H&V FIBER REMEDIAL PERFORMANCE REPORT
2015

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Corvallis, Oregon

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1 INTRODUCTION

PNG Environmental, Inc. (PNG) prepared this report on behalf of H&V Fiber Corporation (formerly Evanite) to document remedial system performance and groundwater monitoring activities conducted at the former Evanite site for calendar year 2015. The Evanite site is located at 1115 SE Crystal Lake Drive in Corvallis, Oregon (Figures 1 through 3). Trichloroethylene (TCE) was historically released in soil and groundwater at the site creating dense non-aqueous phase liquid (DNAPL) conditions at the Submicro Building source zone. Remedial actions in soil and groundwater were first implemented in 1991 and continue through present.

Routine site monitoring and reporting conducted since site discovery in 1986 was aimed at documentation of the pump and treat system performance with groundwater wells sampled on a quarterly basis. Groundwater extraction was operated continuously with significant TCE recovered over the first three years of operation. An estimated 90,500 pounds of TCE was extracted as DNAPL from soil and groundwater between 1991 and 1993. After several years of groundwater extraction, very little change in groundwater quality was noted between events as the groundwater surrounding each extraction well was flushed of mobile DNAPL and dissolved phase TCE. Concentrations in monitoring wells outside the core of the plume (i.e., the source zone at the Submicro Building) slowly decreased to relatively steady state concentration conditions by the late 1990's. TCE mass recovery between 2000 and 2011 averaged approximately 1,000 pounds per year with very little change in concentrations of TCE in site remediation wells.

Starting in late 2011 with the addition of a catalytic oxidizer purchased and installed for destruction of TCE off-gas, groundwater pumping from the source zone was increased to create a larger unsaturated zone cone of depression in the Submicro Building source zone. Soil vapor extraction (SVE) applied in newly installed wells at the top of the now unsaturated aquifer provided for an increase in mass removal with over 10,000 pounds of TCE recovered per year in 2012 and 2013. Groundwater extraction necessary for dewatering the source zone was slowly increased through the period with upgrades implemented on the air stripper, tanks, water and air piping, and SVE system.

In 2013, PNG implemented a pilot test to evaluate enhanced reductive dechlorination (ERD) as a remedial alternative to be applied surrounding and within the source zone once the decreasing concentration trend in dissolved plume and/or SVE mass removal in the source zone became asymptotic. Wells were installed along the axis of the source zone plume on the south (i.e., upgradient) edge for injection of nutrients. A recirculation cell was established with extraction in the core of the source zone and, after augmentation, reinjection of the extracted water. This cell was designed to provide data ranging from an area with very low TCE concentrations upgradient of the plume to the core of the DNAPL source zone where residual DNAPL remains. Monitoring well pairs in the upper and lower portions of the aquifer provided performance data. The test was successful in stimulating degradation in a former DNAPL zone with significant concentrations of anaerobic degradation products measured in the test area.

Subsequent to successful pilot testing, PNG prepared an addendum to the 2007 Focused Feasibility Study (FFS) (Kennec 2007) presenting an amended remedial option (PNG 2015a). Remedy RA-2 Amended included 1) SVE for mass depletion at the DNAPL source zone and vapor intrusion protection for the Submicro Building, 2) aggressive groundwater extraction focused in the source zone to remove dissolved contaminants and increase the depth of the unsaturated zone, and 3) polishing with ERD starting at the periphery of the plume and moving into the source zone. The more aggressive approach,

as opposed to the previous decades of pump and treat operations, was supported and/or dependent on the purchase and operations of a Catalytic Oxidizer (CatOx) offgas system that destroys chlorinated solvents in the SVE and groundwater air stripper streams. The current discharge limits to atmosphere are in the order of a few hundred pounds per year; operations during the pilot testing created over 10,000 pounds per year that was treated with the CatOx.

The Oregon Department of Environmental Quality (DEQ) concurred with the presentation and conclusions presented in the amended FS and prepared a Staff Report of the recommended remedial action (DEQ 2015a). This document was posted to the DEQ website to support the 30 day public comment period in May 2015. Comments were minimal with several providing support for the recommended remedy.

DEQ prepared the Record of Decision (DEQ 2015b) which included a summary of site conditions and the recommended remedial alternative. DEQ stated that the remedial action was considered to be protective, effective, reliable, and cost effective. Current regulatory activities include finalization of a remediation order and development of design documents that will include an updated performance monitoring plan consistent with the optimized remedial scheme.

1.1 BACKGROUND

The history of the site and surrounding area, including summaries of previous investigations, are provided in extensive detail in the original Part B Post Closure Permit (CH2M Hill 1987), Focused Feasibility Study (Kennec 2007), Evanite DNAPL Source Zone Well Installation (PNG 2009), and H&V Fiber Remedial Performance Report – 2013 (PNG 2014). TCE was predominantly used at Evanite from the period between 1975 and 1996 in the manufacturing process for polyethylene-silica battery separator material. Historic spills/releases resulted in a DNAPL source zone located in the former process area at the Submicro Building, with a dissolved phase volatile groundwater plume migrating north and northeast towards the Willamette and Marys Rivers (Figures 4 and 5). The original TCE concentrations measured prior to implementation of remediation in 1991 were at near saturation concentrations in the source zone with the 100,000 micrograms per liter (ug/L) plume covering approximately ten acres. The original 10,000 ug/L TCE plume outline extended over approximately 23 acres of the facility and discharged into the rivers. The current plume core as defined by a vapor intrusion standard of 3,700 ug/L for TCE has been shrunk back to about one half acre; only a single well in the source area exceeds 10,000 ug/L.

Contamination on the Evanite site consists nearly entirely of TCE and its degradation products. Additionally, a segment of the plume offsite to the south in the edges of an adjacent residential neighborhood has been remediated. This historic segment of the Evanite TCE plume also comingled with one or more offsite, upgradient chlorinated groundwater plumes that currently continue to migrate through the neighborhood in a northerly direction towards Evanite property.

Evanite has been engaged in continuous remedial action with Environmental Protection Agency (EPA) and DEQ approval since April 30, 1990. Hydraulic containment through groundwater pumping at up to six site wells began in 1991 with over 458 million gallons of groundwater extracted and treated thorough 2014. Evanite's hydraulic containment and groundwater monitoring system historically included six groundwater extraction wells, thirteen monitoring wells located onsite, and up to seventeen residential water wells in the adjacent neighborhood to the south. Additional source zone, dual purpose monitoring and treatment wells were installed in 2009, 2013, 2014, and 2015. Currently, the site well

network includes 57 wells screened either at the top or base of the aquifer (i.e., intermediate or deep designation) and includes three wells in the neighborhood to the south. Figure 2 illustrates the current monitoring well network and several of the historic residential wells in the adjacent neighborhood. Well construction details are provided in Table 1.

1.2 PERFORMANCE MONITORING PROGRAM

The monitoring program in 2013 was based on a Performance Monitoring Plan (PNG 2013a) that reflected the startup of the CatOx system which allowed increases in groundwater extraction and DNAPL mass removal through SVE. Monitoring requirements for 2015, which follows the same basic schedule outlined in 2013, are illustrated in Table 2. The long-term monitoring program will be developed in the Remedial Design/Remedial Action scope of work which includes Sampling and Analysis, Operations and Maintenance, and Performance Monitoring plans.

2 REGULATORY SETTING

The original 25 acre Evanite TCE plume encompasses multiple potential human health and ecological exposure pathways across the site, ranging from the residential setting in the neighborhood located to the south, to heavy industrial manufacturing in the many Evanite buildings, and eventually to groundwater discharge to the Marys and Willamette Rivers. PNG, in a cooperative effort with DEQ, identified currently applicable default regulatory screening criteria for the evaluation of data collected at the Evanite site. The screening criteria were selected based on current and reasonably likely future use of the subject property for complete human health and ecological exposure pathways. These default criteria are considered conservative by definition as they were developed by DEQ for application at typical sites using reasonable exposure parameters. Screening values are presented in Table 3.

The chemicals of potential concern (COPCs) were established decades ago with substantive sampling of soil and groundwater centered around the RCRA Appendix IX analytical suite. A consistent lack of detection of other chemicals (specifically volatile organic compounds [VOCs]) related to TCE resulted in Evanite and the agencies narrowing the target chemical list to five chlorinated compounds related to TCE and its degradation products.

In the late 1980's, when Evanite was developing their initial remedial scheme, DEQ's cleanup programs were in early stages of development; specific guidance for establishing risk-based cleanup goals did not exist. The initial cleanup goal for COPCs was established as "background" with a caveat to seek an alternate concentration limit if background could not be achieved within a few years. Based on the presence of mobile DNAPL over a large area, it was recognized that background levels were unachievable at that time. During the next two decades as active remediation was ongoing, risk-based regulatory criteria were developed by DEQ and now provide a framework for guiding future remedial efforts. DEQ released a ROD in September 2015 developed for the site using these default screening levels.

Human health criteria are provided by DEQ's Risk Based Decision-Making (RBDM) guidance that was originally produced to address hydrocarbon sites, and subsequently modified on several occasions to include other volatiles such as the Evanite COPCs. Risk-based concentrations (RBCs) are established for most common applicable human health exposure pathways. Ecological guidance is provided by DEQ's Guidance for Ecological Risk Assessment: Levels I, II, III, IV. This document was developed by DEQ in April 1998 and is consistent with EPA's approach to ecological risk assessment. Level I Ecological Scoping is intended to discern the potential for ecological impacts from site-related contaminants. Level II Ecological Screening provides Agency-approved screening criteria (ecological benchmark values) for potentially impacted media and reasonably likely ecological receptors.

A site-specific human health and ecological risk assessment is not necessary for Evanite at this time due to the unique circumstances created by the DNAPL source zone and resulting dissolved phase TCE plume. The TCE plume in soil and groundwater at the Submicro source zone contains residual DNAPL that is the primary target of future remedial efforts. Contamination in this industrial part of the site exceeds applicable generic RBCs and is expected to do so for many years. Any site specific RBCs calculated for this area would also be exceeded.

The periphery areas at Evanite surrounding the DNAPL source zone have been flushed with pump and treat remediation for decades, and concentrations are below applicable

generic criteria in soil, groundwater, sediment pore water, surface water, and air media. A site specific risk assessment applicable to these areas is not necessary, as the concentrations measured during routine sampling events meet generic criteria that are more conservative (i.e., lower concentration) than site-specific criteria.

2.1 OREGON DEQ RISK BASED CONCENTRATIONS

DEQ first developed RBDM guidance for comparing Contaminant of Interest (COI) concentrations to default RBCs for applicable human health exposure scenarios in 2003. These RBCs eventually replaced EPA Preliminary Remediation Goals (PRGs) as screening criteria in human health risk assessments. Published RBC tables are updated periodically by DEQ with the most critical update relevant to Evanite published in November 2011 when the standards for TCE were updated based on new toxicity values published by EPA. More recently in February 2012, DEQ issued an update for tetrachloroethene (PCE) that incorporated a similar modification by EPA to the parameters for that chemical. Both of these modifications increased the RBC concentrations for the various exposure pathways for these chemicals. The current RBDM table was published on November 1, 2015.

In the 2009 revision to its RBC tables, DEQ included newly-developed soil gas and indoor air RBCs (DEQ 2009) for residential, urban, and occupational settings. DEQ also published final guidance for vapor intrusion assessments (DEQ 2010), and issued revised air and soil vapor RBC values in November 2011 and February 2012, and November 2015.

The published RBCs (Table 3) represent a conservative default concentration of a chemical in an impacted medium (e.g. soil, groundwater, or air) that represents the upper limit as a regulatory standard. When chemical concentrations on a site exceed the RBC, unacceptable human health impacts are potentially present. For carcinogens, the regulatory standard is represented by an excess cancer risk of one in one million (1E-06); for non-carcinogens, this is represented by a Hazard Index of 1. RBC exceedances typically trigger further investigation and potentially a human health risk assessment. Therefore, RBCs can be applied at sites as generic, conservative cleanup standards and are routinely used by DEQ to determine if a site requires additional action. Site specific parameters used in the equations to develop the RBCs are often adjusted to match actual conditions in developing site-specific cleanup levels. These are generally significantly greater concentrations than the generic standards. For the Evanite site where active remediation has been ongoing for 22 years, the comparison is made in the context of the performance evaluation to determine if the site or areas of the site are sufficiently remediated to discontinue active remediation.

There are several exposure pathways by which a receptor may be exposed to a chemical, including incidental ingestion, inhalation, and dermal contact with the affected medium. The current and reasonably anticipated future use of the property is the primary criterion for determining whether a certain exposure pathway is likely to be of concern.

Considering the current industrial and occupational use of the Evanite property, the potential receptors and pathways that are considered applicable and evaluated for the site are:

- Direct contact with soil by an Evanite occupational worker or construction worker is a complete pathway of exposure where TCE was released in soil (i.e. Submicro Process Area). This pathway applies to a depth of 10 to 15 feet below ground surface (bgs) which is considered the typical maximum depth of a utility.

- Direct contact with soil and/or groundwater by an excavation worker is a potentially complete pathway in areas where TCE was released in soil (i.e., Submicro Process Area). It is unlikely that direct contact with groundwater could be an issue as the depth to contaminated groundwater in the source zone at approximately 20 feet and in areas downgradient at over 40 feet as characterized by field observations downgradient towards the rivers.
- Volatilization of volatile chemicals from subsurface soil or groundwater to indoor and outdoor air is a complete pathway. Occupational workers could potentially be exposed in indoor and outdoor air. For construction and excavation workers, outdoor air is the only likely significant pathway of exposure. In the upgradient neighborhood to the south where low concentration remnants of the plume exist, a resident would be a potential receptor of concern but volatile concentrations do not exceed the applicable RBC; therefore, this is not a complete pathway.
- Domestic or commercial use of groundwater has been eliminated with engineering controls as the Evanite site is on city water and the residential neighborhood wells were switched from shallow wells to city water over 20 years ago; Evanite continues to pay water bills at potentially affected houses. It should also be noted that several upgradient chlorinated solvent plumes are commingled within the neighborhood and flow onto the Evanite property.
- Soil leaching to groundwater is a complete pathway as the TCE DNAPL migrated through the surficial silts/sands and silty sandy gravel aquifer to pool on the underlying clay surface. This pathway applies to the source zone.
- Groundwater migration to surface waters of the Willamette and Marys Rivers is a complete pathway that is controlled by the current pump and treat hydraulic containment system. The criteria for this pathway are the lowest concentrations listed in Table 3 as this pathway is anticipated to become the final driver for active remediation. TCE concentrations in the Submicro DNAPL source zone must be reduced such that screening criteria applied at the pore water and surface water are not exceeded when groundwater extraction and/or ERD are terminated.

Environmental data presented in the following sections is compared to the lowest RBC for each identified receptor zone (e.g., Residential, Upgradient Area, Source Zone Area, etc.) as presented in tables, figures and discussed in text. The relatively new soil vapor and air RBCs are compared to historic air samples collected at various locations within and around Evanite and to SVE performance data for the currently operating system.

2.2 GUIDANCE FOR ECOLOGICAL RISK

A scoping level ecological risk assessment (Level I) consists of an overview of previous site investigations, site conditions, likely COIs, a description of potential ecological receptors (including rare, threatened, and endangered species) at or near the site, and a summary of the potential or likely exposure of ecological receptors to site-related chemicals. Through the identification of COIs, potential exposure media, potential ecological receptors, and complete exposure pathways, the Level I Scoping provides the basis for a conceptual ecological exposure model.

- The COPCs were previously identified as TCE and five of its chlorinated degradation products: tetrachloroethene (PCE), cis-1,2-dichloroethene (cis-1,2-DCE), trans-1,2-dichloroethene (trans-1,2-DCE), 1,1-dichloroethene (1,1-DCE), and vinyl chloride.

- An evaluation of on-site pathways determined that the current and expected future habitat quality and quantity is low at the Evanite industrial site. Therefore, potential impact to terrestrial receptors was considered to be insignificant.
- Groundwater migration to the surface water of the Willamette and Marys Rivers is a complete pathway of exposure.

Consistent with DEQ Guidance for Ecological Risk Assessment, the potential for unacceptable impacts to aquatic receptors were further evaluated in a Level II, Ecological Screening. Both pore water samples and surface water samples were collected and screened against DEQ's Level II benchmark values (Table 3).

The benchmark screening values represent media concentrations below which no unacceptable adverse effects are anticipated. Analytical results for surface water samples were nondetect at the method detection limit (MDL), which was below the benchmark screening criteria for aquatic receptors. Pore water samples were collected to represent the groundwater – surface water interface. Concentrations of the COPCs in pore water did not exceed the benchmark values for surface water.

The Level II Screening determined that no unacceptable ecological impacts are anticipated to aquatic receptors in the Willamette and Marys Rivers. Where media concentrations are below benchmark values, no further ecological evaluation is required under DEQ Guidance.

3 2015 MONITORING

This section summarizes investigation activities and analytical results related to the performance monitoring activities at the site in 2015 up through the December 2015 well installation event and subsequent sampling. Groundwater was sampled on March 9-13, June 10-11, September 1-3, and December 14-16. Goals of the monitoring included update of the Conceptual Site Model (CSM), evaluation of hydraulic containment or plume capture, and analysis of plume remediation based on the trend of decreasing plume concentrations. An element of the groundwater sampling included the continued evaluation of rebound following the ERD pilot test that was conducted in the Submicro source zone in 2013. In September 2015, coincident with low surface water flow conditions in the rivers, hyporheic pore water and surface water sampling was conducted in the Willamette and Marys Rivers. These samples were necessary to evaluate potential risk at the surface water discharge point for the TCE plume. In December, additional monitoring/remediation wells were installed to further characterize the remnant plume in the planned remediation area and serve as remedial wells. Soil vapor data were routinely collected from existing intermediate wells for evaluation of the vapor intrusion pathway and to provide data necessary to optimize the SVE systems in the mass depletion effort at the Submicro Building source zone.

3.1 WELL INSTALLATIONS

In December 2015, six wells were installed at five separate locations at the Evanite site in both deep and intermediate zones of the aquifer (well locations DMW-30, IMW-32, DMW-40, IMW-40, DMW-41, and DMW-42 on Figure 2). These borings and associated wells were necessary to further characterize the TCE plume, and serve as future remediation wells for source zone depletion and ERD application. The deep wells are screened to the base of the aquifer which is a target zone for groundwater extraction and ERD recirculation, while the intermediate wells are screened in the upper portion of the aquifer. Wells were constructed to be multi-purpose to support groundwater extraction, SVE, ERD substrate injection, and performance monitoring.

3.1.1 Soil Boring and Sampling

Following removal of the concrete or asphalt pavement surface at each boring location, Cascade Drilling advanced an eight-inch diameter drill casing up to a maximum of 50 feet. All deep borings penetrated the full stratigraphic sequence previously identified at the site, including the Willamette Silt, the Linn Gravel (primary aquifer bearing formation at the site), and underlying Calapooia Clay (regional aquitard). Regional documents show the clayey silt aquitard has been characterized to exceed 100 feet in thickness in the local area. Drilling equipment was decontaminated between well locations following standard operating procedures (SOPs) included in the work plan (PNG 2013).

Boring cores were continuously sampled using a four-inch diameter inner core barrel which was advanced in front of the eight-inch drive casing. Cores were removed from the barrel by vibrating the soil into tubular plastic bags and then placed onto a work bench covered with plastic sheeting for examination. The cores were field screened at approximately one-foot intervals for the potential presence of VOCs using a photo-ionization detector (PID) calibrated to isobutylene. PID readings and collected sample notes are included on individual well logs. Soil samples for laboratory analysis were selected on the basis of field screening results and visual and olfactory observations. Boring logs and well construction logs are included in Appendix A. These logs illustrate the soil horizon, PID readings every foot along the core, and other field observations.

During drilling, soil samples were collected in each boring to identify any potential source areas. Soil data are summarized in Table 4. TCE was detected in all of the 19 soil samples ranging from 0.0023 milligrams per kilogram (mg/Kg) at location DMW-40 located on the west side of the Submicro Building to 61 mg/Kg at location DMW-41 inside the Glass Plant. Consistent with the CSM, shallow soil samples at the two locations in Glass Plant contained only traces of TCE (i.e., less than 0.005 mg/Kg) which confirms the transport pathway to this location to be plume migration along the aquitard. No additional or new soil contaminant source areas were identified in the investigation.

PNG also collected grab groundwater samples during drilling at deep well locations to evaluate groundwater conditions in the upper portion of the aquifer at those locations (DMW-41 and DMW-42). Groundwater samples were collected using a new plastic disposable bailer in accordance with PNG SOPs. Groundwater contained within the bailer was decanted directly into three laboratory provided 40-milliliter vials.

Groundwater samples were collected from near the water table to characterize possible plume conditions at the intermediate zone (Table 5). TCE concentrations were detected in both samples, with the highest concentration of 54 ug/l at a depth of 27 feet bgs collected from DMW-42.

Groundwater was encountered at approximately 20 to 30 feet at each of the boring locations (Appendix A). Final well construction details are shown in Table 1. Stratigraphy, well construction details, and soil and groundwater analytical data are summarized below:

- DMW-40 was installed on the edge of the source area, outside of Submicro near the southwest corner. At this location, below the surface six inches of asphalt pavement, sandy gravel extended to a depth of approximately 3.5 feet, followed by Willamette Silt to approximately 17 feet, Linn Gravel to approximately 36.5 feet, and the Calapooia Clay to the boring termination depth of 40 feet. IMW-40 was installed approximately five feet south of DMW-40 to a boring termination depth of 30 feet bgs. The highest TCE concentration in soil at these locations (0.0072 mg/Kg) was observed about two feet into the Calapooia Clay. TCE in groundwater from IMW-40 and DMW-40 was nondetect at 0.5 ug/L in December 2015.
- IMW-32 was installed adjacent to DMW-32, which was installed in December 2014, in the Upgradient Area south of the Submicro Building, primarily for use in future substrate injection. At this location, below the asphalt pavement, Willamette silt was encountered to a depth of approximately 15 feet. Below the silt, Linn Gravel was encountered to the final boring termination depth of 33 feet. No soil samples were collected at this location since soil was already characterized during the installation of DMW-32. The highest TCE soil concentration detected in DMW-32 was an estimated value from 38 feet (i.e., below the water table) at 0.0059 mg/Kg. TCE in groundwater was nondetect at 0.5 ug/L in IMW-32 and 366 ug/L in DMW-32 in December 2015.
- DMW-30 was installed within the Source Zone Area inside the Submicro Building adjacent to previously installed IMW-30. At this location, below the surface six inches of concrete pavement, sandy gravel fill extended to a depth of approximately five feet, followed by Willamette Silt to approximately 19 feet, Linn Gravel to approximately 42 feet, and Calapooia Clay to the boring termination depth of 46 feet. The highest TCE concentration in soil at this location of 2.7 mg/Kg at 18.5 feet bgs was observed in the sandy transitional layer between the

Willamette silt and Linn Gravel. TCE in groundwater was 1.5 ug/L in IMW-30 and 61 ug/L in DMW-30 in December 2015.

- DMW-41 was installed inside the western half of the Glass Plant Building. At this location, below the five inches of concrete, sandy gravel fill extended to a depth of approximately three feet, followed by Willamette silt to a depth of approximately 17.5 feet. Below the silt, Linn Gravel was encountered to a depth of approximately 42.5 feet, followed by Calapooia Clay to the final boring termination depth of 50 feet. TCE concentrations in soil at this location were highest at the aquitard contact with a maximum concentration of 61 mg/Kg at the aquitard (42.5 feet bgs). A sample several feet into the aquitard at 49.5 feet bgs contained TCE at 0.0039 mg/Kg. This location was one of the highest priority data gaps regarding the extent of contamination that had migrated beneath the Glass Plant Building. TCE in groundwater was 4.9 ug/L in a grab sample at 29 feet and 1,650 ug/L in DMW-41 after the well was developed.
- DMW-42 was installed inside the eastern half of the Glass Plant Building. At this location, below the five inches of concrete, gravel fill extended to a depth of approximately five feet, followed by Willamette silt to a depth of approximately 17 feet. Below the silt, Linn Gravel was encountered to a depth of approximately 35.5 feet, followed by Calapooia Clay to the final boring termination depth of 40 feet. TCE concentrations in soil at this location were highest at the aquitard contact with a maximum concentration of 25 mg/Kg (35.5 feet). Similar to DMW-42, this location was a high priority data gap. TCE in groundwater was 54 ug/L in a grab sample at 27 feet and 13 ug/L in DMW-42 after the well was developed.

3.1.2 Monitoring Well Construction

The six new wells were constructed of threaded four-inch diameter PVC well casing with a factory-slotted (0.060-inch) stainless steel well screen. Wells in the Source Zone Area (DMW-30, DMW/IMW-40, and IMW-32) have ten foot stainless steel screens, while the wells in the Glass Plant Building (DMW-41 and DMW-42) have five foot stainless steel screens. The larger than typical slot sizes were used to support future ERD substrate injections. Well construction details are provided in Table 1 and on well logs in Appendix A. The base of each deep well was constructed with a three-foot long sump for collection of DNAPL and fines, if applicable. The base of each intermediate well was constructed with a one-foot sump. Coarse grade 6/9 silica sand was selected to construct the annular filter pack around the screened interval. The annular filter pack extends approximately two to three feet above the well screen at each well.

Prior to placement of the bentonite seal, the annular sand pack was surged in each well to encourage settling and prevent collapse of the overlying seal. Bentonite chips (3/8-inch Hole Plug) were placed from the top of the filter-pack to approximately 1.5 feet bgs and subsequently hydrated with potable water. Each outdoor well was completed with an above ground monument to allow for flexibility for both ERD and groundwater extraction systems. Indoor wells were completed with flush monuments to minimize the well's interference with H&V processes.

3.1.3 Well Development and Survey

PNG developed the six wells one to two weeks after installation. The new wells were surged with a bailer and over-pumped. During development, PNG removed between six and 16 well volumes of water from each well. Field parameters of pH, temperature, and

conductivity were measured during the development process. Well development forms are presented in Appendix B.

Wells were surveyed by Centerline Concepts Land Surveying on December 29, 2015, and tied into the existing well network. Relevant top of casing and screen zone elevations are shown in Table 1.

3.2 ANNUAL GROUNDWATER MONITORING RESULTS

Monitoring wells were sampled in 2015 to provide a characterization of current plume conditions related to pump and treat operations and to support implementation of the Record of Decision (DEQ 2015) as proposed in the FFS Addendum (PNG 2015a). Groundwater data for quarterly, semiannual, and annual events in 2015 are presented and discussed below. These most recent data, together with average concentrations from monitoring events over the past three years for each well are illustrated on Figures 4 and 5 for the intermediate and deep aquifer zones, respectively. The applicable, generic cleanup standards (i.e., RBCs and Secondary Chronic Values [SCVs]) for exposure areas are presented on the figure to support a comparison and identify areas requiring further investigation and/or continued remediation. Laboratory analytical reports and data validation documentation are provided in Appendix C. Groundwater field sample forms are included in Appendix D.

3.2.1 Groundwater Flow Characteristics

The depth to groundwater measurements and elevation data for each well are presented in Table 6. September is a period of seasonally low groundwater table with depths to water around 27 feet bgs near and surrounding the Submicro DNAPL source zone. Depths within the source zone are controlled by active pumping with the depth to water in DMW-3 at 34 feet bgs. The depth to groundwater in the neighborhood to the south ranged from 28 to 31 feet bgs. In wells near the Marys and Willamette Rivers where the topography slopes down toward these rivers, groundwater levels ranged from 18 to 24 feet bgs.

The groundwater elevation contour map for September 1, 2015 is illustrated in Figure 6 with five wells actively pumping in the source zone at the Submicro area at a total yield of 52.5 gallons per minute (gpm). Lateral groundwater flow at the Evanite facility is largely directed inward toward the pumping center at the source zone. Continuous groundwater extraction creates significant overlapping drawdown cones of depression within the source zone core of the Evanite site to support TCE mass removal from intermediate zone SVE wells. A groundwater flow stagnation point is created near wells MW-6, MW-15, and MW-13 as the water table bridges and flow begins to drop toward the Willamette River. This flow pattern created by the groundwater extraction and treatment system has been consistent for 23 years as the primary method to prevent TCE discharge to the rivers at unacceptable concentrations. Sediment pore water data presented in this report confirm the success of these containment efforts.

A maintenance issue with the H&V manufacturing process caused a shutdown of groundwater extraction on December 24, 2015. Shutdown during the high groundwater time of year for up to several weeks was of little concern for contaminant migration based on the slow advective velocity associated with plume transport. Further, pulsing of wells was evaluated as a pilot test in an effort to allow the water table to rise into the former cone of depression and allow residual TCE to dissolve and thus be recovered in groundwater air stripper operations. Groundwater extraction temporarily resumed in early February 2016, and again in early March.

The groundwater elevation contour map for January 27, 2016 (Figure 7) represents static or nearly static conditions since pumping had been off for more than a month. This is the first static map created since the late 1980's when initial groundwater extraction began. Groundwater flow is consistent with early investigations from the mid-1980s, across the site to the north-northwest and discharge to the north into the Willamette River.

The average horizontal gradient across the site is on the order of 0.005, which is within the range reported from pre-extraction conditions in 1988-1989. Applying a hydraulic conductivity of 40 feet per day as measured in the early investigations and assuming an effective porosity of 30, the advective flow velocity is in the order of 0.7 feet per day. Plume transport would be expected to be slower based on attenuation and retardation.

3.2.2 Groundwater Sampling Protocol

Groundwater sampling protocols, including PNG SOPs, can be found in the Evanite Sampling and Analysis Plan (SAP) (PNG 2009b). In general, groundwater samples are collected from in-line sampling ports at each of the extraction wells. Prior to sampling monitoring wells, well caps are removed and the static water level allowed to equilibrate before depth to water is measured. Monitoring wells are generally sampled following low-flow sampling methodology and, based on site conditions, either with a peristaltic pump or approved Grundfos submersible environmental pump with new HDPE tubing. All reusable sampling equipment is decontaminated between wells. A flow through cell is used to record groundwater quality parameters and samples are collected following groundwater quality parameter stabilization.

3.2.3 Groundwater Analytical Results

During the four groundwater monitoring events in 2015, a total of 118 well samples were collected with 41 samples collected in the September yearly event. Data are presented by receptor areas in Tables 7 through 11 and are illustrated on Figures 4 and 5. TCE concentrations ranged from lower than detection limits in the neighborhood and upgradient areas to 12,500 ug/L in intermediate well DMW-23 which is located just downgradient of the Submicro DNAPL source zone. IMW-3 had the highest TCE concentration in groundwater in 2014 at 14,000 ug/L, however, due to drawdown in the Source Zone Area, there was never enough water in IMW-3 to collect a sample in 2015. The highest intermediate concentrations in 2015 were 3,900 ug/L at IMW-25 located near IMW-3 and 8,800 ug/L at IMW-28 located within the Submicro Building at the south end of the source area.

The intermediate and deep zone groundwater plumes have been contoured separately to illustrate their distinct footprints and allow analyses of their unique potential exposure pathways and receptors. TCE contour concentrations of 3,700 ug/L and 47 ug/L were selected to represent the current and future likely default standards. The TCE concentration of 3,700 ug/L represents the current industrial vapor intrusion RBC (previously 3,300 ug/L) and the TCE concentration of 47 ug/L represents the surface water SCV that would be applicable should the plume migrate to and discharge through hyporheic pore water into the rivers.

The area of concern for vapor intrusion from the water table plume or intermediate zone plume (Figure 4) is very limited in extent as compared to the original plume characterized in the 1980's. In particular, only a portion of the Submicro Building is underlain by unacceptable TCE concentrations using the vapor intrusion RBC of 3,700 ug/L for an occupational setting. This building is currently protected from vapor intrusion by an active sub slab SVE system that is operating during the ongoing source depletion efforts;

essentially a combination of mass depletion and vapor intrusion mitigation. TCE concentrations in this uppermost groundwater (i.e., the water table) do not exceed the generic RBC beneath the Glass Plant Building because plume migration from the source area was primarily along the lower aquitard. A zone or wedge of relatively clean groundwater overlies the deep plume and provides a barrier for vapor intrusion. In addition, the near surface silt horizon has very low conductivity and provides an additional physical barrier. Vapor intrusion is therefore not a current concern for the Glass Plant Building.

The 47 ug/L TCE contour in the intermediate groundwater zone defines a plume that would represent an unacceptable risk if it migrated to the rivers and discharged at these concentrations. This area is limited to the Submicro and western Glass Plant footprints; downgradient wells contain very low concentrations or nondetect. Because there has not been any active remediation in the intermediate zone downgradient of the source zone, these low concentrations suggest the intermediate plume did not historically migrate to the rivers. A future risk at the river from this zone is therefore highly unlikely. The current monitoring network is sufficient to monitor this pathway.

