surface Water Pathway

Shallow groundwater from the site receives a majority of its recharge from rainfall and surface run-off from the resulting rainfall. Groundwater flow direction has been determined to flow in a west northwest direction towards Motts Creek located within the Head of Bay water body. The nearest water body is located north northeast of the site and is nearly 1,350' away. Groundwater samples collected northwest of the site (down gradient) indicated a significant decrease in chlorinated VOCs with the highest detection of PCE found at a level of 50 ppb just 300 feet from the site. Given the significant reduction of groundwater contamination only 300 feet from the site, it is highly unlikely this contamination could discharge to a surface water pathway nearly 1,350 feet from the original source. Based upon this information gathered from the off-site groundwater investigation discharge of groundwater to surface water is not a completed pathway at this time, although the potential still exists.

### 3.6 Exposure Assessment Summary

A qualitative exposure assessment was performed based upon newly generated data collected from the subject property and off-site as part of the supplemental RI. Information suggests that contaminated groundwater exists on-site and off-site to the northwest or down gradient from the site.

As mentioned above, groundwater is not intended for potable use and discharging of groundwater to the surface water is not intended or anticipated based on the geographical location of the site. Despite these two factors ingestion of groundwater and surface discharge remain as potential exposure pathways due to the shallow nature of the water table off-site.

The soil contact exposure route would be a completed exposure pathway, however a large majority of this shallow source material was removed via excavation eliminating the primary element needed in order to possess a completed pathway. Although the soil contact exposure is not a completed pathway the potential for soil contact still exists.

Due to the off-site groundwater contamination found during the supplemental RI, the inhalation exposure pathway remains a potential threat, although much of the soil vapor intrusion findings during the 2013 heating season have warranted no further action. One remaining property was

re-sampled during 2014 for which lab results indicated that re-testing will be requested during the winter of 2015 (November/December).

In conclusion, the exposure assessment did not reveal any completed exposure pathways largely based upon the data derived from the SVI study. Although completed exposure pathways do not currently exist the potential for discharge of groundwater to the surface, ingestion of groundwater, soil contact and inhalation exposures exist based upon the on-site and off-site contamination discovered during the RI.

#### **4.0 Health and Safety Plan**

The Health and Safety Plan (HASP) provided in the RIWP was adhered to by all personnel associated with the investigation work. Activities performed under the HASP complied with applicable parts of OSHA Regulations, primarily 29 CFR Parts 1910 and 1926. Please refer to Attachment-A for the HASP sign in sheets.

#### **5.0 Community Air Monitoring Plan**

The Community Air Monitoring Plan (CAMP) was employed during all RI ground intrusive activities. The CAMP data (particulate and PID) for this investigation is provided as Attachment- B.

#### **6.0 Conclusions and Recommendations**

Supplemental data (GW-06, 07, 08 & 09) collected northwest of the Chase Bank indicates that horizontal groundwater contamination (PCE) still exists above regulatory standards in the 20-30' bgs range, but nothing was detected above 53 ppb. Vertical contamination was fully delineated at all four locations as non-detect readings were confirmed down to a depth of 60-64'. Data collected to supplement previous sampling locations (EP-13, 15 & 18) was collected in order to delineate vertical chlorinated impacts. Previous data indicated that PCE concentrations were detected from 50-52' in EP-13, 15 and 18 at 76.8 ppb, 4,620 ppb and 111 ppb respectively. These detections at 60-62' were significantly lower with PCE detections at EP-13, 15 and 18 of 16 ppb, 29 ppb and 36 ppb respectively. Based upon these significant reductions, only ten (10') deeper into the aquifer, contamination beyond 60-64' is not expected.

On-site groundwater data collected as part of the supplemental investigation indicated that petroleum and chlorinated contamination exists to a depth of 70-74' bgs at the GW-01 location. Significant contamination, mainly PCE and DCE, exists at the surface of the water table (15') and at depth from 70-74'. The intermediate sampling intervals, from 30'-50' (suspected clay formation) did not exhibit significant chlorinated constituents. The probability of vertical hydrodynamic dispersion of PVOC and CVOC contamination through this clay formation seems highly unlikely given the contaminant concentrations in relation to their respective sampling



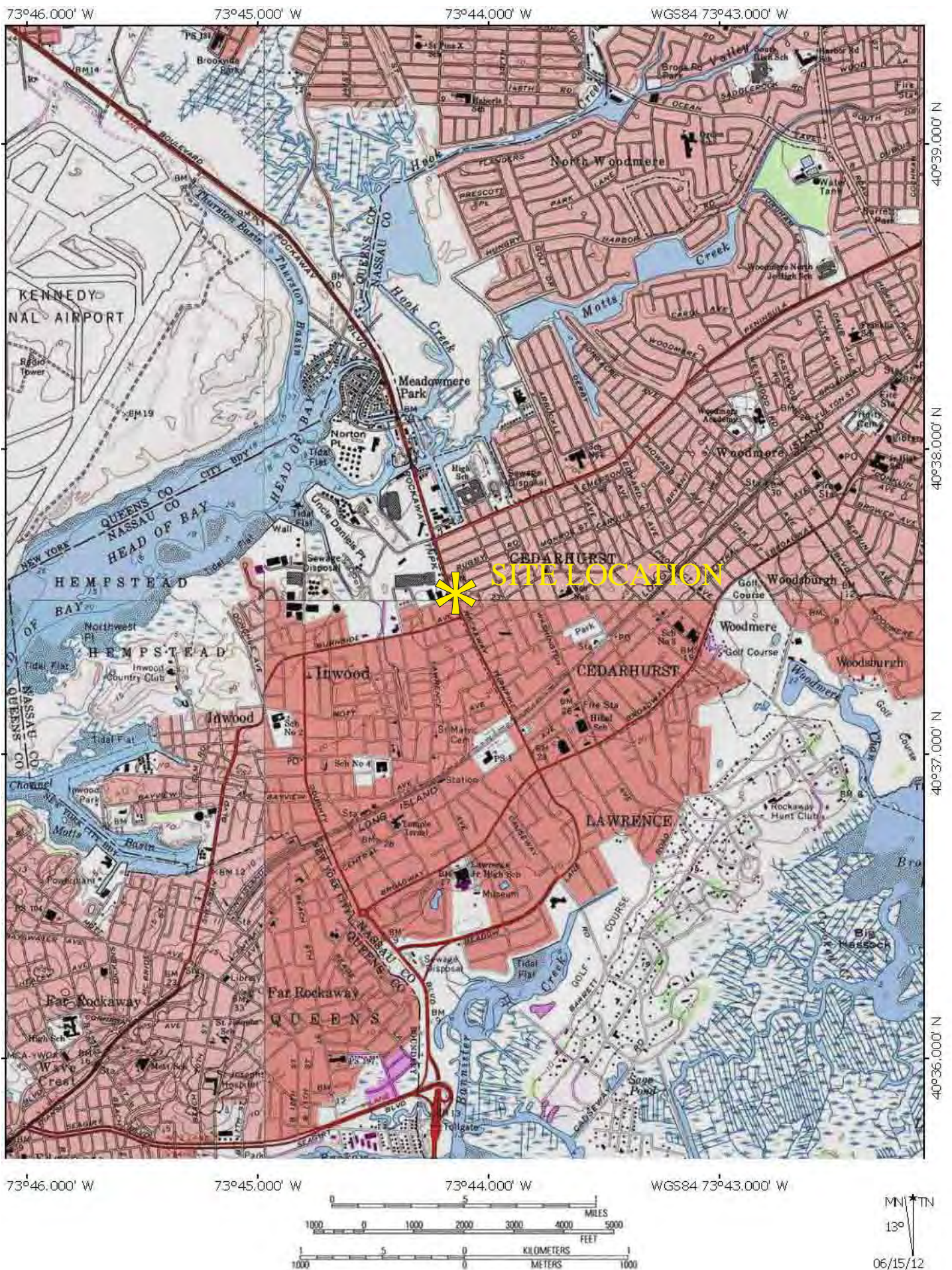
intervals. Further vertical delineation in this area is not suggested due to the risk of mechanically transporting contamination to deeper depths and puncturing the confining unit. Additional sampling locations located in the vicinity the site building (GW-02-05) indicated some elevated 1, 2, DCE in the 30-32' range but nothing above 87 ppb. Continued delineation in this area is does not appear necessary given the risk of puncturing the clay layer as discussed above. The need for further down gradient delineation or on-site delineation is not recommended based on the findings from the investigation conducted.

Based upon the data generated from the Remedial Investigation the following recommendations are proposed in order to address the potential for vapor intrusion at surrounding properties and the remediation of on-site and off-site groundwater contamination with regard to achieving the generic RAOs established for the site :

- a vapor intrusion study at surrounding properties during the next heating season (2015/2016) in order to identify the effects of vapor intrusion as a result of the off-site plume consisting of elevated chlorinated VOC contamination. Access letters will be issued to neighboring properties upon approval from the NYSDOH and NYSDEC;
- development of a plan discussing potential remedies in order to treat on-site and off-site groundwater contamination at the site in order to meet, at a minimum, the generic RAOs;
- proposed remedies for on and off-site treatment of groundwater may include but not be limited to: installation of a multi-level monitoring well network with the purpose of in-situ remedial action (i.e. bio-remediation, RegenOx, monitoring anaerobic degradation, etc.) in order to meet RAOs for the site.

## FIGURES



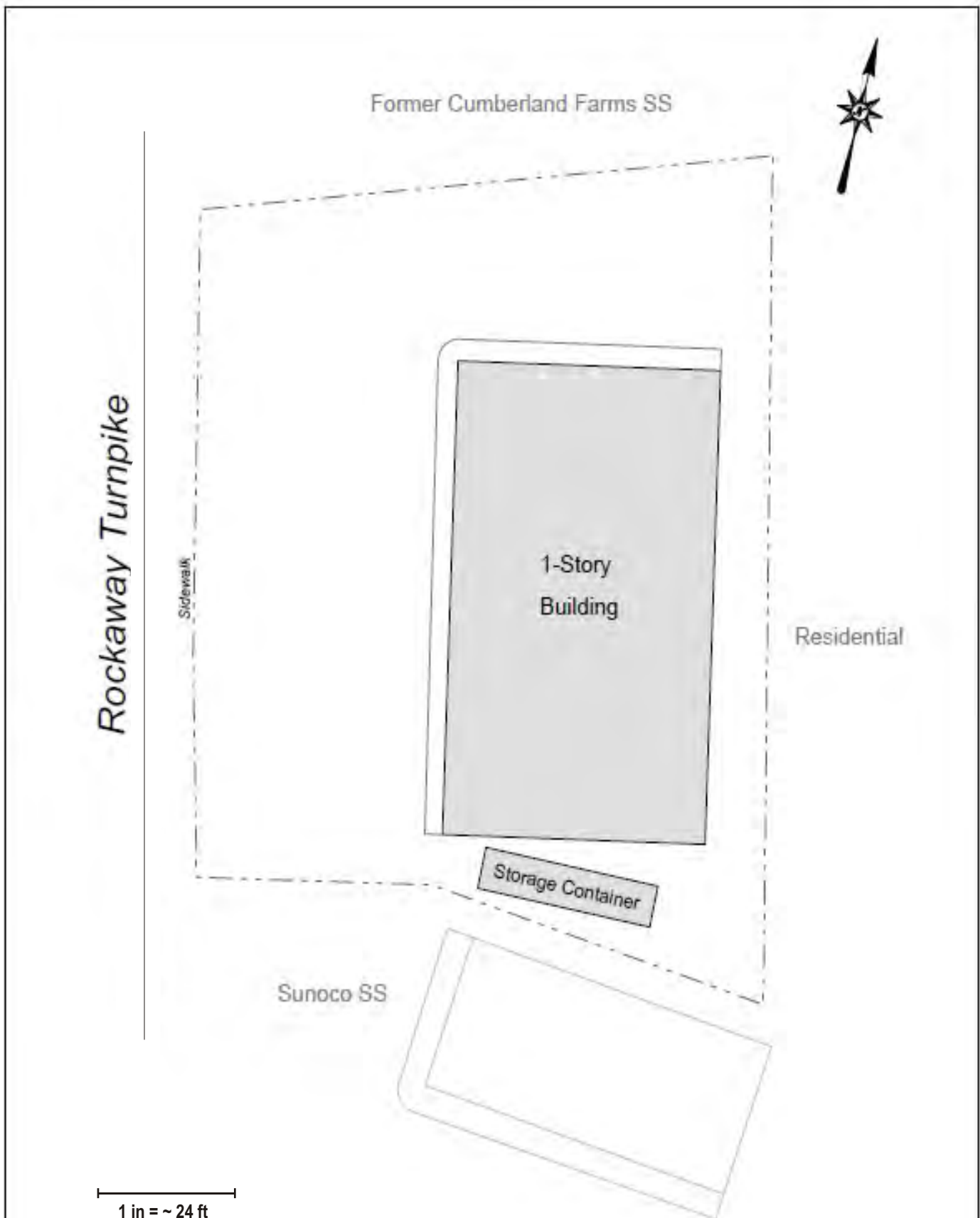


Former Quick and Clean Cleaners  
380 Rockaway Turnpike  
Cedarhurst, New York

Figure-1  
Site Location

John V. Soderberg P.E  
PO Box 263  
Stony Brook, NY 11790





Former Quick and Clean Cleaners  
380 Rockaway Turnpike  
Cedarhurst, New York

Figure-2  
Site Map

John V. Soderberg P.E  
PO Box 263  
Stony Brook, NY 11790



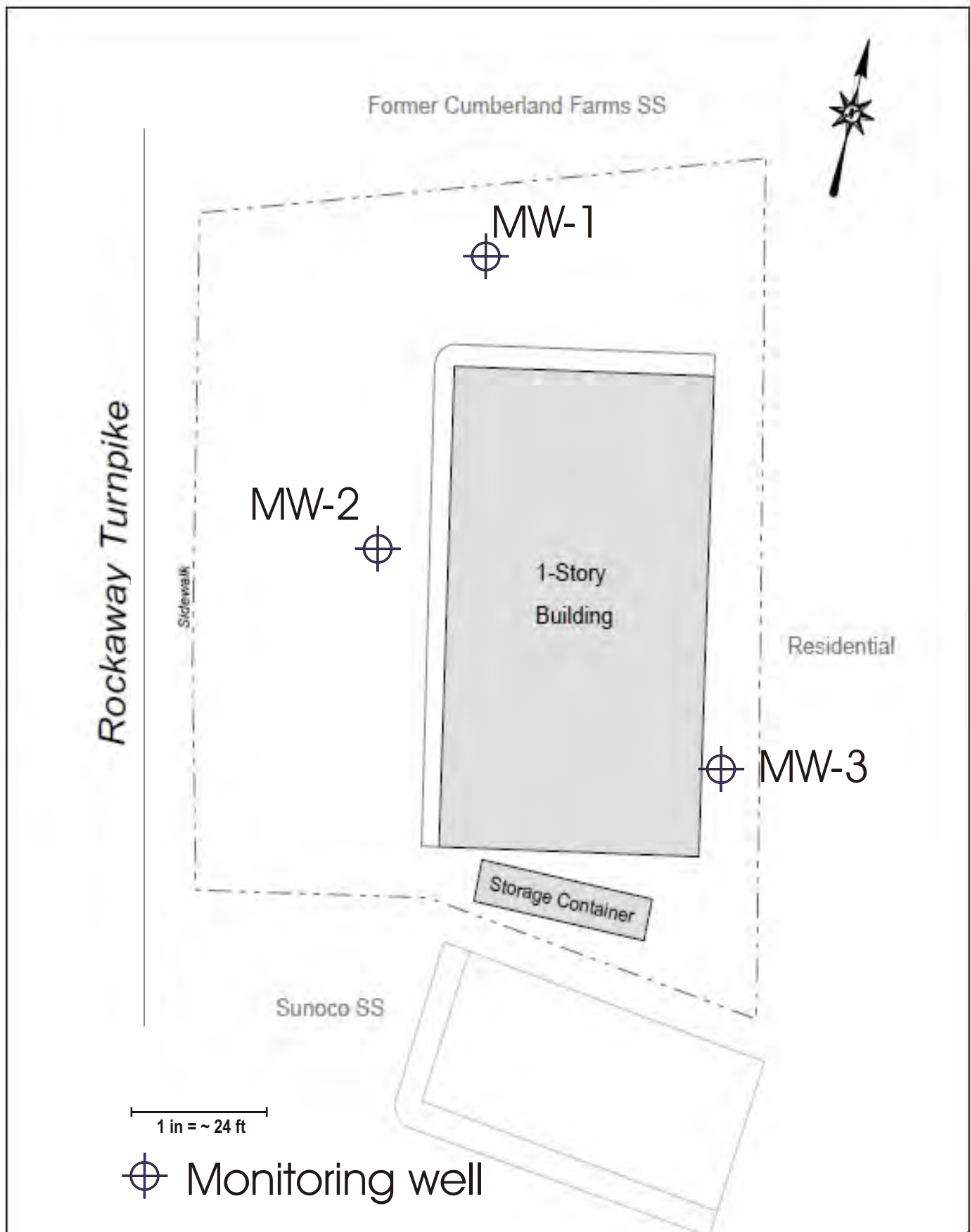


**Former Quick and Clean Cleaners  
 380 Rockaway Turnpike  
 Cedarhurst, New York**

**Figure-3  
 Sample  
 Locations**

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 Stony Brook, NY 11790**





Former Quick and Clean Cleaners  
380 Rockaway Turnpike  
Cedarhurst, New York

Figure-4  
Monitoring  
Well Locations

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Stony Brook, NY 11790

John V. Soderberg P.E

PO Box 263

Stony Brook, NY 11790

Drawn By: JGH

## Figure 5a

## Well Log

Project: Former Quick and Clean Cleaners

Client: 380 Rockaway Turnpike Corp

Location: Cedarhurst, NY

Well No: MW-1 Use: Survey/Monitoring Well

Drilling Method: Geoprobe direct push

Casing Type: PVC Casing Dia: 2" Casing Length: 2'

Screen Type: PVC Screen Dia: 2" Screen Length: 10'

Screen Slot: .02 inch Gravel Pack: #2 Fil-pro

Casing Seal: Cement Finish: Cement flush

Date: TBA

Be Job No:

Driller: Joel/Eusi

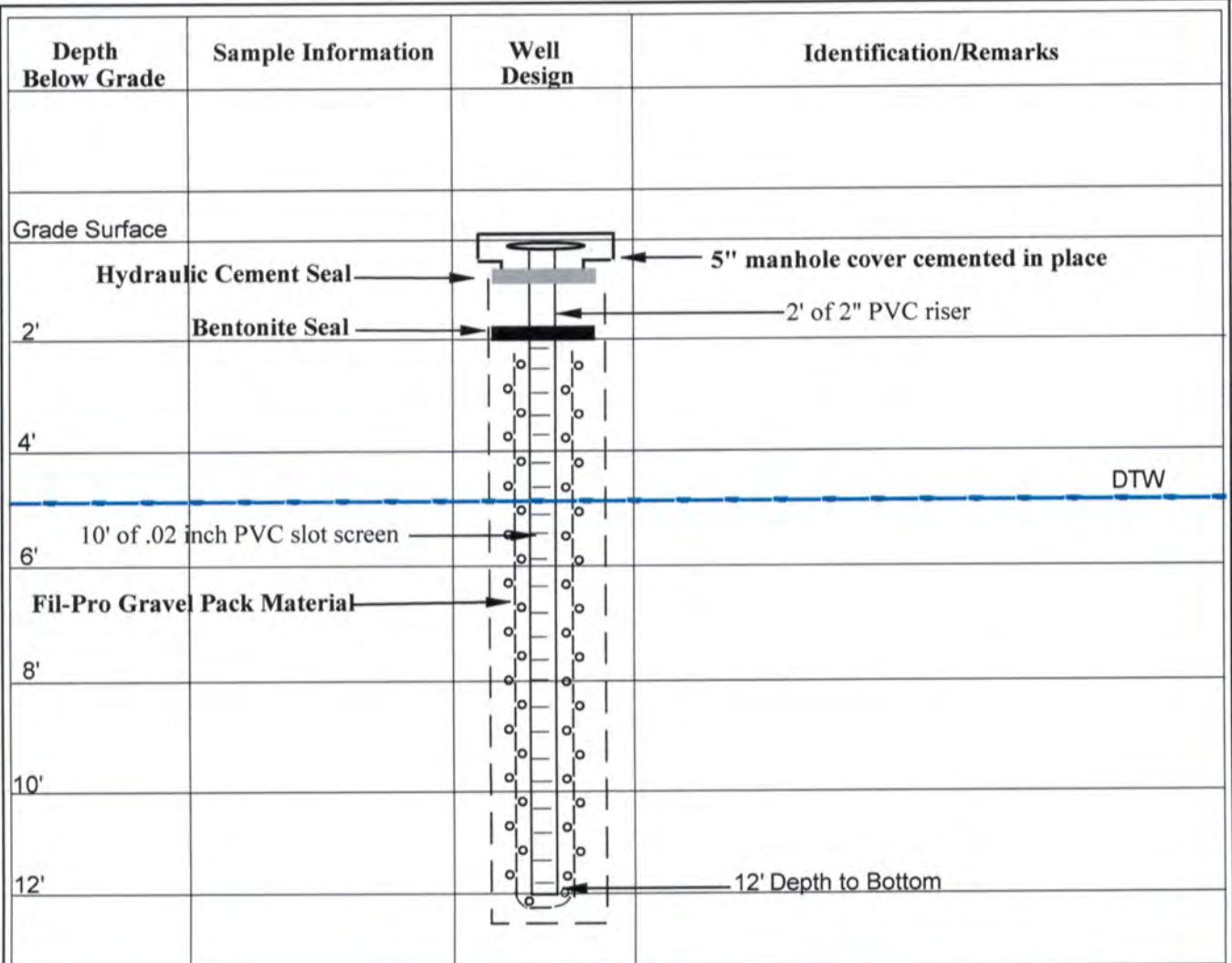
Bore Hole Dia: 3.5"

Sample Method: N/A

Depth to Water: 5'

Total Depth: 12'

Security: 5" Manhole



John V. Soderberg P.E

PO Box 263

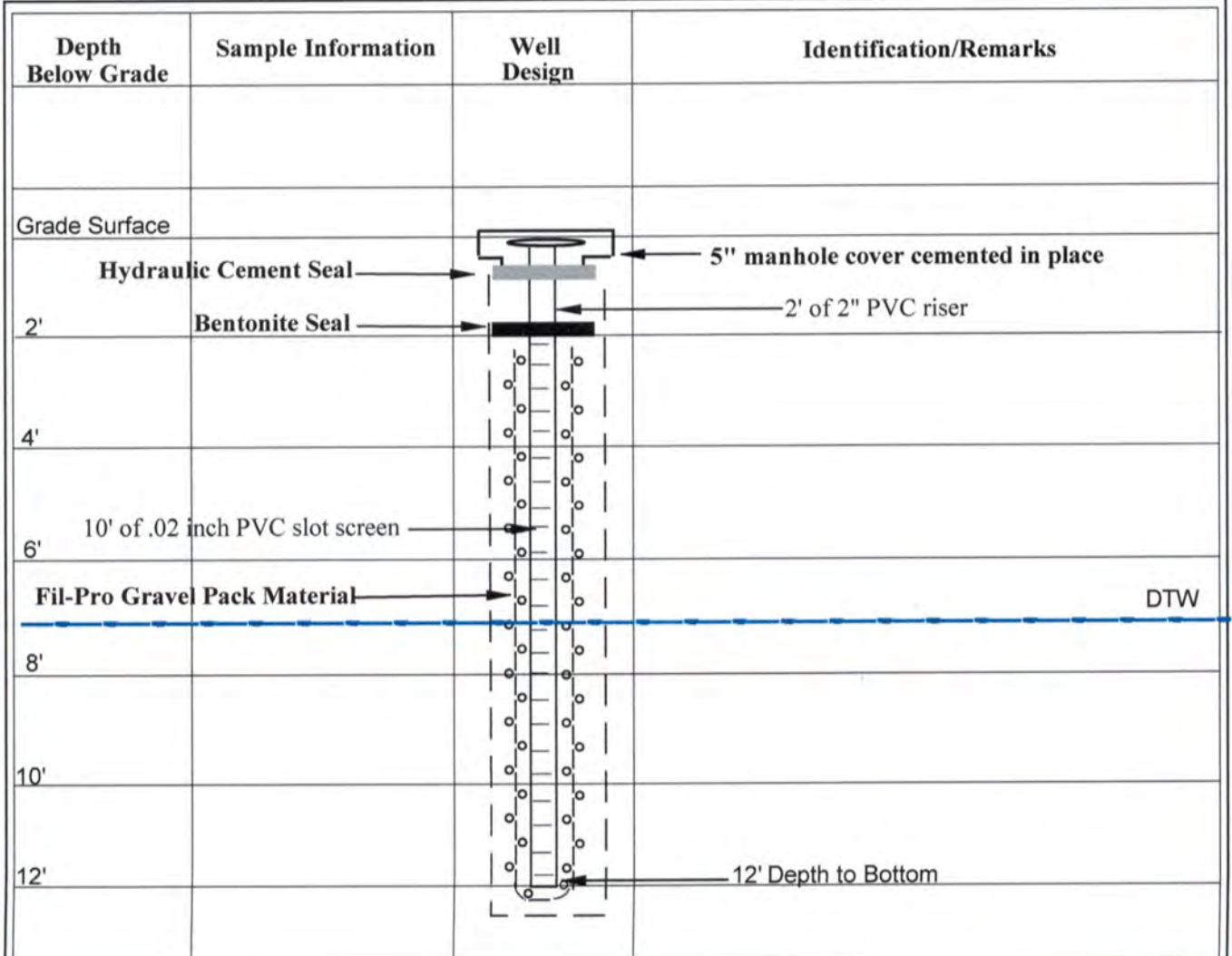
Stony Brook, NY 11790

Drawn By: JGH

Figure 5b

## Well Log

|   |                             |
|---|-----------------------------|
| <b>Project:</b> Former Quick and Clean Cleaners                         | <b>Date:</b> 4/9/13         |
| <b>Client:</b> 380 Rockaway Turnpike Corp                               | <b>Be Job No:</b>           |
| <b>Location:</b> Cedarhurst, NY   | <b>Driller:</b> Joel/Eusi   |
| <b>Well No:</b> MW-2 <b>Use:</b> Survey/Monitoring Well                 | <b>Bore Hole Dia:</b> 3.5"  |
| <b>Drilling Method:</b> Geoprobe direct push                            | <b>Sample Method:</b> N/A   |
| <b>Casing Type:</b> PVC <b>Casing Dia:</b> 2" <b>Casing Length:</b> 2'  | <b>Depth to Water:</b> 7'   |
| <b>Screen Type:</b> PVC <b>Screen Dia:</b> 2" <b>Screen Length:</b> 10' | <b>Total Depth:</b> 12'     |
| <b>Screen Slot:</b> .02 inch <b>Gravel Pack:</b> #2 Fil-pro             | <b>Security:</b> 5" Manhole |
| <b>Casing Seal:</b> Cement <b>Finish:</b> Cement flush                  |                             |



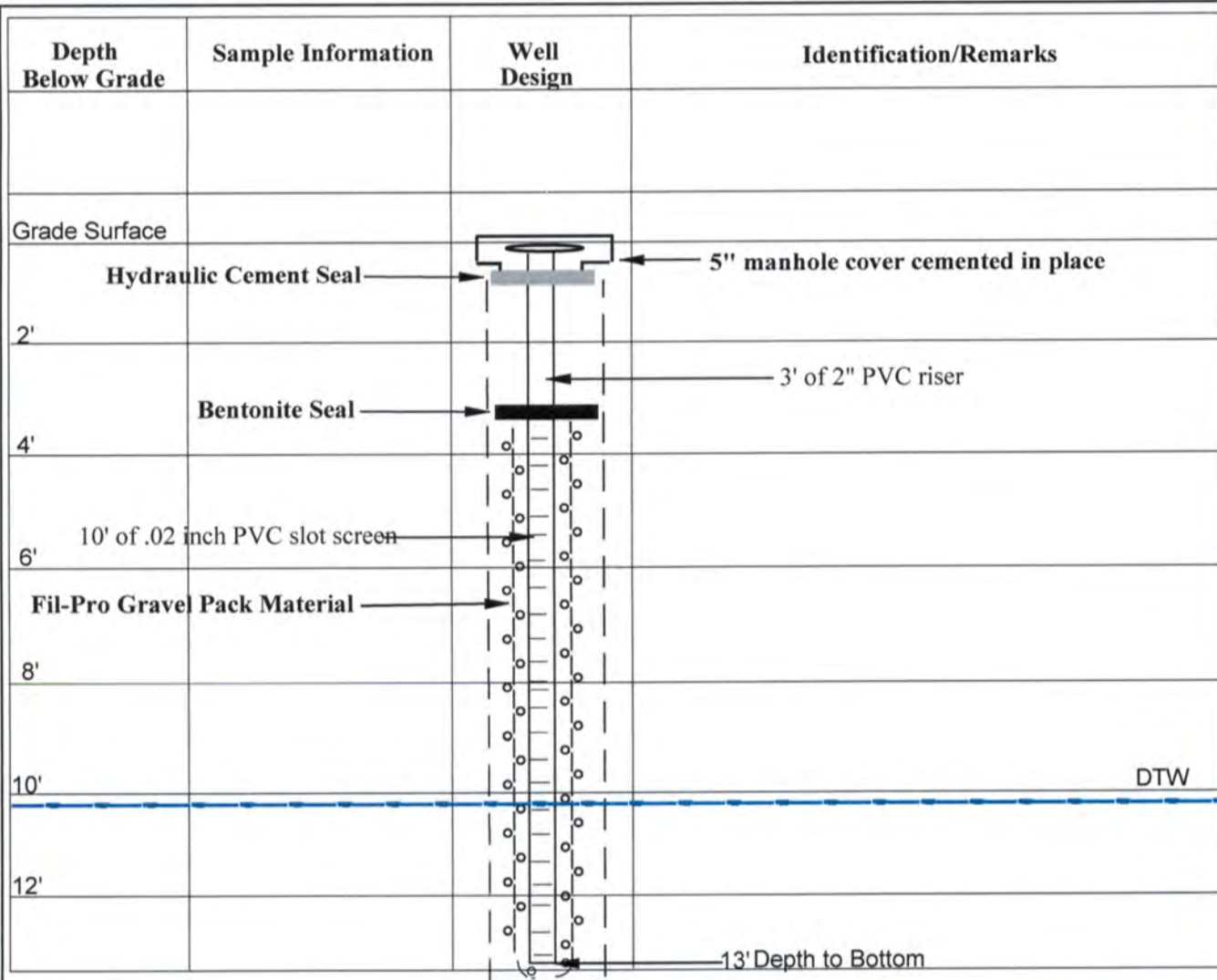


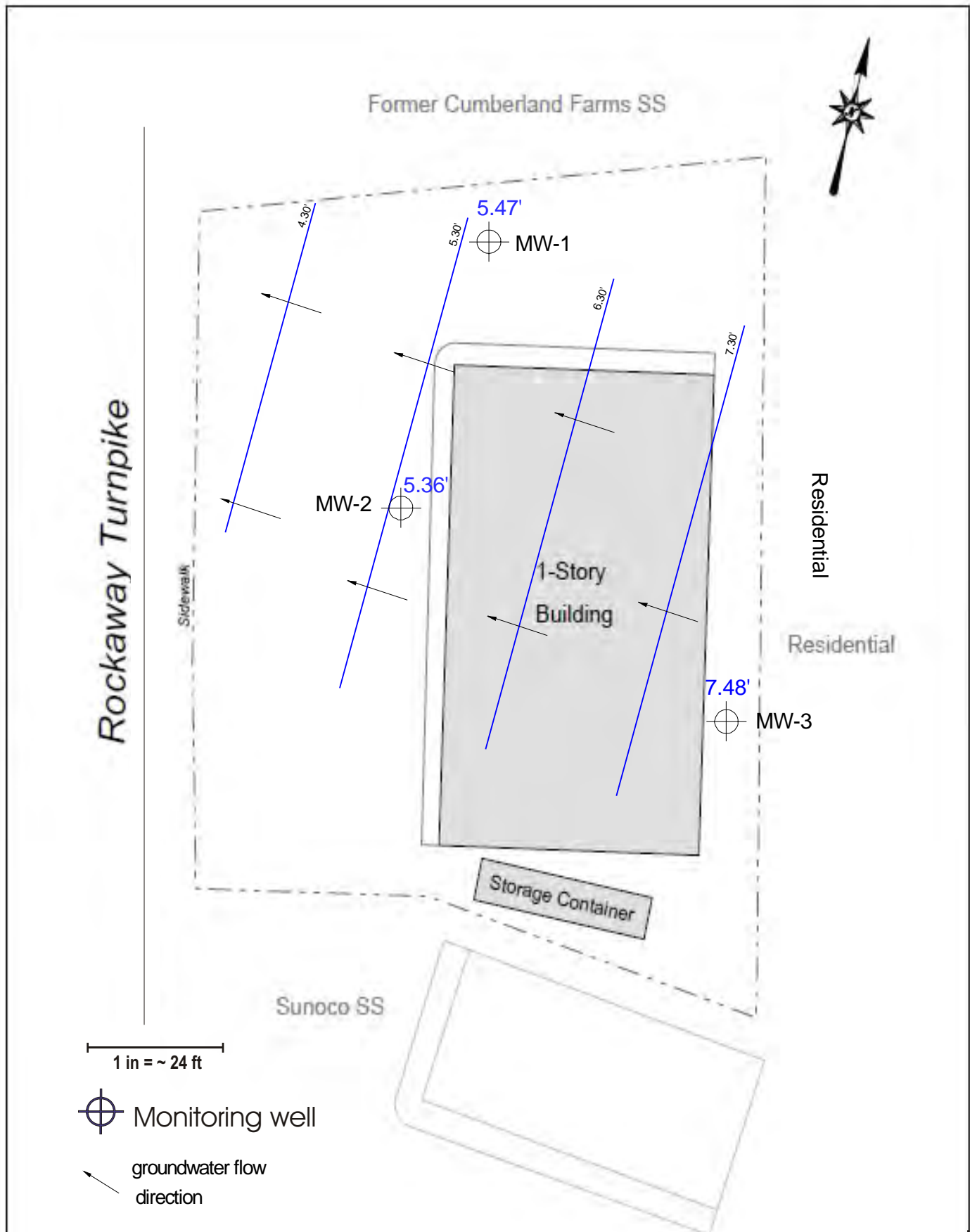
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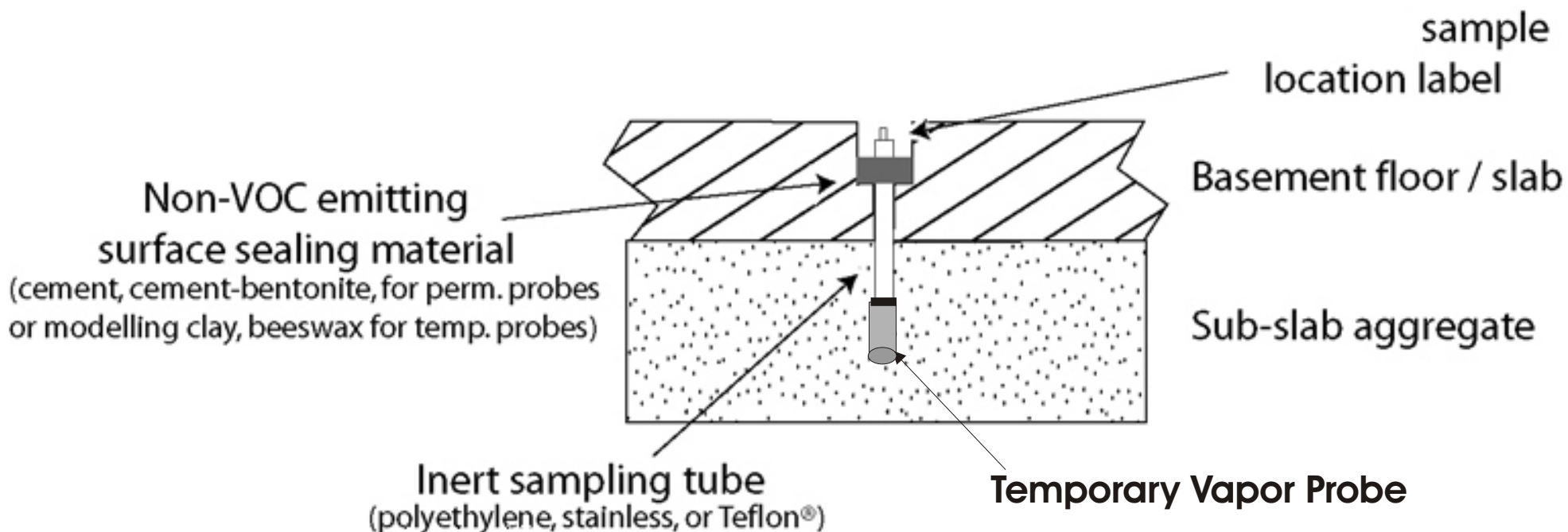
## Figure 5c Well Log

|   |                             |
|---|-----------------------------|
| <b>Project:</b> Former Quick and Clean Cleaners                         | <b>Date:</b> 4/9/13         |
| <b>Client:</b> 380 Rockaway Turnpike Corp                               | <b>Be Job No:</b>           |
| <b>Location:</b> Cedarhurst, NY   | <b>Driller:</b> Joel/Eusi   |
| <b>Well No:</b> MW-3 <b>Use:</b> Survey/Monitoring Well                 | <b>Bore Hole Dia:</b> 3.5"  |
| <b>Drilling Method:</b> Geoprobe direct push                            | <b>Sample Method:</b> N/A   |
| <b>Casing Type:</b> PVC <b>Casing Dia:</b> 2" <b>Casing Length:</b> 3'  | <b>Depth to Water:</b> 10'  |
| <b>Screen Type:</b> PVC <b>Screen Dia:</b> 2" <b>Screen Length:</b> 10' | <b>Total Depth:</b> 13'     |
| <b>Screen Slot:</b> .02 inch <b>Gravel Pack:</b> #2 Fil-pro             | <b>Security:</b> 5" Manhole |
| <b>Casing Seal:</b> Cement <b>Finish:</b> Cement flush                  |                             |





|   |  |   |
|---|--|---|
| <p>Former Quick and Clean Cleaners<br/>380 Rockaway Turnpike<br/>Cedarhurst, New York</p> | <p>Figure-6<br/>Groundwater<br/>Flow</p> | <p>John V. Soderberg P.E<br/>PO Box 263<br/>Stony Brook, NY 11790</p> |
|---|--|---|



**Former Quick and Clean Cleaners**  
**380 Rockaway Turnpike**  
**Cedarhurst, New York**

**Figure-7**  
**Temporary Vapor**  
**Probe Construction**

**John V. Soderberg P.E**  
**PO Box 263**  
**Stony Brook, NY 11790**



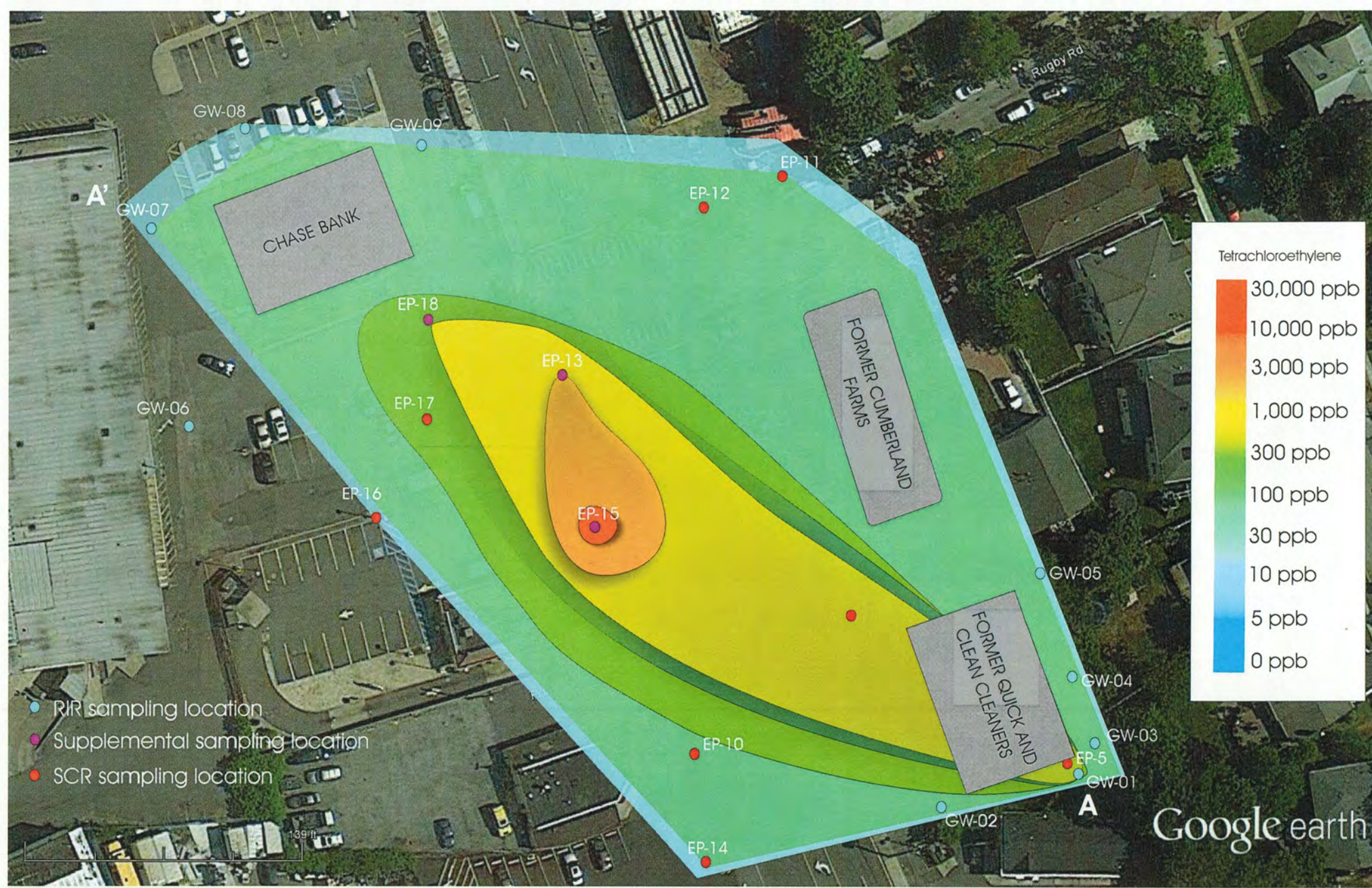


Figure- 8a  
PCE Aerial  
View

Former Quick and Clean Cleaners  
380 Rockaway Turnpike  
Cedarhurst, NY

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Stony Brook NY, 11790



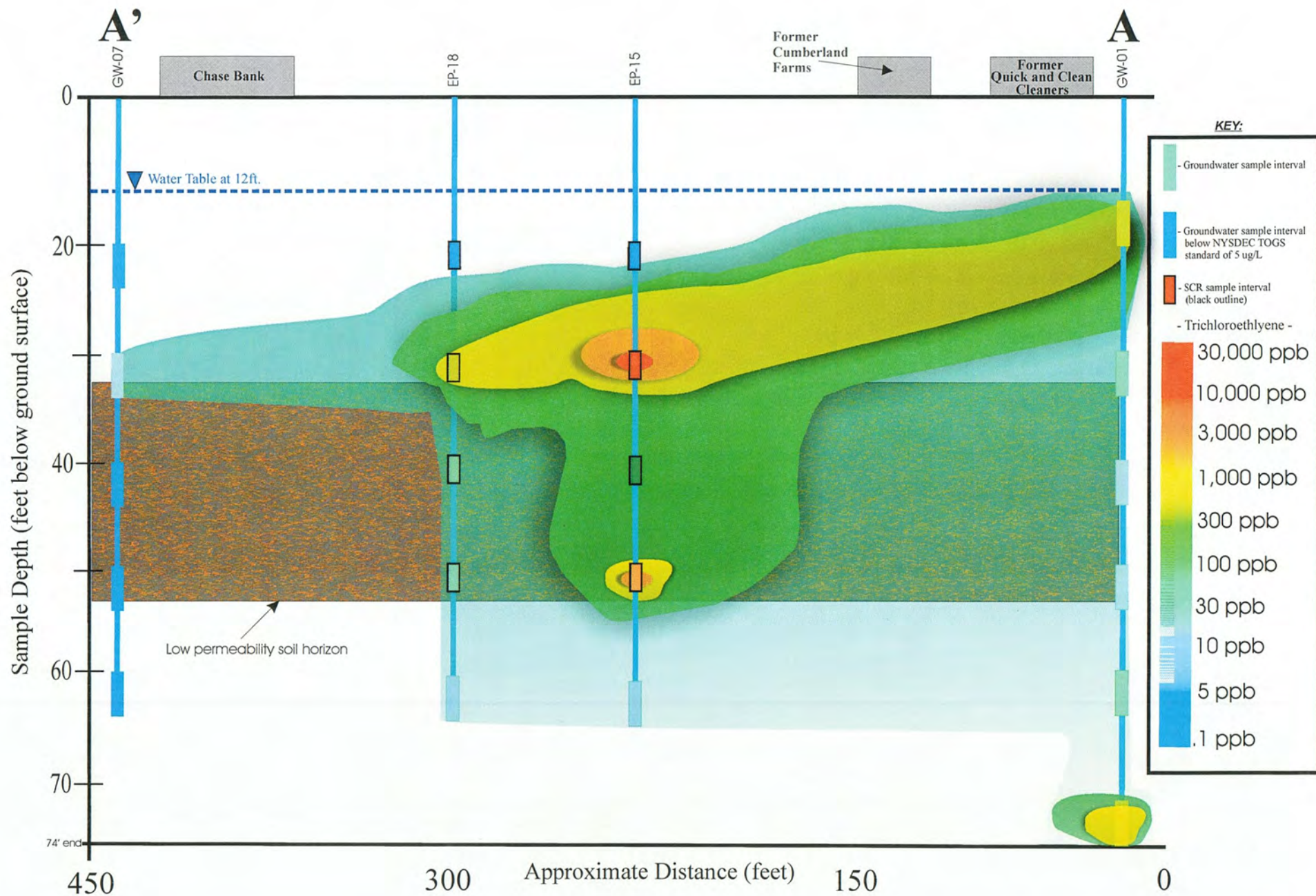


Figure 8b - South (A) to North (A') Cross-section  
Vertical profile of PCE in Groundwater

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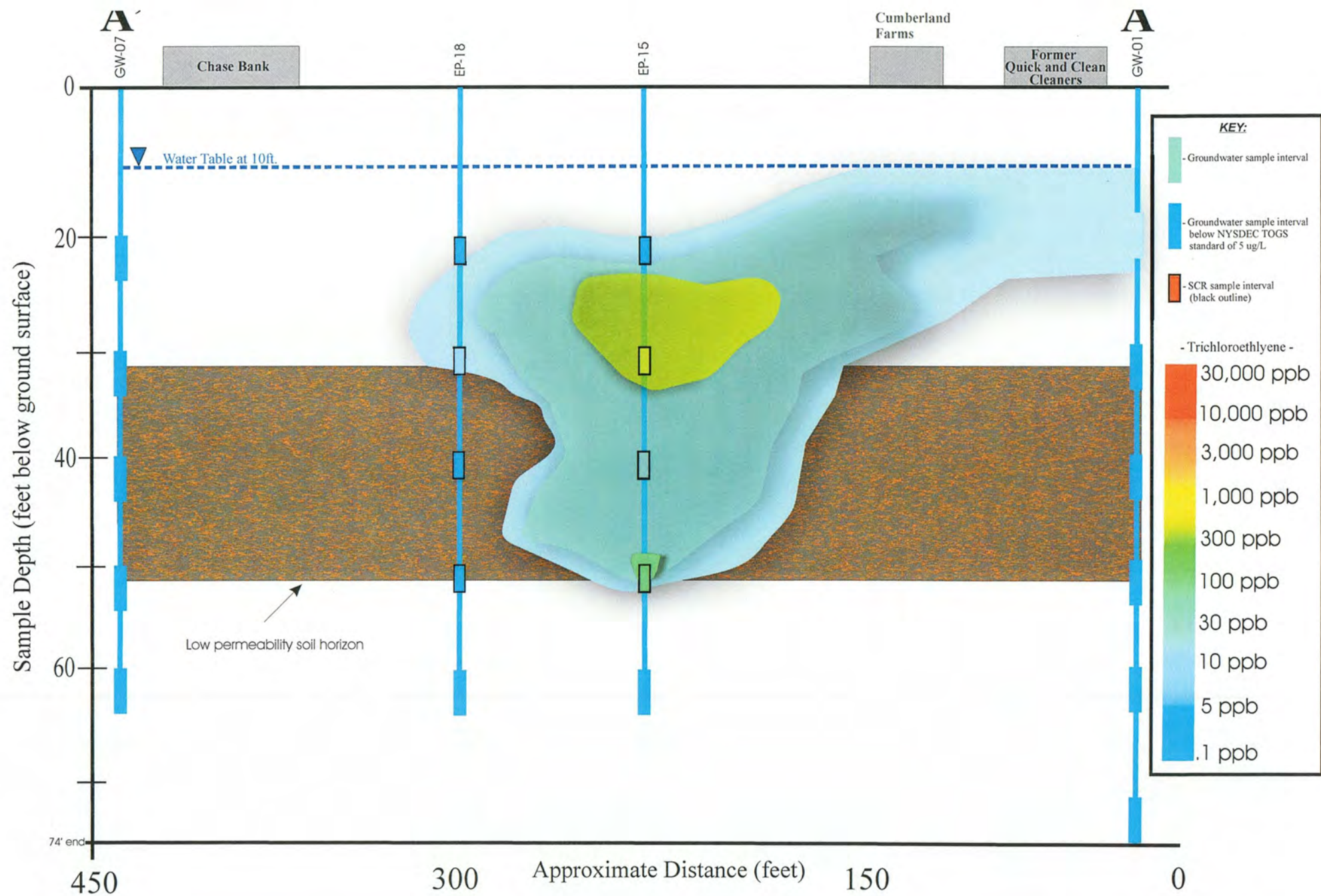


Figure- 9a  
TCE Aerial  
View

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Cedarhurst, NY

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**Figure 9b - South (A) to North (A') Cross-section  
Vertical profile of TCE in Groundwater**

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380 Rockaway Turnpike  
Cedarhurst, New York**

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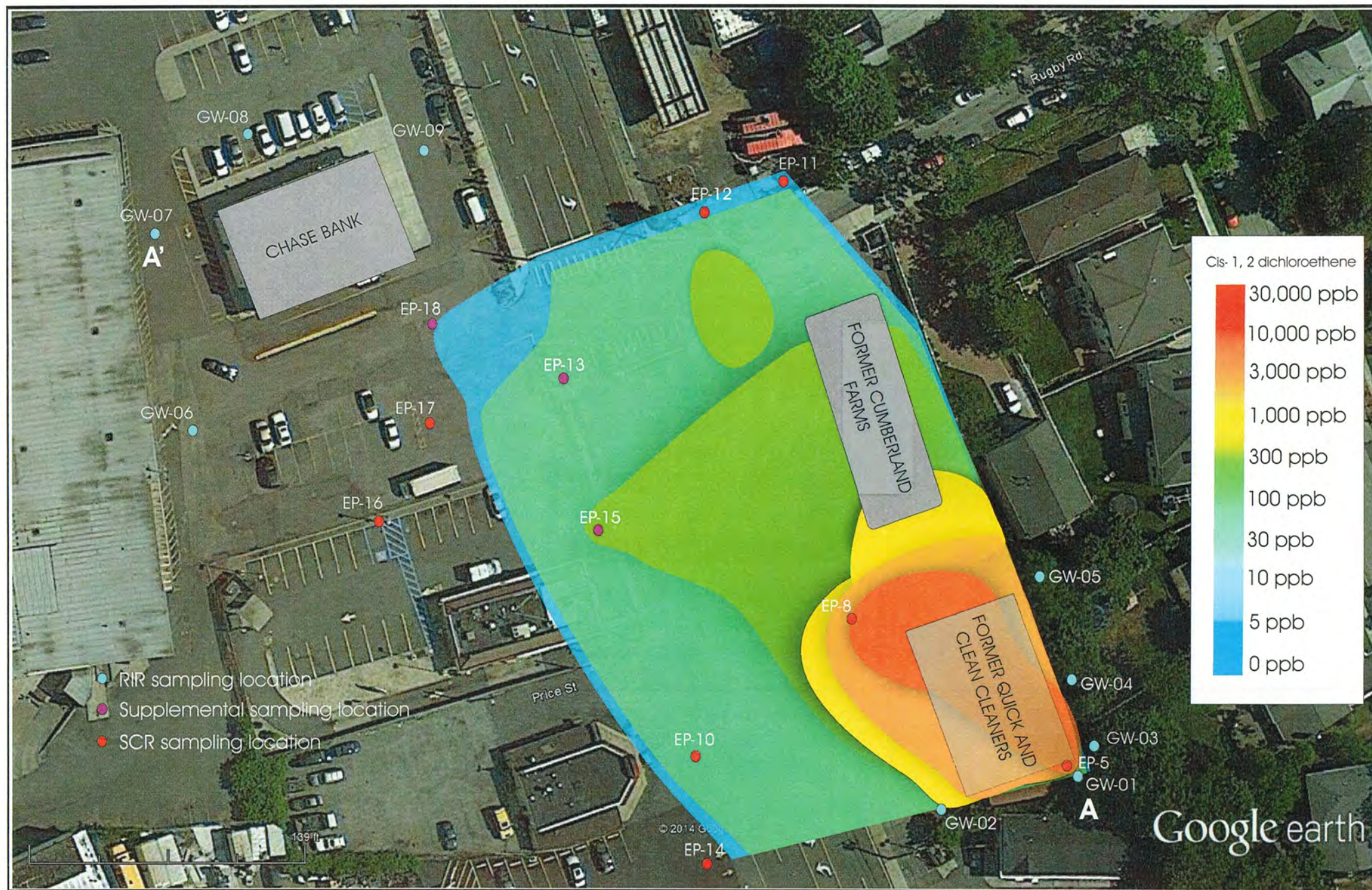


Figure- 10a  
1, 2 cDCE Aerial  
View

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380 Rockaway Turnpike  
Cedarhurst, NY

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Stony Brook NY, 11790



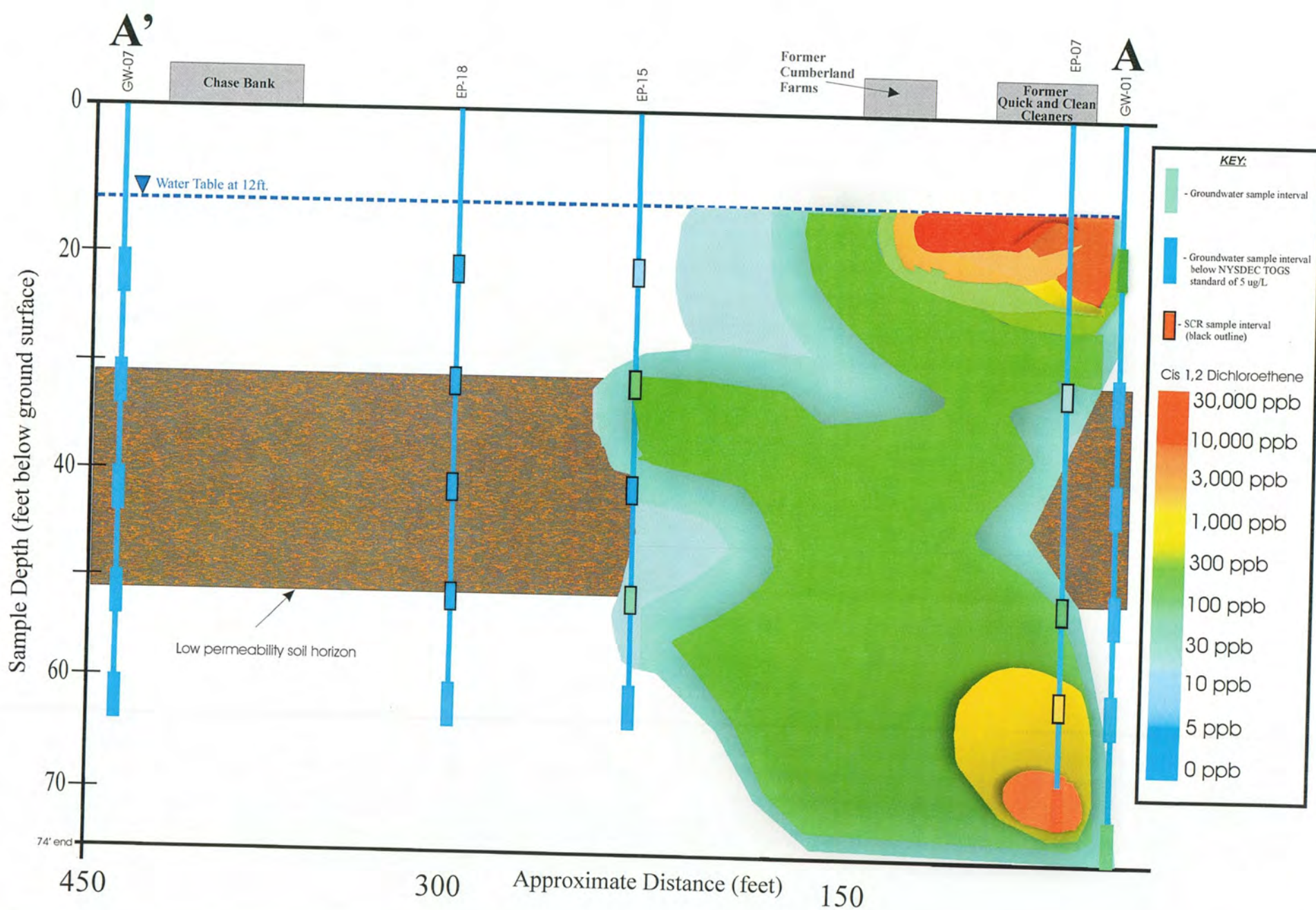


Figure 10b - South (A) to North (A') Cross-section Vertical profile of 1, 2 cDCE in Groundwater

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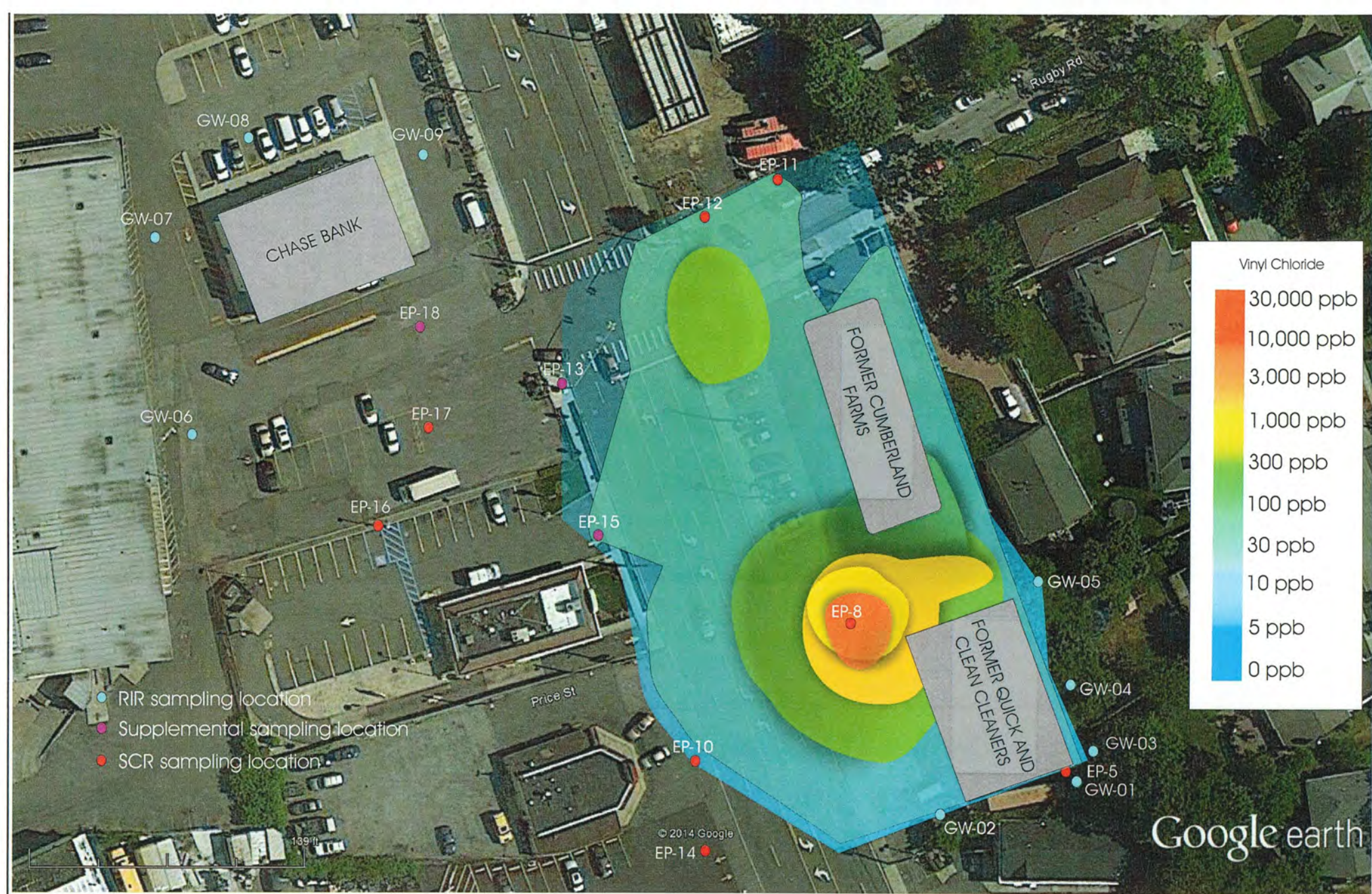


Figure- 11a  
VC Aerial  
View

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Cedarhurst, NY

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Stony Brook NY, 11790



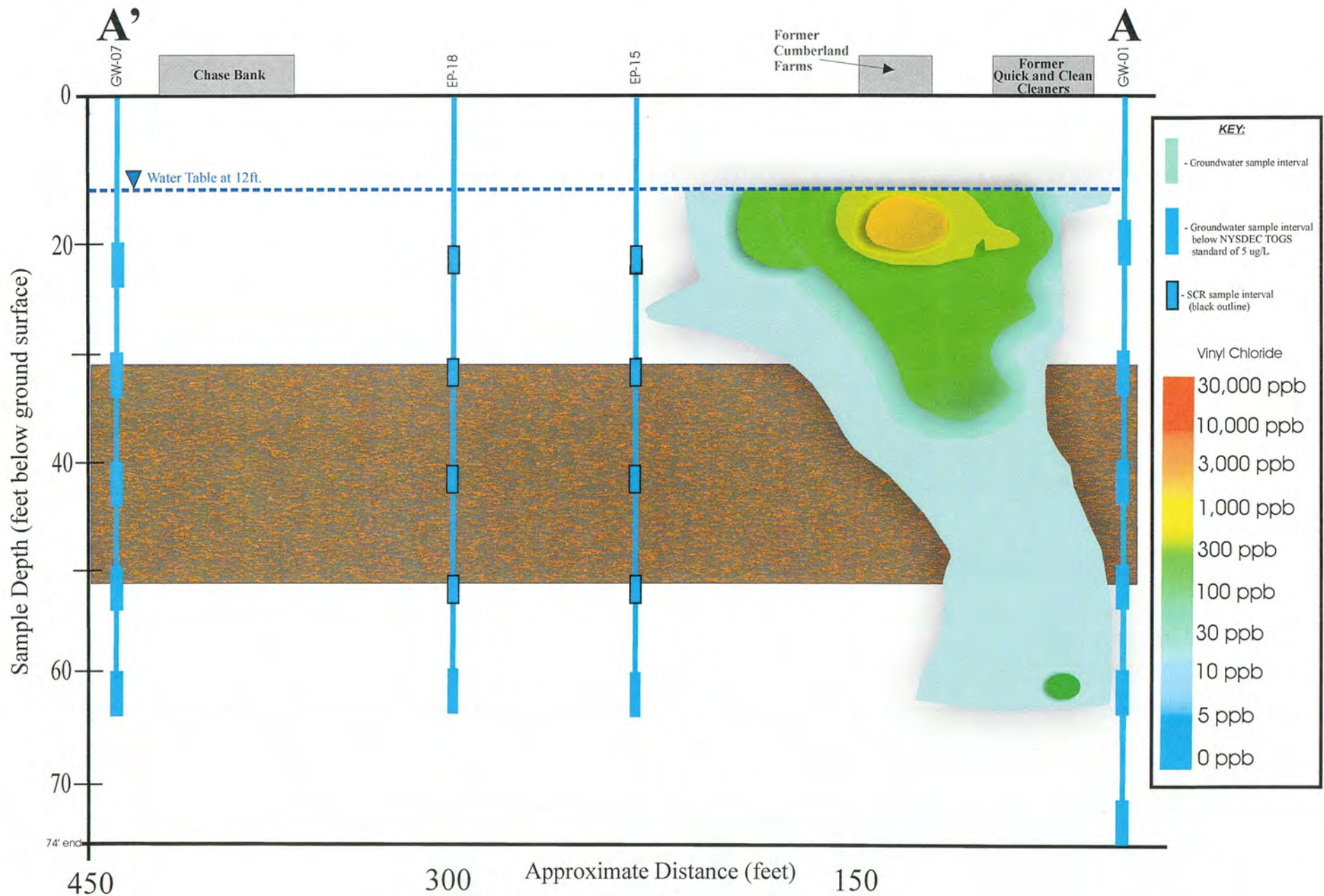


Figure 11b - South (A) to North (A') Cross-section  
Vertical profile of VC in Groundwater

Former Quick and Clean Cleaners  
380 Rockaway Turnpike  
Cedarhurst, NY

John V. Soderberg P.E  
PO Box 263  
Stony Brook NY, 11790

## **ATTACHMENTS**

## **Attachment-A**

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Health and Safety Plan (HASP) sign-in

# DAILY BRIEFING SIGN-IN SHEET

Date: 4/9-10/2013 Person Conducting Briefing: J.H.

Project Name and Location: Q+C

1. AWARENESS (topics discussed, special safety concerns, recent incidents, etc...):

Traffic, Hot work, General PPE

2. OTHER ISSUES (HASP changes, attendee comments, etc...):

3. ATTENDEES (Print Name):

|                           |     |
|---------------------------|-----|
| 1. <u>Justin Halpin</u>   | 11. |
| 2. <u>Eusebio Watkins</u> | 12. |
| 3. <u>Joel Meyer</u>      | 13. |
| 4. <u>John Daniels</u>    | 14. |
| 5.                        | 15. |
| 6.                        | 16. |
| 7.                        | 17. |
| 8.                        | 18. |
| 9.                        | 19. |
| 10.                       | 20. |



# DAILY BRIEFING SIGN-IN SHEET

Date: 6/11/2013 Person Conducting Briefing: STH

Project Name and Location: Quick + Clean Site

1. AWARENESS (topics discussed, special safety concerns, recent incidents, etc...):

Traffic, Hot Work Handling, General PPE

2. OTHER ISSUES (HASP changes, attendee comments, etc...):

3. ATTENDEES (Print Name):

|                           |     |
|---------------------------|-----|
| 1. <u>Justin Halpin</u>   | 11. |
| 2. <u>Eusebio Watkins</u> | 12. |
| 3. <u>Jul Meyer</u>       | 13. |
| 4. <u>Pete Daniels</u>    | 14. |
| 5.                        | 15. |
| 6.                        | 16. |
| 7.                        | 17. |
| 8.                        | 18. |
| 9.                        | 19. |
| 10.                       | 20. |

### DAILY BRIEFING SIGN-IN SHEET

Date: October 10, 11 2013 Person Conducting Briefing: JCH

Project Name and Location: Quick + Clean

1. AWARENESS (topics discussed, special safety concerns, recent incidents, etc...):

falls, the waste handling, General PE

2. OTHER ISSUES (HASP changes, attendee comments, etc...):

3. ATTENDEES (Print Name):

|                           |     |
|---------------------------|-----|
| 1. <u>Justin Holpin</u>   | 11. |
| 2. <u>Eusebio Blatkin</u> | 12. |
| 3. <u>Joel Mayers</u>     | 13. |
| 4. <u>Pete Daniels</u>    | 14. |
| 5.                        | 15. |
| 6.                        | 16. |
| 7.                        | 17. |
| 8.                        | 18. |
| 9.                        | 19. |
| 10.                       | 20. |



## **Attachment-B**

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CAMP Data (PID and Particulate)

pDR-1000 S/N: 00000

Tag Number: 06

Number of Logged Points: 207

Start time and date: 09:19:00 11-Oct

Elapsed time: 03:26:00

Logging period (sec) : 60

Calibration Factor (%) : 100

Max Display Concentration: 0.042

Time at maximum: 10:40

Max STEL Concentration : 0.000 mg/m3

Time at max STEL: 9:18 Oct 11

Overall Avg Conc: 0.000 mg/m3

Logged Data:

| Point | Date   | Time  | Avg. (mg/m3) |
|-------|--------|-------|--------------|
| 1     | 11-Oct | 9:19  | 0.000        |
| 2     | 11-Oct | 9:20  | 0.000        |
| 3     | 11-Oct | 9:21  | 0.000        |
| 4     | 11-Oct | 9:22  | 0.000        |
| 5     | 11-Oct | 9:23  | 0.001        |
| 6     | 11-Oct | 9:24  | 0.000        |
| 7     | 11-Oct | 9:25  | 0.000        |
| 8     | 11-Oct | 9:26  | 0.000        |
| 9     | 11-Oct | 9:27  | 0.000        |
| 10    | 11-Oct | 9:28  | 0.000        |
| 11    | 11-Oct | 9:29  | 0.000        |
| 12    | 11-Oct | 9:30  | 0.001        |
| 13    | 11-Oct | 9:31  | 0.001        |
| 14    | 11-Oct | 9:32  | 0.003        |
| 15    | 11-Oct | 9:33  | 0.000        |
| 16    | 11-Oct | 9:34  | 0.000        |
| 17    | 11-Oct | 9:35  | 0.003        |
| 18    | 11-Oct | 9:36  | 0.000        |
| 19    | 11-Oct | 9:37  | 0.001        |
| 20    | 11-Oct | 9:38  | 0.000        |
| 21    | 11-Oct | 9:39  | 0.000        |
| 22    | 11-Oct | 9:40  | 0.000        |
| 23    | 11-Oct | 9:41  | 0.000        |
| 24    | 11-Oct | 9:42  | 0.000        |
| 25    | 11-Oct | 9:43  | 0.000        |
| 26    | 11-Oct | 9:44  | 0.002        |
| 27    | 11-Oct | 9:45  | 0.003        |
| 28    | 11-Oct | 9:46  | 0.000        |
| 29    | 11-Oct | 9:47  | 0.000        |
| 30    | 11-Oct | 9:48  | 0.000        |
| 31    | 11-Oct | 9:49  | 0.000        |
| 32    | 11-Oct | 9:50  | 0.001        |
| 33    | 11-Oct | 9:51  | 0.001        |
| 34    | 11-Oct | 9:52  | 0.003        |
| 35    | 11-Oct | 9:53  | 0.002        |
| 36    | 11-Oct | 9:54  | 0.000        |
| 37    | 11-Oct | 9:55  | 0.003        |
| 38    | 11-Oct | 9:56  | 0.002        |
| 39    | 11-Oct | 9:57  | 0.001        |
| 40    | 11-Oct | 9:58  | 0.000        |
| 41    | 11-Oct | 9:59  | 0.000        |
| 42    | 11-Oct | 10:00 | 0.000        |
| 43    | 11-Oct | 10:01 | 0.000        |
| 44    | 11-Oct | 10:02 | 0.000        |
| 45    | 11-Oct | 10:03 | 0.001        |
| 46    | 11-Oct | 10:04 | 0.003        |

|     |        |       |       |
|-----|--------|-------|-------|
| 47  | 11-Oct | 10:05 | 0.000 |
| 48  | 11-Oct | 10:06 | 0.000 |
| 49  | 11-Oct | 10:07 | 0.000 |
| 50  | 11-Oct | 10:08 | 0.000 |
| 51  | 11-Oct | 10:09 | 0.000 |
| 52  | 11-Oct | 10:10 | 0.001 |
| 53  | 11-Oct | 10:11 | 0.000 |
| 54  | 11-Oct | 10:12 | 0.003 |
| 55  | 11-Oct | 10:13 | 0.000 |
| 56  | 11-Oct | 10:14 | 0.000 |
| 57  | 11-Oct | 10:15 | 0.003 |
| 58  | 11-Oct | 10:16 | 0.002 |
| 59  | 11-Oct | 10:17 | 0.000 |
| 60  | 11-Oct | 10:18 | 0.000 |
| 61  | 11-Oct | 10:19 | 0.000 |
| 62  | 11-Oct | 10:20 | 0.000 |
| 63  | 11-Oct | 10:21 | 0.000 |
| 64  | 11-Oct | 10:22 | 0.000 |
| 65  | 11-Oct | 10:23 | 0.001 |
| 66  | 11-Oct | 10:24 | 0.002 |
| 67  | 11-Oct | 10:25 | 0.000 |
| 68  | 11-Oct | 10:26 | 0.000 |
| 69  | 11-Oct | 10:27 | 0.000 |
| 70  | 11-Oct | 10:28 | 0.000 |
| 71  | 11-Oct | 10:29 | 0.002 |
| 72  | 11-Oct | 10:30 | 0.003 |
| 73  | 11-Oct | 10:31 | 0.000 |
| 74  | 11-Oct | 10:32 | 0.001 |
| 75  | 11-Oct | 10:33 | 0.001 |
| 76  | 11-Oct | 10:34 | 0.002 |
| 77  | 11-Oct | 10:35 | 0.000 |
| 78  | 11-Oct | 10:36 | 0.000 |
| 79  | 11-Oct | 10:37 | 0.003 |
| 80  | 11-Oct | 10:38 | 0.002 |
| 81  | 11-Oct | 10:39 | 0.000 |
| 82  | 11-Oct | 10:40 | 0.004 |
| 83  | 11-Oct | 10:41 | 0.002 |
| 84  | 11-Oct | 10:42 | 0.002 |
| 85  | 11-Oct | 10:43 | 0.000 |
| 86  | 11-Oct | 10:44 | 0.000 |
| 87  | 11-Oct | 10:45 | 0.003 |
| 88  | 11-Oct | 10:46 | 0.002 |
| 89  | 11-Oct | 10:47 | 0.000 |
| 90  | 11-Oct | 10:48 | 0.004 |
| 91  | 11-Oct | 10:49 | 0.002 |
| 92  | 11-Oct | 10:50 | 0.002 |
| 93  | 11-Oct | 10:51 | 0.000 |
| 94  | 11-Oct | 10:52 | 0.000 |
| 95  | 11-Oct | 10:53 | 0.003 |
| 96  | 11-Oct | 10:54 | 0.002 |
| 97  | 11-Oct | 10:55 | 0.000 |
| 98  | 11-Oct | 10:56 | 0.000 |
| 99  | 11-Oct | 10:57 | 0.000 |
| 100 | 11-Oct | 10:58 | 0.002 |
| 101 | 11-Oct | 10:59 | 0.000 |
| 102 | 11-Oct | 11:00 | 0.000 |
| 103 | 11-Oct | 11:01 | 0.003 |
| 104 | 11-Oct | 11:02 | 0.000 |
| 105 | 11-Oct | 11:03 | 0.000 |
| 106 | 11-Oct | 11:04 | 0.004 |

|     |        |       |       |
|-----|--------|-------|-------|
| 107 | 11-Oct | 11:05 | 0.002 |
| 108 | 11-Oct | 11:06 | 0.001 |
| 109 | 11-Oct | 11:07 | 0.000 |
| 110 | 11-Oct | 11:08 | 0.000 |
| 111 | 11-Oct | 11:09 | 0.000 |
| 112 | 11-Oct | 11:10 | 0.000 |
| 113 | 11-Oct | 11:11 | 0.000 |
| 114 | 11-Oct | 11:12 | 0.001 |
| 115 | 11-Oct | 11:13 | 0.002 |
| 116 | 11-Oct | 11:14 | 0.004 |
| 117 | 11-Oct | 11:15 | 0.000 |
| 118 | 11-Oct | 11:16 | 0.000 |
| 119 | 11-Oct | 11:17 | 0.000 |
| 120 | 11-Oct | 11:18 | 0.000 |
| 121 | 11-Oct | 11:19 | 0.001 |
| 122 | 11-Oct | 11:20 | 0.001 |
| 123 | 11-Oct | 11:21 | 0.000 |
| 124 | 11-Oct | 11:22 | 0.001 |
| 125 | 11-Oct | 11:23 | 0.000 |
| 126 | 11-Oct | 11:24 | 0.000 |
| 127 | 11-Oct | 11:25 | 0.000 |
| 128 | 11-Oct | 11:26 | 0.000 |
| 129 | 11-Oct | 11:27 | 0.000 |
| 130 | 11-Oct | 11:28 | 0.001 |
| 131 | 11-Oct | 11:29 | 0.000 |
| 132 | 11-Oct | 11:30 | 0.000 |
| 133 | 11-Oct | 11:31 | 0.000 |
| 134 | 11-Oct | 11:32 | 0.000 |
| 135 | 11-Oct | 11:33 | 0.000 |
| 136 | 11-Oct | 11:34 | 0.000 |
| 137 | 11-Oct | 11:35 | 0.001 |
| 138 | 11-Oct | 11:36 | 0.001 |
| 139 | 11-Oct | 11:37 | 0.001 |
| 140 | 11-Oct | 11:38 | 0.001 |
| 141 | 11-Oct | 11:39 | 0.000 |
| 142 | 11-Oct | 11:40 | 0.000 |
| 143 | 11-Oct | 11:41 | 0.000 |
| 144 | 11-Oct | 11:42 | 0.000 |
| 145 | 11-Oct | 11:43 | 0.000 |
| 146 | 11-Oct | 11:44 | 0.001 |
| 147 | 11-Oct | 11:45 | 0.000 |
| 148 | 11-Oct | 11:46 | 0.002 |
| 149 | 11-Oct | 11:47 | 0.000 |
| 150 | 11-Oct | 11:48 | 0.000 |
| 151 | 11-Oct | 11:49 | 0.000 |
| 152 | 11-Oct | 11:50 | 0.000 |
| 153 | 11-Oct | 11:51 | 0.001 |
| 154 | 11-Oct | 11:52 | 0.001 |
| 155 | 11-Oct | 11:53 | 0.003 |
| 156 | 11-Oct | 11:54 | 0.002 |
| 157 | 11-Oct | 11:55 | 0.000 |
| 158 | 11-Oct | 11:56 | 0.000 |
| 159 | 11-Oct | 11:57 | 0.000 |
| 160 | 11-Oct | 11:58 | 0.003 |
| 161 | 11-Oct | 11:59 | 0.002 |
| 162 | 11-Oct | 12:00 | 0.000 |
| 163 | 11-Oct | 12:01 | 0.002 |
| 164 | 11-Oct | 12:02 | 0.002 |
| 165 | 11-Oct | 12:03 | 0.000 |
| 166 | 11-Oct | 12:04 | 0.000 |

|     |        |       |       |
|-----|--------|-------|-------|
| 167 | 11-Oct | 12:05 | 0.000 |
| 168 | 11-Oct | 12:06 | 0.000 |
| 169 | 11-Oct | 12:07 | 0.000 |
| 170 | 11-Oct | 12:08 | 0.001 |
| 171 | 11-Oct | 12:09 | 0.002 |
| 172 | 11-Oct | 12:10 | 0.000 |
| 173 | 11-Oct | 12:11 | 0.000 |
| 174 | 11-Oct | 12:12 | 0.000 |
| 175 | 11-Oct | 12:13 | 0.000 |
| 176 | 11-Oct | 12:14 | 0.000 |
| 177 | 11-Oct | 12:15 | 0.000 |
| 178 | 11-Oct | 12:16 | 0.000 |
| 179 | 11-Oct | 12:17 | 0.000 |
| 180 | 11-Oct | 12:18 | 0.000 |
| 181 | 11-Oct | 12:19 | 0.000 |
| 182 | 11-Oct | 12:20 | 0.000 |
| 183 | 11-Oct | 12:21 | 0.000 |
| 184 | 11-Oct | 12:22 | 0.000 |
| 185 | 11-Oct | 12:23 | 0.000 |
| 186 | 11-Oct | 12:24 | 0.000 |
| 187 | 11-Oct | 12:25 | 0.000 |
| 188 | 11-Oct | 12:26 | 0.000 |
| 189 | 11-Oct | 12:27 | 0.000 |
| 190 | 11-Oct | 12:28 | 0.000 |
| 191 | 11-Oct | 12:29 | 0.000 |
| 192 | 11-Oct | 12:30 | 0.000 |
| 193 | 11-Oct | 12:31 | 0.001 |
| 194 | 11-Oct | 12:32 | 0.001 |
| 195 | 11-Oct | 12:33 | 0.000 |
| 196 | 11-Oct | 12:34 | 0.000 |
| 197 | 11-Oct | 12:35 | 0.000 |
| 198 | 11-Oct | 12:36 | 0.000 |
| 199 | 11-Oct | 12:37 | 0.000 |
| 200 | 11-Oct | 12:38 | 0.001 |
| 201 | 11-Oct | 12:39 | 0.000 |
| 202 | 11-Oct | 12:40 | 0.002 |
| 203 | 11-Oct | 12:41 | 0.000 |
| 204 | 11-Oct | 12:42 | 0.000 |
| 205 | 11-Oct | 12:43 | 0.001 |
| 206 | 11-Oct | 12:44 | 0.001 |
| 207 | 11-Oct | 12:45 | 0.000 |

Instrument: MiniRAE 2000 (PGM7600)

Serial Number: 009059

User ID: 00000001

Site ID: 00000202

Data Points: 206

Gas Name: Isobutylene

Sample Period: 60 sec

Last Calibration Time: 09/03/13 11:05

| Measurement Type:  | Min (ppm) | Avg (ppm) | Max (ppm) |
|--------------------|-----------|-----------|-----------|
| High Alarm Levels: | 100.0     | 100.0     | 100.0     |
| Low Alarm Levels:  | 50.0      | 50.0      | 50.0      |

| Line # | Date     | Time  | Min (ppm) | Avg (ppm) | Max (ppm) |
|--------|----------|-------|-----------|-----------|-----------|
| 1      | 10/11/13 | 9:18  | -----     | 0.0       | 0.1       |
| 2      | 10/11/13 | 9:19  | -----     | 0.0       | 0.1       |
| 3      | 10/11/13 | 9:20  | -----     | 0.0       | 0.1       |
| 4      | 10/11/13 | 9:21  | -----     | 0.0       | 0.1       |
| 5      | 10/11/13 | 9:22  | -----     | 0.0       | 0.1       |
| 6      | 10/11/13 | 9:23  | -----     | 0.0       | 0.1       |
| 7      | 10/11/13 | 9:24  | -----     | 0.0       | 0.1       |
| 8      | 10/11/13 | 9:25  | -----     | 0.0       | 0.1       |
| 9      | 10/11/13 | 9:26  | -----     | 0.0       | 0.1       |
| 10     | 10/11/13 | 9:27  | -----     | 0.0       | 0.1       |
| 11     | 10/11/13 | 9:28  | -----     | 0.0       | 0.1       |
| 12     | 10/11/13 | 9:29  | -----     | 0.0       | 0.1       |
| 13     | 10/11/13 | 9:30  | -----     | 0.0       | 0.1       |
| 14     | 10/11/13 | 9:31  | -----     | 0.0       | 0.1       |
| 15     | 10/11/13 | 9:32  | -----     | 0.0       | 0.0       |
| 16     | 10/11/13 | 9:33  | -----     | 0.0       | 0.1       |
| 17     | 10/11/13 | 9:34  | -----     | 0.0       | 0.0       |
| 18     | 10/11/13 | 9:35  | -----     | 0.0       | 0.1       |
| 19     | 10/11/13 | 9:36  | -----     | 0.0       | 0.1       |
| 20     | 10/11/13 | 9:37  | -----     | 0.0       | 0.0       |
| 21     | 10/11/13 | 9:38  | -----     | 0.0       | 0.1       |
| 22     | 10/11/13 | 9:39  | -----     | 0.0       | 0.1       |
| 23     | 10/11/13 | 9:40  | -----     | 0.0       | 0.1       |
| 24     | 10/11/13 | 9:41  | -----     | 0.0       | 0.1       |
| 25     | 10/11/13 | 9:42  | -----     | 0.0       | 0.0       |
| 26     | 10/11/13 | 9:43  | -----     | 0.0       | 0.1       |
| 27     | 10/11/13 | 9:44  | -----     | 0.0       | 0.1       |
| 28     | 10/11/13 | 9:45  | -----     | 0.0       | 0.1       |
| 29     | 10/11/13 | 9:46  | -----     | 0.0       | 0.1       |
| 30     | 10/11/13 | 9:47  | -----     | 0.0       | 0.1       |
| 31     | 10/11/13 | 9:48  | -----     | 0.0       | 0.0       |
| 32     | 10/11/13 | 9:49  | -----     | 0.0       | 0.1       |
| 33     | 10/11/13 | 9:50  | -----     | 0.0       | 0.1       |
| 34     | 10/11/13 | 9:51  | -----     | 0.0       | 0.1       |
| 35     | 10/11/13 | 9:52  | -----     | 0.0       | 0.1       |
| 36     | 10/11/13 | 9:53  | -----     | 0.0       | 0.1       |
| 37     | 10/11/13 | 9:54  | -----     | 0.0       | 0.1       |
| 38     | 10/11/13 | 9:55  | -----     | 0.0       | 0.1       |
| 39     | 10/11/13 | 9:56  | -----     | 0.0       | 0.1       |
| 40     | 10/11/13 | 9:57  | -----     | 0.0       | 0.1       |
| 41     | 10/11/13 | 9:58  | -----     | 0.0       | 0.1       |
| 42     | 10/11/13 | 9:59  | -----     | 0.0       | 0.1       |
| 43     | 10/11/13 | 10:00 | -----     | 0.0       | 0.1       |
| 44     | 10/11/13 | 10:01 | -----     | 0.0       | 0.1       |
| 45     | 10/11/13 | 10:02 | -----     | 0.0       | 0.1       |
| 46     | 10/11/13 | 10:03 | -----     | 0.0       | 0.1       |
| 47     | 10/11/13 | 10:04 | -----     | 0.0       | 0.1       |
| 48     | 10/11/13 | 10:05 | -----     | 0.0       | 0.1       |
| 49     | 10/11/13 | 10:06 | -----     | 0.0       | 0.1       |
| 50     | 10/11/13 | 10:07 | -----     | 0.0       | 0.1       |
| 51     | 10/11/13 | 10:08 | -----     | 0.0       | 0.1       |
| 52     | 10/11/13 | 10:09 | -----     | 0.0       | 0.1       |
| 53     | 10/11/13 | 10:10 | -----     | 0.0       | 0.1       |
| 54     | 10/11/13 | 10:11 | -----     | 0.0       | 0.1       |
| 55     | 10/11/13 | 10:12 | -----     | 0.0       | 0.1       |
| 56     | 10/11/13 | 10:13 | -----     | 0.0       | 0.1       |
| 57     | 10/11/13 | 10:14 | -----     | 0.0       | 0.1       |
| 58     | 10/11/13 | 10:15 | -----     | 0.0       | 0.1       |
| 59     | 10/11/13 | 10:16 | -----     | 0.0       | 0.1       |
| 60     | 10/11/13 | 10:17 | -----     | 0.0       | 0.1       |
| 61     | 10/11/13 | 10:18 | -----     | 0.0       | 0.1       |
| 62     | 10/11/13 | 10:19 | -----     | 0.0       | 0.1       |
| 63     | 10/11/13 | 10:20 | -----     | 0.0       | 0.1       |

|     |          |       |       |     |     |
|-----|----------|-------|-------|-----|-----|
| 64  | 10/11/13 | 10:21 | ----- | 0.0 | 0.1 |
| 65  | 10/11/13 | 10:22 | ----- | 0.0 | 0.1 |
| 66  | 10/11/13 | 10:23 | ----- | 0.0 | 0.1 |
| 67  | 10/11/13 | 10:24 | ----- | 0.0 | 0.1 |
| 68  | 10/11/13 | 10:25 | ----- | 0.0 | 0.1 |
| 69  | 10/11/13 | 10:26 | ----- | 0.0 | 0.1 |
| 70  | 10/11/13 | 10:27 | ----- | 0.0 | 0.1 |
| 71  | 10/11/13 | 10:28 | ----- | 0.0 | 0.1 |
| 72  | 10/11/13 | 10:29 | ----- | 0.0 | 0.1 |
| 73  | 10/11/13 | 10:30 | ----- | 0.0 | 0.1 |
| 74  | 10/11/13 | 10:31 | ----- | 0.0 | 0.1 |
| 75  | 10/11/13 | 10:32 | ----- | 0.0 | 0.1 |
| 76  | 10/11/13 | 10:33 | ----- | 0.0 | 0.1 |
| 77  | 10/11/13 | 10:34 | ----- | 0.0 | 0.1 |
| 78  | 10/11/13 | 10:35 | ----- | 0.0 | 0.1 |
| 79  | 10/11/13 | 10:36 | ----- | 0.0 | 0.1 |
| 80  | 10/11/13 | 10:37 | ----- | 0.0 | 0.1 |
| 81  | 10/11/13 | 10:38 | ----- | 0.0 | 0.1 |
| 82  | 10/11/13 | 10:39 | ----- | 0.0 | 0.1 |
| 83  | 10/11/13 | 10:40 | ----- | 0.0 | 0.1 |
| 84  | 10/11/13 | 10:41 | ----- | 0.0 | 0.1 |
| 85  | 10/11/13 | 10:42 | ----- | 0.0 | 0.1 |
| 86  | 10/11/13 | 10:43 | ----- | 0.0 | 0.1 |
| 87  | 10/11/13 | 10:44 | ----- | 0.0 | 0.1 |
| 88  | 10/11/13 | 10:45 | ----- | 0.0 | 0.1 |
| 89  | 10/11/13 | 10:46 | ----- | 0.0 | 0.1 |
| 90  | 10/11/13 | 10:47 | ----- | 0.0 | 0.1 |
| 91  | 10/11/13 | 10:48 | ----- | 0.0 | 0.1 |
| 92  | 10/11/13 | 10:49 | ----- | 0.0 | 0.1 |
| 93  | 10/11/13 | 10:50 | ----- | 0.0 | 0.1 |
| 94  | 10/11/13 | 10:51 | ----- | 0.0 | 0.1 |
| 95  | 10/11/13 | 10:52 | ----- | 0.0 | 0.1 |
| 96  | 10/11/13 | 10:53 | ----- | 0.0 | 0.1 |
| 97  | 10/11/13 | 10:54 | ----- | 0.0 | 0.1 |
| 98  | 10/11/13 | 10:55 | ----- | 0.0 | 0.1 |
| 99  | 10/11/13 | 10:56 | ----- | 0.0 | 0.1 |
| 100 | 10/11/13 | 10:57 | ----- | 0.0 | 0.1 |
| 101 | 10/11/13 | 10:58 | ----- | 0.0 | 0.1 |
| 102 | 10/11/13 | 10:59 | ----- | 0.0 | 0.1 |
| 103 | 10/11/13 | 11:00 | ----- | 0.0 | 0.1 |
| 104 | 10/11/13 | 11:01 | ----- | 0.0 | 0.1 |
| 105 | 10/11/13 | 11:02 | ----- | 0.0 | 0.1 |
| 106 | 10/11/13 | 11:03 | ----- | 0.0 | 0.1 |
| 107 | 10/11/13 | 11:04 | ----- | 0.0 | 0.1 |
| 108 | 10/11/13 | 11:05 | ----- | 0.0 | 0.1 |
| 109 | 10/11/13 | 11:06 | ----- | 0.0 | 0.1 |
| 110 | 10/11/13 | 11:07 | ----- | 0.0 | 0.1 |
| 111 | 10/11/13 | 11:08 | ----- | 0.0 | 0.1 |
| 112 | 10/11/13 | 11:09 | ----- | 0.0 | 0.1 |
| 113 | 10/11/13 | 11:10 | ----- | 0.0 | 0.1 |
| 114 | 10/11/13 | 11:11 | ----- | 0.0 | 0.1 |
| 115 | 10/11/13 | 11:12 | ----- | 0.0 | 0.1 |
| 116 | 10/11/13 | 11:13 | ----- | 0.0 | 0.1 |
| 117 | 10/11/13 | 11:14 | ----- | 0.0 | 0.1 |
| 118 | 10/11/13 | 11:15 | ----- | 0.0 | 0.1 |
| 119 | 10/11/13 | 11:16 | ----- | 0.0 | 0.1 |
| 120 | 10/11/13 | 11:17 | ----- | 0.0 | 0.1 |
| 121 | 10/11/13 | 11:18 | ----- | 0.0 | 0.1 |
| 122 | 10/11/13 | 11:19 | ----- | 0.0 | 0.1 |
| 123 | 10/11/13 | 11:20 | ----- | 0.0 | 0.1 |
| 124 | 10/11/13 | 11:21 | ----- | 0.0 | 0.1 |
| 125 | 10/11/13 | 11:22 | ----- | 0.0 | 0.1 |
| 126 | 10/11/13 | 11:23 | ----- | 0.0 | 0.1 |
| 127 | 10/11/13 | 11:24 | ----- | 0.0 | 0.1 |
| 128 | 10/11/13 | 11:25 | ----- | 0.0 | 0.1 |
| 129 | 10/11/13 | 11:26 | ----- | 0.0 | 0.1 |
| 130 | 10/11/13 | 11:27 | ----- | 0.0 | 0.1 |
| 131 | 10/11/13 | 11:28 | ----- | 0.0 | 0.1 |
| 132 | 10/11/13 | 11:29 | ----- | 0.0 | 0.1 |
| 133 | 10/11/13 | 11:30 | ----- | 0.0 | 0.1 |
| 134 | 10/11/13 | 11:31 | ----- | 0.0 | 0.1 |
| 135 | 10/11/13 | 11:32 | ----- | 0.0 | 0.1 |
| 136 | 10/11/13 | 11:33 | ----- | 0.0 | 0.1 |
| 137 | 10/11/13 | 11:34 | ----- | 0.0 | 0.1 |

|     |          |       |       |     |     |
|-----|----------|-------|-------|-----|-----|
| 138 | 10/11/13 | 11:35 | ----- | 0.0 | 0.1 |
| 139 | 10/11/13 | 11:36 | ----- | 0.0 | 0.1 |
| 140 | 10/11/13 | 11:37 | ----- | 0.0 | 0.1 |
| 141 | 10/11/13 | 11:38 | ----- | 0.0 | 0.1 |
| 142 | 10/11/13 | 11:39 | ----- | 0.0 | 0.1 |
| 143 | 10/11/13 | 11:40 | ----- | 0.0 | 0.1 |
| 144 | 10/11/13 | 11:41 | ----- | 0.0 | 0.1 |
| 145 | 10/11/13 | 11:42 | ----- | 0.0 | 0.1 |
| 146 | 10/11/13 | 11:43 | ----- | 0.0 | 0.1 |
| 147 | 10/11/13 | 11:44 | ----- | 0.0 | 0.1 |
| 148 | 10/11/13 | 11:45 | ----- | 0.0 | 0.1 |
| 149 | 10/11/13 | 11:46 | ----- | 0.0 | 0.1 |
| 150 | 10/11/13 | 11:47 | ----- | 0.0 | 0.1 |
| 151 | 10/11/13 | 11:48 | ----- | 0.0 | 0.1 |
| 152 | 10/11/13 | 11:49 | ----- | 0.0 | 0.1 |
| 153 | 10/11/13 | 11:50 | ----- | 0.0 | 0.1 |
| 154 | 10/11/13 | 11:51 | ----- | 0.0 | 0.1 |
| 155 | 10/11/13 | 11:52 | ----- | 0.0 | 0.1 |
| 156 | 10/11/13 | 11:53 | ----- | 0.0 | 0.1 |
| 157 | 10/11/13 | 11:54 | ----- | 0.0 | 0.1 |
| 158 | 10/11/13 | 11:55 | ----- | 0.0 | 0.1 |
| 159 | 10/11/13 | 11:56 | ----- | 0.0 | 0.1 |
| 160 | 10/11/13 | 11:57 | ----- | 0.0 | 0.1 |
| 161 | 10/11/13 | 11:58 | ----- | 0.0 | 0.1 |
| 162 | 10/11/13 | 11:59 | ----- | 0.0 | 0.1 |
| 163 | 10/11/13 | 12:00 | ----- | 0.0 | 0.1 |
| 164 | 10/11/13 | 12:01 | ----- | 0.0 | 0.1 |
| 165 | 10/11/13 | 12:02 | ----- | 0.0 | 0.1 |
| 166 | 10/11/13 | 12:03 | ----- | 0.0 | 0.1 |
| 167 | 10/11/13 | 12:04 | ----- | 0.0 | 0.1 |
| 168 | 10/11/13 | 12:05 | ----- | 0.0 | 0.1 |
| 169 | 10/11/13 | 12:06 | ----- | 0.0 | 0.1 |
| 170 | 10/11/13 | 12:07 | ----- | 0.0 | 0.1 |
| 171 | 10/11/13 | 12:08 | ----- | 0.0 | 0.1 |
| 172 | 10/11/13 | 12:09 | ----- | 0.0 | 0.1 |
| 173 | 10/11/13 | 12:10 | ----- | 0.0 | 0.1 |
| 174 | 10/11/13 | 12:11 | ----- | 0.0 | 0.1 |
| 175 | 10/11/13 | 12:12 | ----- | 0.0 | 0.1 |
| 176 | 10/11/13 | 12:13 | ----- | 0.0 | 0.1 |
| 177 | 10/11/13 | 12:14 | ----- | 0.0 | 0.1 |
| 178 | 10/11/13 | 12:15 | ----- | 0.0 | 0.1 |
| 179 | 10/11/13 | 12:16 | ----- | 0.0 | 0.1 |
| 180 | 10/11/13 | 12:17 | ----- | 0.0 | 0.1 |
| 181 | 10/11/13 | 12:18 | ----- | 0.0 | 0.1 |
| 182 | 10/11/13 | 12:19 | ----- | 0.0 | 0.1 |
| 183 | 10/11/13 | 12:20 | ----- | 0.0 | 0.1 |
| 184 | 10/11/13 | 12:21 | ----- | 0.0 | 0.1 |
| 185 | 10/11/13 | 12:22 | ----- | 0.0 | 0.1 |
| 186 | 10/11/13 | 12:23 | ----- | 0.0 | 0.1 |
| 187 | 10/11/13 | 12:24 | ----- | 0.0 | 0.1 |
| 188 | 10/11/13 | 12:25 | ----- | 0.0 | 0.1 |
| 189 | 10/11/13 | 12:26 | ----- | 0.0 | 0.1 |
| 190 | 10/11/13 | 12:27 | ----- | 0.0 | 0.1 |
| 191 | 10/11/13 | 12:28 | ----- | 0.0 | 0.1 |
| 192 | 10/11/13 | 12:29 | ----- | 0.0 | 0.1 |
| 193 | 10/11/13 | 12:30 | ----- | 0.0 | 0.1 |
| 194 | 10/11/13 | 12:31 | ----- | 0.0 | 0.1 |
| 195 | 10/11/13 | 12:32 | ----- | 0.0 | 0.1 |
| 196 | 10/11/13 | 12:33 | ----- | 0.0 | 0.0 |
| 197 | 10/11/13 | 12:34 | ----- | 0.0 | 0.0 |
| 198 | 10/11/13 | 12:35 | ----- | 0.0 | 0.0 |
| 199 | 10/11/13 | 12:36 | ----- | 0.0 | 0.0 |
| 200 | 10/11/13 | 12:37 | ----- | 0.0 | 0.1 |
| 201 | 10/11/13 | 12:38 | ----- | 0.0 | 0.0 |
| 202 | 10/11/13 | 12:39 | ----- | 0.0 | 0.0 |
| 203 | 10/11/13 | 12:40 | ----- | 0.0 | 0.2 |
| 204 | 10/11/13 | 12:41 | ----- | 0.0 | 0.0 |
| 205 | 10/11/13 | 12:42 | ----- | 0.0 | 0.0 |
| 206 | 10/11/13 | 12:43 | ----- | 0.0 | 0.1 |



pDR-1000 S/N: 00000

Tag Number: 06

Number of Logged Points: 231

Start time and date: 09:10:00 10-Oct

Elapsed time: 03:50:00

Logging period (sec) : 60

Calibration Factor (%) : 100

Max Display Concentration: 0.042

Time at maximum: 10:05

Max STEL Concentration : 0.000 mg/m3

Time at max STEL: 9:09 Oct 10

Overall Avg Conc: 0.000 mg/m3

Logged Data:

| Point | Date   | Time | Avg. (mg/m3) |
|-------|--------|------|--------------|
| 1     | 10-Oct | 9:10 | 0.000        |
| 2     | 10-Oct | 9:11 | 0.002        |
| 3     | 10-Oct | 9:12 | 0.002        |
| 4     | 10-Oct | 9:13 | 0.002        |
| 5     | 10-Oct | 9:14 | 0.000        |
| 6     | 10-Oct | 9:15 | 0.000        |
| 7     | 10-Oct | 9:16 | 0.002        |
| 8     | 10-Oct | 9:17 | 0.001        |
| 9     | 10-Oct | 9:18 | 0.000        |
| 10    | 10-Oct | 9:19 | 0.000        |
| 11    | 10-Oct | 9:20 | 0.000        |
| 12    | 10-Oct | 9:21 | 0.000        |
| 13    | 10-Oct | 9:22 | 0.000        |
| 14    | 10-Oct | 9:23 | 0.001        |
| 15    | 10-Oct | 9:24 | 0.002        |
| 16    | 10-Oct | 9:25 | 0.000        |
| 17    | 10-Oct | 9:26 | 0.000        |
| 18    | 10-Oct | 9:27 | 0.000        |
| 19    | 10-Oct | 9:28 | 0.000        |
| 20    | 10-Oct | 9:29 | 0.000        |
| 21    | 10-Oct | 9:30 | 0.001        |
| 22    | 10-Oct | 9:31 | 0.001        |
| 23    | 10-Oct | 9:32 | 0.003        |
| 24    | 10-Oct | 9:33 | 0.000        |
| 25    | 10-Oct | 9:34 | 0.000        |
| 26    | 10-Oct | 9:35 | 0.003        |
| 27    | 10-Oct | 9:36 | 0.002        |
| 28    | 10-Oct | 9:37 | 0.001        |
| 29    | 10-Oct | 9:38 | 0.000        |
| 30    | 10-Oct | 9:39 | 0.000        |
| 31    | 10-Oct | 9:40 | 0.000        |
| 32    | 10-Oct | 9:41 | 0.000        |
| 33    | 10-Oct | 9:42 | 0.000        |
| 34    | 10-Oct | 9:43 | 0.001        |
| 35    | 10-Oct | 9:44 | 0.002        |
| 36    | 10-Oct | 9:45 | 0.003        |
| 37    | 10-Oct | 9:46 | 0.000        |
| 38    | 10-Oct | 9:47 | 0.000        |
| 39    | 10-Oct | 9:48 | 0.000        |
| 40    | 10-Oct | 9:49 | 0.000        |
| 41    | 10-Oct | 9:50 | 0.001        |
| 42    | 10-Oct | 9:51 | 0.001        |
| 43    | 10-Oct | 9:52 | 0.003        |
| 44    | 10-Oct | 9:53 | 0.002        |
| 45    | 10-Oct | 9:54 | 0.000        |
| 46    | 10-Oct | 9:55 | 0.003        |
| 47    | 10-Oct | 9:56 | 0.002        |
| 48    | 10-Oct | 9:57 | 0.001        |

|     |        |       |       |
|-----|--------|-------|-------|
| 49  | 10-Oct | 9:58  | 0.000 |
| 50  | 10-Oct | 9:59  | 0.000 |
| 51  | 10-Oct | 10:00 | 0.000 |
| 52  | 10-Oct | 10:01 | 0.000 |
| 53  | 10-Oct | 10:02 | 0.000 |
| 54  | 10-Oct | 10:03 | 0.001 |
| 55  | 10-Oct | 10:04 | 0.003 |
| 56  | 10-Oct | 10:05 | 0.004 |
| 57  | 10-Oct | 10:06 | 0.000 |
| 58  | 10-Oct | 10:07 | 0.000 |
| 59  | 10-Oct | 10:08 | 0.000 |
| 60  | 10-Oct | 10:09 | 0.000 |
| 61  | 10-Oct | 10:10 | 0.001 |
| 62  | 10-Oct | 10:11 | 0.000 |
| 63  | 10-Oct | 10:12 | 0.003 |
| 64  | 10-Oct | 10:13 | 0.000 |
| 65  | 10-Oct | 10:14 | 0.000 |
| 66  | 10-Oct | 10:15 | 0.003 |
| 67  | 10-Oct | 10:16 | 0.002 |
| 68  | 10-Oct | 10:17 | 0.001 |
| 69  | 10-Oct | 10:18 | 0.000 |
| 70  | 10-Oct | 10:19 | 0.000 |
| 71  | 10-Oct | 10:20 | 0.000 |
| 72  | 10-Oct | 10:21 | 0.000 |
| 73  | 10-Oct | 10:22 | 0.000 |
| 74  | 10-Oct | 10:23 | 0.001 |
| 75  | 10-Oct | 10:24 | 0.002 |
| 76  | 10-Oct | 10:25 | 0.000 |
| 77  | 10-Oct | 10:26 | 0.000 |
| 78  | 10-Oct | 10:27 | 0.000 |
| 79  | 10-Oct | 10:28 | 0.000 |
| 80  | 10-Oct | 10:29 | 0.002 |
| 81  | 10-Oct | 10:30 | 0.003 |
| 82  | 10-Oct | 10:31 | 0.000 |
| 83  | 10-Oct | 10:32 | 0.001 |
| 84  | 10-Oct | 10:33 | 0.001 |
| 85  | 10-Oct | 10:34 | 0.002 |
| 86  | 10-Oct | 10:35 | 0.000 |
| 87  | 10-Oct | 10:36 | 0.000 |
| 88  | 10-Oct | 10:37 | 0.003 |
| 89  | 10-Oct | 10:38 | 0.002 |
| 90  | 10-Oct | 10:39 | 0.000 |
| 91  | 10-Oct | 10:40 | 0.004 |
| 92  | 10-Oct | 10:41 | 0.002 |
| 93  | 10-Oct | 10:42 | 0.002 |
| 94  | 10-Oct | 10:43 | 0.000 |
| 95  | 10-Oct | 10:44 | 0.000 |
| 96  | 10-Oct | 10:45 | 0.003 |
| 97  | 10-Oct | 10:46 | 0.002 |
| 98  | 10-Oct | 10:47 | 0.000 |
| 99  | 10-Oct | 10:48 | 0.004 |
| 100 | 10-Oct | 10:49 | 0.002 |
| 101 | 10-Oct | 10:50 | 0.002 |
| 102 | 10-Oct | 10:51 | 0.000 |
| 103 | 10-Oct | 10:52 | 0.000 |
| 104 | 10-Oct | 10:53 | 0.003 |
| 105 | 10-Oct | 10:54 | 0.002 |
| 106 | 10-Oct | 10:55 | 0.000 |
| 107 | 10-Oct | 10:56 | 0.000 |
| 108 | 10-Oct | 10:57 | 0.000 |
| 109 | 10-Oct | 10:58 | 0.002 |
| 110 | 10-Oct | 10:59 | 0.000 |

|     |        |       |       |
|-----|--------|-------|-------|
| 111 | 10-Oct | 11:00 | 0.000 |
| 112 | 10-Oct | 11:01 | 0.003 |
| 113 | 10-Oct | 11:02 | 0.002 |
| 114 | 10-Oct | 11:03 | 0.000 |
| 115 | 10-Oct | 11:04 | 0.004 |
| 116 | 10-Oct | 11:05 | 0.002 |
| 117 | 10-Oct | 11:06 | 0.001 |
| 118 | 10-Oct | 11:07 | 0.000 |
| 119 | 10-Oct | 11:08 | 0.000 |
| 120 | 10-Oct | 11:09 | 0.000 |
| 121 | 10-Oct | 11:10 | 0.000 |
| 122 | 10-Oct | 11:11 | 0.000 |
| 123 | 10-Oct | 11:12 | 0.001 |
| 124 | 10-Oct | 11:13 | 0.002 |
| 125 | 10-Oct | 11:14 | 0.004 |
| 126 | 10-Oct | 11:15 | 0.000 |
| 127 | 10-Oct | 11:16 | 0.000 |
| 128 | 10-Oct | 11:17 | 0.000 |
| 129 | 10-Oct | 11:18 | 0.000 |
| 130 | 10-Oct | 11:19 | 0.001 |
| 131 | 10-Oct | 11:20 | 0.001 |
| 132 | 10-Oct | 11:21 | 0.003 |
| 133 | 10-Oct | 11:22 | 0.001 |
| 134 | 10-Oct | 11:23 | 0.000 |
| 135 | 10-Oct | 11:24 | 0.000 |
| 136 | 10-Oct | 11:25 | 0.000 |
| 137 | 10-Oct | 11:26 | 0.000 |
| 138 | 10-Oct | 11:27 | 0.000 |
| 139 | 10-Oct | 11:28 | 0.001 |
| 140 | 10-Oct | 11:29 | 0.002 |
| 141 | 10-Oct | 11:30 | 0.000 |
| 142 | 10-Oct | 11:31 | 0.000 |
| 143 | 10-Oct | 11:32 | 0.000 |
| 144 | 10-Oct | 11:33 | 0.000 |
| 145 | 10-Oct | 11:34 | 0.000 |
| 146 | 10-Oct | 11:35 | 0.001 |
| 147 | 10-Oct | 11:36 | 0.001 |
| 148 | 10-Oct | 11:37 | 0.001 |
| 149 | 10-Oct | 11:38 | 0.001 |
| 150 | 10-Oct | 11:39 | 0.000 |
| 151 | 10-Oct | 11:40 | 0.000 |
| 152 | 10-Oct | 11:41 | 0.000 |
| 153 | 10-Oct | 11:42 | 0.000 |
| 154 | 10-Oct | 11:43 | 0.000 |
| 155 | 10-Oct | 11:44 | 0.001 |
| 156 | 10-Oct | 11:45 | 0.002 |
| 157 | 10-Oct | 11:46 | 0.002 |
| 158 | 10-Oct | 11:47 | 0.000 |
| 159 | 10-Oct | 11:48 | 0.000 |
| 160 | 10-Oct | 11:49 | 0.000 |
| 161 | 10-Oct | 11:50 | 0.000 |
| 162 | 10-Oct | 11:51 | 0.001 |
| 163 | 10-Oct | 11:52 | 0.001 |
| 164 | 10-Oct | 11:53 | 0.003 |
| 165 | 10-Oct | 11:54 | 0.002 |
| 166 | 10-Oct | 11:55 | 0.002 |
| 167 | 10-Oct | 11:56 | 0.000 |
| 168 | 10-Oct | 11:57 | 0.000 |
| 169 | 10-Oct | 11:58 | 0.003 |
| 170 | 10-Oct | 11:59 | 0.002 |
| 171 | 10-Oct | 12:00 | 0.000 |
| 172 | 10-Oct | 12:01 | 0.002 |

|     |        |       |       |
|-----|--------|-------|-------|
| 173 | 10-Oct | 12:02 | 0.002 |
| 174 | 10-Oct | 12:03 | 0.002 |
| 175 | 10-Oct | 12:04 | 0.000 |
| 176 | 10-Oct | 12:05 | 0.000 |
| 177 | 10-Oct | 12:06 | 0.000 |
| 178 | 10-Oct | 12:07 | 0.000 |
| 179 | 10-Oct | 12:08 | 0.001 |
| 180 | 10-Oct | 12:09 | 0.002 |
| 181 | 10-Oct | 12:10 | 0.000 |
| 182 | 10-Oct | 12:11 | 0.000 |
| 183 | 10-Oct | 12:12 | 0.000 |
| 184 | 10-Oct | 12:13 | 0.000 |
| 185 | 10-Oct | 12:14 | 0.001 |
| 186 | 10-Oct | 12:15 | 0.000 |
| 187 | 10-Oct | 12:16 | 0.000 |
| 188 | 10-Oct | 12:17 | 0.000 |
| 189 | 10-Oct | 12:18 | 0.000 |
| 190 | 10-Oct | 12:19 | 0.000 |
| 191 | 10-Oct | 12:20 | 0.000 |
| 192 | 10-Oct | 12:21 | 0.000 |
| 193 | 10-Oct | 12:22 | 0.000 |
| 194 | 10-Oct | 12:23 | 0.000 |
| 195 | 10-Oct | 12:24 | 0.000 |
| 196 | 10-Oct | 12:25 | 0.000 |
| 197 | 10-Oct | 12:26 | 0.000 |
| 198 | 10-Oct | 12:27 | 0.000 |
| 199 | 10-Oct | 12:28 | 0.000 |
| 200 | 10-Oct | 12:29 | 0.000 |
| 201 | 10-Oct | 12:30 | 0.000 |
| 202 | 10-Oct | 12:31 | 0.001 |
| 203 | 10-Oct | 12:32 | 0.001 |
| 204 | 10-Oct | 12:33 | 0.000 |
| 205 | 10-Oct | 12:34 | 0.000 |
| 206 | 10-Oct | 12:35 | 0.000 |
| 207 | 10-Oct | 12:36 | 0.000 |
| 208 | 10-Oct | 12:37 | 0.000 |
| 209 | 10-Oct | 12:38 | 0.001 |
| 210 | 10-Oct | 12:39 | 0.002 |
| 211 | 10-Oct | 12:40 | 0.002 |
| 212 | 10-Oct | 12:41 | 0.000 |
| 213 | 10-Oct | 12:42 | 0.000 |
| 214 | 10-Oct | 12:43 | 0.001 |
| 215 | 10-Oct | 12:44 | 0.001 |
| 216 | 10-Oct | 12:45 | 0.000 |
| 217 | 10-Oct | 12:46 | 0.000 |
| 218 | 10-Oct | 12:47 | 0.000 |
| 219 | 10-Oct | 12:48 | 0.000 |
| 220 | 10-Oct | 12:49 | 0.000 |
| 221 | 10-Oct | 12:50 | 0.001 |
| 222 | 10-Oct | 12:51 | 0.002 |
| 223 | 10-Oct | 12:52 | 0.002 |
| 224 | 10-Oct | 12:53 | 0.000 |
| 225 | 10-Oct | 12:54 | 0.000 |
| 226 | 10-Oct | 12:55 | 0.001 |
| 227 | 10-Oct | 12:56 | 0.001 |
| 228 | 10-Oct | 12:57 | 0.000 |
| 229 | 10-Oct | 12:58 | 0.000 |
| 230 | 10-Oct | 12:59 | 0.000 |
| 231 | 10-Oct | 1:00  | 0.000 |

Instrument: MiniRAE 2000 (PGM7600)

Serial Number: 009059

User ID: 00000001

Site ID: 00000202

Data Points: 227

Gas Name: Isobutylene

Sample Period: 60 sec

Last Calibration Time: 09/03/13 11:05

| Measurement Type:  | Min (ppm) | Avg (ppm) | Max (ppm) |
|--------------------|-----------|-----------|-----------|
| High Alarm Levels: | 100.0     | 100.0     | 100.0     |
| Low Alarm Levels:  | 50.0      | 50.0      | 50.0      |

| Line # | Date     | Time  | Min (ppm) | Avg (ppm) | Max (ppm) |
|--------|----------|-------|-----------|-----------|-----------|
| 1      | 10/10/13 | 9:12  | -----     | 0.0       | 0.1       |
| 2      | 10/10/13 | 9:13  | -----     | 0.0       | 0.1       |
| 3      | 10/10/13 | 9:14  | -----     | 0.0       | 0.1       |
| 4      | 10/10/13 | 9:15  | -----     | 0.0       | 0.1       |
| 5      | 10/10/13 | 9:16  | -----     | 0.0       | 0.1       |
| 6      | 10/10/13 | 9:17  | -----     | 0.0       | 0.1       |
| 7      | 10/10/13 | 9:18  | -----     | 0.0       | 0.1       |
| 8      | 10/10/13 | 9:19  | -----     | 0.0       | 0.1       |
| 9      | 10/10/13 | 9:20  | -----     | 0.0       | 0.1       |
| 10     | 10/10/13 | 9:21  | -----     | 0.0       | 0.1       |
| 11     | 10/10/13 | 9:22  | -----     | 0.0       | 0.1       |
| 12     | 10/10/13 | 9:23  | -----     | 0.0       | 0.1       |
| 13     | 10/10/13 | 9:24  | -----     | 0.0       | 0.1       |
| 14     | 10/10/13 | 9:25  | -----     | 0.0       | 0.1       |
| 15     | 10/10/13 | 9:26  | -----     | 0.0       | 0.1       |
| 16     | 10/10/13 | 9:27  | -----     | 0.0       | 0.1       |
| 17     | 10/10/13 | 9:28  | -----     | 0.0       | 0.1       |
| 18     | 10/10/13 | 9:29  | -----     | 0.0       | 0.1       |
| 19     | 10/10/13 | 9:30  | -----     | 0.0       | 0.1       |
| 20     | 10/10/13 | 9:31  | -----     | 0.0       | 0.1       |
| 21     | 10/10/13 | 9:32  | -----     | 0.0       | 0.0       |
| 22     | 10/10/13 | 9:33  | -----     | 0.0       | 0.1       |
| 23     | 10/10/13 | 9:34  | -----     | 0.0       | 0.0       |
| 24     | 10/10/13 | 9:35  | -----     | 0.0       | 0.1       |
| 25     | 10/10/13 | 9:36  | -----     | 0.0       | 0.1       |
| 26     | 10/10/13 | 9:37  | -----     | 0.0       | 0.0       |
| 27     | 10/10/13 | 9:38  | -----     | 0.0       | 0.1       |
| 28     | 10/10/13 | 9:39  | -----     | 0.0       | 0.1       |
| 29     | 10/10/13 | 9:40  | -----     | 0.0       | 0.1       |
| 30     | 10/10/13 | 9:41  | -----     | 0.0       | 0.1       |
| 31     | 10/10/13 | 9:42  | -----     | 0.0       | 0.0       |
| 32     | 10/10/13 | 9:43  | -----     | 0.0       | 0.1       |
| 33     | 10/10/13 | 9:44  | -----     | 0.0       | 0.1       |
| 34     | 10/10/13 | 9:45  | -----     | 0.0       | 0.1       |
| 35     | 10/10/13 | 9:46  | -----     | 0.0       | 0.1       |
| 36     | 10/10/13 | 9:47  | -----     | 0.0       | 0.1       |
| 37     | 10/10/13 | 9:48  | -----     | 0.0       | 0.0       |
| 38     | 10/10/13 | 9:49  | -----     | 0.0       | 0.1       |
| 39     | 10/10/13 | 9:50  | -----     | 0.0       | 0.1       |
| 40     | 10/10/13 | 9:51  | -----     | 0.0       | 0.1       |
| 41     | 10/10/13 | 9:52  | -----     | 0.0       | 0.1       |
| 42     | 10/10/13 | 9:53  | -----     | 0.0       | 0.1       |
| 43     | 10/10/13 | 9:54  | -----     | 0.0       | 0.1       |
| 44     | 10/10/13 | 9:55  | -----     | 0.0       | 0.1       |
| 45     | 10/10/13 | 9:56  | -----     | 0.0       | 0.1       |
| 46     | 10/10/13 | 9:57  | -----     | 0.0       | 0.1       |
| 47     | 10/10/13 | 9:58  | -----     | 0.0       | 0.1       |
| 48     | 10/10/13 | 9:59  | -----     | 0.0       | 0.1       |
| 49     | 10/10/13 | 10:00 | -----     | 0.0       | 0.1       |
| 50     | 10/10/13 | 10:01 | -----     | 0.0       | 0.1       |
| 51     | 10/10/13 | 10:02 | -----     | 0.0       | 0.1       |
| 52     | 10/10/13 | 10:03 | -----     | 0.0       | 0.1       |
| 53     | 10/10/13 | 10:04 | -----     | 0.0       | 0.1       |
| 54     | 10/10/13 | 10:05 | -----     | 0.0       | 0.1       |
| 55     | 10/10/13 | 10:06 | -----     | 0.0       | 0.1       |
| 56     | 10/10/13 | 10:07 | -----     | 0.0       | 0.1       |
| 57     | 10/10/13 | 10:08 | -----     | 0.0       | 0.1       |
| 58     | 10/10/13 | 10:09 | -----     | 0.0       | 0.1       |
| 59     | 10/10/13 | 10:10 | -----     | 0.0       | 0.1       |
| 60     | 10/10/13 | 10:11 | -----     | 0.0       | 0.1       |
| 61     | 10/10/13 | 10:12 | -----     | 0.0       | 0.1       |
| 62     | 10/10/13 | 10:13 | -----     | 0.0       | 0.1       |
| 63     | 10/10/13 | 10:14 | -----     | 0.0       | 0.1       |
| 64     | 10/10/13 | 10:15 | -----     | 0.0       | 0.1       |
| 65     | 10/10/13 | 10:16 | -----     | 0.0       | 0.1       |
| 66     | 10/10/13 | 10:17 | -----     | 0.0       | 0.1       |
| 67     | 10/10/13 | 10:18 | -----     | 0.0       | 0.1       |
| 68     | 10/10/13 | 10:19 | -----     | 0.0       | 0.1       |
| 69     | 10/10/13 | 10:20 | -----     | 0.0       | 0.1       |

|     |          |       |       |     |     |
|-----|----------|-------|-------|-----|-----|
| 70  | 10/10/13 | 10:21 | ----- | 0.0 | 0.1 |
| 71  | 10/10/13 | 10:22 | ----- | 0.0 | 0.1 |
| 72  | 10/10/13 | 10:23 | ----- | 0.0 | 0.1 |
| 73  | 10/10/13 | 10:24 | ----- | 0.0 | 0.1 |
| 74  | 10/10/13 | 10:25 | ----- | 0.0 | 0.1 |
| 75  | 10/10/13 | 10:26 | ----- | 0.0 | 0.1 |
| 76  | 10/10/13 | 10:27 | ----- | 0.0 | 0.1 |
| 77  | 10/10/13 | 10:28 | ----- | 0.0 | 0.1 |
| 78  | 10/10/13 | 10:29 | ----- | 0.0 | 0.1 |
| 79  | 10/10/13 | 10:30 | ----- | 0.0 | 0.1 |
| 80  | 10/10/13 | 10:31 | ----- | 0.0 | 0.1 |
| 81  | 10/10/13 | 10:32 | ----- | 0.0 | 0.1 |
| 82  | 10/10/13 | 10:33 | ----- | 0.0 | 0.1 |
| 83  | 10/10/13 | 10:34 | ----- | 0.0 | 0.1 |
| 84  | 10/10/13 | 10:35 | ----- | 0.0 | 0.1 |
| 85  | 10/10/13 | 10:36 | ----- | 0.0 | 0.1 |
| 86  | 10/10/13 | 10:37 | ----- | 0.0 | 0.1 |
| 87  | 10/10/13 | 10:38 | ----- | 0.0 | 0.1 |
| 88  | 10/10/13 | 10:39 | ----- | 0.0 | 0.1 |
| 89  | 10/10/13 | 10:40 | ----- | 0.0 | 0.1 |
| 90  | 10/10/13 | 10:41 | ----- | 0.0 | 0.1 |
| 91  | 10/10/13 | 10:42 | ----- | 0.0 | 0.1 |
| 92  | 10/10/13 | 10:43 | ----- | 0.0 | 0.1 |
| 93  | 10/10/13 | 10:44 | ----- | 0.0 | 0.1 |
| 94  | 10/10/13 | 10:45 | ----- | 0.0 | 0.1 |
| 95  | 10/10/13 | 10:46 | ----- | 0.0 | 0.1 |
| 96  | 10/10/13 | 10:47 | ----- | 0.0 | 0.1 |
| 97  | 10/10/13 | 10:48 | ----- | 0.0 | 0.1 |
| 98  | 10/10/13 | 10:49 | ----- | 0.0 | 0.1 |
| 99  | 10/10/13 | 10:50 | ----- | 0.0 | 0.1 |
| 100 | 10/10/13 | 10:51 | ----- | 0.0 | 0.1 |
| 101 | 10/10/13 | 10:52 | ----- | 0.0 | 0.1 |
| 102 | 10/10/13 | 10:53 | ----- | 0.0 | 0.1 |
| 103 | 10/10/13 | 10:54 | ----- | 0.0 | 0.1 |
| 104 | 10/10/13 | 10:55 | ----- | 0.0 | 0.1 |
| 105 | 10/10/13 | 10:56 | ----- | 0.0 | 0.1 |
| 106 | 10/10/13 | 10:57 | ----- | 0.0 | 0.1 |
| 107 | 10/10/13 | 10:58 | ----- | 0.0 | 0.1 |
| 108 | 10/10/13 | 10:59 | ----- | 0.0 | 0.1 |
| 109 | 10/10/13 | 11:00 | ----- | 0.0 | 0.1 |
| 110 | 10/10/13 | 11:01 | ----- | 0.0 | 0.1 |
| 111 | 10/10/13 | 11:02 | ----- | 0.0 | 0.1 |
| 112 | 10/10/13 | 11:03 | ----- | 0.0 | 0.1 |
| 113 | 10/10/13 | 11:04 | ----- | 0.0 | 0.1 |
| 114 | 10/10/13 | 11:05 | ----- | 0.0 | 0.1 |
| 115 | 10/10/13 | 11:06 | ----- | 0.0 | 0.1 |
| 116 | 10/10/13 | 11:07 | ----- | 0.0 | 0.1 |
| 117 | 10/10/13 | 11:08 | ----- | 0.0 | 0.1 |
| 118 | 10/10/13 | 11:09 | ----- | 0.0 | 0.1 |
| 119 | 10/10/13 | 11:10 | ----- | 0.0 | 0.1 |
| 120 | 10/10/13 | 11:11 | ----- | 0.0 | 0.1 |
| 121 | 10/10/13 | 11:12 | ----- | 0.0 | 0.1 |
| 122 | 10/10/13 | 11:13 | ----- | 0.0 | 0.1 |
| 123 | 10/10/13 | 11:14 | ----- | 0.0 | 0.1 |
| 124 | 10/10/13 | 11:15 | ----- | 0.0 | 0.1 |
| 125 | 10/10/13 | 11:16 | ----- | 0.0 | 0.1 |
| 126 | 10/10/13 | 11:17 | ----- | 0.0 | 0.1 |
| 127 | 10/10/13 | 11:18 | ----- | 0.0 | 0.1 |
| 128 | 10/10/13 | 11:19 | ----- | 0.0 | 0.1 |
| 129 | 10/10/13 | 11:20 | ----- | 0.0 | 0.1 |
| 130 | 10/10/13 | 11:21 | ----- | 0.0 | 0.1 |
| 131 | 10/10/13 | 11:22 | ----- | 0.0 | 0.1 |
| 132 | 10/10/13 | 11:23 | ----- | 0.0 | 0.1 |
| 133 | 10/10/13 | 11:24 | ----- | 0.0 | 0.1 |
| 134 | 10/10/13 | 11:25 | ----- | 0.0 | 0.1 |
| 135 | 10/10/13 | 11:26 | ----- | 0.0 | 0.1 |
| 136 | 10/10/13 | 11:27 | ----- | 0.0 | 0.1 |
| 137 | 10/10/13 | 11:28 | ----- | 0.0 | 0.1 |
| 138 | 10/10/13 | 11:29 | ----- | 0.0 | 0.1 |
| 139 | 10/10/13 | 11:30 | ----- | 0.0 | 0.1 |
| 140 | 10/10/13 | 11:31 | ----- | 0.0 | 0.1 |
| 141 | 10/10/13 | 11:32 | ----- | 0.0 | 0.1 |
| 142 | 10/10/13 | 11:33 | ----- | 0.0 | 0.1 |
| 143 | 10/10/13 | 11:34 | ----- | 0.0 | 0.1 |
| 144 | 10/10/13 | 11:35 | ----- | 0.0 | 0.1 |
| 145 | 10/10/13 | 11:36 | ----- | 0.0 | 0.1 |
| 146 | 10/10/13 | 11:37 | ----- | 0.0 | 0.1 |
| 147 | 10/10/13 | 11:38 | ----- | 0.0 | 0.1 |
| 148 | 10/10/13 | 11:39 | ----- | 0.0 | 0.1 |
| 149 | 10/10/13 | 11:40 | ----- | 0.0 | 0.1 |

|     |          |       |       |     |     |
|-----|----------|-------|-------|-----|-----|
| 150 | 10/10/13 | 11:41 | ----- | 0.0 | 0.1 |
| 151 | 10/10/13 | 11:42 | ----- | 0.0 | 0.1 |
| 152 | 10/10/13 | 11:43 | ----- | 0.0 | 0.1 |
| 153 | 10/10/13 | 11:44 | ----- | 0.0 | 0.1 |
| 154 | 10/10/13 | 11:45 | ----- | 0.0 | 0.1 |
| 155 | 10/10/13 | 11:46 | ----- | 0.0 | 0.1 |
| 156 | 10/10/13 | 11:47 | ----- | 0.0 | 0.1 |
| 157 | 10/10/13 | 11:48 | ----- | 0.0 | 0.1 |
| 158 | 10/10/13 | 11:49 | ----- | 0.0 | 0.1 |
| 159 | 10/10/13 | 11:50 | ----- | 0.0 | 0.1 |
| 160 | 10/10/13 | 11:51 | ----- | 0.0 | 0.1 |
| 161 | 10/10/13 | 11:52 | ----- | 0.0 | 0.1 |
| 162 | 10/10/13 | 11:53 | ----- | 0.0 | 0.1 |
| 163 | 10/10/13 | 11:54 | ----- | 0.0 | 0.1 |
| 164 | 10/10/13 | 11:55 | ----- | 0.0 | 0.1 |
| 165 | 10/10/13 | 11:56 | ----- | 0.0 | 0.1 |
| 166 | 10/10/13 | 11:57 | ----- | 0.0 | 0.1 |
| 167 | 10/10/13 | 11:58 | ----- | 0.0 | 0.1 |
| 168 | 10/10/13 | 11:59 | ----- | 0.0 | 0.1 |
| 169 | 10/10/13 | 12:00 | ----- | 0.0 | 0.1 |
| 170 | 10/10/13 | 12:01 | ----- | 0.0 | 0.1 |
| 171 | 10/10/13 | 12:02 | ----- | 0.0 | 0.1 |
| 172 | 10/10/13 | 12:03 | ----- | 0.0 | 0.1 |
| 173 | 10/10/13 | 12:04 | ----- | 0.0 | 0.1 |
| 174 | 10/10/13 | 12:05 | ----- | 0.0 | 0.1 |
| 175 | 10/10/13 | 12:06 | ----- | 0.0 | 0.1 |
| 176 | 10/10/13 | 12:07 | ----- | 0.0 | 0.1 |
| 177 | 10/10/13 | 12:08 | ----- | 0.0 | 0.1 |
| 178 | 10/10/13 | 12:09 | ----- | 0.0 | 0.1 |
| 179 | 10/10/13 | 12:10 | ----- | 0.0 | 0.1 |
| 180 | 10/10/13 | 12:11 | ----- | 0.0 | 0.1 |
| 181 | 10/10/13 | 12:12 | ----- | 0.0 | 0.1 |
| 182 | 10/10/13 | 12:13 | ----- | 0.0 | 0.1 |
| 183 | 10/10/13 | 12:14 | ----- | 0.0 | 0.1 |
| 184 | 10/10/13 | 12:15 | ----- | 0.0 | 0.1 |
| 185 | 10/10/13 | 12:16 | ----- | 0.0 | 0.1 |
| 186 | 10/10/13 | 12:17 | ----- | 0.0 | 0.1 |
| 187 | 10/10/13 | 12:18 | ----- | 0.0 | 0.1 |
| 188 | 10/10/13 | 12:19 | ----- | 0.0 | 0.1 |
| 189 | 10/10/13 | 12:20 | ----- | 0.0 | 0.1 |
| 190 | 10/10/13 | 12:21 | ----- | 0.0 | 0.1 |
| 191 | 10/10/13 | 12:22 | ----- | 0.0 | 0.1 |
| 192 | 10/10/13 | 12:23 | ----- | 0.0 | 0.1 |
| 193 | 10/10/13 | 12:24 | ----- | 0.0 | 0.1 |
| 194 | 10/10/13 | 12:25 | ----- | 0.0 | 0.1 |
| 195 | 10/10/13 | 12:26 | ----- | 0.0 | 0.1 |
| 196 | 10/10/13 | 12:27 | ----- | 0.0 | 0.1 |
| 197 | 10/10/13 | 12:28 | ----- | 0.0 | 0.1 |
| 198 | 10/10/13 | 12:29 | ----- | 0.0 | 0.1 |
| 199 | 10/10/13 | 12:30 | ----- | 0.0 | 0.1 |
| 200 | 10/10/13 | 12:31 | ----- | 0.0 | 0.1 |
| 201 | 10/10/13 | 12:32 | ----- | 0.0 | 0.1 |
| 202 | 10/10/13 | 12:33 | ----- | 0.0 | 0.0 |
| 203 | 10/10/13 | 12:34 | ----- | 0.0 | 0.0 |
| 204 | 10/10/13 | 12:35 | ----- | 0.0 | 0.0 |
| 205 | 10/10/13 | 12:36 | ----- | 0.0 | 0.0 |
| 206 | 10/10/13 | 12:37 | ----- | 0.0 | 0.1 |
| 207 | 10/10/13 | 12:38 | ----- | 0.0 | 0.0 |
| 208 | 10/10/13 | 12:39 | ----- | 0.0 | 0.0 |
| 209 | 10/10/13 | 12:40 | ----- | 0.0 | 0.2 |
| 210 | 10/10/13 | 12:41 | ----- | 0.0 | 0.0 |
| 211 | 10/10/13 | 12:42 | ----- | 0.0 | 0.0 |
| 212 | 10/10/13 | 12:43 | ----- | 0.0 | 0.1 |
| 213 | 10/10/13 | 12:44 | ----- | 0.0 | 0.0 |
| 214 | 10/10/13 | 12:45 | ----- | 0.0 | 0.0 |
| 215 | 10/10/13 | 12:46 | ----- | 0.0 | 0.0 |
| 216 | 10/10/13 | 12:47 | ----- | 0.0 | 0.0 |
| 217 | 10/10/13 | 12:48 | ----- | 0.0 | 0.0 |
| 218 | 10/10/13 | 12:49 | ----- | 0.0 | 0.0 |
| 219 | 10/10/13 | 12:50 | ----- | 0.0 | 0.0 |
| 220 | 10/10/13 | 12:51 | ----- | 0.0 | 0.0 |
| 221 | 10/10/13 | 12:52 | ----- | 0.0 | 0.1 |
| 222 | 10/10/13 | 12:53 | ----- | 0.0 | 0.0 |
| 223 | 10/10/13 | 12:54 | ----- | 0.0 | 0.0 |
| 224 | 10/10/13 | 12:55 | ----- | 0.0 | 0.0 |
| 225 | 10/10/13 | 12:56 | ----- | 0.0 | 0.2 |
| 226 | 10/10/13 | 12:57 | ----- | 0.0 | 0.1 |
| 227 | 10/10/13 | 12:58 | ----- | 0.0 | 0.0 |



DR-1000 S/N: 00000  
Tag Number: 06  
Number of logged points: 175  
Start time and date: 09:32:51 11-Jun  
Elapsed time: 02:55:00  
Logging period (sec): 60  
Calibration Factor (%): 100  
Max Display Concentration: 0.042 mg/m<sup>3</sup>  
Time at maximum: 09:38:43 Jun 11  
Max STEL Concentration: 0.000 mg/m<sup>3</sup>  
Time at max STEL: 09:32:51 Jun 11  
Overall Avg Conc: 0.000 mg/m<sup>3</sup>

Logged Data:

| Point | Date   | Time     | Avg. (mg/m <sup>3</sup> ) |
|-------|--------|----------|---------------------------|
| 1     | 11 Jun | 09:33:51 | 0.000                     |
| 2     | 11 Jun | 09:34:51 | 0.000                     |
| 3     | 11 Jun | 09:35:51 | 0.000                     |
| 4     | 11 Jun | 09:36:51 | 0.000                     |
| 5     | 11 Jun | 09:37:51 | 0.000                     |
| 6     | 11 Jun | 09:38:51 | 0.009                     |
| 7     | 11 Jun | 09:39:51 | 0.000                     |
| 8     | 11 Jun | 09:40:51 | 0.000                     |
| 9     | 11 Jun | 09:41:51 | 0.000                     |
| 10    | 11 Jun | 09:42:51 | 0.000                     |
| 11    | 11 Jun | 09:43:51 | 0.000                     |
| 12    | 11 Jun | 09:44:51 | 0.000                     |
| 13    | 11 Jun | 09:45:51 | 0.000                     |
| 14    | 11 Jun | 09:46:51 | 0.004                     |
| 15    | 11 Jun | 09:47:51 | 0.000                     |
| 16    | 11 Jun | 09:48:51 | 0.000                     |
| 17    | 11 Jun | 09:49:51 | 0.000                     |
| 18    | 11 Jun | 09:50:51 | 0.000                     |
| 19    | 11 Jun | 09:51:51 | 0.000                     |
| 20    | 11 Jun | 09:52:51 | 0.000                     |
| 21    | 11 Jun | 09:53:51 | 0.003                     |
| 22    | 11 Jun | 09:54:51 | 0.000                     |
| 23    | 11 Jun | 09:55:51 | 0.000                     |
| 24    | 11 Jun | 09:56:51 | 0.000                     |
| 25    | 11 Jun | 09:57:51 | 0.000                     |
| 26    | 11 Jun | 09:58:51 | 0.000                     |
| 27    | 11 Jun | 09:59:51 | 0.000                     |
| 28    | 11 Jun | 10:00:51 | 0.000                     |
| 29    | 11 Jun | 10:01:51 | 0.001                     |
| 30    | 11 Jun | 10:02:51 | 0.000                     |
| 31    | 11 Jun | 10:03:51 | 0.000                     |
| 32    | 11 Jun | 10:04:51 | 0.000                     |
| 33    | 11 Jun | 10:05:51 | 0.000                     |
| 34    | 11 Jun | 10:06:51 | 0.000                     |
| 35    | 11 Jun | 10:07:51 | 0.000                     |
| 36    | 11 Jun | 10:08:51 | 0.000                     |
| 37    | 11 Jun | 10:09:51 | 0.000                     |
| 38    | 11 Jun | 10:10:51 | 0.000                     |
| 39    | 11 Jun | 10:11:51 | 0.000                     |
| 40    | 11 Jun | 10:12:51 | 0.000                     |
| 41    | 11 Jun | 10:13:51 | 0.000                     |
| 42    | 11 Jun | 10:14:51 | 0.000                     |
| 43    | 11 Jun | 10:15:51 | 0.000                     |
| 44    | 11 Jun | 10:16:51 | 0.000                     |
| 45    | 11 Jun | 10:17:51 | 0.002                     |
| 46    | 11 Jun | 10:18:51 | 0.000                     |
| 47    | 11 Jun | 10:19:51 | 0.000                     |
| 48    | 11 Jun | 10:20:51 | 0.000                     |
| 49    | 11 Jun | 10:21:51 | 0.000                     |
| 50    | 11 Jun | 10:22:51 | 0.000                     |
| 51    | 11 Jun | 10:23:51 | 0.004                     |
| 52    | 11 Jun | 10:24:51 | 0.000                     |
| 53    | 11 Jun | 10:25:51 | 0.000                     |
| 54    | 11 Jun | 10:26:51 | 0.000                     |
| 55    | 11 Jun | 10:27:51 | 0.001                     |
| 56    | 11 Jun | 10:28:51 | 0.000                     |
| 57    | 11 Jun | 10:29:51 | 0.000                     |

|      |    |      |           |       |
|------|----|------|-----------|-------|
| 58,  | 11 | Jun, | 10:30:51, | 0.000 |
| 59,  | 11 | Jun, | 10:31:51, | 0.000 |
| 60,  | 11 | Jun, | 10:32:51, | 0.000 |
| 61,  | 11 | Jun, | 10:33:51, | 0.000 |
| 62,  | 11 | Jun, | 10:34:51, | 0.000 |
| 63,  | 11 | Jun, | 10:35:51, | 0.000 |
| 64,  | 11 | Jun, | 10:36:51, | 0.000 |
| 65,  | 11 | Jun, | 10:37:51, | 0.002 |
| 66,  | 11 | Jun, | 10:38:51, | 0.000 |
| 67,  | 11 | Jun, | 10:39:51, | 0.000 |
| 68,  | 11 | Jun, | 10:40:51, | 0.000 |
| 69,  | 11 | Jun, | 10:41:51, | 0.000 |
| 70,  | 11 | Jun, | 10:42:51, | 0.005 |
| 71,  | 11 | Jun, | 10:43:51, | 0.001 |
| 72,  | 11 | Jun, | 10:44:51, | 0.006 |
| 73,  | 11 | Jun, | 10:45:51, | 0.000 |
| 74,  | 11 | Jun, | 10:46:51, | 0.000 |
| 75,  | 11 | Jun, | 10:47:51, | 0.003 |
| 76,  | 11 | Jun, | 10:48:51, | 0.001 |
| 77,  | 11 | Jun, | 10:49:51, | 0.000 |
| 78,  | 11 | Jun, | 10:50:51, | 0.000 |
| 79,  | 11 | Jun, | 10:51:51, | 0.000 |
| 80,  | 11 | Jun, | 10:52:51, | 0.000 |
| 81,  | 11 | Jun, | 10:53:51, | 0.002 |
| 82,  | 11 | Jun, | 10:54:51, | 0.001 |
| 83,  | 11 | Jun, | 10:55:51, | 0.000 |
| 84,  | 11 | Jun, | 10:56:51, | 0.000 |
| 85,  | 11 | Jun, | 10:57:51, | 0.000 |
| 86,  | 11 | Jun, | 10:58:51, | 0.000 |
| 87,  | 11 | Jun, | 10:59:51, | 0.000 |
| 88,  | 11 | Jun, | 11:00:51, | 0.000 |
| 89,  | 11 | Jun, | 11:01:51, | 0.000 |
| 90,  | 11 | Jun, | 11:02:51, | 0.000 |
| 91,  | 11 | Jun, | 11:03:51, | 0.000 |
| 92,  | 11 | Jun, | 11:04:51, | 0.000 |
| 93,  | 11 | Jun, | 11:05:51, | 0.000 |
| 94,  | 11 | Jun, | 11:06:51, | 0.002 |
| 95,  | 11 | Jun, | 11:07:51, | 0.000 |
| 96,  | 11 | Jun, | 11:08:51, | 0.000 |
| 97,  | 11 | Jun, | 11:09:51, | 0.000 |
| 98,  | 11 | Jun, | 11:10:51, | 0.000 |
| 99,  | 11 | Jun, | 11:11:51, | 0.000 |
| 100, | 11 | Jun, | 11:12:51, | 0.000 |
| 101, | 11 | Jun, | 11:13:51, | 0.000 |
| 102, | 11 | Jun, | 11:14:51, | 0.000 |
| 103, | 11 | Jun, | 11:15:51, | 0.000 |
| 104, | 11 | Jun, | 11:16:51, | 0.000 |
| 105, | 11 | Jun, | 11:17:51, | 0.000 |
| 106, | 11 | Jun, | 11:18:51, | 0.000 |
| 107, | 11 | Jun, | 11:19:51, | 0.000 |
| 108, | 11 | Jun, | 11:20:51, | 0.003 |
| 109, | 11 | Jun, | 11:21:51, | 0.000 |
| 110, | 11 | Jun, | 11:22:51, | 0.000 |
| 111, | 11 | Jun, | 11:23:51, | 0.002 |
| 112, | 11 | Jun, | 11:24:51, | 0.000 |
| 113, | 11 | Jun, | 11:25:51, | 0.000 |
| 114, | 11 | Jun, | 11:26:51, | 0.001 |
| 115, | 11 | Jun, | 11:27:51, | 0.000 |
| 116, | 11 | Jun, | 11:28:51, | 0.000 |
| 117, | 11 | Jun, | 11:29:51, | 0.000 |
| 118, | 11 | Jun, | 11:30:51, | 0.000 |
| 119, | 11 | Jun, | 11:31:51, | 0.000 |
| 120, | 11 | Jun, | 11:32:51, | 0.000 |
| 121, | 11 | Jun, | 11:33:51, | 0.000 |
| 122, | 11 | Jun, | 11:34:51, | 0.000 |
| 123, | 11 | Jun, | 11:35:51, | 0.000 |
| 124, | 11 | Jun, | 11:36:51, | 0.000 |
| 125, | 11 | Jun, | 11:37:51, | 0.000 |
| 126, | 11 | Jun, | 11:38:51, | 0.000 |
| 127, | 11 | Jun, | 11:39:51, | 0.000 |
| 128, | 11 | Jun, | 11:40:51, | 0.000 |

|      |    |      |           |       |
|------|----|------|-----------|-------|
| 129, | 11 | Jun, | 11:41:51, | 0.000 |
| 130, | 11 | Jun, | 11:42:51, | 0.000 |
| 131, | 11 | Jun, | 11:43:51, | 0.000 |
| 132, | 11 | Jun, | 11:44:51, | 0.007 |
| 133, | 11 | Jun, | 11:45:51, | 0.000 |
| 134, | 11 | Jun, | 11:46:51, | 0.000 |
| 135, | 11 | Jun, | 11:47:51, | 0.000 |
| 136, | 11 | Jun, | 11:48:51, | 0.004 |
| 137, | 11 | Jun, | 11:49:51, | 0.000 |
| 138, | 11 | Jun, | 11:50:51, | 0.000 |
| 139, | 11 | Jun, | 11:51:51, | 0.000 |
| 140, | 11 | Jun, | 11:52:51, | 0.000 |
| 141, | 11 | Jun, | 11:53:51, | 0.000 |
| 142, | 11 | Jun, | 11:54:51, | 0.000 |
| 143, | 11 | Jun, | 11:55:51, | 0.000 |
| 144, | 11 | Jun, | 11:56:51, | 0.000 |
| 145, | 11 | Jun, | 11:57:51, | 0.000 |
| 146, | 11 | Jun, | 11:58:51, | 0.001 |
| 147, | 11 | Jun, | 11:59:51, | 0.000 |
| 148, | 11 | Jun, | 12:00:51, | 0.000 |
| 149, | 11 | Jun, | 12:01:51, | 0.000 |
| 150, | 11 | Jun, | 12:02:51, | 0.000 |
| 151, | 11 | Jun, | 12:03:51, | 0.000 |
| 152, | 11 | Jun, | 12:04:51, | 0.000 |
| 153, | 11 | Jun, | 12:05:51, | 0.000 |
| 154, | 11 | Jun, | 12:06:51, | 0.000 |
| 155, | 11 | Jun, | 12:07:51, | 0.000 |
| 156, | 11 | Jun, | 12:08:51, | 0.002 |
| 157, | 11 | Jun, | 12:09:51, | 0.000 |
| 158, | 11 | Jun, | 12:10:51, | 0.000 |
| 159, | 11 | Jun, | 12:11:51, | 0.000 |
| 160, | 11 | Jun, | 12:12:51, | 0.004 |
| 161, | 11 | Jun, | 12:13:51, | 0.000 |
| 162, | 11 | Jun, | 12:14:51, | 0.000 |
| 163, | 11 | Jun, | 12:15:51, | 0.000 |
| 164, | 11 | Jun, | 12:16:51, | 0.000 |
| 165, | 11 | Jun, | 12:17:51, | 0.000 |
| 166, | 11 | Jun, | 12:18:51, | 0.002 |
| 167, | 11 | Jun, | 12:19:51, | 0.000 |
| 168, | 11 | Jun, | 12:20:51, | 0.000 |
| 169, | 11 | Jun, | 12:21:51, | 0.000 |
| 170, | 11 | Jun, | 12:22:51, | 0.000 |
| 171, | 11 | Jun, | 12:23:51, | 0.000 |
| 172, | 11 | Jun, | 12:24:51, | 0.000 |
| 173, | 11 | Jun, | 12:25:51, | 0.000 |
| 174, | 11 | Jun, | 12:26:51, | 0.001 |
| 175, | 11 | Jun, | 12:27:51, | 0.000 |

Instrument: MiniRAE 2000 (PGM7600)