The deep groundwater plume (Figure 5) has a larger footprint than the overlying intermediate plume due to the historic presence of the DNAPL pools beneath the Submicro source zone. These pools created a high-concentration dissolved phase plume that migrated downgradient along the base of the aquifer. The original 1991 TCE plume exceeding 10,000 ug/L covered the majority of the site, encompassing some 23 acres and discharged into the rivers. Currently, the 3,700 ug/L TCE contour reflects the success of the physical source depletion and ERD testing, as this area is reduced and is limited to beneath the Submicro Building. This contour is based on occupational vapor intrusion, but has little relevance in the deep zone other than to define the current source area.

The 47 ug/L TCE contour is the primary compliance boundary for the deep plume as this concentration represents the applicable standard for pore water in the hyporheic zone. The boundary is currently halfway between the source zone and the rivers.

The site has been segregated into receptor areas based on the lowest applicable TCE RBC concentration considering potential receptors and current and reasonably likely future site use. The applicable RBCs are included on the tables and Figures 4 and 5. Each receptor zone is discussed below in the CSM within the context of the current water quality and RBCs and SCVs. It is important to note these groundwater data represent active remediation data and that comparisons to applicable RBCs can only be used to evaluate current potential risk. Final decisions regarding site closure will depend on comparison of groundwater data and mass flux to the applicable standards as active remedial efforts are terminated. It is anticipated that as plume concentrations decrease, remedial efforts will be reduced in a sequential manner as deemed appropriate with mass flux performance monitoring along the downgradient plane.

3.3 PORE WATER

Pore water from shoreline sediment and surface water sampling from the Marys and Willamette Rivers was initiated in 2010. PNG recommended the use of pushpoint pore water sampling techniques (Zimmerman et al. 2005) to characterize pore water in the groundwater/surface water transition zone (PNG 2010a). Characterization of the chlorinated VOC plume concentrations in the hyporheic zone provides representative exposure data for aquatic biota at the point of groundwater discharge to the Willamette and Marys Rivers. Prior to pore water sampling, upland groundwater monitoring wells were used as surrogate data points to evaluate potential ecological risk. The data was

problematic as some of the wells were at a distance of 100 feet landward of the discharge face and were therefore not representative of the actual hyporheic zone; the groundwater plume characterized in these wells provided an overestimate of potential risk.

3.3.1 Pore Water Analytical Results

Pore water and surface water results for 2010 through 2015 are tabulated in Tables 12 and 13 with 2015 results illustrated on Figure 8. Sampling techniques are described in detail in the 2010 Groundwater Discharge Investigation Work Plan (PNG 2010b).

All sample depths are below the sediment line with approximately 12 inches of surface water at the sampling locations. A total of 12 pore water samples were collected from the seven sampling locations with the goal of collecting two depths at each location to provide data on vertical migration. PNG attempted to collect samples at multiple depth intervals at each sampling location but the local presence of cemented gravels prevented the collection of more than one sample from two of the seven locations. Depths ranged from 16 to 48 inches for samples collected. 2015 analytical results are summarized below.

- **RB0-24 and 42:** There was no detection of VOCs above the laboratory method reporting limit (MRL) of 1.0 ug/L. This sample location provides an upgradient boundary for detectable TCE in pore water for all sampling events. Dissolved oxygen in all samples collected at this location are at or below 0.38 ug/L as compared to surface water samples in the 5 to 8 ug/L range. Based on this comparison, the hyporheic water is dominated by groundwater and therefore are representative samples for measuring potential groundwater plume migration and discharge.
- **RB1-24 and 48:** There was no detection of VOCs above the laboratory MRL of 1.0 ug/L. Historically, this location had contained low concentrations of TCE and Cis-DCE. This location now represents the upstream limit of the detectable TCE plume in pore water.
- **RB2-48:** RB-2 is located at the discharge point of a TCE plume that ranges in concentration between 167 ug/L (2011) and 9.0 ug/L as measured in hyporheic water.

  The most recent data shows a TCE concentration of 152 ug/L at a depth of four feet below the sediment, which exceeds the TCE screening level of 47 ug/L. Cis-1,2-DCE was also elevated in this sample at a concentration of 109 ug/L indicating ongoing plume degradation. A shallow sample at this location was not attainable.

  Historic samples from depths less than three feet have all been less than the TCE screening level even when the deeper sample exceeded. Shallow samples are expected to have lower concentrations due to a higher degree of surface water influence. The 2011 sample at three feet that exceeded the screening level contained dissolved oxygen at 0.57 mg/L with the shallow sample at two feet with a 92% reduction in TCE containing dissolved oxygen at 2.9 mg/L.
- **RB3-12:** TCE and cis-1,2-DCE were detected at 1.8 and 11 ug/L, respectively, at a depth of 12 inches. Historic samples at this location have had concentrations vary from nondetect to 6.8 ug/L for TCE and 0.58 to 10 ug/L for cic-1,2-DCE. This pattern suggests the plume is highly degraded at this discharge location. This location represents the downstream boundary of this plume segment based on chlorinated solvent undetected downstream of this location in the Willamette River.

- **RB4-24 and 48:** TCE and other constituents were not detected above the MRL of 1.0 ug/L at any of the sample locations. This is consistent with historic samples which have been nondetect or estimated at concentrations below MRLs.
- **RB5-24 and 48:** TCE and other constituents were not detected above the MRL of 1.0 ug/L at any of the sample locations. This is consistent with historic samples which have been nondetect or estimated at concentrations below MRLs.
- **RB6-24 and 48:** TCE was not detected at concentrations above the MRL in the samples at this location and no target chemicals were detected in the shallow sample; however cis-1,2-DCE and vinyl chloride were detected in the deeper sample at 4.8 and 33 ug/L, respectively. These concentrations are well below their respective screening criteria. Consistent with very low dissolved oxygen and negative ORP (oxidation reduction potential), this pattern suggests ongoing reductive dechlorination in the vicinity of this location in the Marys River.

3.4 SURFACE WATER

The two surface water samples collected during the pore water event were from the Willamette River (RB-2) and Marys River (RB-6). No VOCs were detected in either sample above the detection limit of 1.0 ug/L. No VOCs have ever been detected in surface water samples during any of the pore water sampling events conducted between 2011 through 2015.

The sampling plan includes collection of surface water samples from the Millrace as it flows through the Evanite property adjacent to the Submicro source zone (Figures 2 and 3). Sample EMR-1 is located on the south or upstream portion of the property and EMR-4 is on the north or downstream portion of the property. Two samples were collected in March 2015; however no samples were collected in September 2015 because those locations were dry. No VOCs were detected in either March sample at the detection limit of 1.0 ug/L.

3.5 SOIL VAPOR

Soil vapor data from calibrated PIDs and laboratory analyses have been collected from Evanite SVE system components since 1991. These data are often more useful than soil data to identify and characterize highly contaminated zones. Soil data are more subject to the heterogeneity in distribution of TCE in the Willamette Silt horizon and often provide low concentration or no detection of TCE because a boring and sample missed a contaminated zone by inches or feet. Soil vapor samples from a purged well in the unsaturated zone have a larger zone of influence and therefore moderate the influence of heterogeneity.

3.5.1 Intermediate Zone SVE Wells

Vapor samples from the five intermediate wells operational in the SVE system in 2015 contained concentrations of TCE ranging from 0.36 to 6,400 milligrams per cubic meter (mg/m^3), with the occupational RBC at 2.9 mg/m^3 (Table 14). A decreasing trend in concentrations for all wells over the past few years is a result of the more aggressive source depletion as afforded by increased groundwater extraction and SVE that was possible with the implementation of off-gas treatment. TCE is the dominant chlorinated chemical removed in soil vapor at 94 to 99% of the mass.

Three of the five intermediate zone SVE wells are located between the Submicro Building and Millrace which represents the east boundary of the source zone. SVE has been active

in wells IMW-3, IMW-24 and IMW-26 since they were installed in 2009. Concentrations in IMW-3 decreased from 256,000 mg/Kg TCE in 2009 to below 1,000 in 2013 through 2015. The other two wells indicate a similar trend, although initial concentrations were not as great at these locations.

In early 2013, IMW-28 and IMW-29 were installed in the Submicro Building at locations along the former TCE extraction process pans. Whereas DNAPL blebs were observed during drilling operations, soil gas concentrations are not as great as those observed in the other three source area SVE wells. The highest TCE concentrations in these wells are 6,400 and 2,600 mg/Kg with TCE being the dominant chemical. A strong trend in decreasing concentrations has not yet been characterized in these wells and they will be a focus of future source depletion efforts.

3.6 AIR

A series of ambient air sampling events have been conducted at the Submicro Building since 2005. The most recent event (May 22, 2015) was conducted to evaluate recent efforts to remove fugitive sources of volatiles from the Submicro Building.

This investigation was conducted consistent with the approved work plan (PNG 2015b) that was modeled from previous efforts outlined in the Submicro Pilot Test Work Plan (PNG 2008a). The earlier work plan document included SOPs for indoor and outdoor air sampling that were used for this most recent sampling event.

3.6.1 Background Objectives

The Submicro Building overlies the TCE source area that has been the focus of ongoing remediation efforts beginning in 1991. TCE in unsaturated zone soil and groundwater has been characterized with non-aqueous phase liquid (NAPL) concentrations and represents a potential source for vapor intrusion to Submicro indoor air and nearby outdoor air. The TCE remediation and treatment system, which consist of several SVE legs and a groundwater treatment air stripper, is located in an equipment shed with a common wall on the east side of the Submicro Building. Fugitive emissions from the remediation system have historically represented a potential source of TCE in indoor and outdoor air samples to the extent that TCE emissions escape the treatment equipment shed/enclosure. Air from the air stripper and SVE system is collected and treated by a Catalytic Oxidizer (CatOx) unit located at the Glass Plant.

3.6.2 2005 Through 2009 Air Sampling

Air sampling conducted from 2005 through 2009 (Table 15) indicated detections of TCE in both indoor and outdoor air at the Submicro Building. TCE Concentrations in indoor air samples were greatest in the Treatment Shed and ranged from 196 micrograms per cubic meter of air (ug/m^3) to 2,060 ug/m^3. Submicro indoor air (i.e., Submicro Warehouse North and Submicro Warehouse South) contained TCE at concentrations up to 128 ug/m^3. The greater TCE concentrations were found at the south warehouse location adjacent to the Treatment Shed. All TCE results were greater than the DEQ Occupational RBC of 2.9 ug/m^3 for indoor air. This occupational RBC was developed assuming a 40 hours per week exposure over a 25 year period. As the current facility use is for material storage, the Submicro Warehouse represents a potential worker exposure of less than an hour per day; therefore, PNG calculated a site-specific five hour per week RBC of 24 ug/m^3; However, PNG recommends that any worker with access to the Treatment Shed should be HAZWOPPER trained and have an understanding of the contaminants and their effects.

For perspective, the OSHA 8-hour Time Weighted Average (TWA) concentration for TCE exposure of eight hours per day for workers is 537,000 ug/m^3. OSHA defines this TWA as the employee's average airborne exposure in any eight-hour shift of a 40-hour work week which shall not be exceeded. This OSHA criteria is applied over the lifetime of a worker without any specific assumption for years of employment/exposure.

Outdoor air samples collected at the north and south ends of the Submicro Building during this period (see North Landfill and South Landfill locations on Figure 2) contained measureable TCE with concentrations just above or below the RBC of 2.9 ug/m^3. These outdoor sampling locations are more than 100 feet north of the southern property line and the distance from the property line to the nearest residence is approximately 500 feet.

3.6.3 2013 Air Sampling

The exact source (or sources) of TCE in Submicro Building indoor and outdoor air samples collected up through 2009 could not be determined as at least three potential sources for TCE detections were identified. Vapor intrusion from underlying contaminated soil and the groundwater plume was a strong candidate source as historic sampling of sub slab vapors had identified concentrations in the thousands of micrograms per cubic meter.

A second source of TCE detected in air samples collected in and around the Submicro Building is the Treatment Shed. Historically, the Treatment Shed was not completely sealed, including gaps in the common wall with the Submicro Building. In addition, there was not negative pressure within the Treatment Shed enclosure and TCE measured in Treatment Shed air could escape through the openings in the shed walls. Finally, a third source of TCE detected in air samples collected in and around the Submicro Building was the vapor from the top of the groundwater treatment air stripper, which was observed at times to settle onto the Submicro Building roof during operation of the stripper.

Several ongoing engineering controls for vapor intrusion were implemented in 2010 and 2011 to address the potential for the TCE measured in Submicro indoor and outdoor air to be derived from a fugitive source (i.e., other than vapor intrusion). Prior to additional air sampling in January 2013, the discharge from the air stripper was plumbed into the SVE discharge line, such that all remediation vapor discharge was directed to a CatOx unit for subsequent destruction. The CatOx unit began treating vapor effluent from the SVE system and air stripper in 2012. In addition, the majority of the small openings in the common wall between the Treatment Shed and Submicro were sealed with foam. Following completion of these remediation facility and equipment modifications, another air sampling event was conducted in January 2013 at the routine locations previously established inside and outside of the Submicro Building. During this January 2013 sampling event, the SVE system in the sub slab gravels beneath the Submicro Building was not operational.

Results from the January 2013 event were similar to historic results (i.e., 2005 through 2009). Concentrations of TCE in Submicro Building indoor air samples were measured at 20 and 150 ug/m^3. Outdoor air from the upwind location contained 2.5 ug/m^3, which is similar to a typical background concentration in an urban area. The outdoor sample next to the Treatment Shed contained TCE at 6.6 ug/m^3 and the downwind sample at the property line contained 5.7 ug/m^3 (as noted previously the distance from the property line to the nearest residence is approximately 500 feet). Both samples exceed the occupational RBC of 2.9 ug/m^3.

After receipt of the January 2013 air results, H&V performed several additional engineering controls with the goal of removing fugitive sources of TCE. These included

replacing seals in the air stripper tower discharge, repairing leaks in SVE piping, and further enclosing the Treatment Shed such that a greater inward flow of air could be maintained via air flow into the groundwater air stripper intake. Following completion of these additional engineering controls, another air sampling event was completed in October 2013. For the October 2013 air sampling event, SVE beneath Submicro and from wells located outdoor in the source area was active. The building sub slab system was maintained at 75 cubic feet per minute (cfm), as earlier testing had characterized this flow as sustaining a zone of influence beneath the entire building.

Samples collected from inside at Submicro Warehouse North and Submicro Warehouse South (Table 15) show TCE concentrations of 14 ug/m^3 and 81 ug/m^3. Both of these are the lowest values recorded at their respective locations since 2006. The north sample was below the site specific RBC of 24 ug/m^3. The south sample was approximately 3.3 times greater than the applicable criteria. The Treatment Shed contained air with TCE at 5,680 ug/m^3. The increase from earlier samples was likely a result of sealing the Treatment Shed prior to this air sampling event. This concentration is orders of magnitude lower than the OSHA TWA criteria applicable to treatment plant operations. The TCE concentration at the North Landfill location was 0.97 ug/m^3, which, like the concentrations within Submicro, was the lowest recorded since 2006. The TCE concentration at the South Landfill location was 0.18 ug/m^3, lower than any historical data collected by PNG. The air leaving the property at the South Property Line location contained TCE at 0.29 ug/m^3, lower than historically measured. This was below the occupational RBC and the residential RBC for TCE in air of 0.44 ug/m^3.

3.6.4 2015 Air Sampling Results

Prior to the recent May 2015 sampling event, additional modifications were made to reduce possible sources of TCE in both indoor and outdoor air. In addition to repairing sections of groundwater and SVE piping outdoors to prevent leaks, significant modifications were made within the Treatment Shed. Groundwater holding tanks were cleaned to remove built up sediment and residue and vented directly into the air stripper's intake. Additionally, the old activated carbon treatment unit which was located at the southern end of the treatment shed was dismantled and removed. During this process, it was discovered that this unit still contained solvent which may have been an ongoing source of TCE emissions within the treatment shed. The common wall between the treatment shed and Submicro was further sealed with concrete along the wall base. As in October 2013, SVE was fully operational during this most recent sampling event to prevent sub slab vapor intrusion into Submicro.

To ensure calm conditions during sampling, wind speed was monitored approximately every hour next to the Submicro Warehouse using a Kestrel 3000 Pocket Weather Station. The recorded wind speeds reached a peak of 4.1 miles per hour (mph). The predominant wind direction was northwest throughout the sampling period. Data was also collected from the Corvallis Municipal Airport (Table 16). The airport reported winds mainly from the northwest peaking at 16.1 mph during the sampling period. H&V's many buildings blocked some of the wind, likely resulting in lower wind speeds on site in comparison to the airport.

The wind direction was forecast to be from the north, so the sampling location for the South Property Line was placed on the property line fence on the south side of the Submicro Building. A new sample location closer to the nearby neighborhood was added to this event at the South Settling Ponds. Both of these locations are southeast of the Treatment Shed and former TCE process area within the building.

Six-liter summa cans were hung at the seven sample locations (Figure 9) ensuring that the intake was at average breathing height. Each was fitted with an eight-hour flow control regulator provided by CH2M Hill. The initial vacuum on each can was recorded, and then monitored hourly. Malfunctions within the regulators resulted in the cans filling in less than the expected time, about 6.5 hours. All samples were submitted to CH2M Hill (Corvallis, Oregon) for analysis (Appendix C).

Samples collected from inside at Submicro Warehouse North and Submicro Warehouse South (Table 15) show TCE concentrations of 4.1 ug/m^3 and 1.8 ug/m^3. Both of these are the lowest values ever recorded at their respective locations. Both samples are well below the site specific RBC of 24 ug/m^3.

One sample was collected inside the Treatment Shed where the groundwater holding tanks and blowers for the stripper tower are located. The Treatment Shed contained air with TCE at 601 ug/m^3. This is an 89.4% reduction from the record high result of 5,680 ug/m^3 in October 2013, likely as a result of the modifications and cleaning performed within the treatment shed during early 2015. This concentration is orders of magnitude lower than the OSHA TWA criteria applicable to treatment plant operations.

Additional samples were collected outdoors at the north and south ends of the landfill. The TCE concentration at the North Landfill location was 0.16 ug/m^3, which, like the concentrations within Submicro, was the lowest ever recorded at that location. The TCE concentration at the South Landfill location was 1.4 ug/m^3. Both samples are below the occupational RBC of 2.9 ug/m^3. Another outdoor sample was collected further downwind at the South Property Line location. The air leaving the property at this end contained TCE at 0.15 ug/m^3, lower than historically measured. This is below the occupational RBC and the residential RBC for TCE in air of 0.44 ug/m^3. The final sample was collected at the South Settling Ponds. The TCE concentration at this location was 1.0 ug/m^3. Although this is greater than the residential RBC, it is lower than the mean concentration of TCE in outdoor air regionally as determined by EPA (Table 15). In addition, significant dilution of this air would occur in the 500 foot distance to the nearest residential receptor.

3.7 REMEDIATION FACILITY AND EQUIPMENT MODIFICATIONS

In early 2015, several mechanical modifications were made to the groundwater extraction and treatment system to support higher pumping rates. Individual wells were re-plumbed to the oil/water separator, removing the restrictive header. Additionally, an extraneous holding tank was removed from the treatment shed and the remaining two tanks were thoroughly cleaned. By removing bottlenecks, replacing clogged piping, and streamlining treatment components and holding tanks, these modifications allow for increased potential groundwater extraction yields of about 60 gpm instead of the prior flow rate of 30 gpm.

Efforts were made to reduce the risk associated with fugitive vapor emissions from the treatment shed passing through the shared wall into the Submicro Building. The old activated carbon treatment system, previously located in the south end of the treatment shed, was considered a possible source of indoor air contamination. The entire system was disassembled and removed, including removal of the associated chimney. The floors in the treatment shed were chemically cleaned and power washed to remove residual buildup. The holding tanks were re-plumbed such that the vented air is discharged to the air stripper's air intake rather than allowing the tanks to offgas directly into the room. Lastly, the shared wall was more completely sealed through the construction of a concrete footer. Together, these efforts add an additional level of protection beyond the sub slab depressurization system to any workers in the Submicro Building.

4 CONCEPTUAL SITE MODEL

The Evanite Conceptual Site Model (CSM) is based on historical knowledge of former site operations, onsite and regional soil boring and monitoring well logs, historical TCE recovery data from source zone remediation wells (i.e., groundwater and SVE), plume reaction to ERD pilot testing, and observed migration pathways of the DNAPL as it infiltrated and spread through the four primary soil horizons beneath the site. TCE and related breakdown or degradation products are found within a groundwater plume that historically covered the entire site as well as an area in the neighborhood upgradient of the site. This plume has been substantially reduced in size due to active remedial since 1991 and now is centered around two site buildings (i.e., Submicro and Glass Plant No. 2 shown on Figures 4 and 5) and the industrial area immediately downgradient to the northeast.

The current CSM includes an intermediate plume section that is defined by potential risk for vapor intrusion into onsite buildings, and a deeper plume section that is defined by a potential risk of discharge of TCE at unacceptable concentrations to the Willamette and Marys Rivers. The vapor intrusion risk is limited to a small portion of the southeast corner of the Submicro Building and is currently remedied by operations of the sub slab SVE system that is part of the ongoing source depletion efforts. Plume migration from the source area is remedied by the hydraulic containment resulting from ongoing pump and treat that started in 1991.

The intermediate plume (Figure 4) vapor intrusion RBC for occupational is 3,700 ug/L and the residential RBC is 200 ug/L. The current plume area exceeding the occupational RBC is less than a quarter of an acre, only potentially affecting the Submicro Building. If the residential RBC was applied, the plume area would be in the range of 1.5 acres similar to the 47 ug/L contour shown on Figure 4. Twenty five years of active remediation has addressed site issues for vapor intrusion down to the original source area at the Submicro Building. All other buildings in the H&V manufacturing areas and surrounding neighborhoods have no vapor intrusion concerns.

The deep plume has also been substantially remediated. The original 23 acre plume as defined by TCE exceeding 10,000 ug/L has been reduced to a single well in the DNAPL source zone. The 1,000 ug/L contour is less than an acre based on September 2015 monitoring data. Future source depletion efforts defined in the ROD are focused in this area.

The plume area exceeding the pore water screening criteria is roughly five acres in size and encompasses the south portion of the Submicro Building and downgradient to the northeast (Figure 5). This plume has been characterized intermittently in deep pore water at sample location RB-2, likely representing the leading edge of the plume. Note that shallower samples at location RB-2 have not exceeded this criteria. Other pore water locations have also not exceeded the criteria.

4.1 SITE GEOLOGY AND HYDROGEOLOGY

The general site stratigraphy is briefly outlined below. A more thorough review of site geology can be found in the FFS (Kennec 2007).

- Where structures are present, structural fill gravels have been measured to depths between one and seven feet bgs.
- From the native soil/structural fill interface to depths of approximately 20 feet, moderately dense silt and clay (Willamette Silt) forms a semi-confining layer.

- Between depths of approximately 20 and 40 feet is a unit of sandy gravel and silty/cemented sandy gravel (Linn Gravel Aquifer). Upper sections of this unit are often cemented in thin, layered zones. This unit is the only recognized aquifer in the area.
- The base of the Linn Gravel Aquifer ranges between 30 and 45 feet across the site and sits unconformably on a clayey silt to clay (Calapooia Clay). This clay aquitard is reported to be up to 100 feet thick in the Willamette Valley and beneath the Evanite site, as characterized by local well logs.

The deep site monitoring wells are screened between approximately 30-40 feet bgs near the base of the water bearing aquifer zone. The early wells were originally placed at the base of the aquifer 1) where local water well drillers had identified the most prolific water bearing zone, and 2) to target the DNAPL pool(s) that had accumulated on the underlying aquitard. In the past seven years, Evanite has been adding additional deep zone wells and intermediate wells in the DNAPL source zone to support remediation technology pilot testing activities and additional plume delineation. The intermediate wells generally straddle the transition from overlying silts into the Sandy Gravel Aquifer and are used for groundwater extraction, SVE, and ERD. These wells also intercept the water table and as such represent monitoring points for vapor intrusion. Well construction details for all site wells are summarized in Table 1.

Groundwater flow under static, pre-pumping conditions is to the north-northeast toward the Willamette and Marys Rivers (Figures 1, 4, and 5), with historic minor fluctuations most likely caused by nearby residential pumping and surface water level stage changes in the nearby rivers. Current groundwater flow conditions are controlled by the cone of depression induced by groundwater extraction at the Evanite DNAPL source zone. Static groundwater conditions measured in January 2016 (Figure 7) after a period of non-pumping confirmed the flow directions reported in the 1980's prior to active remediation.

4.2 EXPOSURE AREAS

The five exposure areas (or receptor zone areas) at Evanite with current water quality data are presented in Figures 2, 4, and 5 with pore water and surface water data presented on Figure 8. The boundaries between these areas were selected based on the TCE plume configuration (e.g., DNAPL source zone vs. dissolved phase plume) and applicable RBCs as defined by current land use setting (e.g., residential vs. occupational). Whereas the current setting on all of Evanite properties is heavy industrial, zoning allows for possible future mixed use. As such, residential RBCs for vapor intrusion are discussed herein.

The Neighborhood Area is currently characterized by three monitoring wells: IMW-20, IMW-21, and IMW-22 in the neighborhood to the south of the Evanite facility. The current likely applicable lowest RBC for this area is volatilization to indoor air from groundwater in a residential setting (TCE at 200 ug/L).

The Upgradient Area is characterized by six wells (DMW-5, DMW-18, DMW-19, DMW-9, DMW-1, and DMW-10 positioned along a south-to-north arc). These wells are located on the Evanite upgradient boundary (i.e., upgradient of the DNAPL source zone) with likely applicable RBCs for TCE including vapor intrusion into occupational buildings (3,700 ug/L) or volatilization to outdoor air (occupational worker at 20,000 ug/L). With groundwater flow concentric toward the groundwater extraction center near the Submicro DNAPL source zone, any offsite upgradient contaminated groundwater plumes from another source would flow through these wells to be captured for treatment.

The Source Zone Area is represented by the four original DNAPL extraction wells (DMW-2, DMW-3, DMW-16, and DMW-17) and 22 wells added in recent years to support pilot tests performed to define a long-term remedy. Likely applicable groundwater RBCs would include vapor intrusion to indoor air and outdoor air in an occupational setting (TCE at 3,700 and 20,000 ug/L, respectively).

The Hardboard Area is located north and east of the Source Zone Area northeast and downgradient of the Submicro Building and is distinct because the current CSM suggests there is no DNAPL residual in this area. Sixteen wells characterize this area. Likely applicable RBCs would include vapor intrusion to indoor air and outdoor air in an occupational setting (TCE at 3,700 and 20,000 ug/L, respectively) and plume discharge to the river (TCE in pore water at 47 ug/L). The compliance plane for mass flux discharge monitoring will be defined by the northwest to southeast arc of monitoring wells in this Hardboard area.

The Downgradient Area includes the large grass covered area north of site buildings and riverbank areas covered by thick briars along the Marys and Willamette Rivers. This is the hyporheic zone where the groundwater plume historically discharged and mixed into the significantly larger volumes of surface water of the rivers. Wells DMW-4, MW-6, MW-13, MW-15, and the downgradient pore water sampling locations characterize this area. DEQ's current ecological guidance was used to define the screening level for this area (i.e., Tier II SCV). The Tier II SCV for TCE is 47 ug/L.

4.3 TRANSPORT

The Source Zone Area near the Submicro Building is conceptually represented by residual DNAPL in the silts and residual and/or pockets of mobile DNAPL in the underlying sandy gravel aquifer. Initially, TCE entered the soil from spills in the former process area near monitoring wells DMW-3, DMW-28, and DMW-29. Upon release to the soil, the TCE DNAPL, with up to 30% dissolved miscella oil infiltrated vertically through three to six feet of coarse gravel fill material, a thick sequence of silt and silty aquifer matrix, and then ponded on the underlying clay aquitard surface. Source zone migration was primarily vertical with some lateral spreading due to heterogeneity in the layered structure of the silts and sandy silts.

In the source zone, small blebs of DNAPL at residual saturation levels has been observed as trapped within and tightly sorbed into the unsaturated silts. This area has therefore been the focus of SVE source depletion efforts during several years of pilot testing and is a focus area in the ROD. When installed in 2009, intermediate zone well IMW-3 contained high TCE concentrations, similar to deeper, pre-remediation levels found in 1986. This was expected since active remediation of deep groundwater extraction and treatment had not been focused at the water table. This well now produces the majority of TCE recovered through SVE with concentrations dropping three orders of magnitude from 2011 through 2015. Wells IMW-28, IMW-29, and IMW-31 located in the former process area contained traces of visible non-aqueous phase liquid (NAPL) blebs during drilling and have been the focus of recent SVE efforts. Initial concentrations in these wells were substantially less than IMW-3 and a decreasing trend in soil vapor concentrations is evident as source depletion efforts continue. Interestingly, IMW-30 located between IMW-28 and 29 in the former process area did not contain visible NAPL and soil vapor concentrations are very small in comparison. This pattern attests to the very highly heterogeneous nature of the release and subsequent transport in the unsaturated zone.

Mobile DNAPL reached the aquifer and continued to migrate vertically, as well as laterally, on lower permeability finer grained horizons within the sand and gravel aquifer. The

separate phase (i.e., DNAPL) migrated to the aquitard surface at approximately 40 feet bgs, accumulated in pools, and migrated in a general easterly direction along the relatively impermeable clay surface. Mobile DNAPL migration was documented at wells DMW-3, DMW-16, and DMW-17 where substantial quantities of separate phase NAPL were recovered until the early 2000s. Another four well locations (MW-23, MW-28, MW-31, and MW-41) contained soil staining and high PID readings at and into the aquitard surface indicating the former presence of NAPL. These locations provide a rough extent of the original DNAPL as they are bound by several wells that do not exhibit similar features. This footprint starts at the southeast end of the Submicro Building coincident with the former TCE manufacturing process and spreads east and northeast to beneath the west end of the Glass Plant Building. None of these wells currently contain any mobile NAPL as 25 years of flushing has apparently recovered any free product.

The Millrace historically represented a physical barrier (i.e. deep ditch) between the TCE process area and other areas of the property (Figures 2 and 3). This former ditch now hosts a large diameter culvert (Figure 3) between and separating the Submicro and Glass Plant Buildings. Whereas TCE contamination was expected to be encountered in the unsaturated zone beneath the former process and release area (Submicro Building area), any borings or wells located to the east of the Millrace were not expected to encounter TCE contamination above the seasonal high water table.

Intermediate groundwater TCE concentrations in wells east of the Millrace ranged in concentration from 530 ug/L at IMW-16 to less than laboratory detection limits in wells on the south and north sides of the Glass Plant building (grab samples collected during drilling at DMW-37 and DMW-38 in 2014). Intermediate water grab samples in the two wells installed in the Glass Plant Building ranged from 4.9 to 54 ug/L (as compared to the vapor intrusion RBC of 3,700). This wedge of relatively clean water combined with the tight overlying silts provides a natural barrier for vapor intrusion to the overlying Glass Plant Building.

4.3.1 Neighborhood Area

Groundwater TCE concentrations in the neighborhood have been reduced to below the applicable RBCs following 25 years of aggressive groundwater extraction. Two wells in the neighborhood on SE Vera Avenue have been at nondetect or less than 1 ug/L for TCE since installation in 2008. A third well (IMW-20) is located near SE Crystal Lake Drive and was installed at the location of a residential well with the highest original concentration (MW-665 Vera well at over 19,000 ug/L) to provide remediation performance data (PNG 2009c). After an initial decreasing TCE concentration trend following the resumption of groundwater extraction from DMW-12, the IMW-20 well has shown stable reduced VOC concentrations over the past few years (Table 7). The September 2015 TCE concentration in the groundwater sample from IMW-20 was 22 ug/L with the average between 2012 and 2015 at 22 ug/L (Figure 4). These data are well below the applicable RBC of 200 ug/L for potential vapor intrusion in a residential setting.

The RBC for domestic water use is 0.43 ug/L for TCE. Use of groundwater for drinking and other household uses was terminated by implementation of a site engineering control in 1986, when Evanite began paying for city supplied water to neighborhood area homes.

DEQ is currently performing a regional study of several VOC-containing groundwater plumes outside of and unrelated to the Evanite site and has identified shallow groundwater with PCE and TCE at concentrations up to 556 and 2,660 ug/L, respectively (PNG 2008b). Based on current data in the Neighborhood Receptor Area, these plumes are not migrating onto Evanite property at any significant concentration.