Serial Number: 009059

User ID: 00000001

Site ID: 00000202

Data Points: 183

Gas Name: Isobutylene

Sample Period: 60 sec

Last Calibration Time: 02/07/13 10:49

| Measurement Type:  | Min (ppm) | Avg (ppm) | Max (ppm) |
|--------------------|-----------|-----------|-----------|
| High Alarm Levels: | 100.0     | 100.0     | 100.0     |
| Low Alarm Levels:  | 50.0      | 50.0      | 50.0      |

| Line # | Date     | Time  | Min (ppm) | Avg (ppm) | Max (ppm) |
|--------|----------|-------|-----------|-----------|-----------|
| 1      | 06/11/13 | 9:30  | -----     | 0.0       | 0.1       |
| 2      | 06/11/13 | 9:31  | -----     | 0.0       | 0.1       |
| 3      | 06/11/13 | 9:32  | -----     | 0.0       | 0.0       |
| 4      | 06/11/13 | 9:33  | -----     | 0.0       | 0.1       |
| 5      | 06/11/13 | 9:34  | -----     | 0.0       | 0.0       |
| 6      | 06/11/13 | 9:35  | -----     | 0.0       | 0.1       |
| 7      | 06/11/13 | 9:36  | -----     | 0.0       | 0.1       |
| 8      | 06/11/13 | 9:37  | -----     | 0.0       | 0.0       |
| 9      | 06/11/13 | 9:38  | -----     | 0.0       | 0.1       |
| 10     | 06/11/13 | 9:39  | -----     | 0.0       | 0.1       |
| 11     | 06/11/13 | 9:40  | -----     | 0.0       | 0.1       |
| 12     | 06/11/13 | 9:41  | -----     | 0.0       | 0.1       |
| 13     | 06/11/13 | 9:42  | -----     | 0.0       | 0.0       |
| 14     | 06/11/13 | 9:43  | -----     | 0.0       | 0.1       |
| 15     | 06/11/13 | 9:44  | -----     | 0.0       | 0.1       |
| 16     | 06/11/13 | 9:45  | -----     | 0.0       | 0.1       |
| 17     | 06/11/13 | 9:46  | -----     | 0.0       | 0.1       |
| 18     | 06/11/13 | 9:47  | -----     | 0.0       | 0.1       |
| 19     | 06/11/13 | 9:48  | -----     | 0.0       | 0.0       |
| 20     | 06/11/13 | 9:49  | -----     | 0.0       | 0.1       |
| 21     | 06/11/13 | 9:50  | -----     | 0.0       | 0.1       |
| 22     | 06/11/13 | 9:51  | -----     | 0.0       | 0.1       |
| 23     | 06/11/13 | 9:52  | -----     | 0.0       | 0.1       |
| 24     | 06/11/13 | 9:53  | -----     | 0.0       | 0.1       |
| 25     | 06/11/13 | 9:54  | -----     | 0.0       | 0.1       |
| 26     | 06/11/13 | 9:55  | -----     | 0.0       | 0.1       |
| 27     | 06/11/13 | 9:56  | -----     | 0.0       | 0.1       |
| 28     | 06/11/13 | 9:57  | -----     | 0.0       | 0.1       |
| 29     | 06/11/13 | 9:58  | -----     | 0.0       | 0.1       |
| 30     | 06/11/13 | 9:59  | -----     | 0.0       | 0.1       |
| 31     | 06/11/13 | 10:00 | -----     | 0.0       | 0.1       |
| 32     | 06/11/13 | 10:01 | -----     | 0.0       | 0.1       |
| 33     | 06/11/13 | 10:02 | -----     | 0.0       | 0.1       |
| 34     | 06/11/13 | 10:03 | -----     | 0.0       | 0.1       |
| 35     | 06/11/13 | 10:04 | -----     | 0.0       | 0.1       |
| 36     | 06/11/13 | 10:05 | -----     | 0.0       | 0.1       |
| 37     | 06/11/13 | 10:06 | -----     | 0.0       | 0.1       |
| 38     | 06/11/13 | 10:07 | -----     | 0.0       | 0.1       |
| 39     | 06/11/13 | 10:08 | -----     | 0.0       | 0.1       |
| 40     | 06/11/13 | 10:09 | -----     | 0.0       | 0.1       |
| 41     | 06/11/13 | 10:10 | -----     | 0.0       | 0.1       |
| 42     | 06/11/13 | 10:11 | -----     | 0.0       | 0.1       |
| 43     | 06/11/13 | 10:12 | -----     | 0.0       | 0.1       |
| 44     | 06/11/13 | 10:13 | -----     | 0.0       | 0.1       |
| 45     | 06/11/13 | 10:14 | -----     | 0.0       | 0.1       |
| 46     | 06/11/13 | 10:15 | -----     | 0.0       | 0.1       |
| 47     | 06/11/13 | 10:16 | -----     | 0.0       | 0.1       |
| 48     | 06/11/13 | 10:17 | -----     | 0.0       | 0.1       |
| 49     | 06/11/13 | 10:18 | -----     | 0.0       | 0.1       |
| 50     | 06/11/13 | 10:19 | -----     | 0.0       | 0.1       |
| 51     | 06/11/13 | 10:20 | -----     | 0.0       | 0.1       |
| 52     | 06/11/13 | 10:21 | -----     | 0.0       | 0.1       |
| 53     | 06/11/13 | 10:22 | -----     | 0.0       | 0.1       |
| 54     | 06/11/13 | 10:23 | -----     | 0.0       | 0.1       |

|     |          |       |       |     |     |
|-----|----------|-------|-------|-----|-----|
| 55  | 06/11/13 | 10:24 | ----- | 0.0 | 0.1 |
| 56  | 06/11/13 | 10:25 | ----- | 0.0 | 0.1 |
| 57  | 06/11/13 | 10:26 | ----- | 0.0 | 0.1 |
| 58  | 06/11/13 | 10:27 | ----- | 0.0 | 0.1 |
| 59  | 06/11/13 | 10:28 | ----- | 0.0 | 0.1 |
| 60  | 06/11/13 | 10:29 | ----- | 0.0 | 0.1 |
| 61  | 06/11/13 | 10:30 | ----- | 0.0 | 0.1 |
| 62  | 06/11/13 | 10:31 | ----- | 0.0 | 0.1 |
| 63  | 06/11/13 | 10:32 | ----- | 0.0 | 0.1 |
| 64  | 06/11/13 | 10:33 | ----- | 0.0 | 0.1 |
| 65  | 06/11/13 | 10:34 | ----- | 0.0 | 0.1 |
| 66  | 06/11/13 | 10:35 | ----- | 0.0 | 0.1 |
| 67  | 06/11/13 | 10:36 | ----- | 0.0 | 0.1 |
| 68  | 06/11/13 | 10:37 | ----- | 0.0 | 0.1 |
| 69  | 06/11/13 | 10:38 | ----- | 0.0 | 0.1 |
| 70  | 06/11/13 | 10:39 | ----- | 0.0 | 0.1 |
| 71  | 06/11/13 | 10:40 | ----- | 0.0 | 0.1 |
| 72  | 06/11/13 | 10:41 | ----- | 0.0 | 0.1 |
| 73  | 06/11/13 | 10:42 | ----- | 0.0 | 0.1 |
| 74  | 06/11/13 | 10:43 | ----- | 0.0 | 0.1 |
| 75  | 06/11/13 | 10:44 | ----- | 0.0 | 0.1 |
| 76  | 06/11/13 | 10:45 | ----- | 0.0 | 0.1 |
| 77  | 06/11/13 | 10:46 | ----- | 0.0 | 0.1 |
| 78  | 06/11/13 | 10:47 | ----- | 0.0 | 0.1 |
| 79  | 06/11/13 | 10:48 | ----- | 0.0 | 0.1 |
| 80  | 06/11/13 | 10:49 | ----- | 0.0 | 0.1 |
| 81  | 06/11/13 | 10:50 | ----- | 0.0 | 0.1 |
| 82  | 06/11/13 | 10:51 | ----- | 0.0 | 0.1 |
| 83  | 06/11/13 | 10:52 | ----- | 0.0 | 0.1 |
| 84  | 06/11/13 | 10:53 | ----- | 0.0 | 0.1 |
| 85  | 06/11/13 | 10:54 | ----- | 0.0 | 0.1 |
| 86  | 06/11/13 | 10:55 | ----- | 0.0 | 0.1 |
| 87  | 06/11/13 | 10:56 | ----- | 0.0 | 0.1 |
| 88  | 06/11/13 | 10:57 | ----- | 0.0 | 0.1 |
| 89  | 06/11/13 | 10:58 | ----- | 0.0 | 0.1 |
| 90  | 06/11/13 | 10:59 | ----- | 0.0 | 0.1 |
| 91  | 06/11/13 | 11:00 | ----- | 0.0 | 0.1 |
| 92  | 06/11/13 | 11:01 | ----- | 0.0 | 0.1 |
| 93  | 06/11/13 | 11:02 | ----- | 0.0 | 0.1 |
| 94  | 06/11/13 | 11:03 | ----- | 0.0 | 0.1 |
| 95  | 06/11/13 | 11:04 | ----- | 0.0 | 0.1 |
| 96  | 06/11/13 | 11:05 | ----- | 0.0 | 0.1 |
| 97  | 06/11/13 | 11:06 | ----- | 0.0 | 0.1 |
| 98  | 06/11/13 | 11:07 | ----- | 0.0 | 0.1 |
| 99  | 06/11/13 | 11:08 | ----- | 0.0 | 0.1 |
| 100 | 06/11/13 | 11:09 | ----- | 0.0 | 0.1 |
| 101 | 06/11/13 | 11:10 | ----- | 0.0 | 0.1 |
| 102 | 06/11/13 | 11:11 | ----- | 0.0 | 0.1 |
| 103 | 06/11/13 | 11:12 | ----- | 0.0 | 0.1 |
| 104 | 06/11/13 | 11:13 | ----- | 0.0 | 0.1 |
| 105 | 06/11/13 | 11:14 | ----- | 0.0 | 0.1 |
| 106 | 06/11/13 | 11:15 | ----- | 0.0 | 0.1 |
| 107 | 06/11/13 | 11:16 | ----- | 0.0 | 0.1 |
| 108 | 06/11/13 | 11:17 | ----- | 0.0 | 0.1 |
| 109 | 06/11/13 | 11:18 | ----- | 0.0 | 0.1 |
| 110 | 06/11/13 | 11:19 | ----- | 0.0 | 0.1 |
| 111 | 06/11/13 | 11:20 | ----- | 0.0 | 0.1 |
| 112 | 06/11/13 | 11:21 | ----- | 0.0 | 0.1 |
| 113 | 06/11/13 | 11:22 | ----- | 0.0 | 0.1 |
| 114 | 06/11/13 | 11:23 | ----- | 0.0 | 0.1 |
| 115 | 06/11/13 | 11:24 | ----- | 0.0 | 0.1 |
| 116 | 06/11/13 | 11:25 | ----- | 0.0 | 0.1 |
| 117 | 06/11/13 | 11:26 | ----- | 0.0 | 0.1 |
| 118 | 06/11/13 | 11:27 | ----- | 0.0 | 0.1 |
| 119 | 06/11/13 | 11:28 | ----- | 0.0 | 0.1 |

|     |          |       |       |     |     |
|-----|----------|-------|-------|-----|-----|
| 120 | 06/11/13 | 11:29 | ----- | 0.0 | 0.1 |
| 121 | 06/11/13 | 11:30 | ----- | 0.0 | 0.1 |
| 122 | 06/11/13 | 11:31 | ----- | 0.0 | 0.1 |
| 123 | 06/11/13 | 11:32 | ----- | 0.0 | 0.1 |
| 124 | 06/11/13 | 11:33 | ----- | 0.0 | 0.1 |
| 125 | 06/11/13 | 11:34 | ----- | 0.0 | 0.1 |
| 126 | 06/11/13 | 11:35 | ----- | 0.0 | 0.1 |
| 127 | 06/11/13 | 11:36 | ----- | 0.0 | 0.1 |
| 128 | 06/11/13 | 11:37 | ----- | 0.0 | 0.1 |
| 129 | 06/11/13 | 11:38 | ----- | 0.0 | 0.1 |
| 130 | 06/11/13 | 11:39 | ----- | 0.0 | 0.1 |
| 131 | 06/11/13 | 11:40 | ----- | 0.0 | 0.1 |
| 132 | 06/11/13 | 11:41 | ----- | 0.0 | 0.1 |
| 133 | 06/11/13 | 11:42 | ----- | 0.0 | 0.1 |
| 134 | 06/11/13 | 11:43 | ----- | 0.0 | 0.1 |
| 135 | 06/11/13 | 11:44 | ----- | 0.0 | 0.1 |
| 136 | 06/11/13 | 11:45 | ----- | 0.0 | 0.1 |
| 137 | 06/11/13 | 11:46 | ----- | 0.0 | 0.1 |
| 138 | 06/11/13 | 11:47 | ----- | 0.0 | 0.1 |
| 139 | 06/11/13 | 11:48 | ----- | 0.0 | 0.1 |
| 140 | 06/11/13 | 11:49 | ----- | 0.0 | 0.1 |
| 141 | 06/11/13 | 11:50 | ----- | 0.0 | 0.1 |
| 142 | 06/11/13 | 11:51 | ----- | 0.0 | 0.1 |
| 143 | 06/11/13 | 11:52 | ----- | 0.0 | 0.1 |
| 144 | 06/11/13 | 11:53 | ----- | 0.0 | 0.1 |
| 145 | 06/11/13 | 11:54 | ----- | 0.0 | 0.1 |
| 146 | 06/11/13 | 11:55 | ----- | 0.0 | 0.1 |
| 147 | 06/11/13 | 11:56 | ----- | 0.0 | 0.1 |
| 148 | 06/11/13 | 11:57 | ----- | 0.0 | 0.1 |
| 149 | 06/11/13 | 11:58 | ----- | 0.0 | 0.1 |
| 150 | 06/11/13 | 11:59 | ----- | 0.0 | 0.1 |
| 151 | 06/11/13 | 12:00 | ----- | 0.0 | 0.1 |
| 152 | 06/11/13 | 12:01 | ----- | 0.0 | 0.1 |
| 153 | 06/11/13 | 12:02 | ----- | 0.0 | 0.1 |
| 154 | 06/11/13 | 12:03 | ----- | 0.0 | 0.1 |
| 155 | 06/11/13 | 12:04 | ----- | 0.0 | 0.1 |
| 156 | 06/11/13 | 12:05 | ----- | 0.0 | 0.1 |
| 157 | 06/11/13 | 12:06 | ----- | 0.0 | 0.1 |
| 158 | 06/11/13 | 12:07 | ----- | 0.0 | 0.1 |
| 159 | 06/11/13 | 12:08 | ----- | 0.0 | 0.1 |
| 160 | 06/11/13 | 12:09 | ----- | 0.0 | 0.1 |
| 161 | 06/11/13 | 12:10 | ----- | 0.0 | 0.1 |
| 162 | 06/11/13 | 12:11 | ----- | 0.0 | 0.1 |
| 163 | 06/11/13 | 12:12 | ----- | 0.0 | 0.1 |
| 164 | 06/11/13 | 12:13 | ----- | 0.0 | 0.1 |
| 165 | 06/11/13 | 12:14 | ----- | 0.0 | 0.1 |
| 166 | 06/11/13 | 12:15 | ----- | 0.0 | 0.1 |
| 167 | 06/11/13 | 12:16 | ----- | 0.0 | 0.1 |
| 168 | 06/11/13 | 12:17 | ----- | 0.0 | 0.1 |
| 169 | 06/11/13 | 12:18 | ----- | 0.0 | 0.1 |
| 170 | 06/11/13 | 12:19 | ----- | 0.0 | 0.1 |
| 171 | 06/11/13 | 12:20 | ----- | 0.0 | 0.1 |
| 172 | 06/11/13 | 12:21 | ----- | 0.0 | 0.1 |
| 173 | 06/11/13 | 12:22 | ----- | 0.0 | 0.1 |
| 174 | 06/11/13 | 12:23 | ----- | 0.0 | 0.1 |
| 175 | 06/11/13 | 12:24 | ----- | 0.0 | 0.1 |
| 176 | 06/11/13 | 12:25 | ----- | 0.0 | 0.1 |
| 177 | 06/11/13 | 12:26 | ----- | 0.0 | 0.1 |
| 178 | 06/11/13 | 12:27 | ----- | 0.0 | 0.1 |
| 179 | 06/11/13 | 12:28 | ----- | 0.0 | 0.1 |
| 180 | 06/11/13 | 12:29 | ----- | 0.0 | 0.1 |
| 181 | 06/11/13 | 12:30 | ----- | 0.0 | 0.1 |
| 182 | 06/11/13 | 12:31 | ----- | 0.0 | 0.1 |
| 183 | 06/11/13 | 12:32 | ----- | 0.0 | 0.1 |

pDR-1000 S/N: 00000

Tag Number: 06

Number of Logged Points: 173

Start time and date: 09:40:00 10-Apr

Elapsed time: 02:52:00

Logging period (sec) : 60

Calibration Factor (%) : 100

Max Display Concentration: 0.042

Time at maximum: 10:35

Max STEL Concentration : 0.000 mg/m3

Time at max STEL: 9:39 Apr 10

Overall Avg Conc: 0.000 mg/m3

Logged Data:

| Point | Date   | Time  | Avg. (mg/m3) |
|-------|--------|-------|--------------|
| 1     | 10 Apr | 9:40  | 0.001        |
| 2     | 10 Apr | 9:41  | 0.001        |
| 3     | 10 Apr | 9:42  | 0.003        |
| 4     | 10 Apr | 9:43  | 0.002        |
| 5     | 10 Apr | 9:44  | 0.000        |
| 6     | 10 Apr | 9:45  | 0.003        |
| 7     | 10 Apr | 9:46  | 0.002        |
| 8     | 10 Apr | 9:47  | 0.001        |
| 9     | 10 Apr | 9:48  | 0.000        |
| 10    | 10 Apr | 9:49  | 0.000        |
| 11    | 10 Apr | 9:50  | 0.000        |
| 12    | 10 Apr | 9:51  | 0.000        |
| 13    | 10 Apr | 9:52  | 0.000        |
| 14    | 10 Apr | 9:53  | 0.001        |
| 15    | 10 Apr | 9:54  | 0.002        |
| 16    | 10 Apr | 9:55  | 0.004        |
| 17    | 10 Apr | 9:56  | 0.000        |
| 18    | 10 Apr | 9:57  | 0.000        |
| 19    | 10 Apr | 9:58  | 0.000        |
| 20    | 10 Apr | 9:59  | 0.000        |
| 21    | 10 Apr | 10:00 | 0.001        |
| 22    | 10 Apr | 10:01 | 0.001        |
| 23    | 10 Apr | 10:02 | 0.003        |
| 24    | 10 Apr | 10:03 | 0.002        |
| 25    | 10 Apr | 10:04 | 0.000        |
| 26    | 10 Apr | 10:05 | 0.003        |
| 27    | 10 Apr | 10:06 | 0.002        |
| 28    | 10 Apr | 10:07 | 0.001        |
| 29    | 10 Apr | 10:08 | 0.000        |
| 30    | 10 Apr | 10:09 | 0.000        |
| 31    | 10 Apr | 10:10 | 0.000        |
| 32    | 10 Apr | 10:11 | 0.000        |
| 33    | 10 Apr | 10:12 | 0.000        |
| 34    | 10 Apr | 10:13 | 0.001        |
| 35    | 10 Apr | 10:14 | 0.002        |
| 36    | 10 Apr | 10:15 | 0.004        |
| 37    | 10 Apr | 10:16 | 0.000        |
| 38    | 10 Apr | 10:17 | 0.000        |
| 39    | 10 Apr | 10:18 | 0.000        |
| 40    | 10 Apr | 10:19 | 0.000        |
| 41    | 10 Apr | 10:20 | 0.001        |
| 42    | 10 Apr | 10:21 | 0.001        |
| 43    | 10 Apr | 10:22 | 0.003        |
| 44    | 10 Apr | 10:23 | 0.002        |
| 45    | 10 Apr | 10:24 | 0.000        |
| 46    | 10 Apr | 10:25 | 0.003        |



|     |        |       |       |
|-----|--------|-------|-------|
| 47  | 10 Apr | 10:26 | 0.002 |
| 48  | 10 Apr | 10:27 | 0.001 |
| 49  | 10 Apr | 10:28 | 0.000 |
| 50  | 10 Apr | 10:29 | 0.000 |
| 51  | 10 Apr | 10:30 | 0.000 |
| 52  | 10 Apr | 10:31 | 0.000 |
| 53  | 10 Apr | 10:32 | 0.000 |
| 54  | 10 Apr | 10:33 | 0.001 |
| 55  | 10 Apr | 10:34 | 0.002 |
| 56  | 10 Apr | 10:35 | 0.004 |
| 57  | 10 Apr | 10:36 | 0.000 |
| 58  | 10 Apr | 10:37 | 0.000 |
| 59  | 10 Apr | 10:38 | 0.000 |
| 60  | 10 Apr | 10:39 | 0.000 |
| 61  | 10 Apr | 10:40 | 0.001 |
| 62  | 10 Apr | 10:41 | 0.001 |
| 63  | 10 Apr | 10:42 | 0.003 |
| 64  | 10 Apr | 10:43 | 0.002 |
| 65  | 10 Apr | 10:44 | 0.000 |
| 66  | 10 Apr | 10:45 | 0.003 |
| 67  | 10 Apr | 10:46 | 0.002 |
| 68  | 10 Apr | 10:47 | 0.001 |
| 69  | 10 Apr | 10:48 | 0.000 |
| 70  | 10 Apr | 10:49 | 0.000 |
| 71  | 10 Apr | 10:50 | 0.000 |
| 72  | 10 Apr | 10:51 | 0.000 |
| 73  | 10 Apr | 10:52 | 0.000 |
| 74  | 10 Apr | 10:53 | 0.001 |
| 75  | 10 Apr | 10:54 | 0.002 |
| 76  | 10 Apr | 10:55 | 0.004 |
| 77  | 10 Apr | 10:56 | 0.000 |
| 78  | 10 Apr | 10:57 | 0.000 |
| 79  | 10 Apr | 10:58 | 0.000 |
| 80  | 10 Apr | 10:59 | 0.002 |
| 81  | 10 Apr | 11:00 | 0.003 |
| 82  | 10 Apr | 11:01 | 0.000 |
| 83  | 10 Apr | 11:02 | 0.001 |
| 84  | 10 Apr | 11:03 | 0.001 |
| 85  | 10 Apr | 11:04 | 0.002 |
| 86  | 10 Apr | 11:05 | 0.000 |
| 87  | 10 Apr | 11:06 | 0.000 |
| 88  | 10 Apr | 11:07 | 0.003 |
| 89  | 10 Apr | 11:08 | 0.002 |
| 90  | 10 Apr | 11:09 | 0.000 |
| 91  | 10 Apr | 11:10 | 0.004 |
| 92  | 10 Apr | 11:11 | 0.002 |
| 93  | 10 Apr | 11:12 | 0.002 |
| 94  | 10 Apr | 11:13 | 0.000 |
| 95  | 10 Apr | 11:14 | 0.000 |
| 96  | 10 Apr | 11:15 | 0.003 |
| 97  | 10 Apr | 11:16 | 0.002 |
| 98  | 10 Apr | 11:17 | 0.000 |
| 99  | 10 Apr | 11:18 | 0.004 |
| 100 | 10 Apr | 11:19 | 0.002 |
| 101 | 10 Apr | 11:20 | 0.002 |
| 102 | 10 Apr | 11:21 | 0.000 |
| 103 | 10 Apr | 11:22 | 0.000 |
| 104 | 10 Apr | 11:23 | 0.003 |
| 105 | 10 Apr | 11:24 | 0.002 |
| 106 | 10 Apr | 11:25 | 0.000 |

|     |        |       |       |
|-----|--------|-------|-------|
| 107 | 10 Apr | 11:26 | 0.004 |
| 108 | 10 Apr | 11:27 | 0.002 |
| 109 | 10 Apr | 11:28 | 0.002 |
| 110 | 10 Apr | 11:29 | 0.000 |
| 111 | 10 Apr | 11:30 | 0.000 |
| 112 | 10 Apr | 11:31 | 0.003 |
| 113 | 10 Apr | 11:32 | 0.002 |
| 114 | 10 Apr | 11:33 | 0.000 |
| 115 | 10 Apr | 11:34 | 0.004 |
| 116 | 10 Apr | 11:35 | 0.002 |
| 117 | 10 Apr | 11:36 | 0.001 |
| 118 | 10 Apr | 11:37 | 0.000 |
| 119 | 10 Apr | 11:38 | 0.000 |
| 120 | 10 Apr | 11:39 | 0.000 |
| 121 | 10 Apr | 11:40 | 0.000 |
| 122 | 10 Apr | 11:41 | 0.000 |
| 123 | 10 Apr | 11:42 | 0.001 |
| 124 | 10 Apr | 11:43 | 0.002 |
| 125 | 10 Apr | 11:44 | 0.004 |
| 126 | 10 Apr | 11:45 | 0.000 |
| 127 | 10 Apr | 11:46 | 0.000 |
| 128 | 10 Apr | 11:47 | 0.000 |
| 129 | 10 Apr | 11:48 | 0.000 |
| 130 | 10 Apr | 11:49 | 0.001 |
| 131 | 10 Apr | 11:50 | 0.001 |
| 132 | 10 Apr | 11:51 | 0.003 |
| 133 | 10 Apr | 11:52 | 0.001 |
| 134 | 10 Apr | 11:53 | 0.000 |
| 135 | 10 Apr | 11:54 | 0.000 |
| 136 | 10 Apr | 11:55 | 0.000 |
| 137 | 10 Apr | 11:56 | 0.000 |
| 138 | 10 Apr | 11:57 | 0.000 |
| 139 | 10 Apr | 11:58 | 0.001 |
| 140 | 10 Apr | 11:59 | 0.002 |
| 141 | 10 Apr | 12:00 | 0.004 |
| 142 | 10 Apr | 12:01 | 0.000 |
| 143 | 10 Apr | 12:02 | 0.000 |
| 144 | 10 Apr | 12:03 | 0.000 |
| 145 | 10 Apr | 12:04 | 0.000 |
| 146 | 10 Apr | 12:05 | 0.001 |
| 147 | 10 Apr | 12:06 | 0.001 |
| 148 | 10 Apr | 12:07 | 0.003 |
| 149 | 10 Apr | 12:08 | 0.001 |
| 150 | 10 Apr | 12:09 | 0.000 |
| 151 | 10 Apr | 12:10 | 0.000 |
| 152 | 10 Apr | 12:11 | 0.000 |
| 153 | 10 Apr | 12:12 | 0.000 |
| 154 | 10 Apr | 12:13 | 0.000 |
| 155 | 10 Apr | 12:14 | 0.001 |
| 156 | 10 Apr | 12:15 | 0.002 |
| 157 | 10 Apr | 12:16 | 0.004 |
| 158 | 10 Apr | 12:17 | 0.000 |
| 159 | 10 Apr | 12:18 | 0.000 |
| 160 | 10 Apr | 12:19 | 0.000 |
| 161 | 10 Apr | 12:20 | 0.000 |
| 162 | 10 Apr | 12:21 | 0.001 |
| 163 | 10 Apr | 12:22 | 0.001 |
| 164 | 10 Apr | 12:23 | 0.003 |
| 165 | 10 Apr | 12:24 | 0.002 |
| 166 | 10 Apr | 12:25 | 0.002 |

|     |        |       |       |
|-----|--------|-------|-------|
| 167 | 10 Apr | 12:26 | 0.000 |
| 168 | 10 Apr | 12:27 | 0.000 |
| 169 | 10 Apr | 12:28 | 0.003 |
| 170 | 10 Apr | 12:29 | 0.002 |
| 171 | 10 Apr | 12:30 | 0.000 |
| 172 | 10 Apr | 12:31 | 0.004 |
| 173 | 10 Apr | 12:32 | 0.002 |

# Quick & Clean

Instrument: MiniRAE 2000 (PGM7600) Serial Number: 009059  
User ID: 00000001 Site ID: 00000159  
Data Points: 166 Gas Name: Isobutylene Sample Period: 60 sec  
Last Calibration Time: 12/18/2012 14:56

| Measurement Type:  | Min (ppm) | Avg (ppm) | Max (ppm) |
|--------------------|-----------|-----------|-----------|
| High Alarm Levels: | 100.0     | 100.0     | 100.0     |
| Low Alarm Levels:  | 50.0      | 50.0      | 50.0      |

| Line# | Date       | Time  | Min (ppm) | Avg (ppm) | Max (ppm) |
|-------|------------|-------|-----------|-----------|-----------|
| 1     | 04/10/2013 | 09:46 | -----     | 0.0       | 0.8       |
| 2     | 04/10/2013 | 09:47 | -----     | 0.0       | 0.0       |
| 3     | 04/10/2013 | 09:48 | -----     | 0.0       | 0.3       |
| 4     | 04/10/2013 | 09:49 | -----     | 0.0       | 0.0       |
| 5     | 04/10/2013 | 09:50 | -----     | 0.0       | 0.0       |
| 6     | 04/10/2013 | 09:51 | -----     | 0.0       | 0.0       |
| 7     | 04/10/2013 | 09:52 | -----     | 0.0       | 0.0       |
| 8     | 04/10/2013 | 09:53 | -----     | 0.0       | 0.0       |
| 9     | 04/10/2013 | 09:54 | -----     | 0.0       | 0.1       |
| 10    | 04/10/2013 | 09:55 | -----     | 0.0       | 0.1       |
| 11    | 04/10/2013 | 09:56 | -----     | 0.0       | 0.0       |
| 12    | 04/10/2013 | 09:57 | -----     | 0.0       | 0.1       |
| 13    | 04/10/2013 | 09:58 | -----     | 0.0       | 0.1       |
| 14    | 04/10/2013 | 09:59 | -----     | 0.0       | 0.0       |
| 15    | 04/10/2013 | 10:00 | -----     | 0.0       | 0.1       |
| 16    | 04/10/2013 | 10:01 | -----     | 0.0       | 0.1       |
| 17    | 04/10/2013 | 10:02 | -----     | 0.0       | 0.1       |
| 18    | 04/10/2013 | 10:03 | -----     | 0.0       | 0.1       |
| 19    | 04/10/2013 | 10:04 | -----     | 0.0       | 0.1       |
| 20    | 04/10/2013 | 10:05 | -----     | 0.0       | 0.1       |
| 21    | 04/10/2013 | 10:06 | -----     | 0.0       | 0.1       |
| 22    | 04/10/2013 | 10:07 | -----     | 0.0       | 0.2       |
| 23    | 04/10/2013 | 10:08 | -----     | 0.0       | 0.1       |
| 24    | 04/10/2013 | 10:09 | -----     | 0.0       | 0.2       |
| 25    | 04/10/2013 | 10:10 | -----     | 0.0       | 0.1       |
| 26    | 04/10/2013 | 10:11 | -----     | 0.0       | 0.2       |
| 27    | 04/10/2013 | 10:12 | -----     | 0.0       | 0.2       |
| 28    | 04/10/2013 | 10:13 | -----     | 0.0       | 0.2       |
| 29    | 04/10/2013 | 10:14 | -----     | 0.1       | 0.2       |
| 30    | 04/10/2013 | 10:15 | -----     | 0.1       | 0.2       |
| 31    | 04/10/2013 | 10:16 | -----     | 0.1       | 0.2       |
| 32    | 04/10/2013 | 10:17 | -----     | 0.1       | 0.2       |
| 33    | 04/10/2013 | 10:18 | -----     | 0.1       | 0.3       |
| 34    | 04/10/2013 | 10:19 | -----     | 0.1       | 0.3       |
| 35    | 04/10/2013 | 10:20 | -----     | 0.1       | 0.3       |
| 36    | 04/10/2013 | 10:21 | -----     | 0.0       | 0.2       |
| 37    | 04/10/2013 | 10:22 | -----     | 0.0       | 0.1       |
| 38    | 04/10/2013 | 10:23 | -----     | 0.0       | 0.1       |
| 39    | 04/10/2013 | 10:24 | -----     | 0.0       | 0.1       |
| 40    | 04/10/2013 | 10:25 | -----     | 0.0       | 0.1       |
| 41    | 04/10/2013 | 10:26 | -----     | 0.0       | 0.1       |
| 42    | 04/10/2013 | 10:27 | -----     | 0.0       | 0.2       |
| 43    | 04/10/2013 | 10:28 | -----     | 0.0       | 0.2       |
| 44    | 04/10/2013 | 10:29 | -----     | 0.0       | 0.2       |
| 45    | 04/10/2013 | 10:30 | -----     | 0.0       | 0.2       |
| 46    | 04/10/2013 | 10:31 | -----     | 0.1       | 0.2       |
| 47    | 04/10/2013 | 10:32 | -----     | 0.1       | 0.2       |
| 48    | 04/10/2013 | 10:33 | -----     | 0.1       | 0.2       |
| 49    | 04/10/2013 | 10:34 | -----     | 0.1       | 0.2       |
| 50    | 04/10/2013 | 10:35 | -----     | 0.1       | 0.2       |
| 51    | 04/10/2013 | 10:36 | -----     | 0.1       | 0.2       |
| 52    | 04/10/2013 | 10:37 | -----     | 0.1       | 0.2       |
| 53    | 04/10/2013 | 10:38 | -----     | 0.1       | 0.3       |
| 54    | 04/10/2013 | 10:39 | -----     | 0.1       | 0.2       |
| 55    | 04/10/2013 | 10:40 | -----     | 0.1       | 0.3       |
| 56    | 04/10/2013 | 10:41 | -----     | 0.1       | 0.3       |
| 57    | 04/10/2013 | 10:42 | -----     | 0.1       | 0.3       |
| 58    | 04/10/2013 | 10:43 | -----     | 0.1       | 0.2       |

|     |                  |       |     |     |
|-----|------------------|-------|-----|-----|
| 59  | 04/10/2013 10:44 | ----- | 0.2 | 0.3 |
| 60  | 04/10/2013 10:45 | ----- | 0.2 | 0.3 |
| 61  | 04/10/2013 10:46 | ----- | 0.2 | 0.3 |
| 62  | 04/10/2013 10:47 | ----- | 0.2 | 0.3 |
| 63  | 04/10/2013 10:48 | ----- | 0.2 | 0.3 |
| 64  | 04/10/2013 10:49 | ----- | 0.2 | 0.3 |
| 65  | 04/10/2013 10:50 | ----- | 0.2 | 0.3 |
| 66  | 04/10/2013 10:51 | ----- | 0.2 | 0.3 |
| 67  | 04/10/2013 10:52 | ----- | 0.2 | 0.4 |
| 68  | 04/10/2013 10:53 | ----- | 0.2 | 0.3 |
| 69  | 04/10/2013 10:54 | ----- | 0.2 | 0.4 |
| 70  | 04/10/2013 10:55 | ----- | 0.2 | 0.3 |
| 71  | 04/10/2013 10:56 | ----- | 0.1 | 1.7 |
| 72  | 04/10/2013 10:57 | ----- | 0.0 | 0.1 |
| 73  | 04/10/2013 10:58 | ----- | 0.0 | 0.1 |
| 74  | 04/10/2013 10:59 | ----- | 0.0 | 0.1 |
| 75  | 04/10/2013 11:00 | ----- | 0.0 | 0.1 |
| 76  | 04/10/2013 11:01 | ----- | 0.0 | 0.1 |
| 77  | 04/10/2013 11:02 | ----- | 0.0 | 0.1 |
| 78  | 04/10/2013 11:03 | ----- | 0.0 | 0.1 |
| 79  | 04/10/2013 11:04 | ----- | 0.0 | 0.1 |
| 80  | 04/10/2013 11:05 | ----- | 0.0 | 0.1 |
| 81  | 04/10/2013 11:06 | ----- | 0.0 | 0.1 |
| 82  | 04/10/2013 11:07 | ----- | 0.0 | 0.1 |
| 83  | 04/10/2013 11:08 | ----- | 0.0 | 0.1 |
| 84  | 04/10/2013 11:09 | ----- | 0.0 | 0.0 |
| 85  | 04/10/2013 11:10 | ----- | 0.0 | 0.1 |
| 86  | 04/10/2013 11:11 | ----- | 0.0 | 0.1 |
| 87  | 04/10/2013 11:12 | ----- | 0.0 | 0.1 |
| 88  | 04/10/2013 11:13 | ----- | 0.0 | 0.2 |
| 89  | 04/10/2013 11:14 | ----- | 0.0 | 0.2 |
| 90  | 04/10/2013 11:15 | ----- | 0.0 | 0.3 |
| 91  | 04/10/2013 11:16 | ----- | 0.0 | 0.2 |
| 92  | 04/10/2013 11:17 | ----- | 0.0 | 0.1 |
| 93  | 04/10/2013 11:18 | ----- | 0.0 | 0.1 |
| 94  | 04/10/2013 11:19 | ----- | 0.0 | 0.1 |
| 95  | 04/10/2013 11:20 | ----- | 0.0 | 0.0 |
| 96  | 04/10/2013 11:21 | ----- | 0.0 | 0.1 |
| 97  | 04/10/2013 11:22 | ----- | 0.0 | 0.1 |
| 98  | 04/10/2013 11:23 | ----- | 0.0 | 0.1 |
| 99  | 04/10/2013 11:24 | ----- | 0.0 | 0.1 |
| 100 | 04/10/2013 11:25 | ----- | 0.0 | 0.1 |
| 101 | 04/10/2013 11:26 | ----- | 0.0 | 0.1 |
| 102 | 04/10/2013 11:27 | ----- | 0.0 | 0.1 |
| 103 | 04/10/2013 11:28 | ----- | 0.0 | 0.1 |
| 104 | 04/10/2013 11:29 | ----- | 0.0 | 0.1 |
| 105 | 04/10/2013 11:30 | ----- | 0.0 | 0.1 |
| 106 | 04/10/2013 11:31 | ----- | 0.0 | 0.1 |
| 107 | 04/10/2013 11:32 | ----- | 0.0 | 0.1 |
| 108 | 04/10/2013 11:33 | ----- | 0.0 | 0.1 |
| 109 | 04/10/2013 11:34 | ----- | 0.0 | 0.1 |
| 110 | 04/10/2013 11:35 | ----- | 0.0 | 0.1 |
| 111 | 04/10/2013 11:36 | ----- | 0.0 | 0.1 |
| 112 | 04/10/2013 11:37 | ----- | 0.0 | 0.1 |
| 113 | 04/10/2013 11:38 | ----- | 0.0 | 0.1 |
| 114 | 04/10/2013 11:39 | ----- | 0.0 | 0.1 |
| 115 | 04/10/2013 11:40 | ----- | 0.0 | 0.1 |
| 116 | 04/10/2013 11:41 | ----- | 0.0 | 0.1 |
| 117 | 04/10/2013 11:42 | ----- | 0.0 | 0.1 |
| 118 | 04/10/2013 11:43 | ----- | 0.0 | 0.1 |
| 119 | 04/10/2013 11:44 | ----- | 0.0 | 0.1 |
| 120 | 04/10/2013 11:45 | ----- | 0.0 | 0.1 |
| 121 | 04/10/2013 11:46 | ----- | 0.0 | 0.1 |
| 122 | 04/10/2013 11:47 | ----- | 0.0 | 0.1 |
| 123 | 04/10/2013 11:48 | ----- | 0.0 | 0.7 |
| 124 | 04/10/2013 11:49 | ----- | 0.0 | 0.1 |
| 125 | 04/10/2013 11:50 | ----- | 0.0 | 0.1 |
| 126 | 04/10/2013 11:51 | ----- | 0.0 | 0.0 |
| 127 | 04/10/2013 11:52 | ----- | 0.0 | 0.1 |



|     |                  |       |     |     |
|-----|------------------|-------|-----|-----|
| 128 | 04/10/2013 11:53 | ----- | 0.0 | 0.1 |
| 129 | 04/10/2013 11:54 | ----- | 0.0 | 0.1 |
| 130 | 04/10/2013 11:55 | ----- | 0.0 | 0.1 |
| 131 | 04/10/2013 11:56 | ----- | 0.0 | 0.1 |
| 132 | 04/10/2013 11:57 | ----- | 0.0 | 0.1 |
| 133 | 04/10/2013 11:58 | ----- | 0.0 | 0.1 |
| 134 | 04/10/2013 11:59 | ----- | 0.0 | 0.1 |
| 135 | 04/10/2013 12:00 | ----- | 0.0 | 0.1 |
| 136 | 04/10/2013 12:01 | ----- | 0.0 | 0.0 |
| 137 | 04/10/2013 12:02 | ----- | 0.0 | 0.1 |
| 138 | 04/10/2013 12:03 | ----- | 0.0 | 0.0 |
| 139 | 04/10/2013 12:04 | ----- | 0.0 | 0.1 |
| 140 | 04/10/2013 12:05 | ----- | 0.0 | 0.0 |
| 141 | 04/10/2013 12:06 | ----- | 0.0 | 0.0 |
| 142 | 04/10/2013 12:07 | ----- | 0.0 | 0.1 |
| 143 | 04/10/2013 12:08 | ----- | 0.0 | 0.1 |
| 144 | 04/10/2013 12:09 | ----- | 0.0 | 0.0 |
| 145 | 04/10/2013 12:10 | ----- | 0.0 | 0.0 |
| 146 | 04/10/2013 12:11 | ----- | 0.0 | 0.1 |
| 147 | 04/10/2013 12:12 | ----- | 0.0 | 0.0 |
| 148 | 04/10/2013 12:13 | ----- | 0.0 | 0.0 |
| 149 | 04/10/2013 12:14 | ----- | 0.0 | 0.0 |
| 150 | 04/10/2013 12:15 | ----- | 0.0 | 0.0 |
| 151 | 04/10/2013 12:16 | ----- | 0.0 | 0.0 |
| 152 | 04/10/2013 12:17 | ----- | 0.0 | 0.0 |
| 153 | 04/10/2013 12:18 | ----- | 0.0 | 0.0 |
| 154 | 04/10/2013 12:19 | ----- | 0.0 | 0.0 |
| 155 | 04/10/2013 12:20 | ----- | 0.0 | 0.0 |
| 156 | 04/10/2013 12:21 | ----- | 0.0 | 0.0 |
| 157 | 04/10/2013 12:22 | ----- | 0.0 | 0.0 |
| 158 | 04/10/2013 12:23 | ----- | 0.0 | 0.0 |
| 159 | 04/10/2013 12:24 | ----- | 0.0 | 0.0 |
| 160 | 04/10/2013 12:25 | ----- | 0.0 | 0.0 |
| 161 | 04/10/2013 12:26 | ----- | 0.0 | 0.0 |
| 162 | 04/10/2013 12:27 | ----- | 0.0 | 0.1 |
| 163 | 04/10/2013 12:28 | ----- | 0.0 | 0.1 |
| 164 | 04/10/2013 12:29 | ----- | 0.0 | 0.1 |
| 165 | 04/10/2013 12:30 | ----- | 0.0 | 0.1 |
| 166 | 04/10/2013 12:31 | ----- | 0.0 | 0.0 |

pDR-1000 S/N: 00000

Tag Number: 06

Number of Logged Points: 238

Start time and date: 09:10:00 09-Apr

Elapsed time: 03:57:00

Logging period (sec) : 60

Calibration Factor (%) : 100

Max Display Concentration: 0.051

Time at maximum: 10:15

Max STEL Concentration : 0.000 mg/m3

Time at max STEL: 9:18 Apr 09

Overall Avg Conc: 0.000 mg/m3

Logged Data:

| Point | Date   | Time  | Avg. (mg/m3) |
|-------|--------|-------|--------------|
| 1     | 09 Apr | 9:19  | 0.000        |
| 2     | 09 Apr | 9:20  | 0.001        |
| 3     | 09 Apr | 9:21  | 0.001        |
| 4     | 09 Apr | 9:22  | 0.003        |
| 5     | 09 Apr | 9:23  | 0.002        |
| 6     | 09 Apr | 9:24  | 0.000        |
| 7     | 09 Apr | 9:25  | 0.003        |
| 8     | 09 Apr | 9:26  | 0.002        |
| 9     | 09 Apr | 9:27  | 0.001        |
| 10    | 09 Apr | 9:28  | 0.000        |
| 11    | 09 Apr | 9:29  | 0.000        |
| 12    | 09 Apr | 9:30  | 0.000        |
| 13    | 09 Apr | 9:31  | 0.000        |
| 14    | 09 Apr | 9:32  | 0.000        |
| 15    | 09 Apr | 9:33  | 0.001        |
| 16    | 09 Apr | 9:34  | 0.002        |
| 17    | 09 Apr | 9:35  | 0.004        |
| 18    | 09 Apr | 9:36  | 0.000        |
| 19    | 09 Apr | 9:37  | 0.000        |
| 20    | 09 Apr | 9:38  | 0.000        |
| 21    | 09 Apr | 9:39  | 0.000        |
| 22    | 09 Apr | 9:40  | 0.001        |
| 23    | 09 Apr | 9:41  | 0.001        |
| 24    | 09 Apr | 9:42  | 0.003        |
| 25    | 09 Apr | 9:43  | 0.002        |
| 26    | 09 Apr | 9:44  | 0.000        |
| 27    | 09 Apr | 9:45  | 0.003        |
| 28    | 09 Apr | 9:46  | 0.002        |
| 29    | 09 Apr | 9:47  | 0.001        |
| 30    | 09 Apr | 9:48  | 0.000        |
| 31    | 09 Apr | 9:49  | 0.000        |
| 32    | 09 Apr | 9:50  | 0.000        |
| 33    | 09 Apr | 9:51  | 0.000        |
| 34    | 09 Apr | 9:52  | 0.000        |
| 35    | 09 Apr | 9:53  | 0.001        |
| 36    | 09 Apr | 9:54  | 0.002        |
| 37    | 09 Apr | 9:55  | 0.004        |
| 38    | 09 Apr | 9:56  | 0.000        |
| 39    | 09 Apr | 9:57  | 0.000        |
| 40    | 09 Apr | 9:58  | 0.000        |
| 41    | 09 Apr | 9:59  | 0.000        |
| 42    | 09 Apr | 10:00 | 0.001        |
| 43    | 09 Apr | 10:01 | 0.001        |
| 44    | 09 Apr | 10:02 | 0.003        |
| 45    | 09 Apr | 10:03 | 0.002        |
| 46    | 09 Apr | 10:04 | 0.000        |
| 47    | 09 Apr | 10:05 | 0.003        |
| 48    | 09 Apr | 10:06 | 0.002        |
| 49    | 09 Apr | 10:07 | 0.001        |

|     |        |       |       |
|-----|--------|-------|-------|
| 50  | 09 Apr | 10:08 | 0.000 |
| 51  | 09 Apr | 10:09 | 0.000 |
| 52  | 09 Apr | 10:10 | 0.000 |
| 53  | 09 Apr | 10:11 | 0.000 |
| 54  | 09 Apr | 10:12 | 0.000 |
| 55  | 09 Apr | 10:13 | 0.001 |
| 56  | 09 Apr | 10:14 | 0.002 |
| 57  | 09 Apr | 10:15 | 0.004 |
| 58  | 09 Apr | 10:16 | 0.000 |
| 59  | 09 Apr | 10:17 | 0.000 |
| 60  | 09 Apr | 10:18 | 0.000 |
| 61  | 09 Apr | 10:19 | 0.000 |
| 62  | 09 Apr | 10:20 | 0.001 |
| 63  | 09 Apr | 10:21 | 0.001 |
| 64  | 09 Apr | 10:22 | 0.003 |
| 65  | 09 Apr | 10:23 | 0.002 |
| 66  | 09 Apr | 10:24 | 0.000 |
| 67  | 09 Apr | 10:25 | 0.003 |
| 68  | 09 Apr | 10:26 | 0.002 |
| 69  | 09 Apr | 10:27 | 0.001 |
| 70  | 09 Apr | 10:28 | 0.000 |
| 71  | 09 Apr | 10:29 | 0.000 |
| 72  | 09 Apr | 10:30 | 0.000 |
| 73  | 09 Apr | 10:31 | 0.000 |
| 74  | 09 Apr | 10:32 | 0.000 |
| 75  | 09 Apr | 10:33 | 0.001 |
| 76  | 09 Apr | 10:34 | 0.002 |
| 77  | 09 Apr | 10:35 | 0.004 |
| 78  | 09 Apr | 10:36 | 0.000 |
| 79  | 09 Apr | 10:37 | 0.000 |
| 80  | 09 Apr | 10:38 | 0.000 |
| 81  | 09 Apr | 10:39 | 0.000 |
| 82  | 09 Apr | 10:40 | 0.001 |
| 83  | 09 Apr | 10:41 | 0.001 |
| 84  | 09 Apr | 10:42 | 0.003 |
| 85  | 09 Apr | 10:43 | 0.002 |
| 86  | 09 Apr | 10:44 | 0.000 |
| 87  | 09 Apr | 10:45 | 0.003 |
| 88  | 09 Apr | 10:46 | 0.002 |
| 89  | 09 Apr | 10:47 | 0.001 |
| 90  | 09 Apr | 10:48 | 0.000 |
| 91  | 09 Apr | 10:49 | 0.000 |
| 92  | 09 Apr | 10:50 | 0.000 |
| 93  | 09 Apr | 10:51 | 0.000 |
| 94  | 09 Apr | 10:52 | 0.000 |
| 95  | 09 Apr | 10:53 | 0.001 |
| 96  | 09 Apr | 10:54 | 0.002 |
| 97  | 09 Apr | 10:55 | 0.004 |
| 98  | 09 Apr | 10:56 | 0.000 |
| 99  | 09 Apr | 10:57 | 0.000 |
| 100 | 09 Apr | 10:58 | 0.000 |
| 101 | 09 Apr | 10:59 | 0.002 |
| 102 | 09 Apr | 11:00 | 0.003 |
| 103 | 09 Apr | 11:01 | 0.000 |
| 104 | 09 Apr | 11:02 | 0.001 |
| 105 | 09 Apr | 11:03 | 0.001 |
| 106 | 09 Apr | 11:04 | 0.002 |
| 107 | 09 Apr | 11:05 | 0.000 |
| 108 | 09 Apr | 11:06 | 0.000 |
| 109 | 09 Apr | 11:07 | 0.003 |
| 110 | 09 Apr | 11:08 | 0.002 |
| 111 | 09 Apr | 11:09 | 0.000 |
| 112 | 09 Apr | 11:10 | 0.004 |

|     |        |       |       |
|-----|--------|-------|-------|
| 113 | 09 Apr | 11:11 | 0.002 |
| 114 | 09 Apr | 11:12 | 0.002 |
| 115 | 09 Apr | 11:13 | 0.000 |
| 116 | 09 Apr | 11:14 | 0.000 |
| 117 | 09 Apr | 11:15 | 0.003 |
| 118 | 09 Apr | 11:16 | 0.002 |
| 119 | 09 Apr | 11:17 | 0.000 |
| 120 | 09 Apr | 11:18 | 0.004 |
| 121 | 09 Apr | 11:19 | 0.002 |
| 122 | 09 Apr | 11:20 | 0.002 |
| 123 | 09 Apr | 11:21 | 0.000 |
| 124 | 09 Apr | 11:22 | 0.000 |
| 125 | 09 Apr | 11:23 | 0.003 |
| 126 | 09 Apr | 11:24 | 0.002 |
| 127 | 09 Apr | 11:25 | 0.000 |
| 128 | 09 Apr | 11:26 | 0.004 |
| 129 | 09 Apr | 11:27 | 0.002 |
| 130 | 09 Apr | 11:28 | 0.002 |
| 131 | 09 Apr | 11:29 | 0.000 |
| 132 | 09 Apr | 11:30 | 0.000 |
| 133 | 09 Apr | 11:31 | 0.003 |
| 134 | 09 Apr | 11:32 | 0.002 |
| 135 | 09 Apr | 11:33 | 0.000 |
| 136 | 09 Apr | 11:34 | 0.004 |
| 137 | 09 Apr | 11:35 | 0.002 |
| 138 | 09 Apr | 11:36 | 0.001 |
| 139 | 09 Apr | 11:37 | 0.000 |
| 140 | 09 Apr | 11:38 | 0.000 |
| 141 | 09 Apr | 11:39 | 0.000 |
| 142 | 09 Apr | 11:40 | 0.000 |
| 143 | 09 Apr | 11:41 | 0.000 |
| 144 | 09 Apr | 11:42 | 0.001 |
| 145 | 09 Apr | 11:43 | 0.002 |
| 146 | 09 Apr | 11:44 | 0.004 |
| 147 | 09 Apr | 11:45 | 0.000 |
| 148 | 09 Apr | 11:46 | 0.000 |
| 149 | 09 Apr | 11:47 | 0.000 |
| 150 | 09 Apr | 11:48 | 0.000 |
| 151 | 09 Apr | 11:49 | 0.001 |
| 152 | 09 Apr | 11:50 | 0.001 |
| 153 | 09 Apr | 11:51 | 0.003 |
| 154 | 09 Apr | 11:52 | 0.001 |
| 155 | 09 Apr | 11:53 | 0.000 |
| 156 | 09 Apr | 11:54 | 0.000 |
| 157 | 09 Apr | 11:55 | 0.000 |
| 158 | 09 Apr | 11:56 | 0.000 |
| 159 | 09 Apr | 11:57 | 0.000 |
| 160 | 09 Apr | 11:58 | 0.001 |
| 161 | 09 Apr | 11:59 | 0.002 |
| 162 | 09 Apr | 12:00 | 0.004 |
| 163 | 09 Apr | 12:01 | 0.000 |
| 164 | 09 Apr | 12:02 | 0.000 |
| 165 | 09 Apr | 12:03 | 0.000 |
| 166 | 09 Apr | 12:04 | 0.000 |
| 167 | 09 Apr | 12:05 | 0.001 |
| 168 | 09 Apr | 12:06 | 0.001 |
| 169 | 09 Apr | 12:07 | 0.003 |
| 170 | 09 Apr | 12:08 | 0.001 |
| 171 | 09 Apr | 12:09 | 0.000 |
| 172 | 09 Apr | 12:10 | 0.000 |
| 173 | 09 Apr | 12:11 | 0.000 |
| 174 | 09 Apr | 12:12 | 0.000 |
| 175 | 09 Apr | 12:13 | 0.000 |

|     |        |       |       |
|-----|--------|-------|-------|
| 176 | 09 Apr | 12:14 | 0.001 |
| 177 | 09 Apr | 12:15 | 0.002 |
| 178 | 09 Apr | 12:16 | 0.004 |
| 179 | 09 Apr | 12:17 | 0.000 |
| 180 | 09 Apr | 12:18 | 0.000 |
| 181 | 09 Apr | 12:19 | 0.000 |
| 182 | 09 Apr | 12:20 | 0.000 |
| 183 | 09 Apr | 12:21 | 0.001 |
| 184 | 09 Apr | 12:22 | 0.001 |
| 185 | 09 Apr | 12:23 | 0.003 |
| 186 | 09 Apr | 12:24 | 0.002 |
| 187 | 09 Apr | 12:25 | 0.002 |
| 188 | 09 Apr | 12:26 | 0.000 |
| 189 | 09 Apr | 12:27 | 0.000 |
| 190 | 09 Apr | 12:28 | 0.003 |
| 191 | 09 Apr | 12:29 | 0.002 |
| 192 | 09 Apr | 12:30 | 0.000 |
| 193 | 09 Apr | 12:31 | 0.004 |
| 194 | 09 Apr | 12:32 | 0.002 |
| 195 | 09 Apr | 12:33 | 0.001 |
| 196 | 09 Apr | 12:34 | 0.000 |
| 197 | 09 Apr | 12:35 | 0.000 |
| 198 | 09 Apr | 12:36 | 0.000 |
| 199 | 09 Apr | 12:37 | 0.000 |
| 200 | 09 Apr | 12:38 | 0.000 |
| 201 | 09 Apr | 12:39 | 0.001 |
| 202 | 09 Apr | 12:40 | 0.002 |
| 203 | 09 Apr | 12:41 | 0.004 |
| 204 | 09 Apr | 12:42 | 0.000 |
| 205 | 09 Apr | 12:43 | 0.000 |
| 206 | 09 Apr | 12:44 | 0.000 |
| 207 | 09 Apr | 12:45 | 0.000 |
| 208 | 09 Apr | 12:46 | 0.001 |
| 209 | 09 Apr | 12:47 | 0.001 |
| 210 | 09 Apr | 12:48 | 0.003 |
| 211 | 09 Apr | 12:49 | 0.001 |
| 212 | 09 Apr | 12:50 | 0.000 |
| 213 | 09 Apr | 12:51 | 0.000 |
| 214 | 09 Apr | 12:52 | 0.000 |
| 215 | 09 Apr | 12:53 | 0.000 |
| 216 | 09 Apr | 12:54 | 0.000 |
| 217 | 09 Apr | 12:55 | 0.001 |
| 218 | 09 Apr | 12:56 | 0.002 |
| 219 | 09 Apr | 12:57 | 0.004 |
| 220 | 09 Apr | 12:58 | 0.000 |
| 221 | 09 Apr | 12:59 | 0.000 |
| 222 | 09 Apr | 1:00  | 0.000 |
| 223 | 09 Apr | 1:01  | 0.003 |
| 224 | 09 Apr | 1:02  | 0.002 |
| 225 | 09 Apr | 1:03  | 0.000 |
| 226 | 09 Apr | 1:04  | 0.004 |
| 227 | 09 Apr | 1:05  | 0.002 |
| 228 | 09 Apr | 1:06  | 0.001 |
| 229 | 09 Apr | 1:07  | 0.000 |
| 230 | 09 Apr | 1:08  | 0.000 |
| 231 | 09 Apr | 1:09  | 0.000 |
| 232 | 09 Apr | 1:10  | 0.000 |
| 233 | 09 Apr | 1:11  | 0.000 |
| 234 | 09 Apr | 1:12  | 0.001 |
| 235 | 09 Apr | 1:13  | 0.002 |
| 236 | 09 Apr | 1:14  | 0.004 |
| 237 | 09 Apr | 1:15  | 0.000 |
| 238 | 09 Apr | 1:16  | 0.000 |



Quick & Clean

Instrument: MiniRAE 2000 (PGM7600) Serial Number: 009059  
User ID: 00000001 Site ID: 00000158  
Data Points: 249 Gas Name: Isobutylene Sample Period: 60 sec  
Last Calibration Time: 12/18/2012 14:56

| Measurement Type:  | Min(ppm) | Avg(ppm) | Max(ppm) |
|--------------------|----------|----------|----------|
| High Alarm Levels: | 100.0    | 100.0    | 100.0    |
| Low Alarm Levels:  | 50.0     | 50.0     | 50.0     |

| Line# | Date       | Time  | Min(ppm) | Avg(ppm) | Max(ppm) |
|-------|------------|-------|----------|----------|----------|
| 1     | 04/09/2013 | 09:12 | -----    | 0.0      | 0.0      |
| 2     | 04/09/2013 | 09:13 | -----    | 0.0      | 0.0      |
| 3     | 04/09/2013 | 09:14 | -----    | 0.0      | 0.0      |
| 4     | 04/09/2013 | 09:15 | -----    | 0.0      | 0.0      |
| 5     | 04/09/2013 | 09:16 | -----    | 0.0      | 0.0      |
| 6     | 04/09/2013 | 09:17 | -----    | 0.0      | 0.0      |
| 7     | 04/09/2013 | 09:18 | -----    | 0.0      | 0.0      |
| 8     | 04/09/2013 | 09:19 | -----    | 0.0      | 0.0      |
| 9     | 04/09/2013 | 09:20 | -----    | 0.0      | 0.0      |
| 10    | 04/09/2013 | 09:21 | -----    | 0.0      | 0.0      |
| 11    | 04/09/2013 | 09:22 | -----    | 0.0      | 0.0      |
| 12    | 04/09/2013 | 09:23 | -----    | 0.0      | 0.0      |
| 13    | 04/09/2013 | 09:24 | -----    | 0.0      | 0.0      |
| 14    | 04/09/2013 | 09:25 | -----    | 0.0      | 0.0      |
| 15    | 04/09/2013 | 09:26 | -----    | 0.0      | 0.0      |
| 16    | 04/09/2013 | 09:27 | -----    | 0.0      | 0.0      |
| 17    | 04/09/2013 | 09:28 | -----    | 0.0      | 0.0      |
| 18    | 04/09/2013 | 09:29 | -----    | 0.0      | 0.0      |
| 19    | 04/09/2013 | 09:30 | -----    | 0.0      | 0.0      |
| 20    | 04/09/2013 | 09:31 | -----    | 0.0      | 0.0      |
| 21    | 04/09/2013 | 09:32 | -----    | 0.0      | 0.0      |
| 22    | 04/09/2013 | 09:33 | -----    | 0.0      | 0.0      |
| 23    | 04/09/2013 | 09:34 | -----    | 0.0      | 0.0      |
| 24    | 04/09/2013 | 09:35 | -----    | 0.0      | 0.0      |
| 25    | 04/09/2013 | 09:36 | -----    | 0.0      | 0.0      |
| 26    | 04/09/2013 | 09:37 | -----    | 0.0      | 0.0      |
| 27    | 04/09/2013 | 09:38 | -----    | 0.0      | 0.0      |
| 28    | 04/09/2013 | 09:39 | -----    | 0.0      | 0.0      |
| 29    | 04/09/2013 | 09:40 | -----    | 0.0      | 0.0      |
| 30    | 04/09/2013 | 09:41 | -----    | 0.0      | 0.0      |
| 31    | 04/09/2013 | 09:42 | -----    | 0.0      | 0.0      |
| 32    | 04/09/2013 | 09:43 | -----    | 0.0      | 0.0      |
| 33    | 04/09/2013 | 09:44 | -----    | 0.0      | 0.0      |
| 34    | 04/09/2013 | 09:45 | -----    | 0.0      | 0.0      |
| 35    | 04/09/2013 | 09:46 | -----    | 0.0      | 0.0      |
| 36    | 04/09/2013 | 09:47 | -----    | 0.0      | 0.0      |
| 37    | 04/09/2013 | 09:48 | -----    | 0.0      | 0.0      |
| 38    | 04/09/2013 | 09:49 | -----    | 0.0      | 0.0      |
| 39    | 04/09/2013 | 09:50 | -----    | 0.0      | 0.0      |
| 40    | 04/09/2013 | 09:51 | -----    | 0.0      | 0.0      |
| 41    | 04/09/2013 | 09:52 | -----    | 0.0      | 0.0      |
| 42    | 04/09/2013 | 09:53 | -----    | 0.0      | 0.2      |
| 43    | 04/09/2013 | 09:54 | -----    | 0.0      | 0.0      |
| 44    | 04/09/2013 | 09:55 | -----    | 0.0      | 0.0      |
| 45    | 04/09/2013 | 09:56 | -----    | 0.0      | 0.0      |
| 46    | 04/09/2013 | 09:57 | -----    | 0.0      | 0.0      |
| 47    | 04/09/2013 | 09:58 | -----    | 0.0      | 0.0      |
| 48    | 04/09/2013 | 09:59 | -----    | 0.0      | 0.0      |
| 49    | 04/09/2013 | 10:00 | -----    | 0.0      | 0.0      |
| 50    | 04/09/2013 | 10:01 | -----    | 0.0      | 0.0      |
| 51    | 04/09/2013 | 10:02 | -----    | 0.0      | 0.0      |
| 52    | 04/09/2013 | 10:03 | -----    | 0.0      | 0.0      |
| 53    | 04/09/2013 | 10:04 | -----    | 0.0      | 0.0      |
| 54    | 04/09/2013 | 10:05 | -----    | 0.0      | 0.0      |
| 55    | 04/09/2013 | 10:06 | -----    | 0.0      | 0.0      |
| 56    | 04/09/2013 | 10:07 | -----    | 0.0      | 0.0      |
| 57    | 04/09/2013 | 10:08 | -----    | 0.0      | 0.0      |
| 58    | 04/09/2013 | 10:09 | -----    | 0.0      | 0.0      |

|     |                  |       |     |     |
|-----|------------------|-------|-----|-----|
| 59  | 04/09/2013 10:10 | ----- | 0.0 | 0.0 |
| 60  | 04/09/2013 10:11 | ----- | 0.0 | 0.0 |
| 61  | 04/09/2013 10:12 | ----- | 0.0 | 0.0 |
| 62  | 04/09/2013 10:13 | ----- | 0.0 | 0.0 |
| 63  | 04/09/2013 10:14 | ----- | 0.0 | 0.0 |
| 64  | 04/09/2013 10:15 | ----- | 0.0 | 0.0 |
| 65  | 04/09/2013 10:16 | ----- | 0.0 | 0.0 |
| 66  | 04/09/2013 10:17 | ----- | 0.0 | 0.0 |
| 67  | 04/09/2013 10:18 | ----- | 0.0 | 0.0 |
| 68  | 04/09/2013 10:19 | ----- | 0.0 | 0.0 |
| 69  | 04/09/2013 10:20 | ----- | 0.0 | 0.0 |
| 70  | 04/09/2013 10:21 | ----- | 0.0 | 0.0 |
| 71  | 04/09/2013 10:22 | ----- | 0.0 | 0.0 |
| 72  | 04/09/2013 10:23 | ----- | 0.0 | 0.0 |
| 73  | 04/09/2013 10:24 | ----- | 0.0 | 0.0 |
| 74  | 04/09/2013 10:25 | ----- | 0.0 | 0.0 |
| 75  | 04/09/2013 10:26 | ----- | 0.0 | 0.0 |
| 76  | 04/09/2013 10:27 | ----- | 0.0 | 0.0 |
| 77  | 04/09/2013 10:28 | ----- | 0.0 | 0.0 |
| 78  | 04/09/2013 10:29 | ----- | 0.0 | 0.0 |
| 79  | 04/09/2013 10:30 | ----- | 0.0 | 0.0 |
| 80  | 04/09/2013 10:31 | ----- | 0.0 | 0.0 |
| 81  | 04/09/2013 10:32 | ----- | 0.0 | 0.0 |
| 82  | 04/09/2013 10:33 | ----- | 0.0 | 0.0 |
| 83  | 04/09/2013 10:34 | ----- | 0.0 | 0.0 |
| 84  | 04/09/2013 10:35 | ----- | 0.0 | 0.0 |
| 85  | 04/09/2013 10:36 | ----- | 0.0 | 0.0 |
| 86  | 04/09/2013 10:37 | ----- | 0.0 | 0.0 |
| 87  | 04/09/2013 10:38 | ----- | 0.0 | 0.0 |
| 88  | 04/09/2013 10:39 | ----- | 0.0 | 0.0 |
| 89  | 04/09/2013 10:40 | ----- | 0.0 | 0.0 |
| 90  | 04/09/2013 10:41 | ----- | 0.0 | 0.0 |
| 91  | 04/09/2013 10:42 | ----- | 0.0 | 0.0 |
| 92  | 04/09/2013 10:43 | ----- | 0.0 | 0.0 |
| 93  | 04/09/2013 10:44 | ----- | 0.0 | 0.0 |
| 94  | 04/09/2013 10:45 | ----- | 0.0 | 0.0 |
| 95  | 04/09/2013 10:46 | ----- | 0.0 | 0.0 |
| 96  | 04/09/2013 10:47 | ----- | 0.0 | 0.0 |
| 97  | 04/09/2013 10:48 | ----- | 0.0 | 0.0 |
| 98  | 04/09/2013 10:49 | ----- | 0.0 | 0.0 |
| 99  | 04/09/2013 10:50 | ----- | 0.0 | 0.0 |
| 100 | 04/09/2013 10:51 | ----- | 0.0 | 0.0 |
| 101 | 04/09/2013 10:52 | ----- | 0.0 | 0.0 |
| 102 | 04/09/2013 10:53 | ----- | 0.0 | 0.0 |
| 103 | 04/09/2013 10:54 | ----- | 0.0 | 0.0 |
| 104 | 04/09/2013 10:55 | ----- | 0.0 | 0.0 |
| 105 | 04/09/2013 10:56 | ----- | 0.0 | 0.0 |
| 106 | 04/09/2013 10:57 | ----- | 0.0 | 0.0 |
| 107 | 04/09/2013 10:58 | ----- | 0.0 | 0.0 |
| 108 | 04/09/2013 10:59 | ----- | 0.0 | 0.0 |
| 109 | 04/09/2013 11:00 | ----- | 0.0 | 0.0 |
| 110 | 04/09/2013 11:01 | ----- | 0.0 | 0.0 |
| 111 | 04/09/2013 11:02 | ----- | 0.0 | 0.0 |
| 112 | 04/09/2013 11:03 | ----- | 0.0 | 0.0 |
| 113 | 04/09/2013 11:04 | ----- | 0.0 | 0.0 |
| 114 | 04/09/2013 11:05 | ----- | 0.0 | 0.0 |
| 115 | 04/09/2013 11:06 | ----- | 0.0 | 0.0 |
| 116 | 04/09/2013 11:07 | ----- | 0.0 | 0.0 |
| 117 | 04/09/2013 11:08 | ----- | 0.0 | 0.0 |
| 118 | 04/09/2013 11:09 | ----- | 0.0 | 0.0 |
| 119 | 04/09/2013 11:10 | ----- | 0.0 | 0.0 |
| 120 | 04/09/2013 11:11 | ----- | 0.0 | 0.0 |
| 121 | 04/09/2013 11:12 | ----- | 0.0 | 0.0 |
| 122 | 04/09/2013 11:13 | ----- | 0.0 | 0.0 |
| 123 | 04/09/2013 11:14 | ----- | 0.0 | 0.0 |
| 124 | 04/09/2013 11:15 | ----- | 0.0 | 0.0 |
| 125 | 04/09/2013 11:16 | ----- | 0.0 | 0.0 |
| 126 | 04/09/2013 11:17 | ----- | 0.0 | 0.0 |
| 127 | 04/09/2013 11:18 | ----- | 0.0 | 0.0 |

|     |                  |       |     |     |
|-----|------------------|-------|-----|-----|
| 128 | 04/09/2013 11:19 | ----- | 0.0 | 0.0 |
| 129 | 04/09/2013 11:20 | ----- | 0.0 | 0.0 |
| 130 | 04/09/2013 11:21 | ----- | 0.0 | 0.0 |
| 131 | 04/09/2013 11:22 | ----- | 0.0 | 0.0 |
| 132 | 04/09/2013 11:23 | ----- | 0.0 | 0.0 |
| 133 | 04/09/2013 11:24 | ----- | 0.0 | 0.0 |
| 134 | 04/09/2013 11:25 | ----- | 0.0 | 0.0 |
| 135 | 04/09/2013 11:26 | ----- | 0.0 | 0.5 |
| 136 | 04/09/2013 11:27 | ----- | 0.0 | 0.0 |
| 137 | 04/09/2013 11:28 | ----- | 0.0 | 0.0 |
| 138 | 04/09/2013 11:29 | ----- | 0.1 | 2.1 |
| 139 | 04/09/2013 11:30 | ----- | 0.0 | 0.0 |
| 140 | 04/09/2013 11:31 | ----- | 0.0 | 0.0 |
| 141 | 04/09/2013 11:32 | ----- | 0.0 | 0.0 |
| 142 | 04/09/2013 11:33 | ----- | 0.0 | 0.0 |
| 143 | 04/09/2013 11:34 | ----- | 0.0 | 0.0 |
| 144 | 04/09/2013 11:35 | ----- | 0.0 | 0.0 |
| 145 | 04/09/2013 11:36 | ----- | 0.0 | 0.0 |
| 146 | 04/09/2013 11:37 | ----- | 0.0 | 0.0 |
| 147 | 04/09/2013 11:38 | ----- | 0.0 | 0.0 |
| 148 | 04/09/2013 11:39 | ----- | 0.0 | 0.0 |
| 149 | 04/09/2013 11:40 | ----- | 0.0 | 0.0 |
| 150 | 04/09/2013 11:41 | ----- | 0.0 | 0.0 |
| 151 | 04/09/2013 11:42 | ----- | 0.0 | 0.0 |
| 152 | 04/09/2013 11:43 | ----- | 0.0 | 0.0 |
| 153 | 04/09/2013 11:44 | ----- | 0.0 | 0.0 |
| 154 | 04/09/2013 11:45 | ----- | 0.0 | 0.0 |
| 155 | 04/09/2013 11:46 | ----- | 0.0 | 0.0 |
| 156 | 04/09/2013 11:47 | ----- | 0.0 | 0.0 |
| 157 | 04/09/2013 11:48 | ----- | 0.0 | 0.0 |
| 158 | 04/09/2013 11:49 | ----- | 0.0 | 0.0 |
| 159 | 04/09/2013 11:50 | ----- | 0.0 | 0.0 |
| 160 | 04/09/2013 11:51 | ----- | 0.0 | 0.0 |
| 161 | 04/09/2013 11:52 | ----- | 0.0 | 0.0 |
| 162 | 04/09/2013 11:53 | ----- | 0.0 | 0.0 |
| 163 | 04/09/2013 11:54 | ----- | 0.0 | 0.0 |
| 164 | 04/09/2013 11:55 | ----- | 0.0 | 2.2 |
| 165 | 04/09/2013 11:56 | ----- | 0.0 | 0.0 |
| 166 | 04/09/2013 11:57 | ----- | 0.0 | 0.0 |
| 167 | 04/09/2013 11:58 | ----- | 0.0 | 0.0 |
| 168 | 04/09/2013 11:59 | ----- | 0.0 | 0.0 |
| 169 | 04/09/2013 12:00 | ----- | 0.0 | 0.0 |
| 170 | 04/09/2013 12:01 | ----- | 0.0 | 0.0 |
| 171 | 04/09/2013 12:02 | ----- | 0.0 | 0.0 |
| 172 | 04/09/2013 12:03 | ----- | 0.0 | 0.0 |
| 173 | 04/09/2013 12:04 | ----- | 0.0 | 0.0 |
| 174 | 04/09/2013 12:05 | ----- | 0.0 | 0.0 |
| 175 | 04/09/2013 12:06 | ----- | 0.0 | 0.0 |
| 176 | 04/09/2013 12:07 | ----- | 0.0 | 0.0 |
| 177 | 04/09/2013 12:08 | ----- | 0.0 | 0.0 |
| 178 | 04/09/2013 12:09 | ----- | 0.0 | 0.0 |
| 179 | 04/09/2013 12:10 | ----- | 0.0 | 0.0 |
| 180 | 04/09/2013 12:11 | ----- | 0.0 | 0.0 |
| 181 | 04/09/2013 12:12 | ----- | 0.0 | 0.0 |
| 182 | 04/09/2013 12:13 | ----- | 0.0 | 1.4 |
| 183 | 04/09/2013 12:14 | ----- | 0.0 | 0.0 |
| 184 | 04/09/2013 12:15 | ----- | 0.0 | 0.0 |
| 185 | 04/09/2013 12:16 | ----- | 0.0 | 0.0 |
| 186 | 04/09/2013 12:17 | ----- | 0.0 | 0.0 |
| 187 | 04/09/2013 12:18 | ----- | 0.0 | 0.0 |
| 188 | 04/09/2013 12:19 | ----- | 0.0 | 0.0 |
| 189 | 04/09/2013 12:20 | ----- | 0.0 | 0.0 |
| 190 | 04/09/2013 12:21 | ----- | 0.0 | 0.0 |
| 191 | 04/09/2013 12:22 | ----- | 0.0 | 0.0 |
| 192 | 04/09/2013 12:23 | ----- | 0.0 | 0.0 |
| 193 | 04/09/2013 12:24 | ----- | 0.0 | 0.5 |
| 194 | 04/09/2013 12:25 | ----- | 0.0 | 0.0 |
| 195 | 04/09/2013 12:26 | ----- | 0.0 | 0.0 |
| 196 | 04/09/2013 12:27 | ----- | 0.0 | 0.1 |

|     |                  |       |     |     |
|-----|------------------|-------|-----|-----|
| 197 | 04/09/2013 12:28 | ----- | 0.0 | 0.4 |
| 198 | 04/09/2013 12:29 | ----- | 0.0 | 0.0 |
| 199 | 04/09/2013 12:30 | ----- | 0.0 | 0.0 |
| 200 | 04/09/2013 12:31 | ----- | 0.0 | 0.0 |
| 201 | 04/09/2013 12:32 | ----- | 0.0 | 0.0 |
| 202 | 04/09/2013 12:33 | ----- | 0.0 | 0.0 |
| 203 | 04/09/2013 12:34 | ----- | 0.0 | 0.0 |
| 204 | 04/09/2013 12:35 | ----- | 0.0 | 0.0 |
| 205 | 04/09/2013 12:36 | ----- | 0.0 | 0.0 |
| 206 | 04/09/2013 12:37 | ----- | 0.0 | 0.0 |
| 207 | 04/09/2013 12:38 | ----- | 0.0 | 0.0 |
| 208 | 04/09/2013 12:39 | ----- | 0.0 | 0.0 |
| 209 | 04/09/2013 12:40 | ----- | 0.0 | 0.0 |
| 210 | 04/09/2013 12:41 | ----- | 0.0 | 0.0 |
| 211 | 04/09/2013 12:42 | ----- | 0.0 | 0.0 |
| 212 | 04/09/2013 12:43 | ----- | 0.0 | 0.0 |
| 213 | 04/09/2013 12:44 | ----- | 0.0 | 0.0 |
| 214 | 04/09/2013 12:45 | ----- | 0.0 | 0.0 |
| 215 | 04/09/2013 12:46 | ----- | 0.0 | 0.0 |
| 216 | 04/09/2013 12:47 | ----- | 0.0 | 0.0 |
| 217 | 04/09/2013 12:48 | ----- | 0.0 | 0.0 |
| 218 | 04/09/2013 12:49 | ----- | 0.0 | 0.0 |
| 219 | 04/09/2013 12:50 | ----- | 0.0 | 0.0 |
| 220 | 04/09/2013 12:51 | ----- | 0.0 | 0.0 |
| 221 | 04/09/2013 12:52 | ----- | 0.0 | 0.0 |
| 222 | 04/09/2013 12:53 | ----- | 0.0 | 0.0 |
| 223 | 04/09/2013 12:54 | ----- | 0.0 | 0.0 |
| 224 | 04/09/2013 12:55 | ----- | 0.0 | 0.0 |
| 225 | 04/09/2013 12:56 | ----- | 0.0 | 0.0 |
| 226 | 04/09/2013 12:57 | ----- | 0.0 | 0.0 |
| 227 | 04/09/2013 12:58 | ----- | 0.0 | 0.0 |
| 228 | 04/09/2013 12:59 | ----- | 0.0 | 0.0 |
| 229 | 04/09/2013 13:00 | ----- | 0.0 | 0.0 |
| 230 | 04/09/2013 13:01 | ----- | 0.0 | 0.0 |
| 231 | 04/09/2013 13:02 | ----- | 0.0 | 0.0 |
| 232 | 04/09/2013 13:03 | ----- | 0.0 | 0.0 |
| 233 | 04/09/2013 13:04 | ----- | 0.0 | 0.0 |
| 234 | 04/09/2013 13:05 | ----- | 0.0 | 0.0 |
| 235 | 04/09/2013 13:06 | ----- | 0.0 | 0.0 |
| 236 | 04/09/2013 13:07 | ----- | 0.0 | 0.0 |
| 237 | 04/09/2013 13:08 | ----- | 0.0 | 0.0 |
| 238 | 04/09/2013 13:09 | ----- | 0.0 | 0.0 |
| 239 | 04/09/2013 13:10 | ----- | 0.0 | 0.1 |
| 240 | 04/09/2013 13:11 | ----- | 0.0 | 0.1 |
| 241 | 04/09/2013 13:12 | ----- | 0.0 | 0.1 |
| 242 | 04/09/2013 13:13 | ----- | 0.0 | 0.1 |
| 243 | 04/09/2013 13:14 | ----- | 0.0 | 0.2 |
| 244 | 04/09/2013 13:15 | ----- | 0.0 | 0.1 |
| 245 | 04/09/2013 13:16 | ----- | 0.0 | 0.1 |
| 246 | 04/09/2013 13:17 | ----- | 0.0 | 0.1 |
| 247 | 04/09/2013 13:18 | ----- | 0.0 | 0.1 |
| 248 | 04/09/2013 13:19 | ----- | 0.0 | 0.1 |
| 249 | 04/09/2013 13:20 | ----- | 0.0 | 0.1 |

## **Attachment-F**

---

Slug Test Data



INF File Information

Printed: Tuesday, December 10, 2013 13:04:46

SITE INFORMATION -- SLUG TEST REV. 1.0

START DATE: 10/2/2013

START TIME: 12:41 PM

DATA FILE NAME: C:\DIRIM95\LOGFILES\QANDC2.DAT

DATA FILE FORMAT:

TIME(S) TRANSDUCER(V) HEAD(FT) HEAD(MM) PRESSURE(MILLIBAR)

UNITS: ENGLISH

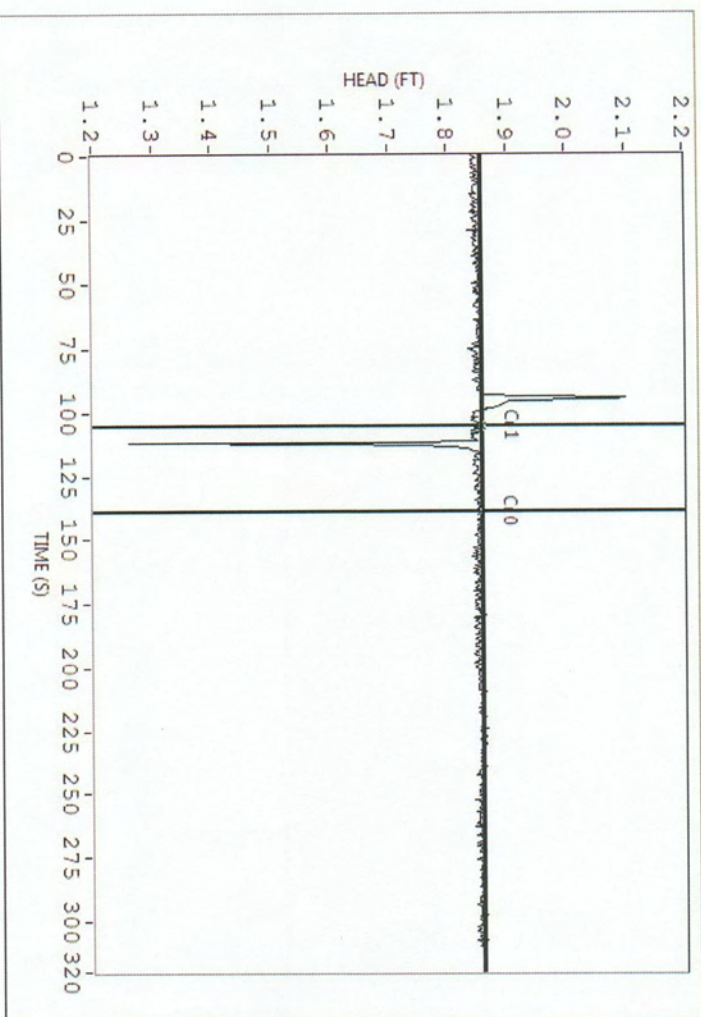
TRANSDUCER NUMBER: 12345 10 PSI (690 MILLIBAR)

END DATE: 10/2/2013

END TIME: 12:50 PM

Geoprobe® Slug Test Analysis Software V0.00

Log Data Set  
File Name: C:\dirim95\logfiles\QandC2.dat Printed: Tuesday, December 10, 2013 13:04:46



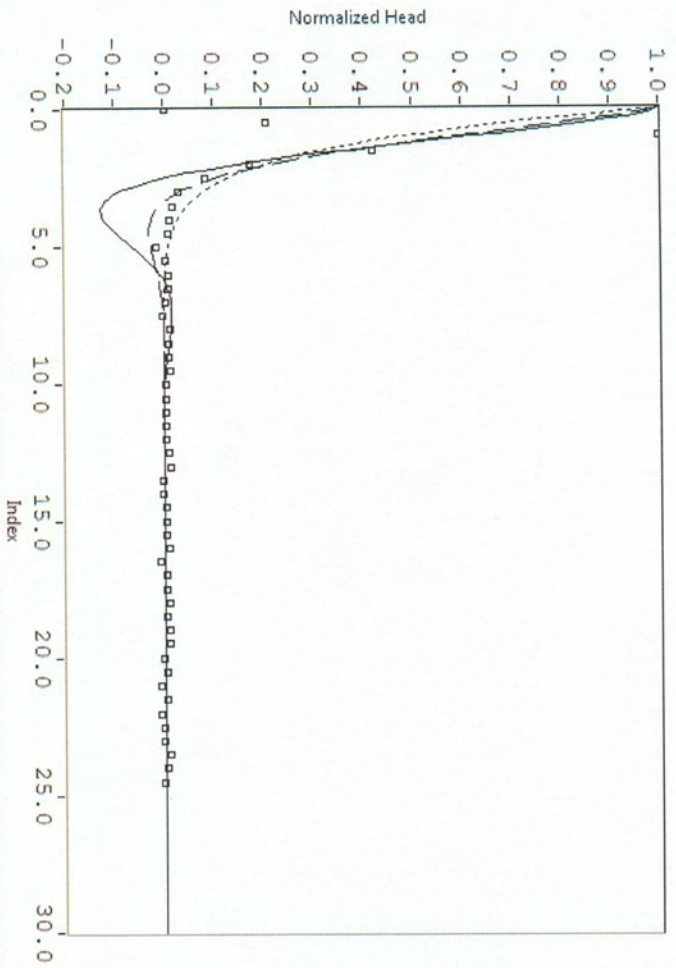


Interval Data Set

Interval: 111.000 Sec to 136.500 Sec

File Name: Log Name: C:\dirim95\logfiles\QandC2.dat

Printed: Tuesday, December 10, 2013 13:04:46



|           |  |
|-----------|--|
| Cd=1.1000 |  |
| Cd=1.5000 |  |
| Cd=1.9000 |  |
| DATA      |  |

| Well Construction Parameters |       |          |                       | Site Data   |                        |
|------------------------------|-------|----------|-----------------------|-------------|------------------------|
| Le (ft)                      | 4.000 | rt (in)  | 0.113                 | Site Name:  | Former Quick and Clean |
| Ls (ft)                      | 3.850 | SWL (ft) | 10.000                | Project #:  | test 2                 |
| Lw (ft)                      | 8.000 | TD (ft)  | 18.000                | Well #:     | temp well              |
| Rs (in)                      | 0.500 | H (ft)   | 50.000                | Test #:     | 2                      |
| Rb (in)                      | 0.750 | Ho (in)  | 10.000                | Location:   | Cedarhurst, NY         |
| Rc (in)                      | 0.625 |          |                       | Date:       | 10/2/13                |
|                              |       |          | Well                  | Field Tech: | JGH                    |
|                              |       |          | Partially Penetrating | Analyst:    | JGH                    |

| Analysis                     |        |                                  |             | Documentation         |       |
|------------------------------|--------|----------------------------------|-------------|-----------------------|-------|
| Configuration                |        | Response                         | Oscillatory | View Parameters       |       |
|                              |        |                                  | Unconfined  | View Parameters       |       |
| Analysis Algorithm           |        | Bouwer&Rice                      |             |                       |       |
| Baseline (ft)                | 1.851  |                                  |             |                       |       |
| t*d/t*                       | 1.000  | Cd                               | 1.500       |                       |       |
| K-Correction small dia wells |        | 1.003                            |             |                       |       |
| Log Response Parameters      |        | Partially Penetrating Parameters |             |                       |       |
| D Coeff                      | -1.000 | Where Le/Rb =                    | 64.000      |                       |       |
| Amplitude                    | -1.000 | A =                              | 3.428       | B =                   | 0.556 |
|                              |        | Fully Penetrating Parameter      |             |                       |       |
|                              |        | C =                              | -1.000      |                       |       |
|                              |        | Calculated K                     |             |                       |       |
|                              |        | K (FT/Day)                       |             | 56.302                |       |
|                              |        | K (cm/Sec)                       |             | 1.986E-2              |       |
|                              |        | Well                             |             | Partially Penetrating |       |
|                              |        |                                  |             | Print This Page       |       |

## **Attachment-G**

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RIR Validated Groundwater Data



**DATA USABILITY SUMMARY REPORT – DUSR  
DATA VALIDATION SUMMARY**

**ORGANIC ANALYSIS**

**TARGET COMPOUND LIST (TCL) VOLATILES BY GC/MS**

**For Groundwater Samples Collected  
April 09, 2013 and April 10, 2013  
From 380 Rockaway Turnpike, Cedarhurst, NY  
Former Quick and Clean  
Collected by Berninger Environmental, Inc.**

**SAMPLE DELIVERY GROUP NUMBER:  
BER121  
BY H2M Labs, Inc. (ELAP #10478)**

**SUBMITTED TO:**

**Mr. Walter Berninger/President  
Berninger Environmental  
90-B Knickerbocker Avenue  
Bohemia, NY 11716**

**May 05, 2013**

**PREPARED BY:**

**Lori A. Beyer/President  
L.A.B. Validation Corp.  
14 West Point Drive  
East Northport, NY 11731**

*Lori A. Beyer*

Former Quick and Clean, 380 Rockaway Turnpike, Cedarhurst, New York- Groundwater Samples;  
April 2013 Sampling Event

Data Usability Summary Report (Data Validation): TCL Volatiles

Table of Contents:

Introduction  
Data Qualifier Definitions  
Sample Receipt

- 1.0 Target Compound List (TCL) Volatile Organics by GC/MS SW846 Method 8260
  - 1.1 Holding Time
  - 1.2 System Monitoring Compound (Surrogate) Recovery
  - 1.3 Matrix Spikes (MS), Matrix Spike Duplicates (MSD)
  - 1.4 Laboratory Control Sample/Fortified Blank Spikes
  - 1.5 Blank Contamination
  - 1.6 GC/MS Instrument Performance Check (Tuning)
  - 1.7 Initial and Continuing Calibrations
  - 1.8 Internal Standards
  - 1.9 Field Duplicates
  - 1.10 Target Compound List Identification
  - 1.11 Compound Quantification and Reported Detection Limits
  - 1.12 Overall System Performance

**APPENDICES:**

- A. Data Summary Tables/Form Is with Qualifications
- B. Chain of Custody Documents
- C. SDG Narratives
- D. NYSDEC ASP Summary Forms

### **Introduction:**

A validation was performed on groundwater samples and the associated quality control samples for organic analysis for samples collected under chain of custody documentation by Berninger Environmental Inc. and submitted to H2M Labs, Inc. for subsequent analysis. This report contains the laboratory and validation results for the field samples itemized below. The groundwater samples were collected on April 09, 2013 and April 10, 2013.