4.3.2 Upgradient Area

The southern and western extent of the Evanite groundwater plume is characterized by this group of six upgradient monitoring wells (Table 8). Pre-remediation concentrations of TCE in groundwater ranged from 42 to 3,000 ug/L in this area. TCE contamination in this Upgradient Area was generally attributed to Evanite as the concentration pattern correlated well with the geometry of the onsite TCE plume. However, due to the local shallow groundwater flow direction to the north and northeast toward the rivers, other regional chlorinated plumes located upgradient of Evanite had comingled into and were masked by the Evanite plume.

Within a few years of startup of the groundwater remediation system, all of the Upgradient Area wells indicated a strong decreasing trend in TCE concentrations. Currently, groundwater from wells DMW-1, DMW-5, DMW-9, and DMW-19 do not contain TCE above laboratory reporting limits. In September 2015, wells DMW-10 and DMW-18 contained TCE at 1.6 and 8.9 ug/L, respectively (Figure 5).

Overall, the upgradient wells have been stable at low TCE concentrations for several years, with TCE concentrations well below the occupational vapor intrusion RBC concentration of 3,700 ug/L as well as the residential RBC of 200 ug/L. After 24 years of aggressive groundwater pumping, it is likely that much of the TCE attributable to the Evanite plume has been flushed from the aquifer in the Upgradient Area. Groundwater pumping at Evanite has maintained a northerly shallow groundwater flow direction and as such it is possible that current low level detections of chlorinated compounds in these wells are attributable to the regional chlorinated VOC-containing groundwater plumes.

4.3.3 Source Zone Area

The Source Zone Area includes the DNAPL source zone that is the focus of pilot testing efforts to support the FFS (PNG 2008c and 2010c). Three wells (i.e., DMW-3, DMW-16, and DMW-17) in this area yielded nearly 3,000 gallons of separate-phase TCE DNAPL from direct pumping and the majority of the 154,035 pounds of TCE recovered from the aquifer to date. The 2015 data is still somewhat influenced by the ERD pilot testing, which concluded October 29, 2013, with several of these wells (i.e., DMW-3 and DMW-17) used for the pilot test.

Original (1980's) TCE concentrations in groundwater were as great as 1,010 mg/L in DMW-3 to 810 mg/L in DMW-16. Source zone groundwater data is summarized in Table 9 with data presented in Figures 4 and 5.

For the current monitoring event, the fifteen deep source zone wells ranged in TCE concentrations between less than 1 ug/L at DMW-27 to 12,500 ug/L at DMW-23, which is located furthest away from the ERD pilot test. Well DMW-3 which historically contained the highest concentrations was reduced from a range of 12 to 18 mg/L to and range of 1.6 to 2.2 mg/L following the ERD pilot testing. The current concentration at 2.2 mg/L indicates that the well has not rebounded. The deep plume core has been substantially depleted from beneath the Submicro Building with the current core centered to the west around wells DMW-16 and DMW-23, which were not within the influence of the ERD testing.

The intermediate zone of the source area has been targeted for source depletion with SVE for five years. Monitoring wells that are within an active SVE radius of influence indicate a strong trend in TCE concentration reduction. Current TCE concentrations in groundwater from 13 intermediate zone wells in the source zone range from less than 1 ug/L in IMW-32 to 8,800 ug/L at IMW-28. IMW-17 is unique in that the SVE implemented

at this location in 2012 has decreased TCE concentrations in groundwater from this well from 41,800 ug/L to 620 ug/L in March 2013. Subsequent ERD pilot testing reduced the TCE concentration further, with the current concentration at 57 ug/L.

Source depletion has reduced the potential risk for occupational vapor intrusion down to a very small area between the Submicro Building and Millrace; only a single intermediate well within the Submicro Building exceeds the RBC of 3,700 ug/L. Active SVE in the building sub slab is an engineering control that addresses any potential risk to onsite workers.

The deep groundwater plume is a potential future risk for discharge to the rivers only after the hydraulic containment ceases. Current remedial efforts are continuing to reduce the source area plume core with only three wells at concentrations higher than 1,000 ug/L in the annual sampling event. Remedial progress in the source area is illustrated by the TCE concentration trends in well DMW-17 and DMW-3 (Figure 10).

DMW-17 is located on the upgradient or south end of the DNAPL source zone and had an initial concentration of 200,000 ug/L. An estimated 1,059 gallons of pure phase DNAPL was recovered from this well in 1991 and 1992 after which time no additional accumulation in the well was observed. Groundwater extraction over the next several years reduced the dissolved phase TCE concentrations to around 500 ug/L by the year 2000 where the TCE concentration trend became asymptotic. As indicated on Figure 10, the ERD pilot test reduced the TCE concentrations to below 1 ug/L by the end of 2013. No appreciable rebound has occurred with the current TCE concentration at 14 ug/L. ERD polishing appears to have been successful at this location along the outer core of the source zone.

DMW-3 is located at the center of the source zone core, with an initial concentration of 1,100,000 ug/L TCE. After removal of 622 gallons of separate phase TCE NAPL between 1992 and 1994, groundwater extraction related flushing decreased the concentrations down to below 20,000 ug/L by 1997 where the trend became asymptotic. Continued pumping through mid-2013 did little to reduce concentrations until the ERD testing and the SVE mass removal caused a decrease to around 2,000 ug/L where concentrations appear stable.

4.3.4 Hardboard Area

The Hardboard Area is located to the north and east of the DNAPL source zone and has not been characterized as containing any mobile DNAPL sources based on previous site investigations and knowledge of manufacturing history. Prior to implementation of groundwater remediation by Evanite in 1991, wells in this area contained very high concentrations of TCE (Table 10) that are often indicative of DNAPL (i.e., > 100,000 ug/L). However, unlike the source zone, TCE concentrations in groundwater steadily declined in response to aquifer pore space flushing to below 1,000 ug/L of TCE prior to becoming asymptotic.

September/December 2015 groundwater sampling results indicate the highest intermediate zone TCE concentration within the Hardboard Area is 54 ug/L from a grab sample at DMW-42 in the Glass Plant Building. This concentration is well below the vapor intrusion RBCs for occupational and residential settings of 3,700 ug and 200 ug/L, respectively. Vapor intrusion is not a pathway of concern anywhere on the property outside of the source zone.

The highest TCE concentration in deep zone groundwater in 2015 was at DMW-8 (594 ug/L); this well began with concentrations on the order of 250,000 ug/L and has been as low as nondetect over the past few years. This well and the surrounding aquifer are

targeted for the initial phase of ERD. Remedial progress in the Hardboard area is illustrated by the TCE concentration trends in well DMW-2 and DMW-11 (Figure 11).

DMW-2 is located north and downgradient of the source zone. TCE concentrations in this well were initially as high as 710,000 ug/L, which is definitively indicative of DNAPL. No free product DNAPL was ever observed in this well. Groundwater extraction flushed this location resulting in a decreasing trend in concentrations that became asymptotic by 1998 near or below 2,000 ug/L TCE. Increased pumping starting during the pilot testing phase is coincident with a new decreasing trend and TCE concentrations are now below 500 ug/L. Whereas this location was not directly affected by the ERD testing, efforts for mass depletion in the source zone may be accountable for the most recent trend in decreasing concentrations. Results of the ERD pilot test suggest a groundwater plume zone with these characteristics will respond quickly and efficiently to this in situ treatment technology.

DMW-11 is located downgradient to the northeast of the source zone. TCE concentrations in this well are similar to DMW-2 with an initial concentration of 180,000 ug/L becoming asymptotic by 2000 at a concentration below 500 ug/L (Figure 11). There is a decreasing concentration trend at this location with some more recent sampling events indicating TCE below 10 ug/L.

The locations of DMW-2 and DMW-11 are targeted with several additional wells as a compliance plane for performance monitoring based on mass flux. These locations are just downgradient of the original extent of the mobile DNAPL pool and have not exhibited rebound after flushing.

The deep contaminated plume remnant in the Hardboard area starts below the Glass Plant Building and appears to migrate to the east through DMW-35 (TCE at 475 ug/L) to DMW-39 and discharge at pore water location RB-2. The potential risk here is for pore water to exceed the screening level of 47 ug/L, which occurs at a depth of four feet into the sediment (TCE at 152 ug/L) in 2015. This groundwater plume segment will be closely monitored and targeted in the second phase of ERD remediation.

4.3.5 Downgradient Area and Hyporheic Water

This area is characterized by three deep wells that are aligned perpendicular to the original plume flow direction (i.e., northeasterly migration from the source zone). Concentrations of TCE are less than 2 ug/L or not detected. Newly installed well DMW-39 is located within the footprint of the former Hardboard Building and is located southwest or landward of the sub-area boundary approximately 160 feet upgradient of the Willamette River. The intermediate zone grab sample contained TCE at 1.2 ug/L; this area is not of concern for vapor intrusion in an occupational or residential setting. The recent deep sample reported TCE at 21 ug/L and represents the leading edge of the remnant TCE plume that is migrating toward the Willamette River (Figure 5). This plume segment is the primary reason pore water sampling is conducted.

Groundwater data for this area is provided in Table 11 and pore water and surface water data in Table 12. Data are illustrated on Figures 4, 5, and 7 with applicable screening values for TCE posted on the figures and other chlorinated solvents included in the tables.

Based on direction from DEQ, the Oak Ridge National Laboratory's Tier II SCVs are appropriate screening criteria for the pore water analytical data for TCE, PCE, cis-1,2-DCE, and trans-1,2-DCE. Because no SCV value is reported for vinyl chloride, DEQ has adopted the EPA ecological screening value for that constituent of 47 ug/L. These screening levels represent a highly conservative lower threshold concentration from

which site data are screened against to indicate if more evaluation is necessary. They are not intended to be used as cleanup values or triggers for active remediation as they are too conservative for such use.

Currently, all but one of the pore water and near shore sample locations in the downgradient area are below the applicable pore water screening criteria. The exceedance of the TCE standard has been observed in a deep pore water sample at RB-2. An exceedance was previously observed at this same location in 2011; however, the shallow sample at this location was below the screening criteria.

Screening level values for the degradation chemicals are summarized in Table 12 and comparison with analytical results indicates concentrations of these VOCs in all pore water samples are below respective criteria.

Surface water samples collected in the Willamette and Marys Rivers were nondetect for TCE and other COIs, and are below the applicable TCE surface water standard of 3 ug/L.

Multiple lines of evidence, including direct observation of relative head differences, pore water field measured water quality parameters, and analytical data all indicate that shallow groundwater from the Evanite site has historically discharged to the Willamette River. The pore water sampled is representative of the discharge of remnants of the groundwater plume in the hyporheic zone, to the extent elements of the plume migrate beyond the hydraulic containment.

5 REMEDIAL SYSTEM PERFORMANCE

5.1 SOIL VAPOR EXTRACTION

SVE was operated nearly continuously during the reporting period with subsequent off-gas destruction by the CatOx unit. SVE performance data for individual wells is presented in Table 17 and various legs of the SVE and combined SVE and air stripper in Table 18. In previous years, the greatest TCE soil gas concentrations were found at the IMW-3 location which is central to the Submicro source zone. Once the off-gas treatment came online in November 2011 and up until the ERD test started in May 2013, groundwater drawdown and SVE was focused at this location. Concentrations in IMW-3 air reduced from 256,000 mg/m^3 in 2011 to 244 mg/m^3 in December 2015. During this period, air concentrations in other nearby intermediate zone SVE wells also reduced significantly. Currently, the greatest concentration of TCE in vapor is found at IMW-29 in the Submicro Building with current concentrations at 1,360 mg/m^3 in December 2015.

Overall, TCE mass removal from SVE as measured by SVE system combined discharge has declined since 2011 as contaminated soil surrounding each of the SVE wells has been purged continuously with air. Combined discharge TCE concentrations in 2011 at 10,300 mg/m^3 are now reduced to 432 mg/m^3.

Up until the ROD (DEQ 2015) was published, SVE in the source zone as a mass depletion remedy was implemented as a pilot test. With the installation of new groundwater extraction wells and SVE wells in the source area, these efforts will be significantly increased, including the installation of a second SVE blower. Concentrations and mass recovery are expected to increase.

Data for the SVE combined discharge indicate that TCE is the dominant chemical in the plume. TCE ranged from 96 to 99% of the target chemicals on an air concentration basis during the productive summer months of 2015.

5.2 HYDRAULIC CONTAINMENT AND CAPTURE

Capture zone analysis for the Evanite site is based on a weight-of-evidence approach using both hydraulic and groundwater analytical data to evaluate the effectiveness of the containment system. The pump and treat system is designed for depletion and hydraulic containment of the DNAPL source zone, contaminant mass removal and shrinking of the source zone, and flushing of the dissolved phase portions of the plume found around the plume fringes (Kennec 2007). Hydraulic data includes gathering water level measurements and calculating groundwater elevations to establish the potentiometric groundwater surface and drawdown cones of depression. TCE is used as the indicator chemical to evaluate plume extent and relative mass reduction at the Evanite site.

5.2.1 Groundwater Extraction

The combined groundwater extraction flow rate for the active extraction wells averaged 29 gpm in 2015 with over 15.1 million gallons extracted and treated. This yield has historically proven to provide a large capture zone for the TCE plume. A thorough evaluation of capture, including groundwater modeling efforts, have been presented in previous annual reports (PNG 2010c).

Once the ERD pilot test was completed in late October 2013, groundwater extraction was returned to pre-test conditions with maximum yields from DMW-3 for a combined pumping rate of approximately 30 gpm. Efforts to improve and/or optimize the existing groundwater extraction and treatment systems in 2014 and 2015 have increased the maximum

potential yield to over 50 gpm. Although these flows may only be attainable during winter months when the aquifer is seasonally high, they do provide a mechanism for dewatering and thus increasing the capacity of SVE for mass depletion.

The groundwater extraction emphasis at the site continues to be centered on the DNAPL source zone with wells DMW-3, DMW-24 and DMW-29 creating the core of the cone of depression (Figure 6) and accounting for the majority of the total groundwater extracted since October 2009. From system startup through the end of 2015, more than 475 million gallons of groundwater, representing approximately 11 pore flushes of the original plume extent, have been extracted through the hydraulic containment system.

On December 24, 2015, the groundwater extraction system was temporarily turned off. A breach in the pipe used to transport site process water and including treated groundwater from the air stripper required system shutdown until February 2016. DEQ was notified and Evanite coordinated with them throughout the relatively short shutdown.

5.2.2 Capture Zone Analysis

Target Capture Zone

The target capture zone is defined as the three-dimensional zone of groundwater that must be captured by the extraction wells for the hydraulic containment system to be considered successful (EPA 2008). The Evanite hydraulic containment system was originally designed to capture the entire DNAPL source zone and portions of the dissolved VOC plume found outside the source zone to encourage flushing and remediation of the dissolved phase portion of the plume (Kennec 2007). Based on significant reductions in contaminant concentrations within the dissolved portions of the plume, the target capture zone was revised in 2013 to the area presented in Figure 12. The width of the target capture zone is approximately 900 feet when extraction is at 30 gpm. An extraction rate of 50 gpm would increase the capture zone significantly. A 30 gpm capture zone is wider than necessary to address the intermediate vapor intrusion plume (i.e., about 90 feet wide in the zone exceeding the 3,700 ug/L occupational RBC) or the deep plume migrating toward the rivers (i.e., about 630 feet wide in the zone exceeding the 47 ug/L surface water standard).

Drawdown and Flowfield

As previously noted, lateral groundwater flow at the Evanite facility is largely directed inward toward the active extraction centered at DMW-3 (Figure 6). The widespread overlapping cones of depression cause a groundwater flow stagnation point near DMW-6, DMW-15, DMW-13, and DMW-12, as groundwater begins to flow away from the Evanite Site toward the Willamette River. Groundwater flow through the neighborhood near IMW-20 through IMW-22 may also be captured.

Water Quality Trends

The core of the Evanite TCE plume is centered within the DNAPL source zone at the MW-3 nest (Figures 4 and 5). The overall plume shape, with a north-northeast trending axis coinciding with ambient groundwater flow, generally resembles the cone of depression depicted on Figure 6 as key wells along the axis of this plume were pumping during the year. To date, remediation can be characterized in several stages as illustrated by trends in TCE concentrations (Figures 10 and 11). This discussion is supported with plots of TCE concentrations for three wells. DMW-3 is at the core of the DNAPL source area, DMW-2 is directly downgradient of the source area to the north along a discharge

flow path to the Marys River, and DMW-11 is downgradient to the northwest along a flow path to the Willamette River.

Initial Three Years (1991 to 1994)

An initial three years of groundwater extraction along with separate phase DNAPL pumping from source zone wells screened at the base of the aquifer removed the majority of mobile DNAPL (i.e., to the effective radius of influence of the three Submicro source zone wells). During this period, all site wells show a distinct trend in decreasing concentrations. Pure phase DNAPL was recovered from three wells in the Submicro Building source zone. TCE mass recovery decreased each subsequent year as mobile DNAPL recovery was depleted and the original SVE slowly became less effective. Plots for monitoring wells DMW-3 and DMW-17 in the source area and wells DMW-2 and DMW-17 immediately downgradient of the source area illustrate the result of pore flushing (Figures 10 and 11). TCE concentrations in nearly all wells remained greater than the current screening levels for the associated exposure area. Total TCE recoveries in 1991, 1992, and 1993 were estimated at 48,800, 26,800, and 14,900 pounds, respectively (Figure 13).

1994 to 2000

Groundwater extraction from these original wells continued as the primary remediation until 2009 when additional wells are installed to investigate and characterize the upper zone of the aquifer. In the period from 1994 to around 2000, water quality in all wells followed a decreasing trend as multiple pore volume flushes of the groundwater plume continued to extract the dissolved phase TCE. This decreasing trend was likely the result of the first pore flush of a dissolved phase TCE groundwater plume at nearly saturated conditions and a capture zone that began to draw in relatively clean water from upgradient. At this time, the trend of decreasing TCE concentrations became stagnant or asymptotic as TCE concentrations were generally stable until enhanced mass removal pilot testing began in 2010. In the Neighborhood Area, TCE concentrations were flushed to below currently applicable RBCs around 1994. A similar pattern is observed around the DNAPL source zone perimeter (Upgradient and Hardboard Areas, Figure 2). TCE concentrations in the source zone remained significantly greater than the comparison RBCs, likely due to the presence of residual NAPL. Although pore water sampling was not conducted during this period, the TCE concentrations in four wells along the downgradient rivers greatly exceeded current pore water standards. Total TCE recovery in 2000 was estimated at 1,482 pounds.

2000 to 2010

From 2000 up until 2010, the trend in water quality at most wells was stable. Wells with TCE concentrations below their respective screening levels remained below these thresholds. Source zone wells remained above screening levels for vapor intrusion in an industrial setting. With the exception of the Neighborhood Area, nearly all wells on the properties exceeded the pore water standards downgradient of the site. Total TCE recovery during this period was around 1,000 pounds each year.

Pilot Testing Period (2010 to 2013)

From 2010 to 2013, implementation of several pilot tests in the source zone have proven to be effective in decreasing TCE concentrations in wells and increasing TCE

mass removal. The two-fold approach of increased groundwater extraction in the source zone combined with SVE followed by ERD in the area from DMW-3 to DMW-27 has reduced TCE concentrations to below the RBC of 3,700 ug/L for vapor intrusion. This approach is anticipated to be equally effective throughout the source zone. The 3,700 ug/L or greater TCE concentration plume (Figure 5) has been reduced in size and now does not exist in deep groundwater beneath the Submicro Building.

TCE concentrations in the two source zone wells (Figure 10) and two wells immediately downgradient of the source zone (Figure 11) exhibit a decreasing trend that is a response to pilot testing efforts. Significant rebound has not as yet been observed.

Post Pilot Period - 2015

The mass of TCE recovered in 2014 and 2015 decreased from 2013 (Figures 13 and 14) for two primary reasons. Pumping rates and well yields were less than historic amounts due to system modifications that were implemented to support future remediation system expansion and greater source depletion efforts. More importantly, the combination of pilot testing using dewatering/SVE and ERD have reduced the TCE source. As new wells are installed in the source zone during final remedy implementation, it is likely that TCE recovery will increase as new areas are influenced.

5.3 TREATMENT SYSTEM PERFORMANCE

5.3.1 Trichloroethene Mass Removal

From system startup in 1991 through 2015, an estimated 158,612 pounds of TCE has been removed from a combination of extracted groundwater plume treatment with the air stripper, separate-phase DNAPL recovery, and SVE (Figures 13 and 14).

Groundwater treatment with the air stripper in 2015 has been ongoing at an average rate of approximately 30 gpm with an average influent TCE concentration of 4.5 mg/L. This remediation system results in an average daily extraction of 1.7 pounds of TCE (621 pounds per year at this rate).

SVE had not been active in recent years until July 2012 when the CatOx off-gas system provided a method for destruction of the associated higher TCE mass loadings. In 2015, relatively continuous SVE operations at 290 cubic feet per minute (cfm) resulted in a removal of 3,450 pounds of TCE. Average TCE concentration in off-gas varies seasonally between 54 and 700 mg/m^3 (i.e., lower TCE concentrations in winter and spring months due to higher groundwater levels). When including the contribution from the groundwater treatment with the air stripper, the mass removal rate averaged 11.2 pounds of TCE per day, with a total mass removal of 4,071 pounds in 2015.

5.3.2 Air Stripper Efficiency

The groundwater treatment system (i.e. air stripping) at the Evanite facility continues to be highly effective (Table 18). Monitoring of pre-treatment influent versus post-treatment effluent concentrations indicates the air stripper treatment system has performed with an efficiency of approximately 98% over the history of operations.

5.3.3 CatOx System

Current Operations

The CatOx system is currently (December 2015) treating an average influent TCE concentration of 483 mg/m^3 at 330 cfm as provided by the groundwater air stripper and SVE systems. This influent airflow is diluted with clean air to approximately 1,000 cfm before destruction (dilution is currently necessary to operate the CatOx unit in conjunction with Evanite's existing wet scrubber units). TCE destruction efficiencies as measured by influent and effluent TCE air concentrations have ranged from 90% to 99%.

ROD Implementation - Optimization for Mass Removal

The following items have been identified for maintenance, performance evaluation, or system expansion as part of the design and startup phase of future operations:

- Modify CatOx functions in order to operate at lower influent air flow rates (i.e., 500 cfm) to obtain higher efficiency of destruction. This may involve purchase and installation of an independent scrubber or modification of current CatOx system alarms and controls to accommodate the operational mode of the existing Evanite process scrubbers. The CatOx unit is designed for an optimal operation influent air flow range between 300 and 1,000 cfm.
- Upgrade the temporary pilot testing piping and meter configuration at wellheads to a configuration more appropriate for longer-term operation. Sufficient data is now available to indicate the most recently installed source zone deep wells are influenced by residual TCE and the nested intermediate wells respond positively to SVE as an accelerated mass removal technique.
- Evaluate routine maintenance options for the air stripper media that was replaced in June 2013. This task is recommended following the summer and fall months which support the highest SVE TCE mass removal rates.
- Evaluate the entire water treatment process train from wells, through inlet tanks, through air stripper, to sump and to discharge for appropriate pumps and controls to allow flexible and more efficient longer-term operations.
- Evaluate additional groundwater pumps in source zone wells to increase total groundwater extraction rates in response to water levels rising in the early winter season. Note that the existing groundwater extraction and treatment plumbing configuration anticipated additional wells in the future.
- Evaluate installation of additional deep and intermediate zone extraction wells within and outside the current configuration to achieve greater mass removal and prepare for anticipated applications of biological degradation (enhanced reductive dechlorination) as future remedy for source zone groundwater.
- Purchase and install a second SVE blower and related additional plumping for greater mass removal and SVE operation flexibility in the Source Zone Area.
- Design and install plumbing around and through Glass Plant to support the first phase of ERD to be implemented beneath the building footprint
- Purchase (or lease) and setup an ERD unit with skid-mount base to allow ease in moving system for separate phases of treatment.

6 REMEDIAL ACTION OBJECTIVE STATUS

Site-specific remedial action objectives (RAOs) were developed in the FS for groundwater, surface water, soil and air, for the purpose of achieving protection of human health, ecological receptors, and beneficial uses, as required by OAR 340-122-040. The RAOs were tightly structured from EPA guidance for DNAPL sites (ITRC 2004) which were developed after many years of failure in meeting health-based groundwater remediation goals at these sites. EPA guidance in the 1990's stated that there were no known treatment technologies currently available that could attain risk-based cleanup levels where subsurface DNAPL was present; complete removal of DNAPL from the subsurface was considered not practicable. By 2004, guidance focused on the source zone with containment and treatment (i.e., mass depletion) as focus of early efforts, while emerging technologies were being developed that might provide for remediation in a reasonable time frame. The RAOs for the Evanite site follow a three step process with containment and depletion in the source zone as the first two steps, followed by a more long term goal of meeting risk-based levels. This final goal is based on application of a mass flux performance monitoring approach as afforded by ERD polishing.

6.1 EVANITE DNAPL REMEDIAL ACTION OBJECTIVES

The three tiered RAOs are as follows:

6.1.1 Short-Term Goals

For DNAPL source zone remediation, these goals involve the mitigation of immediate risks to humans or natural resources and the prevention of further expansion of the source zone. Often this goal is addressed through some form of mass removal or containment to minimize further mobilization of a DNAPL mass. Short-term goals for the source zone include:

1. Recovering mobile DNAPL.
2. Mitigating the potential for vapor intrusion.
3. Preventing further migration of DNAPL.

6.1.2 Intermediate-Term Goals

These goals target the achievement of desired cleanup levels at a response boundary or, depending on the performance assessment methodology, a series of control planes. It may take a year (or several) to make a determination or confirm that the target cleanup level has been achieved at a response boundary. Long-term monitoring is required to ascertain that the cleanup levels are sustainable and are not subject to a rebound in groundwater contaminant concentrations once post-treatment equilibrium is established in the aquifer. Intermediate goals include:

1. Depleting the source sufficiently to allow for natural attenuation.
2. Reducing dissolved-phase concentrations outside the source zone.
3. Reducing the mass discharge rate or flux from the source.
4. Reducing the DNAPL source mass or volume to the extent practicable.
5. Preventing the migration of remediation fluids beyond the treatment zone.

Hot Spots for several media are present in the DNAPL source zone. Hot Spots will be treated to the extent feasible, as specified in OAR 340-122-090(4) and are addressed under short and intermediate term RAO goals.

6.1.3 Long-Term Goals

Long-term goals target the achievement of compliance with RBCs and screening levels applicable to all contaminated media at the site with the exception of those pathways controlled through long-term engineering or institutional controls.

6.2 REMEDIAL ACTION OBJECTIVE ATTAINMENT

Remedial goals have been substantially met at the Evanite site for many of the DNAPL-based RAOs due to twenty five years of groundwater flushing through pump and treat and five years of pilot testing of mass depletion and polishing technologies in the source area. Through 2015, an estimated 158,612 pounds of TCE has been physically removed and another significant mass of TCE destroyed in situ through ERD. As the site moves into the permanent remedial scheme defined in the ROD, many of the original RAOs are resolved as discussed in detail below.

6.2.1 Short-Term Goal Attainment

Short-term goal #1 for recovering mobile DNAPL was essentially met in 2007 when the last DNAPL was recovered from well DMW-16. Between 1991 and 2015, this well along with DMW-3 and DMW-16 in the source zone, yielded approximately 1,059 gallons of separate-phase TCE. Starting in 2009, an additional 15 deep wells have been installed in and surrounding the source area with one of the primary goals being to characterize the current and former extent of DNAPL pools. None of these wells encountered mobile DNAPL and routine monitoring using an interface probe and/or clear bailers has confirmed these observations. Flushing of nearly 475.5 million gallons of groundwater, predominantly toward wells centered in the source zone, has successfully removed the mobile separate-phase DNAPL pools.

Whereas vapor intrusion was not a common concern or pathway of exposure when Evanite started remedial efforts in 1991, it is now the primary risk driver for the intermediate zone (i.e., water table) plume. Short-term goal #2 for vapor intrusion has been met over the majority of the Evanite site and offsite through reduction in VOC concentrations in groundwater and soil. The current TCE RBCs for occupational and residential vapor intrusion are 3,700 and 200 ug/L, respectively. The intermediate groundwater plume map (Figure 4) illustrates the only areas on the Evanite site or offsite that exceed the residential vapor intrusion standard. It is a small plume area located between the southeast corner of the Submicro Building and expands to the eastern edge of the Glass Plant Building. The area of the plume exceeding the TCE occupational RBC of 3,700 ug/L is merely a sliver of plume centered over the former process area between the Submicro Building and Millrace. Potential for vapor intrusion in the Submicro Building is controlled by the sub slab depressurization system component of the SVE mass depletion.

Near surface soil contamination is limited to the Submicro Building and area immediately to the east between the building and Millrace. As stated above, this area is protected by the SVE engineering control.

Further migration of DNAPL (short-term goal #3) has been addressed in the soil by mass depletion efforts, DNAPL recovery, and twenty five years of groundwater extraction and

flushing. First, migration in soil has been characterized as essentially vertically downward with the TCE pool forming beneath the footprint of Submicro Building. Soil contamination did not spread laterally other than through localized heterogeneity through silts as it worked through the soil matrix and aquifer to form the underlying pool. During drilling efforts in Submicro, residual blebs of DNAPL were observed in silty soils from borings DMW-28, DMW-29, and IMW-31 (note that location IMW-30 located between DMW-28 and 31 did not contain DNAPL blebs). Intermediate wells have been installed at these locations and mass depletion using dewatering and SVE is ongoing. A comparison of observations and PID readings from soil cores in wells IMW-30 and DMW-30, which were drilled approximately two years apart, provides additional evidence of mass depletion. These wells are located less than ten feet from each other, so variations in PID readings between the two well installation events is likely indicative of the effectiveness of ongoing groundwater extraction and SVE within the Submicro Building. The boring logs indicate an order of magnitude decrease in PID reading for similar depths throughout the cores (Appendix A).

The original DNAPL pool size is characterized by wells with mobile DNAPL recovered from the pool on the aquitard, wells with residual DNAPL blebs at the base of the aquifer, and wells that formerly contained DNAPL at the aquitard as evidenced by field observations such as discolored aquitard matrix combined with extremely high PID readings and high concentrations of TCE measured in soil. The original DNAPL pool extent is illustrated in Figure 15 with wells labeled as to the DNAPL evidence observed. Bounding wells outside of the original pool did not have any of the field evidence at the aquifer-aquitard contact based on PNG's careful field logging.

Current performance monitoring indicates all mobile DNAPL has been thoroughly flushed from the DNAPL pool area with no indication of residual product during monitoring. Concentrations in these deep wells have decreased by orders of magnitude (Figure 5) to levels that are below those indicative of DNAPL. Any residual TCE found in the top few feet of the very low permeability aquitard will slowly diffuse upward into the overlying aquifer where ERD treatment is being implemented consistent with the ROD.

6.2.2 Intermediate-Term Goal Attainment

Groundwater plume areas outside of the source zone have been undergoing natural attenuation (intermediate-term goal #1) for decades as evidenced by the presence of chlorinated VOC breakdown products in groundwater. The area with greatest observed attenuation is downgradient of the source area. As early as 1990, deep well DMW-6 contained as much as 10% cis-1,2-DCE (concentration of cis-1,2-DCE relative to total VOC concentration). Groundwater at MW-15 contained significant amounts of this decay chemical with cis-1,2-DCE sometimes higher in concentration than TCE. Lesser concentrations of other breakdown chemicals were also measured. These wells contain very little dissolved oxygen and have negative ORPs suggesting localized anaerobic conditions conducive to natural degradation of TCE.

ERD was the focus of the 2013 pilot testing and resulted in this technology being selected in the ROD as a final active treatment remedy (e.g. polishing treatment). The success of ERD is presented in detail in the 2013 Remedial Performance Report (PNG 2014) with the results of the pilot test presented in Appendix C. The results of the six pilot tests include:

- It was not necessary to introduce a microbial community as sufficient native microbes capable of dechlorination were present and thrived once the substrate was added.