The samples were analyzed by H2M Labs, Inc., utilizing SW846 and submitted under NYSDEC ASP (2000) Category B equivalent deliverable requirements for the associated analytical methodologies employed. The analytical testing consisted of the Target Compound/Analyte Lists for Volatile Organics.

The data was evaluated in accordance with EPA Region II National Functional Guidelines for Organic Data Review and EPA Region II SOPs for 8260 and also in conjunction with the analytical methodologies for which the samples were analyzed, where applicable and relevant.

The data validation report pertains to the following samples:

| <b>Sample Identification</b>      | <b>Laboratory Identification</b> | <b>Sample Matrix</b> | <b>Date Collected</b> | <b>Date Received</b> |
|-----------------------------------|----------------------------------|----------------------|-----------------------|----------------------|
| GW-0113 @ 15-19'                  | 1304656-001                      | Groundwater          | 04/09/13              | 04/10/13             |
| GW-0113 @ 30-34'<br>(plus MS/MSD) | 1304656-002                      | Groundwater          | 04/09/13              | 04/10/13             |
| GW-0113 @ 40-44'                  | 1304656-003                      | Groundwater          | 04/09/13              | 04/10/13             |
| GW-0113 @ 50-54'                  | 1304656-004                      | Groundwater          | 04/09/13              | 04/10/13             |
| GW-0113 @60-64                    | 1304656-005                      | Groundwater          | 04/09/13              | 04/10/13             |
| GW-0113 @ 70-74'                  | 1304656-006                      | Groundwater          | 04/09/13              | 04/10/13             |
| GW-0213 10-12'                    | 1304656-007                      | Groundwater          | 04/09/13              | 04/10/13             |
| GW-0213 @20-22'                   | 1304656-008                      | Groundwater          | 04/09/13              | 04/10/13             |
| GW-0213 @30-32'                   | 1304656-009                      | Groundwater          | 04/09/13              | 04/10/13             |
| GW-0313 @ 11-13'                  | 1304656-010                      | Groundwater          | 04/09/13              | 04/10/13             |
| GW-0313 @20-22'                   | 1304656-011                      | Groundwater          | 04/10/13              | 04/10/13             |
| GW-0313 @30-32'                   | 1304656-012                      | Groundwater          | 04/10/13              | 04/10/13             |
| GW-0412 @ 10-12'                  | 1304656-013                      | Groundwater          | 04/10/13              | 04/10/13             |
| GW-0413 @20-22'                   | 1304656-014                      | Groundwater          | 04/10/13              | 04/10/13             |
| GW-0413 @30-32'                   | 1304656-015                      | Groundwater          | 04/10/13              | 04/10/13             |
| Trip Blank                        | 1304656-016                      | Aqueous              | 04/10/13              | 04/10/13             |
| Field Blank                       | 1304656-017                      | Aqueous              | 04/10/13              | 04/10/13             |
| Storage Blank                     | 1304656-018                      | Aqueous              | 04/10/13              | 04/10/13             |

**Data Qualifier Definitions:**

The following definitions provide brief explanations of the qualifiers assigned to results in the data review process.

**U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.**

**J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.**

**UJ - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.**

**R - The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.**

**N - The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."**

**NJ - The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate quantity.**

**Sample Receipt:**

The Chain of Custody documents indicate that the samples were hand delivered by Berninger Environmental field sampling personnel and received at H2M Labs on 04/10/13 upon completion of the sampling event. Sample login notes were generated. The cooler temperature for all samples were recorded upon receipt at H2M Labs and determined to be acceptable (<6.0 degrees C). The actual temperature is recorded on the chain of custody documents provided in Appendix B of this report.

Several samples (both vials) were noted upon receipt to contain small air bubbles. Specifically, GW-0113 40-44', GW0113 @ 60-64', GW-0113 @ 70-74', GW-0213 @ 30-32', GW-0313 @20-22' and GW-0313 @ 30-32'. Based on professional judgment, no qualifications to the data were made.

No unresolved problems and/or discrepancies were noted, consequently, the integrity of the samples has been assumed to be good.

The data summary tables included in Appendix A includes all usable (qualified) and unusable (rejected) results for the samples identified above. These tables summarize the detailed narrative section of the report.

**NOTE:**

L.A.B. Validation Corp. believes it is appropriate to note that the data validation criteria utilized for data evaluation is different than the method requirements utilized by the laboratory. Qualified data does not necessarily mean that the laboratory was non-compliant in the analysis that was performed.

**1.0 Target Analyte List (TCL) Volatile Organics by GC/MS SW846 Method 8260**

The following method criteria were reviewed: holding times, SMCs, MS, MSD, LCS, Laboratory Spiked Blanks, Method Blanks, Tunes, Calibrations, Internal Standards, Target Component Identification, Quantitation, Reported Quantitation Limits and Overall System Performance. The Volatile results were considered to be valid and useable as noted within the following as noted within the following text:

**1.1 Holding Time**

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the technical holding time is exceeded, the data may not be considered valid. Those analytes detected in the samples whose holding time has been exceeded will be qualified as estimates, "J". The non-detects (sample quantitation limits) are required to be flagged as estimated, "UJ", or unusable, "R", if the holding times are grossly exceeded.



**Samples pertaining to this SDG were performed within the Method required holding times as well as the technical holding times for data validation of 14 days from collection to analysis and diluted reanalysis. No data validation qualifiers were required based upon holding time.**

## **1.2 System Monitoring Compound (Surrogate) Recovery**

All samples are spiked with surrogate compounds prior to sample analysis to evaluate overall laboratory performance and efficiency of the analytical technique. If the measure of surrogate concentrations is outside contract specifications, qualifications are required to be applied to associated samples and analytes.

**Surrogate recoveries (%R) were found to be within acceptable limits for all three (3) surrogate compounds for all analyses pertaining to this SDG with the exception of 1,2-dichloroethane-d4 which recovered high in initial analysis of 0213 @ 20-22' (122%), 0213 @ 30-32' (115%), 0213 @ 10-12' (119%) and 0413 @ 30-32' (118%).**

**These samples were reanalyzed at dilutions due to high target compound concentrations. Diluted reanalysis and therefore reduced matrix interferences acceptable recovery values were observed for 1,2-dichloroethane-d4.**

**No qualifications were required to 0213 @ 10-12' since 1,2-dichloroethene (total) concentration was obtained from diluted reanalysis since in the primary run, this compound was detected above the instruments linear calibration range.**

**The laboratory reported concentrations for 1,2-dichloroethene (total) must be considered estimated, "J" in samples 0213 @ 20-22', 0213 @ 30-32' and 0413 @ 30-32'.**

## **1.3 Matrix Spikes (MS)/ Matrix Spike Duplicates (MSD)**

The MS/MSD data are generated to determine the long-term precision and accuracy of the analytical method in various matrices and to demonstrate acceptable compound recovery by the laboratory at the time of sample analysis. The MS/MSD may be used in conjunction with other QC criteria for additional qualification of data.

**Groundwater MS/MSD analysis was conducted on 0113 @ 30-34' as requested by Berninger field sampling personnel. All spike recoveries and RPD values fell within in house established QC ranges.**

#### **1.4 Laboratory Control Sample/Fortified Blank Spikes**

The LCS data for laboratory control samples (LCS) are generated to provide information on the accuracy of the analytical method and on the laboratory performance.

**LCS/Fortified Blank Spike recovery values fell within acceptance limits.**

#### **1.5 Blank Contamination**

Quality assurance (QA) blanks; i.e. method, trip and field blanks are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Trip blanks measure cross-contamination of samples during shipment. Field blanks measure cross-contamination of samples during field operations.

The following table was utilized to qualify target analyte results due to contamination. The largest value from all the associated blanks is required to be utilized:

| <b>For:</b>                                       | <b>Flag Sample Result with a "U" when:</b>              | <b>Report CRQL &amp; Qualify "U" when:</b>             | <b>No Qualification is Needed when:</b>             |
|---|---|--|---|
| Methylene Chloride, Acetone, Toluene & 2-Butanone | Sample Conc. Is >CRQL, but $\leq 10 \times$ blank value | Sample Conc. is <CRQL and $\leq 10 \times$ blank value | Sample Conc. is >CRQL and $> 10 \times$ blank value |
| Other Contaminants                                | Sample Conc. Is >CRQL, but $\leq 5 \times$ blank value  | Sample Conc. Is <CRQL and $\leq 5 \times$ blank value  | Sample Conc. is >CRQL and $> 5 \times$ blank value  |

Below is a summary of the compounds in the sample and the associated qualifications that have been applied:

##### **A) Method Blank Contamination:**

**No target/non target analytes were detected in the method blanks associated with sample analysis.**

**B) Field Blank Contamination:**

**Target/non-target analytes were not detected in the Field Blank applicable to 04/09/13-04/10/13 sampling event.**

**C) Trip Blank Contamination:**

**Target/non-target analytes were not detected in the Trip Blank applicable to 04/09/13-04/10/13 sampling event.**

**D) Storage Blanks**

**Methylene Chloride (21 ug/L) and Acetone (6 ug/L) were detected in the storage blank.**

**Sample results were evaluated based on the above criteria and the laboratory reported presence of Methylene Chloride was negated in 0413 @ 10-12' and -413 @ 20-22'.**

**Acetone was negated in samples 0113 @ 15-19', 0113 @ 30-34', 0113 @ 40-44', 0113 @ 50-54', 0113 @ 60-64', 0113 @ 70-74', 0213 @ 10-12', 0213 @ 20-22', 0213 @ 30-32', 0313 @ 11'13', 0313 @ 30-32', 0413 @ 10-12' and 0413 @ 30-32'.**

**Acetone could not be negated in 0313 @ 20-22' (110 ug/L) nor in 0413 @ 20-22' (65 ug/L). Since levels up to 60 ug/L can be attributed to laboratory storage contamination, the reported results for these samples must be considered estimated and also suspect and therefore has been qualified, "JN" to denote that presumptive evidence of the presence of this compound in these sampling points.**

**1.6 GC/MS Instrument Performance Check**

Tuning and performance criteria are established to ensure adequate mass resolution, proper identification of compounds and to some degree, sufficient instrument sensitivity. These criteria are not sample specific. Instrument performance is determined using standard materials. Therefore, these criteria should be met in all circumstances. The Tuning standard for volatile organics is Bromofluorobenzene (BFB).

**Instrument performance was generated within acceptable limits and frequency for Bromofluorobenzene (BFB) for all analyses conducted for this SDG.**

## **1.7 Initial and Continuing Calibrations**

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of giving acceptable performance at the beginning of an experimental sequence.

The continuing calibration checks document that the instrument is giving satisfactory daily performance.

### **A) Response Factor GC/MS:**

The response factor measures the instrument's response to specific chemical compounds. The response factor for all compounds must be  $\geq 0.05$  in both initial and continuing calibrations. A value  $< 0.05$  indicates a serious detection and quantitation problem (poor sensitivity). Analytes detected in the sample will be qualified as estimated, "J". All non-detects for that compound in the corresponding samples will be rejected, "R".

**All the response factors for the target analytes reported were found to be within acceptable limits ( $\geq 0.05$ ), for the initial and continuing calibrations for all reported TCL analytes.**

### **B) Percent Relative Standard Deviation (%RSD) and Percent Difference (%D):**

Percent RSD is calculated from the initial calibration and is used to indicate the stability of the specific compound response factor over increasing concentrations. Percent D compares the response factor of the continuing calibration check to the mean response factor (RRF) from the initial calibration. Percent D is a measure of the instrument's daily performance. Percent RSD must be  $< 30\%$  and %D must be  $< 25\%$ . A value outside of these limits indicates potential detection and quantitation errors. For these reasons, all positive results are flagged as estimated, "J" and non-detects are flagged "UJ". If %RSD and %D grossly exceed QC criteria, non-detect data may be qualified, "R", unusable. Additionally, in cases where the %RSD is  $> 30\%$  and eliminating either the high or the low point of the curve does not restore the %RSD to less than or equal to 30% then positive results are qualified, "J". In cases

where removal of either the low or high point restores the linearity, then only low or high level results will be qualified, "J" in the portion of the curve where non linearity exists.

**Initial Calibrations:** The initial calibrations provided and the %RSD were within acceptable limits (30%) for all reported compounds with the exception of Bromoform (33.2%). Non-detects for all samples must be considered estimated, "UJ" for Bromoform.

**Continuing Calibrations:** The continuing calibrations provided and the %D was within acceptable limits (25%) for all reported compounds with the following exceptions:

CCAL 04/11/13 Instrument HP5973-3; Acetone 27.8%; this analyte was negated due to storage blank contamination, however, the reported validated non-detected concentrations must be considered estimated, "UJ" in Storage Blank, Field Blank, Trip Blank, 0113 @ 15-19', 0113 @ 60-64', 0213 @ 20-22', 0213 @ 30-32', 0313 @ 11-13', 0313 @ 20-22', 0413 @ 10-12', 0413 @ 20-22', 0213 @ 10-12' and 0313 @ 30-32'.

CCAL 04/12/13 Instrument HP5973-3; Bromoform 25.3% (results were previously qualified due to ICAL) and 2-Hexanone 33.5%. Non-detects for 2-Hexanone must be considered estimated in samples 0113 @ 50-54', 0113 @ 30-34', 0113 @ 40-44', 0413 @ 30-32' and 0113 @ 70-74'.

## **1.8 Internal Standards**

Internal Standards (IS) performance criteria ensure that the GC/MS sensitivity and response are stable during every experimental run. The internal standard area count must not vary by more than a factor of 2 (-50% to +100%) from the associated continuing calibration standard. The retention time of the internal standard must not vary more than +/- 30 seconds from the associated continuing calibration standard. If the area count is outside the (-50% to +100%) range of the associated standard, all of the positive results for compounds quantitated using that IS are qualified as estimated, "J", and all non-detects as "UJ", or "R" if there is a severe loss of sensitivity.

If an internal standard retention time varies by more than 30 seconds, professional judgment will be used to determine either partial or total rejection of the data for that sample fraction.



All samples were spiked with the internal standards Bromochloromethane, 1,4-Difluorobenzene and Chlorobenzene-d5 prior to sample analysis. The area responses and retention time of each internal standard met QC criteria in all samples associated with this SDG.

**1.9 Field Duplicates**

Field duplicate samples are collected and analyzed as an indication of overall precision. These results are expected to have more variability than laboratory duplicate samples. Generally for water samples an acceptable RPD is 10%.

Field Duplicate analysis was not collected as part of this sampling event.

**1.10 Target Compound List Identification**

TCL compounds are identified on the GC/MS by using the analyte's relative retention time (RRT) and by comparison to the ion spectra obtained from known standards. For the results to be a positive hit, the sample peak must be within  $\pm 0.06$ RRT units of the standard compound and have an ion spectra which has a ratio of the primary and secondary m/e intensities within 20% of that in the standard compound.

GC/MS spectra met the qualitative criteria for identification. All retention times were within required specifications.

**1.10 Compound Quantification and Reported Detection Limits**

GC/MS quantitative analysis is considered to be acceptable. Correct internal standards per SW846, response factors were used to calculate final concentrations.

As required, the laboratory reported "J" values between the limit of quantitation (LOQ) and limit of detection (LOD). This is consistent with common laboratory practices and a requirement of the National Environmental Laboratory Approval Program (NELAP).

Tentatively identified compounds were detected field samples. The total TIC concentration is presented in the spreadsheets in Appendix A. Non target constituents primarily consist of aromatic hydrocarbons and aromatic substituted benzene compounds.

All groundwater samples were initially analyzed undiluted at 5mls. Based on Tetrachloroethene, 1,2-Dichloroethene (total), Toluene, Ethylbenzene and/or Xylene concentrations diluted reanalyses were required for 0113 @ 15-19' (1:20), 0113 @ 70-74' (1:3), 0213 @ 10-12' (1:40), 0213 @ 20-22' (1:10), 0213 @ 30-32' (1:2), 0313 @ 11-13' (1:5), 0313 @ 20-22' (1:40), 0313 @ 30-32' (1:5), 0413 @ 20-22' (1:10) and 0413 @ 30-32' (1:4) since the raw concentrations were determined to exceed the instruments linear calibration range.

Concentrations must be obtained from diluted reanalysis as reported by the laboratory and presented in the summary spreadsheets and Form I's in Appendix A.

Acceptable dilutions were performed such that raw concentrations were within the upper half of the instruments linear calibration range.

The end user should proceed with caution when making decisions based on Acetone, Methylene Chloride, and 2-Butanone concentrations since these compounds are common laboratory contaminants.

#### 1.11 Overall System Performance

Good resolution and chromatographic performance were observed. Raw data was reviewed and confirmed that no carryover exists for any analysis conducted with this data set.

Reviewer's Signature

*Lou A. Bayl*

Date

*05/06/13*

**Appendix A**  
**Data Summary Tables and Form I's**  
**With Qualifications**

BERNINGER ENVIRONMENTAL  
Project: FORMER QUICK AND CLEAN  
Laboratory: H2M; BER121  
Sample Identification:  
Laboratory ID:  
Sampling Date:

[illegible]

**BERNINGER ENVIRONMENTAL**  
Protect. FORMER QUICK AND CLEAN  
Laboratory: H2M; BER121  
Sample Identification:  
Laboratory ID:  
Sampling Date:

[illegible]



**BERNINGER ENVIRONMENTAL**  
**Project: FORMER QUICK AND CLEAN**  
 Laboratory: H2M; BER121  
 Sample Identification:  
 Laboratory ID:  
 Sampling Date:

[illegible]

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0113 @ 15-19'

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: H2M

Case No.: BER

SAS No. \_\_\_\_\_

SDG No.: BER121

Matrix: (soil/water) WATER

Lab Sample ID: 1304656-001A

Sample wt/vol: 5 (g/mL ML

Lab File ID: 13\J9881.D

Level: (low/med) LOW

Date Received: 04/10/13

% Moisture: not dec.

Date Analyzed: 04/11/13, 4/12/13

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor: 1.00 x 20

Soil Extract Volume: \_\_\_\_\_ (µL)

Soil Aliquot Volu \_\_\_\_\_ (µL)

CONCENTRATION UNITS:

| CAS NO.    | COMPOUND                   | (µg/L or µg/Kg UG/L | Q  |
|------------|----------------------------|---------------------|----|
| 74-87-3    | Chloromethane              | 5                   | U  |
| 74-83-9    | Bromomethane               | 5                   | U  |
| 75-01-4    | Vinyl chloride             | 5                   | U  |
| 75-00-3    | Chloroethane               | 5                   | U  |
| 75-09-2    | Methylene chloride         | 5                   | U  |
| 67-64-1    | Acetone                    | 39                  | UJ |
| 75-35-4    | 1,1-Dichloroethene         | 5                   | U  |
| 75-15-0    | Carbon disulfide           | 5                   | U  |
| 75-34-3    | 1,1-Dichloroethane         | 5                   | U  |
| 540-59-0   | 1,2-Dichloroethene (total) | 240 270             | E  |
| 67-66-3    | Chloroform                 | 5                   | U  |
| 107-06-2   | 1,2-Dichloroethane         | 5                   | U  |
| 78-93-3    | 2-Butanone                 | 39                  |    |
| 71-55-6    | 1,1,1-Trichloroethane      | 5                   | U  |
| 56-23-5    | Carbon tetrachloride       | 5                   | U  |
| 75-27-4    | Bromodichloromethane       | 5                   | U  |
| 78-87-5    | 1,2-Dichloropropane        | 5                   | U  |
| 10061-01-5 | cis-1,3-Dichloropropene    | 5                   | U  |
| 79-01-6    | Trichloroethene            | 8                   |    |
| 124-48-1   | Dibromochloromethane       | 5                   | U  |
| 79-00-5    | 1,1,2-Trichloroethane      | 5                   | U  |
| 71-43-2    | Benzene                    | 1                   | J  |
| 10061-02-6 | trans-1,3-Dichloropropene  | 5                   | U  |
| 75-25-2    | Bromoform                  | 5                   | UJ |
| 108-10-1   | 4-Methyl-2-pentanone       | 5                   | U  |
| 591-78-6   | 2-Hexanone                 | 5                   | U  |
| 127-18-4   | Tetrachloroethene          | 650 730             | E  |
| 79-34-5    | 1,1,2,2-Tetrachloroethane  | 5                   | U  |
| 108-88-3   | Toluene                    | 200                 |    |
| 108-90-7   | Chlorobenzene              | 5                   | U  |
| 100-41-4   | Ethylbenzene               | 590 640             | E  |
| 100-42-5   | Styrene                    | 5                   | U  |
| 1330-20-7  | Xylene (total)             | 6500 2500           | E  |

8/11/13  
5/5/13

1F

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

0113 @ 15-19'

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: H2MCase No.: BER

SAS No.: \_\_\_\_\_

SDG No.: BER121

Matrix: (soil/water)

WATERLab Sample ID: 1304656-001ASample wt/vol: 5(g/mL) MLLab File ID: 13\J9881.DLevel: (low/med) LOWDate Received: 04/10/13

% Moisture: not dec.

Date Analyzed: 04/11/13GC Column: Rtx-624ID: .18 (mm)Dilution Factor: 1.00

Soil Extract Volume:

(μl)

Soil Aliquot Volume: 0 (μL)

## CONCENTRATION UNITS:

Number TICs found:

7

(μg/L or μg/Kg)

UG/L

| CAS NUMBER | COMPOUND NAME                  | RT    | EST.CONC. | Q |
|------------|--------------------------------|-------|-----------|---|
| 1.         | (DEL) Alkane: Branched (3.23)  | 3.23  | 490       | J |
| 2.         | (DEL) Alkane: Branched (3.56)  | 3.56  | 370       | J |
| 3.         | (DEL) Alkane: Cyclic           | 4.85  | 680       | J |
| 4.         | c3 substituted benzene (11.06) | 11.06 | 270       | J |
| 5.         | c3 substituted benzene (11.16) | 11.16 | 950       | J |
| 6.         | c3 substituted benzene (11.25) | 11.25 | 460       | J |
| 7.         | c3 substituted benzene (11.45) | 11.45 | 480       | J |
| 8.         | c3 substituted benzene (11.63) | 11.63 | 940       | J |
| 9.         | c3 substituted benzene (12.04) | 12.04 | 460       | J |
| 10.        | c3 substituted benzene (12.23) | 12.23 | 460       | J |

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0113 @ 30-34'

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: H2M

Case No.: BER

SAS No. \_\_\_\_\_

SDG No.: BER121

Matrix: (soil/water) WATER

Lab Sample ID: 1304656-002A

Sample wt/vol: 5 (g/mL ML

Lab File ID: 13\J9911.D

Level: (low/med) LOW

Date Received: 04/10/13

% Moisture: not dec.

Date Analyzed: 04/12/13

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (µL)

Soil Aliquot Volu \_\_\_\_\_ (µL)

CONCENTRATION UNITS:

| CAS NO.    | COMPOUND                   | (µg/L or µg/Kg UG/L | Q            |
|------------|----------------------------|---------------------|--------------|
| 74-87-3    | Chloromethane              | 5                   | U            |
| 74-83-9    | Bromomethane               | 5                   | U            |
| 75-01-4    | Vinyl chloride             | 5                   | U            |
| 75-00-3    | Chloroethane               | 5                   | U            |
| 75-09-2    | Methylene chloride         | 5                   | U            |
| 67-64-1    | Acetone                    | <del>5</del> 2      | <del>U</del> |
| 75-35-4    | 1,1-Dichloroethene         | 5                   | U            |
| 75-15-0    | Carbon disulfide           | 5                   | U            |
| 75-34-3    | 1,1-Dichloroethane         | 5                   | U            |
| 540-59-0   | 1,2-Dichloroethene (total) | 2                   | J            |
| 67-66-3    | Chloroform                 | 5                   | U            |
| 107-06-2   | 1,2-Dichloroethane         | 5                   | U            |
| 78-93-3    | 2-Butanone                 | 5                   | U            |
| 71-55-6    | 1,1,1-Trichloroethane      | 5                   | U            |
| 56-23-5    | Carbon tetrachloride       | 5                   | U            |
| 75-27-4    | Bromodichloromethane       | 5                   | U            |
| 78-87-5    | 1,2-Dichloropropane        | 5                   | U            |
| 10061-01-5 | cis-1,3-Dichloropropene    | 5                   | U            |
| 79-01-6    | Trichloroethene            | 5                   | U            |
| 124-48-1   | Dibromochloromethane       | 5                   | U            |
| 79-00-5    | 1,1,2-Trichloroethane      | 5                   | U            |
| 71-43-2    | Benzene                    | 5                   | U            |
| 10061-02-6 | trans-1,3-Dichloropropene  | 5                   | U            |
| 75-25-2    | Bromoform                  | 5                   | U J          |
| 108-10-1   | 4-Methyl-2-pentanone       | 5                   | U            |
| 591-78-6   | 2-Hexanone                 | 5                   | U J          |
| 127-18-4   | Tetrachloroethene          | 55                  |              |
| 79-34-5    | 1,1,2,2-Tetrachloroethane  | 5                   | U            |
| 108-88-3   | Toluene                    | 4                   | J            |
| 108-90-7   | Chlorobenzene              | 5                   | U            |
| 100-41-4   | Ethylbenzene               | 1                   | J            |
| 100-42-5   | Styrene                    | 5                   | U            |
| 1330-20-7  | Xylene (total)             | 6                   |              |

*801K*  
*5/5/13*

1F  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

0113 @ 30-34'

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: H2M

Case No.: BER

SAS No.: \_\_\_\_\_

SDG No.: BER121

Matrix: (soil/water)

WATER

Lab Sample ID: 1304656-002A

Sample wt/vol: 5

(g/mL) ML

Lab File ID: 13\J9911.D

Level: (low/med) LOW

Date Received: 04/10/13

% Moisture: not dec.

Date Analyzed: 04/12/13

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (µl)

Soil Aliquot Volume: 0 (µL)

CONCENTRATION UNITS:

Number TICs found: 2

(µg/L or µg/Kg)

UG/L

| CAS NUMBER | COMPOUND NAME         | RT   | EST.CONC. | Q |
|------------|-----------------------|------|-----------|---|
| 1.         | unknown alkene (1.26) | 1.26 | 9         | J |
| 2.         | unknown alkene (1.51) | 1.51 | 6         | J |

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0113 @ 40-44'

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: H2M

Case No.: BER

SAS No. \_\_\_\_\_

SDG No.: BER121

Matrix: (soil/water) WATER

Lab Sample ID: 1304656-003A

Sample wt/vol: 5 (g/mL ML

Lab File ID: 13\J9914.D

Level: (low/med) LOW

Date Received: 04/10/13

% Moisture: not dec.

Date Analyzed: 04/12/13

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (µL)

Soil Aliquot Volu \_\_\_\_\_ (µL)

CONCENTRATION UNITS:

| CAS NO.    | COMPOUND                   | (µg/L or µg/Kg UG/L | Q   |
|------------|----------------------------|---------------------|-----|
| 74-87-3    | Chloromethane              | 5                   | U   |
| 74-83-9    | Bromomethane               | 5                   | U   |
| 75-01-4    | Vinyl chloride             | 5                   | U   |
| 75-00-3    | Chloroethane               | 5                   | U   |
| 75-09-2    | Methylene chloride         | 5                   | U   |
| 67-64-1    | Acetone                    | 5-4                 | J U |
| 75-35-4    | 1,1-Dichloroethene         | 5                   | U   |
| 75-15-0    | Carbon disulfide           | 5                   | U   |
| 75-34-3    | 1,1-Dichloroethane         | 5                   | U   |
| 540-59-0   | 1,2-Dichloroethene (total) | 2                   | J   |
| 67-66-3    | Chloroform                 | 5                   | U   |
| 107-06-2   | 1,2-Dichloroethane         | 5                   | U   |
| 78-93-3    | 2-Butanone                 | 5                   | U   |
| 71-55-6    | 1,1,1-Trichloroethane      | 5                   | U   |
| 56-23-5    | Carbon tetrachloride       | 5                   | U   |
| 75-27-4    | Bromodichloromethane       | 5                   | U   |
| 78-87-5    | 1,2-Dichloropropane        | 5                   | U   |
| 10061-01-5 | cis-1,3-Dichloropropene    | 5                   | U   |
| 79-01-6    | Trichloroethene            | 5                   | U   |
| 124-48-1   | Dibromochloromethane       | 5                   | U   |
| 79-00-5    | 1,1,2-Trichloroethane      | 5                   | U   |
| 71-43-2    | Benzene                    | 5                   | U   |
| 10061-02-6 | trans-1,3-Dichloropropene  | 5                   | U   |
| 75-25-2    | Bromoform                  | 5                   | U J |
| 108-10-1   | 4-Methyl-2-pentanone       | 5                   | U   |
| 591-78-6   | 2-Hexanone                 | 5                   | U J |
| 127-18-4   | Tetrachloroethene          | 20                  |     |
| 79-34-5    | 1,1,2,2-Tetrachloroethane  | 5                   | U   |
| 108-88-3   | Toluene                    | 3                   | J   |
| 108-90-7   | Chlorobenzene              | 5                   | U   |
| 100-41-4   | Ethylbenzene               | 5                   | U   |
| 100-42-5   | Styrene                    | 5                   | U   |
| 1330-20-7  | Xylene (total)             | 5                   |     |

8012  
5/5/13



1F

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

0113 @ 40-44'

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: H2MCase No.: BER

SAS No.: \_\_\_\_\_

SDG No.: BER121

Matrix: (soil/water)

WATERLab Sample ID: 1304656-003ASample wt/vol: 5(g/mL) MLLab File ID: 13\J9914.DLevel: (low/med) LOWDate Received: 04/10/13

% Moisture: not dec.

Date Analyzed: 04/12/13GC Column: Rtx-624ID: .18 (mm)Dilution Factor: 1.00

Soil Extract Volume:

(µL)

Soil Aliquot Volume: 0 (µL)

## CONCENTRATION UNITS:

Number TICs found:

2

(µg/L or µg/Kg)

UG/L

| CAS NUMBER | COMPOUND NAME         | RT   | EST.CONC. | Q |
|------------|-----------------------|------|-----------|---|
| 1.         | unknown alkene (1.26) | 1.26 | 18        | J |
| 2.         | unknown alkene (1.51) | 1.51 | 12        | J |

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0113 @ 50-54'

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: H2M

Case No.: BER

SAS No. \_\_\_\_\_

SDG No.: BER121

Matrix: (soil/water) WATER

Lab Sample ID: 1304656-004A

Sample wt/vol: 5 (g/mL ML

Lab File ID: 13\J9901.D

Level: (low/med) LOW

Date Received: 04/10/13

% Moisture: not dec.

Date Analyzed: 04/12/13

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (µL)

Soil Aliquot Volu \_\_\_\_\_ (µL)

CONCENTRATION UNITS:

| CAS NO.    | COMPOUND                   | (µg/L or µg/Kg <u>UG/L</u> | Q              |
|------------|----------------------------|----------------------------|----------------|
| 74-87-3    | Chloromethane              | 5                          | U              |
| 74-83-9    | Bromomethane               | 5                          | U              |
| 75-01-4    | Vinyl chloride             | 5                          | U              |
| 75-00-3    | Chloroethane               | 5                          | U              |
| 75-09-2    | Methylene chloride         | 5                          | U              |
| 67-64-1    | Acetone                    | <del>2</del> 5             | <del>J</del> U |
| 75-35-4    | 1,1-Dichloroethene         | 5                          | U              |
| 75-15-0    | Carbon disulfide           | 5                          | U              |
| 75-34-3    | 1,1-Dichloroethane         | 5                          | U              |
| 540-59-0   | 1,2-Dichloroethene (total) | 1                          | J              |
| 67-66-3    | Chloroform                 | 5                          | U              |
| 107-06-2   | 1,2-Dichloroethane         | 5                          | U              |
| 78-93-3    | 2-Butanone                 | 5                          | U              |
| 71-55-6    | 1,1,1-Trichloroethane      | 5                          | U              |
| 56-23-5    | Carbon tetrachloride       | 5                          | U              |
| 75-27-4    | Bromodichloromethane       | 5                          | U              |
| 78-87-5    | 1,2-Dichloropropane        | 5                          | U              |
| 10061-01-5 | cis-1,3-Dichloropropene    | 5                          | U              |
| 79-01-6    | Trichloroethene            | 5                          | U              |
| 124-48-1   | Dibromochloromethane       | 5                          | U              |
| 79-00-5    | 1,1,2-Trichloroethane      | 5                          | U              |
| 71-43-2    | Benzene                    | 5                          | U              |
| 10061-02-6 | trans-1,3-Dichloropropene  | 5                          | U              |
| 75-25-2    | Bromoform                  | 5                          | U J            |
| 108-10-1   | 4-Methyl-2-pentanone       | 5                          | U              |
| 591-78-6   | 2-Hexanone                 | 5                          | U J            |
| 127-18-4   | Tetrachloroethene          | 17                         |                |
| 79-34-5    | 1,1,2,2-Tetrachloroethane  | 5                          | U              |
| 108-88-3   | Toluene                    | 2                          | J              |
| 108-90-7   | Chlorobenzene              | 5                          | U              |
| 100-41-4   | Ethylbenzene               | 5                          | U              |
| 100-42-5   | Styrene                    | 5                          | U              |
| 1330-20-7  | Xylene (total)             | 1                          | J              |

575713

1F

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

0113 @ 50-54'

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: H2MCase No.: BER

SAS No.: \_\_\_\_\_

SDG No.: BER121

Matrix: (soil/water)

WATERLab Sample ID: 1304656-004ASample wt/vol: 5(g/mL) MLLab File ID: 13\J9901.DLevel: (low/med) LOWDate Received: 04/10/13

% Moisture: not dec.

Date Analyzed: 04/12/13GC Column: Rtx-624ID: .18 (mm)Dilution Factor: 1.00

Soil Extract Volume:

(μl)

Soil Aliquot Volume: 0 (μL)

## CONCENTRATION UNITS:

Number TICs found:

1

(μg/L or μg/Kg)

UG/L

| CAS NUMBER | COMPOUND NAME  | RT   | EST.CONC. | Q |
|------------|----------------|------|-----------|---|
| 1          | unknown alkene | 1.26 | 6         | J |

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0113 @ 60-64

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: H2M

Case No.: BER

SAS No. \_\_\_\_\_

SDG No.: BER121

Matrix: (soil/water) WATER

Lab Sample ID: 1304656-005A

Sample wt/vol: 5 (g/mL ML)

Lab File ID: 13\J9883.D

Level: (low/med) LOW

Date Received: 04/10/13

% Moisture: not dec.

Date Analyzed: 04/11/13

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (µL)

Soil Aliquot Volu \_\_\_\_\_ (µL)

CONCENTRATION UNITS:

| CAS NO.    | COMPOUND                   | (µg/L or µg/Kg <u>UG/L</u> ) | <u>Q</u>   |
|------------|----------------------------|------------------------------|------------|
| 74-87-3    | Chloromethane              | 5                            | U          |
| 74-83-9    | Bromomethane               | 5                            | U          |
| 75-01-4    | Vinyl chloride             | 5                            | U          |
| 75-00-3    | Chloroethane               | 5                            | U          |
| 75-09-2    | Methylene chloride         | 5                            | U          |
| 67-64-1    | Acetone                    | <u>2.5</u>                   | <u>2.5</u> |
| 75-35-4    | 1,1-Dichloroethene         | 5                            | U          |
| 75-15-0    | Carbon disulfide           | 5                            | U          |
| 75-34-3    | 1,1-Dichloroethane         | 5                            | U          |
| 540-59-0   | 1,2-Dichloroethene (total) | 3                            | J          |
| 67-66-3    | Chloroform                 | 5                            | U          |
| 107-06-2   | 1,2-Dichloroethane         | 5                            | U          |
| 78-93-3    | 2-Butanone                 | 5                            | U          |
| 71-55-6    | 1,1,1-Trichloroethane      | 5                            | U          |
| 56-23-5    | Carbon tetrachloride       | 5                            | U          |
| 75-27-4    | Bromodichloromethane       | 5                            | U          |
| 78-87-5    | 1,2-Dichloropropane        | 5                            | U          |
| 10061-01-5 | cis-1,3-Dichloropropene    | 5                            | U          |
| 79-01-6    | Trichloroethene            | 5                            | U          |
| 124-48-1   | Dibromochloromethane       | 5                            | U          |
| 79-00-5    | 1,1,2-Trichloroethane      | 5                            | U          |
| 71-43-2    | Benzene                    | 5                            | U          |
| 10061-02-6 | trans-1,3-Dichloropropene  | 5                            | U          |
| 75-25-2    | Bromoform                  | 5                            | U <u>J</u> |
| 108-10-1   | 4-Methyl-2-pentanone       | 5                            | U          |
| 591-78-6   | 2-Hexanone                 | 5                            | U          |
| 127-18-4   | Tetrachloroethene          | 64                           |            |
| 79-34-5    | 1,1,2,2-Tetrachloroethane  | 5                            | U          |
| 108-88-3   | Toluene                    | 10                           |            |
| 108-90-7   | Chlorobenzene              | 5                            | U          |
| 100-41-4   | Ethylbenzene               | 2                            | J          |
| 100-42-5   | Styrene                    | 5                            | U          |
| 1330-20-7  | Xylene (total)             | 12                           |            |

80  
5/5/13

1F

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

0113 @ 60-64

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: H2MCase No.: BER

SAS No.: \_\_\_\_\_

SDG No.: BER121

Matrix: (soil/water)

WATERLab Sample ID: 1304656-005ASample wt/vol: 5(g/mL) MLLab File ID: 13\J9883.DLevel: (low/med) LOWDate Received: 04/10/13

% Moisture: not dec.

Date Analyzed: 04/11/13GC Column: Rtx-624ID: .18 (mm)Dilution Factor: 1.00

Soil Extract Volume:

(µL)

Soil Aliquot Volume: 0 (µL)

## CONCENTRATION UNITS:

Number TICs found:

2

(µg/L or µg/Kg)

UG/L

| CAS NUMBER | COMPOUND NAME                | RT   | EST.CONC. | Q |
|------------|------------------------------|------|-----------|---|
| 1.         | unknown alkene (1.26)        | 1.26 | 31        | J |
| 2.         | unknown alkene (1.51)        | 1.51 | 22        | J |
| 3.         | (DEL) Alkane: Branched       | 1.95 | 6         | J |
| 4.         | (DEL) Alkane: Cyclic         | 2.15 | 6         | J |
| 5.         | (DEL) Alkane: Straight-Chain | 2.20 | 8         | J |

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0113 @ 70-74'

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: H2M

Case No.: BER

SAS No. \_\_\_\_\_

SDG No.: BER121

Matrix: (soil/water) WATER

Lab Sample ID: 1304656-006A

Sample wt/vol: 5 (g/mL ML

Lab File ID: 13\J9916.D

Level: (low/med) LOW

Date Received: 04/10/13

% Moisture: not dec.

Date Analyzed: 04/12/13, 4/18/13

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor: 1.00 4 3

Soil Extract Volume: \_\_\_\_\_ (μL)

Soil Aliquot Volu \_\_\_\_\_ (μL)

CONCENTRATION UNITS:

| CAS NO.    | COMPOUND                   | (μg/L or μg/Kg UG/L | Q   |
|------------|----------------------------|---------------------|-----|
| 74-87-3    | Chloromethane              | 5                   | U   |
| 74-83-9    | Bromomethane               | 5                   | U   |
| 75-01-4    | Vinyl chloride             | 5                   | U   |
| 75-00-3    | Chloroethane               | 5                   | U   |
| 75-09-2    | Methylene chloride         | 5                   | U   |
| 67-64-1    | Acetone                    | 28                  | U   |
| 75-35-4    | 1,1-Dichloroethene         | 5                   | U   |
| 75-15-0    | Carbon disulfide           | 5                   | U   |
| 75-34-3    | 1,1-Dichloroethane         | 5                   | U   |
| 540-59-0   | 1,2-Dichloroethene (total) | 35                  |     |
| 67-66-3    | Chloroform                 | 5                   | U   |
| 107-06-2   | 1,2-Dichloroethane         | 5                   | U   |
| 78-93-3    | 2-Butanone                 | 10                  |     |
| 71-55-6    | 1,1,1-Trichloroethane      | 5                   | U   |
| 56-23-5    | Carbon tetrachloride       | 5                   | U   |
| 75-27-4    | Bromodichloromethane       | 5                   | U   |
| 78-87-5    | 1,2-Dichloropropane        | 5                   | U   |
| 10061-01-5 | cis-1,3-Dichloropropene    | 5                   | U   |
| 79-01-6    | Trichloroethene            | 5                   |     |
| 124-48-1   | Dibromochloromethane       | 5                   | U   |
| 79-00-5    | 1,1,2-Trichloroethane      | 5                   | U   |
| 71-43-2    | Benzene                    | 4                   | J   |
| 10061-02-6 | trans-1,3-Dichloropropene  | 5                   | U   |
| 75-25-2    | Bromoform                  | 5                   | U J |
| 108-10-1   | 4-Methyl-2-pentanone       | 5                   | U   |
| 591-78-6   | 2-Hexanone                 | 5                   | U J |
| 127-18-4   | Tetrachloroethene          | 350 320             | E   |
| 79-34-5    | 1,1,2,2-Tetrachloroethane  | 5                   | U   |
| 108-88-3   | Toluene                    | 82                  |     |
| 108-90-7   | Chlorobenzene              | 5                   | U   |
| 100-41-4   | Ethylbenzene               | 12                  |     |
| 100-42-5   | Styrene                    | 5                   | U   |
| 1330-20-7  | Xylene (total)             | 68                  |     |



1F

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

0113 @ 70-74'

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: H2MCase No.: BER

SAS No.: \_\_\_\_\_

SDG No.: BER121

Matrix: (soil/water)

WATERLab Sample ID: 1304656-006ASample wt/vol: 5(g/mL) MLLab File ID: 13\J9916.DLevel: (low/med) LOWDate Received: 04/10/13

% Moisture: not dec.

Date Analyzed: 04/12/13GC Column: Rtx-624ID: .18 (mm)Dilution Factor: 1.00

Soil Extract Volume:

(μl)

Soil Aliquot Volume: 0 (μL)

## CONCENTRATION UNITS:

Number TICs found:

6

(μg/L or μg/Kg)

UG/L

| CAS NUMBER | COMPOUND NAME                  | RT    | EST.CONC. | Q |
|------------|--------------------------------|-------|-----------|---|
| 1.         | unknown alkene (1.26)          | 1.26  | 62        | J |
| 2.         | unknown alkene (1.51)          | 1.51  | 45        | J |
| 3.         | unknown alkene (1.67)          | 1.67  | 10        | J |
| 4.         | (DEL) Alkane: Cyclic (2.15)    | 2.15  | 11        | J |
| 5.         | (DEL) Alkane: Straight-Chain   | 2.19  | 8         | J |
| 6.         | unknown alkene (2.22)          | 2.22  | 9         | J |
| 7.         | (DEL) Alkane: Cyclic (3.87)    | 3.87  | 8         | J |
| 8.         | (DEL) Alkane: Cyclic (4.85)    | 4.85  | 9         | J |
| 9.         | c3 substituted benzene (11.15) | 11.15 | 16        | J |
| 10.        | c3 substituted benzene (11.62) | 11.62 | 18        | J |

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0213 @ 10-12'

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: H2M

Case No.: BER

SAS No. \_\_\_\_\_

SDG No.: BER121

Matrix: (soil/water) WATER

Lab Sample ID: 1304656-007A

Sample wt/vol: 5 (g/mL ML

Lab File ID: 13\J9890.D

Level: (low/med) LOW

Date Received: 04/10/13

% Moisture: not dec.

Date Analyzed: 04/11/13 , 4/12/13

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor: 1.00 4 40

Soil Extract Volume: \_\_\_\_\_ (µL)

Soil Aliquot Volu \_\_\_\_\_ (µL)

CONCENTRATION UNITS:

| CAS NO.    | COMPOUND                   | (µg/L or µg/Kg <u>UG/L</u>   | Q            |
|------------|----------------------------|------------------------------|--------------|
| 74-87-3    | Chloromethane              | 5                            | U            |
| 74-83-9    | Bromomethane               | 5                            | U            |
| 75-01-4    | Vinyl chloride             | 5                            | U            |
| 75-00-3    | Chloroethane               | 5                            | U            |
| 75-09-2    | Methylene chloride         | 5                            | U            |
| 67-64-1    | Acetone                    | 26                           | <u>UJ</u>    |
| 75-35-4    | 1,1-Dichloroethene         | 3                            | J            |
| 75-15-0    | Carbon disulfide           | 5                            | U            |
| 75-34-3    | 1,1-Dichloroethane         | 5                            | U            |
| 540-59-0   | 1,2-Dichloroethene (total) | <u>2400</u> <del>1700</del>  | <del>E</del> |
| 67-66-3    | Chloroform                 | 5                            | U            |
| 107-06-2   | 1,2-Dichloroethane         | 5                            | U            |
| 78-93-3    | 2-Butanone                 | 9                            |              |
| 71-55-6    | 1,1,1-Trichloroethane      | 5                            | U            |
| 56-23-5    | Carbon tetrachloride       | 5                            | U            |
| 75-27-4    | Bromodichloromethane       | 5                            | U            |
| 78-87-5    | 1,2-Dichloropropane        | 5                            | U            |
| 10061-01-5 | cis-1,3-Dichloropropene    | 5                            | U            |
| 79-01-6    | Trichloroethene            | 3                            | J            |
| 124-48-1   | Dibromochloromethane       | 5                            | U            |
| 79-00-5    | 1,1,2-Trichloroethane      | 5                            | U            |
| 71-43-2    | Benzene                    | 24                           |              |
| 10061-02-6 | trans-1,3-Dichloropropene  | 5                            | U            |
| 75-25-2    | Bromoform                  | 5                            | <u>UJ</u>    |
| 108-10-1   | 4-Methyl-2-pentanone       | 5                            | U            |
| 591-78-6   | 2-Hexanone                 | 5                            | U            |
| 127-18-4   | Tetrachloroethene          | 10                           |              |
| 79-34-5    | 1,1,2,2-Tetrachloroethane  | 5                            | U            |
| 108-88-3   | Toluene                    | <u>4900</u> <del>1200</del>  | <del>E</del> |
| 108-90-7   | Chlorobenzene              | 5                            | U            |
| 100-41-4   | Ethylbenzene               | <u>2200</u> <del>1100</del>  | <del>E</del> |
| 100-42-5   | Styrene                    | 5                            | U            |
| 1330-20-7  | Xylene (total)             | <u>17000</u> <del>3000</del> | <del>E</del> |

80/5/13

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

0213 @ 10-12'

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: H2MCase No.: BER

SAS No.: \_\_\_\_\_

SDG No.: BER121

Matrix: (soil/water)

WATERLab Sample ID: 1304656-007ASample wt/vol: 5(g/mL) MLLab File ID: 13\J9890.DLevel: (low/med) LOWDate Received: 04/10/13

% Moisture: not dec.

Date Analyzed: 04/11/13GC Column: Rtx-624ID: .18 (mm)Dilution Factor: 1.00

Soil Extract Volume:

(μl)

Soil Aliquot Volume: 0 (μL)

## CONCENTRATION UNITS:

Number TICs found:

9

(μg/L or μg/Kg)

UG/L

| CAS NUMBER | COMPOUND NAME                  | RT    | EST.CONC. | Q  |
|------------|--------------------------------|-------|-----------|----|
| 1          | c3 substituted benzene (11.06) | 11.06 | 290       | J  |
| 2          | c3 substituted benzene (11.17) | 11.17 | 1100      | EJ |
| 3          | c3 substituted benzene (11.26) | 11.26 | 520       | J  |
| 4          | c3 substituted benzene (11.45) | 11.45 | 520       | J  |
| 5          | c3 substituted benzene (11.63) | 11.63 | 930       | J  |
| 6          | c3 substituted benzene (12.05) | 12.05 | 540       | J  |
| 7          | c3 substituted benzene (12.24) | 12.24 | 570       | J  |
| 8          | c4 substituted benzene (12.32) | 12.32 | 340       | J  |
| 9          | c4 substituted benzene (13.57) | 13.57 | 280       | J  |

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0213 @ 20-22'

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: H2M

Case No.: BER

SAS No. \_\_\_\_\_

SDG No.: BER121

Matrix: (soil/water) WATER

Lab Sample ID: 1304656-008A

Sample wt/vol: 5 (g/mL ML

Lab File ID: 13\J9884.D

Level: (low/med) LOW

Date Received: 04/10/13

% Moisture: not dec.

Date Analyzed: 04/11/13, 4/12/13

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor: 1.00 x 10

Soil Extract Volume: \_\_\_\_\_ (µL)

Soil Aliquot Volu \_\_\_\_\_ (µL)

CONCENTRATION UNITS:

| CAS NO.    | COMPOUND                   | (µg/L or µg/Kg UG/L | Q   |
|------------|----------------------------|---------------------|-----|
| 74-87-3    | Chloromethane              | 5                   | U   |
| 74-83-9    | Bromomethane               | 5                   | U   |
| 75-01-4    | Vinyl chloride             | 5                   | U   |
| 75-00-3    | Chloroethane               | 5                   | U   |
| 75-09-2    | Methylene chloride         | 5                   | U   |
| 67-64-1    | Acetone                    | 10                  | U J |
| 75-35-4    | 1,1-Dichloroethene         | 5                   | U   |
| 75-15-0    | Carbon disulfide           | 5                   | U   |
| 75-34-3    | 1,1-Dichloroethane         | 5                   | U   |
| 540-59-0   | 1,2-Dichloroethene (total) | 65                  | J   |
| 67-66-3    | Chloroform                 | 5                   | U   |
| 107-06-2   | 1,2-Dichloroethane         | 5                   | U   |
| 78-93-3    | 2-Butanone                 | 6                   |     |
| 71-55-6    | 1,1,1-Trichloroethane      | 5                   | U   |
| 56-23-5    | Carbon tetrachloride       | 5                   | U   |
| 75-27-4    | Bromodichloromethane       | 5                   | U   |
| 78-87-5    | 1,2-Dichloropropane        | 5                   | U   |
| 10061-01-5 | cis-1,3-Dichloropropene    | 5                   | U   |
| 79-01-6    | Trichloroethene            | 5                   | U   |
| 124-48-1   | Dibromochloromethane       | 5                   | U   |
| 79-00-5    | 1,1,2-Trichloroethane      | 5                   | U   |
| 71-43-2    | Benzene                    | 2                   | J   |
| 10061-02-6 | trans-1,3-Dichloropropene  | 5                   | U   |
| 75-25-2    | Bromoform                  | 5                   | U J |
| 108-10-1   | 4-Methyl-2-pentanone       | 5                   | U   |
| 591-78 6   | 2-Hexanone                 | 5                   | U   |
| 127-18-4   | Tetrachloroethene          | 3                   | J   |
| 79-34-5    | 1,1,2,2-Tetrachloroethane  | 5                   | U   |
| 108-88-3   | Toluene                    | 580 520             | E   |
| 108-90-7   | Chlorobenzene              | 5                   | U   |
| 100-41-4   | Ethylbenzene               | 610 570             | E   |
| 100-42-5   | Styrene                    | 5                   | U   |
| 1330-20-7  | Xylene (total)             | 4500 2000           | E   |

80/575/13

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

0213 @ 20-22'

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: H2MCase No.: BER

SAS No.: \_\_\_\_\_

SDG No.: BER121

Matrix: (soil/water)

WATERLab Sample ID: 1304656-008ASample wt/vol: 5(g/mL) MLLab File ID: 13\J9884.DLevel: (low/med) LOWDate Received: 04/10/13

% Moisture: not dec.

Date Analyzed: 04/11/13GC Column: Rtx-624ID: .18 (mm)Dilution Factor: 1.00

Soil Extract Volume:

(μl)

Soil Aliquot Volume: 0 (μL)

## CONCENTRATION UNITS:

Number TICs found:

8

(μg/L or μg/Kg)

UG/L

| CAS NUMBER | COMPOUND NAME                  | RT    | EST.CONC. | Q |
|------------|--------------------------------|-------|-----------|---|
| 1.         | (DEL) Alkane: Branched         | 3.23  | 250       | J |
| 2.         | (DEL) Alkane: Cyclic           | 4.85  | 280       | J |
| 3.         | c3 substituted benzene (11.16) | 11.16 | 930       | J |
| 4.         | c3 substituted benzene (11.25) | 11.25 | 430       | J |
| 5.         | c3 substituted benzene (11.45) | 11.45 | 360       | J |
| 6.         | c3 substituted benzene (11.63) | 11.63 | 780       | J |
| 7.         | c3 substituted benzene (12.04) | 12.04 | 370       | J |
| 8.         | c3 substituted benzene (12.23) | 12.23 | 450       | J |
| 9.         | c4 substituted benzene (12.32) | 12.32 | 340       | J |
| 10.        | c4 substituted benzene (12.69) | 12.69 | 220       | J |

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0213 @ 30-32'

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: H2M

Case No.: BER

SAS No. \_\_\_\_\_

SDG No.: BER121

Matrix: (soil/water) WATER

Lab Sample ID: 1304656-009A

Sample wt/vol: 5 (g/mL ML

Lab File ID: 13\J9885.D

Level: (low/med) LOW

Date Received: 04/10/13

% Moisture: not dec.

Date Analyzed: 04/11/13, 4/12/13

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor: 1.00 x 2

Soil Extract Volume: \_\_\_\_\_ (µL)

Soil Aliquot Volu \_\_\_\_\_ (µL)

CONCENTRATION UNITS:

| CAS NO.    | COMPOUND                   | (µg/L or µg/Kg UG/L | Q   |
|------------|----------------------------|---------------------|-----|
| 74-87-3    | Chloromethane              | 5                   | U   |
| 74-83-9    | Bromomethane               | 5                   | U   |
| 75-01-4    | Vinyl chloride             | 5                   | U   |
| 75-00-3    | Chloroethane               | 5                   | U   |
| 75-09-2    | Methylene chloride         | 5                   | U   |
| 67-64-1    | Acetone                    | 6                   | U J |
| 75-35-4    | 1,1-Dichloroethene         | 5                   | U   |
| 75-15-0    | Carbon disulfide           | 4                   | J   |
| 75-34-3    | 1,1-Dichloroethane         | 5                   | U   |
| 540-59-0   | 1,2-Dichloroethene (total) | 15                  | J   |
| 67-66-3    | Chloroform                 | 5                   | U   |
| 107-06-2   | 1,2-Dichloroethane         | 5                   | U   |
| 78-93-3    | 2-Butanone                 | 3                   | J   |
| 71-55-6    | 1,1,1-Trichloroethane      | 5                   | U   |
| 56-23-5    | Carbon tetrachloride       | 5                   | U   |
| 75-27-4    | Bromodichloromethane       | 5                   | U   |
| 78-87-5    | 1,2-Dichloropropane        | 5                   | U   |
| 10061-01-5 | cis-1,3-Dichloropropene    | 5                   | U   |
| 79-01-6    | Trichloroethene            | 5                   | U   |
| 124-48-1   | Dibromochloromethane       | 5                   | U   |
| 79-00-5    | 1,1,2-Trichloroethane      | 5                   | U   |
| 71-43-2    | Benzene                    | 5                   | U   |
| 10061-02-6 | trans-1,3-Dichloropropene  | 5                   | U   |
| 75-25-2    | Bromoform                  | 5                   | U J |
| 108-10-1   | 4-Methyl-2-pentanone       | 5                   | U   |
| 591-78-6   | 2-Hexanone                 | 5                   | U   |
| 127-18-4   | Tetrachloroethene          | 2                   | J   |
| 79-34-5    | 1,1,2,2-Tetrachloroethane  | 5                   | U   |
| 108-88-3   | Toluene                    | 120                 |     |
| 108-90-7   | Chlorobenzene              | 5                   | U   |
| 100-41-4   | Ethylbenzene               | 130                 |     |
| 100-42-5   | Styrene                    | 5                   | U   |
| 1330-20-7  | Xylene (total)             | 700 790             | E   |



1F

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

0213 @ 30-32'

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: H2MCase No.: BER

SAS No.: \_\_\_\_\_

SDG No.: BER121

Matrix: (soil/water)

WATERLab Sample ID: 1304656-009ASample wt/vol: 5(g/mL) MLLab File ID: 13\J9885.DLevel: (low/med) LOWDate Received: 04/10/13

% Moisture: not dec.

Date Analyzed: 04/11/13GC Column: Rtx-624ID: .18 (mm)Dilution Factor: 1.00

Soil Extract Volume:

(μl)

Soil Aliquot Volume: 0 (μL)

## CONCENTRATION UNITS:

Number TICs found:

5

(μg/L or μg/Kg)

UG/L

| CAS NUMBER | COMPOUND NAME                  | RT    | EST. CONC. | Q |
|------------|--------------------------------|-------|------------|---|
| 1          | (DEL) Alkane: Branched (3.24)  | 3.24  | 130        | J |
| 2          | (DEL) Alkane: Branched (5.92)  | 5.92  | 140        | J |
| 3          | (DEL) Alkane: Cyclic           | 7.04  | 130        | J |
| 4          | (DEL) Alkane: Branched (7.5)   | 7.50  | 170        | J |
| 5          | (DEL) Alkane: Branched (7.62)  | 7.62  | 190        | J |
| 6          | c3 substituted benzene (11.15) | 11.15 | 420        | J |
| 7          | c3 substituted benzene (11.24) | 11.24 | 160        | J |
| 8          | c3 substituted benzene (11.62) | 11.62 | 420        | J |
| 9          | c4 substituted benzene (12.24) | 12.24 | 190        | J |
| 10         | c4 substituted benzene (12.32) | 12.32 | 190        | J |

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0313 @ 11-13'

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: H2M

Case No.: BER

SAS No. \_\_\_\_\_

SDG No.: BER121

Matrix: (soil/water) WATER

Lab Sample ID: 1304656-010A

Sample wt/vol: 5 (g/mL ML

Lab File ID: 13\J9886.D

Level: (low/med) LOW

Date Received: 04/10/13

% Moisture: not dec.

Date Analyzed: 04/11/13 , 4/12/13

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor: 1.00 & 5

Soil Extract Volume: \_\_\_\_\_ (μL)

Soil Aliquot Volu \_\_\_\_\_ (μL)

CONCENTRATION UNITS:

| CAS NO.    | COMPOUND                   | (μg/L or μg/Kg UG/L | Q  |
|------------|----------------------------|---------------------|----|
| 74-87-3    | Chloromethane              | 5                   | U  |
| 74-83-9    | Bromomethane               | 5                   | U  |
| 75-01-4    | Vinyl chloride             | 5                   | U  |
| 75-00-3    | Chloroethane               | 5                   | U  |
| 75-09-2    | Methylene chloride         | 5                   | U  |
| 67-64-1    | Acetone                    | 20                  | UJ |
| 75-35-4    | 1,1-Dichloroethene         | 5                   | U  |
| 75-15-0    | Carbon disulfide           | 5                   | U  |
| 75-34-3    | 1,1-Dichloroethane         | 5                   | U  |
| 540-59-0   | 1,2-Dichloroethene (total) | 5                   | U  |
| 67-66-3    | Chloroform                 | 8                   |    |
| 107-06-2   | 1,2-Dichloroethane         | 5                   | U  |
| 78-93-3    | 2-Butanone                 | 13                  |    |
| 71-55-6    | 1,1,1-Trichloroethane      | 5                   | U  |
| 56-23-5    | Carbon tetrachloride       | 5                   | U  |
| 75-27-4    | Bromodichloromethane       | 5                   | U  |
| 78-87-5    | 1,2-Dichloropropane        | 5                   | U  |
| 10061-01-5 | cis-1,3-Dichloropropene    | 5                   | U  |
| 79-01-6    | Trichloroethene            | 5                   | U  |
| 124-48-1   | Dibromochloromethane       | 5                   | U  |
| 79-00-5    | 1,1,2-Trichloroethane      | 5                   | U  |
| 71-43-2    | Benzene                    | 5                   | U  |
| 10061-02-6 | trans-1,3-Dichloropropene  | 5                   | U  |
| 75-25-2    | Bromoform                  | 5                   | UJ |
| 108-10-1   | 4-Methyl-2-pentanone       | 5                   | U  |
| 591-78-6   | 2-Hexanone                 | 5                   | U  |
| 127-18-4   | Tetrachloroethene          | 3                   | J  |
| 79-34-5    | 1,1,2,2-Tetrachloroethane  | 5                   | U  |
| 108-88-3   | Toluene                    | 150                 |    |
| 108-90-7   | Chlorobenzene              | 5                   | U  |
| 100-41-4   | Ethylbenzene               | 170 230             | E  |
| 100-42-5   | Styrene                    | 3                   | J  |
| 1330-20-7  | Xylene (total)             | 1700 1400           | E  |

BER121 S47

8/15/13

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

0313 @ 11-13'

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: H2MCase No.: BER

SAS No.: \_\_\_\_\_

SDG No.: BER121

Matrix: (soil/water)

WATERLab Sample ID: 1304656-010ASample wt/vol: 5(g/mL) MLLab File ID: 13\J9886.DLevel: (low/med) LOWDate Received: 04/10/13

% Moisture: not dec.

Date Analyzed: 04/11/13GC Column: Rtx-624ID: .18 (mm)Dilution Factor: 1.00

Soil Extract Volume:

(μl)

Soil Aliquot Volume: 0 (μL)

## CONCENTRATION UNITS:

Number TICs found:

7

(μg/L or μg/Kg)

UG/L

| CAS NUMBER | COMPOUND NAME                  | RT    | EST.CONC. | Q |
|------------|--------------------------------|-------|-----------|---|
| 1          | (DEL) Alkane: Cyclic (4.85)    | 4.85  | 190       | J |
| 2          | (DEL) Alkane: Branched         | 5.92  | 200       | J |
| 3          | (DEL) Alkane: Cyclic (7.04)    | 7.04  | 210       | J |
| 4          | c3 substituted benzene (11.16) | 11.16 | 680       | J |
| 5          | c3 substituted benzene (11.25) | 11.25 | 300       | J |
| 6          | c3 substituted benzene (11.45) | 11.45 | 290       | J |
| 7          | c3 substituted benzene (11.63) | 11.63 | 600       | J |
| 8          | c3 substituted benzene (12.04) | 12.04 | 300       | J |
| 9          | c3 substituted benzene (12.23) | 12.23 | 380       | J |
| 10         | c4 substituted benzene         | 12.32 | 220       | J |

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0313 @ 20-22'

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: H2M

Case No.: BER

SAS No. \_\_\_\_\_

SDG No.: BER121

Matrix: (soil/water) WATER

Lab Sample ID: 1304656-011A

Sample wt/vol: 5 (g/mL ML

Lab File ID: 13\J9887.D

Level: (low/med) LOW

Date Received: 04/10/13

% Moisture: not dec.

Date Analyzed: 04/11/13, 4/11/13

GC Column: Rtx-624

ID: 118 (mm)

Dilution Factor: 1.00 x 40

Soil Extract Volume: \_\_\_\_\_ (μL)

Soil Aliquot Volu \_\_\_\_\_ (μL)

CONCENTRATION UNITS:

| CAS NO.    | COMPOUND                   | (μg/L or μg/Kg UG/L | Q   |
|------------|----------------------------|---------------------|-----|
| 74-87-3    | Chloromethane              | 5                   | U   |
| 74-83-9    | Bromomethane               | 5                   | U   |
| 75-01-4    | Vinyl chloride             | 5                   | U   |
| 75-00-3    | Chloroethane               | 5                   | U   |
| 75-09-2    | Methylene chloride         | 5                   | U   |
| 67-64-1    | Acetone                    | 110                 | JN  |
| 75-35-4    | 1,1-Dichloroethene         | 2                   | J   |
| 75-15-0    | Carbon disulfide           | 1                   | J   |
| 75-34-3    | 1,1-Dichloroethane         | 5                   | U   |
| 540-59-0   | 1,2-Dichloroethene (total) | 920 860             | E   |
| 67-66-3    | Chloroform                 | 2                   | J   |
| 107-06-2   | 1,2-Dichloroethane         | 5                   | U   |
| 78-93-3    | 2-Butanone                 | 87                  |     |
| 71-55-6    | 1,1,1-Trichloroethane      | 5                   | U   |
| 56-23-5    | Carbon tetrachloride       | 5                   | U   |
| 75-27-4    | Bromodichloromethane       | 5                   | U   |
| 78-87-5    | 1,2-Dichloropropane        | 5                   | U   |
| 10061-01-5 | cis-1,3-Dichloropropene    | 5                   | U   |
| 79-01-6    | Trichloroethene            | 4                   | J   |
| 124-48-1   | Dibromochloromethane       | 5                   | U   |
| 79-00-5    | 1,1,2-Trichloroethane      | 5                   | U   |
| 71-43-2    | Benzene                    | 18                  |     |
| 10061-02-6 | trans-1,3-Dichloropropene  | 5                   | U   |
| 75-25-2    | Bromoform                  | 5                   | U J |
| 108-10-1   | 4-Methyl-2-pentanone       | 5                   | U   |
| 591-78-6   | 2-Hexanone                 | 5                   | U   |
| 127-18-4   | Tetrachloroethene          | 15                  |     |
| 79-34-5    | 1,1,2,2-Tetrachloroethane  | 5                   | U   |
| 108-88-3   | Toluene                    | 5800 1100           | E   |
| 108-90-7   | Chlorobenzene              | 5                   | U   |
| 100-41-4   | Ethylbenzene               | 1600 770            | E   |
| 100-42-5   | Styrene                    | 2                   | J   |
| 1330-20-7  | Xylene (total)             | 12000 2300          | E   |

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

0313 @ 20-22'

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: H2MCase No.: BER

SAS No.: \_\_\_\_\_

SDG No.: BER121

Matrix: (soil/water)

WATERLab Sample ID: 1304656-011ASample wt/vol: 5(g/mL) MLLab File ID: 13\J9887.DLevel: (low/med) LOWDate Received: 04/10/13

% Moisture: not dec.

Date Analyzed: 04/11/13GC Column: Rtx-624ID: .18 (mm)Dilution Factor: 1.00

Soil Extract Volume:

(μl)

Soil Aliquot Volume: 0 (μL)

## CONCENTRATION UNITS:

Number TICs found:

9

(μg/L or μg/Kg)

UG/L

| CAS NUMBER      | COMPOUND NAME                  | RT    | EST.CONC. | Q  |
|-----------------|--------------------------------|-------|-----------|----|
| 1.              | (DEL) Alkane: Branched         | 3.23  | 320       | J  |
| 2.              | c3 substituted benzene (11.06) | 11.06 | 220       | J  |
| 3.              | c3 substituted benzene (11.16) | 11.16 | 850       | J  |
| 4.              | c3 substituted benzene (11.25) | 11.25 | 350       | J  |
| 5.              | c3 substituted benzene (11.45) | 11.45 | 370       | J  |
| 6.              | c3 substituted benzene (11.63) | 11.63 | 750       | J  |
| 7.              | c3 substituted benzene (12.04) | 12.04 | 350       | J  |
| 8.              | c3 substituted benzene (12.23) | 12.23 | 490       | J  |
| 9.              | c4 substituted benzene         | 12.32 | 270       | J  |
| 10. 000091-20-3 | Naphthalene                    | 14.22 | 270       | JN |

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0313 @ 30-32'

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: H2M

Case No.: BER

SAS No. \_\_\_\_\_

SDG No.: BER121

Matrix: (soil/water) WATER

Lab Sample ID: 1304656-012A

Sample wt/vol: 5 (g/mL ML

Lab File ID: 13\J9891.D

Level: (low/med) LOW

Date Received: 04/10/13

% Moisture: not dec.

Date Analyzed: 04/11/13 , 4/12/13

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor: 1.00 85

Soil Extract Volume: \_\_\_\_\_ (µL)

Soil Aliquot Volu \_\_\_\_\_ (µL)

CONCENTRATION UNITS:

| CAS NO.    | COMPOUND                   | (µg/L or µg/Kg UG/L | Q   |
|------------|----------------------------|---------------------|-----|
| 74-87-3    | Chloromethane              | 5                   | U   |
| 74-83-9    | Bromomethane               | 5                   | U   |
| 75-01-4    | Vinyl chloride             | 5                   | U   |
| 75-00-3    | Chloroethane               | 5                   | U   |
| 75-09-2    | Methylene chloride         | 5                   | U   |
| 67-64-1    | Acetone                    | 15                  | U J |
| 75-35-4    | 1,1-Dichloroethene         | 5                   | U   |
| 75-15-0    | Carbon disulfide           | 2                   | J   |
| 75-34-3    | 1,1-Dichloroethane         | 5                   | U   |
| 540-59-0   | 1,2-Dichloroethene (total) | 82                  |     |
| 67-66-3    | Chloroform                 | 5                   | U   |
| 107-06-2   | 1,2-Dichloroethane         | 5                   | U   |
| 78-93-3    | 2-Butanone                 | 12                  |     |
| 71-55-6    | 1,1,1-Trichloroethane      | 5                   | U   |
| 56-23-5    | Carbon tetrachloride       | 5                   | U   |
| 75-27-4    | Bromodichloromethane       | 5                   | U   |
| 78-87-5    | 1,2-Dichloropropane        | 5                   | U   |
| 10061-01-5 | cis-1,3-Dichloropropene    | 5                   | U   |
| 79-01-6    | Trichloroethene            | 5                   | U   |
| 124-48-1   | Dibromochloromethane       | 5                   | U   |
| 79-00-5    | 1,1,2-Trichloroethane      | 5                   | U   |
| 71-43-2    | Benzene                    | 3                   | J   |
| 10061-02-6 | trans-1,3-Dichloropropene  | 5                   | U   |
| 75-25-2    | Bromoform                  | 5                   | U J |
| 108-10-1   | 4-Methyl-2-pentanone       | 5                   | U   |
| 591-78-6   | 2-Hexanone                 | 5                   | U   |
| 127-18-4   | Tetrachloroethene          | 5                   |     |
| 79-34-5    | 1,1,2,2-Tetrachloroethane  | 5                   | U   |
| 108-88-3   | Toluene                    | 670 550             | -E  |
| 108-90-7   | Chlorobenzene              | 5                   | U   |
| 100-41-4   | Ethylbenzene               | 280 340             | -E  |
| 100-42-5   | Styrene                    | 5                   | U   |
| 1330-20-7  | Xylene (total)             | 1900 1400           | -E  |



1F

VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

0313 @ 30-32'

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: H2MCase No.: BER

SAS No.: \_\_\_\_\_

SDG No.: BER121

Matrix: (soil/water)

WATERLab Sample ID: 1304656-012ASample wt/vol: 5(g/mL) MLLab File ID: 13\J9891.DLevel: (low/med) LOWDate Received: 04/10/13

% Moisture: not dec.

Date Analyzed: 04/11/13GC Column: Rtx-624ID: .18 (mm)Dilution Factor: 1.00

Soil Extract Volume:

(μl)

Soil Aliquot Volume: 0 (μL)

## CONCENTRATION UNITS:

Number TICs found:

7

(μg/L or μg/Kg)

UG/L

| CAS NUMBER | COMPOUND NAME                  | RT    | EST.CONC. | Q |
|------------|--------------------------------|-------|-----------|---|
| 1.         | (DEL) Alkane: Branched (3.23)  | 3.23  | 180       | J |
| 2.         | (DEL) Alkane: Branched (5.7)   | 5.70  | 170       | J |
| 3.         | (DEL) Alkane: Branched (5.92)  | 5.92  | 180       | J |
| 4.         | c3 substituted benzene (11.15) | 11.15 | 560       | J |
| 5.         | c3 substituted benzene (11.24) | 11.24 | 230       | J |
| 6.         | c3 substituted benzene (11.44) | 11.44 | 200       | J |
| 7.         | c3 substituted benzene (11.62) | 11.62 | 520       | J |
| 8.         | c3 substituted benzene (12.04) | 12.04 | 190       | J |
| 9.         | c3 substituted benzene (12.23) | 12.23 | 270       | J |
| 10.        | c4 substituted benzene         | 12.32 | 200       | J |

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0413 @ 10-12'

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: H2M

Case No.: BER

SAS No. \_\_\_\_\_

SDG No.: BER121

Matrix: (soil/water) WATER

Lab Sample ID: 1304656-013A

Sample wt/vol: 5 (g/mL ML

Lab File ID: 13\J9888.D

Level: (low/med) LOW

Date Received: 04/10/13

% Moisture: not dec.

Date Analyzed: 04/11/13

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (µL)

Soil Aliquot Volu \_\_\_\_\_ (µL)

CONCENTRATION UNITS:

| CAS NO.    | COMPOUND                   | (µg/L or µg/Kg UG/L | Q  |
|------------|----------------------------|---------------------|----|
| 74-87-3    | Chloromethane              | 5                   | U  |
| 74-83-9    | Bromomethane               | 5                   | U  |
| 75-01-4    | Vinyl chloride             | 5                   | U  |
| 75-00-3    | Chloroethane               | 5                   | U  |
| 75-09-2    | Methylene chloride         | 5-2                 | JU |
| 67-64-1    | Acetone                    | 5                   | UJ |
| 75-35-4    | 1,1-Dichloroethene         | 5                   | U  |
| 75-15-0    | Carbon disulfide           | 5                   | U  |
| 75-34-3    | 1,1-Dichloroethane         | 5                   | U  |
| 540-59-0   | 1,2-Dichloroethene (total) | 17                  |    |
| 67-66-3    | Chloroform                 | 5                   |    |
| 107-06-2   | 1,2-Dichloroethane         | 5                   | U  |
| 78-93-3    | 2-Butanone                 | 3                   | J  |
| 71-55-6    | 1,1,1-Trichloroethane      | 5                   | U  |
| 56-23-5    | Carbon tetrachloride       | 5                   | U  |
| 75-27-4    | Bromodichloromethane       | 5                   | U  |
| 78-87-5    | 1,2-Dichloropropane        | 5                   | U  |
| 10061-01-5 | cis-1,3-Dichloropropene    | 5                   | U  |
| 79-01-6    | Trichloroethene            | 3                   | J  |
| 124-48-1   | Dibromochloromethane       | 5                   | U  |
| 79-00-5    | 1,1,2-Trichloroethane      | 5                   | U  |
| 71-43-2    | Benzene                    | 5                   | U  |
| 10061-02-6 | trans-1,3-Dichloropropene  | 5                   | U  |
| 75-25-2    | Bromoform                  | 5                   | UJ |
| 108-10-1   | 4-Methyl-2-pentanone       | 5                   | U  |
| 591-78-6   | 2-Hexanone                 | 5                   | U  |
| 127-18-4   | Tetrachloroethene          | 5                   |    |
| 79-34-5    | 1,1,2,2-Tetrachloroethane  | 5                   | U  |
| 108-88-3   | Toluene                    | 38                  |    |
| 108-90-7   | Chlorobenzene              | 5                   | U  |
| 100-41-4   | Ethylbenzene               | 140                 |    |
| 100-42-5   | Styrene                    | 5                   | U  |
| 1330-20-7  | Xylene (total)             | P60 850             | E  |

1F

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

0413 @ 10-12'

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: H2MCase No.: BER

SAS No.: \_\_\_\_\_

SDG No.: BER121

Matrix: (soil/water)

WATERLab Sample ID: 1304656-013ASample wt/vol: 5(g/mL) MLLab File ID: 13\J9888.DLevel: (low/med) LOWDate Received: 04/10/13

% Moisture: not dec.

Date Analyzed: 04/11/13GC Column: Rtx-624ID: .18 (mm)Dilution Factor: 1.00

Soil Extract Volume:

(μl)

Soil Aliquot Volume: 0 (μL)

## CONCENTRATION UNITS:

Number TICs found:

9

(μg/L or μg/Kg)

UG/L

| CAS NUMBER | COMPOUND NAME                  | RT    | EST.CONC. | Q |
|------------|--------------------------------|-------|-----------|---|
| 1          | (DEL) Alkane: Branched         | 7.50  | 190       | J |
| 2          | c3 substituted benzene (11.16) | 11.16 | 820       | J |
| 3          | c3 substituted benzene (11.25) | 11.25 | 410       | J |
| 4          | c3 substituted benzene (11.45) | 11.45 | 410       | J |
| 5          | c3 substituted benzene (11.63) | 11.63 | 740       | J |
| 6          | c3 substituted benzene (12.04) | 12.04 | 420       | J |
| 7          | c3 substituted benzene (12.23) | 12.23 | 320       | J |
| 8          | c4 substituted benzene (12.32) | 12.32 | 250       | J |
| 9          | c4 substituted benzene (12.69) | 12.69 | 180       | J |
| 10         | c4 substituted benzene (13.57) | 13.57 | 220       | J |

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0413 @ 20-22'

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: H2M

Case No.: BER

SAS No. \_\_\_\_\_

SDG No.: BER121

Matrix: (soil/water) WATER

Lab Sample ID: 1304656-014A

Sample wt/vol: 5 (g/mL ML

Lab File ID: 13\J9889.D

Level: (low/med) LOW

Date Received: 04/10/13

% Moisture: not dec.

Date Analyzed: 04/11/13, 4/12/13

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor: 1.00 010

Soil Extract Volume: \_\_\_\_\_ (µL)

Soil Aliquot Volu \_\_\_\_\_ (µL)

CONCENTRATION UNITS:

| CAS NO.    | COMPOUND                   | (µg/L or µg/Kg UG/L | Q   |
|------------|----------------------------|---------------------|-----|
| 74-87-3    | Chloromethane              | 5                   | U   |
| 74-83-9    | Bromomethane               | 5                   | U   |
| 75-01-4    | Vinyl chloride             | 5                   | U   |
| 75-00-3    | Chloroethane               | 5                   | U   |
| 75-09-2    | Methylene chloride         | 25                  | U   |
| 67-64-1    | Acetone                    | 65                  | JN  |
| 75-35-4    | 1,1-Dichloroethene         | 2                   | J   |
| 75-15-0    | Carbon disulfide           | 5                   | U   |
| 75-34-3    | 1,1-Dichloroethane         | 5                   | U   |
| 540-59-0   | 1,2-Dichloroethene (total) | 350 - 420           | E   |
| 67-66-3    | Chloroform                 | 4                   | J   |
| 107-06-2   | 1,2-Dichloroethane         | 5                   | U   |
| 78-93-3    | 2-Butanone                 | 53                  |     |
| 71-55-6    | 1,1,1-Trichloroethane      | 5                   | U   |
| 56-23-5    | Carbon tetrachloride       | 5                   | U   |
| 75-27-4    | Bromodichloromethane       | 5                   | U   |
| 78-87-5    | 1,2-Dichloropropane        | 5                   | U   |
| 10061-01-5 | cis-1,3-Dichloropropene    | 5                   | U   |
| 79-01-6    | Trichloroethene            | 1                   | J   |
| 124-48-1   | Dibromochloromethane       | 5                   | U   |
| 79-00-5    | 1,1,2-Trichloroethane      | 5                   | U   |
| 71-43-2    | Benzene                    | 14                  |     |
| 10061-02-6 | trans-1,3-Dichloropropene  | 5                   | U   |
| 75-25-2    | Bromoform                  | 5                   | U J |
| 108-10-1   | 4-Methyl-2-pentanone       | 5                   | U   |
| 591-78-6   | 2-Hexanone                 | 5                   | U   |
| 127-18-4   | Tetrachloroethene          | 4                   | J   |
| 79-34-5    | 1,1,2,2-Tetrachloroethane  | 5                   | U   |
| 108-88-3   | Toluene                    | 1000 - 700          | E   |
| 108-90-7   | Chlorobenzene              | 5                   | U   |
| 100-41-4   | Ethylbenzene               | 460 - 510           | E   |
| 100-42-5   | Styrene                    | 5                   | U   |
| 1330-20-7  | Xylene (total)             | 3000 - 1700         | E   |

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1F

VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

0413 @ 20-22'

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: H2MCase No.: BER

SAS No.: \_\_\_\_\_

SDG No.: BER121

Matrix: (soil/water)

WATERLab Sample ID: 1304656-014ASample wt/vol: 5(g/mL) MLLab File ID: 13\J9889.DLevel: (low/med) LOWDate Received: 04/10/13

% Moisture: not dec.

Date Analyzed: 04/11/13GC Column: Rtx-624ID: .18 (mm)Dilution Factor: 1.00

Soil Extract Volume:

(μl)

Soil Aliquot Volume: 0 (μL)

## CONCENTRATION UNITS:

Number TICs found:

8

(μg/L or μg/Kg)

UG/L

| CAS NUMBER      | COMPOUND NAME                  | RT    | EST.CONC. | Q  |
|-----------------|--------------------------------|-------|-----------|----|
| 1.              | (DEL) Alkane; Branched (3.23)  | 3.23  | 160       | J  |
| 2.              | unknown alkene                 | 5.70  | 160       | J  |
| 3.              | (DEL) Alkane; Branched (5.92)  | 5.92  | 160       | J  |
| 4.              | c3 substituted benzene (11.15) | 11.15 | 650       | J  |
| 5.              | c3 substituted benzene (11.24) | 11.24 | 170       | J  |
| 6.              | c3 substituted benzene (11.44) | 11.44 | 290       | J  |
| 7.              | c3 substituted benzene (11.62) | 11.62 | 530       | J  |
| 8.              | c3 substituted benzene (12.04) | 12.04 | 210       | J  |
| 9.              | c3 substituted benzene (12.23) | 12.23 | 320       | J  |
| 10. 000091-20-3 | Naphthalene                    | 14.22 | 180       | JN |

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0413 @ 30-32'

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: H2M

Case No.: BER

SAS No. \_\_\_\_\_

SDG No.: BER121

Matrix: (soil/water) WATER

Lab Sample ID: 1304656-015A

Sample wt/vol: 5 (g/mL ML

Lab File ID: 13\J9915.D

Level: (low/med) LOW

Date Received: 04/10/13

% Moisture: not dec.

Date Analyzed: 04/12/13, 4/18/13

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor: 1.00 x 4

Soil Extract Volume: \_\_\_\_\_ (μL)

Soil Aliquot Volu \_\_\_\_\_ (μL)

CONCENTRATION UNITS:

| CAS NO.    | COMPOUND                   | (μg/L or μg/Kg UG/L | Q   |
|------------|----------------------------|---------------------|-----|
| 74-87-3    | Chloromethane              | 5                   | U   |
| 74-83-9    | Bromomethane               | 5                   | U   |
| 75-01-4    | Vinyl chloride             | 5                   | U   |
| 75-00-3    | Chloroethane               | 5                   | U   |
| 75-09-2    | Methylene chloride         | 5                   | U   |
| 67-64-1    | Acetone                    | 6                   | U   |
| 75-35-4    | 1,1-Dichloroethene         | 5                   | U   |
| 75-15-0    | Carbon disulfide           | 1                   | J   |
| 75-34-3    | 1,1-Dichloroethane         | 5                   | U   |
| 540-59-0   | 1,2-Dichloroethene (total) | 87                  | J   |
| 67-66-3    | Chloroform                 | 2                   | J   |
| 107-06-2   | 1,2-Dichloroethane         | 5                   | U   |
| 78-93-3    | 2-Butanone                 | 4                   | J   |
| 71-55-6    | 1,1,1-Trichloroethane      | 5                   | U   |
| 56-23-5    | Carbon tetrachloride       | 5                   | U   |
| 75-27-4    | Bromodichloromethane       | 5                   | U   |
| 78-87-5    | 1,2-Dichloropropane        | 5                   | U   |
| 10061-01-5 | cis-1,3-Dichloropropene    | 5                   | U   |
| 79-01-6    | Trichloroethene            | 5                   | U   |
| 124-48-1   | Dibromochloromethane       | 5                   | U   |
| 79-00-5    | 1,1,2-Trichloroethane      | 5                   | U   |
| 71-43-2    | Benzene                    | 4                   | J   |
| 10061-02-6 | trans-1,3-Dichloropropene  | 5                   | U   |
| 75-25-2    | Bromoform                  | 5                   | U J |
| 108-10-1   | 4-Methyl-2-pentanone       | 5                   | U   |
| 591-78-6   | 2-Hexanone                 | 5                   | U J |
| 127-18-4   | Tetrachloroethene          | 2                   | J   |
| 79-34-5    | 1,1,2,2-Tetrachloroethane  | 5                   | U   |
| 108-88-3   | Toluene                    | 110                 |     |
| 108-90-7   | Chlorobenzene              | 5                   | U   |
| 100-41-4   | Ethylbenzene               | 100                 |     |
| 100-42-5   | Styrene                    | 5                   | U   |
| 1330-20-7  | Xylene (total)             | 1000 790            | E   |



1F

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

0413 @ 30-32'

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: H2MCase No.: BER

SAS No.: \_\_\_\_\_

SDG No.: BER121

Matrix: (soil/water)

WATERLab Sample ID: 1304656-015ASample wt/vol: 5(g/mL) MLLab File ID: 13\J9915.DLevel: (low/med) LOWDate Received: 04/10/13

% Moisture: not dec.

Date Analyzed: 04/12/13GC Column: Rtx-624ID: .18 (mm)Dilution Factor: 1.00

Soil Extract Volume:

(μL)

Soil Aliquot Volume: 0 (μL)

## CONCENTRATION UNITS:

Number TICs found:

6

(μg/L or μg/Kg)

UG/L

| CAS NUMBER | COMPOUND NAME                  | RT    | EST.CONC. | Q |
|------------|--------------------------------|-------|-----------|---|
| 1.         | (DEL) Alkane: Branched (5.7)   | 5.70  | 120       | J |
| 2.         | (DEL) Alkane: Branched (5.92)  | 5.92  | 130       | J |
| 3.         | (DEL) Alkane: Branched (7.5)   | 7.50  | 150       | J |
| 4.         | (DEL) Alkane: Branched (7.62)  | 7.62  | 130       | J |
| 5.         | c3 substituted benzene (11.15) | 11.15 | 340       | J |
| 6.         | c3 substituted benzene (11.24) | 11.24 | 130       | J |
| 7.         | c3 substituted benzene (11.62) | 11.62 | 360       | J |
| 8.         | c3 substituted benzene (12.04) | 12.04 | 130       | J |
| 9.         | c4 substituted benzene (12.24) | 12.24 | 160       | J |
| 10.        | c4 substituted benzene (12.32) | 12.32 | 130       | J |

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TRIP BLANK

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: H2M

Case No.: BER

SAS No. \_\_\_\_\_

SDG No.: BER121

Matrix: (soil/water) WATER

Lab Sample ID: 1304656-016A

Sample wt/vol: 5 (g/mL ML)

Lab File ID: 13\J9880.D

Level: (low/med) LOW

Date Received: 04/10/13

% Moisture: not dec.

Date Analyzed: 04/11/13

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (μL)

Soil Aliquot Volu \_\_\_\_\_ (μL)

CONCENTRATION UNITS:

| CAS NO.    | COMPOUND                   | (μg/L or μg/Kg <u>UG/L</u> ) | <u>Q</u>                             |
|------------|----------------------------|------------------------------|--------------------------------------|
| 74-87-3    | Chloromethane              | 5                            | U                                    |
| 74-83-9    | Bromomethane               | 5                            | U                                    |
| 75-01-4    | Vinyl chloride             | 5                            | U                                    |
| 75-00-3    | Chloroethane               | 5                            | U                                    |
| 75-09-2    | Methylene chloride         | 5                            | U                                    |
| 67-64-1    | Acetone                    | 5                            | U <span style="color: red;">J</span> |
| 75-35-4    | 1,1-Dichloroethene         | 5                            | U                                    |
| 75-15-0    | Carbon disulfide           | 5                            | U                                    |
| 75-34-3    | 1,1-Dichloroethane         | 5                            | U                                    |
| 540-59-0   | 1,2-Dichloroethene (total) | 5                            | U                                    |
| 67-66-3    | Chloroform                 | 5                            | U                                    |
| 107-06-2   | 1,2-Dichloroethane         | 5                            | U                                    |
| 78-93-3    | 2-Butanone                 | 5                            | U                                    |
| 71-55-6    | 1,1,1-Trichloroethane      | 5                            | U                                    |
| 56-23-5    | Carbon tetrachloride       | 5                            | U                                    |
| 75-27-4    | Bromodichloromethane       | 5                            | U                                    |
| 78-87-5    | 1,2-Dichloropropane        | 5                            | U                                    |
| 10061-01-5 | cis-1,3-Dichloropropene    | 5                            | U                                    |
| 79-01-6    | Trichloroethene            | 5                            | U                                    |
| 124-48-1   | Dibromochloromethane       | 5                            | U                                    |
| 79-00-5    | 1,1,2-Trichloroethane      | 5                            | U                                    |
| 71-43-2    | Benzene                    | 5                            | U                                    |
| 10061-02-6 | trans-1,3-Dichloropropene  | 5                            | U                                    |
| 75-25-2    | Bromoform                  | 5                            | U <span style="color: red;">J</span> |
| 108-10-1   | 4-Methyl-2-pentanone       | 5                            | U                                    |
| 591-78-6   | 2-Hexanone                 | 5                            | U                                    |
| 127-18-4   | Tetrachloroethene          | 5                            | U                                    |
| 79-34-5    | 1,1,2,2-Tetrachloroethane  | 5                            | U                                    |
| 108-88-3   | Toluene                    | 5                            | U                                    |
| 108-90-7   | Chlorobenzene              | 5                            | U                                    |
| 100-41-4   | Ethylbenzene               | 5                            | U                                    |
| 100-42-5   | Styrene                    | 5                            | U                                    |
| 1330-20-7  | Xylene (total)             | 5                            | U                                    |

*Handwritten:* 5/5/13

1F  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

TRIP BLANK

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: H2M

Case No.: BER

SAS No.: \_\_\_\_\_

SDG No.: BER121

Matrix: (soil/water)

WATER

Lab Sample ID: 1304656-016A

Sample wt/vol: 5

(g/mL) ML

Lab File ID: 13\J9880.D

Level: (low/med) LOW

Date Received: 04/10/13

% Moisture: not dec.

Date Analyzed: 04/11/13

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor: 1.00

Soil Extract Volume:

( $\mu$ L)

Soil Aliquot Volume: 0 ( $\mu$ L)

CONCENTRATION UNITS:

Number TICs found:

0

( $\mu$ g/L or  $\mu$ g/Kg)

UG/L

| CAS NUMBER | COMPOUND NAME | RT | EST.CONC. | Q |
|------------|---------------|----|-----------|---|
|------------|---------------|----|-----------|---|

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FIELD BLANK

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: H2M

Case No.: BER

SAS No. \_\_\_\_\_

SDG No.: BER121

Matrix: (soil/water) WATER

Lab Sample ID: 1304656-017A

Sample wt/vol: 5 (g/mL ML

Lab File ID: 13\J9879.D

Level: (low/med) LOW

Date Received: 04/10/13

% Moisture: not dec.

Date Analyzed: 04/11/13

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (µL)

Soil Aliquot Volu \_\_\_\_\_ (µL)

CONCENTRATION UNITS:

| CAS NO.    | COMPOUND                   | (µg/L or µg/Kg <u>UG/L</u> | Q   |
|------------|----------------------------|----------------------------|-----|
| 74-87-3    | Chloromethane              | 5                          | U   |
| 74-83-9    | Bromomethane               | 5                          | U   |
| 75-01-4    | Vinyl chloride             | 5                          | U   |
| 75-00-3    | Chloroethane               | 5                          | U   |
| 75-09-2    | Methylene chloride         | 5                          | U   |
| 67-64-1    | Acetone                    | 5                          | U J |
| 75-35-4    | 1,1-Dichloroethene         | 5                          | U   |
| 75-15-0    | Carbon disulfide           | 5                          | U   |
| 75-34-3    | 1,1-Dichloroethane         | 5                          | U   |
| 540-59-0   | 1,2-Dichloroethene (total) | 5                          | U   |
| 67-66-3    | Chloroform                 | 5                          | U   |
| 107-06-2   | 1,2-Dichloroethane         | 5                          | U   |
| 78-93-3    | 2-Butanone                 | 5                          | U   |
| 71-55-6    | 1,1,1-Trichloroethane      | 5                          | U   |
| 56-23-5    | Carbon tetrachloride       | 5                          | U   |
| 75-27-4    | Bromodichloromethane       | 5                          | U   |
| 78-87-5    | 1,2-Dichloropropane        | 5                          | U   |
| 10061-01-5 | cis-1,3-Dichloropropene    | 5                          | U   |
| 79-01-6    | Trichloroethene            | 5                          | U   |
| 124-48-1   | Dibromochloromethane       | 5                          | U   |
| 79-00-5    | 1,1,2-Trichloroethane      | 5                          | U   |
| 71-43-2    | Benzene                    | 5                          | U   |
| 10061-02-6 | trans-1,3-Dichloropropene  | 5                          | U   |
| 75-25-2    | Bromoform                  | 5                          | U J |
| 108-10-1   | 4-Methyl-2-pentanone       | 5                          | U   |
| 591-78-6   | 2-Hexanone                 | 5                          | U   |
| 127-18-4   | Tetrachloroethene          | 5                          | U   |
| 79-34-5    | 1,1,2,2-Tetrachloroethane  | 5                          | U   |
| 108-88-3   | Toluene                    | 5                          | U   |
| 108-90-7   | Chlorobenzene              | 5                          | U   |
| 100-41-4   | Ethylbenzene               | 5                          | U   |
| 100-42-5   | Styrene                    | 5                          | U   |
| 1330-20-7  | Xylene (total)             | 5                          | U   |

04/15/13

1F

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD BLANK

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: H2MCase No.: BER

SAS No.: \_\_\_\_\_

SDG No.: BER121

Matrix: (soil/water)

WATERLab Sample ID: 1304656-017ASample wt/vol: 5(g/mL) MLLab File ID: 13\J9879.DLevel: (low/med) LOWDate Received: 04/10/13

% Moisture: not dec.

Date Analyzed: 04/11/13GC Column: Rtx-624ID: .18 (mm)Dilution Factor: 1.00

Soil Extract Volume:

(μl)

Soil Aliquot Volume: 0 (μL)

## CONCENTRATION UNITS:

Number TICs found:

0

(μg/L or μg/Kg)

UG/L

| CAS NUMBER | COMPOUND NAME | RT | EST.CONC. | Q |
|------------|---------------|----|-----------|---|
|------------|---------------|----|-----------|---|

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

STORAGE BLANK

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: H2M

Case No.: BER

SAS No. \_\_\_\_\_

SDG No.: BER121

Matrix: (soil/water) WATER

Lab Sample ID: 1304656-018A

Sample wt/vol: 5 (g/mL ML

Lab File ID: 13\J9878.D

Level: (low/med) LOW

Date Received: 04/10/13

% Moisture: not dec.

Date Analyzed: 04/11/13

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (µL)

Soil Aliquot Volu \_\_\_\_\_ (µL)

CONCENTRATION UNITS:

| CAS NO.    | COMPOUND                   | (µg/L or µg/Kg <u>UG/L</u> | Q   |
|------------|----------------------------|----------------------------|-----|
| 74-87-3    | Chloromethane              | 5                          | U   |
| 74-83-9    | Bromomethane               | 5                          | U   |
| 75-01-4    | Vinyl chloride             | 5                          | U   |
| 75-00-3    | Chloroethane               | 5                          | U   |
| 75-09-2    | Methylene chloride         | 21                         |     |
| 67-64-1    | Acetone                    | 6                          | J   |
| 75-35-4    | 1,1-Dichloroethene         | 5                          | U   |
| 75-15-0    | Carbon disulfide           | 5                          | U   |
| 75-34-3    | 1,1-Dichloroethane         | 5                          | U   |
| 540-59-0   | 1,2-Dichloroethene (total) | 5                          | U   |
| 67-66-3    | Chloroform                 | 5                          | U   |
| 107-06-2   | 1,2-Dichloroethane         | 5                          | U   |
| 78-93-3    | 2-Butanone                 | 5                          | U   |
| 71-55-6    | 1,1,1-Trichloroethane      | 5                          | U   |
| 56-23-5    | Carbon tetrachloride       | 5                          | U   |
| 75-27-4    | Bromodichloromethane       | 5                          | U   |
| 78-87-5    | 1,2-Dichloropropane        | 5                          | U   |
| 10061-01-5 | cis-1,3-Dichloropropene    | 5                          | U   |
| 79-01-6    | Trichloroethene            | 5                          | U   |
| 124-48-1   | Dibromochloromethane       | 5                          | U   |
| 79-00-5    | 1,1,2-Trichloroethane      | 5                          | U   |
| 71-43-2    | Benzene                    | 5                          | U   |
| 10061-02-6 | trans-1,3-Dichloropropene  | 5                          | U   |
| 75-25-2    | Bromoform                  | 5                          | U J |
| 108-10-1   | 4-Methyl-2-pentanone       | 5                          | U   |
| 591-78-6   | 2-Hexanone                 | 5                          | U   |
| 127-18-4   | Tetrachloroethene          | 5                          | U   |
| 79-34-5    | 1,1,2,2-Tetrachloroethane  | 5                          | U   |
| 108-88-3   | Toluene                    | 5                          | U   |
| 108-90-7   | Chlorobenzene              | 5                          | U   |
| 100-41-4   | Ethylbenzene               | 5                          | U   |
| 100-42-5   | Styrene                    | 5                          | U   |
| 1330-20-7  | Xylene (total)             | 5                          | U   |

*Handwritten signature and date: 8/5/13*



1F

VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

STORAGE BLANK

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: H2MCase No.: BER

SAS No.: \_\_\_\_\_

SDG No.: BER121

Matrix: (soil/water)

WATERLab Sample ID: 1304656-018ASample wt/vol: 5(g/mL) MLLab File ID: 13\J9878.DLevel: (low/med) LOWDate Received: 04/10/13

% Moisture: not dec.

Date Analyzed: 04/11/13GC Column: Rtx-624ID: .18 (mm)Dilution Factor: 1.00

Soil Extract Volume:

(μl)

Soil Aliquot Volume: 0 (μL)

## CONCENTRATION UNITS:

Number TICs found:

0

(μg/L or μg/Kg)

UG/L

| CAS NUMBER | COMPOUND NAME | RT | EST.CONC. | Q |
|------------|---------------|----|-----------|---|
|------------|---------------|----|-----------|---|

**Appendix B  
Chain of Custody  
Documents**



# H2M LABS, INC.

575 Broad Hollow Rd, Melville, NY 11747-5076

Tel: (631) 694-3040 Fax: (631) 420-8436

## 420-1 EXTERNAL CHAIN OF CUSTODY

|  |       |                    |                |  |          |
|--|-------|--------------------|----------------|--|----------|
| PROJECT NAME/NUMBER<br>9:50<br>330 Mackaway Trpk.<br>Biochemical             |       | CLIENT: BEI        |                | H2M SDG NO: BER121   |          |
| SAMPLERS (Signature)/Client<br>9:10<br>9:20<br>9:30<br>9:40<br>9:50<br>10:30 |       | NOTES:<br>Page 2   |                | Project Contact<br>Justin<br>Phone Number:<br>5896521<br>PIS/Quote #   |          |
| DELIVERABLES:<br>ASP - Cat. B  |       | ANALYSIS REQUESTED |                | LAB I.D. NO.   |          |
| TURNAROUND TIME: 2 days  |       | ORGANIC            |                | REMARKS:   |          |
| DATE   | TIME  | MATRIX             | FIELD I.D.     | LAB I.D. NO.   | REMARKS: |
| 4/10   | 8:10  | W                  | GW-0313 20-22' | 1304056-011A   |          |
|  | 9:20  |                    | 11 230-32'     | -012A  |          |
|  | 9:30  |                    | GW-0413 10-12' | -013A  |          |
|  | 9:40  |                    | 11 20-22'      | -014A  |          |
|  | 9:50  |                    | 11 30-32'      | -015A  |          |
|  |       |                    | Trip Blank     | -016A  |          |
|  | 10:30 |                    | Field Blank    | -017A  |          |
| Relinquished by: (Signature)   |       | Date               | Time           | LABORATORY USE ONLY  |          |
| Relinquished by: (Signature)   |       | 4/10/13            | 1349           | Discrepancies Between Sample Labels and COC Record? Y or N   |          |
| Relinquished by: (Signature)   |       | 4-10-13            | 1349           | Samples were:<br>1. Shipped or Hand Delivered: Airbill#<br>2. Ambient or chilled, Temp<br>3. Received in good condition: Y or N<br>4. Properly preserved: Y or N |          |
| Relinquished by: (Signature)   |       | Date               | Time           | COC Tape was:<br>1. Present on outer package: Y or N<br>2. Unbroken on outer package: Y or N<br>3. COC record present & complete upon sample receipt: Y or N     |          |

WHITE COPY - ORIGINAL  
BER121 S8

YELLOW COPY - CLIENT

PINK COPY - LABORATORY



labs

H2M LABS INC

575 Broad Hollow Rd.

Melville, NY 11747

TEL: (631) 694-3040 FAX: (631) 420-8436

Website: www.h2mlabs.com

## Sample Receipt Checklist

Client Name **BER**Date and Time Received: **4/10/2013 1:49:00 PM**Work Order Number: **1304656**RcptNo: **1**Received by **Beth Vogel**

Completed by:

*Beth Vogel*

Reviewed by:

*Kennia Vennard*

Completed Date:

4/10/2013

Reviewed Date:

4/11/2013 10:52:08 AMCarrier name: Client

|   |  |  |   |
|---|--|--|---|
| Chain of custody present?                               | Yes <input checked="" type="checkbox"/>    | No <input type="checkbox"/>            |   |
| Chain of custody signed when relinquished and received? | Yes <input checked="" type="checkbox"/>    | No <input type="checkbox"/>            |   |
| Chain of custody agrees with sample labels?             | Yes <input type="checkbox"/>               | No <input checked="" type="checkbox"/> |   |
| Are matrices correctly identified on Chain of custody?  | Yes <input checked="" type="checkbox"/>    | No <input type="checkbox"/>            |   |
| Is it clear what analyses were requested?               | Yes <input checked="" type="checkbox"/>    | No <input type="checkbox"/>            |   |
| Custody seals intact on sample bottles?                 | Yes <input type="checkbox"/>               | No <input type="checkbox"/>            | Not Present <input checked="" type="checkbox"/> |
| Samples in proper container/bottle?                     | Yes <input checked="" type="checkbox"/>    | No <input type="checkbox"/>            |   |
| Were correct preservatives used and noted?              | Yes <input checked="" type="checkbox"/>    | No <input type="checkbox"/>            | NA <input type="checkbox"/>                     |
| Preservative added to bottles:                          |  |  |   |
| Sample Condition?                                       | Intact <input checked="" type="checkbox"/> | Broken <input type="checkbox"/>        | Leaking <input type="checkbox"/>                |
| Sufficient sample volume for indicated test?            | Yes <input checked="" type="checkbox"/>    | No <input type="checkbox"/>            |   |
| Were container labels complete (ID, Pres, Date)?        | Yes <input checked="" type="checkbox"/>    | No <input type="checkbox"/>            |   |
| All samples received within holding time?               | Yes <input checked="" type="checkbox"/>    | No <input type="checkbox"/>            |   |
| Was an attempt made to cool the samples?                | Yes <input checked="" type="checkbox"/>    | No <input type="checkbox"/>            | NA <input type="checkbox"/>                     |
| All samples received at a temp. of > 0° C to 6.0° C?    | Yes <input checked="" type="checkbox"/>    | No <input type="checkbox"/>            | NA <input type="checkbox"/>                     |
| Response when temperature is outside of range:          |  |  |   |
| Sample Temp. taken and recorded upon receipt?           | Yes <input checked="" type="checkbox"/>    | No <input type="checkbox"/>            | To 4.3° <input type="checkbox"/>                |
| Water - Were bubbles absent in VOC vials?               | Yes <input type="checkbox"/>               | No <input checked="" type="checkbox"/> | No Vials <input type="checkbox"/>               |
| Water - Was there Chlorine Present?                     | Yes <input type="checkbox"/>               | No <input type="checkbox"/>            | NA <input checked="" type="checkbox"/>          |
| Water - pH acceptable upon receipt?                     | Yes <input checked="" type="checkbox"/>    | No <input type="checkbox"/>            | No Water <input type="checkbox"/>               |
| Are Samples considered acceptable?                      | Yes <input checked="" type="checkbox"/>    | No <input type="checkbox"/>            |   |
| Custody Seals present?                                  | Yes <input type="checkbox"/>               | No <input checked="" type="checkbox"/> |   |
| Airbill or Sticker?                                     | Air Bil <input type="checkbox"/>           | Sticker <input type="checkbox"/>       | Not Present <input checked="" type="checkbox"/> |

Airbill No:

Case Number:

SDG:

BER121

SAS:

Any No response should be detailed in the comments section below, if applicable.

Client Contacted? ☒ Yes ☐ No Person Contacted: **JUSTIN**

Contact Mode: ☒ Phone: ☐ Fax: ☐ Email: ☐ In Person:

Client Instructions: Client provided times of collection.

Date Contacted: **4/10/2013** Contacted By: **Beth Vogel**

Regarding: No times of collection listed on COC.

Comments:

No times of collection listed on COC.

One vial for sample GW-0113 @ 40-44' has a 0.5mm air bubble, while the other was not filled fully. Both vials for sample GW-0113 @ 60-64' have 1mm air bubbles. Both vials for sample GW-0113 @ 70-74' are not filled fully. Both vials for samples GW-0213 @ 30-32', GW-0313 @ 20-22', and GW-0313 @ 30-32' have 0.5mm air bubbles. One vial for sample GW-0413 @ 30-32' has a 0.5mm air bubble, but the spare has no headspace.

CorrectiveAction:

The client was contacted and the samples are logged as per times given by client.

BER121 S9

**Appendix C**  
**SDG Narratives**





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575 Broad Hollow Road  
Melville, NY 11747

tel 631.694.3040  
fax 631.420.8436

**SDG NARRATIVE FOR VOLATILE ANALYSES  
SAMPLES RECEIVED: 4/10/13  
SDG#: BER121**

For Sample(s):

Page 1 of 2

GW-0113 @ 15-19' GW-0213 @ 10-12' GW-0413 @ 10-12'  
GW-0113 @ 30-34' GW-0213 @ 20-22' GW-0413 @ 20-22'  
GW-0113 @ 40-44' GW-0213 @ 30-32' GW-0413 @ 30-32'  
GW-0113 @ 50-54' GW-0313 @ 11-13' TRIP BLANK  
GW-0113 @ 60-64 GW-0313 @ 20-22' FIELD BLANK  
GW-0113 @ 70-74' GW-0313 @ 30-32' STORAGE BLANK

The above samples was/were analyzed for volatile organics by EPA method 8260B in accordance with the NYSDEC ASP, Rev. 6/2000 and reported with category B deliverables.

All quality control and calibration requirements were met, unless discussed below. The following should be noted:

Sample GW-0113 @ 30-34' was analyzed as the matrix spike/matrix spike duplicate. All percent recoveries were within Q.C. limits. All percent recoveries and RPDs were within Q.C. limits. A lab fortified blank was analyzed and indicates good method efficiency.

Samples GW-0113 @ 15-19', GW-0113 @ 70-74', GW-0213 @ 10-12', GW-0213 @ 20-22', GW-0213 @ 30-32', GW-0313 @ 11-13', GW-0313 @ 20-22', GW-0313 @ 30-32', GW-0413 @ 10-12', GW-0413 @ 20-22' and GW-0413 @ 30-32' were reanalyzed at a dilution due to concentration levels of targeted analytes above the calibration range. Both sets of data are submitted.

Dibromomethane and bromoform had %RSDs greater than 20.5% in the initial calibration of 1/22/13.

Several samples had headspace in one or both vials. Samples GW-0213 @ 20-22', GW-0213 @ 30-32', GW-0213 @ 10-12' and GW-0413 @ 30-32' had high surrogate recoveries for d-4 1,2-dichloroethane.

BER121 S13



labs

575 Broad Hollow Road  
Melville, NY 11747

tel 631.694.3040  
fax 631.420.8436

**SDG NARRATIVE FOR VOLATILE ANALYSES  
SAMPLES RECEIVED: 4/10/13  
SDG#: BER121**

Page 2 of 2

Bromomethane had a %D greater than 25% but below the limit of 40% in the continuing calibration of 4/12/13. The %D for bromoform was > 25% but < 40% in the calibrations of 4/12/13 and 4/18/13. Trichloroethene had a response factor of 0.286 in the continuing calibration of 4/11/13.

**I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.**

Date Reported: April 26, 2013

\*\*\*\*\*  
\*  \*  
\* \*  
\*\*\*\*\*  
Joann M. Slavin  
Senior Vice President

BER121 S14

**Appendix D**  
**NYSDEC ASP Summary Forms**

# NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

## SAMPLE IDENTIFICATION AND ANALYTICAL REQUIREMENT SUMMARY

SDG: BER121

Analytical Requirements

| Customer<br>Sample<br>Code | Laboratory<br>Sample<br>Code | MSVOA |
|----------------------------|------------------------------|-------|
| GW-0113 @ 15-19'           | 1304656-001                  | X     |
| GW-0113 @ 30-34'           | 1304656-002                  | X     |
| GW-0113 @ 40-44' •         | • 1304656-003                | X     |
| GW-0113 @ 50-54'           | 1304656-004                  | X     |
| GW-0113 @ 60-64' •         | • 1304656-005                | X     |
| GW-0113 @ 70-74'           | • 1304656-006                | X     |
| GW-0213 @ 10-12'           | 1304656-007                  | X     |
| GW-0213 @ 20-22'           | 1304656-008                  | X     |
| GW-0213 @ 30-32'           | • 1304656-009                | X     |
| GW-0313 @ 11-13'           | 1304656-010                  | X     |
| GW-0313 @ 20-22'           | • 1304656-011                | X     |
| GW-0313 @ 30-32'           | • 1304656-012                | X     |
| GW-0413 @ 10-12'           | 1304656-013                  | X     |
| GW-0413 @ 20-22'           | 1304656-014                  | X     |
| GW-0413 @ 30-32'           | 1304656-015                  | X     |
| TRIP BLANK                 | 1304656-016                  | X     |
| FIELD BLANK                | 1304656-017                  | X     |
| STORAGE BLANK              | 1304656-018                  | X     |

CLP ☒ Non-CLP (Please indicate year of protocol)  
TCL/TAL, HSL, Priority Pollutant,

ASP B 2000

4/30/13

BER121 S3

## NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY  
VOLATILE (VOA)  
ANALYSES

SDG: BER121

| Laboratory<br>Samp ID | Client Sample ID | Matrix  | Analytical<br>Protocol | Date<br>Collected | Date Recd<br>at Lab | Date<br>Extracted | Date<br>Analyzed | Extraction<br>Method | DF | Level | Aux Cleanup |
|-----------------------|------------------|---------|------------------------|-------------------|---------------------|-------------------|------------------|----------------------|----|-------|-------------|
| 1304656-001A          | 0113 @ 15-19'    | Aqueous | ASP8260                | 09-Apr-13         | 10-Apr-13           |                   | 11-Apr-13        |                      | 1  | LOW   |             |
| 1304656-001ADL        | 0113 @ 15-19'DL  | Aqueous | ASP8260                | 09-Apr-13         | 10-Apr-13           |                   | 12-Apr-13        |                      | 20 | LOW   |             |
| 1304656-002A          | 0113 @ 30-34'    | Aqueous | ASP8260                | 09-Apr-13         | 10-Apr-13           |                   | 12-Apr-13        |                      | 1  | LOW   |             |
| 1304656-002AMS        | 0113 @ 30-34'MS  | Aqueous | ASP8260                | 09-Apr-13         | 10-Apr-13           |                   | 12-Apr-13        |                      | 1  | LOW   |             |
| 1304656-002AMSD       | 0113 @ 30-34'MSD | Aqueous | ASP8260                | 09-Apr-13         | 10-Apr-13           |                   | 12-Apr-13        |                      | 1  | LOW   |             |
| 1304656-003A          | 0113 @ 40-44'    | Aqueous | ASP8260                | 09-Apr-13         | 10-Apr-13           |                   | 12-Apr-13        |                      | 1  | LOW   |             |
| 1304656-004A          | 0113 @ 50-54'    | Aqueous | ASP8260                | 09-Apr-13         | 10-Apr-13           |                   | 12-Apr-13        |                      | 1  | LOW   |             |
| 1304656-005A          | 0113 @ 60-64'    | Aqueous | ASP8260                | 09-Apr-13         | 10-Apr-13           |                   | 11-Apr-13        |                      | 1  | LOW   |             |
| 1304656-006A          | 0113 @ 70-74'    | Aqueous | ASP8260                | 09-Apr-13         | 10-Apr-13           |                   | 12-Apr-13        |                      | 1  | LOW   |             |
| 1304656-006ADL        | 0113 @ 70-74'DL  | Aqueous | ASP8260                | 09-Apr-13         | 10-Apr-13           |                   | 18-Apr-13        |                      | 3  | LOW   |             |
| 1304656-007A          | 0213 @ 10-12'    | Aqueous | ASP8260                | 09-Apr-13         | 10-Apr-13           |                   | 11-Apr-13        |                      | 1  | LOW   |             |
| 1304656-007ADL        | 0213 @ 10-12'DL  | Aqueous | ASP8260                | 09-Apr-13         | 10-Apr-13           |                   | 12-Apr-13        |                      | 40 | LOW   |             |
| 1304656-008A          | 0213 @ 20-22'    | Aqueous | ASP8260                | 09-Apr-13         | 10-Apr-13           |                   | 11-Apr-13        |                      | 1  | LOW   |             |
| 1304656-008ADL        | 0213 @ 20-22'DL  | Aqueous | ASP8260                | 09-Apr-13         | 10-Apr-13           |                   | 12-Apr-13        |                      | 10 | LOW   |             |
| 1304656-009A          | 0213 @ 30-32'    | Aqueous | ASP8260                | 09-Apr-13         | 10-Apr-13           |                   | 11-Apr-13        |                      | 1  | LOW   |             |
| 1304656-009ADL        | 0213 @ 30-32'DL  | Aqueous | ASP8260                | 09-Apr-13         | 10-Apr-13           |                   | 12-Apr-13        |                      | 2  | LOW   |             |
| 1304656-010A          | 0313 @ 11-13'    | Aqueous | ASP8260                | 09-Apr-13         | 10-Apr-13           |                   | 11-Apr-13        |                      | 1  | LOW   |             |
| 1304656-010ADL        | 0313 @ 11-13'DL  | Aqueous | ASP8260                | 09-Apr-13         | 10-Apr-13           |                   | 12-Apr-13        |                      | 5  | LOW   |             |
| 1304656-011A          | 0313 @ 20-22'    | Aqueous | ASP8260                | 10-Apr-13         | 10-Apr-13           |                   | 11-Apr-13        |                      | 1  | LOW   |             |
| 1304656-011ADL        | 0313 @ 20-22'DL  | Aqueous | ASP8260                | 10-Apr-13         | 10-Apr-13           |                   | 18-Apr-13        |                      | 40 | LOW   |             |
| 1304656-012A          | 0313 @ 30-32'    | Aqueous | ASP8260                | 10-Apr-13         | 10-Apr-13           |                   | 11-Apr-13        |                      | 1  | LOW   |             |
| 1304656-012ADL        | 0313 @ 30-32'DL  | Aqueous | ASP8260                | 10-Apr-13         | 10-Apr-13           |                   | 12-Apr-13        |                      | 5  | LOW   |             |
| 1304656-013A          | 0413 @ 10-12'    | Aqueous | ASP8260                | 10-Apr-13         | 10-Apr-13           |                   | 11-Apr-13        |                      | 1  | LOW   |             |
| 1304656-013ADL        | 0413 @ 10-12'DL  | Aqueous | ASP8260                | 10-Apr-13         | 10-Apr-13           |                   | 12-Apr-13        |                      | 3  | LOW   |             |
| 1304656-014A          | 0413 @ 20-22'    | Aqueous | ASP8260                | 10-Apr-13         | 10-Apr-13           |                   | 11-Apr-13        |                      | 1  | LOW   |             |
| 1304656-014ADL        | 0413 @ 20-22'DL  | Aqueous | ASP8260                | 10-Apr-13         | 10-Apr-13           |                   | 12-Apr-13        |                      | 10 | LOW   |             |
| 1304656-015A          | 0413 @ 30-32'    | Aqueous | ASP8260                | 10-Apr-13         | 10-Apr-13           |                   | 12-Apr-13        |                      | 1  | LOW   |             |
| 1304656-015ADL        | 0413 @ 30-32'DL  | Aqueous | ASP8260                | 10-Apr-13         | 10-Apr-13           |                   | 18-Apr-13        |                      | 4  | LOW   |             |

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| Lab ID       | Client Sample ID | Matrix  | Analytical Protocol | Date Collected | Date at Lab | Date Extracted | Date Analyzed | Extraction Method | DF | Level | Aux Cleanup |
|--------------|------------------|---------|---------------------|----------------|-------------|----------------|---------------|-------------------|----|-------|-------------|
| 1304656-016A | TRIP BLANK       | Aqueous | ASP8260             | 10-Apr-13      | 10-Apr-13   |                | 11-Apr-13     |                   | 1  | LOW   |             |
| 1304656-017A | FIELD BLANK      | Aqueous | ASP8260             | 10-Apr-13      | 10-Apr-13   |                | 11-Apr-13     |                   | 1  | LOW   |             |
| 1304656-018A | STORAGE BLANK    | Aqueous | ASP8260             | 10-Apr-13      | 10-Apr-13   |                | 11-Apr-13     |                   | 1  | LOW   |             |

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**DATA USABILITY SUMMARY REPORT – DUSR  
DATA VALIDATION SUMMARY**

**ORGANIC ANALYSIS**

**TARGET COMPOUND LIST (TCL) VOLATILES BY GC/MS**

**For Groundwater Samples Collected  
June 11, 2013  
From 380 Rockaway Turnpike, Cedarhurst, NY  
Former Quick and Clean  
Collected by Berninger Environmental, Inc.**

**SAMPLE DELIVERY GROUP NUMBER:  
BER123  
BY H2M Labs, Inc. (ELAP #10478)**

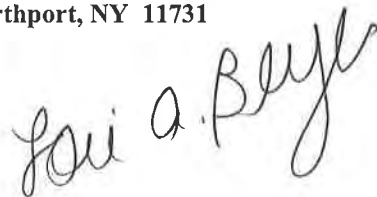
**SUBMITTED TO:**

**Mr. Walter Berninger/President  
Berninger Environmental  
90-B Knickerbocker Avenue  
Bohemia, NY 11716**

**July 29, 2013**

**PREPARED BY:**

**Lori A. Beyer/President  
L.A.B. Validation Corp.  
14 West Point Drive  
East Northport, NY 11731**

A handwritten signature in black ink, reading "Lori A. Beyer", is written over the printed name and address of the preparer.

Former Quick and Clean, 380 Rockaway Turnpike, Cedarhurst, New York- Groundwater Samples;  
June 2013 Sampling Event  
Data Usability Summary Report (Data Validation): TCL Volatiles

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**APPENDICES:**

- A. Data Summary Tables/Form Is with Qualifications
- B. Chain of Custody Documents
- C. SDG Narratives
- D. NYSDEC ASP Summary Forms

**Introduction:**

A validation was performed on groundwater samples and the associated quality control samples for organic analysis for samples collected under chain of custody documentation by Berninger Environmental Inc. and submitted to H2M Labs, Inc. for subsequent analysis. This report contains the laboratory and validation results for the field samples itemized below. The groundwater samples were collected on June 11, 2013.

The samples were analyzed by H2M Labs, Inc., utilizing SW846 and submitted under NYSDEC ASP (2000) Category B equivalent deliverable requirements for the associated analytical methodologies employed. The analytical testing consisted of the Target Compound/Analyte Lists for Volatile Organics.

The data was evaluated in accordance with EPA Region II National Functional Guidelines for Organic Data Review and EPA Region II SOPs for 8260 and also in conjunction with the analytical methodologies for which the samples were analyzed, where applicable and relevant.

The data validation report pertains to the following samples:

|                                   |             |             |          |          |
|-----------------------------------|-------------|-------------|----------|----------|
| GW-0513 @ 10-12'<br>(plus MS/MSD) | 1306773-001 | Groundwater | 06/11/13 | 06/13/13 |
| GW-0513 @ 20-22'                  | 1306773-002 | Groundwater | 06/11/13 | 06/13/13 |
| GW-0513 @ 30-32'                  | 1306773-003 | Groundwater | 06/11/13 | 06/13/13 |
| Field Blank                       | 1306773-004 | Aqueous     | 06/11/13 | 06/13/13 |
| Trip Blank                        | 1306773-005 | Aqueous     | 06/11/13 | 06/13/13 |
| Storage Blank                     | 1306773-006 | Aqueous     | 06/13/13 | 06/13/13 |

**Data Qualifier Definitions:**

The following definitions provide brief explanations of the qualifiers assigned to results in the data review process.

**U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.**

**J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.**

**UJ - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.**

**R - The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.**

**N - The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."**

**NJ - The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate quantity.**

**D - Indicates the analyte concentration was obtained from diluted analysis.**

**Sample Receipt:**

The Chain of Custody documents indicate that the samples were hand delivered by Berninger Environmental field sampling personnel and received at H2M Labs on 06/13/13 upon completion of the sampling event. Sample login notes were generated. The cooler temperature for all samples were recorded upon receipt at H2M Labs and determined to be acceptable @ 2.6 degrees C (<6.0 degrees C). The actual temperature is recorded on the chain of custody documents provided in Appendix B of this report.

Several samples were noted upon receipt to contain small air bubbles. Specifically, GW-0513 @10-12' (5 of the 6 vials), GW-0513 @ 20-22' (1 vial), and GW-0513 @ 30-32' (2 vials). Based on professional judgment, no qualifications to the data were made.

No unresolved problems and/or discrepancies were noted, consequently, the integrity of the samples has been assumed to be good.

The data summary tables included in Appendix A includes all usable (qualified) and unusable (rejected) results for the samples identified above. These tables summarize the detailed narrative section of the report.

**NOTE:**

L.A.B. Validation Corp. believes it is appropriate to note that the data validation criteria utilized for data evaluation is different than the method requirements utilized by the laboratory. Qualified data does not necessarily mean that the laboratory was non-compliant in the analysis that was performed.

**1.0 Target Analyte List (TCL) Volatile Organics by GC/MS SW846 Method 8260**

The following method criteria were reviewed: holding times, SMCs, MS, MSD, LCS, Laboratory Spiked Blanks, Method Blanks, Tunes, Calibrations, Internal Standards, Target Component Identification, Quantitation, Reported Quantitation Limits and Overall System Performance. The Volatile results were considered to be valid and useable as noted within the following as noted within the following text:

### **1.1 Holding Time**

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the technical holding time is exceeded, the data may not be considered valid. Those analytes detected in the samples whose holding time has been exceeded will be qualified as estimates, "J". The non-detects (sample quantitation limits) are required to be flagged as estimated, "UJ", or unusable, "R", if the holding times are grossly exceeded.

**Samples pertaining to this SDG were performed within the Method required holding times as well as the technical holding times for data validation of 14 days from collection to analysis and diluted reanalysis. No data validation qualifiers were required based upon holding time.**

### **1.2 System Monitoring Compound (Surrogate) Recovery**

All samples are spiked with surrogate compounds prior to sample analysis to evaluate overall laboratory performance and efficiency of the analytical technique. If the measure of surrogate concentrations is outside contract specifications, qualifications are required to be applied to associated samples and analytes.

**Surrogate recoveries (%R) were found to be within acceptable limits for all three (3) surrogate compounds for all analyses pertaining to this SDG with the exception of 1,2-dichloroethane-d4 which recovered high in initial analysis of GW-0513 @ 20-22' (162%).**

**This sample was reanalyzed at a 1:25 dilution due to high target compound concentrations. Diluted reanalysis and therefore reduced matrix interferences acceptable recovery values were observed for 1,2-dichloroethane-d4.**

**The laboratory reported concentrations for vinyl chloride, 1,1-dichloroethene, 1,2-dichloroethene (total), trichloroethene and benzene must be considered estimated, "J" in sample 0513 @ 20-22'.**

### **1.3 Matrix Spikes (MS)/ Matrix Spike Duplicates (MSD)**

The MS/MSD data are generated to determine the long-term precision and accuracy of the analytical method in various matrices and to demonstrate acceptable compound recovery by the laboratory at the time of sample analysis. The MS/MSD may be used in conjunction with other QC criteria for additional qualification of data.



**Groundwater MS/MSD analysis was conducted on GW-0513 @ 10-12' as requested by Berninger field sampling personnel. All spike recoveries and RPD values fell within in house established QC ranges for spiked compounds.**

#### **1.4 Laboratory Control Sample/Fortified Blank Spikes**

The LCS data for laboratory control samples (LCS) are generated to provide information on the accuracy of the analytical method and on the laboratory performance.

**LCS/Fortified Blank Spike recovery values fell within acceptance limits.**

#### **1.5 Blank Contamination**

Quality assurance (QA) blanks; i.e. method, trip and field blanks are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Trip blanks measure cross-contamination of samples during shipment. Field blanks measure cross-contamination of samples during field operations.

The following table was utilized to qualify target analyte results due to contamination. The largest value from all the associated blanks is required to be utilized:

| <b>For:</b>                                       | <b>Flag Sample Result with a "U" when:</b>        | <b>Report CRQL &amp; Qualify "U" when:</b>       | <b>No Qualification is Needed when:</b>       |
|---|---|--|---|
| Methylene Chloride, Acetone, Toluene & 2-Butanone | Sample Conc. Is >CRQL, but $\leq 10x$ blank value | Sample Conc. is <CRQL and $\leq 10x$ blank value | Sample Conc. is >CRQL and $> 10x$ blank value |
| Other Contaminants                                | Sample Conc. Is >CRQL, but $\leq 5x$ blank value  | Sample Conc. Is <CRQL and $\leq 5x$ blank value  | Sample Conc. is >CRQL and $> 5x$ blank value  |

Below is a summary of the compounds in the sample and the associated qualifications that have been applied:

##### **A) Method Blank Contamination:**

**No target/non target analytes were detected in the method blanks associated with sample analysis.**

**B) Field Blank Contamination:**

**Acceptable levels of Acetone and 2-Butanone were detected in the field blank associated with sample analysis. Results were evaluated based on the above criteria and the laboratory reported presence of these common lab contaminants were negated in samples GW-0513 @ 20-22' and GW-0513 @ 30-32'.**

**C) Trip Blank Contamination:**

**Target/non-target analytes were not detected in the Trip Blank applicable to this sampling event.**

**D) Storage Blanks**

**Target/non-target analytes were not detected in the Storage Blank associated with field samples.**

**1.6 GC/MS Instrument Performance Check**

Tuning and performance criteria are established to ensure adequate mass resolution, proper identification of compounds and to some degree, sufficient instrument sensitivity. These criteria are not sample specific. Instrument performance is determined using standard materials. Therefore, these criteria should be met in all circumstances. The Tuning standard for volatile organics is Bromofluorobenzene (BFB).

**Instrument performance was generated within acceptable limits and frequency for Bromofluorobenzene (BFB) for all analyses conducted for this SDG.**

**1.7 Initial and Continuing Calibrations**

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of giving acceptable performance at the beginning of an experimental sequence.

The continuing calibration checks document that the instrument is giving satisfactory daily performance.

**A) Response Factor GC/MS:**

The response factor measures the instrument's response to specific chemical compounds. The response factor for all compounds must be  $\geq 0.05$  in both initial and continuing calibrations. A value  $< 0.05$  indicates a serious detection and quantitation problem (poor sensitivity). Analytes detected in the sample will be qualified as estimated, "J". All non-detects for that compound in the corresponding samples will be rejected, "R".

**All the response factors for the target analytes reported were found to be within acceptable limits ( $\geq 0.05$ ), for the initial and continuing calibrations for all reported TCL analytes.**

**B) Percent Relative Standard Deviation (%RSD) and Percent Difference (%D):**

Percent RSD is calculated from the initial calibration and is used to indicate the stability of the specific compound response factor over increasing concentrations. Percent D compares the response factor of the continuing calibration check to the mean response factor (RRF) from the initial calibration. Percent D is a measure of the instrument's daily performance. Percent RSD must be  $< 30\%$  and %D must be  $< 25\%$ . A value outside of these limits indicates potential detection and quantitation errors. For these reasons, all positive results are flagged as estimated, "J" and non-detects are flagged "UJ". If %RSD and %D grossly exceed QC criteria, non-detect data may be qualified, "R", unusable. Additionally, in cases where the %RSD is  $> 30\%$  and eliminating either the high or the low point of the curve does not restore the %RSD to less than or equal to 30% then positive results are qualified, "J". In cases where removal of either the low or high point restores the linearity, then only low or high level results will be qualified, "J" in the portion of the curve where non linearity exists.

**Initial Calibrations: The initial calibrations provided and the %RSD were within acceptable limits (30%) for all reported compounds.**

**Continuing Calibrations: The continuing calibrations provided and the %D was within acceptable limits (25%) for all reported compounds with the following exceptions:**

**CCAL 06/18/13 Instrument HP5972-2; 4-Methyl-2-Pentanone – 33.0% and 2-Hexanone – 33.8%. Non-detects for these compounds in all samples have been qualified, "UJ."**

**CCAL 6/20/13 HP5972-2; Bromoform 25.1%. No qualifications to the data is required since this calibration is only applicable to diluted reanalysis for GW-0513 @ 20-22' for analytes exceeding the calibration range in initial analysis.**

#### **1.8 Internal Standards**

Internal Standards (IS) performance criteria ensure that the GC/MS sensitivity and response are stable during every experimental run. The internal standard area count must not vary by more than a factor of 2 (-50% to +100%) from the associated continuing calibration standard. The retention time of the internal standard must not vary more than +/- 30 seconds from the associated continuing calibration standard. If the area count is outside the (-50% to +100%) range of the associated standard, all of the positive results for compounds quantitated using that IS are qualified as estimated, "J", and all non-detects as "UJ", or "R" if there is a severe loss of sensitivity.

If an internal standard retention time varies by more than 30 seconds, professional judgment will be used to determine either partial or total rejection of the data for that sample fraction.

**All samples were spiked with the internal standards Bromochloromethane, 1,4-Difluorobenzene and Chlorobenzene-d5 prior to sample analysis. The area responses and retention time of each internal standard met QC criteria in all samples associated with this SDG.**

#### **1.9 Field Duplicates**

**Field duplicate samples are collected and analyzed as an indication of overall precision. These results are expected to have more variability than laboratory duplicate samples. Generally for water samples an acceptable RPD is 10%.**

**Field Duplicate analysis was not collected as part of this sampling event.**

#### **1.10 Target Compound List Identification**

TCL compounds are identified on the GC/MS by using the analyte's relative retention time (RRT) and by comparison to the ion spectra obtained from known standards. For the results to be a positive hit, the sample peak must be within  $\pm 0.06$ RRT units of the standard compound and have an ion spectra which has a ratio of the primary and secondary m/e intensities within 20% of that in the standard compound.

**GC/MS spectra met the qualitative criteria for identification. All retention times were within required specifications.**

#### **1.10 Compound Quantification and Reported Detection Limits**

GC/MS quantitative analysis is considered to be acceptable. Correct internal standards per SW846, response factors were used to calculate final concentrations.

**As required, the laboratory reported "J" values between the limit of quantitation (LOQ) and limit of detection (LOD). This is consistent with common laboratory practices and a requirement of the National Environmental Laboratory Approval Program (NELAP).**

**Tentatively identified compounds were detected field samples. The total TIC concentration is presented in the spreadsheets in Appendix A. Non target constituents primarily consist of aromatic hydrocarbons and aromatic substituted benzene compounds.**

**All groundwater samples were initially analyzed undiluted at 5mls. Based on Toluene, Ethylbenzene and Xylene concentrations diluted reanalyses were required for GW-0513 @ 20-22' (1:25) since the raw concentrations were determined to exceed the instruments linear calibration range.**

**Concentrations must be obtained from diluted reanalysis as reported by the laboratory and presented in the summary spreadsheets and have been qualified "D" on Form I's in Appendix A.**

Acceptable dilutions were performed such that raw concentrations were within the upper half of the instruments linear calibration range.

The end user should proceed with caution when making decisions based on Methylene Chloride concentrations since this compound is a common laboratory contaminant.

**1.11 Overall System Performance**

Good resolution and chromatographic performance were observed. Raw data was reviewed and confirmed that no carryover exists for any analysis conducted with this data set.

Reviewer's Signature Lisa Bayn Date 07/29/13



**Appendix A**  
**Data Summary Tables and Form I's**  
**With Qualifications**

**BERNINGER ENVIRONMENTAL**  
Protect FORMER QUICK AND CLEAN

**BERNUNGK ENVIRONMENTAL**  
**Protect FORMER QUICK AND CLEAN**  
Laboratory: H2M: BER123

**Sample Identification:**

Laboratory ID:

Sampling Date:

| Sample Identification: | Sample ID:                                    | Sampling Date: | OW-0513 (B 30-22)<br>1306773-002<br>6/11/2013 | OW-0513 (B 30-22)<br>1306773-003<br>6/11/2013 | Field Blank<br>1306773-004<br>6/11/2013 | Trio Blank<br>1306773-005<br>6/11/2013 | Storea Blank<br>1306773-006<br>6/11/2013 |
|------------------------|---|----------------|---|---|---|--|--|
| Cas #                  | Analyte                                       | Unit/oz        | 5 U   | 5 U   | 5 U                                     | 5 U                                    | 5 U                                      |
| 74-87-3                | Chloromethane                                 | uofL           | 5 U   | 5 U   | 5 U                                     | 5 U                                    | 5 U                                      |
| 74-83-9                | Bromomethane                                  | uofL           | 5 U   | 5 U   | 5 U                                     | 5 U                                    | 5 U                                      |
| 75-01-4                | Vinyl Chloride                                | uofL           | 1 J   | 3 J   | 5 U                                     | 5 U                                    | 5 U                                      |
| 75-00-3                | Chloroethane                                  | uofL           | 5 U   | 5 U   | 5 U                                     | 5 U                                    | 5 U                                      |
| 75-00-3                | Methylene Chloride                            | uofL           | 5 U   | 5 U   | 5 U                                     | 5 U                                    | 5 U                                      |
| 67-66-2                | Carbon disulfide                              | uofL           | 36 U  | 5 U   | 1 J                                     | 5 U                                    | 5 U                                      |
| 75-16-0                | Carbon disulfide                              | uofL           | 4 J   | 5 U   | 36 U                                    | 5 U                                    | 5 U                                      |
| 75-35-4                | 1,1-Dichloroethane                            | uofL           | 5 U   | 1 J   | 18 U                                    | 5 U                                    | 5 U                                      |
| 75-34-3                | 1,1-Dichloroethane                            | uofL           | 5 U   | 5 U   | 5 U                                     | 5 U                                    | 5 U                                      |
| 540-59-0               | 1,2-Dichloroethane (total)                    | uofL           | 27  | 250 J   | 5 U                                     | 5 U                                    | 5 U                                      |
| 67-66-3                | Chloroform                                    | uofL           | 1 J   | 5 U   | 5 U                                     | 5 U                                    | 5 U                                      |
| 75-00-2                | 1,2-Dichloroethane                            | uofL           | 5 U   | 5 U   | 5 U                                     | 5 U                                    | 5 U                                      |
| 74-93-2                | 2,2,4-Trichloroethane                         | uofL           | 10 U  | 5 U   | 18 U                                    | 5 U                                    | 5 U                                      |
| 71-55-6                | 1,1,1-Trichloroethane                         | uofL           | 5 U   | 5 U   | 5 U                                     | 5 U                                    | 5 U                                      |
| 56-23-5                | Carbon Tetrachloride                          | uofL           | 5 U   | 5 U   | 5 U                                     | 5 U                                    | 5 U                                      |
| 75-27-4                | Bromodichloromethane                          | uofL           | 5 U   | 5 U   | 5 U                                     | 5 U                                    | 5 U                                      |
| 78-87-5                | 1,2-Dichloropropane                           | uofL           | 5 U   | 5 U   | 5 U                                     | 5 U                                    | 5 U                                      |
| 10051-61-5             | cis-1,3-Dichloropropene                       | uofL           | 5 U   | 5 U   | 5 U                                     | 5 U                                    | 5 U                                      |
| 10051-61-5             | trans-1,3-Dichloropropene                     | uofL           | 5 U   | 5 U   | 5 U                                     | 5 U                                    | 5 U                                      |
| 127-18-4               | Diisobutylene                                 | uofL           | 1 U   | 5 U   | 5 U                                     | 5 U                                    | 5 U                                      |
| 79-00-5                | 1,1,2-Trichloroethane                         | uofL           | 5 U   | 5 U   | 5 U                                     | 5 U                                    | 5 U                                      |
| 71-43-2                | Benzene                                       | uofL           | 5 U   | 48 J  | 2 J                                     | 5 U                                    | 5 U                                      |
| 10051-02-6             | trans-1,3-Dichloropropene                     | uofL           | 5 U   | 5 U   | 5 U                                     | 5 U                                    | 5 U                                      |
| 75-25-2                | Bromoform                                     | uofL           | 5 U   | 5 U   | 5 U                                     | 5 U                                    | 5 U                                      |
| 105-10-1               | 4-Methyl-2-Pentanone                          | uofL           | 5 U   | 5 U   | 5 U                                     | 5 U                                    | 5 U                                      |
| 105-10-1               | 4-Methyl-2-Pentanone                          | uofL           | 5 U   | 5 U   | 5 U                                     | 5 U                                    | 5 U                                      |
| 127-18-4               | Diisobutylene                                 | uofL           | 5 U   | 5 U   | 5 U                                     | 5 U                                    | 5 U                                      |
| 79-34-5                | 1,1,2,2-Tetrachloroethane                     | uofL           | 18 U  | 7 U   | 5 U                                     | 5 U                                    | 5 U                                      |
| 104-68-3               | Toluene                                       | uofL           | 5 U   | 5 U   | 5 U                                     | 5 U                                    | 5 U                                      |
| 105-90-7               | Chlorobenzene                                 | uofL           | 7   | 2600 D  | 190                                     | 5 U                                    | 5 U                                      |
| 100-41-4               | Ethylbenzene                                  | uofL           | 5 U   | 5 U   | 5 U                                     | 5 U                                    | 5 U                                      |
| 100-41-4               | Ethylbenzene                                  | uofL           | 40  | 430 D   | 37                                      | 5 U                                    | 5 U                                      |
| 100-41-4               | Ethylbenzene                                  | uofL           | 40  | 430 D   | 37                                      | 5 U                                    | 5 U                                      |
| 1300-20-7              | Xylenes (total)                               | uofL           | 440 J   | 500 D   | 510                                     | 5 U                                    | 5 U                                      |
| 1300-20-7              | Total Tentatively Identified Compounds (TICa) | uofL           | 1110 J  | 4310 J  | 1620 J                                  | 0                                      | 0  |

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW-AT-10-12'

GW-0513 @ 10-12'

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: H2M

Case No.: BER

SAS No.: \_\_\_\_\_

SDG No.: BER123

Matrix: (soil/water)

WATER

Lab Sample ID: 1306773-001A

Sample wt/vol: 5

(g/mL) ML

Lab File ID: 13\G19773.

Level: (low/med)

LOW

Date Received: 06/13/13

% Moisture: not dec.

Date Analyzed: 06/18/13

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_

(µL)

Soil Aliquot Volume \_\_\_\_\_

(µL)

CONCENTRATION UNITS:

| CAS NO.    | COMPOUND                   | (µg/L or µg/Kg) <u>UG/L</u> | <u>Q</u> |
|------------|----------------------------|-----------------------------|----------|
| 74-87-3    | Chloromethane              | 5                           | U        |
| 74-83-9    | Bromomethane               | 5                           | U        |
| 75-01-4    | Vinyl chloride             | 1                           | J        |
| 75-00-3    | Chloroethane               | 5                           | U        |
| 75-09-2    | Methylene chloride         | 5                           | U        |
| 67-64-1    | Acetone                    | 32                          | U        |
| 75-35-4    | 1,1-Dichloroethene         | 5                           | U        |
| 75-15-0    | Carbon disulfide           | 4                           | J        |
| 75-34-3    | 1,1-Dichloroethane         | 5                           | U        |
| 540-59-0   | 1,2-Dichloroethene (total) | 27                          |          |
| 67-66-3    | Chloroform                 | 1                           | J        |
| 107-06-2   | 1,2-Dichloroethane         | 5                           | U        |
| 78-93-3    | 2-Butanone                 | 10                          | U        |
| 71-55-6    | 1,1,1-Trichloroethane      | 5                           | U        |
| 56-23-5    | Carbon tetrachloride       | 5                           | U        |
| 75-27-4    | Bromodichloromethane       | 5                           | U        |
| 78-87-5    | 1,2-Dichloropropane        | 5                           | U        |
| 10061-01-5 | cis-1,3-Dichloropropene    | 5                           | U        |
| 79-01-6    | Trichloroethene            | 11                          |          |
| 124-48-1   | Dibromochloromethane       | 5                           | U        |
| 79-00-5    | 1,1,2-Trichloroethane      | 5                           | U        |
| 71-43-2    | Benzene                    | 5                           | U        |
| 10061-02-6 | trans-1,3-Dichloropropene  | 5                           | U        |
| 75-25-2    | Bromoform                  | 5                           | U        |
| 108-10-1   | 4-Methyl-2-pentanone       | 5                           | U        |
| 591-78-6   | 2-Hexanone                 | 5                           | U        |
| 127-18-4   | Tetrachloroethene          | 16                          |          |
| 79-34-5    | 1,1,2,2-Tetrachloroethane  | 5                           | U        |
| 108-88-3   | Toluene                    | 7                           |          |
| 108-90-7   | Chlorobenzene              | 5                           | U        |
| 100-41-4   | Ethylbenzene               | 40                          |          |
| 100-42-5   | Styrene                    | 5                           | U        |
| 1330-20-7  | Xylene (total)             | 440                         |          |

VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

GW-AT 10-12'

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

GW-0513 @ 10-12'

Lab Code: H2MCase No.: BER

SAS No.: \_\_\_\_\_

SDG No.: BER123

Matrix: (soil/water)

WATERLab Sample ID: 1306773-001ASample wt/vol: 5(g/mL) MLLab File ID: 13\G19773.Level: (low/med) LOWDate Received: 06/13/13

% Moisture: not dec.

Date Analyzed: 06/18/13GC Column: Rtx-624ID: .18 (mm)Dilution Factor: 1.00

Soil Extract Volume:

(μl)

Soil Aliquot Volume: 0 (μL)

## CONCENTRATION UNITS:

Number TICs found:

9

(μg/L or μg/Kg)

UG/L

| CAS NUMBER | COMPOUND NAME                    | RT   | EST. CONC. | Q |
|------------|----------------------------------|------|------------|---|
| 1.         | (DEL) Alkane: Cyclic             | 3.34 | 47         | J |
| 2.         | c3 substituted benzene (7.64)    | 7.64 | 200        | J |
| 3.         | c3 substituted benzene (7.7)     | 7.70 | 110        | J |
| 4.         | c3 substituted benzene (7.81)    | 7.81 | 93         | J |
| 5.         | c3 substituted benzene (7.91)    | 7.91 | 280        | J |
| 6.         | c3 substituted benzene (8.14)    | 8.14 | 99         | J |
| 7.         | c3+c4 substituted benzene (8.24) | 8.24 | 110        | J |
| 8.         | c4 substituted benzene (8.26)    | 8.26 | 51         | J |
| 9.         | c4 substituted benzene (8.46)    | 8.46 | 52         | J |
| 10.        | c4 substituted benzene (8.88)    | 8.88 | 69         | J |

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW-AT 20-22'

GW-0573 @ 20-22'

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: H2M

Case No.: BER

SAS No.: \_\_\_\_\_

SDG No.: BER123

Matrix: (soil/water)

WATER

Lab Sample ID: 1306773-002A

Sample wt/vol: 5

(g/mL) ML

Lab File ID: 13\G19772.

Level: (low/med)

LOW

Date Received: 06/13/13

% Moisture: not dec.

Date Analyzed: 06/18/13

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor: 1.00 25.0

Soil Extract Volume: \_\_\_\_\_ (µL)

Soil Aliquot Volume \_\_\_\_\_ (µL)

CONCENTRATION UNITS:

| CAS NO.    | COMPOUND                   | (µg/L or µg/Kg) UG/L | Q              |
|------------|----------------------------|----------------------|----------------|
| 74-87-3    | Chloromethane              | 5                    | U              |
| 74-83-9    | Bromomethane               | 5                    | U              |
| 75-01-4    | Vinyl chloride             | 3                    | <del>U</del> J |
| 75-00-3    | Chloroethane               | 5                    | U              |
| 75-09-2    | Methylene chloride         | 5                    | U              |
| 67-64-1    | Acetone                    | 5                    | U              |
| 75-35-4    | 1,1-Dichloroethene         | 1                    | <del>U</del> J |
| 75-15-0    | Carbon disulfide           | 5                    | U              |
| 75-34-3    | 1,1-Dichloroethane         | 5                    | U              |
| 540-59-0   | 1,2-Dichloroethene (total) | 250                  | <del>U</del> J |
| 67-66-3    | Chloroform                 | 5                    | U              |
| 107-06-2   | 1,2-Dichloroethane         | 5                    | U              |
| 78-93-3    | 2-Butanone                 | 5                    | U              |
| 71-55-6    | 1,1,1-Trichloroethane      | 5                    | U              |
| 56-23-5    | Carbon tetrachloride       | 5                    | U              |
| 75-27-4    | Bromodichloromethane       | 5                    | U              |
| 78-87-5    | 1,2-Dichloropropane        | 5                    | U              |
| 10061-01-5 | cis-1,3-Dichloropropene    | 5                    | U              |
| 79-01-6    | Trichloroethene            | 5                    | <del>U</del> J |
| 124-48-1   | Dibromochloromethane       | 5                    | U              |
| 79-00-5    | 1,1,2-Trichloroethane      | 5                    | U              |
| 71-43-2    | Benzene                    | 48                   | <del>U</del> J |
| 10061-02-6 | trans-1,3-Dichloropropene  | 5                    | U              |
| 75-25-2    | Bromoform                  | 5                    | U              |
| 108-10-1   | 4-Methyl-2-pentanone       | 5                    | U J            |
| 591-78-6   | 2-Hexanone                 | 5                    | U J            |
| 127-18-4   | Tetrachloroethene          | 7                    |                |
| 79-34-5    | 1,1,2,2-Tetrachloroethane  | 5                    | U              |
| 108-88-3   | Toluene                    | <del>2800</del> 1100 | <del>U</del> E |
| 108-90-7   | Chlorobenzene              | 5                    | U              |
| 100-41-4   | Ethylbenzene               | <del>430</del> 460   | <del>U</del> D |
| 100-42-5   | Styrene                    | 5                    | U              |
| 1330-20-7  | Xylene (total)             | <del>6300</del> 2800 | <del>U</del> D |

2/27/13

VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GW-AT 20-22'

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

GW-0513 @ 20-22'

Lab Code: H2MCase No.: BER

SAS No.: \_\_\_\_\_

SDG No.: BER123

Matrix: (soil/water)

WATERLab Sample ID: 1306773-002ASample wt/vol: 5(g/mL) MLLab File ID: 13\G19772.Level: (low/med) LOWDate Received: 06/13/13

% Moisture: not dec.

Date Analyzed: 06/18/13GC Column: Rtx-624ID: .18 (mm)Dilution Factor: 1.00 25.0

Soil Extract Volume:

(μl)

Soil Aliquot Volume: 0 (μL)

## CONCENTRATION UNITS:

Number TICs found:

9

(μg/L or μg/Kg)

UG/L

| CAS NUMBER | COMPOUND NAME                    | RT   | EST. CONC. | Q |
|------------|----------------------------------|------|------------|---|
| 1.         | (DEL) Alkane: Branched           | 2.61 | 260        | J |
| 2.         | c3 substituted benzene (7.66)    | 7.66 | 860        | J |
| 3.         | c3 substituted benzene (7.71)    | 7.71 | 460        | J |
| 4.         | c3 substituted benzene (7.83)    | 7.83 | 420        | J |
| 5.         | c3 substituted benzene (7.93)    | 7.93 | 720        | J |
| 6.         | c3 substituted benzene (8.15)    | 8.15 | 410        | J |
| 7.         | c3+c4 substituted benzene (8.25) | 8.25 | 550        | J |
| 8.         | c4 substituted benzene (8.28)    | 8.28 | 240        | J |
| 9.         | c4 substituted benzene (8.46)    | 8.46 | 210        | J |
| 10.        | c4 substituted benzene (8.88)    | 8.88 | 180        | J |



1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW-AT 30-32'

GW-0513 @30-32'

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: H2M

Case No.: BER

SAS No.: \_\_\_\_\_

SDG No.: BER123

Matrix: (soil/water)

WATER

Lab Sample ID: 1306773-003A

Sample wt/vol: 5

(g/mL) ML

Lab File ID: 13\G19771.

Level: (low/med)

LOW

Date Received: 06/13/13

% Moisture: not dec.

Date Analyzed: 06/18/13

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (µL)

Soil Aliquot Volume \_\_\_\_\_ (µL)

CONCENTRATION UNITS:

| CAS NO.    | COMPOUND                   | (µg/L or µg/Kg) <u>UG/L</u> | <u>Q</u> |
|------------|----------------------------|-----------------------------|----------|
| 74-87-3    | Chloromethane              | 5                           | U        |
| 74-83-9    | Bromomethane               | 5                           | U        |
| 75-01-4    | Vinyl chloride             | 5                           | U        |
| 75-00-3    | Chloroethane               | 5                           | U        |
| 75-09-2    | Methylene chloride         | 1                           | J        |
| 67-64-1    | Acetone                    | 30                          | U        |
| 75-35-4    | 1,1-Dichloroethene         | 5                           | U        |
| 75-15-0    | Carbon disulfide           | 19                          |          |
| 75-34-3    | 1,1-Dichloroethane         | 5                           | U        |
| 540-59-0   | 1,2-Dichloroethene (total) | 8                           |          |
| 67-66-3    | Chloroform                 | 5                           | U        |
| 107-06-2   | 1,2-Dichloroethane         | 5                           | U        |
| 78-93-3    | 2-Butanone                 | 19                          | U        |
| 71-55-6    | 1,1,1-Trichloroethane      | 5                           | U        |
| 56-23-5    | Carbon tetrachloride       | 5                           | U        |
| 75-27-4    | Bromodichloromethane       | 5                           | U        |
| 78-87-5    | 1,2-Dichloropropane        | 5                           | U        |
| 10061-01-5 | cis-1,3-Dichloropropene    | 5                           | U        |
| 79-01-6    | Trichloroethene            | 5                           | U        |
| 124-48-1   | Dibromochloromethane       | 5                           | U        |
| 79-00-5    | 1,1,2-Trichloroethane      | 5                           | U        |
| 71-43-2    | Benzene                    | 2                           | J        |
| 10061-02-6 | trans-1,3-Dichloropropene  | 5                           | U        |
| 75-25-2    | Bromoform                  | 5                           | U        |
| 108-10-1   | 4-Methyl-2-pentanone       | 5                           | U        |
| 591 78-6   | 2-Hexanone                 | 5                           | U        |
| 127-18-4   | Tetrachloroethene          | 5                           | U        |
| 79-34-5    | 1,1,2,2-Tetrachloroethane  | 5                           | U        |
| 108-88-3   | Toluene                    | 190                         |          |
| 108-90-7   | Chlorobenzene              | 5                           | U        |
| 100-41-4   | Ethylbenzene               | 37                          |          |
| 100-42-5   | Styrene                    | 5                           | U        |
| 1330-20-7  | Xylene (total)             | 510                         |          |

7/27/13

BER123 S23

1F  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GW-AT 30-32'

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

*GW-0513 @ 30-32/*

Lab Code: H2M

Case No.: BER

SAS No.: \_\_\_\_\_

SDG No.: BER123

Matrix: (soil/water)

WATER

Lab Sample ID: 1306773-003A

Sample wt/vol: 5

(g/mL) ML

Lab File ID: 13\G19771

Level: (low/med) LOW

Date Received: 06/13/13

% Moisture: not dec.

Date Analyzed: 06/18/13

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor: 1.00

Soil Extract Volume:

( $\mu$ l)

Soil Aliquot Volume: 0 ( $\mu$ L)

CONCENTRATION UNITS:

Number TICs found:

5

( $\mu$ g/L or  $\mu$ g/Kg)

UG/L

| CAS NUMBER | COMPOUND NAME                 | RT   | EST. CONC. | Q |
|------------|-------------------------------|------|------------|---|
| 1.         | (DEL) Alkane: Branched (2.61) | 2.61 | 180        | J |
| 2.         | (DEL) Alkane: Branched (3.77) | 3.77 | 140        | J |
| 3.         | (DEL) Alkane: Branched (3.91) | 3.91 | 170        | J |
| 4.         | (DEL) Alkane: Branched (4.98) | 4.98 | 110        | J |
| 5.         | (DEL) Alkane: Branched (5.07) | 5.07 | 130        | J |
| 6.         | c3 substituted benzene (7.64) | 7.64 | 230        | J |
| 7.         | c3 substituted benzene (7.7)  | 7.70 | 120        | J |
| 8.         | c3 substituted benzene (7.91) | 7.91 | 240        | J |
| 9.         | c3 substituted benzene (8.24) | 8.24 | 160        | J |
| 10.        | c4 substituted benzene        | 8.27 | 140        | J |

1A

EPA SAMPLE NO.

## VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD BLANK

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: H2MCase No.: BER

SAS No.: \_\_\_\_\_

SDG No.: BER123

Matrix: (soil/water)

WATERLab Sample ID: 1306773-004ASample wt/vol: 5(g/mL) MLLab File ID: 13\G19770.

Level: (low/med)

LOWDate Received: 06/13/13

% Moisture: not dec.

Date Analyzed: 06/18/13GC Column: Rtx-624ID: .18 (mm)Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_

(μL)

Soil Aliquot Volume \_\_\_\_\_

(μL)

## CONCENTRATION UNITS:

CAS NO.