- Loading rates to sustain the dechlorination were achieved through the 4-inch diameter monitoring wells
- Hydraulic conditions in the aquifer were favorable to sustain a recirculation distance of 144 feet with a lateral front of 100 feet crossgradient to the injection and recovery wells.
- Plume containment was maintained surrounding the recirculation system
- Dechlorination was substantial with decreases in chlorinated VOC concentrations (Figure 10).
- Rebound was not observed for the first five months after the test and long-term monitoring as illustrated by wells DMW-17 and DMW-3 (Figure 10) suggests minimal rebound after two years

Intermediate-term goal #2 is reduction of dissolved phase concentrations outside of the source area, which began with startup of pump and treat in 1991. The residual plumes outside of the source area now meet applicable RBCs with no rebound observed. In the Neighborhood Area, original TCE concentrations have been reduced from 19,400 ug/L to 22 ug/L in the highest concentration well. The other two neighborhood wells are less than 1 ug/L TCE or TCE is not detected; a concentration threshold less than the neighborhood background.

The Upgradient Area plume has TCE concentrations that are lower than laboratory detection limits in three of the wells. Of the remaining wells, DMW-18, which is closest to the site, started with TCE at 3,000 ug/L and is now at 8.9 ug/L. Well DMW-10, on the northwest end of the plume, indicates concentrations decreased from 2,400 to 1.7 ug/L.

The Hardboard area is located immediately downgradient of the source area and illustrates the greatest decrease in dissolved TCE concentrations. These wells had initial TCE concentrations well over 100,000 ug/L. Flushing and mass depletion at the source area have reduced concentrations to less than 1,000 ug/L (Figures 4 and 5). A plot of TCE concentrations versus time for two key extraction wells (DMW-2 and DMW-11 in Figure 11) demonstrates the TCE concentration reduction and lack of rebound to date.

Intermediate-term goal #2 has been met with all areas outside of the source zone meeting RBCs for dissolved VOC contamination. Future efforts are aimed at TCE reductions in the source zone such that hydraulic containment is no longer necessary for continuing to meet this goal.

Goal #3 for reducing the TCE mass discharge rate or flux from the source is the focus of the remedy selected in the ROD. TCE mass depletion through 1) pump and treat and 2) dewatering coupled with SVE in the expanded unsaturated zone will be followed by ERD as a polishing in situ treatment technology.

Goal #4 is to reduce the DNAPL source mass to the extent practicable and is also being addressed by the ROD selected remedy. The mobile DNAPL mass has been removed and TCE mass depletion efforts have proven effective. The mass discharge from all remedial systems into the offgas treatment decreased from TCE at 20,442 mg/m^3 in 2010 to less than 500 mg/m^3 in late 2015. New wells, system improvements, and optimization of operations will increase TCE mass removal during startup of the permanent, full scale remediation outlined in the ROD.

Prevention of migration of remediation fluids beyond the treatment zone is goal #5. This goal is currently met with the hydraulic containment in place since 1991. In the future,

success in meeting this goal will be measured under the metric of mass flux migration from the treatment zone as illustrated in Figure 16. With this approach ecological receptors at the river are protected by preventing unacceptable migration of TCE flux beyond the compliance plane. This goal dovetails into the long-term goal of achieving risk-based regulatory criteria.

Oregon has a preference for active treatment of Hot-Spots as specified in OAR 340-122-090(4). All Hot-Spots for soil and groundwater at Evanite are located in the source zone (PNG 2015b) where active treatment is implemented consistent with the ROD.

6.2.3 Long-Term Goal Attainment

Health based compliance for vapor intrusion into buildings is only of concern for the eastern half of the Submicro Building where engineering controls associated with the SVE implemented for source depletion is ongoing. Long-term attainment may include continuation of the sub slab depressurization.

For soil contamination and hot-spots that are only present in the source area, institutional controls are in place to protect workers and visitors; it is assumed these controls will continue for decades.

Achievement of regulatory criteria for groundwater will be measured through performance monitoring under a mass flux metric as illustrated in Figure 16. Once the TCE mass depletion and ERD polishing treatment has been sufficiently effective such as to prevent unacceptable TCE mass flux from migrating between the source zone to the hyporheic zone at the ecologic compliance plane, hydraulic containment can be terminated in a controlled and monitored sequence. Performance monitoring will be modified and reduced in step with the transition from active remedial system shutdown to natural attenuation.

7 LIMITATIONS

PNG has prepared this report for use by the H&V Fiber Corporation (Formerly Evanite). This report may be made available to future property owners and to regulatory agencies. This report is not intended for use by others and the information contained herein is not applicable to other sites.

Our interpretation of subsurface conditions is based on field observations and chemical analytical data. Areas with contamination may exist in portions of the site that were not explored or analyzed.

Within the limitations of scope, schedule, and budget, our services have been executed in accordance with generally accepted practices and laws, rules, and regulations at the time that the report was prepared. No other conditions, express or implied, should be understood.

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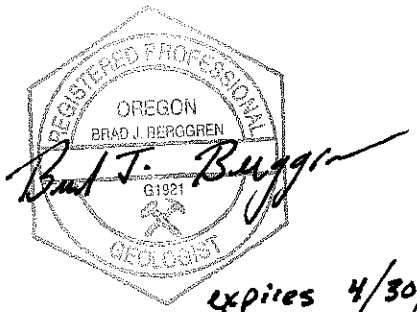

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expires 4/30/2016

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TABLES

Table 1
Well Construction Details
H&V Fiber Corporation
Corvallis, Oregon

Well Identification	Date Installed	Installer	Installation Method	Construction Materials	Ground Surface Elevation (ft)	Well Casing Elevation[a] (ft)	Well Diameter (in)	Total Well Depth from TOC[a] (ft)	Elevation at Base of Well (ft)	Casing Stickup (ft)	Screen Slot Size	Screened Interval Elevation (ft)	Clay Aquitard Elevation (ft)	Oregon State Plane Coordinates[a]	
														Northing (33….)	Easting (748….)
DMW-1	02/21/1986	Corvallis Drilling	Air Rotary	Steel	224.15	223.77	6	38.88	184.89	-0.38	1/8-inch	184.9 - 194.9	189.15	5726.85	1670.49
DMW-2	02/14/1986	Corvallis Drilling	Air Rotary	Steel	222.40	224.16	6	39.01	185.15	1.76	1/8-inch	185.2 - 195.2	185.4	5924.59	2177.43
DMW-3	02/12/1985	Corvallis Drilling	Air Rotary	Steel	223.50	225.39	6	42.10	183.29	1.89	1/8-inch	183.3 - 193.3	182.5	5657.67	2056.35
IMW-3	06/05/2009	Boart Longyear	Sonic	Stainless	223.43	226.44	4	29.12	197.32	3.01	0.02 slot	198.8 - 207.7	NE	5668.26	2057.35
DMW-4	UK	UK	UK	UK	220.63	221.18	18	40.46	180.72	0.55	UK	UK	UK	5941.70	2809.06
DMW-5	02/19/1985	Corvallis Drilling	Air Rotary	Steel	221.90	223.53	6	44.60	178.93	1.63	1/8-inch	178.9 - 188.9	179.9	5244.85	2252.41
DMW-6	04/22/1986	Corvallis Drilling	Air Rotary	Steel	213.40	218.43	6	35.98	182.45	5.03	1/8-inch	182.5 - 192.5	184.4	6347.76	2245.28
DMW-7	01/30/1987	Geotech Exploration	Hollow Stem	Stainless	221.50	222.05	2	36.57	185.48	0.55	0.01 slot	188.7 - 198.7	183.5	5548.03	2586.84
DMW-8	02/02/1987	Geotech Exploration	Hollow Stem	Stainless	220.77	220.68	2	40.40	180.28	-0.09	0.01 slot	183.5 - 193.5	184.77	5498.52	2378.38
DMW-9	01/27/1987	Geotech Exploration	Hollow Stem	Stainless	220.00	221.51	2	42.74	178.77	1.51	0.01 slot	182.0 - 192.0	181.7	5485.63	1780.60
DMW-10	02/03/1987	Geotech Exploration	Hollow Stem	Stainless	224.44	223.40	2	39.21	184.19	-1.04	0.01 slot	187.4 - 197.4	191.44	6113.52	1797.31
DMW-11	06/06/1988	Staco Well Drilling	Cable Tool	Steel/Stainless	223.90	225.21	6	42.40	182.81	1.31	0.04 slot	183.3 - 198.3	184.9	5860.19	2446.98
DMW-12	06/03/1988	Staco Well Drilling	Cable Tool	Steel/Stainless	222.50	223.60	6	41.17	182.43	1.10	0.04 slot	182.9 - 197.9	185.0	5642.78	2737.28
DMW-13	05/25/1988	Staco Well Drilling	Cable Tool	PVC	218.90	220.47	2	38.80	181.67	1.57	0.01 slot	183.7 - 203.7	180.9	6114.43	2573.52
DMW-14	05/26/1988	Staco Well Drilling	Cable Tool	Steel/Stainless	232.50	233.25	6	49.38	183.87	0.75	0.04 slot	184.9 - 199.9	186.5	5433.43	3090.44
DMW-15	06/17/1988	Staco Well Drilling	Cable Tool	Steel/Stainless	214.34	214.08	6	27.86	186.22	-0.26	0.04 slot	186.7 - 195.7	188.34	6217.36	2437.62
DMW-16	12/05/1988	Staco Well Drilling	Cable Tool	Steel/Stainless	222.40	223.53	6	43.08	180.45	1.13	0.04 slot	181.1 - 187.1	182.3	5667.53	2153.33
IMW-16	06/04/2009	Boart Longyear	Sonic	Stainless	221.95	225.26	4	30.98	194.28	3.31	0.02 slot	195.3 - 204.1	NE	5658.19	2149.94
DMW-17	12/09/1988	Staco Well Drilling	Cable Tool	Steel/Stainless	224.40	226.23	6	46.40	179.83	1.83	0.04 slot	180.3 - 190.3	180.8	5541.23	2058.32
IMW-17	06/08/2009	Boart Longyear	Sonic	Stainless	224.07	226.17	4	31.92	194.25	2.10	0.02 slot	195.3 - 204.1	NE	5550.60	2053.08
DMW-18	12/21/1988	Staco Well Drilling	Cable Tool	Stainless	222.60	223.29	2	40.29	183.00	0.69	0.01 slot	184.0 - 194.0	185.6	5415.84	2170.22
DMW-19	07/10/1990	Onwego Drilling, Inc.	Cable Tool	PVC/Stainless	221.90	225.13	5	45.34	179.79	3.23	0.04 slot	181.9 - 191.9	184.7	5390.65	1965.28
IMW-20	10/29/2008	Boart Longyear	Sonic	PVC	228.07	227.78	2	42.09	185.69	-0.29	0.02 slot	186.2 - 195.7	NE	5410.12	2622.67
IMW-21	10/29/2008	Boart Longyear	Sonic	PVC	231.71	231.45	2	43.18	188.27	-0.26	0.02 slot	188.8 - 198.3	NE	5257.65	2836.26
IMW-22	10/28/2008	Boart Longyear	Sonic	PVC	232.36	232.05	2	43.13	188.92	-0.31	0.02 slot	189.4 - 198.9	187.36	5098.20	2578.12
DMW-23	06/08/2009	Boart Longyear	Sonic	Stainless	222.11	223.57	4	46.80	176.77	1.46	0.02 slot	180.6 - 189.1	181.61	5731.12	2139.69
DMW-24	06/02/2009	Boart Longyear	Sonic	Stainless	224.07	225.65	4	48.22	177.43	1.58	0.02 slot	181.4 - 190.2	182.07	5605.07	2047.19
IMW-24	06/02/2009	Boart Longyear	Sonic	Stainless	224.05	227.00	4	33.41	193.59	2.95	0.02 slot	195.1 - 203.9	NE	5598.46	2046.30
DMW-25	06/03/2009	Boart Longyear	Sonic	Stainless	221.75	224.15	4	46.94	177.21	2.40	0.02 slot	180.7 - 189.6	181.75	5652.40	2088.75
IMW-25	06/03/2009	Boart Longyear	Sonic	Stainless	221.78	224.41	4	31.40	193.01	2.63	0.02 slot	194.5 - 203.4	NE	5662.07	2089.73
DMW-26	12/20/2014	Cascade Drilling	Sonic	PVC/Stainless	223.67	226.24	6	44.84	181.40	2.57	0.060 slot	184.5 - 189.1	184.17	5755.61	2045.00
IMW-26	06/09/2009	Boart Longyear	Sonic	Stainless	223.71	226.67	4	31.18	195.49	2.96	0.02 slot	197.0 - 205.8	NE	5743.92	2042.44
DMW-27	02/06/2013	Boart Longyear	Sonic	PVC	224.07	223.83	4	46.55	177.28	-0.24	0.060 slot	182.5 - 191.8	184.83	5511.25	2061.91
IMW-27	02/06/2013	Boart Longyear	Sonic	PVC	224.09	223.78	4	35.59	188.19	-0.31	0.060 slot	189.4 - 198.7	NE	5511.25	2056.38
DMW-28	02/07/2013	Boart Longyear	Sonic	Stainless	224.05	223.74	4	48.07	175.67	-0.31	0.060 slot	180.8 - 190.3	181.74	5529.67	1975.61
IMW-28	02/12/2013	Boart Longyear	Sonic	Stainless	224.04	223.48	4	28.82	194.66	-0.56	0.060 slot	195.8 - 205.3	NE	5534.58	1976.21
DMW-29	02/11/2013	Boart Longyear	Sonic	Stainless	224.05	223.75	4	42.85	180.90	-0.30	0.060 slot	186.0 - 195.5	187.75	5670.00	1990.27
IMW-29	02/11/2013	Boart Longyear	Sonic	Stainless	224.04	223.51	4	28.72	194.79	-0.53	0.060 slot	195.9 - 205.4	NE	5676.33	1990.27
DMW-30	12/02/2015	Cascade Drilling	Sonic	PVC/Stainless	223.99	223.66	4	45.55	178.11	-0.33	0.060 slot	181.2 - 190.8	181.99	5581.71	1977.76
IMW-30	02/12/2013	Boart Longyear	Sonic	PVC	223.99	223.67	4	28.96	194.71	-0.32	0.060 slot	195.9 - 205.2	NE	5575.32	1978.72
IMW-31	02/13/2013	Boart Longyear	Sonic	PVC	224.07	223.73	4	29.01	194.72	-0.34	0.060 slot	196.2 - 205.6	NE	5625.37	1983.07

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														Northing (33….)	Easting (748….)
DMW-32	12/22/2014	Cascade Drilling	Sonic	PVC/Stainless	220.00	222.46	6	42.32	180.14	2.46	0.060 slot	183.2 - 187.7	184.00	5466.39	1943.03
IMW-32	12/07/2015	Cascade Drilling	Sonic	PVC/Stainless	220.08	221.89	4	34.88	187.01	1.81	0.060 slot	188.5 - 198.1	NE	5467.08	1934.69
DMW-33	01/07/2014	Cascade Drilling	Sonic	PVC	222.29	221.93	2	35.83	186.10	-0.36	0.020 slot	187.3 - 191.9	187.79	5853.09	2018.69
IMW-33	01/07/2014	Cascade Drilling	Sonic	PVC	222.24	221.91	2	27.74	194.17	-0.33	0.020 slot	195.3 - 200.0	NE	5852.79	2023.41
DMW-34	01/08/2014	Cascade Drilling	Sonic	PVC	222.58	222.54	2	38.59	183.95	-0.04	0.020 slot	185.1 - 189.8	185.58	5946.52	2292.02
IMW-34	01/08/2014	Cascade Drilling	Sonic	PVC	222.60	222.45	2	29.50	192.95	-0.15	0.020 slot	194.1 - 198.8	NE	5949.76	2297.02
DMW-35	01/09/2014	Cascade Drilling	Sonic	PVC	222.97	222.64	2	41.92	180.72	-0.33	0.020 slot	181.9 - 186.6	182.47	5755.97	2614.77
IMW-35	01/10/2014	Cascade Drilling	Sonic	PVC	223.06	222.76	2	29.29	193.47	-0.30	0.020 slot	194.6 - 199.3	NE	5752.18	2618.56
DMW-36	12/18/2014	Cascade Drilling	Sonic	PVC/Stainless	221.33	223.48	6	42.60	180.88	2.15	0.060 slot	184.0 - 188.5	185.33	5523.70	2129.03
DMW-37	12/16/2014	Cascade Drilling	Sonic	PVC/Stainless	220.35	222.50	6	40.00	182.50	2.15	0.060 slot	185.7 - 190.3	185.35	5464.73	2213.29
DMW-38	12/18/2014	Cascade Drilling	Sonic	PVC/Stainless	223.72	226.06	6	44.92	181.14	2.34	0.060 slot	184.3 - 188.8	185.22	5830.74	2347.22
DMW-39	12/19/2014	Cascade Drilling	Sonic	PVC	225.02	227.45	6	45.56	181.89	2.43	0.060 slot	185.0 - 194.6	185.02	5775.50	2830.03
DMW-40	12/01/2015	Cascade Drilling	Sonic	PVC/Stainless	220.64	222.61	4	42.14	180.47	1.97	0.060 slot	183.6 - 193.2	184.14	5557.35	1870.37
IMW-40	12/02/2015	Cascade Drilling	Sonic	PVC/Stainless	220.67	222.50	4	30.08	192.42	1.83	0.060 slot	193.5 - 203.2	NE	5552.02	1869.86
DMW-41	12/03/2015	Cascade Drilling	Sonic	PVC/Stainless	224.45	224.16	4	46.35	177.81	-0.29	0.060 slot	180.9 - 185.5	181.95	5612.92	2235.12
DMW-42	12/04/2015	Cascade Drilling	Sonic	PVC/Stainless	224.39	224.09	4	38.71	185.38	-0.30	0.060 slot	188.5 - 193.1	188.89	5597.15	2356.34

Notes:

[a] Wells re-surveyed and total well depths recorded in March 2009, DNAPL wells re-surveyed after SVE components added in July 2010
ft = Feet
HSA = Hollow Stem Auger
TOC = Top of Casing
UK = Unknown
NE - Not encountered during well installation
in = Inches

Table 2
2015 Design Phase Monitoring Schedule
H&V Fiber Corporation
Corvallis, Oregon

Frequency	Date(s)	Water Pumping Rates and Totalizers	Water VOCs for Evanite Chemicals (EPA 8260)	Air VOCs (PID and Flow)	Air VOCs for Evanite Chemicals (EPA TO-15)	Depth to Water and NAPL
Semi-Weekly	Every Other Tuesday	**TASK 1** All Pumping Wells Stripper Effluent		**TASK 2** Submicro Legs Post-SVE SVE + Stripper CatOx Prebleed CatOx Postbleed		
Monthly	First Tuesday 1/5, 2/2, 3/1, 4/5, 5/3 6/7, 7/5, 8/2, 9/6, 10/4 11/1, 12/6			**TASK 3** All Active SVE Wells	**TASK 4** CatOx Effluent CatOx Postbleed	
Semi-Monthly	First Week of Month Week beginning with: 1/5 3/1 5/3 7/5 9/6 11/8		**TASK 5** Stripper Influent Stripper Effluent		**TASK 6** Submicro Legs Post-SVE SVE + Stripper CatOx Prebleed	**TASK 7** DMW-2, DMW-3, IMW-3, DMW-16, IMW-16, DMW-17, IMW-17, DMW-23, DMW-24, IMW-24, DMW-25, IMW-25, DMW-26, IMW-26, DMW-27, IMW-27, DMW-28, IMW-28, DMW-29, IMW-29, DMW-30, IMW-30, IMW-31, DMW-32, IMW-32, DMW-40, IMW-40
Quarterly (March, June, Sept., Dec.)	First Week of Month Week beginning with: 3/1 6/7 9/6 12/6		**TASK 8** DMW-3, DMW-16, DMW-17, DMW-23, DMW-24, DMW-25, DMW-26, DMW-27, DMW-28, DMW-29, DMW-30, DMW-32, IMW-32, DMW-40, IMW-40, DMW-41, DMW-42		**TASK 9** IMW-3, IMW-16, IMW-17, IMW-24, IMW-25, IMW-26, IMW-27, IMW-28, IMW-29, IMW-30, IMW-31	
Semiannual (March, Sept.)	First Week of Month Week beginning with: 3/3 9/8		**TASK 10** DMW-2, MW-7, MW-8, DMW-11, DMW-12, MW-20, Millrace 1, Millrace 2, IMW-33, DMW-33, IMW-34, DMW-34, DMW-35, IMW-35, DMW-36, DMW-37, DMW-38, DMW-39			**TASK 11** MW-1, MW-5, MW-6, MW-7, MW-8, MW-9, MW-10, DMW-11, DMW-12, MW-13, MW-14, MW-15, MW-18, MW-19, MW-20, MW-21, MW-22, DMW-36, DMW-37, DMW-38, DMW-39, DMW-41, DMW-42
Annual -March	First Week Week beginning with: 3/3		**TASK 12** IMW-3, IMW-16, IMW-17, IMW-24, IMW-25, IMW-26, IMW-27, IMW-28, IMW-29, IMW-30, IMW-31			
Annual - Sept.	First Week Week beginning with: 9/8		**TASK 13** MW-1, MW-5, MW-6, MW-9, MW-10, MW-13, MW-14, MW-15, MW-18, MW-19, MW-21, MW-22, Porewater (7)			

Notes:
VOC = Volatile organic compound
PID = Photoionizer detector

Table 3
Media Screening Levels
H&V Fiber Corporation
Corvallis, Oregon

Oregon Department of Environmental Quality Risk Based Concentrations[a]	Criteria Basis	Applicable Plume Area	Pathway	Media	Units	Tetrachloroethene	Trichlorethene	Cis-1,2-dichloroethene	Trans-1,2-dichloroethene	Vinyl chloride
Soil Ingestion, Dermal Contact, & Inhalation	DEQ RBDM	Neighborhood	Residential	Soil	mg/kg	200 >Csat	6.7	160	1,600	0.36
	DEQ RBDM	Source and Hardboard Areas	Occupational	Soil	mg/kg	1000 >Csat	51	2,300 >Csat	23,000 >Csat	4.4
	DEQ RBDM	All Areas	Construction Worker	Soil	mg/kg	1,800 >Csat	470 >Csat	710	7,100 >Csat	34
	DEQ RBDM	All Areas	Excavation Worker	Soil	mg/kg	50,000 >Csat	13,000 >Csat	20,000 >Csat	200,000 >Csat	950 >Csat
Volatilization to Outdoor Air	DEQ RBDM	Neighborhood	Residential	Soil	mg/kg	- >Csat	15	- >Max	- >Max	5.3
	DEQ RBDM	Source and Hardboard Areas	Occupational	Soil	mg/kg	- >Csat	96	- >Max	- >Max	89
Vapor Intrusion into Buildings	DEQ RBDM	Neighborhood	Residential	Soil	mg/kg	2.8	0.12	- >Max	- >Max	0.043
	DEQ RBDM	Source and Hardboard Areas	Occupational	Soil	mg/kg	36	2.3	- >Max	- >Max	2.2
Leaching to Groundwater	DEQ RBDM	Neighborhood	Residential	Soil	mg/kg	0.46	0.013	1.1	13	0.0006
	DEQ RBDM	Source and Hardboard Areas	Occupational	Soil	mg/kg	1.9	0.087	4.5	51	0.010
Ingestion & Inhalation from Tapwater	DEQ RBDM	Neighborhood	Residential	Groundwater	ug/L	12	0.49	36	360	0.027
Volatilization to Outdoor Air	DEQ RBDM	Neighborhood	Residential	Groundwater	ug/L	64,000	3,300	- >S	- >S	350
	DEQ RBDM	Source and Hardboard Areas	Occupational	Groundwater	ug/L	- >S	20,000	- >S	- >S	5,900
Vapor Intrusion into Buildings	DEQ RBDM	Neighborhood	Residential	Groundwater	ug/L	3,700	200	- >S	- >S	17
	DEQ RBDM	Source and Hardboard Areas	Occupational	Groundwater	ug/L	48,000	3,700	- >S	- >S	880
Groundwater in Excavation	DEQ RBDM	All Areas	Construction/Excavation Worker	Groundwater	ug/L	5,600	3,000	18,000	180,000	960
Vapor Intrusion into Buildings	DEQ RBDM	Neighborhood	Residential	Soil Gas	ug/m^3	2,200	95	- >Pv	- >Pv	33
	DEQ RBDM	Source and Hardboard Areas	Occupational	Soil Gas	ug/m^3	47,000	2,900	- >Pv	- >Pv	2,800
Inhalation	DEQ RBDM	Neighborhood	Residential	Air	ug/m^3	11	0.47	- >Pv	- >Pv	0.17
		Source and Hardboard Areas	Occupational	Air	ug/m^3	47	2.9	- >Pv	- >Pv	2.8
Surface Water	See Footnotes[bcde]	Willamette and Mary's Rivers	Ecological Receptors	Surface Water	ug/L	0.33	3.0	NV	590	0.24
Pore Water	See Footnotes[bcde]	Willamette and Mary's Rivers	Ecological Receptors	Hyporheic Water	ug/L	98	47	590	590	590

Notes:

[a] Oregon Department of Environmental Quality (DEQ) Risk-Based Decision Making (RBDM) (revised November 1, 2015)

[b] United State Environmental Protection Agency (EPA) Resource Conservation and Recovery Act (RCRA) Region 5 Ecologic Screening Value (August 22, 2003)

[d] DEQ Human Health Water Quality Criteria for Toxic Pollutants Table 40: Organism (October 7, 2011)

[e] National Oceanic and Atmospheric Administration (NOAA) Office of Resonse and Restoration Screening Quick Reference Tables (SQRT) (developed 2008)

[e] Per Oak Ridge National Laboratory's Water Quality Criteria - Ecological Receptors - Tier II SCV (Tier II SCV values were taken from Suter II, G.W. and Tsao, C.L., 1996. Toxicological Benchmarks for Screening Potential Contaminants of Concern for Effects on Aquatic Biota: 1996 Revision. ORNL publication ES/ER/TM-96/R2)

mg/kg = Milligrams per kilogram

ug/L = Micrograms per liter

ug/m^3 = Micrograms per cubic meter

NV = No published value

>Csat = This soil RBC exceeds the limit of three-phase equilibrium partitioning. Refer to "ChemData" page of the RBDM for the corresponding value of Csat.

>Max = The constituent RBC for this pathway is greater than 100,000 mg/kg or 100,000 mg/L. The Department believes it is highly unlikely that such concentrations will ever be encountered

>S = The groundwater RBC exceeds the solubility limit. Groundwater concentrations in excess of S indicate that free product may be present

>Pv = The air concentration reported for the RBC exceeds the vapor pressure of the pure chemical. It can be assumed that this constituent cannot create an unacceptable risk by this pathway.

Table 4
Soil Analytical Results - VOCs (mg/Kg)
H&V Fiber Corporation
Corvallis, Oregon

Sample ID	Sample Depth (feet)	Date Sampled	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,1-Dichloroethene	Vinyl Chloride
DMW-30/6	6	12/02/2015	0.0013 U	0.20	0.19	0.0017	0.0013 U	0.0014
DMW-30/14	14	12/02/2015	0.0013 U	0.14	0.085	0.0013 U	0.0013 U	0.0013 U
DMW-30/18.5	18.5	12/02/2015	0.0014 U	2.7	4.0	0.028	0.0019	0.0014
DMW-30/42	42	12/02/2015	0.0015 U	0.87	0.034 U	0.0015 U	0.0015 U	0.0015 U
DMW-30/44	44	12/02/2015	0.0014 U	1.5	0.075 U	0.0014 U	0.0014 U	0.0014 U
DMW-30/46	46	12/02/2015	0.0014 U	0.63	0.0014 U	0.0014 U	0.0014 U	0.0014 U
DMW-40/15	15	11/30/2015	0.0014 U	0.0050	0.0014 U	0.0014 U	0.0014 U	0.0014 U
DMW-40/17.5	17.5	11/30/2015	0.0013 U	0.0050	0.0013 U	0.0013 U	0.0013 U	0.0013 U
DMW-40/37	37	12/01/2015	0.0017 U	0.0023	0.0017 U	0.0017 U	0.0017 U	0.0017 U
DMW-40/38.5	38.5	12/01/2015	0.0014 U	0.0072	0.0014 U	0.0014 U	0.0014 U	0.0014 U
DMW-41/8	8	12/03/2015	0.0014 U	0.0039	0.0014 U	0.0014 U	0.0014 U	0.0014 U
DMW-41/19.5	19.5	12/03/2015	0.0013 U	0.022	0.0017	0.0013 U	0.0013 U	0.0013 U
DMW-41/42.5	42.5	12/03/2015	0.026	61	1.4 U	0.0059	0.0052	0.0095
DMW-41/45	45	12/03/2015	0.0014 U	51	0.85	0.0014 U	0.0028	0.015
DMW-41/49.5	49.5	12/03/2015	0.0014 U	0.0039	0.0014 U	0.0014 U	0.0014 U	0.0014 U
DMW-42/17	17	12/04/2015	0.0013 U	0.0032	0.0013 U	0.0013 U	0.0013 U	0.0013 U
DMW-42/35.5	35.5	12/04/2015	0.0016 U	25	0.24	0.0018	0.0025	0.018
DMW-42/37	37	12/04/2015	0.0015 U	17	0.16	0.0015 U	0.0015 U	0.014
DMW-42/40	40	12/04/2015	0.0015 U	4.6	0.020	0.0015 U	0.0015 U	0.0068
DEQ Screening Level Criteria for Soil								
Direct Contact/Ingestion (Occupational)[d]			1,000	51	2,300	23,000	29,000	4.4
Direct Contact/Ingestion (Construction Worker)[c]			1,800	470	710	7,100	13,000	34
Direct Contact/Ingestion (Excavation Worker)[b]			50,000	13,000	20,000	200,000	370,000	950
Volitilization to Outdoor Air (Occupational)[e]			>Csat	96	>Max	>Max	>Csat	89
Vapor Intrusion to Buildings (Occupational)[f]			36	2.3	>Max	>Max	680	2.2

Notes:

[a] Sample reanalyzed at a dilution

[b] DEQ Risk-Based Concentration (RBC) for direct contact/ingestion by an excavation worker (revised November 1, 2015)

[c] DEQ RBC for direct contact/ingestion by an construction worker (revised November 1, 2015)

[d] DEQ RBC for direct contact/ingestion in a occupational setting (revised November 1, 2015)

[e] DEQ RBC for volatilization to outdoor air in a occupational setting (revised November 1, 2015)

[f] DEQ RBC for vapor intrusion to indoor air in a occupational setting (revised November 1, 2015)

Volatile organic compounds (VOCs) analyzed by EPA Method 8260B

mg/Kg = Milligrams per kilogram

* = result reported on 'as received' basis (not dry weight corrected)

U = Not detected above the reporting limit shown

J = Laboratory Qualifier. Estimated result. Detection was between the method reporting limit and method detection limit.

- = Not analyzed for this parameter

>Max indicates the DEQ regards this concentration as not being "physically possible" since the constituent RBC exceeds likely free-phase levels

>Csat = Soil concentrations in excess of Csat indicate that free product might be present

Table 5
Groundwater Analytical Results - VOCs in New Wells (ug/L)
H&V Fiber Corporation
Corvallis, Oregon

Location	Date Sampled	Tetrachloroethene	Trichloroethene	TCE as % of Detected VOCs	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,1-Dichloroethene	Vinyl Chloride
DMW-41								
Intermediate Grab Sample (29 feet bgs)	12/03/2015	0.5 U	4.9	76%	1.5	0.5 U	0.5 U	0.5 U
Deep Well Sample	12/16/2015	0.5 U	1,650	86%	261	1.3	0.95 U	0.5 U
DMW-42								
Intermediate Grab Sample (27 feet bgs)	12/04/2015	0.5 U	54	84%	10	0.5 U	0.5 U	0.5 U
Deep Well Sample	12/16/2015	0.5 U	13	60%	7.4	0.5 U	0.5 U	0.5 U
DEQ Screening-Level Criteria for Groundwater (ug/L)								
Volatilization to Outdoor Air (Occupational)[a]		>S	20,000	-	>S	>S	2,400,000	5,900
Vapor Intrusion (Occupational)[b]		48,000	3,700	-	>S	>S	360,000	880
GW in Excavation[c]		5,600	3,000	-	18,000	180,000	44,000	960

Notes:
[a] DEQ Generic Risk-Based Concentration (RBC) for Volatilization to Outdoor Air in an Occupational Setting (revised November 1, 2015)
[b] DEQ RBC for Vapor Intrusion into Buildings in an Occupational Setting (revised November 1, 2015)
[c] DEQ RBC for Groundwater in Excavation (revised November 1, 2015)
ug/L = Micrograms per liter
U = Undetected at Method Reporting Limit shown
J = Laboratory Qualifier. Estimated result. Detection was between the method reporting limit and method detection limit.
NA = Not applicable
>S = This groundwater RBC exceeds the solubility limit. Groundwater concentrations in excess of S indicate that free product may be present
- = No sample collected
Note: Grab samples were collected during drilling. Deep well samples were collected following well development.