COMPOUND

(μg/L or μg/Kg) UG/L

Q

|            |                            |   |   |
|------------|----------------------------|---|---|
| 74-87-3    | Chloromethane              | 5 | U |
| 74-83-9    | Bromomethane               | 5 | U |
| 75-01-4    | Vinyl chloride             | 5 | U |
| 75-00-3    | Chloroethane               | 5 | U |
| 75-09-2    | Methylene chloride         | 5 | U |
| 67-64-1    | Acetone                    | 7 |   |
| 75-35-4    | 1,1-Dichloroethene         | 5 | U |
| 75-15-0    | Carbon disulfide           | 5 | U |
| 75-34-3    | 1,1-Dichloroethane         | 5 | U |
| 540-59-0   | 1,2-Dichloroethene (total) | 5 | U |
| 67-66-3    | Chloroform                 | 5 | U |
| 107-06-2   | 1,2-Dichloroethane         | 5 | U |
| 78-93-3    | 2-Butanone                 | 2 | J |
| 71-55-6    | 1,1,1-Trichloroethane      | 5 | U |
| 56-23-5    | Carbon tetrachloride       | 5 | U |
| 75-27-4    | Bromodichloromethane       | 5 | U |
| 78-87-5    | 1,2-Dichloropropane        | 5 | U |
| 10061-01-5 | cis-1,3-Dichloropropene    | 5 | U |
| 79-01-6    | Trichloroethene            | 5 | U |
| 124-48-1   | Dibromochloromethane       | 5 | U |
| 79-00-5    | 1,1,2-Trichloroethane      | 5 | U |
| 71-43-2    | Benzene                    | 5 | U |
| 10061-02-6 | trans-1,3-Dichloropropene  | 5 | U |
| 75-25-2    | Bromoform                  | 5 | U |
| 108-10-1   | 4-Methyl-2-pentanone       | 5 | U |
| 591-78-6   | 2-Hexanone                 | 5 | U |
| 127-18-4   | Tetrachloroethene          | 5 | U |
| 79-34-5    | 1,1,2,2-Tetrachloroethane  | 5 | U |
| 108-88-3   | Toluene                    | 5 | U |
| 108-90-7   | Chlorobenzene              | 5 | U |
| 100-41-4   | Ethylbenzene               | 5 | U |
| 100-42-5   | Styrene                    | 5 | U |
| 1330-20-7  | Xylene (total)             | 5 | U |

BER123 S25

JP 7/27/13

1F

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TENTATIVELY IDENTIFIED COMPOUNDS

FIELD BLANK

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: H2MCase No.: BER

SAS No.: \_\_\_\_\_

SDG No.: BER123

Matrix: (soil/water)

WATERLab Sample ID: 1306773-004ASample wt/vol: 5(g/mL) MLLab File ID: 13\G19770.Level: (low/med) LOWDate Received: 06/13/13

% Moisture: not dec.

Date Analyzed: 06/18/13GC Column: Rtx-624ID: .18 (mm)Dilution Factor: 1.00

Soil Extract Volume:

(μl)

Soil Aliquot Volume: 0 (μL)

## CONCENTRATION UNITS:

Number TICs found:

0

(μg/L or μg/Kg)

UG/L

| CAS NUMBER | COMPOUND NAME | RT | EST.CONC. | Q |
|------------|---------------|----|-----------|---|
|------------|---------------|----|-----------|---|

## VOLATILE ORGANICS ANALYSIS DATA SHEET

TRIP BLANK

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: H2MCase No.: BER

SAS No.: \_\_\_\_\_

SDG No.: BER123

Matrix: (soil/water)

WATERLab Sample ID: 1306773-005ASample wt/vol: 5(g/mL) MLLab File ID: 13\G19769.

Level: (low/med)

LOWDate Received: 06/13/13

% Moisture: not dec.

Date Analyzed: 06/18/13GC Column: Rtx-624ID: .18 (mm)Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_

(μL)

Soil Aliquot Volume \_\_\_\_\_

(μL)

## CONCENTRATION UNITS:

CAS NO.

COMPOUND

(μg/L or μg/Kg) UG/L

Q

|            |                            |   |   |
|------------|----------------------------|---|---|
| 74-87-3    | Chloromethane              | 5 | U |
| 74-83-9    | Bromomethane               | 5 | U |
| 75-01-4    | Vinyl chloride             | 5 | U |
| 75-00-3    | Chloroethane               | 5 | U |
| 75-09-2    | Methylene chloride         | 5 | U |
| 67-64-1    | Acetone                    | 5 | U |
| 75-35-4    | 1,1-Dichloroethene         | 5 | U |
| 75-15-0    | Carbon disulfide           | 5 | U |
| 75-34-3    | 1,1-Dichloroethane         | 5 | U |
| 540-59-0   | 1,2-Dichloroethene (total) | 5 | U |
| 67-66-3    | Chloroform                 | 5 | U |
| 107-06-2   | 1,2-Dichloroethane         | 5 | U |
| 78-93-3    | 2-Butanone                 | 5 | U |
| 71-55-6    | 1,1,1-Trichloroethane      | 5 | U |
| 56-23-5    | Carbon tetrachloride       | 5 | U |
| 75-27-4    | Bromodichloromethane       | 5 | U |
| 78-87-5    | 1,2-Dichloropropane        | 5 | U |
| 10061-01-5 | cis-1,3-Dichloropropene    | 5 | U |
| 79-01-6    | Trichloroethene            | 5 | U |
| 124-48-1   | Dibromochloromethane       | 5 | U |
| 79-00-5    | 1,1,2-Trichloroethane      | 5 | U |
| 71-43-2    | Benzene                    | 5 | U |
| 10061-02-6 | trans-1,3-Dichloropropene  | 5 | U |
| 75-25-2    | Bromoform                  | 5 | U |
| 108-10-1   | 4-Methyl-2-pentanone       | 5 | U |
| 591-78-6   | 2-Hexanone                 | 5 | U |
| 127-18-4   | Tetrachloroethene          | 5 | U |
| 79-34-5    | 1,1,2,2-Tetrachloroethane  | 5 | U |
| 108-88-3   | Toluene                    | 5 | U |
| 108-90-7   | Chlorobenzene              | 5 | U |
| 100-41-4   | Ethylbenzene               | 5 | U |
| 100-42-5   | Styrene                    | 5 | U |
| 1330-20-7  | Xylene (total)             | 5 | U |

BER123 S27

8015 7/27/13

1F  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
-----TENTATIVELY IDENTIFIED COMPOUNDS-----

EPA SAMPLE NO.

TRIP BLANK

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: H2M

Case No.: BER

SAS No.: \_\_\_\_\_

SDG No.: BER123

Matrix: (soil/water)

WATER

Lab Sample ID: 1306773-005A

Sample wt/vol: 5

(g/mL) ML

Lab File ID: 13\G19769.

Level: (low/med) LOW

Date Received: 06/13/13

% Moisture: not dec.

Date Analyzed: 06/18/13

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor: 1.00

Soil Extract Volume:

( $\mu$ l)

Soil Aliquot Volume: 0 ( $\mu$ L)

CONCENTRATION UNITS:

Number TICs found:

0

( $\mu$ g/L or  $\mu$ g/Kg)

UG/L

| CAS NUMBER | COMPOUND NAME | RT | EST.CONC. | Q |
|------------|---------------|----|-----------|---|
|------------|---------------|----|-----------|---|



1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

STORAGE BLANK

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: H2M

Case No.: BER

SAS No.: \_\_\_\_\_

SDG No.: BER123

Matrix: (soil/water)

WATER

Lab Sample ID: 1306773-006A

Sample wt/vol: 5

(g/mL) ML

Lab File ID: 13\G19804.

Level: (low/med)

LOW

Date Received: 06/13/13

% Moisture: not dec.

Date Analyzed: 06/20/13

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_

(µL)

Soil Aliquot Volume \_\_\_\_\_

(µL)

CONCENTRATION UNITS:

CAS NO.

COMPOUND

(µg/L or µg/Kg) UG/L

Q

|            |                            |   |   |
|------------|----------------------------|---|---|
| 74-87-3    | Chloromethane              | 5 | U |
| 74-83-9    | Bromomethane               | 5 | U |
| 75-01-4    | Vinyl chloride             | 5 | U |
| 75-00-3    | Chloroethane               | 5 | U |
| 75-09-2    | Methylene chloride         | 5 | U |
| 67-64-1    | Acetone                    | 5 | U |
| 75-35-4    | 1,1-Dichloroethene         | 5 | U |
| 75-15-0    | Carbon disulfide           | 5 | U |
| 75-34-3    | 1,1-Dichloroethane         | 5 | U |
| 540-59-0   | 1,2-Dichloroethene (total) | 5 | U |
| 67-66-3    | Chloroform                 | 5 | U |
| 107-06-2   | 1,2-Dichloroethane         | 5 | U |
| 78-93-3    | 2-Butanone                 | 5 | U |
| 71-55-6    | 1,1,1-Trichloroethane      | 5 | U |
| 56-23-5    | Carbon tetrachloride       | 5 | U |
| 75-27-4    | Bromodichloromethane       | 5 | U |
| 78-87-5    | 1,2-Dichloropropane        | 5 | U |
| 10061-01-5 | cis-1,3-Dichloropropene    | 5 | U |
| 79-01-6    | Trichloroethene            | 5 | U |
| 124-48-1   | Dibromochloromethane       | 5 | U |
| 79-00-5    | 1,1,2-Trichloroethane      | 5 | U |
| 71-43-2    | Benzene                    | 5 | U |
| 10061-02-6 | trans-1,3-Dichloropropene  | 5 | U |
| 75-25-2    | Bromoform                  | 5 | U |
| 108-10-1   | 4-Methyl-2-pentanone       | 5 | U |
| 591-78-6   | 2-Hexanone                 | 5 | U |
| 127-18-4   | Tetrachloroethene          | 5 | U |
| 79-34-5    | 1,1,2,2-Tetrachloroethane  | 5 | U |
| 108-88-3   | Toluene                    | 5 | U |
| 108-90-7   | Chlorobenzene              | 5 | U |
| 100-41-4   | Ethylbenzene               | 5 | U |
| 100-42-5   | Styrene                    | 5 | U |
| 1330-20-7  | Xylene (total)             | 5 | U |

20/7/2013

BER123 S29

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

STORAGE BLANK

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: H2MCase No.: BER

SAS No.: \_\_\_\_\_

SDG No.: BER123

Matrix: (soil/water)

WATERLab Sample ID: 1306773-006ASample wt/vol: 5(g/mL) MLLab File ID: 13\G19804.Level: (low/med) LOWDate Received: 06/13/13

% Moisture: not dec.

Date Analyzed: 06/20/13GC Column: Rtx-624ID: .18 (mm)Dilution Factor: 1.00

Soil Extract Volume:

(μl)

Soil Aliquot Volume: 0 (μL)

## CONCENTRATION UNITS:

Number TICs found:

0

(μg/L or μg/Kg)

UG/L

| CAS NUMBER | COMPOUND NAME | RT | EST.CONC. | Q |
|------------|---------------|----|-----------|---|
|------------|---------------|----|-----------|---|

**Appendix B  
Chain of Custody  
Documents**

|  |  |  |  |                                   |  |   |  |
|--|--|--|--|-----------------------------------|--|---|--|
| <b>PROJECT NAME/NUMBER</b><br>Quick and Clean<br>380 Prockaway Turnpike Cedarhurst, NY |  | <b>CLIENT:</b> BEI                                   |  | <b>H2M SDG NO:</b> BE123          |  | <b>NOTES:</b>   |  |
| <b>DELIVERABLES:</b> ASP-Cat-B   |  | <b>TURNAROUND TIME:</b> Normal                       |  | <b>Project Contact:</b> Justin H. |  | <b>Phone Number:</b> 589 6521   |  |
| <b>SAMPLERS:</b> (signature)/Client<br>(Signature) (BEI)                               |  | <b>Sample Container Description</b><br>40 mil (8260) |  | <b>Project Contact:</b> Justin H. |  | <b>Phone Number:</b> 589 6521   |  |
| <b>DATE</b> <b>TIME</b> <b>MATRIX</b> <b>FIELD I.D.</b>                                |  | <b>ANALYSIS REQUESTED</b>                            |  | <b>LAB I.D. NO.</b>               |  | <b>REMARKS:</b>   |  |
| 6/13/13 9:00 W G-0513210-12 (mslmsd)   |  | ORGANIC: VOA, PCB, PAH                               |  | INORG: Metal                      |  | 1306773-001   |  |
| 6/13/13 9:15 W G-0513220-22  |  | ORGANIC: VOA, PCB, PAH                               |  | INORG: Metal                      |  | -002  |  |
| 6/13/13 9:30 W G-0513230-32  |  | ORGANIC: VOA, PCB, PAH                               |  | INORG: Metal                      |  | -003  |  |
| 6/13/13 10:00 W Field Blank  |  | ORGANIC: VOA, PCB, PAH                               |  | INORG: Metal                      |  | -004  |  |
| 6/13/13 - Trip Blank   |  | ORGANIC: VOA, PCB, PAH                               |  | INORG: Metal                      |  | -005  |  |
| <b>Relinquished by:</b> (Signature)  |  | <b>Received by:</b> (Signature)                      |  | <b>Date</b> <b>Time</b>           |  | <b>Discrepancies Between Sample Labels and COC Record?</b> Y or N         |  |
| 6/13/13 2:20 G.P.  |  | 6/13/13 14:20  |  | 6/13/13 14:20                     |  | Explain:  |  |
| <b>Relinquished by:</b> (Signature)  |  | <b>Received by:</b> (Signature)                      |  | <b>Date</b> <b>Time</b>           |  | 1. Shipped or Hand Delivered <input checked="" type="checkbox"/> Airbill# |  |
| 6/13/13 14:20  |  | 6/13/13 14:20  |  | 6/13/13 14:20                     |  | 2. Ambient or Cooled Temp. 3.6 °C   |  |
| <b>Relinquished by:</b> (Signature)  |  | <b>Received by:</b> (Signature)                      |  | <b>Date</b> <b>Time</b>           |  | 3. Received in good condition: Y or N                                     |  |
| 6/13/13 14:20  |  | 6/13/13 14:20  |  | 6/13/13 14:20                     |  | 4. Property preserved: Y or N   |  |
| <b>Relinquished by:</b> (Signature)  |  | <b>Received by:</b> (Signature)                      |  | <b>Date</b> <b>Time</b>           |  | <b>COC Table was:</b>   |  |
| 6/13/13 14:20  |  | 6/13/13 14:20  |  | 6/13/13 14:20                     |  | 1. Present on outer package: Y or N                                       |  |
| <b>Relinquished by:</b> (Signature)  |  | <b>Received by:</b> (Signature)                      |  | <b>Date</b> <b>Time</b>           |  | 2. Unbroken on outer package: Y or N                                      |  |
| 6/13/13 14:20  |  | 6/13/13 14:20  |  | 6/13/13 14:20                     |  | 3. COC record present & complete upon sample receipt: Y or N              |  |



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H2M LABS INC

575 Broad Hollow Rd.

Melville, NY 11747

TEL: (631) 694-3040 FAX: (631) 420-8436

Website: www.h2mlabs.com

## Sample Receipt Checklist

Client Name **BER**Date and Time Received: **6/13/2013 14:20:00**Work Order Number: **1306773**RcptNo: **1**Received by: **MelissaWatson**

Completed by:

Reviewed by:

Completed Date:

**6/14/2013**

Reviewed Date:

Carrier name: Client

Chain of custody present?

Yes ☒No ☐

Chain of custody signed when relinquished and received?

Yes ☒No ☐

Chain of custody agrees with sample labels?

Yes ☒No ☐

Are matrices correctly identified on Chain of custody?

Yes ☒No ☐

Is it clear what analyses were requested?

Yes ☒No ☐

Custody seals intact on sample bottles?

Yes ☐No ☐Not Present ☒

Samples in proper container/bottle?

Yes ☒No ☐

Were correct preservatives used and noted?

Yes ☒No ☐NA ☐

Preservative added to bottles:

Sample Condition?

Intact ☒Broken ☐Leaking ☐

Sufficient sample volume for indicated test?

Yes ☒No ☐

Were container labels complete (ID, Pres, Date)?

Yes ☒No ☐

All samples received within holding time?

Yes ☒No ☐

Was an attempt made to cool the samples?

Yes ☒No ☐NA ☐

All samples received at a temp. of &gt; 0° C to 6.0° C?

Yes ☒No ☐NA ☐

Response when temperature is outside of range:

Sample Temp. taken and recorded upon receipt?

Yes ☒No ☐

To 3.6 °

Water - Were bubbles absent in VOC vials?

Yes ☐No ☒No Vials ☐

Water - Was there Chlorine Present?

Yes ☐No ☐NA ☒

Water - pH acceptable upon receipt?

Yes ☒No ☐No Water ☐

Are Samples considered acceptable?

Yes ☒No ☐

Custody Seals present?

Yes ☐No ☒

Airbill or Sticker?

Air Bill ☐Sticker ☐Not Present ☒

Airbill No:

Case Number:

SDG:

SAS:

BER123

Any No response should be detailed in the comments section below, if applicable.

Client Contacted?

☐ Yes☒ No

Person Contacted:

Contact Mode:

☐ Phone:☐ Fax:☐ Email:☐ In Person:

Client Instructions:

Date Contacted:

Contacted By:

Regarding:

Comments:

5 vials from 001, 1 vial from sample 002, and 2 vials from sample 003 have headspace bubbles. All diameters are less than 1cm. Justin gave approval to proceed with analysis.

CorrectiveAction:

BER123 S7

## **Appendix C**

### **SDG Narratives**





labs

575 Broad Hollow Road  
Melville, NY 11747

tel 631.694.3040  
fax 631.420.8436

**SDG NARRATIVE FOR VOLATILE ANALYSES**  
**SAMPLES RECEIVED: 6/13/13**  
**SDG#: BER123**

For Sample(s):

|                   |               |
|-------------------|---------------|
| GW-0513 AT 10-12' | FIELD BLANK   |
| GW-0513 AT 20-22' | TRIP BLANK    |
| GW-0513 AT 30-32' | STORAGE BLANK |

The above sample(s) was/were analyzed for a specific list of volatile organic analytes by EPA method 8260. Data are reported according to the requirements of NYSDEC ASP 2000, Category B.

All quality control and calibration requirements were met, unless discussed below. The following should be noted:

Sample GW-0513 AT 10-12' was submitted for matrix spike/ matrix spike duplicate (MS/MSD) analysis. The percent recoveries and RPDs were within the Q. C. limits, and recoveries for the matrix spike blank and the lab fortified blank(s) (LFB) met the control limits.

Sample GW-0513 AT 20-22' was reanalyzed at a dilution due to concentration levels of targeted analytes above the calibration range. Both sets of data are submitted. In the undiluted sample, the recovery for the surrogate 1,2-dichloroethane-d4 was above the Q. C. limit.

Bromoform had a %D above 25% in the continuing calibration of 6/20/13.

As per protocol, TICs identified as alkanes are not counted as TICs, but they are included in the TIC reports.

**I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.**

Date Reported: July 3, 2013

\*\*\*\*\*  
\* *Ursula Middel* \*  
\* \*  
\*\*\*\*\*  
Ursula Middel  
Technical Manager

BER123 S11

**Appendix D**  
**NYSDEC ASP Summary Forms**

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE IDENTIFICATION AND  
ANALYTICAL REQUIREMENT SUMMARY

SDG: BER123

Analytical Requirements

| Customer<br>Sample<br>Code | Laboratory<br>Sample<br>Code | MSVOA |
|----------------------------|------------------------------|-------|
| GW-0513 AT 10-12'          | 1306773-001                  | X     |
| GW-0513 AT 20-22'          | 1306773-002                  | X     |
| GW-0513 AT 30-32'          | 1306773-003                  | X     |
| FIELD BLANK                | 1306773-004                  | X     |
| TRIP BLANK                 | 1306773-005                  | X     |
| STORAGE BLANK              | 1306773-006                  | X     |

CLP, Non-CLP (Please indicate year of protocol)  
TCL/TAL, HSL, Priority Pollutant,

ADP 3 2000  
7/19/13

BER123 S3

# NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

## SAMPLE PREPARATION AND ANALYSIS SUMMARY

### VOLATILE (VOA)

### ANALYSES

SDG: BER123

| Laboratory<br>Samp ID | Client Sample ID | Matrix  | Analytical<br>Protocol | Date<br>Collected | Date/Recd<br>at Lab | Date<br>Extracted | Date<br>Analyzed | Extraction<br>Method | DF | Level | Aux Cleanup |
|-----------------------|------------------|---------|------------------------|-------------------|---------------------|-------------------|------------------|----------------------|----|-------|-------------|
| 1306773-001A          | GW-AT 10-12'     | Aqueous | ASPB 8260              | 11-Jun-13         | 13-Jun-13           |                   | 18-Jun-13        |                      | 1  | LOW   |             |
| 1306773-001AMS        | GW-AT 10-12'MS   | Aqueous | ASPB 8260              | 11-Jun-13         | 13-Jun-13           |                   | 18-Jun-13        |                      | 1  | LOW   |             |
| 1306773-001AMSD       | GW-AT 10-12'MSD  | Aqueous | ASPB 8260              | 11-Jun-13         | 13-Jun-13           |                   | 18-Jun-13        |                      | 1  | LOW   |             |
| 1306773-002A          | GW-AT 20-22'     | Aqueous | ASPB 8260              | 11-Jun-13         | 13-Jun-13           |                   | 18-Jun-13        |                      | 1  | LOW   |             |
| 1306773-002ADL        | GW-AT 20-22'DL   | Aqueous | ASPB 8260              | 11-Jun-13         | 13-Jun-13           |                   | 20-Jun-13        |                      | 25 | LOW   |             |
| 1306773-003A          | GW-AT 30-32'     | Aqueous | ASPB 8260              | 11-Jun-13         | 13-Jun-13           |                   | 18-Jun-13        |                      | 1  | LOW   |             |
| 1306773-004A          | FIELD BLANK      | Aqueous | ASPB 8260              | 11-Jun-13         | 13-Jun-13           |                   | 18-Jun-13        |                      | 1  | LOW   |             |
| 1306773-005A          | TRIP BLANK       | Aqueous | ASPB 8260              | 11-Jun-13         | 13-Jun-13           |                   | 18-Jun-13        |                      | 1  | LOW   |             |
| 1306773-006A          | STORAGE BLANK    | Aqueous | ASPB 8260              | 13-Jun-13         | 13-Jun-13           |                   | 20-Jun-13        |                      | 1  | LOW   |             |

**DATA USABILITY SUMMARY REPORT – DUSR  
DATA VALIDATION SUMMARY**

**ORGANIC ANALYSIS**

**TARGET COMPOUND LIST (TCL) VOLATILES BY GC/MS**

**For Groundwater Samples Collected  
October 02, 2013, October 10, 2013 and October 11, 2013  
From 380 Rockaway Turnpike, Cedarhurst, NY  
Former Quick and Clean  
Collected by Berninger Environmental, Inc.**

**SAMPLE DELIVERY GROUP NUMBERS:  
BER126 and BER 128  
BY H2M Labs, Inc. (ELAP #10478)**

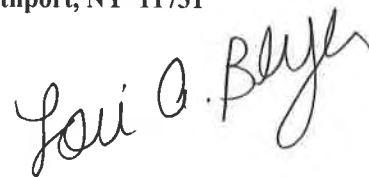
**SUBMITTED TO:**

**Mr. Walter Berninger/President  
Berninger Environmental  
90-B Knickerbocker Avenue  
Bohemia, NY 11716**

**November 11, 2013**

**PREPARED BY:**

**Lori A. Beyer/President  
L.A.B. Validation Corp.  
14 West Point Drive  
East Northport, NY 11731**

A handwritten signature in black ink, reading "Lori A. Beyer", is written over the printed name and address of the preparer.

Former Quick and Clean, 380 Rockaway Turnpike, Cedarhurst, New York- Groundwater Samples;  
October 2013 Sampling Event  
Data Usability Summary Report (Data Validation): TCL Volatiles

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**APPENDICES:**

- A. Data Summary Tables/Form Is with Qualifications
- B. Chain of Custody Documents
- C. SDG Narratives
- D. NYSDEC ASP Summary Forms

**Introduction:**

A validation was performed on groundwater samples and the associated quality control samples for organic analysis for samples collected under chain of custody documentation by Berninger Environmental Inc. and submitted to H2M Labs, Inc. for subsequent analysis. This report contains the laboratory and validation results for the field samples itemized below. The groundwater samples were collected on October 02, 2013, October 10, 2013 and October 11, 2013.

The samples were analyzed by H2M Labs, Inc., utilizing SW846 and submitted under NYSDEC ASP (2000) Category B equivalent deliverable requirements for the associated analytical methodologies employed. The analytical testing consisted of the Target Compound/Analyte Lists for Volatile Organics.

The data was evaluated in accordance with EPA Region II National Functional Guidelines for Organic Data Review and EPA Region II SOPs for 8260 and also in conjunction with the analytical methodologies for which the samples were analyzed, where applicable and relevant.

The data validation report pertains to the following samples:

| <b>Sample Identification</b>    | <b>Laboratory Identification</b> | <b>Sample Matrix</b> | <b>Date Collected</b> | <b>Date Received</b> |
|---------------------------------|----------------------------------|----------------------|-----------------------|----------------------|
| EP-15 @ 60-64'<br>(plus MS/MSD) | 1310202-001                      | Groundwater          | 10/02/13              | 10/03/13             |
| Field Blank                     | 1310202-002                      | Aqueous              | 10/02/13              | 10/03/13             |
| Trip Blank                      | 1310202-003                      | Aqueous              | 10/02/13              | 10/03/13             |
| EP-13 @ 60-62'<br>(plus MS/MSD) | 1310705-001                      | Groundwater          | 10/10/13              | 10/11/13             |
| EP-18 @ 60-62'                  | 1310705-002                      | Groundwater          | 10/10/13              | 10/11/13             |
| GW-061013 @ 20-24'              | 1301705-003                      | Groundwater          | 10/10/13              | 10/11/13             |
| GW-061013 @ 30-34'              | 1301705-004                      | Groundwater          | 10/10/13              | 10/11/13             |
| GW-061013 @ 40-44'              | 1301705-005                      | Groundwater          | 10/10/13              | 10/11/13             |
| GW-061013 @ 50-54'              | 1301705-006                      | Groundwater          | 10/10/13              | 10/11/13             |
| GW-061013 @ 60-64'              | 1301705-007                      | Groundwater          | 10/10/13              | 10/11/13             |
| GW-071013 @ 20-24'              | 1301705-008                      | Groundwater          | 10/10/13              | 10/11/13             |
| GW-071013 @ 30-34'              | 1301705-009                      | Groundwater          | 10/10/13              | 10/11/13             |
| GW-071013 @ 40-44'              | 1301705-010                      | Groundwater          | 10/10/13              | 10/11/13             |
| GW-071013 @ 50-54'              | 1301705-011                      | Groundwater          | 10/10/13              | 10/11/13             |
| GW-071013 @ 60-64'              | 1301705-012                      | Groundwater          | 10/10/13              | 10/11/13             |
| GW-081013 @ 20-24'              | 1301705-013                      | Groundwater          | 10/11/13              | 10/11/13             |
| GW-081013 @ 30-34'              | 1301705-014                      | Groundwater          | 10/11/13              | 10/11/13             |
| GW-081013 @ 40-44'              | 1301705-015                      | Groundwater          | 10/11/13              | 10/11/13             |
| GW-081013 @ 50-54'              | 1301705-016                      | Groundwater          | 10/11/13              | 10/11/13             |
| GW-081013 @ 60-64'              | 1301705-017                      | Groundwater          | 10/11/13              | 10/11/13             |



|                    |             |             |          |          |
|--------------------|-------------|-------------|----------|----------|
| GW-091013 @ 20-24' | 1301705-018 | Groundwater | 10/11/13 | 10/11/13 |
| GW-091013 @ 30-34' | 1301705-019 | Groundwater | 10/11/13 | 10/11/13 |
| GW-091013 @ 40-44' | 1301705-020 | Groundwater | 10/11/13 | 10/11/13 |
| GW-091013 @ 50-54' | 1301705-021 | Groundwater | 10/11/13 | 10/11/13 |
| GW-091013 @ 60-64' | 1301705-022 | Groundwater | 10/11/13 | 10/11/13 |
| Field Blank        | 1301705-023 | Aqueous     | 10/11/13 | 10/11/13 |
| Trip Blank         | 1301705-024 | Aqueous     | 10/11/13 | 10/11/13 |

**Data Qualifier Definitions:**

The following definitions provide brief explanations of the qualifiers assigned to results in the data review process.

**U - The analyte was analyzed for, but was not detected above the reported sample quantitation limit.**

**J - The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.**

**UJ - The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.**

**R - The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.**

**N - The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."**

**NJ - The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate quantity.**

**D - Indicates the concentration was obtained from diluted analysis.**

**Sample Receipt:**

The Chain of Custody documents indicate that the samples were hand delivered by Berninger Environmental field sampling personnel and received at H2M Labs on 10/03/13 and 10/11/13 upon completion of each sampling event. Sample login notes were generated. The cooler temperature for all samples was recorded upon receipt at H2M Labs. Samples were chilled but determined to be 10.2 degrees C for sample EP-15 @ 60-64' which was received the day after collection. The temperature of the 10/11/13 samples was determined to be acceptable (<6.0 degrees C). The actual temperature is recorded on the chain of custody documents provided in Appendix B of this report.

Results for EP-15 @ 60-64' have been qualified, J/UJ."

Several samples were noted upon receipt to contain small air bubbles. Specifically, EP-18, GW-061013 @ 40-44' and GW-071013 @ 40-44' both contained some headspace. Based on professional judgment, no qualifications to the data were made. Additionally, one vial for GW-061013 @ 20-24' and GW-071013 @ 60-64' and GW-081013 @ 50-54' was documented by H2M sample receipt with small air bubbles. It is assumed that the laboratory performed analysis from the vial without documented air bubbles.

No unresolved problems and/or discrepancies were noted, consequently, the integrity of the samples has been assumed to be good.

The data summary tables included in Appendix A includes all usable (qualified) and unusable (rejected) results for the samples identified above. These tables summarize the detailed narrative section of the report.

**NOTE:**

L.A.B. Validation Corp. believes it is appropriate to note that the data validation criteria utilized for data evaluation is different than the method requirements utilized by the laboratory. Qualified data does not necessarily mean that the laboratory was non-compliant in the analysis that was performed.

**1.0 Target Analyte List (TCL) Volatile Organics by GC/MS SW846 Method 8260**

The following method criteria were reviewed: holding times, SMCs, MS, MSD, LCS, Laboratory Spiked Blanks, Method Blanks, Tunes, Calibrations, Internal Standards, Target Component Identification, Quantitation, Reported Quantitation Limits and Overall System Performance. The Volatile results were considered to be valid and useable as noted within the following as noted within the following text:

### **1.1 Holding Time**

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the technical holding time is exceeded, the data may not be considered valid. Those analytes detected in the samples whose holding time has been exceeded will be qualified as estimates, "J". The non-detects (sample quantitation limits) are required to be flagged as estimated, "UJ", or unusable, "R", if the holding times are grossly exceeded.

**Samples pertaining to these SDGs were performed within the Method required holding times as well as the technical holding times for data validation of 14 days from collection to analysis. No data validation qualifiers were required based upon holding time.**

### **1.2 System Monitoring Compound (Surrogate) Recovery**

All samples are spiked with surrogate compounds prior to sample analysis to evaluate overall laboratory performance and efficiency of the analytical technique. If the measure of surrogate concentrations is outside contract specifications, qualifications are required to be applied to associated samples and analytes.

**Surrogate recoveries (%R) were found to be within acceptable limits for all three (3) surrogate compounds for all analyses pertaining to these SDGs.**

### **1.3 Matrix Spikes (MS)/ Matrix Spike Duplicates (MSD)**

The MS/MSD data are generated to determine the long-term precision and accuracy of the analytical method in various matrices and to demonstrate acceptable compound recovery by the laboratory at the time of sample analysis. The MS/MSD may be used in conjunction with other QC criteria for additional qualification of data.

**Groundwater MS/MSD analysis was conducted on EP-15 @ 60-64' as requested by Berninger field sampling personnel. All RPD values fell within in house established QC ranges. The spiking recovery for 1,1-Dichloroethene fell below acceptance limits in the MSD (57%). Based on acceptable LCS, no qualifications to the data were made.**

**Groundwater MS/MSD analysis was also conducted on EP-13 @ 60-62' as requested by Berninger field sampling personnel. All spike recoveries and RPD values fell within in house established QC ranges.**

#### 1.4 Laboratory Control Sample/Fortified Blank Spikes

The LCS data for laboratory control samples (LCS) are generated to provide information on the accuracy of the analytical method and on the laboratory performance.

**LCS/Fortified Blank Spike recovery values fell within acceptance limits.**

#### 1.5 Blank Contamination

Quality assurance (QA) blanks; i.e. method, trip and field blanks are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Trip blanks measure cross-contamination of samples during shipment. Field blanks measure cross-contamination of samples during field operations.

The following table was utilized to qualify target analyte results due to contamination. The largest value from all the associated blanks is required to be utilized:

| <b>For:</b>                                       | <b>Flag Sample Result with a "U" when:</b>             | <b>Report CRQL &amp; Qualify "U" when:</b>            | <b>No Qualification is Needed when:</b>            |
|---|--|---|--|
| Methylene Chloride, Acetone, Toluene & 2-Butanone | Sample Conc. Is >CRQL, but $\leq 10\times$ blank value | Sample Conc. is <CRQL and $\leq 10\times$ blank value | Sample Conc. is >CRQL and $> 10\times$ blank value |
| Other Contaminants                                | Sample Conc. Is >CRQL, but $\leq 5\times$ blank value  | Sample Conc. Is <CRQL and $\leq 5\times$ blank value  | Sample Conc. is >CRQL and $> 5\times$ blank value  |

Below is a summary of the compounds in the sample and the associated qualifications that have been applied:

**A) Method Blank Contamination:**

**No target/non target analytes were detected in the method blanks associated with sample analysis.**

**B) Field Blank Contamination:**

**Acetone was detected at acceptable levels in both Field Blanks pertaining to these SDGs and was negated in all field samples based on the above criteria.**

- C) Trip Blank Contamination:**  
**No target/non target analytes were detected in the Trip Blanks associated with these sampling events.**
- D) Storage Blanks**  
**No target/non target analytes were detected in the Storage Blanks associated with these sampling events.**

#### **1.6 GC/MS Instrument Performance Check**

Tuning and performance criteria are established to ensure adequate mass resolution, proper identification of compounds and to some degree, sufficient instrument sensitivity. These criteria are not sample specific. Instrument performance is determined using standard materials. Therefore, these criteria should be met in all circumstances. The Tuning standard for volatile organics is Bromofluorobenzene (BFB).

**Instrument performance was generated within acceptable limits and frequency for Bromofluorobenzene (BFB) for all analyses conducted for these SDGs.**

#### **1.7 Initial and Continuing Calibrations**

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of giving acceptable performance at the beginning of an experimental sequence. The continuing calibration checks document that the instrument is giving satisfactory daily performance.

- A) Response Factor GC/MS:**  
The response factor measures the instrument's response to specific chemical compounds. The response factor for all compounds must be  $\geq 0.05$  in both initial and continuing calibrations. A value  $< 0.05$  indicates a serious detection and quantitation problem (poor sensitivity). Analytes detected in the sample will be qualified as estimated, "J". All non-detects for that compound in the corresponding samples will be rejected, "R".

**All the response factors for the target analytes reported were found to be within acceptable limits ( $\geq 0.05$ ), for the initial and continuing calibrations for all reported TCL analytes.**

**B) Percent Relative Standard Deviation (%RSD) and Percent Difference (%D):**

Percent RSD is calculated from the initial calibration and is used to indicate the stability of the specific compound response factor over increasing concentrations. Percent D compares the response factor of the continuing calibration check to the mean response factor (RRF) from the initial calibration. Percent D is a measure of the instrument's daily performance. Percent RSD must be  $< 30\%$  and %D must be  $< 25\%$ . A value outside of these limits indicates potential detection and quantitation errors. For these reasons, all positive results are flagged as estimated, "J" and non-detects are flagged "UJ". If %RSD and %D grossly exceed QC criteria, non-detect data may be qualified, "R", unusable. Additionally, in cases where the %RSD is  $> 30\%$  and eliminating either the high or the low point of the curve does not restore the %RSD to less than or equal to 30% then positive results are qualified, "J". In cases where removal of either the low or high point restores the linearity, then only low or high level results will be qualified, "J" in the portion of the curve where non linearity exists.

**Initial Calibrations: The initial calibrations provided and the %RSD were within acceptable limits (30%) for all reported compounds with the exception of Acetone (57.9%). Non-detects for all samples must be considered estimated, "UJ" for Acetone.**

**Continuing Calibrations: The continuing calibrations provided and the %D was within acceptable limits (25%) for all reported compounds with the following exceptions:**

**CCAL 10/04/13 Instrument HP5972-2; Acetone 27.1%; this analyte was negated due to field blank contamination, however, the reported validated non-detected concentrations must be considered estimated, "UJ" in EP-15 @ 60-64', Field Blank (10/02) and Trip Blank (10/02). Additionally, Bromomethane %D = 26.7. Non-detects have been qualified "UJ" for these samples.**

**CCAL 10/14/13 Instrument HP 5972-2; Bromomethane 32.6% and Toluene 31.3%. "UJ" non-detects in samples Trip Blank (10/10), Field Blank (10/10), EP-13 @ 60-62', EP18 @ 60-62', GW-061013 @ 20-24', GW-061013 @ 30-34', GW-061013 @ 40-44', GW-061013 @ 50-54', GW-061013 @ 60-64' and GW-071013 @ 20-24'.**

## **1.8 Internal Standards**

Internal Standards (IS) performance criteria ensure that the GC/MS sensitivity and response are stable during every experimental run. The internal standard area count must not vary by more than a factor of 2 (-50% to +100%) from the associated continuing calibration standard. The retention time of the internal standard must not vary more than +/- 30 seconds from the associated continuing calibration standard. If the area count is outside the (-50% to +100%) range of the associated standard, all of the positive results for compounds quantitated using that IS are qualified as estimated, "J", and all non-detects as "UJ", or "R" if there is a severe loss of sensitivity.

If an internal standard retention time varies by more than 30 seconds, professional judgment will be used to determine either partial or total rejection of the data for that sample fraction.

**All samples were spiked with the internal standards Bromochloromethane, 1,4-Difluorobenzene and Chlorobenzene-d5 prior to sample analysis. The area responses and retention time of each internal standard met QC criteria in all samples associated with these SDGs.**

## **1.9 Field Duplicates**

**Field duplicate samples are collected and analyzed as an indication of overall precision. These results are expected to have more variability than laboratory duplicate samples. Generally for water samples an acceptable RPD is 10%.**

**Field Duplicate analysis was not collected as part of this sampling event.**



#### **1.10 Target Compound List Identification**

TCL compounds are identified on the GC/MS by using the analyte's relative retention time (RRT) and by comparison to the ion spectra obtained from known standards. For the results to be a positive hit, the sample peak must be within  $\pm 0.06$ RRT units of the standard compound and have an ion spectra which has a ratio of the primary and secondary m/e intensities within 20% of that in the standard compound.

**GC/MS spectra met the qualitative criteria for identification. All retention times were within required specifications.**

#### **1.10 Compound Quantification and Reported Detection Limits**

GC/MS quantitative analysis is considered to be acceptable. Correct internal standards per SW846, response factors were used to calculate final concentrations.

**As required, the laboratory reported "J" values between the limit of quantitation (LOQ) and limit of detection (LOD). This is consistent with common laboratory practices and a requirement of the National Environmental Laboratory Approval Program (NELAP).**

**Tentatively identified compounds were detected field samples. The total TIC concentration is presented in the spreadsheets in Appendix A. Non target constituents primarily consist of aromatic hydrocarbons and aromatic substituted benzene compounds.**

**All groundwater samples were analyzed undiluted at 5mls.**

**The end user should proceed with caution when making decisions based on Carbon Disulfide and 2-Butanone concentrations since these compounds are common laboratory contaminants but could not be negated during the review process.**

#### **1.11 Overall System Performance**

**Good resolution and chromatographic performance were observed. Raw data was reviewed and confirmed that no carryover exists for any analysis conducted with this data set.**

Reviewer's Signature *Louisa Bayle* Date 11/11/13

**Appendix A  
Data Summary Tables and Form I's  
With Qualifications**

## VOLATILES BY SW846 METHOD 8260

BERNINGS ENVIRONMENTAL  
Project: FORMER QUICK AND CLEAN  
Laboratory: H2M; BER128, BER128  
Sample Identification:  
Container ID:  
Sampling Date:

| Can #      | Analyte                          | Unit: | EP-15 @ 80-64°<br>1310202-001<br>10/22/2013 | Field Blank<br>1310202-002<br>10/22/2013 | Tri-Blank<br>1310202-003<br>10/22/2013 | EP-13 @ 80-62°<br>1310705-001<br>10/10/2013 | EP-18 @ 80-62°<br>1310705-002<br>10/10/2013 | GW-461013 @ 20-24°<br>1310705-003<br>10/10/2013 | GW-461013 @ 30-34°<br>1310705-004<br>10/10/2013 |
|------------|----------------------------------|-------|---|--|--|---|---|---|---|
| 74-83-9    | Acetone                          | ug/L  | 5 UJ  | 5 UJ                                     | 5 UJ                                   | 5 UJ  | 5 UJ  | 5 UJ  | 5 UJ  |
| 75-01-4    | Bromochloromethane               | ug/L  | 5 UJ  | 5 UJ                                     | 5 UJ                                   | 5 UJ  | 5 UJ  | 5 UJ  | 5 UJ  |
| 75-00-3    | Bromodichloromethane             | ug/L  | 5 UJ  | 5 UJ                                     | 5 UJ                                   | 5 UJ  | 5 UJ  | 5 UJ  | 5 UJ  |
| 75-00-2    | Chloroethane                     | ug/L  | 5 UJ  | 5 UJ                                     | 5 UJ                                   | 5 UJ  | 5 UJ  | 5 UJ  | 5 UJ  |
| 75-00-1    | Chloroform                       | ug/L  | 5 UJ  | 5 UJ                                     | 5 UJ                                   | 5 UJ  | 5 UJ  | 5 UJ  | 5 UJ  |
| 75-15-0    | Carbon tetrachloride             | ug/L  | 5 UJ  | 5 UJ                                     | 5 UJ                                   | 5 UJ  | 5 UJ  | 5 UJ  | 5 UJ  |
| 75-35-4    | 1,1-Dichloroethane               | ug/L  | 5 UJ  | 5 UJ                                     | 5 UJ                                   | 5 UJ  | 5 UJ  | 5 UJ  | 5 UJ  |
| 75-34-3    | 1,1-Dichloroethene (total)       | ug/L  | 5 UJ  | 5 UJ                                     | 5 UJ                                   | 5 UJ  | 5 UJ  | 5 UJ  | 5 UJ  |
| 540-59-0   | Chlorobenzene                    | ug/L  | 5 UJ  | 5 UJ                                     | 5 UJ                                   | 5 UJ  | 5 UJ  | 5 UJ  | 5 UJ  |
| 67-66-3    | 1,2-Dichlorobenzene              | ug/L  | 5 UJ  | 5 UJ                                     | 5 UJ                                   | 5 UJ  | 5 UJ  | 5 UJ  | 5 UJ  |
| 78-07-2    | 2,4-Dichlorobenzene              | ug/L  | 5 UJ  | 5 UJ                                     | 5 UJ                                   | 5 UJ  | 5 UJ  | 5 UJ  | 5 UJ  |
| 78-09-3    | 2,6-Dichlorobenzene              | ug/L  | 5 UJ  | 5 UJ                                     | 5 UJ                                   | 5 UJ  | 5 UJ  | 5 UJ  | 5 UJ  |
| 71-55-6    | 1,1,1-Trichloroethane            | ug/L  | 5 UJ  | 5 UJ                                     | 5 UJ                                   | 5 UJ  | 5 UJ  | 5 UJ  | 5 UJ  |
| 56-23-5    | Carbon tetrachloride             | ug/L  | 5 UJ  | 5 UJ                                     | 5 UJ                                   | 5 UJ  | 5 UJ  | 5 UJ  | 5 UJ  |
| 75-27-4    | Bromodichloromethane             | ug/L  | 5 UJ  | 5 UJ                                     | 5 UJ                                   | 5 UJ  | 5 UJ  | 5 UJ  | 5 UJ  |
| 75-27-5    | Bromochloromethane               | ug/L  | 5 UJ  | 5 UJ                                     | 5 UJ                                   | 5 UJ  | 5 UJ  | 5 UJ  | 5 UJ  |
| 10081-01-5 | 1,1,1,2-Tetrachloroethane        | ug/L  | 5 UJ  | 5 UJ                                     | 5 UJ                                   | 5 UJ  | 5 UJ  | 5 UJ  | 5 UJ  |
| 79-01-6    | Trichloroethane                  | ug/L  | 5 UJ  | 5 UJ                                     | 5 UJ                                   | 5 UJ  | 5 UJ  | 5 UJ  | 5 UJ  |
| 124-46-1   | Dibromochloromethane             | ug/L  | 5 UJ  | 5 UJ                                     | 5 UJ                                   | 5 UJ  | 5 UJ  | 5 UJ  | 5 UJ  |
| 79-00-5    | Benzene                          | ug/L  | 5 UJ  | 5 UJ                                     | 5 UJ                                   | 5 UJ  | 5 UJ  | 5 UJ  | 5 UJ  |
| 71-43-2    | Bromobenzene                     | ug/L  | 5 UJ  | 5 UJ                                     | 5 UJ                                   | 5 UJ  | 5 UJ  | 5 UJ  | 5 UJ  |
| 100-91-6   | 1,2-Dibromochloroethane          | ug/L  | 5 UJ  | 5 UJ                                     | 5 UJ                                   | 5 UJ  | 5 UJ  | 5 UJ  | 5 UJ  |
| 75-25-2    | Bromodifluoromethane             | ug/L  | 5 UJ  | 5 UJ                                     | 5 UJ                                   | 5 UJ  | 5 UJ  | 5 UJ  | 5 UJ  |
| 100-10-1   | 4-Methyl-2-Pentanol              | ug/L  | 5 UJ  | 5 UJ                                     | 5 UJ                                   | 5 UJ  | 5 UJ  | 5 UJ  | 5 UJ  |
| 591-78-6   | 2-Hexanone                       | ug/L  | 5 UJ  | 5 UJ                                     | 5 UJ                                   | 5 UJ  | 5 UJ  | 5 UJ  | 5 UJ  |
| 127-18-4   | Tetrachloroethene                | ug/L  | 5 UJ  | 5 UJ                                     | 5 UJ                                   | 5 UJ  | 5 UJ  | 5 UJ  | 5 UJ  |
| 115-15-1   | 1,1,2,2-Tetrachloroethane        | ug/L  | 5 UJ  | 5 UJ                                     | 5 UJ                                   | 5 UJ  | 5 UJ  | 5 UJ  | 5 UJ  |
| 100-90-3   | Toluene                          | ug/L  | 5 UJ  | 5 UJ                                     | 5 UJ                                   | 5 UJ  | 5 UJ  | 5 UJ  | 5 UJ  |
| 100-90-7   | Chlorobenzene                    | ug/L  | 5 UJ  | 5 UJ                                     | 5 UJ                                   | 5 UJ  | 5 UJ  | 5 UJ  | 5 UJ  |
| 100-11-4   | Ethylbenzene                     | ug/L  | 5 UJ  | 5 UJ                                     | 5 UJ                                   | 5 UJ  | 5 UJ  | 5 UJ  | 5 UJ  |
| 100-92-5   | Styrene                          | ug/L  | 5 UJ  | 5 UJ                                     | 5 UJ                                   | 5 UJ  | 5 UJ  | 5 UJ  | 5 UJ  |
| 133-00-7   | Xylene (total)                   | ug/L  | 5 UJ  | 5 UJ                                     | 5 UJ                                   | 5 UJ  | 5 UJ  | 5 UJ  | 5 UJ  |
|            | Total Identified Compounds (TIC) | ug/L  | 11 J  | 0  | 0                                      | 0   | 15 J  | 0   | 0 J   |

**VOLATILES BY SW846 METHOD 8260**

BERNARDINI ENVIRONMENTAL  
Project: FORMER QUICK AND CLEAN  
Laboratory: H2H; BER126; BER126  
Sample Identification:  
Laboratory ID:  
Sampling Date:

| Case #    | Analyte                                       | Units | GW-051013 @ 48-44"<br>1310705-005<br>10/10/2013 | GW-051013 @ 50-54"<br>1310705-006<br>10/10/2013 | GW-061013 @ 60-64"<br>1310705-007<br>10/10/2013 | GW-071013 @ 20-24"<br>1310705-008<br>10/10/2013 | GW-071013 @ 30-34"<br>1310705-009<br>10/10/2013 | GW-071013 @ 40-44"<br>1310705-010<br>10/10/2013 | GW-071013 @ 50-54"<br>1310705-011<br>10/10/2013 |
|-----------|---|-------|---|---|---|---|---|---|---|
| 74-87-3   | Chloromethane                                 | uol/L | U   | U   | U   | U   | U   | U   | U   |
| 75-01-3   | 1,2-Dichloroethane                            | uol/L | U   | U   | U   | U   | U   | U   | U   |
| 75-01-4   | Vinyl Chloride                                | uol/L | U   | U   | U   | U   | U   | U   | U   |
| 75-00-3   | Chloroethane                                  | uol/L | U   | U   | U   | U   | U   | U   | U   |
| 75-00-2   | Methylene Chloride                            | uol/L | U   | U   | U   | U   | U   | U   | U   |
| 67-64-1   | Acetone                                       | uol/L | U   | U   | U   | U   | U   | U   | U   |
| 75-05-1   | Ethyl Acetate                                 | uol/L | U   | U   | U   | U   | U   | U   | U   |
| 75-35-4   | 1,1-Dichloroethane                            | uol/L | U   | U   | U   | U   | U   | U   | U   |
| 75-34-3   | 1,2-Dichloroethane                            | uol/L | U   | U   | U   | U   | U   | U   | U   |
| 540-38-0  | 1,2-Dichloroethane (total)                    | uol/L | U   | U   | U   | U   | U   | U   | U   |
| 67-66-3   | Chloroform                                    | uol/L | U   | U   | U   | U   | U   | U   | U   |
| 107-06-2  | 1,2-Dichloroethane                            | uol/L | U   | U   | U   | U   | U   | U   | U   |
| 75-00-2   | Chloroethane                                  | uol/L | U   | U   | U   | U   | U   | U   | U   |
| 71-55-6   | 1,1,1-Trichloroethane                         | uol/L | U   | U   | U   | U   | U   | U   | U   |
| 56-23-5   | Carbon Tetrachloride                          | uol/L | U   | U   | U   | U   | U   | U   | U   |
| 75-27-4   | Bromodichloromethane                          | uol/L | U   | U   | U   | U   | U   | U   | U   |
| 76-87-5   | 1,2-Dichloropropane                           | uol/L | U   | U   | U   | U   | U   | U   | U   |
| 75-35-4   | 1,1-Dichloroethane                            | uol/L | U   | U   | U   | U   | U   | U   | U   |
| 79-01-6   | Trichloroethylene                             | uol/L | U   | U   | U   | U   | U   | U   | U   |
| 124-46-1  | Dibromochloromethane                          | uol/L | U   | U   | U   | U   | U   | U   | U   |
| 79-00-5   | 1,1,2-Trichloroethane                         | uol/L | U   | U   | U   | U   | U   | U   | U   |
| 71-43-2   | Benzene                                       | uol/L | U   | U   | U   | U   | U   | U   | U   |
| 106-91-0  | trans-1,3-Dichloropropene                     | uol/L | U   | U   | U   | U   | U   | U   | U   |
| 75-00-3   | Chloroethane                                  | uol/L | U   | U   | U   | U   | U   | U   | U   |
| 106-10-1  | 4-Bromophenol                                 | uol/L | U   | U   | U   | U   | U   | U   | U   |
| 591-78-6  | 2-Hexanone                                    | uol/L | U   | U   | U   | U   | U   | U   | U   |
| 127-10-4  | Tetrachloroethane                             | uol/L | U   | U   | U   | U   | U   | U   | U   |
| 79-34-5   | 1,1,2,2-Tetrachloroethane                     | uol/L | U   | U   | U   | U   | U   | U   | U   |
| 106-86-2  | 1,1,2,2-Tetrachloroethane                     | uol/L | U   | U   | U   | U   | U   | U   | U   |
| 100-96-7  | Chlorobenzene                                 | uol/L | U   | U   | U   | U   | U   | U   | U   |
| 100-41-4  | Ethylbenzene                                  | uol/L | U   | U   | U   | U   | U   | U   | U   |
| 100-42-5  | Styrene                                       | uol/L | U   | U   | U   | U   | U   | U   | U   |
| 1320-20-7 | Xylene (total)                                | uol/L | U   | U   | U   | U   | U   | U   | U   |
|           | Total Tentatively Identified Compounds (TTCa) |       | U   | U   | U   | U   | U   | U   | U   |

VOLATILES BY SW846 METHOD 8260

BERNHARDT ENVIRONMENTAL  
Project: FORMER QUICK AND CLEAN  
Laboratory: H2M; BER126, BER128  
Sample Identification:  
ID:  
Sampling Date:

| Conc #    | Analyte                                       | Units: | GW-081013 @ 60-64"<br>1310705-012<br>10/11/2013 | GW-081013 @ 20-34"<br>1310705-013<br>10/11/2013 | GW-081013 @ 30-34"<br>1310705-014<br>10/11/2013 | GW-081013 @ 40-44"<br>1310705-015<br>10/11/2013 | GW-081013 @ 50-54"<br>1310705-016<br>10/11/2013 | GW-081013 @ 60-64"<br>1310705-017<br>10/11/2013 | GW-081013 @ 20-34"<br>1310705-018<br>10/11/2013 |
|-----------|---|--------|---|---|---|---|---|---|---|
| 74-01-3   | Acetone                                       | u/L    | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   |
| 74-01-4   | Bromochloroethane                             | u/L    | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   |
| 75-01-4   | Bromodichloromethane                          | u/L    | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   |
| 75-00-3   | Chloroethane                                  | u/L    | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   |
| 75-00-2   | Methylene Chloride                            | u/L    | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   |
| 75-00-1   | Perchloroethane                               | u/L    | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   |
| 75-16-1   | Acetone                                       | u/L    | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   |
| 75-16-1   | Acetone                                       | u/L    | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   |
| 75-34-3   | 1,1-Dichloroethane                            | u/L    | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   |
| 50-09-0   | 1,2-Dichloroethane                            | u/L    | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   |
| 67-66-3   | Chloroform                                    | u/L    | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   |
| 75-00-2   | 1,1,1-Trichloroethane                         | u/L    | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   |
| 75-00-3   | 2-Chloroethane                                | u/L    | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   |
| 71-55-6   | 1,1,1-Trichloroethane                         | u/L    | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   |
| 56-23-5   | Carbon Tetrachloride                          | u/L    | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   |
| 75-27-4   | Bromodichloromethane                          | u/L    | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   |
| 75-00-3   | Bromochloroethane                             | u/L    | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   |
| 100-01-5  | 1,1,1-Trichloroethane                         | u/L    | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   |
| 75-01-6   | Trichloroethane                               | u/L    | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   |
| 13-48-1   | Dibromochloromethane                          | u/L    | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   |
| 75-00-5   | Benzene                                       | u/L    | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   |
| 71-43-5   | 1,2-Dichloroethane                            | u/L    | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   |
| 10-02-6   | Bromodichloromethane                          | u/L    | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   |
| 75-26-2   | Bromochloroethane                             | u/L    | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   |
| 108-10-1  | 4-Methyl-2-Pentanone                          | u/L    | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   |
| 59-178-6  | 2-Hexanone                                    | u/L    | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   |
| 127-16-4  | Tetrachloroethane                             | u/L    | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   |
| 75-00-3   | 1,1,2,2-Tetrachloroethane                     | u/L    | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   |
| 108-80-3  | Toluene                                       | u/L    | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   |
| 108-80-7  | Chlorobenzene                                 | u/L    | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   |
| 100-01-4  | Ethylbenzene                                  | u/L    | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   |
| 100-02-5  | Styrene                                       | u/L    | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   |
| 1300-05-7 | Xylenes (Total)                               | u/L    | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   |
|           | Total Tentatively Identified Compounds (TICa) | u/L    | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   | 5 U   |

**VOLATILES BY SW846 METHOD 8260**

SERVICES ENVIRONMENTAL  
PROJECT: FORMER QUICK AND CLEAN  
LABORATORY: H2M; BERTS; BERTS  
Sample Identification:  
Laboratory ID:  
Sampling Date:

| Conc #    | Analyte                                      | Unit: | GW-091013 @ 30-34"<br>1310705-019<br>10/11/2013 | GW-091013 @ 40-44"<br>1310705-020<br>10/11/2013 | GW-091013 @ 50-54"<br>1310705-021<br>10/11/2013 | GW-091013 @ 60-64"<br>1310705-022<br>10/11/2013 | Field Blank<br>1310705-023 | Top Blank<br>1310705-024 |
|-----------|--|-------|---|---|---|---|----------------------------|--------------------------|
| 74-01-3   | Chloromethane                                | ug/L  | 5 U   | 5 U   | 5 U   | 5 U   | 5 U                        | 5 U                      |
| 74-01-4   | Methylenes                                   | ug/L  | 5 U   | 5 U   | 5 U   | 5 U   | 5 U                        | 5 U                      |
| 75-01-4   | Vinyl Chloride                               | ug/L  | 5 U   | 5 U   | 5 U   | 5 U   | 5 U                        | 5 U                      |
| 75-00-3   | Chloroethane                                 | ug/L  | 5 U   | 5 U   | 5 U   | 5 U   | 5 U                        | 5 U                      |
| 75-00-2   | Methylene Chloride                           | ug/L  | 5 U   | 5 U   | 5 U   | 5 U   | 5 U                        | 5 U                      |
| 75-06-1   | Acetone                                      | ug/L  | 5 U   | 5 U   | 5 U   | 5 U   | 5 U                        | 5 U                      |
| 75-05-1   | Chloroform                                   | ug/L  | 5 U   | 5 U   | 5 U   | 5 U   | 5 U                        | 5 U                      |
| 75-05-4   | 1,1-Dichloroethane                           | ug/L  | 5 U   | 5 U   | 5 U   | 5 U   | 5 U                        | 5 U                      |
| 75-34-3   | 1,1-Dichloroethane (total)                   | ug/L  | 5 U   | 5 U   | 5 U   | 5 U   | 5 U                        | 5 U                      |
| 540-50-0  | Chloroform                                   | ug/L  | 5 U   | 5 U   | 5 U   | 5 U   | 5 U                        | 5 U                      |
| 67-66-3   | 1,1,1-Trichloroethane                        | ug/L  | 5 U   | 5 U   | 5 U   | 5 U   | 5 U                        | 5 U                      |
| 75-06-2   | 1,1,1-Trichloroethane                        | ug/L  | 5 U   | 5 U   | 5 U   | 5 U   | 5 U                        | 5 U                      |
| 75-08-3   | Carbon Tetrachloride                         | ug/L  | 5 U   | 5 U   | 5 U   | 5 U   | 5 U                        | 5 U                      |
| 56-23-6   | Bromodichloromethane                         | ug/L  | 5 U   | 5 U   | 5 U   | 5 U   | 5 U                        | 5 U                      |
| 75-27-4   | 1,2-Dichloropropane                          | ug/L  | 5 U   | 5 U   | 5 U   | 5 U   | 5 U                        | 5 U                      |
| 75-07-5   | 1,2-Dichloropropane                          | ug/L  | 5 U   | 5 U   | 5 U   | 5 U   | 5 U                        | 5 U                      |
| 75-01-5   | Trichloroethene                              | ug/L  | 5 U   | 5 U   | 5 U   | 5 U   | 5 U                        | 5 U                      |
| 124-48-1  | Dibromodichloromethane                       | ug/L  | 5 U   | 5 U   | 5 U   | 5 U   | 5 U                        | 5 U                      |
| 75-00-5   | 1,1,2-Trichloroethane                        | ug/L  | 5 U   | 5 U   | 5 U   | 5 U   | 5 U                        | 5 U                      |
| 71-43-2   | Benzene                                      | ug/L  | 5 U   | 5 U   | 5 U   | 5 U   | 5 U                        | 5 U                      |
| 75-06-6   | Bromo-1,1,1-Trichloroethane                  | ug/L  | 5 U   | 5 U   | 5 U   | 5 U   | 5 U                        | 5 U                      |
| 75-26-2   | Bromo-1,1,2-Trichloroethane                  | ug/L  | 5 U   | 5 U   | 5 U   | 5 U   | 5 U                        | 5 U                      |
| 100-10-1  | 4-ethyl-2-Pentane                            | ug/L  | 5 U   | 5 U   | 5 U   | 5 U   | 5 U                        | 5 U                      |
| 501-78-6  | 2-Hexanone                                   | ug/L  | 5 U   | 5 U   | 5 U   | 5 U   | 5 U                        | 5 U                      |
| 127-18-4  | Tetrahydrofuran                              | ug/L  | 5 U   | 5 U   | 5 U   | 5 U   | 5 U                        | 5 U                      |
| 75-06-5   | 1,1,2,2-Tetrachloroethane                    | ug/L  | 5 U   | 5 U   | 5 U   | 5 U   | 5 U                        | 5 U                      |
| 100-00-7  | Chlorobenzene                                | ug/L  | 5 U   | 5 U   | 5 U   | 5 U   | 5 U                        | 5 U                      |
| 100-01-4  | Ethylbenzene                                 | ug/L  | 5 U   | 5 U   | 5 U   | 5 U   | 5 U                        | 5 U                      |
| 100-05-5  | Styrene                                      | ug/L  | 5 U   | 5 U   | 5 U   | 5 U   | 5 U                        | 5 U                      |
| 1330-20-7 | Xylene (total)                               | ug/L  | 5 U   | 5 U   | 5 U   | 5 U   | 5 U                        | 5 U                      |
|           | Total Volatilely Identified Compounds (TVOC) | ug/L  | 0   | 26 J  | 24 J  | 0   | 0                          | 0                        |

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EP-15AT 60-64'

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: 10478

Case No.: BER

SAS No.: \_\_\_\_\_

SDG No.: BER126

Matrix: (soil/water)

WATER

Lab Sample ID: 1310202-001A

Sample wt/vol: 5

(g/mL) ML

Lab File ID: 13\G21568.

Level: (low/med)

LOW

Date Received: 10/03/13

% Moisture: not dec.

Date Analyzed: 10/04/13

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_

(μL)

Soil Aliquot Volume \_\_\_\_\_

(μL)

CONCENTRATION UNITS:

| CAS NO.    | COMPOUND                   | (μg/L or μg/Kg) UG/L | Q   |
|------------|----------------------------|----------------------|-----|
| 74-87-3    | Chloromethane              | 5                    | U J |
| 74-83-9    | Bromomethane               | 5                    | U J |
| 75-01-4    | Vinyl chloride             | 5                    | U J |
| 75-00-3    | Chloroethane               | 5                    | U J |
| 75-09-2    | Methylene chloride         | 5                    | U J |
| 67-64-1    | Acetone                    | 5                    | U J |
| 75-35-4    | 1,1-Dichloroethene         | 5                    | U J |
| 75-15-0    | Carbon disulfide           | 5                    | U J |
| 75-34-3    | 1,1-Dichloroethane         | 5                    | U J |
| 540-59-0   | 1,2-Dichloroethene (total) | 5                    | U J |
| 67-66-3    | Chloroform                 | 5                    | U J |
| 107-06-2   | 1,2-Dichloroethane         | 5                    | U J |
| 78-93-3    | 2-Butanone                 | 5                    | U J |
| 71-55-6    | 1,1,1-Trichloroethane      | 5                    | U J |
| 56-23-5    | Carbon tetrachloride       | 5                    | U J |
| 75-27-4    | Bromodichloromethane       | 5                    | U J |
| 78-87-5    | 1,2-Dichloropropane        | 5                    | U J |
| 10061-01-5 | cis-1,3-Dichloropropene    | 5                    | U J |
| 79-01-6    | Trichloroethene            | 5                    | U J |
| 124-48-1   | Dibromochloromethane       | 5                    | U J |
| 79-00-5    | 1,1,2-Trichloroethane      | 5                    | U J |
| 71-43-2    | Benzene                    | 5                    | U J |
| 10061-02-6 | trans-1,3-Dichloropropene  | 5                    | U J |
| 75-25-2    | Bromoform                  | 5                    | U J |
| 108-10-1   | 4-Methyl-2-pentanone       | 5                    | U J |
| 591-78-6   | 2-Hexanone                 | 5                    | U J |
| 127-18-4   | Tetrachloroethene          | 29                   | J   |
| 79-34-5    | 1,1,2,2-Tetrachloroethane  | 5                    | U J |
| 108-88-3   | Toluene                    | 5                    | U J |
| 108-90-7   | Chlorobenzene              | 5                    | U J |
| 100-41-4   | Ethylbenzene               | 5                    | U J |
| 100-42-5   | Styrene                    | 5                    | U J |
| 1330-20-7  | Xylene (total)             | 5                    | U J |

*for 11/10/13*

BER126 S17



VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EP-15AT 60-64'

Lab Name: H2M LABS INC Contract: \_\_\_\_\_

Lab Code: 10478 Case No.: BER SAS No.: \_\_\_\_\_ SDG No.: BER126

Matrix: (soil/water) WATER Lab Sample ID: 1310202-001A

Sample wt/vol: 5 (g/mL) ML Lab File ID: 13\G21568.

Level: (low/med) LOW Date Received: 10/03/13

% Moisture: not dec. Date Analyzed: 10/04/13

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (μl) Soil Aliquot Volume: 0 (μL)

## CONCENTRATION UNITS:

Number TICs found: 2 (μg/L or μg/Kg) UG/L

| CAS NUMBER | COMPOUND NAME                | RT   | EST. CONC. | Q |
|------------|------------------------------|------|------------|---|
| 1.         | unknown alkene               | 1.38 | 5          | J |
| 2.         | dihydro methyl indene isomer | 8.86 | 6          | J |

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FIELD BLANK

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: 10478

Case No.: BER

SAS No.: \_\_\_\_\_

SDG No.: BER126

Matrix: (soil/water)

WATER

Lab Sample ID: 1310202-002A

Sample wt/vol: 5

(g/mL) ML

Lab File ID: 13\G21571.

Level: (low/med)

LOW

Date Received: 10/03/13

% Moisture: not dec.

Date Analyzed: 10/04/13

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_

(µL)

Soil Aliquot Volume \_\_\_\_\_

(µL)

CONCENTRATION UNITS:

| CAS NO.    | COMPOUND                   | (µg/L or µg/Kg) UG/L | Q |
|------------|----------------------------|----------------------|---|
| 74-87-3    | Chloromethane              | 5                    | U |
| 74-83-9    | Bromomethane               | 5                    | U |
| 75-01-4    | Vinyl chloride             | 5                    | U |
| 75-00-3    | Chloroethane               | 5                    | U |
| 75-09-2    | Methylene chloride         | 5                    | U |
| 67-64-1    | Acetone                    | 3                    | U |
| 75-35-4    | 1,1-Dichloroethene         | 5                    | U |
| 75-15-0    | Carbon disulfide           | 5                    | U |
| 75-34-3    | 1,1-Dichloroethane         | 5                    | U |
| 540-59-0   | 1,2-Dichloroethene (total) | 5                    | U |
| 67-66-3    | Chloroform                 | 5                    | U |
| 107-06-2   | 1,2-Dichloroethane         | 5                    | U |
| 78-93-3    | 2-Butanone                 | 5                    | U |
| 71-55-6    | 1,1,1-Trichloroethane      | 5                    | U |
| 56-23-5    | Carbon tetrachloride       | 5                    | U |
| 75-27-4    | Bromodichloromethane       | 5                    | U |
| 78-87-5    | 1,2-Dichloropropane        | 5                    | U |
| 10061-01-5 | cis-1,3-Dichloropropene    | 5                    | U |
| 79-01-6    | Trichloroethene            | 5                    | U |
| 124-48-1   | Dibromochloromethane       | 5                    | U |
| 79-00-5    | 1,1,2-Trichloroethane      | 5                    | U |
| 71-43-2    | Benzene                    | 5                    | U |
| 10061-02-6 | trans-1,3-Dichloropropene  | 5                    | U |
| 75-25-2    | Bromoform                  | 5                    | U |
| 108-10-1   | 4-Methyl-2-pentanone       | 5                    | U |
| 591-78-6   | 2-Hexanone                 | 5                    | U |
| 127-18-4   | Tetrachloroethene          | 5                    | U |
| 79-34-5    | 1,1,2,2-Tetrachloroethane  | 5                    | U |
| 108-88-3   | Toluene                    | 5                    | U |
| 108-90-7   | Chlorobenzene              | 5                    | U |
| 100-41-4   | Ethylbenzene               | 5                    | U |
| 100-42-5   | Styrene                    | 5                    | U |
| 1330-20-7  | Xylene (total)             | 5                    | U |

80/11/10/13

1F  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

FIELD BLANK

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: 10478

Case No.: BER

SAS No.: \_\_\_\_\_

SDG No.: BER126

Matrix: (soil/water)

WATER

Lab Sample ID: 1310202-002A

Sample wt/vol: 5

(g/mL) ML

Lab File ID: 13\G21571.

Level: (low/med) LOW

Date Received: 10/03/13

% Moisture: not dec.

Date Analyzed: 10/04/13

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor: 1.00

Soil Extract Volume:

( $\mu$ l)

Soil Aliquot Volume: 0 ( $\mu$ L)

CONCENTRATION UNITS:

Number TICs found:

0

( $\mu$ g/L or  $\mu$ g/Kg)

UG/L

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|------------|---------------|----|------------|---|
|------------|---------------|----|------------|---|

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

TRIP BLANK

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: 10478

Case No.: BER

SAS No.: \_\_\_\_\_

SDG No.: BER126

Matrix: (soil/water)

WATER

Lab Sample ID: 1310202-003A

Sample wt/vol: 5

(g/mL) ML

Lab File ID: 13\G21572.

Level: (low/med)

LOW

Date Received: 10/03/13

% Moisture: not dec.

Date Analyzed: 10/04/13

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor: 1.00

Soil Extract Volume:

( $\mu$ L)

Soil Aliquot Volume

( $\mu$ L)

CONCENTRATION UNITS:

| CAS NO.    | COMPOUND                   | ( $\mu$ g/L or $\mu$ g/Kg) <u>UG/L</u> | Q          |
|------------|----------------------------|--|------------|
| 74-87-3    | Chloromethane              | 5                                      | U          |
| 74-83-9    | Bromomethane               | 5                                      | U <i>J</i> |
| 75-01-4    | Vinyl chloride             | 5                                      | U          |
| 75-00-3    | Chloroethane               | 5                                      | U          |
| 75-09-2    | Methylene chloride         | 5                                      | U          |
| 67-64-1    | Acetone                    | 5                                      | U <i>J</i> |
| 75-35-4    | 1,1-Dichloroethene         | 5                                      | U          |
| 75-15-0    | Carbon disulfide           | 5                                      | U          |
| 75-34-3    | 1,1-Dichloroethane         | 5                                      | U          |
| 540-59-0   | 1,2-Dichloroethene (total) | 5                                      | U          |
| 67-66-3    | Chloroform                 | 5                                      | U          |
| 107-06-2   | 1,2-Dichloroethane         | 5                                      | U          |
| 78-93-3    | 2-Butanone                 | 5                                      | U          |
| 71-55-6    | 1,1,1-Trichloroethane      | 5                                      | U          |
| 56-23-5    | Carbon tetrachloride       | 5                                      | U          |
| 75-27-4    | Bromodichloromethane       | 5                                      | U          |
| 78-87-5    | 1,2-Dichloropropane        | 5                                      | U          |
| 10061-01-5 | cis-1,3-Dichloropropene    | 5                                      | U          |
| 79-01-6    | Trichloroethene            | 5                                      | U          |
| 124-48-1   | Dibromochloromethane       | 5                                      | U          |
| 79-00-5    | 1,1,2-Trichloroethane      | 5                                      | U          |
| 71-43-2    | Benzene                    | 5                                      | U          |
| 10061-02-6 | trans-1,3-Dichloropropene  | 5                                      | U          |
| 75-25-2    | Bromoform                  | 5                                      | U          |
| 108-10-1   | 4-Methyl-2-pentanone       | 5                                      | U          |
| 591-78-6   | 2-Hexanone                 | 5                                      | U          |
| 127-18-4   | Tetrachloroethene          | 5                                      | U          |
| 79-34-5    | 1,1,2,2-Tetrachloroethane  | 5                                      | U          |
| 108-88-3   | Toluene                    | 5                                      | U          |
| 108-90-7   | Chlorobenzene              | 5                                      | U          |
| 100-41-4   | Ethylbenzene               | 5                                      | U          |
| 100-42-5   | Styrene                    | 5                                      | U          |
| 1330-20-7  | Xylene (total)             | 5                                      | U          |

*Handwritten:* 11/10/13

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

TRIP BLANK

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: 10478Case No.: BER

SAS No.: \_\_\_\_\_

SDG No.: BER126

Matrix: (soil/water)

WATERLab Sample ID: 1310202-003ASample wt/vol: 5(g/mL) MLLab File ID: 13\G21572.Level: (low/med) LOWDate Received: 10/03/13

% Moisture: not dec.

Date Analyzed: 10/04/13GC Column: Rtx-624ID: .18 (mm)Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (μl)

Soil Aliquot Volume: 0 (μL)

## CONCENTRATION UNITS:

Number TICs found:

0

(μg/L or μg/Kg)

UG/L

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|------------|---------------|----|------------|---|
|------------|---------------|----|------------|---|

1A

EPA SAMPLE NO.

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EP-13 @ 60-62'

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: 10478Case No.: BER

SAS No.: \_\_\_\_\_

SDG No.: BER128

Matrix: (soil/water)

WATERLab Sample ID: 1310705-001ASample wt/vol: 5(g/mL) MLLab File ID: 13\G21633.

Level: (low/med)

LOWDate Received: 10/11/13

% Moisture: not dec.

Date Analyzed: 10/14/13GC Column: Rtx-624ID: .18 (mm)Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_

(μL)

Soil Aliquot Volume \_\_\_\_\_

(μL)

## CONCENTRATION UNITS:

| CAS NO.    | COMPOUND                   | (μg/L or μg/Kg) <u>UG/L</u> | <u>Q</u> |
|------------|----------------------------|-----------------------------|----------|
| 74-87-3    | Chloromethane              | 5                           | U        |
| 74-83-9    | Bromomethane               | 5                           | U        |
| 75-01-4    | Vinyl chloride             | 5                           | U        |
| 75-00-3    | Chloroethane               | 5                           | U        |
| 75-09-2    | Methylene chloride         | 5                           | U        |
| 67-64-1    | Acetone                    | 2.5                         | U        |
| 75-35-4    | 1,1-Dichloroethene         | 5                           | U        |
| 75-15-0    | Carbon disulfide           | 1                           | J        |
| 75-34-3    | 1,1-Dichloroethane         | 5                           | U        |
| 540-59-0   | 1,2-Dichloroethene (total) | 5                           | U        |
| 67-66-3    | Chloroform                 | 5                           | U        |
| 107-06-2   | 1,2-Dichloroethane         | 5                           | U        |
| 78-93-3    | 2-Butanone                 | 5                           | U        |
| 71-55-6    | 1,1,1-Trichloroethane      | 5                           | U        |
| 56-23-5    | Carbon tetrachloride       | 5                           | U        |
| 75-27-4    | Bromodichloromethane       | 5                           | U        |
| 78-87-5    | 1,2-Dichloropropane        | 5                           | U        |
| 10061-01-5 | cis-1,3-Dichloropropene    | 5                           | U        |
| 79-01-6    | Trichloroethene            | 5                           | U        |
| 124-48-1   | Dibromochloromethane       | 5                           | U        |
| 79-00-5    | 1,1,2-Trichloroethane      | 5                           | U        |
| 71-43-2    | Benzene                    | 5                           | U        |
| 10061-02-6 | trans-1,3-Dichloropropene  | 5                           | U        |
| 75-25-2    | Bromoform                  | 5                           | U        |
| 108-10-1   | 4-Methyl-2-pentanone       | 5                           | U        |
| 591-78-6   | 2-Hexanone                 | 5                           | U        |
| 127-18-4   | Tetrachloroethene          | 16                          | U        |
| 79-34-5    | 1,1,2,2-Tetrachloroethane  | 5                           | U        |
| 108-88-3   | Toluene                    | 5                           | U        |
| 108-90-7   | Chlorobenzene              | 5                           | U        |
| 100-41-4   | Ethylbenzene               | 5                           | U        |
| 100-42-5   | Styrene                    | 5                           | U        |
| 1330-20-7  | Xylene (total)             | 5                           | U        |

80 P 11/10/13

1F

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EP-13 @ 60-62'

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: 10478Case No.: BER

SAS No.: \_\_\_\_\_

SDG No.: BER128

Matrix: (soil/water)

WATERLab Sample ID: 1310705-001ASample wt/vol: 5(g/mL) MLLab File ID: 13\G21633.Level: (low/med) LOWDate Received: 10/11/13

% Moisture: not dec.

Date Analyzed: 10/14/13GC Column: Rtx-624ID: .18 (mm)Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (µl)

Soil Aliquot Volume: 0 (µL)

## CONCENTRATION UNITS:

Number TICs found:

0

(µg/L or µg/Kg)

UG/L

| CAS NUMBER | COMPOUND NAME | RT | EST.CONC. | Q |
|------------|---------------|----|-----------|---|
|------------|---------------|----|-----------|---|



1A

EPA SAMPLE NO.

## VOLATILE ORGANICS ANALYSIS DATA SHEET

EP-18 @ 60-62'

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: 10478Case No.: BER

SAS No.: \_\_\_\_\_

SDG No.: BER128

Matrix: (soil/water)

WATERLab Sample ID: 1310705-002ASample wt/vol: 5(g/mL) MLLab File ID: 13\G21636.

Level: (low/med)

LOWDate Received: 10/11/13

% Moisture: not dec.