Table 6
Groundwater Elevation Data
H&V Fiber Corporation
Corvallis, Oregon

Well Identification	TOC Elevation (feet MSL)	Monitoring Summary		
		Date Measured	Depth to Water (feet below TOC)	Groundwater Elevation (feet MSL)
MW-1	223.77	03/23/2009	20.05	203.72
		06/01/2009	20.81	202.96
		08/06/2009	21.95	201.82
		09/14/2009	21.66	202.11
		12/03/2009	21.34	202.43
		03/24/2010	19.91	203.86
		06/08/2010	17.41	206.36
		09/29/2010	21.99	201.78
		12/10/2010	19.59	204.18
		03/22/2011	17.61	206.16
		06/07/2011	19.14	204.63
		09/26/2011	22.05	201.72
		01/27/2012	15.68	208.09
(DMW-1)		07/11/2012	20.85	202.92
		03/18/2013	21.62	202.15
		09/04/2013	22.57	201.20
		03/17/2014	17.42	206.35
		09/22/2014	23.10	200.67
		09/01/2015	23.82	199.95
DMW-2	224.16	03/23/2009	30.06	194.10
		06/01/2009	25.46	198.70
		08/06/2009	27.55	196.61
		09/14/2009	26.74	197.42
		12/03/2009	31.16	193.00
		03/24/2010	26.73	197.43
		06/08/2010	17.49	206.67
		09/29/2010	30.26	193.90
		12/10/2010	23.75	200.41
		03/22/2011	22.99	201.17
		06/07/2011	24.47	199.69
		09/26/2011	29.79	194.37
		10/13/2011	25.72	198.44
		10/17/2011	26.35	197.81
		01/27/2012	13.51	210.65
		07/11/2012	24.80	199.36
		03/18/2013	31.00	193.16
		05/09/2013	30.35	193.81
		05/22/2013	30.00	194.16
		06/03/2013	28.24	195.92
		07/09/2013	30.55	193.61
		07/31/2013	27.63	196.53
		09/04/2013	31.20	192.96
		10/28/2013	29.70	194.46
		11/06/2013	29.80	194.36
		02/04/2014	31.00	193.16

Table 6
Groundwater Elevation Data
H&V Fiber Corporation
Corvallis, Oregon

Well Identification	TOC Elevation (feet MSL)	Monitoring Summary		
		Date Measured	Depth to Water (feet below TOC)	Groundwater Elevation (feet MSL)
DMW-2		02/21/2014	21.60	202.56
		03/04/2014	24.23	199.93
		03/17/2014	23.37	200.79
		04/01/2014	23.20	200.96
		05/15/2014	27.72	196.44
		06/03/2014	29.83	194.33
		07/09/2014	31.31	192.85
		08/14/2014	29.70	194.46
		09/22/2014	28.21	195.95
		10/07/2014	28.78	195.38
		11/05/2014	30.22	193.94
		12/01/2014	25.42	198.74
		01/21/2015	21.55	202.61
		03/09/2015	21.77	202.39
		05/18/2015	27.02	197.14
		06/10/2015	35.52	188.64
		07/08/2015	35.45	188.71
		08/10/2015	28.63	195.53
		09/01/2015	35.50	188.66
		11/05/2015	35.52	188.64
		12/14/2015	32.44	191.72
		01/15/2016	18.10	206.06
IMW-3[a]	225.50	08/06/2009	26.77	198.73
		09/14/2009	26.22	199.28
		12/03/2009	27.33	198.17
		03/24/2010	26.35	199.15
		06/08/2010	19.49	206.01
	226.44	09/29/2010	24.50	201.94
		12/10/2010	25.05	201.39
		03/22/2011	24.04	202.40
		06/07/2011	25.75	200.69
		09/26/2011	-	
		10/13/2011	25.40	201.04
		10/17/2011	26.55	199.89
		01/21/2012	25.15	201.29
		01/27/2012	18.78	207.66
		02/01/2012	16.32	210.12
		02/22/2012	26.40	200.04
		02/23/2012	26.40	200.04
		02/27/2012	26.53	199.91
		02/27/2012	26.70	199.74
		03/01/2012	27.50	198.94
		03/04/2012	27.00	199.44
		03/06/2012	25.50	200.94
		03/15/2012	25.90	200.54

Table 6
Groundwater Elevation Data
H&V Fiber Corporation
Corvallis, Oregon

Well Identification	TOC Elevation (feet MSL)	Monitoring Summary		
		Date Measured	Depth to Water (feet below TOC)	Groundwater Elevation (feet MSL)
IMW-3[a]		03/16/2012	25.30	201.14
		03/20/2012	24.80	201.64
		03/22/2012	18.80	207.64
		03/29/2012	23.70	202.74
		04/03/2012	18.50	207.94
		04/10/2012	21.10	205.34
		04/13/2012	24.00	202.44
		04/19/2012	25.20	201.24
		05/01/2012	26.20	200.24
		05/04/2012	26.10	200.34
		05/10/2012	26.40	200.04
		07/11/2012	-	-
		03/18/2013	27.72	198.72
		06/03/2013	26.02	200.42
		05/09/2013	27.39	199.05
		05/22/2013	27.66	198.78
		06/03/2013	26.02	200.42
		07/09/2013	25.35	201.09
		07/31/2013	26.35	200.09
		09/04/2013	26.66	199.78
		10/28/2013	26.44	200.00
		11/06/2013	24.80	201.64
		02/04/2014	-	-
		02/21/2014	21.45	204.99
		03/04/2014	20.00	206.44
		03/17/2014	27.81	198.63
		04/01/2014	22.39	204.05
		05/15/2014	23.75	202.69
		06/03/2014	24.34	202.10
		07/09/2014	26.37	200.07
		08/14/2014	26.17	200.27
		09/22/2014	26.71	199.73
		10/07/2014	26.83	199.61
		11/05/2014	26.25	200.19
		12/01/2014	26.25	200.19
		01/21/2015	23.70	202.74
		03/09/2015	23.92	202.52
		05/18/2015	25.68	200.76
		06/10/2015	24.38	202.06
		07/08/2015	26.40	200.04
		08/10/2015	24.90	201.54
		09/01/2015	DRY	-
		11/05/2015	26.60	199.84
		12/14/2015	25.75	200.69
		01/15/2016	19.40	207.04

Table 6
Groundwater Elevation Data
H&V Fiber Corporation
Corvallis, Oregon

Well Identification	TOC Elevation (feet MSL)	Monitoring Summary		
		Date Measured	Depth to Water (feet below TOC)	Groundwater Elevation (feet MSL)
DMW-3	225.39	03/23/2009	33.75	191.64
		06/01/2009	26.23	199.16
		08/06/2009	34.16	191.23
		09/14/2009	32.35	193.04
		12/03/2009	34.44	190.95
		03/24/2010	34.38	191.01
		06/08/2010	19.29	206.10
		09/29/2010	28.45	196.94
		12/10/2010	31.69	193.70
		03/22/2011	30.81	194.58
		06/07/2011	32.34	193.05
		09/26/2011	34.69	190.70
		10/13/2011	35.86	189.53
		10/17/2011	DRY	-
		01/27/2012	22.02	203.37
		02/01/2012	15.28	210.11
		04/10/2012	21.08	204.31
		04/13/2012	24.00	201.39
		04/19/2012	25.17	200.22
		05/01/2012	26.17	199.22
		05/04/2012	26.08	199.31
		05/10/2012	26.33	199.06
		07/11/2012	35.90	189.49
		03/18/2013	34.23	191.16
		06/03/2013	-	-
Recirculating		05/09/2013	35.85	189.54
Recirculating		05/22/2013	27.30	198.09
Recirculating		06/03/2013	34.86	190.53
Recirculating		07/09/2013	26.90	198.49
Recirculating		07/31/2013	27.30	198.09
Recirculating		09/04/2013	29.33	196.06
Recirculating		10/28/2013	28.53	196.86
		11/06/2013	27.70	197.69
		02/04/2014	34.20	191.19
		02/21/2014	26.20	199.19
		03/04/2014	28.90	196.49
		03/17/2014	27.55	197.84
		04/01/2014	27.40	197.99
		05/15/2014	32.00	193.39
		06/03/2014	33.52	191.87
		07/09/2014	33.24	192.15
		08/14/2014	33.30	192.09
		09/22/2014	34.21	191.18
		10/07/2014	34.18	191.21
		11/05/2014	36.21	189.18

Table 6
Groundwater Elevation Data
H&V Fiber Corporation
Corvallis, Oregon

Well Identification	TOC Elevation (feet MSL)	Monitoring Summary		
		Date Measured	Depth to Water (feet below TOC)	Groundwater Elevation (feet MSL)
DMW-3		12/01/2014	33.86	191.53
		01/21/2015	29.55	195.84
		03/09/2015	30.00	195.39
		05/18/2015	35.62	189.77
		06/10/2015	37.09	188.30
		07/08/2015	37.30	188.09
		08/10/2015	37.53	187.86
		09/01/2015	36.60	188.79
		11/05/2015	39.20	186.19
		12/14/2015	38.95	186.44
		01/15/2016	18.65	206.74
MW-4	221.18	03/23/2009	23.47	197.71
		06/01/2009	25.42	195.76
		08/06/2009	27.69	193.49
		09/14/2009	26.97	194.21
		12/03/2009	25.35	195.83
		03/24/2010	26.52	194.66
		06/08/2010	16.05	205.13
		09/29/2010	27.59	193.59
		12/10/2010	19.56	201.62
		03/22/2011	21.77	199.41
		06/07/2011	22.11	199.07
		09/26/2011	26.73	194.45
		01/27/2012	8.95	212.23
(DMW-4)		07/11/2012	-	-
		03/18/2013	26.21	194.97
		09/04/2013	27.34	193.84
		03/17/2014	18.95	202.23
MW-4		09/22/2014	27.63	193.55
		09/01/2015	28.59	192.59
MW-5	223.53	03/23/2009	19.98	203.55
		06/01/2009	20.42	203.11
		08/06/2009	22.42	201.11
		09/14/2009	22.41	201.12
		12/03/2009	21.78	201.75
		03/24/2010	19.82	203.71
		06/08/2010	18.28	205.25
		09/29/2010	22.25	201.28
		12/10/2010	20.06	203.47
		03/22/2011	15.92	207.61
		06/07/2011	18.30	205.23
		09/26/2011	22.36	201.17
		01/27/2012	16.88	206.65
(DMW-5)		07/11/2012	20.46	203.07

Table 6
Groundwater Elevation Data
H&V Fiber Corporation
Corvallis, Oregon

Well Identification	TOC Elevation (feet MSL)	Monitoring Summary		
		Date Measured	Depth to Water (feet below TOC)	Groundwater Elevation (feet MSL)
MW-5		03/18/2013	20.89	202.64
		09/04/2013	22.61	200.92
		03/17/2014	13.52	210.01
		09/22/2014	22.80	200.73
		09/01/2015	23.93	199.60
MW-6	218.43	03/23/2009	17.71	200.72
		06/01/2009	19.64	198.79
		08/06/2009	22.22	196.21
		09/14/2009	21.35	197.08
		12/03/2009	19.24	199.19
		03/24/2010	20.18	198.25
		06/08/2010	9.80	208.63
		09/29/2010	21.84	196.59
		12/10/2010	13.51	204.92
		03/22/2011	16.35	202.08
		06/07/2011	16.52	201.91
		09/26/2011	21.17	197.26
		01/27/2012	-	-
(DMW-6)		07/11/2012	21.22	197.21
		03/18/2013	19.99	198.44
		09/04/2013	21.72	196.71
		03/17/2014	13.47	204.96
		09/22/2014	22.13	196.30
		03/09/2015	19.60	198.83
		09/01/2015	22.16	196.27
MW-7	222.05	03/23/2009	19.77	202.28
		06/01/2009	20.37	201.68
		08/06/2009	22.58	199.47
		09/14/2009	22.29	199.76
		12/03/2009	21.25	200.80
		03/24/2010	20.14	201.91
		06/08/2010	16.71	205.34
MW-7		09/29/2010	22.34	199.71
		12/10/2010	18.92	203.13
		03/22/2011	16.27	205.78
		06/07/2011	18.11	203.94
		09/26/2011	22.31	199.74
		01/27/2012	12.72	209.33
(DMW-7)		07/11/2012	20.60	201.45
		03/18/2013	20.92	201.13
		09/04/2013	22.52	199.53
		03/17/2014	14.07	207.98
		09/22/2014	22.63	199.42
		03/09/2015	19.27	202.78

Table 6
Groundwater Elevation Data
H&V Fiber Corporation
Corvallis, Oregon

Well Identification	TOC Elevation (feet MSL)	Monitoring Summary		
		Date Measured	Depth to Water (feet below TOC)	Groundwater Elevation (feet MSL)
MW-7		09/01/2015	23.81	198.24
MW-8	220.68	03/23/2009	18.22	202.46
		06/01/2009	18.62	202.06
		08/06/2009	20.63	200.05
		09/14/2009	20.02	200.66
		12/03/2009	19.77	200.91
		03/24/2010	18.07	202.61
		06/08/2010	14.69	205.99
		09/29/2010	20.41	200.27
		12/10/2010	17.69	202.99
		03/22/2011	14.60	206.08
		06/07/2011	16.51	204.17
		09/26/2011	20.54	200.14
		01/27/2012	11.51	209.17
(DMW-8)		07/11/2012	18.85	201.83
		03/18/2013	19.63	201.05
		09/04/2013	20.88	199.80
		03/17/2014	12.80	207.88
		09/22/2014	21.27	199.41
		03/09/2015	16.81	203.87
		09/01/2015	22.38	198.30
MW-9	221.51	03/23/2009	18.16	203.35
		06/01/2009	18.79	202.72
		08/06/2009	20.14	201.37
		09/14/2009	19.42	202.09
		12/03/2009	19.55	201.96
		03/24/2010	17.71	203.80
		06/08/2010	14.84	206.67
		09/29/2010	20.05	201.46
		12/10/2010	17.73	203.78
		03/22/2011	15.12	206.39
		06/07/2011	16.93	204.58
		09/26/2011	20.18	201.33
		01/27/2012	12.99	208.52
(DMW-9)		07/11/2012	18.61	202.90
		03/18/2013	20.53	200.98
		09/04/2013	20.14	201.37
		03/17/2014	15.32	206.19
		09/22/2014	21.81	199.70
		09/01/2015	22.77	198.74
MW-10	223.40	03/23/2009	21.12	202.28
		06/01/2009	22.69	200.71
		08/06/2009	24.35	199.05
		09/14/2009	24.19	199.21

Table 6
Groundwater Elevation Data
H&V Fiber Corporation
Corvallis, Oregon

Well Identification	TOC Elevation (feet MSL)	Monitoring Summary		
		Date Measured	Depth to Water (feet below TOC)	Groundwater Elevation (feet MSL)
MW-10		12/03/2009	23.86	199.54
		03/24/2010	22.52	200.88
		06/08/2010	15.66	207.74
		09/29/2010	NM	NM
		12/10/2010	19.00	204.40
		03/22/2011	18.55	204.85
		06/07/2011	-	
		09/26/2011	24.22	199.18
		01/27/2012	12.53	210.87
(DMW-10)		07/11/2012	23.39	200.01
		03/18/2013	23.32	200.08
		09/04/2013	24.56	198.84
		03/17/2014	17.41	205.99
		09/22/2014	24.68	198.72
		09/01/2015	25.21	198.19
MW-11	225.21	03/23/2009	22.48	202.73
		06/01/2009	24.35	200.86
		08/06/2009	26.46	198.75
		09/14/2009	25.74	199.47
		12/03/2009	25.03	200.18
		03/24/2010	24.54	200.67
		06/08/2010	18.04	207.17
		09/29/2010	26.23	198.98
		12/10/2010	21.44	203.77
		03/22/2011	20.44	204.77
		06/07/2011	21.98	203.23
		09/26/2011	26.34	198.87
		01/27/2012	13.39	211.82
(DMW-11)		07/11/2012	24.20	201.01
		03/18/2013	25.76	199.45
		09/04/2013	26.74	198.47
		03/17/2014	18.55	206.66
		09/22/2014	26.98	198.23
		03/09/2015	23.39	201.82
		09/01/2015	28.34	196.87
MW-12	223.60	03/23/2009	20.48	203.12
		06/01/2009	22.44	201.16
		08/06/2009	33.87	189.73
		09/14/2009	32.39	191.21
		12/03/2009	27.18	196.42
		03/24/2010	33.91	189.69
		06/08/2010	17.48	206.12
		09/29/2010	29.08	194.52
		12/10/2010	20.01	203.59
		03/22/2011	18.55	205.05

Table 6
Groundwater Elevation Data
H&V Fiber Corporation
Corvallis, Oregon

Well Identification	TOC Elevation (feet MSL)	Monitoring Summary		
		Date Measured	Depth to Water (feet below TOC)	Groundwater Elevation (feet MSL)
MW-12		06/07/2011	22.77	200.83
		09/26/2011	24.82	198.78
		01/27/2012	12.20	211.40
(DMW-12)		07/11/2012	23.20	200.40
		03/18/2013	23.15	200.45
		09/04/2013	24.54	199.06
		03/17/2014	16.15	207.45
		09/22/2014	24.62	198.98
		03/09/2015	21.92	201.68
		09/01/2015	25.61	197.99
		01/15/2016	18.41	205.19
MW-13	220.47	03/23/2009	19.38	201.09
		06/01/2009	21.61	198.86
		08/06/2009	24.05	196.42
		09/14/2009	23.26	197.21
		12/03/2009	21.36	199.11
		03/24/2010	22.74	197.73
		06/08/2010	11.74	208.73
		09/29/2010	23.81	196.66
		12/10/2010	15.57	204.90
		03/22/2011	17.98	202.49
		06/07/2011	18.26	202.21
		09/26/2011	22.98	197.49
		01/27/2012	4.34	216.13
(DMW-13)		07/11/2012	23.30	197.17
		03/18/2013	22.32	198.15
		09/04/2013	23.51	196.96
		03/17/2014	15.12	205.35
		09/22/2014	23.92	196.55
		03/09/2015	23.05	197.42
		09/01/2015	24.69	195.78
MW-14	233.25	03/23/2009	29.60	203.65
		06/01/2009	30.21	203.04
		08/06/2009	32.29	200.96
		09/14/2009	32.63	200.62
		12/03/2009	31.14	202.11
		03/24/2010	29.94	203.31
		06/08/2010	26.45	206.80
		09/29/2010	32.55	200.70
		12/10/2010	29.05	204.20
		03/22/2011	26.45	206.80
		06/07/2011	28.17	205.08
		09/26/2011	32.14	201.11
		01/27/2012	22.22	211.03
(DMW-14)		07/11/2012	30.68	202.57

Table 6
Groundwater Elevation Data
H&V Fiber Corporation
Corvallis, Oregon

Well Identification	TOC Elevation (feet MSL)	Monitoring Summary		
		Date Measured	Depth to Water (feet below TOC)	Groundwater Elevation (feet MSL)
MW-14		03/18/2013	30.44	202.81
		09/04/2013	32.58	200.67
		03/17/2014	23.93	209.32
		09/22/2014	32.73	200.52
		03/09/2015	29.63	203.62
		09/01/2015	33.30	199.95
MW-15	214.08	03/23/2009	13.38	200.70
		06/01/2009	15.55	198.53
		08/06/2009	17.82	196.26
		09/14/2009	16.99	197.09
		12/03/2009	15.33	198.75
		03/24/2010	16.66	197.42
		06/08/2010	15.45	198.63
		09/29/2010	17.60	196.48
		12/10/2010	9.04	205.04
		03/22/2011	11.97	202.11
		06/07/2011	12.14	201.94
		09/26/2011	16.74	197.34
		01/27/2012	-	-
(DMW-15)		07/11/2012	17.23	196.85
		03/18/2013	16.24	197.84
		09/04/2013	17.32	196.76
		03/17/2014	9.11	204.97
		09/22/2014	17.80	196.28
		03/09/2015	17.11	196.97
		09/01/2015	18.59	195.49
IMW-16[a]	224.39	08/06/2009	27.37	197.02
		09/14/2009	25.00	199.39
		12/03/2009	26.73	197.66
		03/24/2010	23.69	200.70
		06/08/2010	18.34	206.05
	225.26	09/29/2010	22.91	202.35
		12/10/2010	24.01	201.25
		03/22/2011	22.92	202.34
		06/07/2011	24.50	200.76
		09/26/2011	28.10	197.16
		10/13/2011	26.30	198.96
		10/17/2011	26.55	198.71
		01/21/2012	24.75	201.42
		01/27/2012	17.28	208.89
		02/01/2012	15.02	211.15
		02/22/2012	25.05	201.12
		02/23/2012	25.90	200.27
		02/27/2012	25.40	200.77

Table 6
Groundwater Elevation Data
H&V Fiber Corporation
Corvallis, Oregon

Well Identification	TOC Elevation (feet MSL)	Monitoring Summary		
		Date Measured	Depth to Water (feet below TOC)	Groundwater Elevation (feet MSL)
IMW-16[a]		02/27/2012	25.80	200.37
		03/01/2012	25.90	200.27
		03/04/2012	25.35	200.82
		03/06/2012	25.20	200.97
		03/15/2012	24.20	201.97
		03/16/2012	24.20	201.97
		03/20/2012	23.00	203.17
		03/29/2012	21.00	205.17
		04/10/2012	19.50	205.76
		04/13/2012	22.40	202.86
		04/19/2012	24.00	201.26
		05/01/2012	25.10	200.16
		05/04/2012	24.90	200.36
		05/10/2012	25.30	199.96
		07/11/2012	-	-
		03/18/2013	28.96	196.30
		05/09/2013	27.40	197.86
		05/22/2013	26.83	198.43
		06/03/2013	25.07	200.19
		07/09/2013	26.63	198.63
		07/31/2013	26.10	199.16
		09/04/2013	28.28	196.98
		10/28/2013	27.50	197.76
		11/06/2013	25.30	199.96
		02/04/2014	27.20	198.06
		02/21/2014	21.89	203.37
		03/04/2014	21.30	203.96
		03/17/2014	22.74	202.52
		04/01/2014	21.58	203.68
		05/15/2014	25.60	199.66
		06/03/2014	25.74	199.52
		07/09/2014	26.38	198.88
		08/14/2014	25.94	199.32
		09/22/2014	27.10	198.16
		10/07/2014	28.90	196.36
		11/05/2014	Dry	
		12/01/2014	26.63	198.63
		01/21/2015	23.20	202.06
		03/09/2015	23.08	202.18
		05/18/2015	Dry	
		06/10/2015	28.61	196.65
		07/08/2015	Dry	
		08/10/2015	Dry	
		09/01/2015	Dry	
		11/05/2015	Dry	

Table 6
Groundwater Elevation Data
H&V Fiber Corporation
Corvallis, Oregon

Well Identification	TOC Elevation (feet MSL)	Monitoring Summary		
		Date Measured	Depth to Water (feet below TOC)	Groundwater Elevation (feet MSL)
IMW-16[a]		12/14/2015	Dry	
		01/15/2016	18.46	206.80
DMW-16	223.53	03/23/2009	37.51	186.02
		06/01/2009	26.66	196.87
		08/06/2009	37.25	186.28
		09/14/2009	34.39	189.14
		12/03/2009	37.44	186.09
		03/24/2010	24.58	198.95
		06/08/2010	17.44	206.09
		09/29/2010	26.06	197.47
		12/10/2010	22.15	201.38
		03/22/2011	35.96	187.57
		06/07/2011	28.18	195.35
		09/26/2011	34.43	189.10
		10/13/2011	26.73	196.80
		10/17/2011	27.25	196.28
		01/27/2012	15.73	207.80
		02/01/2012	13.27	210.26
		04/10/2012	19.42	204.11
		04/13/2012	22.33	201.20
		04/19/2012	24.00	199.53
		05/01/2012	25.08	198.45
		05/04/2012	24.75	198.78
		05/10/2012	25.25	198.28
		07/11/2012	29.10	194.43
		03/18/2013	27.65	195.88
		06/03/2013	23.40	200.13
		05/09/2013	25.79	197.74
		05/22/2013	25.00	198.53
		06/03/2013	23.40	200.13
		07/09/2013	25.05	198.48
		07/31/2013	25.50	198.03
		09/04/2013	26.75	196.78
		10/28/2013	26.23	197.30
		11/06/2013	25.30	198.23
		02/04/2014	27.40	196.13
		02/21/2014	20.30	203.23
		03/04/2014	20.95	202.58
		03/17/2014	20.04	203.49
		04/01/2014	19.94	203.59
		05/15/2014	24.25	199.28
		06/03/2014	25.90	197.63
		07/09/2014	26.90	196.63
		08/14/2014	25.90	197.63
		09/22/2014	28.09	195.44

Table 6
Groundwater Elevation Data
H&V Fiber Corporation
Corvallis, Oregon

Well Identification	TOC Elevation (feet MSL)	Monitoring Summary		
		Date Measured	Depth to Water (feet below TOC)	Groundwater Elevation (feet MSL)
DMW-16		10/07/2014	27.41	196.12
		11/05/2014	28.91	194.62
		12/01/2014	27.15	196.38
		01/21/2015	22.20	201.33
		03/09/2015	22.60	200.93
		05/18/2015	26.92	196.61
		06/10/2015	28.95	194.58
		07/08/2015	29.85	193.68
		08/10/2015	28.84	194.69
		09/01/2015	28.78	194.75
		11/05/2015	30.00	193.53
		12/14/2015	29.03	194.50
		01/15/2016	16.78	206.75
IMW-17[a]	225.36	08/06/2009	27.69	197.67
		09/14/2009	25.47	199.89
		12/03/2009	27.09	198.27
		03/24/2010	25.15	200.21
		06/08/2010	19.58	205.78
	226.17	09/29/2010	23.13	203.04
		12/10/2010	24.89	201.28
		03/22/2011	23.17	203.00
		06/07/2011	24.65	201.52
		09/26/2011	28.40	197.77
		10/13/2011	25.04	201.13
		10/17/2011	25.20	200.97
		01/21/2012	25.20	200.97
		01/27/2012	18.93	207.24
		02/22/2012	25.25	200.92
		02/23/2012	26.30	199.87
		02/27/2012	25.80	200.37
		02/27/2012	26.35	199.82
		03/01/2012	26.50	199.67
		03/04/2012	25.80	200.37
		03/06/2012	25.75	200.42
		03/15/2012	24.90	201.27
		03/16/2012	25.00	201.17
		03/20/2012	23.90	202.27
		03/29/2012	22.90	203.27
		04/10/2012	21.10	205.07
		04/13/2012	22.60	203.57
		04/19/2012	24.20	201.97
		05/01/2012	25.30	200.87
		05/04/2012	25.00	201.17
		05/10/2012	24.80	201.37
		07/11/2012	-	-

Table 6
Groundwater Elevation Data
H&V Fiber Corporation
Corvallis, Oregon

Well Identification	TOC Elevation (feet MSL)	Monitoring Summary		
		Date Measured	Depth to Water (feet below TOC)	Groundwater Elevation (feet MSL)
IMW-17[a]		03/18/2013	29.38	196.79
		05/09/2013	26.60	199.57
		05/22/2013	26.05	200.12
		06/03/2013	24.58	201.59
		07/09/2013	24.73	201.44
		07/31/2013	24.73	201.44
		09/04/2013	26.12	200.05
		10/28/2013	25.04	201.13
		11/06/2013	24.97	201.20
		02/04/2014	28.20	197.97
		02/21/2014	22.90	203.27
		03/04/2014	22.65	203.52
		03/17/2014	21.46	204.71
		04/01/2014	20.90	205.27
		05/15/2014	24.37	201.80
		06/03/2014	25.08	201.09
		07/09/2014	27.18	198.99
		08/14/2014	27.50	198.67
		09/22/2014	30.32	195.85
		10/07/2014	29.00	197.17
		11/05/2014	30.43	195.74
		12/01/2014	28.51	197.66
		01/21/2015	24.13	202.04
		03/09/2015	22.95	203.22
		05/18/2015	28.69	197.48
		06/10/2015	29.35	196.82
		07/08/2015	30.60	195.57
		08/10/2015	29.90	196.27
		09/01/2015	30.28	195.89
		11/05/2015	DRY	
		12/14/2015	29.93	196.24
		01/15/2016	19.31	206.86
DMW-17	226.23	03/23/2009	26.73	199.50
		06/01/2009	26.89	199.34
		08/06/2009	28.65	197.58
		09/14/2009	26.60	199.63
		12/03/2009	28.06	198.17
		03/24/2010	26.22	200.01
		06/08/2010	20.34	205.89
		09/29/2010	28.16	198.07
		12/10/2010	25.05	201.18
		03/22/2011	23.38	202.85
		06/07/2011	24.98	201.25
		09/26/2011	28.46	197.77
		10/13/2011	29.22	197.01

Table 6
Groundwater Elevation Data
H&V Fiber Corporation
Corvallis, Oregon

Well Identification	TOC Elevation (feet MSL)	Monitoring Summary		
		Date Measured	Depth to Water (feet below TOC)	Groundwater Elevation (feet MSL)
DMW-17		10/17/2011	29.63	196.60
		01/27/2012	19.73	206.50
		04/10/2012	21.08	205.15
		04/13/2012	22.50	203.73
		04/19/2012	24.17	202.06
		05/01/2012	25.25	200.98
		05/04/2012	26.00	200.23
		05/10/2012	24.67	201.56
		07/11/2012	27.70	198.53
		03/18/2013	30.19	196.04
		05/09/2013	27.48	198.75
		05/22/2013	26.72	199.51
		06/03/2013	24.80	201.43
		07/09/2013	26.73	199.50
		07/31/2013	27.20	199.03
		09/04/2013	28.51	197.72
		10/28/2013	27.98	198.25
		11/06/2013	27.35	198.88
		02/04/2014	29.32	196.91
		02/21/2014	22.90	203.33
		03/04/2014	23.37	202.86
		03/17/2014	22.37	203.86
		04/01/2014	22.17	204.06
		05/15/2014	26.31	199.92
		06/03/2014	27.78	198.45
		07/09/2014	28.69	197.54
		08/14/2014	28.92	197.31
		09/22/2014	30.55	195.68
		10/07/2014	30.20	196.03
		11/05/2014	32.28	193.95
		12/01/2014	30.02	196.21
		01/21/2015	25.08	201.15
		03/09/2015	23.51	202.72
		05/18/2015	29.70	196.53
		06/10/2015	31.64	194.59
		07/08/2015	32.70	193.53
		08/10/2015	31.80	194.43
		09/01/2015	31.71	194.52
		11/05/2015	33.03	193.20
		12/14/2015	32.00	194.23
		01/15/2016	19.41	206.82
MW-18	223.29	03/23/2009	21.40	201.89
		06/01/2009	21.78	201.51
		08/06/2009	23.57	199.72
		09/14/2009	22.57	200.72

Table 6
Groundwater Elevation Data
H&V Fiber Corporation
Corvallis, Oregon

Well Identification	TOC Elevation (feet MSL)	Monitoring Summary		
		Date Measured	Depth to Water (feet below TOC)	Groundwater Elevation (feet MSL)
MW-18		12/03/2009	22.83	200.46
		03/24/2010	21.04	202.25
		06/08/2010	17.21	206.08
		09/29/2010	23.34	199.95
		12/10/2010	20.85	202.44
		03/22/2011	17.77	205.52
		06/07/2011	19.62	203.67
		09/26/2011	23.52	199.77
		01/27/2012	14.32	208.97
(DMW-18)		07/11/2012	21.99	201.30
		03/18/2013	23.14	200.15
		05/09/2013	22.52	200.77
		05/22/2013	22.26	201.03
		06/03/2013	21.44	201.85
		07/09/2013	22.65	200.64
		07/31/2013	22.97	200.32
		09/04/2013	23.86	199.43
		10/28/2013	23.33	199.96
		03/17/2014	16.24	207.05
		09/22/2014	24.52	198.77
		03/09/2015	19.35	203.94
		09/01/2015	25.54	197.75
		01/15/2016	16.33	206.96
MW-19	225.13	03/23/2009	22.20	202.93
		06/01/2009	22.78	202.35
		08/06/2009	24.24	200.89
		09/14/2009	23.36	201.77
		12/03/2009	23.75	201.38
		03/24/2010	21.68	203.45
		06/08/2010	18.66	206.47
		09/29/2010	24.25	200.88
		12/10/2010	21.95	203.18
		03/22/2011	18.95	206.18
		06/07/2011	20.85	204.28
		09/26/2011	24.25	200.88
		01/27/2012	16.98	208.15
(DMW-19)		07/11/2012	22.78	202.35
		03/18/2013	24.43	200.70
		05/09/2013	23.45	201.68
		05/22/2013	23.23	201.90
		06/03/2013	22.28	202.85
		07/09/2013	23.30	201.83
		07/31/2013	23.64	201.49
		09/04/2013	24.79	200.34
		10/28/2013	24.36	200.77