Date Analyzed: 10/14/13GC Column: Rtx-624ID: .18 (mm)Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_

(μL)

Soil Aliquot Volume \_\_\_\_\_

(μL)

## CONCENTRATION UNITS:

| CAS NO.    | COMPOUND                   | (μg/L or μg/Kg) UG/L | Q |
|------------|----------------------------|----------------------|---|
| 74-87-3    | Chloromethane              | 5                    | U |
| 74-83-9    | Bromomethane               | 5                    | U |
| 75-01-4    | Vinyl chloride             | 5                    | U |
| 75-00-3    | Chloroethane               | 5                    | U |
| 75-09-2    | Methylene chloride         | 5                    | U |
| 67-64-1    | Acetone                    | 5                    | U |
| 75-35-4    | 1,1-Dichloroethene         | 5                    | U |
| 75-15-0    | Carbon disulfide           | 2                    | J |
| 75-34-3    | 1,1-Dichloroethane         | 5                    | U |
| 540-59-0   | 1,2-Dichloroethene (total) | 5                    | U |
| 67-66-3    | Chloroform                 | 5                    | U |
| 107-06-2   | 1,2-Dichloroethane         | 5                    | U |
| 78-93-3    | 2-Butanone                 | 5                    | U |
| 71-55-6    | 1,1,1-Trichloroethane      | 5                    | U |
| 56-23-5    | Carbon tetrachloride       | 5                    | U |
| 75-27-4    | Bromodichloromethane       | 5                    | U |
| 78-87-5    | 1,2-Dichloropropane        | 5                    | U |
| 10061-01-5 | cis-1,3-Dichloropropene    | 5                    | U |
| 79-01-6    | Trichloroethene            | 2                    | J |
| 124-48-1   | Dibromochloromethane       | 5                    | U |
| 79-00-5    | 1,1,2-Trichloroethane      | 5                    | U |
| 71-43-2    | Benzene                    | 5                    | U |
| 10061-02-6 | trans-1,3-Dichloropropene  | 5                    | U |
| 75-25-2    | Bromoform                  | 5                    | U |
| 108-10-1   | 4-Methyl-2-pentanone       | 5                    | U |
| 591-78-6   | 2-Hexanone                 | 5                    | U |
| 127-18-4   | Tetrachloroethene          | 36                   | U |
| 79-34-5    | 1,1,2,2-Tetrachloroethane  | 5                    | U |
| 108-88-3   | Toluene                    | 5                    | U |
| 108-90-7   | Chlorobenzene              | 5                    | U |
| 100-41-4   | Ethylbenzene               | 5                    | U |
| 100-42-5   | Styrene                    | 5                    | U |
| 1330-20-7  | Xylene (total)             | 5                    | U |

1F

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EP-18 @ 60-62'

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: 10478Case No.: BER

SAS No.: \_\_\_\_\_

SDG No.: BER128

Matrix: (soil/water)

WATERLab Sample ID: 1310705-002ASample wt/vol: 5(g/mL) MLLab File ID: 13\G21636.Level: (low/med) LOWDate Received: 10/11/13

% Moisture: not dec.

Date Analyzed: 10/14/13GC Column: Rtx-624ID: .18 (mm)Dilution Factor: 1.00

Soil Extract Volume:

(μl)

Soil Aliquot Volume: 0 (μL)

## CONCENTRATION UNITS:

Number TICs found:

1

(μg/L or μg/Kg)

UG/L

CAS NUMBER

COMPOUND NAME

RT

EST. CONC.

Q

1.

unknown alkene

1.38

13

J

1A

EPA SAMPLE NO.

## VOLATILE ORGANICS ANALYSIS DATA SHEET

GW-061013 20-24'

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: 10478Case No.: BER

SAS No.: \_\_\_\_\_

SDG No.: BER128

Matrix: (soil/water)

WATERLab Sample ID: 1310705-003ASample wt/vol: 5(g/mL) MLLab File ID: 13\G21637.

Level: (low/med)

LOWDate Received: 10/11/13

% Moisture: not dec.

Date Analyzed: 10/14/13GC Column: Rtx-624ID: .18 (mm)Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_

(μL)

Soil Aliquot Volume \_\_\_\_\_

(μL)

## CONCENTRATION UNITS:

| CAS NO.    | COMPOUND                   | (μg/L or μg/Kg) UG/L | Q |
|------------|----------------------------|----------------------|---|
| 74-87-3    | Chloromethane              | 5                    | U |
| 74-83-9    | Bromomethane               | 5                    | U |
| 75-01-4    | Vinyl chloride             | 5                    | U |
| 75-00-3    | Chloroethane               | 5                    | U |
| 75-09-2    | Methylene chloride         | 5                    | U |
| 67-64-1    | Acetone                    | 5                    | U |
| 75-35-4    | 1,1-Dichloroethene         | 5                    | U |
| 75-15-0    | Carbon disulfide           | 5                    | U |
| 75-34-3    | 1,1-Dichloroethane         | 5                    | U |
| 540-59-0   | 1,2-Dichloroethene (total) | 5                    | U |
| 67-66-3    | Chloroform                 | 5                    | U |
| 107-06-2   | 1,2-Dichloroethane         | 5                    | U |
| 78-93-3    | 2-Butanone                 | 5                    | U |
| 71-55-6    | 1,1,1-Trichloroethane      | 5                    | U |
| 56-23-5    | Carbon tetrachloride       | 5                    | U |
| 75-27-4    | Bromodichloromethane       | 5                    | U |
| 78-87-5    | 1,2-Dichloropropane        | 5                    | U |
| 10061-01-5 | cis-1,3-Dichloropropene    | 5                    | U |
| 79-01-6    | Trichloroethene            | 5                    | U |
| 124-48-1   | Dibromochloromethane       | 5                    | U |
| 79-00-5    | 1,1,2-Trichloroethane      | 5                    | U |
| 71-43-2    | Benzene                    | 5                    | U |
| 10061-02-6 | trans-1,3-Dichloropropene  | 5                    | U |
| 75-25-2    | Bromoform                  | 5                    | U |
| 108-10-1   | 4-Methyl-2-pentanone       | 5                    | U |
| 591-78-6   | 2-Hexanone                 | 5                    | U |
| 127-18-4   | Tetrachloroethene          | 2                    | J |
| 79-34-5    | 1,1,2,2-Tetrachloroethane  | 5                    | U |
| 108-88-3   | Toluene                    | 5                    | U |
| 108-90-7   | Chlorobenzene              | 5                    | U |
| 100-41-4   | Ethylbenzene               | 5                    | U |
| 100-42-5   | Styrene                    | 5                    | U |
| 1330-20-7  | Xylene (total)             | 5                    | U |

Soil 11/10/13

1F

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

GW-061013 20-24'

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: 10478Case No.: BER

SAS No.: \_\_\_\_\_

SDG No.: BER128

Matrix: (soil/water)

WATERLab Sample ID: 1310705-003ASample wt/vol: 5(g/mL) MLLab File ID: 13\G21637.Level: (low/med) LOWDate Received: 10/11/13

% Moisture: not dec.

Date Analyzed: 10/14/13GC Column: Rtx-624ID: .18 (mm)Dilution Factor: 1.00

Soil Extract Volume:

(µl)

Soil Aliquot Volume: 0 (µL)

## CONCENTRATION UNITS:

Number TICs found:

0

(µg/L or µg/Kg)

UG/L

| CAS NUMBER | COMPOUND NAME | RT | EST.CONC. | Q |
|------------|---------------|----|-----------|---|
|------------|---------------|----|-----------|---|

1A

EPA SAMPLE NO.

## VOLATILE ORGANICS ANALYSIS DATA SHEET

GW-061013 30-34'

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: 10478Case No.: BER

SAS No.: \_\_\_\_\_

SDG No.: BER128

Matrix: (soil/water)

WATERLab Sample ID: 1310705-004ASample wt/vol: 5(g/mL) MLLab File ID: 13\G21638.

Level: (low/med)

LOWDate Received: 10/11/13

% Moisture: not dec.

Date Analyzed: 10/14/13GC Column: Rtx-624ID: .18 (mm)Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_

(µL)

Soil Aliquot Volume \_\_\_\_\_ (µL)

## CONCENTRATION UNITS:

| CAS NO.    | COMPOUND                   | (µg/L or µg/Kg) UG/L | Q                  |
|------------|----------------------------|----------------------|--------------------|
| 74-87-3    | Chloromethane              | 5                    | U                  |
| 74-83-9    | Bromomethane               | 5                    | U <i>J</i>         |
| 75-01-4    | Vinyl chloride             | 5                    | U                  |
| 75-00-3    | Chloroethane               | 5                    | U                  |
| 75-09-2    | Methylene chloride         | 5                    | U                  |
| 67-64-1    | Acetone                    | <i>4.5</i>           | <i>J</i> <i>UT</i> |
| 75-35-4    | 1,1-Dichloroethene         | 5                    | U                  |
| 75-15-0    | Carbon disulfide           | 5                    | U                  |
| 75-34-3    | 1,1-Dichloroethane         | 5                    | U                  |
| 540-59-0   | 1,2-Dichloroethene (total) | 5                    | U                  |
| 67-66-3    | Chloroform                 | 5                    | U                  |
| 107-06-2   | 1,2-Dichloroethane         | 5                    | U                  |
| 78-93-3    | 2-Butanone                 | 5                    | U                  |
| 71-55-6    | 1,1,1-Trichloroethane      | 5                    | U                  |
| 56-23-5    | Carbon tetrachloride       | 5                    | U                  |
| 75-27-4    | Bromodichloromethane       | 5                    | U                  |
| 78-87-5    | 1,2-Dichloropropane        | 5                    | U                  |
| 10061-01-5 | cis-1,3-Dichloropropene    | 5                    | U                  |
| 79-01-6    | Trichloroethene            | 1                    | J                  |
| 124-48-1   | Dibromochloromethane       | 5                    | U                  |
| 79-00-5    | 1,1,2-Trichloroethane      | 5                    | U                  |
| 71-43-2    | Benzene                    | 5                    | U                  |
| 10061-02-6 | trans-1,3-Dichloropropene  | 5                    | U                  |
| 75-25-2    | Bromoform                  | 5                    | U                  |
| 108-10-1   | 4-Methyl-2-pentanone       | 5                    | U                  |
| 591-78-6   | 2-Hexanone                 | 5                    | U                  |
| 127-18-4   | Tetrachloroethene          | 6                    | U                  |
| 79-34-5    | 1,1,2,2-Tetrachloroethane  | 5                    | U                  |
| 108-88-3   | Toluene                    | 5                    | U <i>J</i>         |
| 108-90-7   | Chlorobenzene              | 5                    | U                  |
| 100-41-4   | Ethylbenzene               | 5                    | U                  |
| 100-42-5   | Styrene                    | 5                    | U                  |
| 1330-20-7  | Xylene (total)             | 5                    | U                  |

*for 11/11/13*

1F

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

GW-061013 30-34'

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: 10478Case No.: BER

SAS No.: \_\_\_\_\_

SDG No.: BER128

Matrix: (soil/water)

WATERLab Sample ID: 1310705-004ASample wt/vol: 5(g/mL) MLLab File ID: 13\G21638.Level: (low/med) LOWDate Received: 10/11/13

% Moisture: not dec.

Date Analyzed: 10/14/13GC Column: Rtx-624ID: .18 (mm)Dilution Factor: 1.00

Soil Extract Volume:

(μl)

Soil Aliquot Volume: 0 (μL)

## CONCENTRATION UNITS:

Number TICs found:

1

(μg/L or μg/Kg)

UG/L

| CAS NUMBER     | COMPOUND NAME                | RT   | EST.CONC. | Q  |
|----------------|------------------------------|------|-----------|----|
| 1. 001634-04-4 | Propane, 2-methoxy-2-methyl- | 2.77 | 6         | JN |

1A

EPA SAMPLE NO.

## VOLATILE ORGANICS ANALYSIS DATA SHEET

GW-061013 40-44'

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: 10478Case No.: BER

SAS No.: \_\_\_\_\_

SDG No.: BER128

Matrix: (soil/water)

WATERLab Sample ID: 1310705-005ASample wt/vol: 5(g/mL) MLLab File ID: 13\G21639.

Level: (low/med)

LOWDate Received: 10/11/13

% Moisture: not dec.

Date Analyzed: 10/14/13GC Column: Rtx-624ID: .18 (mm)Dilution Factor: 1.00

Soil Extract Volume:

(μL)

Soil Aliquot Volume

(μL)

## CONCENTRATION UNITS:

| CAS NO.    | COMPOUND                   | (μg/L or μg/Kg) <u>UG/L</u> | Q |
|------------|----------------------------|-----------------------------|---|
| 74-87-3    | Chloromethane              | 5                           | U |
| 74-83-9    | Bromomethane               | 5                           | U |
| 75-01-4    | Vinyl chloride             | 5                           | U |
| 75-00-3    | Chloroethane               | 5                           | U |
| 75-09-2    | Methylene chloride         | 5                           | U |
| 67-64-1    | Acetone                    | 5                           | U |
| 75-35-4    | 1,1-Dichloroethene         | 5                           | U |
| 75-15-0    | Carbon disulfide           | 5                           | U |
| 75-34-3    | 1,1-Dichloroethane         | 5                           | U |
| 540-59-0   | 1,2-Dichloroethene (total) | 5                           | U |
| 67-66-3    | Chloroform                 | 5                           | U |
| 107-06-2   | 1,2-Dichloroethane         | 5                           | U |
| 78-93-3    | 2-Butanone                 | 5                           | U |
| 71-55-6    | 1,1,1-Trichloroethane      | 5                           | U |
| 56-23-5    | Carbon tetrachloride       | 5                           | U |
| 75-27-4    | Bromodichloromethane       | 5                           | U |
| 78-87-5    | 1,2-Dichloropropane        | 5                           | U |
| 10061-01-5 | cis-1,3-Dichloropropene    | 5                           | U |
| 79-01-6    | Trichloroethene            | 5                           | U |
| 124-48-1   | Dibromochloromethane       | 5                           | U |
| 79-00-5    | 1,1,2-Trichloroethane      | 5                           | U |
| 71-43-2    | Benzene                    | 5                           | U |
| 10061-02-6 | trans-1,3-Dichloropropene  | 5                           | U |
| 75-25-2    | Bromoform                  | 5                           | U |
| 108-10-1   | 4-Methyl-2-pentanone       | 5                           | U |
| 591-78-6   | 2-Hexanone                 | 5                           | U |
| 127-18-4   | Tetrachloroethene          | 5                           | U |
| 79-34-5    | 1,1,2,2-Tetrachloroethane  | 5                           | U |
| 108-88-3   | Toluene                    | 5                           | U |
| 108-90-7   | Chlorobenzene              | 5                           | U |
| 100-41-4   | Ethylbenzene               | 5                           | U |
| 100-42-5   | Styrene                    | 5                           | U |
| 1330-20-7  | Xylene (total)             | 5                           | U |

80/11/10/13



1F

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

GW-061013 40-44'

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: 10478Case No.: BER

SAS No.: \_\_\_\_\_

SDG No.: BER128

Matrix: (soil/water)

WATERLab Sample ID: 1310705-005ASample wt/vol: 5(g/mL) MLLab File ID: 13\G21639.Level: (low/med) LOWDate Received: 10/11/13

% Moisture: not dec.

Date Analyzed: 10/14/13GC Column: Rtx-624ID: .18 (mm)Dilution Factor: 1.00

Soil Extract Volume:

(μl)

Soil Aliquot Volume: 0 (μL)

## CONCENTRATION UNITS:

Number TICs found:

1

(μg/L or μg/Kg)

UG/L

| CAS NUMBER | COMPOUND NAME  | RT   | EST.CONC. | Q |
|------------|----------------|------|-----------|---|
| 1.         | unknown alkene | 1.37 | 5         | J |

1A

EPA SAMPLE NO.

## VOLATILE ORGANICS ANALYSIS DATA SHEET

GW-061013 50-54'

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: 10478Case No.: BER

SAS No.: \_\_\_\_\_

SDG No.: BER128

Matrix: (soil/water)

WATERLab Sample ID: 1310705-006ASample wt/vol: 5(g/mL) MLLab File ID: 13\G21640.

Level: (low/med)

LOWDate Received: 10/11/13

% Moisture: not dec.

Date Analyzed: 10/14/13GC Column: Rtx-624ID: .18 (mm)Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_

(μL)

Soil Aliquot Volume \_\_\_\_\_ (μL)

## CONCENTRATION UNITS:

| CAS NO.    | COMPOUND                   | (μg/L or μg/Kg) <u>UG/L</u> | Q          |
|------------|----------------------------|-----------------------------|------------|
| 74-87-3    | Chloromethane              | 5                           | U          |
| 74-83-9    | Bromomethane               | 5                           | U <b>J</b> |
| 75-01-4    | Vinyl chloride             | 5                           | U          |
| 75-00-3    | Chloroethane               | 5                           | U          |
| 75-09-2    | Methylene chloride         | 5                           | U          |
| 67-64-1    | Acetone                    | <b>25</b>                   | <b>UJ</b>  |
| 75-35-4    | 1,1-Dichloroethene         | 5                           | U          |
| 75-15-0    | Carbon disulfide           | 5                           | U          |
| 75-34-3    | 1,1-Dichloroethane         | 5                           | U          |
| 540-59-0   | 1,2-Dichloroethene (total) | 5                           | U          |
| 67-66-3    | Chloroform                 | 5                           | U          |
| 107-06-2   | 1,2-Dichloroethane         | 5                           | U          |
| 78-93-3    | 2-Butanone                 | 5                           | U          |
| 71-55-6    | 1,1,1-Trichloroethane      | 5                           | U          |
| 56-23-5    | Carbon tetrachloride       | 5                           | U          |
| 75-27-4    | Bromodichloromethane       | 5                           | U          |
| 78-87-5    | 1,2-Dichloropropane        | 5                           | U          |
| 10061-01-5 | cis-1,3-Dichloropropene    | 5                           | U          |
| 79-01-6    | Trichloroethene            | 5                           | U          |
| 124-48-1   | Dibromochloromethane       | 5                           | U          |
| 79-00-5    | 1,1,2-Trichloroethane      | 5                           | U          |
| 71-43-2    | Benzene                    | 5                           | U          |
| 10061-02-6 | trans-1,3-Dichloropropene  | 5                           | U          |
| 75-25-2    | Bromoform                  | 5                           | U          |
| 108-10-1   | 4-Methyl-2-pentanone       | 5                           | U          |
| 591-78-6   | 2-Hexanone                 | 5                           | U          |
| 127-18-4   | Tetrachloroethene          | 5                           | U          |
| 79-34-5    | 1,1,2,2-Tetrachloroethane  | 5                           | U          |
| 108-88-3   | Toluene                    | 5                           | U <b>J</b> |
| 108-90-7   | Chlorobenzene              | 5                           | U          |
| 100-41-4   | Ethylbenzene               | 5                           | U          |
| 100-42-5   | Styrene                    | 5                           | U          |
| 1330-20-7  | Xylene (total)             | 5                           | U          |

for 11/11/13

1F

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

GW-061013 50-54'

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: 10478Case No.: BER

SAS No.: \_\_\_\_\_

SDG No.: BER128

Matrix: (soil/water)

WATERLab Sample ID: 1310705-006ASample wt/vol: 5(g/mL) MLLab File ID: 13\G21640.Level: (low/med) LOWDate Received: 10/11/13

% Moisture: not dec.

Date Analyzed: 10/14/13GC Column: Rtx-624ID: .18 (mm)Dilution Factor: 1.00

Soil Extract Volume:

(μl)

Soil Aliquot Volume: 0 (μL)

## CONCENTRATION UNITS:

Number TICs found:

1

(μg/L or μg/Kg)

UG/L

CAS NUMBER

COMPOUND NAME

RT

EST. CONC.

Q

1.

unknown alkene

1.38

6

J

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW-061013 60-64'

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: 10478

Case No.: BER

SAS No.: \_\_\_\_\_

SDG No.: BER128

Matrix: (soil/water)

WATER

Lab Sample ID: 1310705-007A

Sample wt/vol: 5

(g/mL) ML

Lab File ID: 13\G21641

Level: (low/med)

LOW

Date Received: 10/11/13

% Moisture: not dec.

Date Analyzed: 10/14/13

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor: 1.00

Soil Extract Volume:

(µL)

Soil Aliquot Volume

(µL)

CONCENTRATION UNITS:

| CAS NO.    | COMPOUND                   | (µg/L or µg/Kg) UG/L | Q   |
|------------|----------------------------|----------------------|-----|
| 74-87-3    | Chloromethane              | 5                    | U   |
| 74-83-9    | Bromomethane               | 5                    | U J |
| 75-01-4    | Vinyl chloride             | 5                    | U   |
| 75-00-3    | Chloroethane               | 5                    | U   |
| 75-09-2    | Methylene chloride         | 5                    | U   |
| 67-64-1    | Acetone                    | 2.5                  | U J |
| 75-35-4    | 1,1-Dichloroethene         | 5                    | U   |
| 75-15-0    | Carbon disulfide           | 5                    | U   |
| 75-34-3    | 1,1-Dichloroethane         | 5                    | U   |
| 540-59-0   | 1,2-Dichloroethene (total) | 5                    | U   |
| 67-66-3    | Chloroform                 | 5                    | U   |
| 107-06-2   | 1,2-Dichloroethane         | 5                    | U   |
| 78-93-3    | 2-Butanone                 | 5                    | U   |
| 71-55-6    | 1,1,1-Trichloroethane      | 5                    | U   |
| 56-23-5    | Carbon tetrachloride       | 5                    | U   |
| 75-27-4    | Bromodichloromethane       | 5                    | U   |
| 78-87-5    | 1,2-Dichloropropane        | 5                    | U   |
| 10061-01-5 | cis-1,3-Dichloropropene    | 5                    | U   |
| 79-01-6    | Trichloroethene            | 5                    | U   |
| 124-48-1   | Dibromochloromethane       | 5                    | U   |
| 79-00-5    | 1,1,2-Trichloroethane      | 5                    | U   |
| 71-43-2    | Benzene                    | 5                    | U   |
| 10061-02-6 | trans-1,3-Dichloropropene  | 5                    | U   |
| 75-25-2    | Bromoform                  | 5                    | U   |
| 108-10-1   | 4-Methyl-2-pentanone       | 5                    | U   |
| 591-78-6   | 2-Hexanone                 | 5                    | U   |
| 127-18-4   | Tetrachloroethene          | 5                    | U   |
| 79-34-5    | 1,1,2,2-Tetrachloroethane  | 5                    | U   |
| 108-88-3   | Toluene                    | 5                    | U J |
| 108-90-7   | Chlorobenzene              | 5                    | U   |
| 100-41-4   | Ethylbenzene               | 5                    | U   |
| 100-42-5   | Styrene                    | 5                    | U   |
| 1330-20-7  | Xylene (total)             | 5                    | U   |

80 K 11/10/13

1F

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

GW-061013 60-64'

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: 10478Case No.: BER

SAS No.: \_\_\_\_\_

SDG No.: BER128

Matrix: (soil/water)

WATERLab Sample ID: 1310705-007ASample wt/vol: 5(g/mL) MLLab File ID: 13\G21641.Level: (low/med) LOWDate Received: 10/11/13

% Moisture: not dec.

Date Analyzed: 10/14/13GC Column: Rtx-624ID: .18 (mm)Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (µl)

Soil Aliquot Volume: 0 (µL)

## CONCENTRATION UNITS:

Number TICs found:

0

(µg/L or µg/Kg)

UG/L

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|------------|---------------|----|------------|---|
|------------|---------------|----|------------|---|

## VOLATILE ORGANICS ANALYSIS DATA SHEET

GW-071013 20-24'

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: 10478Case No.: BER

SAS No.: \_\_\_\_\_

SDG No.: BER128

Matrix: (soil/water)

WATERLab Sample ID: 1310705-008ASample wt/vol: 5(g/mL) MLLab File ID: 13\G21642.

Level: (low/med)

LOWDate Received: 10/11/13

% Moisture: not dec.

Date Analyzed: 10/14/13GC Column: Rtx-624ID: .18 (mm)Dilution Factor: 1.00

Soil Extract Volume:

(μL)

Soil Aliquot Volume (μL)

## CONCENTRATION UNITS:

| CAS NO.    | COMPOUND                   | (μg/L or μg/Kg) UG/L | Q |
|------------|----------------------------|----------------------|---|
| 74-87-3    | Chloromethane              | 5                    | U |
| 74-83-9    | Bromomethane               | 5                    | U |
| 75-01-4    | Vinyl chloride             | 5                    | U |
| 75-00-3    | Chloroethane               | 5                    | U |
| 75-09-2    | Methylene chloride         | 5                    | U |
| 67-64-1    | Acetone                    | 25                   | U |
| 75-35-4    | 1,1-Dichloroethene         | 5                    | U |
| 75-15-0    | Carbon disulfide           | 5                    | U |
| 75-34-3    | 1,1-Dichloroethane         | 5                    | U |
| 540-59-0   | 1,2-Dichloroethene (total) | 5                    | U |
| 67-66-3    | Chloroform                 | 5                    | U |
| 107-06-2   | 1,2-Dichloroethane         | 5                    | U |
| 78-93-3    | 2-Butanone                 | 5                    | U |
| 71-55-6    | 1,1,1-Trichloroethane      | 5                    | U |
| 56-23-5    | Carbon tetrachloride       | 5                    | U |
| 75-27-4    | Bromodichloromethane       | 5                    | U |
| 78-87-5    | 1,2-Dichloropropane        | 5                    | U |
| 10061-01-5 | cis-1,3-Dichloropropene    | 5                    | U |
| 79-01-6    | Trichloroethene            | 5                    | U |
| 124-48-1   | Dibromochloromethane       | 5                    | U |
| 79-00-5    | 1,1,2-Trichloroethane      | 5                    | U |
| 71-43-2    | Benzene                    | 5                    | U |
| 10061-02-6 | trans-1,3-Dichloropropene  | 5                    | U |
| 75-25-2    | Bromoform                  | 5                    | U |
| 108-10-1   | 4-Methyl-2-pentanone       | 5                    | U |
| 591-78-6   | 2-Hexanone                 | 5                    | U |
| 127-18-4   | Tetrachloroethene          | 5                    | U |
| 79-34-5    | 1,1,2,2-Tetrachloroethane  | 5                    | U |
| 108-88-3   | Toluene                    | 5                    | U |
| 108-90-7   | Chlorobenzene              | 5                    | U |
| 100-41-4   | Ethylbenzene               | 5                    | U |
| 100-42-5   | Styrene                    | 5                    | U |
| 1330-20-7  | Xylene (total)             | 5                    | U |

805/11/10/13

1F

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

GW-071013 20-24'

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: 10478Case No.: BER

SAS No.: \_\_\_\_\_

SDG No.: BER128

Matrix: (soil/water)

WATERLab Sample ID: 1310705-008ASample wt/vol: 5(g/mL) MLLab File ID: 13\G21642.Level: (low/med) LOWDate Received: 10/11/13

% Moisture: not dec.

Date Analyzed: 10/14/13GC Column: Rtx-624ID: .18 (mm)Dilution Factor: 1.00

Soil Extract Volume:

(μl)

Soil Aliquot Volume: 0 (μL)

## CONCENTRATION UNITS:

Number TICs found:

0

(μg/L or μg/Kg)

UG/L

CAS NUMBER

COMPOUND NAME

RT

EST. CONC.

Q



1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW-071013 30-34'

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: 10478

Case No.: BER

SAS No.: \_\_\_\_\_

SDG No.: BER128

Matrix: (soil/water)

WATER

Lab Sample ID: 1310705-009A

Sample wt/vol: 5

(g/mL) ML

Lab File ID: 13\G21650.

Level: (low/med)

LOW

Date Received: 10/11/13

% Moisture: not dec.

Date Analyzed: 10/15/13

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor: 1.00

Soil Extract Volume:

(µL)

Soil Aliquot Volume

(µL)

CONCENTRATION UNITS:

| CAS NO.    | COMPOUND                   | (µg/L or µg/Kg) <u>UG/L</u> | Q   |
|------------|----------------------------|-----------------------------|-----|
| 74-87-3    | Chloromethane              | 5                           | U   |
| 74-83-9    | Bromomethane               | 5                           | U   |
| 75-01-4    | Vinyl chloride             | 5                           | U   |
| 75-00-3    | Chloroethane               | 5                           | U   |
| 75-09-2    | Methylene chloride         | 5                           | U   |
| 67-64-1    | Acetone                    | 2.5                         | U J |
| 75-35-4    | 1,1-Dichloroethene         | 5                           | U   |
| 75-15-0    | Carbon disulfide           | 5                           | U   |
| 75-34-3    | 1,1-Dichloroethane         | 5                           | U   |
| 540-59-0   | 1,2-Dichloroethene (total) | 2                           | U   |
| 67-66-3    | Chloroform                 | 5                           | U   |
| 107-06-2   | 1,2-Dichloroethane         | 5                           | U   |
| 78-93-3    | 2-Butanone                 | 5                           | U   |
| 71-55-6    | 1,1,1-Trichloroethane      | 5                           | U   |
| 56-23-5    | Carbon tetrachloride       | 5                           | U   |
| 75-27-4    | Bromodichloromethane       | 5                           | U   |
| 78-87-5    | 1,2-Dichloropropane        | 5                           | U   |
| 10061-01-5 | cis-1,3-Dichloropropene    | 5                           | U   |
| 79-01-6    | Trichloroethene            | 4                           | J   |
| 124-48-1   | Dibromochloromethane       | 5                           | U   |
| 79-00-5    | 1,1,2-Trichloroethane      | 5                           | U   |
| 71-43-2    | Benzene                    | 5                           | U   |
| 10061-02-6 | trans-1,3-Dichloropropene  | 5                           | U   |
| 75-25-2    | Bromoform                  | 5                           | U   |
| 108-10-1   | 4-Methyl-2-pentanone       | 5                           | U   |
| 591-78-6   | 2-Hexanone                 | 5                           | U   |
| 127-18-4   | Tetrachloroethene          | 63                          | U   |
| 79-34-5    | 1,1,2,2-Tetrachloroethane  | 5                           | U   |
| 108-88-3   | Toluene                    | 5                           | U   |
| 108-90-7   | Chlorobenzene              | 5                           | U   |
| 100-41-4   | Ethylbenzene               | 5                           | U   |
| 100-42-5   | Styrene                    | 5                           | U   |
| 1330-20-7  | Xylene (total)             | 5                           | U   |

10/11/13

1F

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

GW-071013 30-34'

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: 10478Case No.: BER

SAS No.: \_\_\_\_\_

SDG No.: BER128

Matrix: (soil/water)

WATERLab Sample ID: 1310705-009ASample wt/vol: 5(g/mL) MLLab File ID: 13\G21650.Level: (low/med) LOWDate Received: 10/11/13

% Moisture: not dec.

Date Analyzed: 10/15/13GC Column: Rtx-624ID: .18 (mm)Dilution Factor: 1.00

Soil Extract Volume:

(μl)

Soil Aliquot Volume: 0 (μL)

## CONCENTRATION UNITS:

Number TICs found:

0

(μg/L or μg/Kg)

UG/L

CAS NUMBER

COMPOUND NAME

RT

EST.CONC.

Q

1A

EPA SAMPLE NO.

## VOLATILE ORGANICS ANALYSIS DATA SHEET

GW-071013 40-44'

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: 10478Case No.: BER

SAS No.: \_\_\_\_\_

SDG No.: BER128

Matrix: (soil/water)

WATERLab Sample ID: 1310705-010ASample wt/vol: 5(g/mL) MLLab File ID: 13\G21651.

Level: (low/med)

LOWDate Received: 10/11/13

% Moisture: not dec.

Date Analyzed: 10/15/13GC Column: Rtx-624ID: .18 (mm)Dilution Factor: 1.00

Soil Extract Volume:

(μL)

Soil Aliquot Volume

(μL)

## CONCENTRATION UNITS:

| CAS NO.    | COMPOUND                   | (μg/L or μg/Kg) UG/L | Q |
|------------|----------------------------|----------------------|---|
| 74-87-3    | Chloromethane              | 5                    | U |
| 74-83-9    | Bromomethane               | 5                    | U |
| 75-01-4    | Vinyl chloride             | 5                    | U |
| 75-00-3    | Chloroethane               | 5                    | U |
| 75-09-2    | Methylene chloride         | 5                    | U |
| 67-64-1    | Acetone                    | 3.5                  | U |
| 75-35-4    | 1,1-Dichloroethene         | 5                    | U |
| 75-15-0    | Carbon disulfide           | 5                    | U |
| 75-34-3    | 1,1-Dichloroethane         | 5                    | U |
| 540-59-0   | 1,2-Dichloroethene (total) | 5                    | U |
| 67-66-3    | Chloroform                 | 5                    | U |
| 107-06-2   | 1,2-Dichloroethane         | 5                    | U |
| 78-93-3    | 2-Butanone                 | 5                    | U |
| 71-55-6    | 1,1,1-Trichloroethane      | 5                    | U |
| 56-23-5    | Carbon tetrachloride       | 5                    | U |
| 75-27-4    | Bromodichloromethane       | 5                    | U |
| 78-87-5    | 1,2-Dichloropropane        | 5                    | U |
| 10061-01-5 | cis-1,3-Dichloropropene    | 5                    | U |
| 79-01-6    | Trichloroethene            | 5                    | U |
| 124-48-1   | Dibromochloromethane       | 5                    | U |
| 79-00-5    | 1,1,2-Trichloroethane      | 5                    | U |
| 71-43-2    | Benzene                    | 5                    | U |
| 10061-02-6 | trans-1,3-Dichloropropene  | 5                    | U |
| 75-25-2    | Bromoform                  | 5                    | U |
| 108-10-1   | 4-Methyl-2-pentanone       | 5                    | U |
| 591-78-6   | 2-Hexanone                 | 5                    | U |
| 127-18-4   | Tetrachloroethene          | 5                    | U |
| 79-34-5    | 1,1,2,2-Tetrachloroethane  | 5                    | U |
| 108-88-3   | Toluene                    | 5                    | U |
| 108-90-7   | Chlorobenzene              | 5                    | U |
| 100-41-4   | Ethylbenzene               | 5                    | U |
| 100-42-5   | Styrene                    | 5                    | U |
| 1330-20-7  | Xylene (total)             | 5                    | U |

BER128 S39

10/11/13

1F

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

GW-071013 40-44'

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: 10478Case No.: BER

SAS No.: \_\_\_\_\_

SDG No.: BER128

Matrix: (soil/water)

WATERLab Sample ID: 1310705-010ASample wt/vol: 5(g/mL) MLLab File ID: 13\G21651.Level: (low/med) LOWDate Received: 10/11/13

% Moisture: not dec.

Date Analyzed: 10/15/13GC Column: Rtx-624ID: .18 (mm)Dilution Factor: 1.00

Soil Extract Volume:

(μl)

Soil Aliquot Volume: 0 (μL)

## CONCENTRATION UNITS:

Number TICs found:

3

(μg/L or μg/Kg)

UG/L

| CAS NUMBER | COMPOUND NAME         | RT   | EST. CONC. | Q |
|------------|-----------------------|------|------------|---|
| 1.         | unknown alkene (1.38) | 1.38 | 35         | J |
| 2.         | unknown alkene (1.51) | 1.51 | 5          | J |
| 3.         | unknown alkene (1.91) | 1.91 | 5          | J |

## VOLATILE ORGANICS ANALYSIS DATA SHEET

GW-071013 50-54'

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: 10478Case No.: BER

SAS No.: \_\_\_\_\_

SDG No.: BER128

Matrix: (soil/water)

WATERLab Sample ID: 1310705-011ASample wt/vol: 5(g/mL) MLLab File ID: 13\G21652.

Level: (low/med)

LOWDate Received: 10/11/13

% Moisture: not dec.

Date Analyzed: 10/15/13GC Column: Rtx-624ID: .18 (mm)Dilution Factor: 1.00

Soil Extract Volume:

(μL)

Soil Aliquot Volume

(μL)

## CONCENTRATION UNITS:

| CAS NO.    | COMPOUND                   | (μg/L or μg/Kg) <u>UG/L</u> | Q |
|------------|----------------------------|-----------------------------|---|
| 74-87-3    | Chloromethane              | 5                           | U |
| 74-83-9    | Bromomethane               | 5                           | U |
| 75-01-4    | Vinyl chloride             | 5                           | U |
| 75-00-3    | Chloroethane               | 5                           | U |
| 75-09-2    | Methylene chloride         | 5                           | U |
| 67-64-1    | Acetone                    | 5                           | U |
| 75-35-4    | 1,1-Dichloroethene         | 5                           | U |
| 75-15-0    | Carbon disulfide           | 5                           | U |
| 75-34-3    | 1,1-Dichloroethane         | 5                           | U |
| 540-59-0   | 1,2-Dichloroethene (total) | 5                           | U |
| 67-66-3    | Chloroform                 | 5                           | U |
| 107-06-2   | 1,2-Dichloroethane         | 5                           | U |
| 78-93-3    | 2-Butanone                 | 5                           | U |
| 71-55-6    | 1,1,1-Trichloroethane      | 5                           | U |
| 56-23-5    | Carbon tetrachloride       | 5                           | U |
| 75-27-4    | Bromodichloromethane       | 5                           | U |
| 78-87-5    | 1,2-Dichloropropane        | 5                           | U |
| 10061-01-5 | cis-1,3-Dichloropropene    | 5                           | U |
| 79-01-6    | Trichloroethene            | 5                           | U |
| 124-48-1   | Dibromochloromethane       | 5                           | U |
| 79-00-5    | 1,1,2-Trichloroethane      | 5                           | U |
| 71-43-2    | Benzene                    | 5                           | U |
| 10061-02-6 | trans-1,3-Dichloropropene  | 5                           | U |
| 75-25-2    | Bromoform                  | 5                           | U |
| 108-10-1   | 4-Methyl-2-pentanone       | 5                           | U |
| 591-78-6   | 2-Hexanone                 | 5                           | U |
| 127-18-4   | Tetrachloroethene          | 5                           | U |
| 79-34-5    | 1,1,2,2-Tetrachloroethane  | 5                           | U |
| 108-88-3   | Toluene                    | 5                           | U |
| 108-90-7   | Chlorobenzene              | 5                           | U |
| 100-41-4   | Ethylbenzene               | 5                           | U |
| 100-42-5   | Styrene                    | 5                           | U |
| 1330-20-7  | Xylene (total)             | 5                           | U |

1F

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

GW-071013 50-54'

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: 10478Case No.: BER

SAS No.: \_\_\_\_\_

SDG No.: BER128

Matrix: (soil/water)

WATERLab Sample ID: 1310705-011ASample wt/vol: 5(g/mL) MLLab File ID: 13\G21652.Level: (low/med) LOWDate Received: 10/11/13

% Moisture: not dec.

Date Analyzed: 10/15/13GC Column: Rtx-624ID: .18 (mm)Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (µl)

Soil Aliquot Volume: 0 (µL)

## CONCENTRATION UNITS:

Number TICs found:

1

(µg/L or µg/Kg)

UG/L

| CAS NUMBER | COMPOUND NAME  | RT   | EST.CONC. | Q |
|------------|----------------|------|-----------|---|
| 1.         | unknown alkene | 1.38 | 7         | J |

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW-071013 60-64'

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: 10478

Case No.: BER

SAS No.: \_\_\_\_\_

SDG No.: BER128

Matrix: (soil/water)

WATER

Lab Sample ID: 1310705-012A

Sample wt/vol: 5

(g/mL) ML

Lab File ID: 13\G21653.

Level: (low/med)

LOW

Date Received: 10/11/13

% Moisture: not dec.

Date Analyzed: 10/15/13

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor: 1.00

Soil Extract Volume:

(µL)

Soil Aliquot Volume

(µL)

CONCENTRATION UNITS:

| CAS NO.    | COMPOUND                   | (µg/L or µg/Kg) <u>UG/L</u> | Q |
|------------|----------------------------|-----------------------------|---|
| 74-87-3    | Chloromethane              | 5                           | U |
| 74-83-9    | Bromomethane               | 5                           | U |
| 75-01-4    | Vinyl chloride             | 5                           | U |
| 75-00-3    | Chloroethane               | 5                           | U |
| 75-09-2    | Methylene chloride         | 5                           | U |
| 67-64-1    | Acetone                    | 5                           | U |
| 75-35-4    | 1,1-Dichloroethene         | 5                           | U |
| 75-15-0    | Carbon disulfide           | 5                           | U |
| 75-34-3    | 1,1-Dichloroethane         | 5                           | U |
| 540-59-0   | 1,2-Dichloroethene (total) | 5                           | U |
| 67-66-3    | Chloroform                 | 5                           | U |
| 107-06-2   | 1,2-Dichloroethane         | 5                           | U |
| 78-93-3    | 2-Butanone                 | 5                           | U |
| 71-55-6    | 1,1,1-Trichloroethane      | 5                           | U |
| 56-23-5    | Carbon tetrachloride       | 5                           | U |
| 75-27-4    | Bromodichloromethane       | 5                           | U |
| 78-87-5    | 1,2-Dichloropropane        | 5                           | U |
| 10061-01-5 | cis-1,3-Dichloropropene    | 5                           | U |
| 79-01-6    | Trichloroethene            | 5                           | U |
| 124-48-1   | Dibromochloromethane       | 5                           | U |
| 79-00-5    | 1,1,2-Trichloroethane      | 5                           | U |
| 71-43-2    | Benzene                    | 5                           | U |
| 10061-02-6 | trans-1,3-Dichloropropene  | 5                           | U |
| 75-25-2    | Bromoform                  | 5                           | U |
| 108-10-1   | 4-Methyl-2-pentanone       | 5                           | U |
| 591-78-6   | 2-Hexanone                 | 5                           | U |
| 127-18-4   | Tetrachloroethene          | 5                           | U |
| 79-34-5    | 1,1,2,2-Tetrachloroethane  | 5                           | U |
| 108-88-3   | Toluene                    | 5                           | U |
| 108-90-7   | Chlorobenzene              | 5                           | U |
| 100-41-4   | Ethylbenzene               | 5                           | U |
| 100-42-5   | Styrene                    | 5                           | U |
| 1330-20-7  | Xylene (total)             | 5                           | U |

80K 11/10/13



1F

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

GW-071013 60-64'

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: 10478Case No.: BER

SAS No.: \_\_\_\_\_

SDG No.: BER128

Matrix: (soil/water)

WATERLab Sample ID: 1310705-012ASample wt/vol: 5(g/mL) MLLab File ID: 13\G21653.Level: (low/med) LOWDate Received: 10/11/13

% Moisture: not dec.

Date Analyzed: 10/15/13GC Column: Rtx-624ID: .18 (mm)Dilution Factor: 1.00

Soil Extract Volume:

(μl)

Soil Aliquot Volume: 0 (μL)

## CONCENTRATION UNITS:

Number TICs found:

1

(μg/L or μg/Kg)

UG/L

CAS NUMBER

COMPOUND NAME

RT

EST. CONC.

Q

1.

unknown alkene

1.38

8

J

1A

EPA SAMPLE NO.

## VOLATILE ORGANICS ANALYSIS DATA SHEET

GW-081013 20-24'

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: 10478Case No.: BER

SAS No.: \_\_\_\_\_

SDG No.: BER128

Matrix: (soil/water)

WATERLab Sample ID: 1310705-013ASample wt/vol: 5(g/mL) MLLab File ID: 13\G21654.

Level: (low/med)

LOWDate Received: 10/11/13

% Moisture: not dec.

Date Analyzed: 10/15/13GC Column: Rtx-624ID: .18 (mm)Dilution Factor: 1.00

Soil Extract Volume:

(μL)

Soil Aliquot Volume (μL)

## CONCENTRATION UNITS:

| CAS NO.    | COMPOUND                   | (μg/L or μg/Kg) UG/L | Q   |
|------------|----------------------------|----------------------|-----|
| 74-87-3    | Chloromethane              | 5                    | U   |
| 74-83-9    | Bromomethane               | 5                    | U   |
| 75-01-4    | Vinyl chloride             | 5                    | U   |
| 75-00-3    | Chloroethane               | 5                    | U   |
| 75-09-2    | Methylene chloride         | 5                    | U   |
| 67-64-1    | Acetone                    | 25                   | 80U |
| 75-35-4    | 1,1-Dichloroethene         | 5                    | U   |
| 75-15-0    | Carbon disulfide           | 5                    | U   |
| 75-34-3    | 1,1-Dichloroethane         | 5                    | U   |
| 540-59-0   | 1,2-Dichloroethene (total) | 5                    | U   |
| 67-66-3    | Chloroform                 | 5                    | U   |
| 107-06-2   | 1,2-Dichloroethane         | 5                    | U   |
| 78-93-3    | 2-Butanone                 | 5                    | U   |
| 71-55-6    | 1,1,1-Trichloroethane      | 5                    | U   |
| 56-23-5    | Carbon tetrachloride       | 5                    | U   |
| 75-27-4    | Bromodichloromethane       | 5                    | U   |
| 78-87-5    | 1,2-Dichloropropane        | 5                    | U   |
| 10061-01-5 | cis-1,3-Dichloropropene    | 5                    | U   |
| 79-01-6    | Trichloroethene            | 5                    | U   |
| 124-48-1   | Dibromochloromethane       | 5                    | U   |
| 79-00-5    | 1,1,2-Trichloroethane      | 5                    | U   |
| 71-43-2    | Benzene                    | 5                    | U   |
| 10061-02-6 | trans-1,3-Dichloropropene  | 5                    | U   |
| 75-25-2    | Bromoform                  | 5                    | U   |
| 108-10-1   | 4-Methyl-2-pentanone       | 5                    | U   |
| 591-78-6   | 2-Hexanone                 | 5                    | U   |
| 127-18-4   | Tetrachloroethene          | 10                   | U   |
| 79-34-5    | 1,1,2,2-Tetrachloroethane  | 5                    | U   |
| 108-88-3   | Toluene                    | 5                    | U   |
| 108-90-7   | Chlorobenzene              | 5                    | U   |
| 100-41-4   | Ethylbenzene               | 5                    | U   |
| 100-42-5   | Styrene                    | 5                    | U   |
| 1330-20-7  | Xylene (total)             | 5                    | U   |

80/11/10/13

1F

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

GW-081013 20-24'

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: 10478Case No.: BER

SAS No.: \_\_\_\_\_

SDG No.: BER128

Matrix: (soil/water)

WATERLab Sample ID: 1310705-013ASample wt/vol: 5(g/mL) MLLab File ID: 13\G21654.Level: (low/med) LOWDate Received: 10/11/13

% Moisture: not dec.

Date Analyzed: 10/15/13GC Column: Rtx-624ID: .18 (mm)Dilution Factor: 1.00

Soil Extract Volume:

(μl)

Soil Aliquot Volume: 0 (μL)

## CONCENTRATION UNITS:

Number TICs found:

0

(μg/L or μg/Kg)

UG/L

CAS NUMBER

COMPOUND NAME

RT

EST. CONC.

Q

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW-081013 30-34'

Lab Name: H2M LABS INC Contract: \_\_\_\_\_  
Lab Code: 10478 Case No.: BER SAS No.: \_\_\_\_\_ SDG No.: BER128  
Matrix: (soil/water) WATER Lab Sample ID: 1310705-014A  
Sample wt/vol: 5 (g/mL) ML Lab File ID: 13\G21655.  
Level: (low/med) LOW Date Received: 10/11/13  
% Moisture: not dec. Date Analyzed: 10/15/13  
GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00  
Soil Extract Volume: \_\_\_\_\_ (µL) Soil Aliquot Volume \_\_\_\_\_ (µL)

CONCENTRATION UNITS:

| CAS NO.    | COMPOUND                   | (µg/L or µg/Kg) UG/L | Q |
|------------|----------------------------|----------------------|---|
| 74-87-3    | Chloromethane              | 5                    | U |
| 74-83-9    | Bromomethane               | 5                    | U |
| 75-01-4    | Vinyl chloride             | 5                    | U |
| 75-00-3    | Chloroethane               | 5                    | U |
| 75-09-2    | Methylene chloride         | 5                    | U |
| 67-64-1    | Acetone                    | 5                    | U |
| 75-35-4    | 1,1-Dichloroethene         | 5                    | U |
| 75-15-0    | Carbon disulfide           | 5                    | U |
| 75-34-3    | 1,1-Dichloroethane         | 5                    | U |
| 540-59-0   | 1,2-Dichloroethene (total) | 5                    | U |
| 67-66-3    | Chloroform                 | 5                    | U |
| 107-06-2   | 1,2-Dichloroethane         | 5                    | U |
| 78-93-3    | 2-Butanone                 | 5                    | U |
| 71-55-6    | 1,1,1-Trichloroethane      | 5                    | U |
| 56-23-5    | Carbon tetrachloride       | 5                    | U |
| 75-27-4    | Bromodichloromethane       | 5                    | U |
| 78-87-5    | 1,2-Dichloropropane        | 5                    | U |
| 10061-01-5 | cis-1,3-Dichloropropene    | 5                    | U |
| 79-01-6    | Trichloroethene            | 5                    | U |
| 124-48-1   | Dibromochloromethane       | 5                    | U |
| 79-00-5    | 1,1,2-Trichloroethane      | 5                    | U |
| 71-43-2    | Benzene                    | 5                    | U |
| 10061-02-6 | trans-1,3-Dichloropropene  | 5                    | U |
| 75-25-2    | Bromoform                  | 5                    | U |
| 108-10-1   | 4-Methyl-2-pentanone       | 5                    | U |
| 591-78-6   | 2-Hexanone                 | 5                    | U |
| 127-18-4   | Tetrachloroethene          | 5                    | U |
| 79-34-5    | 1,1,2,2-Tetrachloroethane  | 5                    | U |
| 108-88-3   | Toluene                    | 5                    | U |
| 108-90-7   | Chlorobenzene              | 5                    | U |
| 100-41-4   | Ethylbenzene               | 5                    | U |
| 100-42-5   | Styrene                    | 5                    | U |
| 1330-20-7  | Xylene (total)             | 5                    | U |

80 11/10/13

1F

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

GW-081013 30-34'

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: 10478Case No.: BER

SAS No.: \_\_\_\_\_

SDG No.: BER128

Matrix: (soil/water)

WATERLab Sample ID: 1310705-014ASample wt/vol: 5(g/mL) MLLab File ID: 13\G21655.Level: (low/med) LOWDate Received: 10/11/13

% Moisture: not dec.

Date Analyzed: 10/15/13GC Column: Rtx-624ID: .18 (mm)Dilution Factor: 1.00

Soil Extract Volume:

(μl)

Soil Aliquot Volume: 0 (μL)

## CONCENTRATION UNITS:

Number TICs found:

1

(μg/L or μg/Kg)

UG/L

CAS NUMBER

COMPOUND NAME

RT

EST.CONC.

Q

1

unknown alkene

1.38

9

J

1A

EPA SAMPLE NO.

## VOLATILE ORGANICS ANALYSIS DATA SHEET

GW-081013 40-44'

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: 10478Case No.: BER

SAS No.: \_\_\_\_\_

SDG No.: BER128

Matrix: (soil/water)

WATERLab Sample ID: 1310705-015ASample wt/vol: 5(g/mL) MLLab File ID: 13\G21656.

Level: (low/med)

LOWDate Received: 10/11/13

% Moisture: not dec.

Date Analyzed: 10/15/13GC Column: Rtx-624ID: .18 (mm)Dilution Factor: 1.00

Soil Extract Volume:

(µL)

Soil Aliquot Volume

(µL)

## CONCENTRATION UNITS:

| CAS NO.    | COMPOUND                   | (µg/L or µg/Kg) UG/L | Q |
|------------|----------------------------|----------------------|---|
| 74-87-3    | Chloromethane              | 5                    | U |
| 74-83-9    | Bromomethane               | 5                    | U |
| 75-01-4    | Vinyl chloride             | 5                    | U |
| 75-00-3    | Chloroethane               | 5                    | U |
| 75-09-2    | Methylene chloride         | 5                    | U |
| 67-64-1    | Acetone                    | 5                    | U |
| 75-35-4    | 1,1-Dichloroethene         | 5                    | U |
| 75-15-0    | Carbon disulfide           | 5                    | U |
| 75-34-3    | 1,1-Dichloroethane         | 5                    | U |
| 540-59-0   | 1,2-Dichloroethene (total) | 5                    | U |
| 67-66-3    | Chloroform                 | 5                    | U |
| 107-06-2   | 1,2-Dichloroethane         | 5                    | U |
| 78-93-3    | 2-Butanone                 | 5                    | U |
| 71-55-6    | 1,1,1-Trichloroethane      | 5                    | U |
| 56-23-5    | Carbon tetrachloride       | 5                    | U |
| 75-27-4    | Bromodichloromethane       | 5                    | U |
| 78 87 5    | 1,2 Dichloropropane        | 5                    | U |
| 10061-01-5 | cis-1,3-Dichloropropene    | 5                    | U |
| 79-01-6    | Trichloroethene            | 5                    | U |
| 124-48-1   | Dibromochloromethane       | 5                    | U |
| 79-00-5    | 1,1,2-Trichloroethane      | 5                    | U |
| 71-43-2    | Benzene                    | 5                    | U |
| 10061-02-6 | trans-1,3-Dichloropropene  | 5                    | U |
| 75-25-2    | Bromoform                  | 5                    | U |
| 108-10-1   | 4-Methyl-2-pentanone       | 5                    | U |
| 591-78-6   | 2-Hexanone                 | 5                    | U |
| 127-18-4   | Tetrachloroethene          | 5                    | U |
| 79-34-5    | 1,1,2,2-Tetrachloroethane  | 5                    | U |
| 108-88-3   | Toluene                    | 5                    | U |
| 108-90-7   | Chlorobenzene              | 5                    | U |
| 100-41-4   | Ethylbenzene               | 5                    | U |
| 100-42-5   | Styrene                    | 5                    | U |
| 1330-20-7  | Xylene (total)             | 5                    | U |

80 11/10/13

1F

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

GW-081013 40-44'

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: 10478Case No.: BER

SAS No.: \_\_\_\_\_

SDG No.: BER128

Matrix: (soil/water)

WATERLab Sample ID: 1310705-015ASample wt/vol: 5(g/mL) MLLab File ID: 13\G21656.Level: (low/med) LOWDate Received: 10/11/13

% Moisture: not dec.

Date Analyzed: 10/15/13GC Column: Rtx-624ID: .18 (mm)Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (μl)

Soil Aliquot Volume: 0 (μL)

## CONCENTRATION UNITS:

Number TICs found:

1

(μg/L or μg/Kg)

UG/L

| CAS NUMBER | COMPOUND NAME  | RT   | EST. CONC. | Q |
|------------|----------------|------|------------|---|
| 1.         | unknown alkene | 1.38 | 10         | J |



1A

EPA SAMPLE NO.

## VOLATILE ORGANICS ANALYSIS DATA SHEET

GW-081013 50-54'

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: 10478Case No.: BER

SAS No.: \_\_\_\_\_

SDG No.: BER128

Matrix: (soil/water)

WATERLab Sample ID: 1310705-016ASample wt/vol: 5(g/mL) MLLab File ID: 13\G21657.

Level: (low/med)

LOWDate Received: 10/11/13

% Moisture: not dec.

Date Analyzed: 10/15/13GC Column: Rtx-624ID: .18 (mm)Dilution Factor: 1.00

Soil Extract Volume:

(μL)

Soil Aliquot Volume

(μL)

## CONCENTRATION UNITS:

| CAS NO.    | COMPOUND                   | (μg/L or μg/Kg) <u>UG/L</u> | Q |
|------------|----------------------------|-----------------------------|---|
| 74-87-3    | Chloromethane              | 5                           | U |
| 74-83-9    | Bromomethane               | 5                           | U |
| 75-01-4    | Vinyl chloride             | 5                           | U |
| 75-00-3    | Chloroethane               | 5                           | U |
| 75-09-2    | Methylene chloride         | 5                           | U |
| 67-64-1    | Acetone                    | 25                          | U |
| 75-35-4    | 1,1-Dichloroethene         | 5                           | U |
| 75-15-0    | Carbon disulfide           | 5                           | U |
| 75-34-3    | 1,1-Dichloroethane         | 5                           | U |
| 540-59-0   | 1,2-Dichloroethene (total) | 5                           | U |
| 67-66-3    | Chloroform                 | 5                           | U |
| 107-06-2   | 1,2-Dichloroethane         | 5                           | U |
| 78-93-3    | 2-Butanone                 | 5                           | U |
| 71-55-6    | 1,1,1-Trichloroethane      | 5                           | U |
| 56-23-5    | Carbon tetrachloride       | 5                           | U |
| 75-27-4    | Bromodichloromethane       | 5                           | U |
| 78-87-5    | 1,2-Dichloropropane        | 5                           | U |
| 10061-01-5 | cis-1,3-Dichloropropene    | 5                           | U |
| 79-01-6    | Trichloroethene            | 5                           | U |
| 124-48-1   | Dibromochloromethane       | 5                           | U |
| 79-00-5    | 1,1,2-Trichloroethane      | 5                           | U |
| 71-43-2    | Benzene                    | 5                           | U |
| 10061-02-6 | trans-1,3-Dichloropropene  | 5                           | U |
| 75-25-2    | Bromoform                  | 5                           | U |
| 108-10-1   | 4-Methyl-2-pentanone       | 5                           | U |
| 591-78-6   | 2-Hexanone                 | 5                           | U |
| 127-18-4   | Tetrachloroethene          | 5                           | U |
| 79-34-5    | 1,1,2,2-Tetrachloroethane  | 5                           | U |
| 108-88-3   | Toluene                    | 5                           | U |
| 108-90-7   | Chlorobenzene              | 5                           | U |
| 100-41-4   | Ethylbenzene               | 5                           | U |
| 100-42-5   | Styrene                    | 5                           | U |
| 1330-20-7  | Xylene (total)             | 5                           | U |

BER128 S51

for 11/10/13

1F

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

GW-081013 50-54'

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: 10478Case No.: BER

SAS No.: \_\_\_\_\_

SDG No.: BER128

Matrix: (soil/water)

WATERLab Sample ID: 1310705-016ASample wt/vol: 5(g/mL) MLLab File ID: 13\G21657.Level: (low/med) LOWDate Received: 10/11/13

% Moisture: not dec.

Date Analyzed: 10/15/13GC Column: Rtx-624ID: .18 (mm)Dilution Factor: 1.00

Soil Extract Volume: \_\_\_\_\_ (µl)

Soil Aliquot Volume: 0 (µL)

## CONCENTRATION UNITS:

Number TICs found: 0

(µg/L or µg/Kg)

UG/L

CAS NUMBER

COMPOUND NAME

RT

EST.CONC.

Q

1A

EPA SAMPLE NO.

## VOLATILE ORGANICS ANALYSIS DATA SHEET

GW-081013 60-64'

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: 10478Case No.: BER

SAS No.: \_\_\_\_\_

SDG No.: BER128

Matrix: (soil/water)

WATERLab Sample ID: 1310705-017ASample wt/vol: 5(g/mL) MLLab File ID: 13\G21658.

Level: (low/med)

LOWDate Received: 10/11/13

% Moisture: not dec.

Date Analyzed: 10/15/13GC Column: Rtx-624ID: .18 (mm)Dilution Factor: 1.00

Soil Extract Volume:

(μL)

Soil Aliquot Volume

(μL)

## CONCENTRATION UNITS:

| CAS NO.    | COMPOUND                   | (μg/L or μg/Kg) <u>UG/L</u> | <u>Q</u> |
|------------|----------------------------|-----------------------------|----------|
| 74-87-3    | Chloromethane              | 5                           | U        |
| 74-83-9    | Bromomethane               | 5                           | U        |
| 75-01-4    | Vinyl chloride             | 5                           | U        |
| 75-00-3    | Chloroethane               | 5                           | U        |
| 75-09-2    | Methylene chloride         | 5                           | U        |
| 67-64-1    | Acetone                    | 25                          | U        |
| 75-35-4    | 1,1-Dichloroethene         | 5                           | U        |
| 75-15-0    | Carbon disulfide           | 5                           | U        |
| 75-34-3    | 1,1-Dichloroethane         | 5                           | U        |
| 540-59-0   | 1,2-Dichloroethene (total) | 5                           | U        |
| 67-66-3    | Chloroform                 | 5                           | U        |
| 107-06-2   | 1,2-Dichloroethane         | 5                           | U        |
| 78-93-3    | 2-Butanone                 | 5                           | U        |
| 71-55-6    | 1,1,1-Trichloroethane      | 5                           | U        |
| 56-23-5    | Carbon tetrachloride       | 5                           | U        |
| 75-27-4    | Bromodichloromethane       | 5                           | U        |
| 78-87-5    | 1,2-Dichloropropane        | 5                           | U        |
| 10061-01-5 | cis-1,3-Dichloropropene    | 5                           | U        |
| 79-01-6    | Trichloroethene            | 5                           | U        |
| 124-48-1   | Dibromochloromethane       | 5                           | U        |
| 79-00-5    | 1,1,2-Trichloroethane      | 5                           | U        |
| 71-43-2    | Benzene                    | 5                           | U        |
| 10061-02-6 | trans-1,3-Dichloropropene  | 5                           | U        |
| 75-25-2    | Bromoform                  | 5                           | U        |
| 108-10-1   | 4-Methyl-2-pentanone       | 5                           | U        |
| 591-78-6   | 2-Hexanone                 | 5                           | U        |
| 127-18-4   | Tetrachloroethene          | 5                           | U        |
| 79-34-5    | 1,1,2,2-Tetrachloroethane  | 5                           | U        |
| 108-88-3   | Toluene                    | 5                           | U        |
| 108-90-7   | Chlorobenzene              | 5                           | U        |
| 100-41-4   | Ethylbenzene               | 5                           | U        |
| 100-42-5   | Styrene                    | 5                           | U        |
| 1330-20-7  | Xylene (total)             | 5                           | U        |

80 11/10/13

1F

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

GW-081013 60-64'

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: 10478Case No.: BER

SAS No.: \_\_\_\_\_

SDG No.: BER128

Matrix: (soil/water)

WATERLab Sample ID: 1310705-017ASample wt/vol: 5(g/mL) MLLab File ID: 13\G21658.Level: (low/med) LOWDate Received: 10/11/13

% Moisture: not dec.

Date Analyzed: 10/15/13GC Column: Rtx-624ID: .18 (mm)Dilution Factor: 1.00

Soil Extract Volume:

(μl)

Soil Aliquot Volume: 0 (μL)

## CONCENTRATION UNITS:

Number TICs found:

0

(μg/L or μg/Kg)

UG/L

CAS NUMBER

COMPOUND NAME

RT

EST. CONC.

Q

1A

EPA SAMPLE NO.

## VOLATILE ORGANICS ANALYSIS DATA SHEET

GW-091013 20-24'

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: 10478Case No.: BER

SAS No.: \_\_\_\_\_

SDG No.: BER128

Matrix: (soil/water)

WATERLab Sample ID: 1310705-018ASample wt/vol: 5(g/mL) MLLab File ID: 13\G21659.

Level: (low/med)

LOWDate Received: 10/11/13

% Moisture: not dec.

Date Analyzed: 10/15/13GC Column: Rtx-624ID: .18 (mm)Dilution Factor: 1.00

Soil Extract Volume:

(µL)

Soil Aliquot Volume

(µL)

## CONCENTRATION UNITS:

| CAS NO.    | COMPOUND                   | (µg/L or µg/Kg) <u>UG/L</u> | Q |
|------------|----------------------------|-----------------------------|---|
| 74-87-3    | Chloromethane              | 5                           | U |
| 74-83-9    | Bromomethane               | 5                           | U |
| 75-01-4    | Vinyl chloride             | 5                           | U |
| 75-00-3    | Chloroethane               | 5                           | U |
| 75-09-2    | Methylene chloride         | 5                           | U |
| 67-64-1    | Acetone                    | 25                          | U |
| 75-35-4    | 1,1-Dichloroethene         | 5                           | U |
| 75-15-0    | Carbon disulfide           | 5                           | U |
| 75-34-3    | 1,1-Dichloroethane         | 5                           | U |
| 540-59-0   | 1,2-Dichloroethene (total) | 5                           | U |
| 67-66-3    | Chloroform                 | 5                           | U |
| 107-06-2   | 1,2-Dichloroethane         | 5                           | U |
| 78-93-3    | 2-Butanone                 | 5                           | U |
| 71-55-6    | 1,1,1-Trichloroethane      | 5                           | U |
| 56-23-5    | Carbon tetrachloride       | 5                           | U |
| 75-27-4    | Bromodichloromethane       | 5                           | U |
| 78-87-5    | 1,2-Dichloropropane        | 5                           | U |
| 10061-01-5 | cis-1,3-Dichloropropene    | 5                           | U |
| 79-01-6    | Trichloroethene            | 5                           | U |
| 124-48-1   | Dibromochloromethane       | 5                           | U |
| 79-00-5    | 1,1,2-Trichloroethane      | 5                           | U |
| 71-43-2    | Benzene                    | 5                           | U |
| 10061-02-6 | trans-1,3-Dichloropropene  | 5                           | U |
| 75-25-2    | Bromoform                  | 5                           | U |
| 108-10-1   | 4-Methyl-2-pentanone       | 5                           | U |
| 591-78-6   | 2-Hexanone                 | 5                           | U |
| 127-18-4   | Tetrachloroethene          | 33                          | U |
| 79-34-5    | 1,1,2,2-Tetrachloroethane  | 5                           | U |
| 108-88-3   | Toluene                    | 5                           | U |
| 108-90-7   | Chlorobenzene              | 5                           | U |
| 100-41-4   | Ethylbenzene               | 5                           | U |
| 100-42-5   | Styrene                    | 5                           | U |
| 1330-20-7  | Xylene (total)             | 5                           | U |

10/11/13

1F

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

GW-091013 20-24'

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: 10478Case No.: BER

SAS No.: \_\_\_\_\_

SDG No.: BER128

Matrix: (soil/water)

WATERLab Sample ID: 1310705-018ASample wt/vol: 5(g/mL) MLLab File ID: 13\G21659.Level: (low/med) LOWDate Received: 10/11/13

% Moisture: not dec.

Date Analyzed: 10/15/13GC Column: Rtx-624ID: .18 (mm)Dilution Factor: 1.00

Soil Extract Volume:

(μl)

Soil Aliquot Volume: 0 (μL)

## CONCENTRATION UNITS:

Number TICs found:

0

(μg/L or μg/Kg)

UG/L

CAS NUMBER

COMPOUND NAME

RT

EST.CONC.

Q

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW-091013 30-34'

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: 10478

Case No.: BER

SAS No.: \_\_\_\_\_

SDG No.: BER128

Matrix: (soil/water)

WATER

Lab Sample ID: 1310705-019A

Sample wt/vol: 5

(g/mL) ML

Lab File ID: 13\G21660.

Level: (low/med)

LOW

Date Received: 10/11/13

% Moisture: not dec.

Date Analyzed: 10/15/13

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor: 1.00

Soil Extract Volume:

(µL)

Soil Aliquot Volume

(µL)

CONCENTRATION UNITS:

| CAS NO.    | COMPOUND                   | (µg/L or µg/Kg) UG/L | Q |
|------------|----------------------------|----------------------|---|
| 74-87-3    | Chloromethane              | 5                    | U |
| 74-83-9    | Bromomethane               | 5                    | U |
| 75-01-4    | Vinyl chloride             | 5                    | U |
| 75-00-3    | Chloroethane               | 5                    | U |
| 75-09-2    | Methylene chloride         | 5                    | U |
| 67-64-1    | Acetone                    | 5                    | U |
| 75-35-4    | 1,1-Dichloroethene         | 5                    | U |
| 75-15-0    | Carbon disulfide           | 5                    | U |
| 75-34-3    | 1,1-Dichloroethane         | 5                    | U |
| 540-59-0   | 1,2-Dichloroethene (total) | 5                    | U |
| 67-66-3    | Chloroform                 | 5                    | U |
| 107-06-2   | 1,2-Dichloroethane         | 5                    | U |
| 78-93-3    | 2-Butanone                 | 5                    | U |
| 71-55-6    | 1,1,1-Trichloroethane      | 5                    | U |
| 56-23-5    | Carbon tetrachloride       | 5                    | U |
| 75-27-4    | Bromodichloromethane       | 5                    | U |
| 78-87-5    | 1,2-Dichloropropane        | 5                    | U |
| 10061-01-5 | cis-1,3-Dichloropropene    | 5                    | U |
| 79-01-6    | Trichloroethene            | 5                    | U |
| 124-48-1   | Dibromochloromethane       | 5                    | U |
| 79-00-5    | 1,1,2-Trichloroethane      | 5                    | U |
| 71-43-2    | Benzene                    | 5                    | U |
| 10061-02-6 | trans-1,3-Dichloropropene  | 5                    | U |
| 75-25-2    | Bromoform                  | 5                    | U |
| 108-10-1   | 4-Methyl-2-pentanone       | 5                    | U |
| 591-78-6   | 2-Hexanone                 | 5                    | U |
| 127-18-4   | Tetrachloroethene          | 7                    | U |
| 79-34-5    | 1,1,2,2-Tetrachloroethane  | 5                    | U |
| 108-88-3   | Toluene                    | 5                    | U |
| 108-90-7   | Chlorobenzene              | 5                    | U |
| 100-41-4   | Ethylbenzene               | 5                    | U |
| 100-42-5   | Styrene                    | 5                    | U |
| 1330-20-7  | Xylene (total)             | 5                    | U |

10/11/13



1F

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

GW-091013 30-34'

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: 10478Case No.: BER

SAS No.: \_\_\_\_\_

SDG No.: BER128

Matrix: (soil/water)

WATERLab Sample ID: 1310705-019ASample wt/vol: 5(g/mL) MLLab File ID: 13\G21660.Level: (low/med) LOWDate Received: 10/11/13

% Moisture: not dec.

Date Analyzed: 10/15/13GC Column: Rtx-624ID: .18 (mm)Dilution Factor: 1.00

Soil Extract Volume:

(μl)

Soil Aliquot Volume: 0 (μL)

## CONCENTRATION UNITS:

Number TICs found:

0

(μg/L or μg/Kg)

UG/L

| CAS NUMBER | COMPOUND NAME | RT | EST.CONC. | Q |
|------------|---------------|----|-----------|---|
|------------|---------------|----|-----------|---|

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW-091013 40-44'

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: 10478

Case No.: BER

SAS No.: \_\_\_\_\_

SDG No.: BER128

Matrix: (soil/water)

WATER

Lab Sample ID: 1310705-020A

Sample wt/vol: 5

(g/mL) ML

Lab File ID: 13\G21661.

Level: (low/med)

LOW

Date Received: 10/11/13

% Moisture: not dec.

Date Analyzed: 10/15/13

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor: 1.00

Soil Extract Volume:

( $\mu$ L)

Soil Aliquot Volume

( $\mu$ L)

CONCENTRATION UNITS:

| CAS NO.    | COMPOUND                   | ( $\mu$ g/L or $\mu$ g/Kg) UG/L | Q |
|------------|----------------------------|---------------------------------|---|
| 74-87-3    | Chloromethane              | 5                               | U |
| 74-83-9    | Bromomethane               | 5                               | U |
| 75-01-4    | Vinyl chloride             | 5                               | U |
| 75-00-3    | Chloroethane               | 5                               | U |
| 75-09-2    | Methylene chloride         | 5                               | U |
| 67-64-1    | Acetone                    | 2.5                             | U |
| 75-35-4    | 1,1-Dichloroethene         | 5                               | U |
| 75-15-0    | Carbon disulfide           | 5                               | U |
| 75-34-3    | 1,1-Dichloroethane         | 5                               | U |
| 540-59-0   | 1,2-Dichloroethene (total) | 5                               | U |
| 67-66-3    | Chloroform                 | 5                               | U |
| 107-06-2   | 1,2-Dichloroethane         | 5                               | U |
| 78-93-3    | 2-Butanone                 | 5                               | U |
| 71-55-6    | 1,1,1-Trichloroethane      | 5                               | U |
| 56-23-5    | Carbon tetrachloride       | 5                               | U |
| 75-27-4    | Bromodichloromethane       | 5                               | U |
| 78-87-5    | 1,2-Dichloropropane        | 5                               | U |
| 10061-01-5 | cis-1,3-Dichloropropene    | 5                               | U |
| 79-01-6    | Trichloroethene            | 5                               | U |
| 124-48-1   | Dibromochloromethane       | 5                               | U |
| 79-00-5    | 1,1,2-Trichloroethane      | 5                               | U |
| 71-43-2    | Benzene                    | 5                               | U |
| 10061-02-6 | trans-1,3-Dichloropropene  | 5                               | U |
| 75-25-2    | Bromoform                  | 5                               | U |
| 108-10-1   | 4-Methyl-2-pentanone       | 5                               | U |
| 591-78-6   | 2-Hexanone                 | 5                               | U |
| 127-18-4   | Tetrachloroethene          | 5                               | U |
| 79-34-5    | 1,1,2,2-Tetrachloroethane  | 5                               | U |
| 108-88-3   | Toluene                    | 5                               | U |
| 108-90-7   | Chlorobenzene              | 5                               | U |
| 100-41-4   | Ethylbenzene               | 5                               | U |
| 100-42-5   | Styrene                    | 5                               | U |
| 1330-20-7  | Xylene (total)             | 5                               | U |

10/11/13

1F

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

GW-091013 40-44'

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: 10478Case No.: BER

SAS No.: \_\_\_\_\_

SDG No.: BER128

Matrix: (soil/water)

WATERLab Sample ID: 1310705-020ASample wt/vol: 5(g/mL) MLLab File ID: 13\G21661.Level: (low/med) LOWDate Received: 10/11/13

% Moisture: not dec.

Date Analyzed: 10/15/13GC Column: Rtx-624ID: .18 (mm)Dilution Factor: 1.00

Soil Extract Volume:

(μl)

Soil Aliquot Volume: 0 (μL)

## CONCENTRATION UNITS:

Number TICs found:

1

(μg/L or μg/Kg)

UG/L

CAS NUMBER

COMPOUND NAME

RT

EST. CONC.

Q

1.

unknown alkene

1.38

26

J

1A

EPA SAMPLE NO.

## VOLATILE ORGANICS ANALYSIS DATA SHEET

GW-091013 50-54'

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: 10478Case No.: BER

SAS No.: \_\_\_\_\_

SDG No.: BER128

Matrix: (soil/water)

WATERLab Sample ID: 1310705-021ASample wt/vol: 5(g/mL) MLLab File ID: 13\G21662

Level: (low/med)

LOWDate Received: 10/11/13

% Moisture: not dec.

Date Analyzed: 10/15/13GC Column: Rtx-624ID: .18 (mm)Dilution Factor: 1.00

Soil Extract Volume:

(µL)

Soil Aliquot Volume

(µL)

## CONCENTRATION UNITS:

| CAS NO.    | COMPOUND                   | (µg/L or µg/Kg) UG/L | Q |
|------------|----------------------------|----------------------|---|
| 74-87-3    | Chloromethane              | 5                    | U |
| 74-83-9    | Bromomethane               | 5                    | U |
| 75-01-4    | Vinyl chloride             | 5                    | U |
| 75-00-3    | Chloroethane               | 5                    | U |
| 75-09-2    | Methylene chloride         | 5                    | U |
| 67-64-1    | Acetone                    | 6                    | U |
| 75-35-4    | 1,1-Dichloroethene         | 5                    | U |
| 75-15-0    | Carbon disulfide           | 5                    | U |
| 75-34-3    | 1,1-Dichloroethane         | 5                    | U |
| 540-59-0   | 1,2-Dichloroethene (total) | 5                    | U |
| 67-66-3    | Chloroform                 | 5                    | U |
| 107-06-2   | 1,2-Dichloroethane         | 5                    | U |
| 78-93-3    | 2-Butanone                 | 1                    | J |
| 71-55-6    | 1,1,1-Trichloroethane      | 5                    | U |
| 56-23-5    | Carbon tetrachloride       | 5                    | U |
| 75-27-4    | Bromodichloromethane       | 5                    | U |
| 78-87-5    | 1,2-Dichloropropane        | 5                    | U |
| 10061-01-5 | cis-1,3-Dichloropropene    | 5                    | U |
| 79-01-6    | Trichloroethene            | 5                    | U |
| 124-48-1   | Dibromochloromethane       | 5                    | U |
| 79-00-5    | 1,1,2-Trichloroethane      | 5                    | U |
| 71-43-2    | Benzene                    | 5                    | U |
| 10061-02-6 | trans-1,3-Dichloropropene  | 5                    | U |
| 75-25-2    | Bromoform                  | 5                    | U |
| 108-10-1   | 4-Methyl-2-pentanone       | 5                    | U |
| 591-78-6   | 2-Hexanone                 | 5                    | U |
| 127-18-4   | Tetrachloroethene          | 1                    | J |
| 79-34-5    | 1,1,2,2-Tetrachloroethane  | 5                    | U |
| 108-88-3   | Toluene                    | 5                    | U |
| 108-90-7   | Chlorobenzene              | 5                    | U |
| 100-41-4   | Ethylbenzene               | 5                    | U |
| 100-42-5   | Styrene                    | 5                    | U |
| 1330-20-7  | Xylene (total)             | 5                    | U |

BER128 S61

80K 11/18/13

VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

GW-091013 50-54'

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: 10478Case No.: BER

SAS No.: \_\_\_\_\_

SDG No.: BER128

Matrix: (soil/water)

WATERLab Sample ID: 1310705-021ASample wt/vol: 5(g/mL) MLLab File ID: 13\G21662.Level: (low/med) LOWDate Received: 10/11/13

% Moisture: not dec.

Date Analyzed: 10/15/13GC Column: Rtx-624ID: .18 (mm)Dilution Factor: 1.00

Soil Extract Volume:

(μl)

Soil Aliquot Volume: 0 (μL)

## CONCENTRATION UNITS:

Number TICs found:

1

(μg/L or μg/Kg)

UG/L

CAS NUMBER

COMPOUND NAME

RT

EST. CONC.

Q

1.

unknown alkene

1.38

24

J

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GW-091013 60-64'

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: 10478

Case No.: BER

SAS No.: \_\_\_\_\_

SDG No.: BER128

Matrix: (soil/water)

WATER

Lab Sample ID: 1310705-022A

Sample wt/vol: 5

(g/mL) ML

Lab File ID: 13\G21663.

Level: (low/med)

LOW

Date Received: 10/11/13

% Moisture: not dec.