Table 6
Groundwater Elevation Data
H&V Fiber Corporation
Corvallis, Oregon

Well Identification	TOC Elevation (feet MSL)	Monitoring Summary		
		Date Measured	Depth to Water (feet below TOC)	Groundwater Elevation (feet MSL)
MW-19		03/17/2014	18.68	206.45
		09/22/2014	25.74	199.39
		03/09/2015	20.58	204.55
		09/01/2015	26.69	198.44
MW-20	227.78	03/23/2009	24.55	203.23
		06/01/2009	25.01	202.77
		08/06/2009	27.11	200.67
		09/14/2009	27.06	200.72
		12/03/2009	26.15	201.63
		03/24/2010	24.57	203.21
		06/08/2010	22.29	205.49
MW-20		09/29/2010	26.98	200.80
		12/10/2010	24.33	203.45
		03/22/2011	20.95	206.83
		06/07/2011	22.93	204.85
		09/26/2011	27.04	200.74
		01/27/2012	18.54	209.24
(IMW-20)		07/11/2012	25.21	202.57
		03/18/2013	25.50	202.28
		09/04/2013	27.32	200.46
		03/17/2014	18.85	208.93
		09/22/2014	27.47	200.31
		03/09/2015	23.94	203.84
		09/01/2015	28.46	199.32
MW-21	231.45	03/23/2009	27.16	204.29
		06/01/2009	27.75	203.70
		08/06/2009	29.79	201.66
		09/14/2009	30.11	201.34
		12/03/2009	28.95	202.50
		03/24/2010	27.06	204.39
		06/08/2010	24.71	206.74
		09/29/2010	29.76	201.69
		12/10/2010	27.10	204.35
		03/22/2011	23.51	207.94
		06/07/2011	25.69	205.76
		09/26/2011	29.72	201.73
		01/27/2012	21.69	209.76
(IMW-21)		07/11/2012	28.03	203.42
		03/18/2013	27.93	203.52
		09/04/2013	30.17	201.28
		03/17/2014	21.30	210.15
		09/22/2014	30.24	201.21
		03/09/2015	26.80	204.65
		09/01/2015	30.90	200.55

Table 6
Groundwater Elevation Data
H&V Fiber Corporation
Corvallis, Oregon

Well Identification	TOC Elevation (feet MSL)	Monitoring Summary		
		Date Measured	Depth to Water (feet below TOC)	Groundwater Elevation (feet MSL)
MW-22	232.05	03/23/2009	27.32	204.73
		06/01/2009	27.98	204.07
		08/06/2009	30.10	201.95
		09/14/2009	30.40	201.65
		12/03/2009	29.20	202.85
		03/24/2010	27.23	204.82
		06/08/2010	23.62	208.43
		09/29/2010	-	-
		12/10/2010	27.19	204.86
		03/22/2011	23.62	208.43
		06/07/2011	25.88	206.17
		09/26/2011	30.03	202.02
		01/27/2012	-	-
(IMW-22)		07/11/2012	28.51	203.54
		03/18/2013	28.19	203.86
		09/04/2013	30.48	201.57
		03/17/2014	21.61	210.44
		09/22/2014	30.69	201.36
		03/09/2015	26.97	205.08
		09/01/2015	31.29	200.76
DMW-23[a]	223.57	08/06/2009	26.33	197.24
		09/14/2009	24.09	199.48
		12/03/2009	25.74	197.83
		03/24/2010	23.89	199.68
		06/08/2010	17.43	206.14
		09/29/2010	28.02	195.55
		12/10/2010	23.06	200.51
		03/22/2011	21.56	202.01
		06/07/2011	23.47	200.10
		09/26/2011	27.11	196.46
		10/13/2011	28.41	195.16
		10/17/2011	28.88	194.69
		01/27/2012	16.69	206.88
		02/01/2012	14.26	209.31
		07/11/2012	28.50	195.07
		03/18/2013	34.36	189.21
		05/09/2013	31.38	192.19
		05/22/2013	30.87	192.70
		06/03/2013	29.03	194.54
		07/09/2013	31.40	192.17
		07/31/2013	32.70	190.87
		09/04/2013	29.77	193.80
		10/28/2013	30.70	192.87
		11/06/2013	29.10	194.47
		02/04/2014	32.40	191.17

Table 6
Groundwater Elevation Data
H&V Fiber Corporation
Corvallis, Oregon

Well Identification	TOC Elevation (feet MSL)	Monitoring Summary		
		Date Measured	Depth to Water (feet below TOC)	Groundwater Elevation (feet MSL)
DMW-23[a]		02/21/2014	27.80	195.77
		03/04/2014	25.68	197.89
		03/17/2014	24.00	199.57
		04/01/2014	26.40	197.17
		05/15/2014	28.98	194.59
		06/03/2014	30.55	193.02
		07/09/2014	35.63	187.94
		08/14/2014	27.90	195.67
		09/22/2014	29.30	194.27
		10/07/2014	34.34	189.23
		11/05/2014	35.60	187.97
		12/01/2014	33.40	190.17
		01/21/2015	29.60	193.97
		03/09/2015	28.53	195.04
		05/18/2015	35.55	188.02
		06/10/2015	36.90	186.67
		07/08/2015	37.22	186.35
		08/10/2015	35.62	187.95
		09/01/2015	35.68	187.89
		12/14/2015	35.53	188.04
		01/15/2016	17.83	205.74
IMW-24[a]	226.18	08/06/2009	28.28	197.90
		09/14/2009	26.41	199.77
		12/03/2009	28.04	198.14
		03/24/2010	26.18	200.00
		06/08/2010	20.18	206.00
	227.00	09/29/2010	24.09	202.91
		12/10/2010	25.63	201.37
		03/22/2011	24.34	202.66
		06/07/2011	25.92	201.08
		09/26/2011	29.39	197.61
		10/13/2011	26.00	201.00
		10/17/2011	30.83	196.17
		01/21/2012	26.50	200.50
		01/27/2012	20.07	206.93
		02/01/2012	16.87	210.13
		02/22/2012	26.50	200.50
		02/23/2012	27.40	199.60
		02/27/2012	26.90	200.10
		02/27/2012	27.60	199.40
		03/01/2012	27.60	199.40
		03/04/2012	26.85	200.15
		03/06/2012	26.90	200.10
		03/15/2012	25.90	201.10
		03/16/2012	26.10	200.90

Table 6
Groundwater Elevation Data
H&V Fiber Corporation
Corvallis, Oregon

Well Identification	TOC Elevation (feet MSL)	Monitoring Summary		
		Date Measured	Depth to Water (feet below TOC)	Groundwater Elevation (feet MSL)
IMW-24[a]		03/20/2012	25.10	201.90
		03/29/2012	23.30	203.70
		04/10/2012	21.30	205.70
		04/13/2012	24.00	203.00
		04/19/2012	25.60	201.40
		05/01/2012	26.60	200.40
		05/04/2012	26.40	200.60
		05/10/2012	27.00	200.00
		07/11/2012	-	-
		03/18/2013	29.53	197.47
		05/09/2013	28.10	198.90
		05/22/2013	27.73	199.27
		06/03/2013	25.86	201.14
		07/09/2013	27.50	199.50
		07/31/2013	27.70	199.30
		09/04/2013	27.75	199.25
		10/28/2013	28.70	198.30
		11/06/2013	27.60	199.40
		02/04/2014	28.00	199.00
		02/21/2014	23.80	203.20
		03/04/2014	23.00	204.00
		03/17/2014	23.12	203.88
		04/01/2014	23.02	203.98
		05/15/2014	26.66	200.34
		06/03/2014	28.61	198.39
		07/09/2014	27.68	199.32
		08/14/2014	28.80	198.20
		09/22/2014	30.92	196.08
		10/07/2014	30.52	196.48
		11/05/2014	31.70	195.30
		12/01/2014	29.55	197.45
		01/21/2015	25.71	201.29
		03/09/2015	24.26	202.74
		05/18/2015	28.38	198.62
		06/10/2015	25.55	201.45
		07/08/2015	32.00	195.00
		08/10/2015	25.30	201.70
		09/01/2015	24.40	202.60
		11/05/2015	Dry	
		12/14/2015	30.30	196.70
		01/15/2016	20.14	206.86
DMW-24[a]	225.65	08/06/2009	28.63	197.02
		09/14/2009	26.21	199.44
		12/03/2009	27.65	198.00
		12/03/2009	27.62	198.03

Table 6
Groundwater Elevation Data
H&V Fiber Corporation
Corvallis, Oregon

Well Identification	TOC Elevation (feet MSL)	Monitoring Summary		
		Date Measured	Depth to Water (feet below TOC)	Groundwater Elevation (feet MSL)
DMW-24[a]		03/24/2010	25.92	199.73
		06/08/2010	19.62	206.03
	226.52	09/29/2010	28.57	197.95
		12/10/2010	25.03	201.49
		03/22/2011	24.16	202.36
		06/07/2011	25.78	200.74
		09/26/2011	29.20	197.32
		10/13/2011	30.38	196.14
		10/17/2011	25.35	201.17
		01/27/2012	22.32	204.20
		02/01/2012	16.43	210.09
		04/10/2012	21.67	204.85
		04/13/2012	24.00	202.52
		04/19/2012	25.50	201.02
		05/01/2012	26.50	200.02
		05/04/2012	26.33	200.19
		05/10/2012	27.00	199.52
		07/11/2012	28.60	197.92
		03/18/2013	32.66	193.86
	225.65	05/09/2013	27.30	198.35
		05/22/2013	27.00	198.65
		06/03/2013	24.27	201.38
		07/09/2013	26.20	199.45
		07/31/2013	26.68	198.97
		09/04/2013	28.28	197.37
		10/28/2013	27.68	197.97
		11/06/2013	26.94	198.71
		02/04/2014	29.19	196.46
		02/21/2014	23.55	202.10
		03/04/2014	23.50	202.15
		03/17/2014	22.20	203.45
		04/01/2014	22.02	203.63
		05/15/2014	26.19	199.46
		06/03/2014	27.59	198.06
		07/09/2014	30.55	195.97
		08/14/2014	30.49	196.03
		09/22/2014	32.00	194.52
		10/07/2014	31.70	194.82
		11/05/2014	31.78	194.74
		12/01/2014	32.11	194.41
		01/21/2015	27.45	199.07
		03/09/2015	24.20	202.32
		05/18/2015	32.29	194.23
		06/10/2015	34.26	192.26
		07/08/2015	35.23	191.29

Table 6
Groundwater Elevation Data
H&V Fiber Corporation
Corvallis, Oregon

Well Identification	TOC Elevation (feet MSL)	Monitoring Summary		
		Date Measured	Depth to Water (feet below TOC)	Groundwater Elevation (feet MSL)
DMW-24[a]		08/10/2015	34.35	192.17
		09/01/2015	34.11	192.41
		11/05/2015	35.60	190.92
		12/14/2015	34.69	191.83
		01/15/2016	19.73	206.79
IMW-25[a]	223.60	08/06/2009	26.81	196.79
		09/14/2009	24.28	199.32
		12/03/2009	26.12	197.48
		03/24/2010	24.14	199.46
		06/08/2010	15.89	207.71
	224.41	09/29/2010	22.79	201.62
		12/10/2010	22.15	202.26
		03/22/2011	21.94	202.47
		06/07/2011	23.84	200.57
		09/26/2011	27.32	197.09
		10/13/2011	26.70	197.71
		10/17/2011	26.25	198.16
		01/21/2012	24.10	200.31
		01/27/2012	12.21	212.20
		02/01/2012	14.87	209.54
		02/22/2012	23.60	200.81
		02/23/2012	25.35	199.06
		02/27/2012	24.75	199.66
		02/27/2012	25.40	199.01
		03/01/2012	24.60	199.81
		03/04/2012	24.90	199.51
		03/06/2012	24.70	199.71
		03/15/2012	22.60	201.81
		03/16/2012	22.20	202.21
		03/20/2012	22.25	202.16
		03/29/2012	19.60	204.81
		04/10/2012	19.00	205.41
		04/13/2012	21.80	202.61
		04/19/2012	23.50	200.91
		05/01/2012	24.40	200.01
		05/04/2012	24.60	199.81
		05/10/2012	25.30	199.11
		07/11/2012	-	-
		03/18/2013	27.91	196.50
		05/09/2013	27.20	197.21
		05/22/2013	26.33	198.08
		06/03/2013	24.50	199.91
		07/09/2013	26.00	198.41
		07/31/2013	26.10	198.31
		09/04/2013	27.26	197.15

Table 6
Groundwater Elevation Data
H&V Fiber Corporation
Corvallis, Oregon

Well Identification	TOC Elevation (feet MSL)	Monitoring Summary		
		Date Measured	Depth to Water (feet below TOC)	Groundwater Elevation (feet MSL)
IMW-25[a]		10/28/2013	27.40	197.01
		11/06/2013	25.90	198.51
		02/04/2014	27.00	197.41
		02/21/2014	16.20	208.21
		03/04/2014	19.90	204.51
		03/17/2014	21.10	203.31
		04/01/2014	20.83	203.58
		05/15/2014	25.58	198.83
		06/03/2014	26.42	197.99
		07/09/2014	26.76	197.65
		08/14/2014	26.60	197.81
		09/22/2014	28.35	196.06
		10/07/2014	28.70	195.71
		11/05/2014	29.70	194.71
		12/01/2014	21.00	203.41
		01/21/2015	23.10	201.31
		03/09/2015	22.22	202.19
		05/18/2015	28.61	195.80
		06/10/2015	Dry	
		07/08/2015	Dry	
		08/10/2015	Dry	
		09/01/2015	Dry	
		11/05/2015	Dry	
		12/14/2015	23.09	201.32
		01/15/2016	17.74	206.67
DMW-25[a]	223.26	08/06/2009	26.92	196.34
		09/14/2009	24.56	198.70
		12/03/2009	26.32	196.94
		03/24/2010	24.58	198.68
		06/08/2010	17.20	206.06
	224.15	09/29/2010	30.10	194.05
		12/10/2010	22.77	201.38
		03/22/2011	22.93	201.22
		06/07/2011	24.39	199.76
		09/26/2011	27.85	196.30
		10/13/2011	31.15	193.00
		10/17/2011	31.58	192.57
		01/27/2012	18.24	205.91
		02/01/2012	13.97	210.18
		04/10/2012	19.00	205.15
		04/13/2012	21.67	202.48
		04/19/2012	23.42	200.73
		05/01/2012	24.33	199.82
		05/04/2012	24.50	199.65
		05/10/2012	25.25	198.90

Table 6
Groundwater Elevation Data
H&V Fiber Corporation
Corvallis, Oregon

Well Identification	TOC Elevation (feet MSL)	Monitoring Summary		
		Date Measured	Depth to Water (feet below TOC)	Groundwater Elevation (feet MSL)
DMW-25[a]		07/11/2012	30.10	194.05
		03/18/2013	29.74	194.41
		05/09/2013	31.85	192.30
		05/22/2013	30.40	193.75
		06/03/2013	26.40	197.75
		07/09/2013	27.55	196.60
		07/31/2013	27.90	196.25
		09/04/2013	32.86	191.29
		10/28/2013	31.29	192.86
		11/06/2013	30.50	193.65
		02/04/2014	33.60	190.55
		02/21/2014	28.20	195.95
		03/04/2014	29.20	194.95
		03/17/2014	29.06	195.09
		04/01/2014	28.93	195.22
		05/15/2014	31.82	192.33
		06/03/2014	33.01	191.14
		07/09/2014	27.77	195.49
		08/14/2014	27.17	196.09
		09/22/2014	29.02	194.24
		10/07/2014	28.63	194.63
		12/01/2014	28.03	195.23
		01/21/2015	23.93	199.33
		03/09/2015	22.43	200.83
		05/18/2015	28.61	194.65
		06/10/2015	30.58	192.68
		07/08/2015	31.29	191.97
		08/10/2015	30.59	192.67
		09/01/2015	30.12	193.14
		11/05/2015	31.93	191.33
		12/14/2015	30.56	192.70
		01/15/2016	16.49	206.77
IMW-26[a]	225.66	08/06/2009	28.65	197.01
		09/14/2009	25.82	199.84
		12/03/2009	27.46	198.20
		03/24/2010	26.09	199.57
		06/08/2010	19.67	205.99
	226.67	09/29/2010	24.37	202.30
		12/10/2010	25.71	200.96
		03/22/2011	23.99	202.68
		06/07/2011	25.66	201.01
		09/26/2011	29.44	197.23
		10/13/2011	27.34	199.33
		10/17/2011	25.10	201.57
		01/21/2012	26.10	200.57

Table 6
Groundwater Elevation Data
H&V Fiber Corporation
Corvallis, Oregon

Well Identification	TOC Elevation (feet MSL)	Monitoring Summary		
		Date Measured	Depth to Water (feet below TOC)	Groundwater Elevation (feet MSL)
IMW-26[a]		01/27/2012	18.24	208.43
		02/01/2012	16.66	210.01
		02/22/2012	26.40	200.27
		02/23/2012	26.50	200.17
		02/27/2012	26.87	199.80
		02/27/2012	26.40	200.27
		03/01/2012	27.30	199.37
		03/04/2012	26.80	199.87
		03/06/2012	25.60	201.07
		03/15/2012	25.70	200.97
		03/16/2012	24.70	201.97
		03/20/2012	24.20	202.47
		03/22/2012	19.40	207.27
		03/29/2012	22.60	204.07
		04/10/2012	21.25	205.42
		04/13/2012	24.00	202.67
		04/19/2012	25.42	201.25
		05/01/2012	25.42	201.25
		05/04/2012	25.00	201.67
		05/10/2012	25.75	200.92
		07/11/2012	-	-
		03/18/2013	29.42	197.25
		05/09/2013	29.34	197.33
		05/22/2013	28.81	197.86
		06/03/2013	26.89	199.78
		07/09/2013	27.70	198.97
		07/31/2013	28.00	198.67
		09/04/2013	28.40	198.27
		10/28/2013	29.10	197.57
		11/06/2013	28.00	198.67
		02/04/2014	29.50	197.17
		02/21/2014	23.79	202.88
		03/04/2014	29.80	196.87
		03/17/2014	23.07	203.60
		04/01/2014	23.40	203.27
		05/15/2014	26.86	199.81
		06/03/2014	28.42	198.25
		07/09/2014	27.60	199.07
		08/14/2014	28.10	198.57
		09/22/2014	29.62	197.05
		10/07/2014	29.62	197.05
		11/05/2014	29.80	196.87
		12/01/2014	28.76	197.91
		01/21/2015	25.10	201.57
		03/09/2015	24.37	202.30

Table 6
Groundwater Elevation Data
H&V Fiber Corporation
Corvallis, Oregon

Well Identification	TOC Elevation (feet MSL)	Monitoring Summary		
		Date Measured	Depth to Water (feet below TOC)	Groundwater Elevation (feet MSL)
IMW-26[a]		05/18/2015	27.64	199.03
		06/10/2015	26.10	200.57
		07/08/2015	29.80	196.87
		08/10/2015	26.55	200.12
		09/01/2015	27.70	198.97
		11/05/2015	29.80	196.87
		12/14/2015	27.85	198.82
		01/15/2016	20.14	206.53
DMW-26	226.24	03/09/2015	24.60	201.64
		05/18/2015	30.76	195.48
		06/10/2015	32.72	193.52
		07/08/2015	33.58	192.66
		08/10/2015	32.60	193.64
		09/01/2015	32.34	193.90
		11/05/2015	33.30	192.94
		12/14/2015	32.81	193.43
		01/15/2016	19.65	206.59
IMW-27	223.78	02/19/2013	26.00	197.78
		03/18/2013	26.69	197.09
Injecting for ERD Test		05/09/2013	18.00	205.78
		05/22/2013	7.80	215.98
		06/03/2013	5.75	218.03
IMW-27		07/09/2013	4.60	219.18
		07/31/2013	5.75	218.03
ETEC system down		09/04/2013	20.52	203.26
		10/28/2013	4.33	219.45
ERD Pilot Test Over		11/06/2013	19.00	204.78
		02/04/2014	27.70	196.08
		02/21/2014	7.20	216.58
		03/04/2014	19.83	203.95
ERD Pilot Test Over		03/17/2014	16.86	206.92
		04/01/2014	16.54	207.24
		05/15/2014	20.64	203.14
		06/03/2014	24.00	199.78
		07/09/2014	25.30	198.48
		08/14/2014	25.13	198.65
		09/22/2014	26.89	196.89
		10/07/2014	26.44	197.34
		11/05/2014	27.15	196.63
		12/01/2014	25.53	198.25
		01/21/2015	20.60	203.18
		03/09/2015	19.59	204.19
		05/18/2015	25.03	198.75
		06/10/2015	27.02	196.76

Table 6
Groundwater Elevation Data
H&V Fiber Corporation
Corvallis, Oregon

Well Identification	TOC Elevation (feet MSL)	Monitoring Summary		
		Date Measured	Depth to Water (feet below TOC)	Groundwater Elevation (feet MSL)
ERD Pilot Test Over		07/08/2015	28.55	195.23
		08/10/2015	27.40	196.38
		09/01/2015	27.50	196.28
		11/05/2015	28.50	195.28
		12/14/2015	27.51	196.27
		01/15/2016	16.37	207.41
DMW-27	223.83	02/19/2013	26.46	197.37
		03/18/2013	27.09	196.74
Injecting for ERD Test		05/09/2013	23.98	199.85
		05/22/2013	17.30	206.53
		06/03/2013	19.50	204.33
		07/09/2013	14.40	209.43
		07/31/2013	12.05	211.78
ETEC system down		09/04/2013	24.88	198.95
		10/28/2013	17.57	206.26
ERD Pilot Test Over		11/06/2013	23.95	199.88
		02/04/2014	26.10	197.73
		02/21/2014	11.00	212.83
		03/04/2014	22.93	200.90
		03/17/2014	18.81	205.02
		04/01/2014	18.11	205.72
		05/15/2014	22.65	201.18
		06/03/2014	24.77	199.06
		07/09/2014	26.02	197.81
		08/14/2014	25.91	197.92
		09/22/2014	27.67	196.16
		10/07/2014	27.36	196.47
		11/05/2014	28.20	195.63
		12/01/2014	26.63	197.20
		01/21/2015	25.55	198.28
		03/09/2015	20.20	203.63
		05/18/2015	26.06	197.77
		06/10/2015	28.09	195.74
		07/08/2015	29.52	194.31
		08/10/2015	28.43	195.40
		09/01/2015	28.23	195.60
		11/05/2015	29.50	194.33
		12/14/2015	28.26	195.57
		01/15/2016	16.62	207.21
IMW-28	223.48	02/20/2013	23.44	200.04
		03/18/2013	22.90	200.58
		05/09/2013	22.85	200.63
		05/22/2013	22.45	201.03
		06/03/2013	21.33	202.15

Table 6
Groundwater Elevation Data
H&V Fiber Corporation
Corvallis, Oregon

Well Identification	TOC Elevation (feet MSL)	Monitoring Summary		
		Date Measured	Depth to Water (feet below TOC)	Groundwater Elevation (feet MSL)
IMW-28		07/09/2013	22.15	201.33
		07/31/2013	21.80	201.68
		09/04/2013	20.10	203.38
		10/28/2013	22.35	201.13
		11/06/2013	21.40	202.08
		02/04/2014	25.82	197.66
		02/21/2014	20.00	203.48
		03/04/2014	18.20	205.28
		03/17/2014	18.23	205.25
		04/01/2014	17.58	205.90
		05/15/2014	19.95	203.53
		06/03/2014	21.52	201.96
		07/09/2014	22.29	201.19
		08/14/2014	23.55	199.93
		09/22/2014	22.91	200.57
		10/07/2014	22.75	200.73
		11/05/2014	26.20	197.28
		12/01/2014	22.90	200.58
		01/21/2015	19.10	204.38
		03/09/2015	19.92	203.56
		05/18/2015	22.75	200.73
		06/10/2015	22.12	201.36
		07/08/2015	23.03	200.45
		08/10/2015	22.60	200.88
		09/01/2015	26.13	197.35
		11/05/2015	29.50	193.98
		12/14/2015	23.15	200.33
		01/15/2016	16.56	206.92
DMW-28	223.74	02/20/2013	25.85	197.89
		03/18/2013	26.15	197.59
		06/03/2013	22.36	201.38
		05/09/2013	24.10	199.64
		05/22/2013	23.06	200.68
		06/03/2013	22.36	201.38
		07/09/2013	23.50	200.24
		07/31/2013	23.98	199.76
		09/04/2013	25.36	198.38
		10/28/2013	24.80	198.94
		11/06/2013	24.30	199.44
		02/04/2014	25.80	197.94
		02/21/2014	19.95	203.79
		03/04/2014	20.20	203.54
		03/17/2014	19.26	204.48
		04/01/2014	18.99	204.75
		05/15/2014	22.95	200.79

Table 6
Groundwater Elevation Data
H&V Fiber Corporation
Corvallis, Oregon

Well Identification	TOC Elevation (feet MSL)	Monitoring Summary		
		Date Measured	Depth to Water (feet below TOC)	Groundwater Elevation (feet MSL)
DMW-28		06/03/2014	24.35	199.39
		07/09/2014	25.65	198.09
		08/14/2014	25.35	198.39
		09/22/2014	26.97	196.77
		10/07/2014	26.72	197.02
		11/05/2014	28.02	195.72
		12/01/2014	26.40	197.34
		01/21/2015	21.73	202.01
		03/09/2015	20.75	202.99
		05/18/2015	25.93	197.81
		06/10/2015	27.52	196.22
		07/08/2015	28.44	195.30
		08/10/2015	27.75	195.99
		09/01/2015	27.82	195.92
		11/05/2015	28.98	194.76
		12/14/2015	28.12	195.62
		01/15/2016	16.92	206.82
IMW-29	223.51	02/20/2013	26.44	197.07
		03/18/2013	26.82	196.69
		05/09/2013	27.00	196.51
		05/22/2013	25.82	197.69
		06/03/2013	23.52	199.99
		07/09/2013	25.05	198.46
		07/31/2013	24.70	198.81
		09/04/2013	23.90	199.61
		10/28/2013	26.10	197.41
		11/06/2013	23.90	199.61
		02/04/2014	25.30	198.21
		02/21/2014	21.05	202.46
		03/04/2014	18.20	205.31
		03/17/2014	19.75	203.76
		04/01/2014	20.11	203.40
		05/15/2014	21.20	202.31
		06/03/2014	23.99	199.52
		07/09/2014	23.31	200.20
		08/14/2014	23.10	200.41
		09/22/2014	24.80	198.71
		10/07/2014	24.70	198.81
		11/05/2014	24.40	199.11
		12/01/2014	27.10	196.41
		01/21/2015	21.90	201.61
		03/09/2015	21.48	202.03
		05/18/2015	24.00	199.51
		06/10/2015	23.56	199.95
		07/08/2015	25.00	198.51

Table 6
Groundwater Elevation Data
H&V Fiber Corporation
Corvallis, Oregon

Well Identification	TOC Elevation (feet MSL)	Monitoring Summary		
		Date Measured	Depth to Water (feet below TOC)	Groundwater Elevation (feet MSL)
IMW-29		08/10/2015	24.20	199.31
		09/01/2015	24.95	198.56
		11/05/2015	25.50	198.01
		12/14/2015	24.79	198.72
		01/15/2016	15.81	207.70
DMW-29	223.75	02/20/2013	26.88	196.87
		03/18/2013	27.54	196.21
		05/09/2013	34.35	189.40
		05/22/2013	27.45	196.30
		06/03/2013	24.61	199.14
		07/09/2013	29.10	194.65
		07/31/2013	26.20	197.55
		09/04/2013	35.81	187.94
		10/28/2013	28.75	195.00
		11/06/2013	27.80	195.95
		02/04/2014	32.10	191.65
		02/21/2014	22.45	201.30
		03/04/2014	23.00	200.75
		03/17/2014	21.22	202.53
		04/01/2014	21.81	201.94
		05/15/2014	26.21	197.54
		06/03/2014	27.53	196.22
		07/09/2014	28.19	195.56
		08/14/2014	27.43	196.32
		09/22/2014	31.25	192.50
		10/07/2014	30.11	193.64
		11/05/2014	39.20	184.55
		12/01/2014	32.15	191.60
		01/21/2015	26.50	197.25
		03/09/2015	24.04	199.71
		05/18/2015	31.01	192.74
		06/10/2015	36.28	187.47
		07/08/2015	33.75	190.00
		08/10/2015	40.37	183.38
		09/01/2015	34.02	189.73
		11/05/2015	37.45	186.30
		12/14/2015	33.77	189.98
		01/15/2016	17.31	206.44
IMW-30	223.67	02/20/2013	25.10	198.57
		03/18/2013	25.32	198.35
		05/09/2013	23.82	199.85
		05/22/2013	23.27	200.40
		06/03/2013	21.90	201.77
		07/09/2013	23.15	200.52

Table 6
Groundwater Elevation Data
H&V Fiber Corporation
Corvallis, Oregon

Well Identification	TOC Elevation (feet MSL)	Monitoring Summary		
		Date Measured	Depth to Water (feet below TOC)	Groundwater Elevation (feet MSL)
IMW-30		07/31/2013	23.53	200.14
		09/04/2013	24.96	198.71
		10/28/2013	24.60	199.07
		11/06/2013	24.05	199.62
		02/04/2014	25.23	198.44
		02/21/2014	20.08	203.59
		03/04/2014	20.13	203.54
		03/17/2014	19.05	204.62
		04/01/2014	18.55	205.12
		05/15/2014	22.60	201.07
		06/03/2014	23.96	199.71
		07/09/2014	25.12	198.55
		08/14/2014	24.92	198.75
		09/22/2014	26.29	197.38
		10/07/2014	26.20	197.47
		11/05/2014	27.22	196.45
		12/01/2014	25.95	197.72
		01/21/2015	21.20	202.47
		03/09/2015	20.25	203.42
		05/18/2015	25.01	198.66
		06/10/2015	26.55	197.12
		07/08/2015	27.60	196.07
		08/10/2015	26.81	196.86
		09/01/2015	27.08	196.59
		11/05/2015	27.60	196.07
		12/14/2015	27.20	196.47
		01/15/2016	16.85	206.82
DMW-30	223.66	12/14/2015	28.34	195.32
		01/15/2016	16.90	206.76
IMW-31	223.73	02/20/2013	26.11	197.62
		03/18/2013	26.89	196.84
		05/09/2013	25.25	198.48
		05/22/2013	24.60	199.13
		06/03/2013	22.79	200.94
		07/09/2013	24.30	199.43
		07/31/2013	24.48	199.25
		09/04/2013	25.75	197.98
		10/28/2013	25.30	198.43
		11/06/2013	24.71	199.02
		02/04/2014	26.25	197.48
		02/21/2014	20.63	203.10
		03/04/2014	21.06	202.67
		03/17/2014	20.03	203.70
		04/01/2014	19.60	204.13

Table 6
Groundwater Elevation Data
H&V Fiber Corporation
Corvallis, Oregon

Well Identification	TOC Elevation (feet MSL)	Monitoring Summary		
		Date Measured	Depth to Water (feet below TOC)	Groundwater Elevation (feet MSL)
IMW-31		05/15/2014	23.97	199.76
		06/03/2014	25.26	198.47
		07/09/2014	26.04	197.69
		08/14/2014	25.51	198.22
		09/22/2014	26.34	197.39
		11/05/2014	28.00	195.73
		12/01/2014	26.39	197.34
		01/21/2015	22.50	201.23
		03/09/2015	20.10	203.63
		05/18/2015	26.30	197.43
		06/10/2015	27.83	195.90
		07/08/2015	28.19	195.54
		08/10/2015	27.60	196.13
		09/01/2015	27.55	196.18
IMW-32	221.89	12/14/2015	24.73	197.16
		01/15/2016	14.92	206.97
DMW-32	222.46	03/09/2015	18.58	203.88
		05/18/2015	22.79	199.67
		06/10/2015	24.61	197.85
		07/08/2015	25.53	196.93
		08/10/2015	24.98	197.48
		09/01/2015	25.30	197.16
		11/05/2015	26.20	196.26
		12/14/2015	25.29	197.17
		01/15/2016	15.52	206.94
IMW-33	221.91	03/17/2014	18.50	203.41
		06/03/2014	21.97	199.94
		09/24/2014	24.54	197.37
		12/01/2014	23.92	197.99
		03/09/2015	18.94	202.97
		09/01/2015	26.52	195.39
IMW-33		01/15/2016	16.35	205.56
DMW-33	221.93	02/04/2014	25.12	196.81
		03/17/2014	18.34	203.59
		06/03/2014	23.61	198.32
		09/24/2014	24.40	197.53
		12/01/2014	24.37	197.56
		03/09/2015	19.15	202.78
		09/01/2015	27.02	194.91
		01/15/2016	16.02	205.91
IMW-34	222.45	02/04/2014	24.66	197.79
		03/17/2014	17.60	204.85
		06/03/2014	23.12	199.33

Table 6
Groundwater Elevation Data
H&V Fiber Corporation
Corvallis, Oregon

Well Identification	TOC Elevation (feet MSL)	Monitoring Summary		
		Date Measured	Depth to Water (feet below TOC)	Groundwater Elevation (feet MSL)
IMW-34		09/22/2014	25.18	197.27
		12/01/2014	21.90	200.55
		03/09/2015	20.71	201.74
		09/01/2015	27.14	195.31
		01/15/2016	17.11	205.34
DMW-34	222.54	02/04/2014	25.35	197.19
		03/17/2014	17.71	204.83
		06/03/2014	24.10	198.44
		09/22/2014	25.50	197.04
		12/01/2014	21.83	200.71
		03/09/2015	20.76	201.78
		09/01/2015	27.62	194.92
		01/15/2016	16.78	205.76
IMW-35	222.64	02/04/2014	22.76	199.88
		03/17/2014	15.66	206.98
		06/03/2014	21.94	200.70
		09/22/2014	23.96	198.68
		12/01/2014	19.05	203.59
		03/09/2015	21.69	200.95
		09/01/2015	25.05	197.59
		01/15/2016	17.63	205.01
DMW-35	222.76	02/04/2014	22.60	200.16
		03/17/2014	15.45	207.31
		06/03/2014	21.88	200.88
		09/22/2014	23.88	198.88
		12/01/2014	19.19	203.57
		03/09/2015	21.21	201.55
		09/01/2015	25.19	197.57
		01/15/2016	17.26	205.50
DMW-36	223.48	03/09/2015	20.46	203.02
		06/10/2015	28.13	195.35
		07/08/2015	29.09	194.39
		08/10/2015	28.25	195.23
		09/01/2015	28.34	195.14
		11/05/2015	29.50	193.98
		12/14/2015	28.43	195.05
		01/15/2016	16.64	206.84
DMW-37	222.50	03/09/2015	18.64	203.86
		06/10/2015	23.80	198.70
		07/08/2015	24.82	197.68
		09/01/2015	24.79	197.71
		12/14/2015	24.27	198.23
		01/15/2016	15.60	206.90

Table 6
Groundwater Elevation Data
H&V Fiber Corporation
Corvallis, Oregon

Well Identification	TOC Elevation (feet MSL)	Monitoring Summary		
		Date Measured	Depth to Water (feet below TOC)	Groundwater Elevation (feet MSL)
DMW-38	226.06	03/09/2015	23.53	202.53
		06/10/2015	29.37	196.69
		07/08/2015	30.01	196.05
		09/01/2015	30.04	196.02
		12/14/2015	27.34	198.72
		01/15/2016	19.75	206.31
DMW-39	227.45	03/09/2015	27.79	199.66
		06/10/2015	29.67	197.78
		07/08/2015	30.37	197.08
		09/01/2015	30.74	196.71
		12/14/2015	19.97	207.48
		01/15/2016	23.22	204.23
IMW-40	222.50	12/14/2015	24.04	198.46
		01/15/2016	15.46	207.04
DMW-40	222.61	12/14/2015	24.76	197.85
		01/15/2016	15.75	206.86
DMW-41	224.16	12/14/2015	27.29	196.87
		01/15/2016	17.28	206.88
DMW-42	224.09	12/14/2015	25.51	198.58
		01/15/2016	17.14	206.95

Notes:

[a] Elevations surveyed by PNG and tied into existing Survey from BlueDot, Inc. Wells re-surveyed after adding SVE well heads in July 2010

TOC = Top of casing

MSL = Mean sea level

- = Not measured

Table 7
Neighborhood Area Wells Groundwater Analytical Results - VOCs (ug/L)
H&V Fiber Corporation
Corvallis, Oregon

Well	Date	Tetrachloroethene	Trichloroethene	Cis-1,2-dichloroethene	Trans-1,2-dichloroethene	1,1-Dichloroethene	1,1-Dichloroethane	Vinyl chloride
Neighborhood Area Wells								
MW-20	01/05/2009	0.5 U	55	3.1	0.5 U	0.5 U	0.5 U	0.5 U
	03/23/2009	0.18 J	48	2.6	0.18 J	0.18 J	0.5 U	0.5 U
	06/01/2009	0.15 J	42	0.5 U	0.5 U	0.18 J	0.5 U	0.11 J
	09/14/2009	0.5 U	31	1.6	0.5 U	0.5 U	0.5 U	0.5 U
	12/03/2009	0.18 J	34	2.1	0.18 J	0.16 J	0.5 U	0.12 J
	03/24/2010	0.11 J	13	0.80	0.5 U	0.5 U	-	0.5 U
	06/08/2010	0.09 J	27	1.6	0.10 J	0.10 U	-	0.09 U
	09/29/2010	0.10 J	24	1.5	0.11 J	0.12 J	-	0.12 J
	03/22/2011	0.14 J	25	1.1	0.5 U	0.5 U	-	0.5 U
	06/07/2011	0.10 J	32	1.8	0.14 J	0.13 J	-	0.5 U
duplicate (MW-99)	06/07/2011	0.10 J	30	1.8	0.12 J	0.12 J	-	0.5 U
	09/26/2011	0.5 U	29	1.7	0.5 U	0.5 U	-	0.5 U
	07/16/2012	0.5 U	32	1.9	0.5 U	0.5 U	-	0.5 U
	03/20/2013	1 U	27	1.6	1 U	1 U	-	1 U
	09/04/2013	1 U	18	1.2	1 U	1 U	-	1 U
	03/17/2014	1 U	28	1.4	1 U	1 U	-	1 U
	09/22/2014	1 U	20	1.1	1 U	1 U	-	1 U
	03/13/2015	1 U	16	1.0	1 U	1 U	-	1 U
	09/01/2015	1 U	22	1.3	1 UJ3,UJ[1]	1 UJ3,UJ[1]	-	1 U
MW-21	01/05/2009	0.5 U	0.83	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	03/23/2009	0.39 J	0.87	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	06/01/2009	0.28 J	0.68	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	09/14/2009	0.5 U	0.78	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	12/03/2009	0.28 J	0.63	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
duplicate (MW-99)	12/03/2009	0.33 J	0.67	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	03/24/2010	0.23 J	0.67	0.5 U	0.5 U	0.5 U	-	0.5 U
	03/22/2011	0.27 J	0.68	0.5 U	0.5 U	0.5 U	-	0.5 U
	09/26/2011	0.5 U	0.65	0.5 U	0.5 U	0.5 U	-	0.5 U
	07/12/2012	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U
	09/04/2013	1 U	0.48 J	1 U	1 U	1 U	-	1 U
	09/22/2014	1 U	0.47 J	1 U	1 U	1 U	-	1 U
	09/01/2015	1 U	0.49 J	1 U	1 UJ3,UJ[1]	1 UJ3,UJ[1]	-	1 U
MW-22	01/05/2009	0.5 U	0.69	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	03/23/2009	0.5 U	0.63	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	06/01/2009	0.5 U	0.52	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	09/14/2009	0.5 U	0.58	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	12/03/2009	0.5 U	0.48 J	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U

Table 7
Neighborhood Area Wells Groundwater Analytical Results - VOCs (ug/L)
H&V Fiber Corporation
Corvallis, Oregon

Well	Date	Tetrachloroethene	Trichloroethene	Cis-1,2-dichloroethene	Trans-1,2-dichloroethene	1,1-Dichloroethene	1,1-Dichloroethane	Vinyl chloride
MW-22 (cont'd)	03/24/2010	0.5 U	0.49 J	0.5 U	0.5 U	0.5 U	-	0.5 U
	03/22/2011	0.5 U	0.56	0.5 U	0.5 U	0.5 U	-	0.5 U
	09/26/2011	0.5 U	0.56	0.5 U	0.5 U	0.5 U	-	0.5 U
MW-22 (cont'd)	07/12/2012	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U
duplicate (MW-99)	07/12/2012	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U
	09/04/2013	1 U	0.49 J	1 U	1 U	1 U	-	1 U
	09/22/2014	1 U	1 U	1 U	1 U	1 U	-	1 U
	09/01/2015	1 U	1 U	1 U	1 UJ3,UJ[1]	1 UJ3,UJ[1]	-	1 U
DEQ Screening Level Criteria for Water								
Ingestion and Inhalation of Tap Water (Residential)[a]		12	0.49	36	360	280	2.8	0.027
Volitilization to Outdoor Air (Residential)[b]		64,000	3,300	>S	>S	570,000	16,000	350
Volitilization to Outdoor Air (Occupational)[c]		>S	20,000	>S	>S	2,400,000	68,000	5,900
Vapor Intrusion (Residential)[d]		3,700	200	>S	>S	29,000	1,100	17
Vapor Intrusion (Occupational)[e]		48,000	3,700	>S	>S	360,000	14,000	880
GW in Excavation[f]		5,600	3,000	18,000	180,000	44,000	10,000	960
Portland Harbor JSCS Levels								
Upland Source Control Screening Level[g]		0.33	3.0	NA	1,000	NA	NA	0.24
2004 AWQC (Human Health - Organism Only)[h]		3.3	30	NA	10,000	NA	NA	2.4
2004 AWQC (Ecological Receptors - Chronic)[i]		840	21,900	NA	NA	NA	NA	NA
Oak Ridge Tier II (Ecological Receptors)[j]		98	47	590	590	25[l]	-	930 [k]

Table 7
Neighborhood Area Wells Groundwater Analytical Results - VOCs (ug/L)
H&V Corporation
Corvallis, Oregon

Notes:

[a] Risk-based concentration (RBC) for ingestion/inhalation in a residential setting (revised November 1, 2015)

[b] RBC for volatilization to outdoor air in a residential setting (revised November 1, 2015)

[c] RBC for volatilization to outdoor air in an occupational setting (revised November 1, 2015)

[d] RBC for vapor intrusion into buildings in a residential setting (revised November 1, 2015)

[e] RBC for vapor intrusion into buildings in an occupational setting (revised November 1, 2015)

[r] RBC for groundwater in excavation by a construction worker (revised November 1, 2015)

[g] DEQ, Portland Harbor JSCS, Table 3-1 (revised 7/16/07). Values listed are based on human health via fish ingestion

[h] DEQ, Portland Harbor JSCS, Table 3-1 (revised 7/16/07). Per DEQ's Ambient Water Quality Criteria for Organisms Only (DEQ 2004)

[i] DEQ, Portland Harbor JSCS, Table 3-1 (revised 7/16/07). Per DEQ's Ambient Water Quality Criteria - Ecologic Receptors - Chronic (DEQ 2004)

[j] DEQ, Portland Harbor JSCS, Table 3-1 (revised 7/16/07). Per Oak Ridge National Laboratory's Water Quality Criteria - Ecological Receptors - Tier II SCV
(Tier II SCV values were taken from Suter II, G.W. and Tsao, C.L., 1996. Toxicological Benchmarks for Screening Potential Contaminants of Concern for Effects on Aquatic Biota: 1996 Revision. ORNL publication ES/ER/TM-96/R2

[k] Ecological screening value adopted by EPA in Regions 3,5 and 6.

ug/L = Micrograms per liter

U = not detected at the associated reporting limit

UJ[1] = Data Validation Qualifier. The analyte was analyzed for, but not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

J = estimated trace concentration

J3 = the associated batch QC was outside the established quality control range for precision, value is estimated

- = Analyte not analyzed for this parameter

>S = This RBC exceeds the solubility limit

Table 8
Upgradient Area Wells Groundwater Analytical Results - VOCs (ug/L)
H&V Fiber Corporation
Corvallis, Oregon

Well	Date	Tetrachloroethene	Trichloroethene	Cis-1,2-dichloroethene	Trans-1,2-dichloroethene	1,1-Dichloroethene	1,1-Dichloroethane	Vinyl chloride
Upgradient Area Wells								
MW-1	04/03/1986	-	2.0	-	-	-	-	-
	05/28/1986	-	1.0	-	-	-	-	-
	06/27/1986	-	23	-	-	-	-	-
	07/30/1986	-	4.0	-	-	-	-	-
	09/04/1986	-	1.0	-	-	-	-	-
	10/13/1986	-	1.0	-	-	-	-	-
	11/14/1986	-	2.0	-	-	-	-	-
	12/22/1986	1 U	1.0	-	1 U	1 U	1 U	-
	06/29/1987	2 U	1.0	-	1 U	1 U	1 U	5.0 C
	09/23/1987	2 U	1 U	-	1 U	1 U	1 U	2 U
	12/22/1987	1 U	6.0	-	1 U	1 U	1 U	1 U
	03/22/1988	1 U	1 U	-	1 U	1 U	1 U	1 U
	06/01/1988	1 U	1 U	1 U	1 U	1 U	2.0	1 U
	09/01/1988	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	12/27/1988	1 U	1 U	-	1 U	1 U	1 U	1 U
	03/17/1989	1 U	1 U	1 U	1 U	1 U	1.0	1 U
	06/15/1989	1 U	1 U	1 U	1 U	1 U	4.0	1 U
	09/12/1989	1 U	1 U	1 U	1 U	1 U	2.0	1 U
	12/27/1989	1 U	1 U	-	1 U	1 U	2.0	1 U
	03/16/1990	1 U	1 U	1 U	1 U	1 U	3.0	1 U
	06/27/1990	1 U	1.0	1 U	1 U	1 U	4.0	1 U
	09/24/1990	1 U	1 U	1 U	1 U	1 U	4.0	1 U
	12/14/1990	1 U	1 U	1 U	1 U	1 U	3.0	1 U
	03/15/1991	1 U	1 U	1 U	1 U	1 U	2.0	1 U
	03/16/1992	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	03/16/1993	1 U	1 U	-	1 U	1 U	1 U	1 U
	08/30/1994	1 U	3.2	-	1 U	1 U	1 U	1 U
	09/12/1995	1 U	1 U	-	1 U	1 U	1 U	1 U
	09/06/1996	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	09/04/1997	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	09/04/1998	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	08/31/1999	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	09/12/2000	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	09/20/2001	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	12/18/2001	0.5 U	2.8	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	03/06/2002	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	06/13/2002	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	09/17/2002	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	09/23/2003	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	09/08/2004	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	09/07/2005	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	08/07/2006	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U

Table 8
Upgradient Area Wells Groundwater Analytical Results - VOCs (ug/L)
H&V Fiber Corporation
Corvallis, Oregon

Well	Date	Tetrachloroethene	Trichloroethene	Cis-1,2-dichloroethene	Trans-1,2-dichloroethene	1,1-Dichloroethene	1,1-Dichloroethane	Vinyl chloride
MW-1 (cont'd)	12/12/2006	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	09/26/2007	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	03/23/2009	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	03/25/2010	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U
	03/23/2011	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U
	07/12/2012	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U
	09/04/2013	1.7	2.7	0.91 J	1 U	1 U		1 U
	09/22/2014	1 U	0.49 J	1 U	1 U	1 U	-	1 U
	09/01/2015	1 U	1 U	1 U	1 UJ3,UJ[1]	1 UJ3,UJ[1]	-	1 U
MW-5	04/03/1986	-	46	-	-	-	-	-
	05/28/1986	-	1 U	-	-	-	-	-
	06/27/1986	-	1 U	-	-	-	-	-
	07/30/1986	-	1 U	-	-	-	-	-
	09/04/1986	-	1 U	-	-	-	-	-
	10/13/1986	-	1 U	-	-	-	-	-
	11/14/1986	-	1 U	-	-	-	-	-
	12/22/1986	1 U	1 U	-	1 U	1 U	1 U	1 U
	06/29/1987	1 U	1 U	-	1 U	1 U	1 U	2 U
	09/23/1987	2 U	1 U	-	1 U	1 U	1 U	5.0 C
	12/22/1987	1 U	4.0	-	1 U	1 U	1 U	1 U
	03/22/1988	1 U	1 U	-	1 U	1 U	1 U	1 U
	06/01/1988	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	09/01/1988	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	12/27/1988	1 U	1 U	-	1 U	1 U	1 U	1 U
	03/17/1989	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	06/15/1989	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	09/12/1989	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	12/27/1989	1 U	1 U	-	1 U	1 U	1 U	1 U
	03/16/1990	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	09/12/2000	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	12/13/2006	0.5 U	5.1	0.74	0.5 U	0.5 U	0.5 U	0.5 U
	03/23/2009	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	03/25/2010	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U
	03/22/2011	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U
	07/12/2012	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U
	09/05/2013	1 U	1 U	1 U	1 U	1 U		1 U
duplicate (MW-99)	09/05/2013	1 U	1 U	1 U	1 U	1 U		1 U
	09/22/2014	1 U	1.0	1 U	1 U	1 U	-	1 U
	09/01/2015	1 U	1 U	1 U	1 UJ3,UJ[1]	1 UJ3,UJ[1]	-	1 U
MW-9	03/02/1987	1 U	12	-	34	1 U	1 U	1 U
	06/30/1987	3.0 C	42	-	56	1 U	1.0	9.0 C
	09/23/1987	10 U	27	-	48	5 U	5 U	6.0 C

Table 8
Upgradient Area Wells Groundwater Analytical Results - VOCs (ug/L)
H&V Fiber Corporation
Corvallis, Oregon

Well	Date	Tetrachloroethene	Trichloroethene	Cis-1,2-dichloroethene	Trans-1,2-dichloroethene	1,1-Dichloroethene	1,1-Dichloroethane	Vinyl chloride
MW-9 (cont'd)	12/22/1987	1 U	21	-	1 U	1 U	1 U	1.0
	03/22/1988	1 U	42	-	1 U	1 U	10	6.0
	06/01/1988	1 U	32	76	1 U	1 U	3.0	4.0
	09/01/1988	1 U	18	80	1 U	1 U	1 U	7.0
	12/29/1988	1 U	11	-	26	1 U	1 U	3.0 C
	03/17/1989	1 U	6.0	9.0	1 U	1 U	1 U	7.0
	06/15/1989	2.0	34	130	1 U	1.0	1 U	10
	09/12/1989	1 U	10	18	1 U	1 U	1 U	5.0
	12/27/1989	1 U	12		1 U	1 U	1 U	3.0
	03/16/1990	1 U	14	33	1 U	1 U	1 U	1 U
	06/27/1990	1 U	19	60	1 U	1 U	1 U	8.0
	09/24/1990	1 U	18	46	1 U	1 U	1 U	6.0
	12/14/1990	1 U	7.0	27	1 U	1 U	1 U	5.0
	03/15/1991	1 U	9.0	36	1 U	1 U	1 U	8.0
	06/04/1991	1 U	8.0	50	1 U	1 U	1 U	7.0
	09/04/1991	1.0	8.0	51	1 U	1 U	1 U	6.0
	12/06/1991	1.0	6.0	39	1 U	1 U	1 U	7.0
	03/16/1992	1 U	8.0	45	1 U	1 U	1.0	8.0
	06/05/1992	1 U	4.0	36	1 U	1 U	1 U	3.0
	09/04/1992	1 U	3.0	35	1 U	1 U	1 U	1 U
	12/30/1992	1 U	1 U	1 U	1 U	1 U	1 U	1.6
	03/15/1993	1 U	1 U	-	1 U	1 U	1 U	1.7
	06/16/1993	1 U	1.0	7.0	1 U	1 U	1 U	1 U
	09/10/1993	1 U	1 U	-	1 U	1 U	1 U	1 U
	12/17/1993	1 U	1 U	-	1 U	1 U	1 U	1 U
	03/10/1994	1 U	1 U	-	1 U	1 U	1 U	1 U
	06/29/1994	1 U	1 U	5.9	1 U	1 U	1 U	1 U
	08/30/1994	1 U	2.1 U	-	1 U	1 U	1 U	1 U
	03/21/1995	1 U	1 U	4.0	1 U	1 U	1 U	1 U
	09/12/1995	1 U	1 U	-	1 U	1 U	1 U	1 U
	09/05/1996	1 U	1 U	4.1	1 U	1 U	1 U	1.3
	09/04/1997	1 U	1 U	3.0	1 U	1 U	1 U	1 U
	09/04/1998	1 U	1 U	3.7	1 U	1 U	1 U	1.0
	09/02/1999	1 U	1 U	2.0	1 U	1 U	1 U	1 U
	09/12/2000	1 U	1 U	4.0	1 U	1 U	1 U	1.0
	09/19/2001	0.5 U	0.5 U	1.8	0.5 U	0.5 U	0.5 U	0.60
	09/18/2002	0.5 U	0.5 U	3.0	0.5 U	0.5 U	0.5 U	1.1
	09/24/2003	0.5 U	0.5 U	2.5	0.5 U	0.5 U	0.5 U	0.50
	09/09/2004	0.5 U	0.5 U	2.9	0.5 U	0.5 U	0.5 U	1.0
	09/07/2005	0.5 U	0.5 U	2.1	0.5 U	0.5 U	0.5 U	0.76
	08/08/2006	0.5 U	0.5 U	1.8	0.5 U	0.5 U	0.5 U	0.5 U
	12/12/2006	0.5 U	0.84	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	09/27/2007	0.5 U	0.5 U	1.7	0.5 U	0.5 U	0.5 U	0.94

Table 8
Upgradient Area Wells Groundwater Analytical Results - VOCs (ug/L)
H&V Fiber Corporation
Corvallis, Oregon

Well	Date	Tetrachloroethene	Trichloroethene	Cis-1,2-dichloroethene	Trans-1,2-dichloroethene	1,1-Dichloroethene	1,1-Dichloroethane	Vinyl chloride
MW-9 (cont'd)	03/23/2009	0.5 U	0.17 J	4.4	0.5 U	0.5 U	0.5 U	1.2
	09/14/2009	0.5 U	0.5 U	1.9	0.5 U	0.5 U	-	0.5 U
	03/25/2010	0.5 U	0.16 J	6.0	0.5 U	0.5 U	-	2.6
	03/23/2011	0.5 U	0.5 U	1.2	0.5 U	0.5 U	-	0.18 J
	07/16/2012	0.5 U	0.5 U	7.0	0.5 U	0.5 U	-	2.1
	09/05/2013	1 U	1 U	0.34 J	1 U	1 U		1 U
	09/22/2014	1 U	1 U	1 U	1 U	1 U	-	1 U
	09/01/2015	1 U	1 U	1 U	1 UJ3,UJ[1]	1 UJ3,UJ[1]	-	1 U
MW-10	03/02/1987		650		110	10 U	10	10 U
	06/30/1987	93 C	400	-	83	8.0	7.0	4.0 C
	09/23/1987	95 C	900	-	200	6.0	7.0	10 C
	12/22/1987	4.0 U	2,400	-	4 U	4 U	12.0	4.0
	03/23/1988	40	1,400	-	5 U	5 U	5.0	5.0
	06/01/1988	36	500	200	1 U	2.0	4.0	2.0
	09/01/1988	40	680	250	3 U	3 U	3 U	3.0
	12/29/1988	63	780	-	130	2.0	3.0	4.0 C
	03/17/1989	27	6.0	21	1 U	3.0	2.0	1 U
	06/15/1989	33	500	60	1 U	3.0	1.0	5.0
	09/12/1989	3.0 U	530	70	3 U	3 U	3 U	3.0
	12/27/1989	16	870	-	10 U	10 U	10 U	10 U
	03/16/1990	31	330	48	1 U	1 U	1 U	1 U
	06/27/1990	20	310	4.5	5 U	5 U	5 U	5 U
	09/24/1990	20	300	40	1 U	1 U	1 U	1 U
	12/14/1990	24	170	28	1 U	1.0	1.0	1.0
	03/15/1991	20	110	10	5 U	5 U	5 U	5 U
	06/04/1991	17	57	6.0	5 U	5 U	5 U	5 U
	09/04/1991	18	40	6.0	1 U	1.0	2.0	1 U
	12/06/1991	7.0	15	5.0	1 U	1 U	1.0	1 U
	03/16/1992	15	18	4.0	1 U	1 U	4.0	1 U
	06/05/1992	10	13	5.0	1 U	1 U	1.0	1 U
	09/04/1992	7.0	9.0	4.0	1 U	1 U	1 U	1 U
	12/01/1992	5.1	5.1	-	1 U	1 U	1 U	1 U
	03/16/1993	4.6	4.8	-	1 U	1 U	1 U	1 U
	06/16/1993	11	6.0	1 U	1 U	1 U	2.0	1 U
	09/10/1993	5.4	4.4	-	1 U	1 U	1 U	1 U
	12/17/1993	5.6	3.5	-	1 U	1 U	1 U	1 U
	03/09/1994	1.8	4.4	-	1 U	1 U	1 U	1 U
	06/29/1994	6.0	6.4	1 U	1 U	1 U	1 U	1 U
	08/30/1994	4.5	12	-	1 U	1 U	1 U	1 U
	03/21/1995	7.0	11	12	1 U	1 U	1 U	1 U
	09/12/1995	2.3	2.1	-	1 U	1 U	1 U	1 U
	03/14/1996	1.7	5.9	16	1 U	1 U	1 U	1 U
	09/05/1996	5.9	4.8	3.4	1 U	1 U	1 U	1 U

Table 8
Upgradient Area Wells Groundwater Analytical Results - VOCs (ug/L)
H&V Fiber Corporation
Corvallis, Oregon

Well	Date	Tetrachloroethene	Trichloroethene	Cis-1,2-dichloroethene	Trans-1,2-dichloroethene	1,1-Dichloroethene	1,1-Dichloroethane	Vinyl chloride
MW-10 (cont'd)	03/21/1997	1.6	8.0	29	1 U	1 U	1 U	1 U
	09/04/1997	5.0	3.0	4.0	1 U	1 U	1 U	1 U
	03/13/1998	2.6	2.3	6.5	1 U	1 U	1 U	1 U
	09/04/1998	3.0	2.1	2.2	1 U	1 U	1 U	1 U
	04/02/1999	2.0	3.0	12	1 U	1 U	1 U	1 U
	09/02/1999	5.0	3.0	2.0	1 U	1 U	1 U	1 U
	03/02/2000	1.0	2.0	11	1 U	1 U	1 U	1 U
	09/12/2000	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	09/19/2001	3.0	1.8	2.1	0.5 U	0.5 U	0.5 U	0.5 U
	09/17/2002	6.8	3.7	1.1	0.5 U	0.50	0.50	0.5 U
	09/23/2003	6.5	3.6	2.3	0.5 U	0.5 U	0.60	0.5 U
	09/08/2004	5.1	2.6	0.9	0.5 U	0.5 U	0.5 U	0.5 U
	09/06/2005	5.5	3.9	0.67	0.5 U	0.5 U	0.5 U	0.5 U
	08/08/2006	4.8	4.4	1.0	0.5 U	0.5 U	0.5 U	0.5 U
	12/12/2006	3.5	4.2	2.0	0.5 U	0.5 U	0.5 U	0.5 U
	09/26/2007	4.3	3.2	2.0	0.5 U	0.5 U	0.5 U	0.5 U
	03/23/2009	2.4	3.3	1.5	0.5 U	0.29 J	0.27 J	0.5 U
	03/25/2010	3.4	3.1	0.57	0.5 U	0.40 J	-	0.5 U
	03/22/2011	3.5	14	2.4	0.5 U	0.70	-	0.5 U
	07/13/2012	2.8	5.5	1.3	0.5 U	0.5 U	-	0.5 U
duplicate (MW-98)	07/13/2012	3.1	5.8	1.3	0.5 U	0.5 U	-	0.5 U
	09/05/2013	1 U	1 U	1 U	1 U	1 U		1 U
	09/22/2014	2.7	2.4	0.59 J	1 U	1 U	-	1 U
	09/01/2015	1.8	1.6	0.60 J	1 UJ[1]	1 UJ[1]	-	1 U
MW-18	12/29/1988	1 U	3,000		720	1 U	1 U	110 C
	06/27/1990	20 U	84	300	20 U	20 U	20 U	20 U
	09/24/1990	10 U	450	170	10 U	10 U	10 U	10 U
	12/14/1990	50 U	1,300	410	50 U	50 U	50 U	50 U
	03/15/1991	1 U	63	32	1 U	1 U	1 U	1 U
	06/04/1991	10 U	370	110	10 U	10 U	10 U	10 U
	09/04/1991	1 U	820	100	1 U	1 U	1 U	4.0
	12/06/1991	20 U	1,200	90	20 U	20 U	20 U	20 U
	03/16/1992	20 U	900	80	20 U	20 U	20 U	20 U
	06/05/1992	10 U	740	40	10 U	10 U	10 U	10 U
	09/04/1992	20 U	710	20	20 U	20 U	20 U	20 U
	12/31/1992	10 U	780	-	10 U	10 U	10 U	10 U
	03/16/1993	10 U	550	-	10 U	10 U	10 U	10 U
	06/17/1993	10 U	440	20	10 U	10 U	10 U	10 U
	09/10/1993	1 U	460	-	1 U	1 U	1 U	1 U
	12/17/1993	1 U	400	-	1 U	1 U	1 U	1 U
	03/09/1994	5 U	260	-	5 U	5 U	5 U	5 U
	06/30/1994	10 U	280	15	10 U	10 U	10 U	10 U
	08/30/1994	10 U	318	-	10 U	10 U	10 U	10 U

Table 8
Upgradient Area Wells Groundwater Analytical Results - VOCs (ug/L)
H&V Fiber Corporation
Corvallis, Oregon

Well	Date	Tetrachloroethene	Trichloroethene	Cis-1,2-dichloroethene	Trans-1,2-dichloroethene	1,1-Dichloroethene	1,1-Dichloroethane	Vinyl chloride
MW-18 (cont'd)	12/22/1994	5 U	150	-	5 U	5 U	5 U	5 U
	03/21/1995	1 U	115	10	1 U	1 U	1 U	1 U
	06/06/1995	5 U	76	-	5 U	5 U	5 U	5 U
	09/12/1995	1 U	59	-	1 U	1 U	1 U	1 U
	12/20/1995	1 U	77	2.6	1 U	1 U	1 U	1 U
	03/14/1996	1 U	48	5.8	1 U	1 U	1 U	1 U
	06/21/1996	1 U	60	10	1 U	1 U	1 U	1 U
	09/05/1996	1 U	54	13	1 U	1 U	1 U	1 U
	03/24/1997	1 U	51	7.3	1 U	1 U	1 U	1 U
	09/04/1997	1 U	37	14	1 U	1 U	1 U	1 U
	03/13/1998	1 U	25	6.3	1 U	1 U	1 U	1 U
	09/04/1998	1 U	26	4.5	1 U	1 U	1 U	1 U
	04/02/1999	1 U	24	6.0	1 U	1 U	1 U	1 U
	09/02/1999	1 U	28	9.0	1 U	1 U	1 U	1 U
	03/01/2000	1 U	32	9.0	1 U	1 U	1 U	1 U
	06/27/2000	1 U	24	12	1 U	1 U	1 U	1 U
	09/12/2000	1 U	20	9.0	1 U	1 U	1 U	1 U
	12/13/2000	1 U	23	6.5	1 U	1 U	1 U	1 U
	03/07/2001	1 U	14	4.1	1 U	1 U	1 U	1 U
	09/20/2001	0.5 U	21	4.1	0.5 U	0.5 U	0.5 U	1 U
	03/05/2002	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
	09/18/2002	0.5 U	9.9	2.1	0.5 U	0.5 U	0.5 U	1 U
	03/19/2003	0.5 U	6.4	2.7	0.5 U	0.5 U	0.5 U	1 U
	09/24/2003	0.5 U	6.3	1.5	0.5 U	0.5 U	0.5 U	1 U
	03/04/2004	0.5 U	15	6.6	0.5 U	0.5 U	0.5 U	1 U
	09/08/2004	0.5 U	6.0	6.5	0.5 U	0.5 U	0.5 U	1 U
	03/09/2005	0.5 U	1.6	0.5 U	0.5 U	0.5 U	0.5 U	1 U
	09/07/2005	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
	03/08/2006	0.5 U	19	7.3	0.5 U	0.5 U	0.5 U	1 U
	08/08/2006	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U
	12/13/2006	0.5 U	0.56	7.7	0.5 U	0.5 U	0.5 U	1 U
	03/20/2007	0.5 U	4.6	6.4	0.5 U	0.5 U	0.5 U	1 U
	09/27/2007	0.5 U	4.1	3.5	0.5 U	0.5 U	0.5 U	1 U
	03/13/2008	0.5 U	5.5	2.5	0.5 U	0.5 U	0.5 U	1 U
	03/23/2009	0.5 U	0.15 J	0.69	0.5 U	0.5 U	-	0.5 U
	03/26/2010	0.5 U	25	1.2	0.5 U	0.5 U	-	0.5 U
	06/08/2010	0.06 U	2.3	1.5	0.09 U	0.10 U	-	0.09 U
	03/23/2011	0.5 U	1.4	0.98	0.5 U	0.5 U	-	0.5 U
	07/16/2012	0.5 U	0.5 U	12	0.5 U	0.5 U	-	0.5 U
	09/05/2013	1 U	1.3	4.6	1 U	1 U		1 U
	09/23/2014	1 U	1 U	6	1 U	1 U	-	1 UJ3,UJ[1]
	09/01/2015	1 U	8.9	4.6	1 UJ3,UJ[1]	1 UJ3,UJ[1]	-	1 U