Date Analyzed: 10/15/13

GC Column: Rtx-624

ID: .18 (mm)

Dilution Factor: 1.00

Soil Extract Volume:

(μL)

Soil Aliquot Volume

(μL)

CONCENTRATION UNITS:

| CAS NO.    | COMPOUND                   | (μg/L or μg/Kg) UG/L | Q |
|------------|----------------------------|----------------------|---|
| 74-87-3    | Chloromethane              | 5                    | U |
| 74-83-9    | Bromomethane               | 5                    | U |
| 75-01-4    | Vinyl chloride             | 5                    | U |
| 75-00-3    | Chloroethane               | 5                    | U |
| 75-09-2    | Methylene chloride         | 5                    | U |
| 67-64-1    | Acetone                    | 4.5                  | U |
| 75-35-4    | 1,1-Dichloroethene         | 5                    | U |
| 75-15-0    | Carbon disulfide           | 5                    | U |
| 75-34-3    | 1,1-Dichloroethane         | 5                    | U |
| 540-59-0   | 1,2-Dichloroethene (total) | 5                    | U |
| 67-66-3    | Chloroform                 | 5                    | U |
| 107-06-2   | 1,2-Dichloroethane         | 5                    | U |
| 78-93-3    | 2-Butanone                 | 5                    | U |
| 71-55-6    | 1,1,1-Trichloroethane      | 5                    | U |
| 56-23-5    | Carbon tetrachloride       | 5                    | U |
| 75-27-4    | Bromodichloromethane       | 5                    | U |
| 78-87-5    | 1,2-Dichloropropane        | 5                    | U |
| 10061-01-5 | cis-1,3-Dichloropropene    | 5                    | U |
| 79-01-6    | Trichloroethene            | 5                    | U |
| 124-48-1   | Dibromochloromethane       | 5                    | U |
| 79-00-5    | 1,1,2-Trichloroethane      | 5                    | U |
| 71-43-2    | Benzene                    | 5                    | U |
| 10061-02-6 | trans-1,3-Dichloropropene  | 5                    | U |
| 75-25-2    | Bromoform                  | 5                    | U |
| 108-10-1   | 4-Methyl-2-pentanone       | 5                    | U |
| 591-78-6   | 2-Hexanone                 | 5                    | U |
| 127-18-4   | Tetrachloroethene          | 5                    | U |
| 79-34-5    | 1,1,2,2-Tetrachloroethane  | 5                    | U |
| 108-88-3   | Toluene                    | 5                    | U |
| 108-90-7   | Chlorobenzene              | 5                    | U |
| 100-41-4   | Ethylbenzene               | 5                    | U |
| 100-42-5   | Styrene                    | 5                    | U |
| 1330-20-7  | Xylene (total)             | 5                    | U |

BER128 S63

80/11/10/13

1F

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

GW-091013 60-64'

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: 10478Case No.: BER

SAS No.: \_\_\_\_\_

SDG No.: BER128

Matrix: (soil/water)

WATERLab Sample ID: 1310705-022ASample wt/vol: 5(g/mL) MLLab File ID: 13\G21663.Level: (low/med) LOWDate Received: 10/11/13

% Moisture: not dec.

Date Analyzed: 10/15/13GC Column: Rtx-624ID: .18 (mm)Dilution Factor: 1.00

Soil Extract Volume:

(μl)

Soil Aliquot Volume: 0 (μL)

## CONCENTRATION UNITS:

Number TICs found:

0

(μg/L or μg/Kg)

UG/L

| CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|------------|---------------|----|------------|---|
|------------|---------------|----|------------|---|



1A

EPA SAMPLE NO.

## VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD BLANK

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: 10478Case No.: BER

SAS No.: \_\_\_\_\_

SDG No.: BER128

Matrix: (soil/water)

WATERLab Sample ID: 1310705-023ASample wt/vol: 5(g/mL) MLLab File ID: 13\G21632.

Level: (low/med)

LOWDate Received: 10/11/13

% Moisture: not dec.

Date Analyzed: 10/14/13GC Column: Rtx-624ID: .18 (mm)Dilution Factor: 1.00

Soil Extract Volume:

(μL)

Soil Aliquot Volume (μL)

## CONCENTRATION UNITS:

| CAS NO.    | COMPOUND                   | (μg/L or μg/Kg) <u>UG/L</u> | <u>Q</u> |
|------------|----------------------------|-----------------------------|----------|
| 74-87-3    | Chloromethane              | 5                           | U        |
| 74-83-9    | Bromomethane               | 5                           | U        |
| 75-01-4    | Vinyl chloride             | 5                           | U        |
| 75-00-3    | Chloroethane               | 5                           | U        |
| 75-09-2    | Methylene chloride         | 5                           | U        |
| 67-64-1    | Acetone                    | 2                           | U        |
| 75-35-4    | 1,1-Dichloroethene         | 5                           | U        |
| 75-15-0    | Carbon disulfide           | 5                           | U        |
| 75-34-3    | 1,1-Dichloroethane         | 5                           | U        |
| 540-59-0   | 1,2-Dichloroethene (total) | 5                           | U        |
| 67-66-3    | Chloroform                 | 5                           | U        |
| 107-06-2   | 1,2-Dichloroethane         | 5                           | U        |
| 78-93-3    | 2-Butanone                 | 5                           | U        |
| 71-55-6    | 1,1,1-Trichloroethane      | 5                           | U        |
| 56-23-5    | Carbon tetrachloride       | 5                           | U        |
| 75-27-4    | Bromodichloromethane       | 5                           | U        |
| 78 87 5    | 1,2 Dichloropropane        | 5                           | U        |
| 10061-01-5 | cis-1,3-Dichloropropene    | 5                           | U        |
| 79-01-6    | Trichloroethene            | 5                           | U        |
| 124-48-1   | Dibromochloromethane       | 5                           | U        |
| 79-00-5    | 1,1,2-Trichloroethane      | 5                           | U        |
| 71-43-2    | Benzene                    | 5                           | U        |
| 10061-02-6 | trans-1,3-Dichloropropene  | 5                           | U        |
| 75-25-2    | Bromoform                  | 5                           | U        |
| 108-10-1   | 4-Methyl-2-pentanone       | 5                           | U        |
| 591-78-6   | 2-Hexanone                 | 5                           | U        |
| 127-18-4   | Tetrachloroethene          | 5                           | U        |
| 79-34-5    | 1,1,2,2-Tetrachloroethane  | 5                           | U        |
| 108-88-3   | Toluene                    | 5                           | U        |
| 108-90-7   | Chlorobenzene              | 5                           | U        |
| 100-41-4   | Ethylbenzene               | 5                           | U        |
| 100-42-5   | Styrene                    | 5                           | U        |
| 1330-20-7  | Xylene (total)             | 5                           | U        |

1F

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

FIELD BLANK

Lab Name: H2M LABS INC

Contract: \_\_\_\_\_

Lab Code: 10478Case No.: BER

SAS No.: \_\_\_\_\_

SDG No.: BER128

Matrix: (soil/water)

WATERLab Sample ID: 1310705-023ASample wt/vol: 5(g/mL) MLLab File ID: 13\G21632.Level: (low/med) LOWDate Received: 10/11/13

% Moisture: not dec.

Date Analyzed: 10/14/13GC Column: Rtx-624ID: .18 (mm)Dilution Factor: 1.00

Soil Extract Volume:

(μl)

Soil Aliquot Volume: 0 (μL)

## CONCENTRATION UNITS:

Number TICs found:

0

(μg/L or μg/Kg)

UG/L

CAS NUMBER

COMPOUND NAME

RT

EST. CONC.

Q

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

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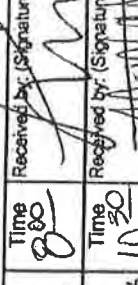
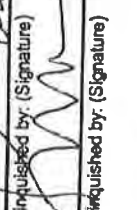
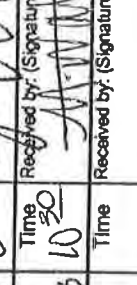
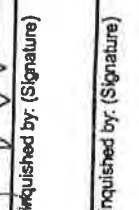
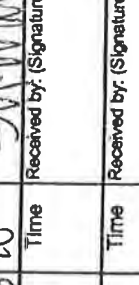
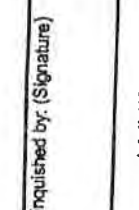
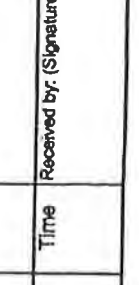
Lab Name: H2M LABS INC Contract: \_\_\_\_\_  
Lab Code: 10478 Case No.: BER SAS No.: \_\_\_\_\_ SDG No.: BER128  
Matrix: (soil/water) WATER Lab Sample ID: 1310705-024A  
Sample wt/vol: 5 (g/mL) ML Lab File ID: 13\G21631.  
Level: (low/med) LOW Date Received: 10/11/13  
% Moisture: not dec. Date Analyzed: 10/14/13  
GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00  
Soil Extract Volume: \_\_\_\_\_ (μL) Soil Aliquot Volume \_\_\_\_\_ (μL)

CONCENTRATION UNITS:

| CAS NO.    | COMPOUND                   | (μg/L or μg/Kg) UG/L | Q |
|------------|----------------------------|----------------------|---|
| 74-87-3    | Chloromethane              | 5                    | U |
| 74-83-9    | Bromomethane               | 5                    | U |
| 75-01-4    | Vinyl chloride             | 5                    | U |
| 75-00-3    | Chloroethane               | 5                    | U |
| 75-09-2    | Methylene chloride         | 5                    | U |
| 67-64-1    | Acetone                    | 5                    | U |
| 75-35-4    | 1,1-Dichloroethene         | 5                    | U |
| 75-15-0    | Carbon disulfide           | 5                    | U |
| 75-34-3    | 1,1-Dichloroethane         | 5                    | U |
| 540-59-0   | 1,2-Dichloroethene (total) | 5                    | U |
| 67-66-3    | Chloroform                 | 5                    | U |
| 107-06-2   | 1,2-Dichloroethane         | 5                    | U |
| 78-93-3    | 2-Butanone                 | 5                    | U |
| 71-55-6    | 1,1,1-Trichloroethane      | 5                    | U |
| 56-23-5    | Carbon tetrachloride       | 5                    | U |
| 75-27-4    | Bromodichloromethane       | 5                    | U |
| 78-87-5    | 1,2-Dichloropropane        | 5                    | U |
| 10061-01-5 | cis-1,3-Dichloropropene    | 5                    | U |
| 79-01-6    | Trichloroethene            | 5                    | U |
| 124-48-1   | Dibromochloromethane       | 5                    | U |
| 79-00-5    | 1,1,2-Trichloroethane      | 5                    | U |
| 71-43-2    | Benzene                    | 5                    | U |
| 10061-02-6 | trans-1,3-Dichloropropene  | 5                    | U |
| 75-25-2    | Bromoform                  | 5                    | U |
| 108-10-1   | 4-Methyl-2-pentanone       | 5                    | U |
| 591-78-6   | 2-Hexanone                 | 5                    | U |
| 127-18-4   | Tetrachloroethene          | 5                    | U |
| 79-34-5    | 1,1,2,2-Tetrachloroethane  | 5                    | U |
| 108-88-3   | Toluene                    | 5                    | U |
| 108-90-7   | Chlorobenzene              | 5                    | U |
| 100-41-4   | Ethylbenzene               | 5                    | U |
| 100-42-5   | Styrene                    | 5                    | U |
| 1330-20-7  | Xylene (total)             | 5                    | U |

*Handwritten signature and date: 11/10/13*

**Appendix B  
Chain of Custody  
Documents**

|  |  |   |  |   |  |  |  |
|--|--|---|--|---|--|--|--|
| <b>CLIENT:</b> BEI   |  | <b>H2M SDG NO:</b> PER 126                              |  | <b>NOTES:</b><br>Final, being signed by<br>Online |  | <b>Project Contact:</b><br>Justin<br><b>Phone Number:</b><br>589 6521<br><b>PIS/Quote #</b>                              |  |
| <b>PROJECT NAME/NUMBER</b><br>Quick and Clean<br>380 McKenney Trpk. Cedarhurst   |  | <b>Sample Container Description</b><br>40 ml VOA (826g) |  | <b>ANALYSIS REQUESTED</b>                         |  | <b>POT#</b> 13101159   |  |
| <b>SAMPLERS:</b> (signature)/Client<br>   |  | <b>DELIVERABLES:</b><br>ASP-Cat B                       |  | <b>TURNAROUND TIME:</b><br>Normal                 |  | <b>LAB I.D. NO.</b><br>1310202-001<br>002<br>003   |  |
| <b>DATE</b> <b>TIME</b> <b>MATRIX</b> <b>FIELD I.D.</b>  |  | <b>Total No. of Containers</b>                          |  | <b>ORGANIC</b> <b>INORG.</b>                      |  | <b>REMARKS:</b>  |  |
| 10/3/13   8:00   W   EP-152 60-64' (ms/msd)  |  | 6   |  | VOA   BNA   PCB   Metal   CN                      |  | 1310202-001  |  |
| 10/3/13   10:30   J   Field Blank  |  | 2   |  | VOA   BNA   PCB   Metal   CN                      |  | 002  |  |
| 10/3/13   10:30   J   Trip Blank   |  | 2   |  | VOA   BNA   PCB   Metal   CN                      |  | 003  |  |
| Cooler temp 10.2 °C  |  |   |  |   |  |  |  |
| IR gun 122336969 / 122076478   |  |   |  |   |  |  |  |
| 2H strips (10BDH0431) <2 3 9 >12   |  |   |  |   |  |  |  |
| Free Cl2 strips (041912C) Present/Absent   |  |   |  |   |  |  |  |
| Lot#   |  |   |  |   |  |  |  |
| <b>Relinquished by: (Signature)</b><br> |  | <b>Date</b><br>10/3/13                                  |  | <b>Time</b><br>8:00                               |  | <b>Received by: (Signature)</b><br> |  |
| <b>Relinquished by: (Signature)</b><br> |  | <b>Date</b><br>10/3/13                                  |  | <b>Time</b><br>10:30                              |  | <b>Received by: (Signature)</b><br> |  |
| <b>Relinquished by: (Signature)</b><br> |  | <b>Date</b>   |  | <b>Time</b>                                       |  | <b>Received by: (Signature)</b><br> |  |
| <b>Relinquished by: (Signature)</b><br> |  | <b>Date</b>   |  | <b>Time</b>                                       |  | <b>Received by: (Signature)</b><br> |  |

**LABORATORY USE ONLY**  
 Discrepancies Between Sample Labels and COC Record? Y or N  
 Explain:

Samples were:  
 1. Shipped \_\_\_\_\_ or Hand Delivered \_\_\_\_\_  
 2. Ambient or chilled Temp \_\_\_\_\_  
 3. Received in good condition? Y or N  
 4. Properly preserved? Y or N

COC Tape was:  
 1. Present on outer package: Y or N  
 2. Unbroken on outer package: Y or N  
 3. COC record present & complete upon sample receipt: Y or N

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H2M LABS INC

575 Broad Hollow Road

Melville, NY 11747

TEL: (631) 694-3040 FAX: (631) 420-8436

Website: www.h2mlabs.com

## Sample Receipt Checklist

Client Name **BER**Date and Time Received: **10/3/2013 10:30:00 AM**Work Order Number: **1310202**RcptNo: **1**Received by **Melissa Watson**

Completed by:

Reviewed by:

Completed Date:

10/3/2013

Reviewed Date:

10/4/2013 11:51:54 AMCarrier name: Client

Chain of custody present?

Yes ☒No ☐

Chain of custody signed when relinquished and received?

Yes ☒No ☐

Chain of custody agrees with sample labels?

Yes ☒No ☐

Are matrices correctly identified on Chain of custody?

Yes ☒No ☐

Is it clear what analyses were requested?

Yes ☒No ☐

Custody seals intact on sample bottles?

Yes ☐No ☐Not Present ☒

Samples in proper container/bottle?

Yes ☒No ☐

Were correct preservatives used and noted?

Yes ☒No ☐NA ☐

Preservative added to bottles:

Sample Condition?

Intact ☒Broken ☐Leaking ☐

Sufficient sample volume for indicated test?

Yes ☒No ☐

Were container labels complete (ID, Pres, Date)?

Yes ☒No ☐

All samples received within holding time?

Yes ☒No ☐

Was an attempt made to cool the samples?

Yes ☒No ☐NA ☐

All samples received at a temp. of &gt; 0° C to 6.0° C?

Yes ☐No ☒NA ☐

Response when temperature is outside of range:

Sample Temp. taken and recorded upon receipt?

Yes ☒No ☐

To 10.2°

Water - Were bubbles absent in VOC vials?

Yes ☒No ☐No Vials ☐

Water - Was there Chlorine Present?

Yes ☐No ☐NA ☒

Water - pH acceptable upon receipt?

Yes ☒No ☐No Water ☐

Are Samples considered acceptable?

Yes ☒No ☐

Custody Seals present?

Yes ☐No ☒

Airbill or Sticker?

Air Bil ☐Sticker ☐Not Present ☒

Airbill No:

Case Number:

SDG:

SAS:

BER126

Any No response should be detailed in the comments section below, if applicable.

Client Contacted?

☐

Yes

☒

No

Person Contacted:

Contact Mode:

☐

Phone:

☐

Fax:

☐

Email:

☐

In Person:

Client Instructions:

Date Contacted:

Contacted By:

Regarding:

Comments:

The samples were chilled but the temperature upon receipt was greater than 6 degrees Celsius.

Corrective Action:

BER126 S7




|  |       |                                      |                         |                          |     |          |       |  |  |
|--|-------|--------------------------------------|-------------------------|--------------------------|-----|----------|-------|--|--|
| PROJECT NAME/NUMBER                          |       | CLIENT: BEI (Beminger)               |                         | H2M SDG NO: BER128       |     | NOTES:   |       | Project Contact: Justin                                      |  |
| Quick + Clean (Q+L)<br>380 Rockaway Turnpike |       | Sample Description: 1/4 mi Vda (HCL) |                         | ANALYSIS REQUESTED       |     | Pay: 1   |       | Phone Number: 774 6682                                       |  |
|  |       |                                      |                         |                          |     |          |       |  |  |
| SAMPLERS: (signature)/Client                 |       | Total No. of Containers              |                         | ORGANIC                  |     | INORG.   |       | LAB I.D. NO.   |  |
| DELIVERABLES: ASP cat-B                      |       | ↑                                    |                         | VOA                      |     | PCB      |       | REMARKS:   |  |
| TURNAROUND TIME: Normal                      |       | ↓                                    |                         | BZ                       |     | Metal    |       | 1310705-001  |  |
| DATE   | TIME  | MATRIX                               | FIELD I.D.              | VOA                      | PCB | BZ       | Metal |  |  |
| 10/10  | 9:00  | W                                    | EP-13 @ 60-62' (rs/rsd) | X                        |     |          |       |  |  |
| 10/10  | 10:00 | W                                    | EP-18 @ 60-62'          | X                        |     |          |       | 2 *  |  |
| 10/10  | 11:50 | W                                    | GW-061013 @ 20-24'      | X                        |     |          |       | 3  |  |
| 10/10  | 11:45 | W                                    | 11 11 30-34'            | X                        |     |          |       | 4  |  |
| 10/10  | 11:40 | W                                    | 11 11 40-44'            | X                        |     |          |       | 5  |  |
| 10/10  | 11:35 | W                                    | 11 11 50-54'            | X                        |     |          |       | 6  |  |
| 10/10  | 11:30 | W                                    | 11 11 60-64'            | X                        |     |          |       | 7  |  |
| 10/10  | 13:20 | W                                    | GW-071013 @ 20-24'      | X                        |     |          |       | 8  |  |
| 10/10  | 13:15 | W                                    | 11 11 30-34'            | X                        |     |          |       | 9  |  |
| 10/10  | 13:10 | W                                    | 11 11 40-44'            | X                        |     |          |       | 10   |  |
| Relinquished by: (Signature)                 |       | Date                                 | Time                    | Received by: (Signature) |     | Date     | Time  | LABORATORY USE ONLY  |  |
| Relinquished by: (Signature)                 |       | 10/10/13                             | 1:40 PM                 | Received by: (Signature) |     | 11/13/14 | 3:40  | Discrepancies Between Sample Labels and COC Record? Y or N   |  |
| Relinquished by: (Signature)                 |       | Date                                 | Time                    | Received by: (Signature) |     | Date     | Time  | Explain:   |  |
| Relinquished by: (Signature)                 |       | Date                                 | Time                    | Received by: (Signature) |     | Date     | Time  | COC Tape was:  |  |
| Relinquished by: (Signature)                 |       | Date                                 | Time                    | Received by: (Signature) |     | Date     | Time  | 1. Present on outer package: Y or N                          |  |
| Relinquished by: (Signature)                 |       | Date                                 | Time                    | Received by: (Signature) |     | Date     | Time  | 2. Unbroken on outer package: Y or N                         |  |
| Relinquished by: (Signature)                 |       | Date                                 | Time                    | Received by: (Signature) |     | Date     | Time  | 3. COC record present & complete upon sample receipt: Y or N |  |

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| PROJECT NAME/NUMBER<br><b>Quidct Clean (atc)</b><br><b>Cedarhurst, NY</b>   |       | CLIENT: <b>BEI</b>                                 |                  | H2M SDG NO:                      |    | NOTES:<br><b>Page 2</b>   |        | Project Contact:<br><b>Justin</b> |    |
|---|-------|--|------------------|----------------------------------|----|---|--------|-----------------------------------|----|
| SAMPLERS: (signature)/Client<br>   |       | Sample Container Description<br><b>(4-411)(K1)</b> |                  | Phone Number:<br><b>774 6682</b> |    | PIS/Quote #   |        |                                   |    |
| DELIVERABLES: <b>ASP - Lot B</b>  |       | Total No. of Containers<br><b>2</b>                |                  | ANALYSIS REQUESTED               |    | LAB I.D. NO.  |        | REMARKS:                          |    |
| TURNAROUND TIME: <b>Normal</b>  |       |  |                  |                                  |    | <b>130705-011</b>   |        |                                   |    |
| DATE  | TIME  | MATRIX   | FIELD I.D.       | VOA                              | BN | PC  | INORG. | Metal                             |    |
| 10/10   | 13:05 | W  | GW-071013250-54' | X                                |    |   |        |                                   | 12 |
| 10/10   | 13:05 | W  | " " 60-64'       | X                                |    |   |        |                                   | 13 |
| 10/11   | 9:20  | W  | GW-081013220-24' | X                                |    |   |        |                                   | 14 |
| 10/11   | 9:15  | W  | " " 30-34'       | X                                |    |   |        |                                   | 15 |
| 10/11   | 9:10  | W  | " " 40-44'       | X                                |    |   |        |                                   | 16 |
| 10/11   | 9:05  | W  | " " 50-54'       | X                                |    |   |        |                                   | 17 |
| 10/11   | 9:00  | W  | " " 60-64'       | X                                |    |   |        |                                   | 18 |
| 10/11   | 11:00 | W  | GW-091013220-24' | X                                |    |   |        |                                   | 19 |
| 10/11   | 11:05 | W  | " " 30-34'       | X                                |    |   |        |                                   | 20 |
| 10/11   | 11:10 | W  | " " 40-44'       | X                                |    |   |        |                                   |    |
| Relinquished by: (Signature)<br> |       | Date<br><b>10/11/13</b>                            |                  | Time<br><b>1:40 PM</b>           |    | Received by: (Signature)<br> |        | Date<br><b>10/11/13</b>           |    |
| Relinquished by: (Signature)  |       | Date   |                  | Time                             |    | Received by: (Signature)  |        | Date                              |    |
| Relinquished by: (Signature)  |       | Date   |                  | Time                             |    | Received by: (Signature)  |        | Date                              |    |
| Relinquished by: (Signature)  |       | Date   |                  | Time                             |    | Received by: (Signature)  |        | Date                              |    |

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PINK COPY - LABORATORY

### LABORATORY USE ONLY

Discrepancies Between Sample Labels and COC Record? Y or N

Explain:

Samples were:

- Shipped or Hand Delivered
- Airbill#
- Ambient or chilled, Temp
- Received in good condition: Y or N
- Properly preserved: Y or N

COC Tape was:

- Present on outer package: Y or N
- Unbroken on outer package: Y or N
- COC record present & complete upon sample receipt: Y or N

[illegible]

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YELLOW COPY - CLIENT

PINK COPY - LABORATORY



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575 Broad Hollow Road

Melville, NY 11747

TEL: (631) 694-3040 FAX: (631) 420-8436

Website: www.h2mlabs.com

## Sample Receipt Checklist

Client Name BER

Date and Time Received: 10/11/2013 1:40:00 PM

Work Order Number: 1310705

RcptNo: 1

Received by Linda Siciliano

Completed by:

Reviewed by:

Completed Date:

10/11/2013 2:26:10 PM

Reviewed Date:

10/14/2013 12:40:55 PM

Carrier name: Client

|   |  |  |   |
|---|--|--|---|
| Chain of custody present?                               | Yes <input checked="" type="checkbox"/>    | No <input type="checkbox"/>            |   |
| Chain of custody signed when relinquished and received? | Yes <input checked="" type="checkbox"/>    | No <input type="checkbox"/>            |   |
| Chain of custody agrees with sample labels?             | Yes <input checked="" type="checkbox"/>    | No <input type="checkbox"/>            |   |
| Are matrices correctly identified on Chain of custody?  | Yes <input checked="" type="checkbox"/>    | No <input type="checkbox"/>            |   |
| Is it clear what analyses were requested?               | Yes <input checked="" type="checkbox"/>    | No <input type="checkbox"/>            |   |
| Custody seals intact on sample bottles?                 | Yes <input type="checkbox"/>               | No <input type="checkbox"/>            | Not Present <input checked="" type="checkbox"/> |
| Samples in proper container/bottle?                     | Yes <input checked="" type="checkbox"/>    | No <input type="checkbox"/>            |   |
| Were correct preservatives used and noted?              | Yes <input checked="" type="checkbox"/>    | No <input type="checkbox"/>            | NA <input type="checkbox"/>                     |
| Preservative added to bottles:                          |  |  |   |
| Sample Condition?                                       | Intact <input checked="" type="checkbox"/> | Broken <input type="checkbox"/>        | Leaking <input type="checkbox"/>                |
| Sufficient sample volume for indicated test?            | Yes <input checked="" type="checkbox"/>    | No <input type="checkbox"/>            |   |
| Were container labels complete (ID, Pres, Date)?        | Yes <input checked="" type="checkbox"/>    | No <input type="checkbox"/>            |   |
| All samples received within holding time?               | Yes <input checked="" type="checkbox"/>    | No <input type="checkbox"/>            |   |
| Was an attempt made to cool the samples?                | Yes <input checked="" type="checkbox"/>    | No <input type="checkbox"/>            | NA <input type="checkbox"/>                     |
| All samples received at a temp. of > 0° C to 6.0° C?    | Yes <input checked="" type="checkbox"/>    | No <input type="checkbox"/>            | NA <input type="checkbox"/>                     |
| Response when temperature is outside of range:          |  |  |   |
| Sample Temp. taken and recorded upon receipt?           | Yes <input checked="" type="checkbox"/>    | No <input type="checkbox"/>            | To 2.6 ° <input type="checkbox"/>               |
| Water - Were bubbles absent in VOC vials?               | Yes <input type="checkbox"/>               | No <input checked="" type="checkbox"/> | No Vials <input type="checkbox"/>               |
| Water - Was there Chlorine Present?                     | Yes <input type="checkbox"/>               | No <input type="checkbox"/>            | NA <input checked="" type="checkbox"/>          |
| Water - pH acceptable upon receipt?                     | Yes <input type="checkbox"/>               | No <input type="checkbox"/>            | No Water <input checked="" type="checkbox"/>    |
| Are Samples considered acceptable?                      | Yes <input checked="" type="checkbox"/>    | No <input type="checkbox"/>            |   |
| Custody Seals present?                                  | Yes <input type="checkbox"/>               | No <input checked="" type="checkbox"/> |   |
| Airbill or Sticker?                                     | Air Bil <input type="checkbox"/>           | Sticker <input type="checkbox"/>       | Not Present <input checked="" type="checkbox"/> |

Case Number:

SDG:

BER128

SAS:

Any No response should be detailed in the comments section below, if applicable.

Client Contacted? ☐ Yes ☒ No Person Contacted:

Contact Mode: ☐ Phone: ☐ Fax: ☐ Email: ☐ In Person:

Client Instructions:

Date Contacted:

Contacted By:

Regarding:

Comments:

The following samples contain headspace: EP-18 (both vials, 0.5 and 1.5cm), GW-061013@40-44' (both vials, 0.5cm), GW-061013@20-24' (1 vial, 0.5cm), GW-071013@40-44' (both vials, 2cm), GW-071013@60-64' (1 vial, .5cm) GW-081013@50-54' (1 vial, 1cm)

CorrectiveAction:

BER128 S9

## **Appendix C SDG Narratives**



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Melville, NY 11747

tel 631.694.3040  
fax 631.420.8436

**SDG NARRATIVE FOR VOLATILE ANALYSES**  
**SAMPLES RECEIVED: 9/10/13**  
**SDG#: BER126**

For Sample(s):

EP-15 AT 60-64'  
FIELD BLANK  
TRIP BLANK  
STORAGE BLANK

The above sample(s) and blank(s) was/were analyzed for a specific list of volatile organic analytes by EPA method 8260B. Data are reported according to the requirements of NYSDEC ASP 2000, Category B.

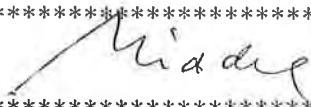
All quality control and calibration requirements were met, unless discussed below. The following should be noted:

Sample EP-15 AT 60-64' was submitted for matrix spike / matrix spike duplicate (MS/MSD) analysis. All recoveries and RPDs met the Q.C. limits with the exception of a low recovery for 1,1-dichloroethene in the MSD. A lab fortified blank was analyzed, and data indicate good method efficiency.

Bromomethane and bromofluorobenzene had a %D in the continuing calibration verification (CCV) above 25% but below the limit of 40% permitted for two analytes with required variability.

**I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.**

Date Reported: October 22, 2013

\*\*\*\*\*  
\*  \*  
\*  
\*\*\*\*\*

Ursula Middel  
Technical Manager

BER126 S11



labs

575 Broad Hollow Road  
Melville, NY 11747

tel 631.694.3040  
fax 631.420.8436

**SDG NARRATIVE FOR VOLATILE ANALYSES**  
**SAMPLES RECEIVED: 10/11/13**  
**SDG#: BER128**

|                    |                    |                    |
|--------------------|--------------------|--------------------|
| EP-13 @ 60-62'     | GW-071013 @ 40-44' | GW-091013 @ 20-24' |
| EP-18 @ 60-62'     | GW-071013 @ 50-54' | GW-091013 @ 30-34' |
| GW-061013 @ 20-24' | GW-071013 @ 60-64' | GW-091013 @ 40-44' |
| GW-061013 @ 30-34' | GW-081013 @ 20-24' | GW-091013 @ 50-54' |
| GW-061013 @ 40-44' | GW-081013 @ 30-34' | GW-091013 @ 60-64' |
| GW-061013 @ 50-54' | GW-081013 @ 40-44' | FIELD BLANK        |
| GW-061013 @ 60-64' | GW-081013 @ 50-54' | TRIP BLANK         |
| GW-071013 @ 20-24' | GW-081013 @ 60-64' | STORAGE BLANK      |
| GW-071013 @ 30-34' |                    |                    |

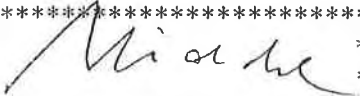
The above water sample(s) and blanks was/were analyzed for a specific list of volatile organic analytes by EPA method 8260C in accordance with the requirements of NYSDEC ASP 2000, Category A.

All quality control and calibration requirements were met. The following should be noted:

The variability for bromomethane and toluene in the continuous calibration check (CCV) exceeded 25% but met the limit of 40% (allowed for two analytes).

**I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.**

Date Reported: October 29, 2013

\*\*\*\*\*  
\*  \*  
\*\*\*\*\*

Ursula Middel  
Technical Manager

BER128 S15

**Appendix D**  
**NYSDEC ASP Summary Forms**



NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE IDENTIFICATION AND  
ANALYTICAL REQUIREMENT SUMMARY

SDG: BER126

Analytical Requirements

| Customer<br>Sample<br>Code | Laboratory<br>Sample<br>Code | MSVOA |
|----------------------------|------------------------------|-------|
| EP-15 AT 60-64'            | 1310202-001                  | X     |
| FIELD BLANK                | 1310202-002                  | X     |
| TRIP BLANK                 | 1310202-003                  | X     |
| STORAGE BLANK              | 1310202-004                  | X     |

CLP, Non-CLP (Please indicate year of protocol)  
TCL/TAL, HSL, Priority Pollutant,

ASP B 2000  
10/25/13

BER126 S3

# NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

## SAMPLE PREPARATION AND ANALYSIS SUMMARY

### VOLATILE (VOA)

#### ANALYSES

SDG: BER126

| Laboratory<br>Samp ID | Client Sample ID  | Matrix  | Analytical<br>Protocol | Date<br>Collected | Date Recd<br>at Lab | Date<br>Extracted | Date<br>Analyzed | Extraction<br>Method | DF | Level | Aux Cleanup |
|-----------------------|-------------------|---------|------------------------|-------------------|---------------------|-------------------|------------------|----------------------|----|-------|-------------|
| 1310202-001A          | EP-15AT 60-64'    | Aqueous | ASP 8260               | 02-Oct-13         | 03-Oct-13           |                   | 04-Oct-13        |                      | 1  | LOW   |             |
| 1310202-001AMS        | EP-15AT 60-64'MS  | Aqueous | ASP 8260               | 02-Oct-13         | 03-Oct-13           |                   | 04-Oct-13        |                      | 1  | LOW   |             |
| 1310202-001AMSD       | EP-15AT 60-64'MSD | Aqueous | ASP 8260               | 02-Oct-13         | 03-Oct-13           |                   | 04-Oct-13        |                      | 1  | LOW   |             |
| 1310202-002A          | FIELD BLANK       | Aqueous | ASP 8260               | 02-Oct-13         | 03-Oct-13           |                   | 04-Oct-13        |                      | 1  | LOW   |             |
| 1310202-003A          | TRIP BLANK        | Aqueous | ASP 8260               | 02-Oct-13         | 03-Oct-13           |                   | 04-Oct-13        |                      | 1  | LOW   |             |
| 1310202-004A          | STORAGE BLANK     | Aqueous | ASP 8260               | 03-Oct-13         | 03-Oct-13           |                   | 04-Oct-13        |                      | 1  | LOW   |             |

BER126 S4

# NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

## SAMPLE IDENTIFICATION AND ANALYTICAL REQUIREMENT SUMMARY

SDG: BER128

Analytical Requirements

| Customer<br>Sample<br>Code | Laboratory<br>Sample<br>Code | MSVOA |
|----------------------------|------------------------------|-------|
| EP-13 @ 60-62'             | 1310705-001                  | X     |
| EP-18 @ 60-62'             | 1310705-002                  | X     |
| GW-061013 @ 20-24'         | 1310705-003                  | X     |
| GW-061013 @ 30-34'         | 1310705-004                  | X     |
| GW-061013 @ 40-44'         | 1310705-005                  | X     |
| GW-061013 @ 50-54'         | 1310705-006                  | X     |
| GW-061013 @ 60-64'         | 1310705-007                  | X     |
| GW-071013 @ 20-24'         | 1310705-008                  | X     |
| GW-071013 @ 30-34'         | 1310705-009                  | X     |
| GW-071013 @ 40-44'         | 1310705-010                  | X     |
| GW-071013 @ 50-54'         | 1310705-011                  | X     |
| GW-071013 @ 60-64'         | 1310705-012                  | X     |
| GW-081013 @ 20-24'         | 1310705-013                  | X     |
| GW-081013 @ 30-34'         | 1310705-014                  | X     |
| GW-081013 @ 40-44'         | 1310705-015                  | X     |
| GW-081013 @ 50-54'         | 1310705-016                  | X     |
| GW-081013 @ 60-64'         | 1310705-017                  | X     |
| GW-091013 @ 20-24'         | 1310705-018                  | X     |
| GW-091013 @ 30-34'         | 1310705-019                  | X     |
| GW-091013 @ 40-44'         | 1310705-020                  | X     |
| GW-091013 @ 50-54'         | 1310705-021                  | X     |
| GW-091013 @ 60-64'         | 1310705-022                  | X     |
| FIELD BLANK                | 1310705-023                  | X     |
| TRIP BLANK                 | 1310705-024                  | X     |
| STORAGE BLANK              | 1310705-025                  | X     |

CLP, Non-CLP (Please indicate year of protocol)  
TCL/TAL, HSL, Priority Pollutant,

ASP B 2000  
(R)  
11/1/13

BER128 S3

# NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

## SAMPLE PREPARATION AND ANALYSIS SUMMARY

### VOLATILE (VOA)

#### ANALYSES

SDG: BER128

| Laboratory<br>Samp ID | Client Sample ID   | Matrix  | Analytical<br>Protocol | Date<br>Collected | Date Recd<br>at Lab | Date<br>Extracted | Date<br>Analyzed | Extraction<br>Method | DF | Level | Aux Cleanup |
|-----------------------|--------------------|---------|------------------------|-------------------|---------------------|-------------------|------------------|----------------------|----|-------|-------------|
| I310705-001A          | EP-13 @ 60-62'     | Aqueous | SW8260                 | 10-Oct-13         | 11-Oct-13           |                   | 14-Oct-13        |                      | 1  | LOW   |             |
| I310705-001AMS        | EP-13 @ 60-62'MS   | Aqueous | SW8260                 | 10-Oct-13         | 11-Oct-13           |                   | 14-Oct-13        |                      | 1  | LOW   |             |
| I310705-001AMSD       | EP-13 @ 60-62'MSD  | Aqueous | SW8260                 | 10-Oct-13         | 11-Oct-13           |                   | 14-Oct-13        |                      | 1  | LOW   |             |
| I310705-002A          | EP-18 @ 60-62'     | Aqueous | SW8260                 | 10-Oct-13         | 11-Oct-13           |                   | 14-Oct-13        |                      | 1  | LOW   |             |
| I310705-003A          | GW-061013 @ 20-24' | Aqueous | SW8260                 | 10-Oct-13         | 11-Oct-13           |                   | 14-Oct-13        |                      | 1  | LOW   |             |
| I310705-004A          | GW-061013 @ 30-34' | Aqueous | SW8260                 | 10-Oct-13         | 11-Oct-13           |                   | 14-Oct-13        |                      | 1  | LOW   |             |
| I310705-005A          | GW-061013 @ 40-44' | Aqueous | SW8260                 | 10-Oct-13         | 11-Oct-13           |                   | 14-Oct-13        |                      | 1  | LOW   |             |
| I310705-006A          | GW-061013 @ 50-54' | Aqueous | SW8260                 | 10-Oct-13         | 11-Oct-13           |                   | 14-Oct-13        |                      | 1  | LOW   |             |
| I310705-007A          | GW-061013 @ 60-64' | Aqueous | SW8260                 | 10-Oct-13         | 11-Oct-13           |                   | 14-Oct-13        |                      | 1  | LOW   |             |
| I310705-008A          | GW-071013 @ 20-24' | Aqueous | SW8260                 | 10-Oct-13         | 11-Oct-13           |                   | 14-Oct-13        |                      | 1  | LOW   |             |
| I310705-009A          | GW-071013 @ 30-34' | Aqueous | SW8260                 | 10-Oct-13         | 11-Oct-13           |                   | 14-Oct-13        |                      | 1  | LOW   |             |
| I310705-010A          | GW-071013 @ 40-44' | Aqueous | SW8260                 | 10-Oct-13         | 11-Oct-13           |                   | 15-Oct-13        |                      | 1  | LOW   |             |
| I310705-011A          | GW-071013 @ 50-54' | Aqueous | SW8260                 | 10-Oct-13         | 11-Oct-13           |                   | 15-Oct-13        |                      | 1  | LOW   |             |
| I310705-012A          | GW-071013 @ 60-64' | Aqueous | SW8260                 | 10-Oct-13         | 11-Oct-13           |                   | 15-Oct-13        |                      | 1  | LOW   |             |
| I310705-013A          | GW-081013 @ 20-24' | Aqueous | SW8260                 | 10-Oct-13         | 11-Oct-13           |                   | 15-Oct-13        |                      | 1  | LOW   |             |
| I310705-014A          | GW-081013 @ 30-34' | Aqueous | SW8260                 | 11-Oct-13         | 11-Oct-13           |                   | 15-Oct-13        |                      | 1  | LOW   |             |
| I310705-015A          | GW-081013 @ 40-44' | Aqueous | SW8260                 | 11-Oct-13         | 11-Oct-13           |                   | 15-Oct-13        |                      | 1  | LOW   |             |
| I310705-016A          | GW-081013 @ 50-54' | Aqueous | SW8260                 | 11-Oct-13         | 11-Oct-13           |                   | 15-Oct-13        |                      | 1  | LOW   |             |
| I310705-017A          | GW-081013 @ 60-64' | Aqueous | SW8260                 | 11-Oct-13         | 11-Oct-13           |                   | 15-Oct-13        |                      | 1  | LOW   |             |
| I310705-018A          | GW-091013 @ 20-24' | Aqueous | SW8260                 | 11-Oct-13         | 11-Oct-13           |                   | 15-Oct-13        |                      | 1  | LOW   |             |
| I310705-019A          | GW-091013 @ 30-34' | Aqueous | SW8260                 | 11-Oct-13         | 11-Oct-13           |                   | 15-Oct-13        |                      | 1  | LOW   |             |
| I310705-020A          | GW-091013 @ 40-44' | Aqueous | SW8260                 | 11-Oct-13         | 11-Oct-13           |                   | 15-Oct-13        |                      | 1  | LOW   |             |
| I310705-021A          | GW-091013 @ 50-54' | Aqueous | SW8260                 | 11-Oct-13         | 11-Oct-13           |                   | 15-Oct-13        |                      | 1  | LOW   |             |
| I310705-022A          | GW-091013 @ 60-64' | Aqueous | SW8260                 | 11-Oct-13         | 11-Oct-13           |                   | 15-Oct-13        |                      | 1  | LOW   |             |
| I310705-023A          | FIELD BLANK        | Aqueous | SW8260                 | 11-Oct-13         | 11-Oct-13           |                   | 14-Oct-13        |                      | 1  | LOW   |             |
| I310705-024A          | TRIP BLANK         | Aqueous | SW8260                 | 11-Oct-13         | 11-Oct-13           |                   | 14-Oct-13        |                      | 1  | LOW   |             |
| I310705-025a          | STORAGE BLANK      | Aqueous | SW8260                 | 11-Oct-13         | 11-Oct-13           |                   | 14-Oct-13        |                      | 1  | LOW   |             |

BER128 S4

## **Attachment-H**

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tabulated lab data

**VOLATILES BY SW846 METHOD 8260**

|       |   |                            |               |      |               |     |               |       |               |        |               |      |               |     |               |     |               |     |     |     |     |                |          |  |
|-------|---|----------------------------|---------------|------|---------------|-----|---------------|-------|---------------|--------|---------------|------|---------------|-----|---------------|-----|---------------|-----|-----|-----|-----|----------------|----------|--|
| Cas # | BERNINGER ENVIRONMENTAL                       |                            |               |      |               |     |               |       |               |        |               |      |               |     |               |     |               |     |     |     |     |                |          |  |
|       | Project: FORMER QUICK AND CLEAN               |                            |               |      |               |     |               |       |               |        |               |      |               |     |               |     |               |     |     |     |     |                |          |  |
|       | Laboratory: H2M; BER121                       |                            |               |      |               |     |               |       |               |        |               |      |               |     |               |     |               |     |     |     |     |                |          |  |
|       | Sample Identification:                        |                            | 0113 @ 15-19' |      | 0113 @ 30-34' |     | 0113 @ 40-44' |       | 0113 @ 50-54' |        | 0113 @ 60-64' |      | 0113 @ 70-74' |     | 0213 @ 10-12' |     | TOGS Standard |     |     |     |     |                |          |  |
|       | Laboratory ID:                                |                            | 1304656-001A  |      | 1304656-002A  |     | 1304656-003A  |       | 1304656-004A  |        | 1304656-005A  |      | 1304656-006A  |     | 1304656-007A  |     |               |     |     |     |     |                |          |  |
|       | Sampling Date:                                |                            | 04/09         |      | 04/09         |     | 04/09         |       | 04/09         |        | 04/09         |      | 04/09         |     | 04/09         |     |               |     |     |     |     |                |          |  |
|       | Analyte                                       |                            | Units:        |      |               |     |               |       |               |        |               |      |               |     |               |     |               |     |     |     |     |                |          |  |
|       | -16   | Chloromethane              | ug/L          | 5 U  | 5 U           | 5 U | 5 U           | 5 U   | 5 U           | 5 U    | 5 U           | 5 U  | 5 U           | 5 U | 5 U           | 5 U | 5 U           | 5 U | 5 U | 5 U | 5 U | 5 U            | *        |  |
|       | -18   | Bromomethane               | ug/L          | 5 U  | 5 U           | 5 U | 5 U           | 5 U   | 5 U           | 5 U    | 5 U           | 5 U  | 5 U           | 5 U | 5 U           | 5 U | 5 U           | 5 U | 5 U | 5 U | 5 U | 5 U            | 5 ug/L   |  |
|       | 70  | Vinyl Chloride             | ug/L          | 5 U  | 5 U           | 5 U | 5 U           | 5 U   | 5 U           | 5 U    | 5 U           | 5 U  | 5 U           | 5 U | 5 U           | 5 U | 5 U           | 5 U | 5 U | 5 U | 5 U | 5 U            | 2 ug/L   |  |
|       | 72  | Chloroethane               | ug/L          | 5 U  | 5 U           | 5 U | 5 U           | 5 U   | 5 U           | 5 U    | 5 U           | 5 U  | 5 U           | 5 U | 5 U           | 5 U | 5 U           | 5 U | 5 U | 5 U | 5 U | 5 U            | 5 ug/L   |  |
|       | 64  | Methylene Chloride         | ug/L          | 5 U  | 5 U           | 5 U | 5 U           | 5 U   | 5 U           | 5 U    | 5 U           | 5 U  | 5 U           | 5 U | 5 U           | 5 U | 5 U           | 5 U | 5 U | 5 U | 5 U | 5 U            | 5 ug/L   |  |
|       | 2   | Acetone                    | ug/L          | 39 U | 5 U           | 5 U | 5 U           | 5 U   | 5 U           | 5 U    | 5 U           | 5 U  | 5 U           | 5 U | 5 U           | 5 U | 5 U           | 5 U | 5 U | 5 U | 5 U | 5 U            | *        |  |
|       | 60  | Carbon disulfide           | ug/L          | 5 U  | 5 U           | 5 U | 5 U           | 5 U   | 5 U           | 5 U    | 5 U           | 5 U  | 5 U           | 5 U | 5 U           | 5 U | 5 U           | 5 U | 5 U | 5 U | 5 U | 5 U            | *        |  |
|       | 36  | 1,1-Dichloroethene         | ug/L          | 5 U  | 5 U           | 5 U | 5 U           | 5 U   | 5 U           | 5 U    | 5 U           | 5 U  | 5 U           | 5 U | 5 U           | 5 U | 5 U           | 5 U | 5 U | 5 U | 5 U | 5 U            | 3 J      |  |
|       | 38  | 1,1-Dichloroethane         | ug/L          | 5 U  | 5 U           | 5 U | 5 U           | 5 U   | 5 U           | 5 U    | 5 U           | 5 U  | 5 U           | 5 U | 5 U           | 5 U | 5 U           | 5 U | 5 U | 5 U | 5 U | 5 U            | 5 ug/L   |  |
|       | 4811  | 1,2-Dichloroethane (total) | ug/L          | 240  | 2 J           | 2 J | 2 J           | 1 J   | 3 J           | 3 J    | 35            | 2400 | 5 U           | 5 U | 5 U           | 5 U | 5 U           | 5 U | 5 U | 5 U | 5 U | 5 U            | 5 ug/L   |  |
|       | 2   | Chloroform                 | ug/L          | 5 U  | 5 U           | 5 U | 5 U           | 5 U   | 5 U           | 5 U    | 5 U           | 5 U  | 5 U           | 5 U | 5 U           | 5 U | 5 U           | 5 U | 5 U | 5 U | 5 U | 5 U            | 7 ug/L   |  |
|       | 99  | 1,2-Dichloroethane         | ug/L          | 5 U  | 5 U           | 5 U | 5 U           | 5 U   | 5 U           | 5 U    | 5 U           | 5 U  | 5 U           | 5 U | 5 U           | 5 U | 5 U           | 5 U | 5 U | 5 U | 5 U | 5 U            | 0.6 ug/L |  |
|       | -18   | 2-Butanone                 | ug/L          | 39   | 5 U           | 5 U | 5 U           | 5 U   | 5 U           | 5 U    | 10            | 9    | 5 U           | 5 U | 5 U           | 5 U | 5 U           | 5 U | 5 U | 5 U | 5 U | 5 U            | *        |  |
|       | 10  | 1,1,1-Trichloroethane      | ug/L          | 5 U  | 5 U           | 5 U | 5 U           | 5 U   | 5 U           | 5 U    | 5 U           | 5 U  | 5 U           | 5 U | 5 U           | 5 U | 5 U           | 5 U | 5 U | 5 U | 5 U | 5 U            | 5 ug/L   |  |
|       | 28  | Carbon Tetrachloride       | ug/L          | 5 U  | 5 U           | 5 U | 5 U           | 5 U   | 5 U           | 5 U    | 5 U           | 5 U  | 5 U           | 5 U | 5 U           | 5 U | 5 U           | 5 U | 5 U | 5 U | 5 U | 5 U            | 5 ug/L   |  |
|       | 44  | Bromodichloromethane       | ug/L          | 5 U  | 5 U           | 5 U | 5 U           | 5 U   | 5 U           | 5 U    | 5 U           | 5 U  | 5 U           | 5 U | 5 U           | 5 U | 5 U           | 5 U | 5 U | 5 U | 5 U | 5 U            | *        |  |
| -14   | 1,2-Dichloropropane                           | ug/L                       | 5 U           | 5 U  | 5 U           | 5 U | 5 U           | 5 U   | 5 U           | 5 U    | 5 U           | 5 U  | 5 U           | 5 U | 5 U           | 5 U | 5 U           | 5 U | 5 U | 5 U | 5 U | 1 ug/L         |          |  |
| 10055 | cis-1,3-Dichloropropene                       | ug/L                       | 5 U           | 5 U  | 5 U           | 5 U | 5 U           | 5 U   | 5 U           | 5 U    | 5 U           | 5 U  | 5 U           | 5 U | 5 U           | 5 U | 5 U           | 5 U | 5 U | 5 U | 5 U | 0.4 ug/L       |          |  |
| 72    | Trichloroethene                               | ug/L                       | 8             | 5 U  | 5 U           | 5 U | 5 U           | 5 U   | 5 U           | 5 U    | 5 U           | 5 U  | 5 U           | 5 U | 5 U           | 5 U | 5 U           | 5 U | 5 U | 5 U | 5 U | 5 ug/L         |          |  |
| 75    | Dibromochloromethane                          | ug/L                       | 5 U           | 5 U  | 5 U           | 5 U | 5 U           | 5 U   | 5 U           | 5 U    | 5 U           | 5 U  | 5 U           | 5 U | 5 U           | 5 U | 5 U           | 5 U | 5 U | 5 U | 5 U | *              |          |  |
| 74    | 1,1,2-Trichloroethane                         | ug/L                       | 5 U           | 5 U  | 5 U           | 5 U | 5 U           | 5 U   | 5 U           | 5 U    | 5 U           | 5 U  | 5 U           | 5 U | 5 U           | 5 U | 5 U           | 5 U | 5 U | 5 U | 5 U | 1 ug/L         |          |  |
| 26    | Benzene                                       | ug/L                       | 1 J           | 5 U  | 5 U           | 5 U | 5 U           | 5 U   | 5 U           | 5 U    | 5 U           | 5 U  | 5 U           | 5 U | 5 U           | 5 U | 5 U           | 5 U | 5 U | 5 U | 5 U | 1 ug/L         |          |  |
| 10053 | trans-1,3-Dichloropropene                     | ug/L                       | 5 U           | 5 U  | 5 U           | 5 U | 5 U           | 5 U   | 5 U           | 5 U    | 5 U           | 5 U  | 5 U           | 5 U | 5 U           | 5 U | 5 U           | 5 U | 5 U | 5 U | 5 U | 0.4 ug/L       |          |  |
| 48    | Bromoform                                     | ug/L                       | 5 U           | 5 U  | 5 U           | 5 U | 5 U           | 5 U   | 5 U           | 5 U    | 5 U           | 5 U  | 5 U           | 5 U | 5 U           | 5 U | 5 U           | 5 U | 5 U | 5 U | 5 U | *              |          |  |
| 97    | 4-Methyl-2-Pentanone                          | ug/L                       | 5 U           | 5 U  | 5 U           | 5 U | 5 U           | 5 U   | 5 U           | 5 U    | 5 U           | 5 U  | 5 U           | 5 U | 5 U           | 5 U | 5 U           | 5 U | 5 U | 5 U | 5 U | *              |          |  |
| 507   | 2-Hexanone                                    | ug/L                       | 5 U           | 5 U  | 5 U           | 5 U | 5 U           | 5 U   | 5 U           | 5 U    | 5 U           | 5 U  | 5 U           | 5 U | 5 U           | 5 U | 5 U           | 5 U | 5 U | 5 U | 5 U | *              |          |  |
| 105   | Tetrachloroethene                             | ug/L                       | 650           | 55   | 20            | 17  | 64            | 350   | 10            | 5 ug/L |               |      |               |     |               |     |               |     |     |     |     |                |          |  |
| 40    | 1,1,2,2-Tetrachloroethane                     | ug/L                       | 5 U           | 5 U  | 5 U           | 5 U | 5 U           | 5 U   | 5 U           | 5 U    | 5 U           | 5 U  | 5 U           | 5 U | 5 U           | 5 U | 5 U           | 5 U | 5 U | 5 U | 5 U | 5 ug/L         |          |  |
| 17    | Toluene                                       | ug/L                       | 200           | 4 J  | 3 J           | 2 J | 82            | 4900  | 5 ug/L        |        |               |      |               |     |               |     |               |     |     |     |     |                |          |  |
| 11    | Chlorobenzene                                 | ug/L                       | 5 U           | 5 U  | 5 U           | 5 U | 5 U           | 5 U   | 5 U           | 5 U    | 5 U           | 5 U  | 5 U           | 5 U | 5 U           | 5 U | 5 U           | 5 U | 5 U | 5 U | 5 U | 5 ug/L         |          |  |
| 55    | Ethylbenzene                                  | ug/L                       | 590           | 5 U  | 5 U           | 5 U | 2 J           | 12    | 2200          | 5 ug/L |               |      |               |     |               |     |               |     |     |     |     |                |          |  |
| 53    | Styrene                                       | ug/L                       | 5 U           | 5 U  | 5 U           | 5 U | 5 U           | 5 U   | 5 U           | 5 U    | 5 U           | 5 U  | 5 U           | 5 U | 5 U           | 5 U | 5 U           | 5 U | 5 U | 5 U | 5 U | 5 ug/L         |          |  |
| 1303  | Xylene (total)                                | ug/L                       | 6500          | 6    | 5             | 1 J | 12            | 68    | 17000         | 5 ug/L |               |      |               |     |               |     |               |     |     |     |     |                |          |  |
|       | Total Tentatively Identified Compounds (TICs) | ug/L                       | 5560 J        | 16 J | 30 J          | 6 J | 73 J          | 196 J | 5090 J        |        |               |      |               |     |               |     |               |     |     |     |     |                |          |  |
|       |   |                            |               |      |               |     |               |       |               |        |               |      |               |     |               |     |               |     |     |     |     |                |          |  |
|       |   |                            |               |      |               |     |               |       |               |        |               |      |               |     |               |     |               |     |     |     |     | * No Standards |          |  |

**VOLATILES BY SW846 METHOD 8260**

| BERNINGER ENVIRONMENTAL         |  |  |  |  |  |  |  |  |  |  |  |  |
|---------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|
| Project: FORMER QUICK AND CLEAN |  |  |  |  |  |  |  |  |  |  |  |  |
| Laboratory: H2M; BER121         |  |  |  |  |  |  |  |  |  |  |  |  |
| Sample Identification:          |  |  |  |  |  |  |  |  |  |  |  |  |
| Laboratory ID:                  |  |  |  |  |  |  |  |  |  |  |  |  |
| Sampling Date:                  |  |  |  |  |  |  |  |  |  |  |  |  |
| TOGS Standard                   |  |  |  |  |  |  |  |  |  |  |  |  |
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**VOLATILES BY SW846 METHOD 8260**

| Cas #          | BERNINGER ENVIRONMENTAL                       |               |              |              |               |               |  |  |    |  |          |  |
|----------------|---|---------------|--------------|--------------|---------------|---------------|--|--|----|--|----------|--|
|                | Project: FORMER QUICK AND CLEAN               |               |              |              |               |               |  |  |    |  |          |  |
|                | Laboratory: H2M; BER121                       |               |              |              |               |               |  |  |    |  |          |  |
|                | Sample Identification:                        | 0412 @ 30-32" | Trip Blank   | Field Blank  | Storage Blank | TOGS Standard |  |  |    |  |          |  |
|                | Laboratory ID:                                | 1304656-015A  | 1304656-016A | 1304656-017A | 1304656-018A  |               |  |  |    |  |          |  |
| Sampling Date: | 04/10   | 04/10         | 04/10        | 04/10        | 04/10         |               |  |  |    |  |          |  |
| Analyte        | Units:  |               |              |              |               |               |  |  |    |  |          |  |
|                | Chloromethane                                 | ug/L          | 5 U          | 5 U          | 5 U           | 5 U           |  |  |    |  | *        |  |
| -16            | Bromomethane                                  | ug/L          | 5 U          | 5 U          | 5 U           | 5 U           |  |  |    |  | 5 ug/L   |  |
| -18            | Vinyl Chloride                                | ug/L          | 5 U          | 5 U          | 5 U           | 5 U           |  |  |    |  | 2 ug/L   |  |
| 70             | Chloroethane                                  | ug/L          | 5 U          | 5 U          | 5 U           | 5 U           |  |  |    |  | 5 ug/L   |  |
| 72             | Methylene Chloride                            | ug/L          | 5 U          | 5 U          | 5 U           | 21            |  |  |    |  | 5 ug/L   |  |
| 64             | Acetone                                       | ug/L          | 6 U          | 5 UJ         | 5 UJ          | 6 J           |  |  |    |  | *        |  |
| 2              | Carbon disulfide                              | ug/L          | 1 J          | 5 U          | 5 U           | 5 U           |  |  |    |  | *        |  |
| 60             | 1,1-Dichloroethene                            | ug/L          | 5 U          | 5 U          | 5 U           | 5 U           |  |  |    |  | 5 ug/L   |  |
| 36             | 1,1-Dichloroethane                            | ug/L          | 5 U          | 5 U          | 5 U           | 5 U           |  |  |    |  | 5 ug/L   |  |
| 38             | 1,2-Dichloroethene (total)                    | ug/L          | 87 J         | 5 U          | 5 U           | 5 U           |  |  |    |  | 5 ug/L   |  |
| 461            | Chloroform                                    | ug/L          | 2 J          | 5 U          | 5 U           | 5 U           |  |  |    |  | 7 ug/L   |  |
| -2             | 1,2-Dichloroethane                            | ug/L          | 5 U          | 5 U          | 5 U           | 5 U           |  |  |    |  | 0.6 ug/L |  |
| 99             | 2-Butanone                                    | ug/L          | 4 J          | 5 U          | 5 U           | 5 U           |  |  |    |  | *        |  |
| -18            | 1,1,1-Trichloroethane                         | ug/L          | 5 U          | 5 U          | 5 U           | 5 U           |  |  |    |  | 5 ug/L   |  |
| 10             | Carbon Tetrachloride                          | ug/L          | 5 U          | 5 U          | 5 U           | 5 U           |  |  |    |  | 5 ug/L   |  |
| 28             | Bromodichloromethane                          | ug/L          | 5 U          | 5 U          | 5 U           | 5 U           |  |  |    |  | *        |  |
| 44             | 1,2-Dichloropropane                           | ug/L          | 5 U          | 5 U          | 5 U           | 5 U           |  |  |    |  | 1 ug/L   |  |
| -14            | cis-1,3-Dichloropropene                       | ug/L          | 5 U          | 5 U          | 5 U           | 5 U           |  |  |    |  | 0.4 ug/L |  |
| 10055          | Trichloroethene                               | ug/L          | 5 U          | 5 U          | 5 U           | 5 U           |  |  |    |  | 5 ug/L   |  |
| 722            | Dibromochloromethane                          | ug/L          | 5 U          | 5 U          | 5 U           | 5 U           |  |  |    |  | *        |  |
| 75             | 1,1,2-Trichloroethane                         | ug/L          | 5 U          | 5 U          | 5 U           | 5 U           |  |  |    |  | 1 ug/L   |  |
| 74             | Benzene                                       | ug/L          | 5 U          | 5 U          | 5 U           | 5 U           |  |  |    |  | 1 ug/L   |  |
| 26             | trans-1,3-Dichloropropene                     | ug/L          | 4 J          | 5 U          | 5 U           | 5 U           |  |  |    |  | 0.4 ug/L |  |
| 10053          | Bromoform                                     | ug/L          | 5 UJ         | 5 UJ         | 5 UJ          | 5 UJ          |  |  |    |  | *        |  |
| 48             | 4-Methyl-2-Pentanone                          | ug/L          | 5 U          | 5 U          | 5 U           | 5 U           |  |  |    |  | *        |  |
| 97             | 2-Hexanone                                    | ug/L          | 5 UJ         | 5 U          | 5 U           | 5 U           |  |  |    |  | *        |  |
| 505            | Tetrachloroethene                             | ug/L          | 2 J          | 5 U          | 5 U           | 5 U           |  |  |    |  | 5 ug/L   |  |
| 107            | 1,1,2,2-Tetrachloroethane                     | ug/L          | 5 U          | 5 U          | 5 U           | 5 U           |  |  |    |  | 5 ug/L   |  |
| 40             | Toluene                                       | ug/L          | 110          | 5 U          | 5 U           | 5 U           |  |  |    |  | 5 ug/L   |  |
| 17             | Chlorobenzene                                 | ug/L          | 5 U          | 5 U          | 5 U           | 5 U           |  |  |    |  | 5 ug/L   |  |
| 11             | Ethylbenzene                                  | ug/L          | 100          | 5 U          | 5 U           | 5 U           |  |  |    |  | 5 ug/L   |  |
| 55             | Styrene                                       | ug/L          | 5 U          | 5 U          | 5 U           | 5 U           |  |  |    |  | 5 ug/L   |  |
| 53             | Xylene (total)                                | ug/L          | 1000         | 5 U          | 5 U           | 5 U           |  |  |    |  | 5 ug/L   |  |
| 1303           | Total Tentatively Identified Compounds (TICs) | ug/L          | 1780 J       | 0            | 0             | 0             |  |  |    |  | *        |  |
|                |   |               |              |              |               |               |  |  |    |  |          |  |
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# **VOLATILES BY SW846 METHOD 8260**

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[illegible]

# VOLATILES BY SW846 METHOD 8260

|            |   |                    |                    |                    |                    |                    |                    |                    |                    |               |        |
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| Cas #      | BERNINGER ENVIRONMENTAL                       |                    |                    |                    |                    |                    |                    |                    |                    |               |        |
|            | Project: FORMER QUICK AND CLEAN               |                    |                    |                    |                    |                    |                    |                    |                    |               |        |
|            | Laboratory: H2M; BER126, BER128               |                    |                    |                    |                    |                    |                    |                    |                    |               |        |
|            | Sample Identification:                        |                    | GW-061013 @ 40-44' | GW-061013 @ 50-54' | GW-061013 @ 60-64' | GW-071013 @ 20-24' | GW-071013 @ 30-34' | GW-071013 @ 40-44' | GW-071013 @ 50-54' | TOGS Standard |        |
|            | Laboratory ID:                                |                    | 1310705-005        | 1310705-006        | 1310705-007        | 1310705-008        | 1310705-009        | 1310705-010        | 1310705-011        |               |        |
|            | Sampling Date:                                |                    | 10/10/2013         | 10/10/2013         | 10/10/2013         | 10/10/2013         | 10/10/2013         | 10/10/2013         | 10/10/2013         |               |        |
|            |   |                    |                    |                    |                    |                    |                    |                    |                    |               |        |
|            |   |                    |                    |                    |                    |                    |                    |                    |                    |               |        |
|            | Analyte                                       |                    | Units:             |                    |                    |                    |                    |                    |                    |               |        |
|            | 74-87-3                                       | Chloromethane      | ug/L               | 5 U                | 5 U                | 5 U                | 5 U                | 5 U                | 5 U                | 5 U           | *      |
|            | 74-83-9                                       | Bromomethane       | ug/L               | 5 UJ               | 5 UJ               | 5 UJ               | 5 UJ               | 5 U                | 5 U                | 5 U           | 5 ug/L |
|            | 75-01-4                                       | Vinyl Chloride     | ug/L               | 5 U                | 5 U                | 5 U                | 5 U                | 5 U                | 5 U                | 5 U           | 2 ug/L |
|            | 75-00-3                                       | Chloroethane       | ug/L               | 5 U                | 5 U                | 5 U                | 5 U                | 5 U                | 5 U                | 5 U           | 5 ug/L |
|            | 75-09-2                                       | Methylene Chloride | ug/L               | 5 U                | 5 U                | 5 U                | 5 U                | 5 U                | 5 U                | 5 U           | 5 ug/L |
|            | 67-64-1                                       | Acetone            | ug/L               | 5 UJ               | 5 UJ               | 5 UJ               | 5 UJ               | 5 UJ               | 5 UJ               | 5 UJ          | *      |
| 75-15-0    | Carbon disulfide                              | ug/L               | 5 U                | 5 U                | 5 U                | 5 U                | 5 U                | 5 U                | 5 U                | *             |        |
| 75-35-4    | 1,1-Dichloroethene                            | ug/L               | 5 U                | 5 U                | 5 U                | 5 U                | 5 U                | 5 U                | 5 U                | 5 ug/L        |        |
| 75-34-3    | 1,1-Dichloroethane                            | ug/L               | 5 U                | 5 U                | 5 U                | 5 U                | 5 U                | 5 U                | 5 U                | 5 ug/L        |        |
| 540-59-0   | 1,2-Dichloroethene (total)                    | ug/L               | 5 U                | 5 U                | 5 U                | 5 U                | 2 J                | 5 U                | 5 U                | 5 ug/L        |        |
| 67-66-3    | Chloroform                                    | ug/L               | 5 U                | 5 U                | 5 U                | 5 U                | 5 U                | 5 U                | 5 U                | 7 ug/L        |        |
| 107-06-2   | 1,2-Dichloroethane                            | ug/L               | 5 U                | 5 U                | 5 U                | 5 U                | 5 U                | 5 U                | 5 U                | 0.6 ug/L      |        |
| 78-93-3    | 2-Butanone                                    | ug/L               | 5 U                | 5 U                | 5 U                | 5 U                | 5 U                | 5 U                | 5 U                | *             |        |
| 71-55-6    | 1,1,1-Trichloroethane                         | ug/L               | 5 U                | 5 U                | 5 U                | 5 U                | 5 U                | 5 U                | 5 U                | 5 ug/L        |        |
| 56-23-5    | Carbon Tetrachloride                          | ug/L               | 5 U                | 5 U                | 5 U                | 5 U                | 5 U                | 5 U                | 5 U                | 5 ug/L        |        |
| 75-27-4    | Bromodichloromethane                          | ug/L               | 5 U                | 5 U                | 5 U                | 5 U                | 5 U                | 5 U                | 5 U                | *             |        |
| 78-87-5    | 1,2-Dichloropropane                           | ug/L               | 5 U                | 5 U                | 5 U                | 5 U                | 5 U                | 5 U                | 5 U                | 1 ug/L        |        |
| 10061-01-5 | cis-1,3-Dichloropropene                       | ug/L               | 5 U                | 5 U                | 5 U                | 5 U                | 5 U                | 5 U                | 5 U                | 0.4 ug/L      |        |
| 79-01-6    | Trichloroethene                               | ug/L               | 5 U                | 5 U                | 5 U                | 5 U                | 4 J                | 5 U                | 5 U                | 5 ug/L        |        |
| 124-48-1   | Dibromochloromethane                          | ug/L               | 5 U                | 5 U                | 5 U                | 5 U                | 5 U                | 5 U                | 5 U                | *             |        |
| 79-00-5    | 1,1,2-Trichloroethane                         | ug/L               | 5 U                | 5 U                | 5 U                | 5 U                | 5 U                | 5 U                | 5 U                | 1 ug/L        |        |
| 71-43-2    | Benzene                                       | ug/L               | 5 U                | 5 U                | 5 U                | 5 U                | 5 U                | 5 U                | 5 U                | 1 ug/L        |        |
| 10061-02-6 | trans-1,3-Dichloropropene                     | ug/L               | 5 U                | 5 U                | 5 U                | 5 U                | 5 U                | 5 U                | 5 U                | 0.4 ug/L      |        |
| 75-25-2    | Bromoform                                     | ug/L               | 5 U                | 5 U                | 5 U                | 5 U                | 5 U                | 5 U                | 5 U                | *             |        |
| 108-10-1   | 4-Methyl-2-Pentanone                          | ug/L               | 5 U                | 5 U                | 5 U                | 5 U                | 5 U                | 5 U                | 5 U                | *             |        |
| 591-78-6   | 2-Hexanone                                    | ug/L               | 5 U                | 5 U                | 5 U                | 5 U                | 5 U                | 5 U                | 5 U                | *             |        |
| 127-18-4   | Tetrachloroethene                             | ug/L               | 5 U                | 5 U                | 5 U                | 5                  | 63                 | 5 U                | 5 U                | 5 ug/L        |        |
| 79-34-5    | 1,1,2,2-Tetrachloroethane                     | ug/L               | 5 U                | 5 U                | 5 U                | 5 U                | 5 U                | 5 U                | 5 U                | 5 ug/L        |        |
| 108-88-3   | Toluene                                       | ug/L               | 5 UJ               | 5 UJ               | 5 UJ               | 5 UJ               | 5 U                | 5 U                | 5 U                | 5 ug/L        |        |
| 108-90-7   | Chlorobenzene                                 | ug/L               | 5 U                | 5 U                | 5 U                | 5 U                | 5 U                | 5 U                | 5 U                | 5 ug/L        |        |
| 100-41-4   | Ethylbenzene                                  | ug/L               | 5 U                | 5 U                | 5 U                | 5 U                | 5 U                | 5 U                | 5 U                | 5 ug/L        |        |
| 100-42-5   | Styrene                                       | ug/L               | 5 U                | 5 U                | 5 U                | 5 U                | 5 U                | 5 U                | 5 U                | 5 ug/L        |        |
| 1330-20-7  | Xylene (total)                                | ug/L               | 5 U                | 5 U                | 5 U                | 5 U                | 5 U                | 5 U                | 5 U                | 5 ug/L        |        |
|            | Total Tentatively Identified Compounds (TICs) | ug/L               | 5 J                | 6 J                | 0                  | 0                  | 0                  | 45 J               | 7 J                |               |        |
|            |   |                    |                    |                    |                    |                    |                    |                    |                    | * No Standard |        |

**VOLATILES BY SW846 METHOD 8260**

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## VOLATILES BY SW846 METHOD 8260

|            |   |        |                    |  |                    |  |                    |  |                    |  |             |             |               |
|------------|---|--------|--------------------|--|--------------------|--|--------------------|--|--------------------|--|-------------|-------------|---------------|
|            | BERNINGER ENVIRONMENTAL                       |        |                    |  |                    |  |                    |  |                    |  |             |             |               |
|            | Project: FORMER QUICK AND CLEAN               |        |                    |  |                    |  |                    |  |                    |  |             |             |               |
|            | Laboratory: H2M; BER126, BER128               |        |                    |  |                    |  |                    |  |                    |  |             |             |               |
|            | Sample Identification:                        |        | GW-091013 @ 30-34' |  | GW-091013 @ 40-44' |  | GW-091013 @ 50-54' |  | GW-091013 @ 60-64' |  | Field Blank | Trip Blank  | TOGS Standard |
|            | Laboratory ID:                                |        | 1310705-019        |  | 1310705-020        |  | 1310705-021        |  | 1310705-022        |  | 1310705-023 | 1310705-024 |               |
|            | Sampling Date:                                |        | 10/11/2013         |  | 10/11/2013         |  | 10/11/2013         |  | 10/11/2013         |  |             |             |               |
|            |   |        |                    |  |                    |  |                    |  |                    |  |             |             |               |
|            |   |        |                    |  |                    |  |                    |  |                    |  |             |             |               |
| Cas #      | Analyte                                       | Units: |                    |  |                    |  |                    |  |                    |  |             |             |               |
| 74-87-3    | Chloromethane                                 | ug/L   | 5 U                |  | 5 U                |  | 5 U                |  | 5 U                |  | 5 U         | 5 U         | *             |
| 74-83-9    | Bromomethane                                  | ug/L   | 5 U                |  | 5 U                |  | 5 U                |  | 5 U                |  | 5 U         | 5 U         | 5 ug/L        |
| 75-01-4    | Vinyl Chloride                                | ug/L   | 5 U                |  | 5 U                |  | 5 U                |  | 5 U                |  | 5 U         | 5 U         | 2 ug/L        |
| 75-00-3    | Chloroethane                                  | ug/L   | 5 U                |  | 5 U                |  | 5 U                |  | 5 U                |  | 5 U         | 5 U         | 5 ug/L        |
| 75-09-2    | Methylene Chloride                            | ug/L   | 5 U                |  | 5 U                |  | 5 U                |  | 5 U                |  | 5 U         | 5 U         | 5 ug/L        |
| 67-64-1    | Acetone                                       | ug/L   | 5 UJ               |  | 5 UJ               |  | 6 UJ               |  | 5 UJ               |  | 2 J         | 5 UJ        | *             |
| 75-15-0    | Carbon disulfide                              | ug/L   | 5 U                |  | 5 U                |  | 5 U                |  | 5 U                |  | 5 U         | 5 U         | *             |
| 75-35-4    | 1,1-Dichloroethene                            | ug/L   | 5 U                |  | 5 U                |  | 5 U                |  | 5 U                |  | 5 U         | 5 U         | 5 ug/L        |
| 75-34-3    | 1,1-Dichloroethane                            | ug/L   | 5 U                |  | 5 U                |  | 5 U                |  | 5 U                |  | 5 U         | 5 U         | 5 ug/L        |
| S40-59-0   | 1,2-Dichloroethene (total)                    | ug/L   | 5 U                |  | 5 U                |  | 5 U                |  | 5 U                |  | 5 U         | 5 U         | 5 ug/L        |
| 67-66-3    | Chloroform                                    | ug/L   | 5 U                |  | 5 U                |  | 5 U                |  | 5 U                |  | 5 U         | 7 ug/L      |               |
| 107-06-2   | 1,2-Dichloroethane                            | ug/L   | 5 U                |  | 5 U                |  | 5 U                |  | 5 U                |  | 5 U         | 5 U         | 0.6 ug/L      |
| 78-93-3    | 2-Butanone                                    | ug/L   | 5 U                |  | 5 U                |  | 1 J                |  | 5 U                |  | 5 U         | 5 U         | *             |
| 71-55-6    | 1,1,1-Trichloroethane                         | ug/L   | 5 U                |  | 5 U                |  | 5 U                |  | 5 U                |  | 5 U         | 5 U         | 5 ug/L        |
| 56-23-5    | Carbon Tetrachloride                          | ug/L   | 5 U                |  | 5 U                |  | 5 U                |  | 5 U                |  | 5 U         | 5 U         | 5 ug/L        |
| 75-27-4    | Bromodichloromethane                          | ug/L   | 5 U                |  | 5 U                |  | 5 U                |  | 5 U                |  | 5 U         | 5 U         | *             |
| 78-87-5    | 1,2-Dichloropropane                           | ug/L   | 5 U                |  | 5 U                |  | 5 U                |  | 5 U                |  | 5 U         | 5 U         | 1 ug/L        |
| 10061-01-5 | cis-1,3-Dichloropropene                       | ug/L   | 5 U                |  | 5 U                |  | 5 U                |  | 5 U                |  | 5 U         | 5 U         | 0.4 ug/L      |
| 79-01-6    | Trichloroethene                               | ug/L   | 5 U                |  | 5 U                |  | 5 U                |  | 5 U                |  | 5 U         | 5 U         | 5 ug/L        |
| 124-48-1   | Dibromochloromethane                          | ug/L   | 5 U                |  | 5 U                |  | 5 U                |  | 5 U                |  | 5 U         | 5 U         | *             |
| 79-00-5    | 1,1,2-Trichloroethane                         | ug/L   | 5 U                |  | 5 U                |  | 5 U                |  | 5 U                |  | 5 U         | 5 U         | 1 ug/L        |
| 71-43-2    | Benzene                                       | ug/L   | 5 U                |  | 5 U                |  | 5 U                |  | 5 U                |  | 5 U         | 5 U         | 1 ug/L        |
| 10061-02-6 | trans-1,3-Dichloropropene                     | ug/L   | 5 U                |  | 5 U                |  | 5 U                |  | 5 U                |  | 5 U         | 5 U         | 0.4 ug/L      |
| 75-25-2    | Bromoform                                     | ug/L   | 5 U                |  | 5 U                |  | 5 U                |  | 5 U                |  | 5 U         | 5 U         | *             |
| 108-10-1   | 4-Methyl-2-Pentanone                          | ug/L   | 5 U                |  | 5 U                |  | 5 U                |  | 5 U                |  | 5 U         | 5 U         | *             |
| 591-78-6   | 2-Hexanone                                    | ug/L   | 5 U                |  | 5 U                |  | 5 U                |  | 5 U                |  | 5 U         | 5 U         | *             |
| 127-18-4   | Tetrachloroethene                             | ug/L   | 7                  |  | 5 U                |  | 1 J                |  | 5 U                |  | 5 U         | 5 U         | 5 ug/L        |
| 79-34-5    | 1,1,2,2-Tetrachloroethane                     | ug/L   | 5 U                |  | 5 U                |  | 5 U                |  | 5 U                |  | 5 U         | 5 U         | 5 ug/L        |
| 108-88-3   | Toluene                                       | ug/L   | 5 U                |  | 5 U                |  | 5 U                |  | 5 U                |  | 5 U         | 5 U         | 5 ug/L        |
| 108-90-7   | Chlorobenzene                                 | ug/L   | 5 U                |  | 5 U                |  | 5 U                |  | 5 U                |  | 5 U         | 5 U         | 5 ug/L        |
| 100-41-4   | Ethylbenzene                                  | ug/L   | 5 U                |  | 5 U                |  | 5 U                |  | 5 U                |  | 5 U         | 5 U         | 5 ug/L        |
| 100-42-5   | Styrene                                       | ug/L   | 5 U                |  | 5 U                |  | 5 U                |  | 5 U                |  | 5 U         | 5 U         | 5 ug/L        |
| 1330-20-7  | Xylene (total)                                | ug/L   | 5 U                |  | 5 U                |  | 5 U                |  | 5 U                |  | 5 U         | 5 U         | 5 ug/L        |
|            | Total Tentatively Identified Compounds (TICs) | ug/L   | 0                  |  | 26 J               |  | 24 J               |  | 0                  |  | 0           | 0           |               |
|            |   |        |                    |  |                    |  |                    |  |                    |  |             |             |               |
|            |   |        |                    |  |                    |  |                    |  |                    |  |             |             | * No Standard |