Table 8
Upgradient Area Wells Groundwater Analytical Results - VOCs (ug/L)
H&V Fiber Corporation
Corvallis, Oregon

Well	Date	Tetrachloroethene	Trichloroethene	Cis-1,2-dichloroethene	Trans-1,2-dichloroethene	1,1-Dichloroethene	1,1-Dichloroethane	Vinyl chloride
MW-19	09/24/1990	4 U	220	270	4 U	4 U	4 U	4 U
	12/14/1990	40 U	2,400	760	40 U	40 U	40 U	40 U
	09/12/2000	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	12/12/2006	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	03/23/2009	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	03/25/2010	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U
duplicate (MW-99)	03/25/2010	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U
	03/23/2011	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U
	07/16/2012	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U
	09/05/2013	1 U	0.41 J	0.32 J	1 U	1 U		1 U
	09/23/2014	1 U	1 U	1 U	1 U	1 U	-	1 UJ3,UJ[1]
	09/01/2015	1 U	1 U	1 U	1 J3	1 J3	-	1 U
DEQ Screening Level Criteria for Water								
Ingestion and Inhalation of Tap Water (Residential)[a]		12	0.49	36	360	280	2.8	0.027
Volitilization to Outdoor Air (Residential)[b]		64,000	3,300	>S	>S	570,000	16,000	350
Volitilization to Outdoor Air (Occupational)[c]		>S	20,000	>S	>S	2,400,000	68,000	5,900
Vapor Intrusion (Residential)[d]		3,700	200	>S	>S	29,000	1,100	17
Vapor Intrusion (Occupational)[e]		48,000	3,700	>S	>S	360,000	14,000	880
GW in Excavation[f]		5,600	3,000	18,000	180,000	44,000	10,000	960
Portland Harbor JSCS Levels								
Upland Source Control Screening Level[g]		0.33	3.0	NA	1,000	NA	NA	0.24
2004 AWQC (Human Health - Organism Only)[h]		3.3	30	NA	10,000	NA	NA	2.4
2004 AWQC (Ecological Receptors - Chronic)[i]		840	21,900	NA	NA	NA	NA	NA
Oak Ridge Tier II (Ecological Receptors)[j]		98	47	590	590	25[l]	-	930 [k]

Table 8
Upgradient Area Wells Groundwater Analytical Results - VOCs (ug/L)
H&V Fiber Corporation
Corvallis, Oregon

Notes:

[a] Risk-based concentration (RBC) for ingestion/inhalation in a residential setting (revised November 1, 2015)

[b] RBC for volatilization to outdoor air in a residential setting (revised November 1, 2015)

[c] RBC for volatilization to outdoor air in an occupational setting (revised November 1, 2015)

[d] RBC for vapor intrusion into buildings in a residential setting (revised November 1, 2015)

[e] RBC for vapor intrusion into buildings in an occupational setting (revised November 1, 2015)

[r] RBC for groundwater in excavation by a construction worker (revised November 1, 2015)

[g] DEQ, Portland Harbor JSCS, Table 3-1 (revised 7/16/07). Values listed are based on human health via fish ingestion

[h] DEQ, Portland Harbor JSCS, Table 3-1 (revised 7/16/07). Per DEQ's Ambient Water Quality Criteria for Organisms Only (DEQ 2004)

[i] DEQ, Portland Harbor JSCS, Table 3-1 (revised 7/16/07). Per DEQ's Ambient Water Quality Criteria - Ecologic Receptors - Chronic (DEQ 2004)

[j] DEQ, Portland Harbor JSCS, Table 3-1 (revised 7/16/07). Per Oak Ridge National Laboratory's Water Quality Criteria - Ecological Receptors - Tier II SCV
(Tier II SCV values were taken from Suter II, G.W. and Tsao, C.L., 1996. Toxicological Benchmarks for Screening Potential Contaminants of Concern for Effects on Aquatic Biota:
1996 Revision. ORNL publication ES/ER/TM-96/R2

[k] Ecological screening value adopted by EPA in Regions 3,5 and 6.

ug/L = Micrograms per liter

U = not detected at the associated reporting limit

- = Analyte not analyzed for this parameter

C = results of coelution

J = estimated trace concentration

J^1 = Data Validation Qualifier. The analyte was detected above the method reporting limit. Results should be considered an estimate. See corresponding data validation report for further explanation.

UJ^1 = Data Validation Qualifier. The analyte was analyzed for, but not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

J3 = the associated batch QC was outside the established quality control range for precision, value is estimated

>S = This RBC exceeds the solubility limit

Table 9
Source Zone Wells Groundwater Analytical Results - VOCs (ug/L)
H&V Fiber Corporation
Corvallis, Oregon

Well	Date	Tetrachloroethene	Trichloroethene	Cis-1,2-dichloroethene	Trans-1,2-dichloroethene	1,1-Dichloroethene	1,1-Dichloroethane	Vinyl chloride
DNAPL Source Zone Area Wells								
DMW-3	04/03/1986	-	326,000	-	-	-	-	-
	05/28/1986	-	516,000	-	-	-	-	-
	06/27/1986	1,000 U	280,000	-	1,300	1,000 U	1,000 U	1,100 C
	07/30/1986	-	229,000	-	-	-	-	-
	09/04/1986	-	475,000	-	-	-	-	-
	10/13/1986	-	443,000	-	-	-	-	-
	11/14/1986	-	254,000	-	-	-	-	-
	12/22/1986	-	110,000	-	2,000	1,000 U	1,000	1,500 C
	06/29/1987	40,000 U	410,000	-	20,000 U	20,000 U	20,000 U	40,000 U
	09/23/1987	10,000 U	390,000	-	10,000	5,000 U	5,000 U	10,000 U
	12/22/1987	2,000 U	1,010,000	-	2,000 U	2,000 U	2,000 U	2,000 U
	03/17/1989	10,000 U	590,000	10,000 U	10,000 U	10,000 U	10,000 U	10,000 U
	06/15/1989	500 U	280,000	6,500	500 U	500 U	500 U	500
	09/12/1989	250 U	130,000	8,000	250 U	250 U	250 U	250 U
	12/28/1989	1,000 U	230,000	-	1,000 U	1,000 U	1,000 U	1,000 U
	03/16/1990	2,000 U	170,000	6,000	2,000 U	2,000 U	2,000 U	2,000 U
	12/14/1990	2,000 U	250,000	5,000	2,000 U	2,000 U	2,000 U	2,000 U
	03/15/1991	4,000 U	420,000	8,000	4,000 U	4,000 U	4,000 U	4,000 U
	06/04/1991	5,000 U	450,000	14,000	5,000 U	5,000 U	5,000 U	5,000 U
	09/04/1991	10,000 U	380,000	10,000 U	10,000 U	10,000 U	10,000 U	10,000 U
	12/06/1991	5,000 U	300,000	5,000 U	5,000 U	5,000 U	5,000 U	5,000 U
	03/16/1992	1,000 U	160,000	3,000	1,000 U	1,000 U	1,000 U	1,000 U
	06/01/1992	-	98,000	-	-	-	-	-
	09/01/1992	-	96,000	-	-	-	-	-
	11/30/1992	-	120,000	-	-	-	-	-
	03/01/1993	-	81,000	-	-	-	-	-
	06/17/1993	2,000 U	106,000	2,000	2,000 U	2,000 U	2,000 U	2,000 U
	09/09/1993	100 U	48,000		100 U	100 U	100 U	100 U
	12/01/1993	-	58,000	-	-	-	-	-
	03/01/1994	-	61,000	-	-	-	-	-
	04/25/1994	500 U	75,000	1,800	500 U	500 U	500 U	500 U
	06/30/1994	2,000 U	61,000	2,000 U	2,000 U	2,000 U	2,000 U	2,000 U
	09/01/1994	-	28,000	-	-	-	-	-
	12/01/1994	-	56,000	-	-	-	-	-
	04/25/1995	-	47,000	-	-	-	-	-
	06/01/1995	-	35,000	-	-	-	-	-
	09/01/1995	-	25,700	-	-	-	-	-
	12/01/1995	-	53,000	-	-	-	-	-
	03/01/1996	-	45,000	-	-	-	-	-
	06/01/1996	-	42,000	-	-	-	-	-
	09/01/1996	-	20,000	-	-	-	-	-
	12/01/1996	-	26,000	-	-	-	-	-

Table 9
Source Zone Wells Groundwater Analytical Results - VOCs (ug/L)
H&V Fiber Corporation
Corvallis, Oregon

Well	Date	Tetrachloroethene	Trichloroethene	Cis-1,2-dichloroethene	Trans-1,2-dichloroethene	1,1-Dichloroethene	1,1-Dichloroethane	Vinyl chloride
DMW-3 (cont'd)	03/01/1997	-	21,000	-	-	-	-	-
	06/01/1997	-	17,000	-	-	-	-	-
	09/01/1997	-	9,600	-	-	-	-	-
	12/01/1997	-	12,100	-	-	-	-	-
	03/01/1998	-	15,000	-	-	-	-	-
	06/01/1998	-	16,700	-	-	-	-	-
	09/01/1998	-	9,280	-	-	-	-	-
	09/01/1999	-	15,400	-	-	-	-	-
	09/01/2000	-	890	-	-	-	-	-
	07/31/2001	-	11,900 E	-	-	-	-	-
	09/20/2001	3.5	15,600	832	4.3	2.0	0.5 U	5.4
	12/18/2001	100 U	17,500	1,010	100 U	100 U	100 U	100 U
	03/06/2002	3.5	22,500	1,670	5.2	3.1	0.5 U	11
	06/13/2002	3.7	22,100	1,390	5.5	3.3	0.5 U	14
	09/18/2002	-	16,800	-	-	-	-	-
	03/19/2003	-	17,200	-	-	-	-	-
	09/22/2003	-	14,400	-	-	-	-	-
	09/09/2004	-	11,900	-	-	-	-	-
	09/07/2005	-	14,200	-	-	-	-	-
	08/08/2006	-	14,000	-	-	-	-	-
	12/14/2006	2.3	8,030	1,750	11	3.3	0.5 U	17
	02/21/2007	-	73,700	-	-	-	-	-
	09/27/2007	-	11,100	-	-	-	-	-
	03/23/2009	25 U	14,800	756	3.4 J	25 U	-	7.2 J
	06/01/2009	25 U	14,900	780	25 U	25 U	-	25 U
	09/14/2009	25 U	14,900	857	25 U	25 U	-	25 U
	12/03/2009	25 U	11,700	682	4.2 J	25 U	-	6.9 J
	03/24/2010	5.6 J	18,800	946	5.4 J	25 U	-	10 J
	12/10/2010	25 U	13,900	796	25 U	25 U	-	25 U
	03/22/2011	25 U	18,700	791	25 U	25 U	-	7.0 J
	09/26/2011	25 U	10,900	2,630	25 U	25 U	-	173
	02/27/2012	25 U	11,700	615	25 U	25 U	-	25 U
	07/12/2012	25 U	12,000	739	25 U	25 U	-	25 U
	03/19/2013	5 U	3,100	260	5 U	5 U	-	5 U
	04/15/2013	25 U	3,000	220	25 U	25 U	-	25 U
	06/03/2013	25 U	1,900	1,200	25 U	25 U	-	25 U
	07/01/2013	10 U	1,800	1,400	9 J	10 UJ3	-	4.2 J
	09/05/2013	0.71 J	2,500	1,100	4.4	1.6	-	13
	12/11/2013	5.0 U	2,100	530	2.3 J	5.0 U	-	18
	03/17/2014	50 U	1,600	450	50 U	50 U	-	14 J
	06/03/2014	50 U	1,900	440	50 U	50 U	-	50 U
Duplicate (DMW-99)	06/03/2014	50 U	1,800	380	50 U	50 U	-	50 U
	09/24/2014	50 U	1,700	430	50 U	50 U	-	50 U

Table 9
Source Zone Wells Groundwater Analytical Results - VOCs (ug/L)
H&V Fiber Corporation
Corvallis, Oregon

Well	Date	Tetrachloroethene	Trichloroethene	Cis-1,2-dichloroethene	Trans-1,2-dichloroethene	1,1-Dichloroethene	1,1-Dichloroethane	Vinyl chloride
DMW-3 (cont'd)	12/03/2014	50 U	2,400	580 J[1]	50 U	50 U	-	50 U
Duplicate (MW-99)	12/03/2014	0.41 J	2,200	510 J4,J[1]	3.1 J[1]	2.3 J[1]	-	5.5 J[1]
	03/09/2015	50 U	1,600	290	50 U	50 U	-	50 U
	06/11/2015	50 U	1,900	230	50 U	50 U	-	50 U
	09/01/2015	50 U	2,120	293	50 U	50 U	-	50 U
	12/14/2015	0.5 U	2,210	164	1.1	0.72	-	0.76
IMW-3	06/05/2009	500 U	442,000	2,560	500 U	500 U	-	500 U
	08/06/2009	500 U	318,000	5,820	500 U	500 U	-	500 U
	09/15/2009	250 U	134,000	18,200	250 U	250 U	-	250 U
	03/26/2010	1,000 U	444,700	4,790	1,000 U	1,000 U	-	1,000 U
	03/22/2011	500 UJ[1]	373,000	3,760 J[1]	500 UJ[1]	500 UJ[1]	-	500 UJ[1]
	06/04/2013	10 U	40,000	480	10 U	10 UJ3	-	10 U
	03/18/2014	100 UJ3,UJ[1]	14,000 J[1]	210	100 U	100 U	-	100 U
	03/18/2014	100 UJ[1]	14,000 J[1]	210	100 U	100 U	-	100 U
DMW-16	12/28/1988	100 U	810,000		18,000	100 U	100 U	2,200
	06/27/1990	2,000 U	650,000	22,000	2,000 U	2,000 U	2,000 U	2,000 U
	12/14/1990	2,000 U	600,000	16,000	2,000 U	2,000 U	2,000 U	2,000 U
	03/15/1991	10,000 U	330,000	10,000 U	10,000 U	10,000 U	10,000 U	10,000 U
	06/04/1991	2,000 U	136,000	13,000	2,000 U	2,000 U	2,000 U	2,000 U
	09/04/1991	2,000 U	120,000	5,000	2,000 U	2,000 U	2,000 U	2,000 U
	12/06/1991	2,000 U	130,000	3,000	2,000 U	2,000 U	2,000 U	2,000 U
	03/16/1992	2,000 U	64,000	2,000 U	2,000 U	2,000 U	2,000 U	2,000 U
	06/05/1992	1,000 U	73,000	1,000 U	1,000 U	1,000 U	1,000 U	1,000 U
	09/04/1992	1,000 U	38,000	1,000	1,000 U	1,000 U	1,000 U	1,000 U
	11/30/1992	-	77,300	-	-	-	-	-
	12/30/1992	2,000 U	51,000	-	2,000 U	2,000 U	2,000 U	2,000 U
	03/15/1993	1,000 U	83,000	-	1,000 U	1,000 U	1,000 U	1,000 U
	06/17/1993	1,000 U	39,000	1,000 U	1,000 U	1,000 U	1,000 U	1,000 U
	09/09/1993	50 U	26,000	-	50 U	50 U	50 U	50 U
	12/17/1993	50 U	28,000	-	50 U	50 U	50 U	50 U
	03/09/1994	500 U	23,000	-	500 U	500 U	500 U	500 U
	04/25/1994	500 U	25,000	500 U	500 U	500 U	500 U	500 U
	06/30/1994	100 U	32,000	470	100 U	100 U	100 U	100 U
	08/29/1994	50 U	24,300 J	-	50 U	50 U	50 U	50 U
	12/01/1994	-	25,000	-	-	-	-	-
	03/20/1995	200 U	20,800	410	200 U	200 U	200 U	200 U
	04/25/1995	-	27,000	-	-	-	-	-
	06/01/1995	-	15,000	-	-	-	-	-
	09/12/1995	500 U	13,000		500 U	500 U	500 U	500 U
	12/01/1995	-	11,000	-	-	-	-	-
	03/14/1996	5,000 U	11,000	110	5,000 U	5,000 U	5,000 U	5,000 U
	06/01/1996	-	7,900	-	-	-	-	-

Table 9
Source Zone Wells Groundwater Analytical Results - VOCs (ug/L)
H&V Fiber Corporation
Corvallis, Oregon

Well	Date	Tetrachloroethene	Trichloroethene	Cis-1,2-dichloroethene	Trans-1,2-dichloroethene	1,1-Dichloroethene	1,1-Dichloroethane	Vinyl chloride
DMW-16 (cont'd)	09/01/1996	-	8,900	-	-	-	-	-
	12/01/1996	-	9,000	-	-	-	-	-
	03/24/1997	100 U	14,100 E	180	100 U	100 U	100 U	100 U
	06/01/1997	-	6,090	-	-	-	-	-
	09/04/1997	200 U	9,000	200 U	200 U	200 U	200 U	200 U
	12/01/1997	-	7,600	-	-	-	-	-
	03/12/1998	200 U	8,600	200 U	200 U	200 U	200 U	200 U
	06/01/1998	-	6,200	-	-	-	-	-
	09/04/1998	100 U	6,320	154	100 U	100 U	100 U	100 U
	04/02/1999	100 U	9,010	130	100 U	100 U	100 U	100 U
	08/31/1999	100 U	5,910	146	100 U	100 U	100 U	100 U
	03/02/2000	100 U	8,520	221	100 U	100 U	100 U	100 U
	10/06/2000	1 U	9,090	-	2.6	1.1	1 U	1.8
	03/07/2001	3.8	4,280	241	1 U	22	1 U	4.2
	07/31/2001	-	4,710	-	-	-	-	-
	09/20/2001	-	4,080	-	-	-	-	-
	12/18/2001	-	5,200	-	-	-	-	-
	03/06/2002	-	5,380	-	-	-	-	-
	09/18/2002	-	4,520	-	-	-	-	-
	03/19/2003	-	7,630	-	-	-	-	-
	09/22/2003	-	6,630	-	-	-	-	-
	09/09/2004	-	5,910	-	-	-	-	-
	09/07/2005	-	3,760	-	-	-	-	-
	08/08/2006	-	3,960	-	-	-	-	-
	12/14/2006	25 U	9,560	4460	25 U	25 U	25 U	52
	02/21/2007	-	21,300	-	-	-	-	-
	09/27/2007	-	7,150	-	-	-	-	-
	03/23/2009	25 U	5,380	128	25 U	25 U	-	25 U
	06/01/2009	10 U	4,240	162	10 U	10 U	-	10 U
	09/14/2009	10 U	4,970	215	10 U	10 U	-	10 U
	12/03/2009	10 U	6,380	181	10 U	10 U	-	10 U
	03/24/2010	50 U	14,100	2330	13 J	50 U	-	50 U
	12/10/2010	10 U	6,780	250	10 J	10 U	-	10 U
	03/22/2011	1.9 J	4,580	178	0.84 J	5 U	-	5 U
	09/26/2011	5 U	3,000	134	5 U	5 U	-	5 U
	07/12/2012	5 U	3,120	156	5 U	5 U	-	5 U
	03/20/2013	14 J	50,000	2,900	12 J	20 U	-	20 U
	06/04/2013	50 U	2,500	210	50 U	50 U	-	50 U
	07/02/2013	25 U	1,400	240	25 U	25 U	-	25 U
	09/05/2013	1 U	3,400	580	2.8	1.2	-	0.43 J
	12/11/2013	5 U	9,300	500	2.6 J	5.0 U	5 U	5.0 U
	03/18/2014	33 J3,J[1]	4,300 J,J[1]	680	20 U	20 U	-	20 U
	06/04/2014	200 U	8,000	420	200 U	200 U	-	200 U

Table 9
Source Zone Wells Groundwater Analytical Results - VOCs (ug/L)
H&V Fiber Corporation
Corvallis, Oregon

Well	Date	Tetrachloroethene	Trichloroethene	Cis-1,2-dichloroethene	Trans-1,2-dichloroethene	1,1-Dichloroethene	1,1-Dichloroethane	Vinyl chloride
DMW-16 (cont'd)	09/22/2014	200 U	9,500	580	200 U	200 U	-	200 UJ3,UJ[1]
	12/02/2014	25 U	1,700	860 J4	25 U	25 U	-	25 U
	03/12/2015	25 U	8,600	690	25 U	25 U	-	25 U
	06/10/2015	250 U	9,800	490	250 U	250 U	-	250 U
	09/02/2015	50 U	2,390	502	50 U	50 U	-	50 U
	12/15/2015	0.5 U	8,120	134	0.88	0.5 U	-	0.5 U
IMW-16	06/05/2009	500 U	1,310	500 U	500 U	500 U	-	500 U
	08/06/2009	10 U	5,160	37	10 U	10 U	-	10 U
	09/15/2009	0.5 U	248	8.7 U	0.5 U	0.5 U	-	0.5 U
	03/25/2010	0.5 U	148	7.3	0.08 J	0.32 J	-	0.5 U
	03/23/2011	0.09 J	354	4.5	0.09 J	0.5 U	-	0.5 U
	03/20/2013	1 U	140	12	1 U	1 U	-	1 U
	03/18/2014	1 UJ3,UJ[1]	320 J[1]	1.2	1 U	1 U	-	1 U
	03/12/2015	5 U	530	8.9	5 U	5 U	-	5 U
	03/12/2015	5 U	530	8.9	5 U	5 U	-	5 U
DMW-17	12/29/1988	37 C	200,000	-	7,100	10 U	10 U	440 C
	12/14/1990	400 U	130,000	4,200	400 U	400 U	400 U	400 U
	03/15/1991	2,000 U	66,000	2,000	2,000 U	2,000 U	2,000 U	2,000 U
	06/04/1991	2,000 U	164,000	3,000	2,000 U	2,000 U	2,000 U	2,000 U
	09/04/1991	4,000 U	110,000	4,000 U	4,000 U	4,000 U	4,000 U	4,000 U
	12/06/1991	2,000 U	75,000	2,000 U	2,000 U	2,000 U	2,000 U	2,000 U
	03/16/1992	2,000 U	59,000	2,000 U	2,000 U	2,000 U	2,000 U	2,000 U
	06/01/1992	-	57,000	-	-	-	-	-
	09/01/1992	-	51,000	-	-	-	-	-
	11/30/1992	-	48,000	-	-	-	-	-
	03/01/1993	-	20,000	-	-	-	-	-
	06/17/1993	200 U	2,200	600	200 U	200 U	200 U	200 U
	09/09/1993	1.7	9,100	-	6.3	1.0	1 U	30
	12/01/1993	-	16,000	-	-	-	-	-
	03/01/1994	-	20,000	-	-	-	-	-
	04/25/1994	500 U	16,000	760	500 U	500 U	500 U	500 U
	06/30/1994	250 U	27,000	300	250 U	250 U	250 U	250 U
	09/01/1994	-	21,000	-	-	-	-	-
	12/01/1994	-	19,000	-	-	-	-	-
	04/25/1995	-	12,400	-	-	-	-	-
	06/01/1995	-	3,200	-	-	-	-	-
	09/01/1995	-	3,500	-	-	-	-	-
	06/01/1996	-	3,000	-	-	-	-	-
	12/01/1996	-	560	-	-	-	-	-
	09/01/1997	-	900	-	-	-	-	-
	12/05/1997	100 U	6,250	135	100 U	100 U	100 U	100 U
	03/01/1998	-	1,450	-	-	-	-	-

Table 9
Source Zone Wells Groundwater Analytical Results - VOCs (ug/L)
H&V Fiber Corporation
Corvallis, Oregon

Well	Date	Tetrachloroethene	Trichloroethene	Cis-1,2-dichloroethene	Trans-1,2-dichloroethene	1,1-Dichloroethene	1,1-Dichloroethane	Vinyl chloride
DMW-17 (cont'd)	09/01/2000	-	150	-	-	-	-	-
	12/14/2006	0.5 U	453	241	1.2	0.55	0.5 U	3.5
	02/21/2007	-	510	-	-	-	-	-
	03/23/2009	1.1 U	408	107	0.65 J	0.32 J	-	1.1
	06/01/2009	1.1 U	734	254	1.7	1.1 U	-	2.5
	09/14/2009	1.1 U	388	203	1.1 U	1.1 U	-	1.4
	12/03/2009	0.5 U	216	80	0.7	0.41 J	-	2.3
	03/24/2010	1.1 U	466	209	1.4	0.70 J	-	26
	12/10/2010	1.1 U	1,110	415	1.5	1.1 U	-	5.8
	03/22/2011	0.5 U	443	89	0.55	0.32 J	-	1.2
	09/26/2011	0.5 U	247	142	0.98	0.5 U	-	1.1
	07/12/2012	0.5 U	244	79	0.5 U	0.5 U	-	0.55
	03/19/2013	1.0 U	200	56	0.41 J	1.0 U	-	1.2
	04/15/2013	2.0 U	180	32	2 U	2.0 U	-	2.0 U
	06/03/2013	1.0 U	9.7	2,200	13	1.6	-	2.4
	07/01/2013	20 U	20 U	2,300	13	20.0 U	-	70.0
	09/04/2013	100 U	100 U	350	100 U	100 U	-	120
	12/10/2013	1 U	1 U	77	0.81 J	1 U	-	34
	03/17/2014	1 U	0.76 J	34	1 U	1 U	-	14
	06/03/2014	1 U	1.6	63	1 U	1 U	-	22
	09/24/2014	1 U	4.3	78	1 U	1 U	-	11 J3,J[1]
	12/02/2014	1 U	9.4	56 J[1]	1 U	0.43 J	-	5.2 J[1]
	03/10/2015	1 U	3.7	110	0.81 J	1 U	-	5.8
	06/10/2015	1 U	3.7	93	0.52 J	0.43 J	-	7.9
	09/01/2015	1 U	3.1	36	1 U	1 U	-	4.3
	12/15/2015	0.5 U	14	35	0.50 U	0.50 U	-	1.2
IMW-17	06/10/2009	2.5 U	786	1,450	6.0	5.9	-	74
	08/06/2009	5 U	3,670	1,870	9.1	7.4	-	39
	09/15/2009	10 U	4,850	1,270	10 U	10 U	-	20
	03/26/2010	25 U	16,800	5,370	29	22 J	-	93
	03/23/2011	50 U	41,800	15,600	60	55	-	244
	03/20/2013	1 U	620	620	2.4	2.1	-	1.3
	06/03/2013	5 U	35	900	5.6	5.0 U	-	7.8
	07/01/2013	5 U	20	1,500	7.9	5.0 UJ3	-	5.6
	03/17/2014	25 U	25 U	130	25 U	25 U	-	18 J
	06/03/2014	25 U	24 J	650	25 U	25 U	-	64
	03/10/2015	25 U	57	240	25 U	25 U	-	25 U
DMW-23	06/10/2009	500 U	202,000	1,640	500 U	500 U	-	500 U
	08/06/2009	100 U	46,300	1,140	100 U	100 U	-	100 U
	09/15/2009	100 U	49,500	1,390	100 U	100 U	-	100 U
	03/26/2010	100 U	45,400	1,120	100 U	100 U	-	100 U
	03/22/2011	50 U	37,900	1,080	50 U	50 U	-	50 U

Table 9
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H&V Fiber Corporation
Corvallis, Oregon

Well	Date	Tetrachloroethene	Trichloroethene	Cis-1,2-dichloroethene	Trans-1,2-dichloroethene	1,1-Dichloroethene	1,1-Dichloroethane	Vinyl chloride
DMW-23 (cont'd)	02/27/2012	50 U	36,400	723	50 U	50 U	-	50 U
	07/12/2012	50 U	21,800	351	50 U	50 U	-	50 U
	03/19/2013	250 U	43,000	670	250 U	250 U	-	250 U
	06/03/2013	250 U	21,000	250 U	250 U	250 U	-	250 U
	07/01/2013	250 U	19,000	500	200 U	200 UJ3	-	200 U
	09/04/2013	200 U	15,000	490	200 U	200 U	-	200 U
	12/11/2013	20 U	16,000	380	20 U	20 U	-	20 U
	03/18/2014	50 UJ3,UJ[1]	11,000 J[1]	360	50 U	50 U	-	50 U
	06/03/2014	500 U	8,200	250 J	500 U	500 U	-	500 U
	09/23/2014	500 U	13,000	360 J	500 U	500 U	-	500 UJ3,UJ[1]
	12/03/2014	200 U	13,000	390	200 U	200 U	-	200 U
	03/09/2015	200 U	12,000	340	200 U	200 U	-	200 U
	06/11/2015	200 U	12,000	280	200 U	200 U	-	200 U
	09/02/2015	200 U	15,600	436	200 U	200 U	-	200 U
	12/15/2015	0.5 U	12,500	67	0.73	0.50 U	-	0.5 U
DMW-24	06/03/2009	2.4	3,970	180	1.2	0.5 U	-	0.61
	08/06/2009	1.3 J	2,050	130	5 U	5 U	-	5 U
	09/15/2009	5 U	2,000	108	5 U	5 U	-	5 U
	03/25/2010	1.6 J	3,140	330	1.6 J	0.85 J	-	3.6 J
	03/23/2011	2.4 J	3,270	161	1.3 J	5 U	-	5 U
	02/27/2012	1.3 J	1,720	137	2.5 U	2.5 U	-	2.5 U
	07/12/2012	5 U	1,800	141	5 U	5 U	-	5 U
	03/19/2013	5 U	1,400	110	5 U	5 U	-	5 U
	04/15/2013	10 U	1,600	100	10 U	10 U	-	10 U
	06/03/2013	10 U	1,800	570	10 U	10 U	-	10 U
	07/02/2013	10 U	2,000	550	10 U	10 U	-	10 U
	07/31/2013	25 U	2,900	500	25 U	25 U	-	25 U
	09/05/2013	2.5 J	3,300	520	2.9 J	5 U	-	3.1 J
	12/10/2013	1.8 J	2,900	290	2.4	0.98 J	-	1.4 J
	03/17/2014	50 U	1,400	410	50 U	50 U	-	50 U
	06/04/2014	50 U	2,400	320	50 U	50 U	-	50 U
	09/23/2014	50 U	900	200	50 U	50 U	-	50 UJ3,UJ[1]
	12/03/2014	20 U	820	230	20 U	20 U	-	20 U
	03/11/2015	20 U	890	200	20 U	20 U	-	20 U
	06/11/2015	20 U	680	160	20 U	20 U	-	20 U
	09/01/2015	20 U	923	230	20 U	20 U	-	20 U
	12/14/2015	0.5 U	619	141	0.80	0.58	-	1.1
IMW-24	06/03/2008	50 U	25,800	3,320	50 U	50 U	-	63
	08/06/2009	5 U	2,040	629	3.6 J	1.9 J	-	8.8
	09/15/2009	10 U	4,500	728	10 U	10 U	-	10 U
	03/25/2010	25 U	10,100	2,310	12 J	7.2 J	-	32
	03/23/2011	50 U	36,900	5,720	22 J	15 J	-	86

Table 9
Source Zone Wells Groundwater Analytical Results - VOCs (ug/L)
H&V Fiber Corporation
Corvallis, Oregon

Well	Date	Tetrachloroethene	Trichloroethene	Cis-1,2-dichloroethene	Trans-1,2-dichloroethene	1,1-Dichloroethene	1,1-Dichloroethane	Vinyl chloride
IMW-24 (cont'd)	03/20/2013	1 U	1,400	560	2.7	0.76 J	-	2.3
	04/15/2013	10 U	3,600	620	10 U	10 U	-	2.7
	06/03/2013	25 U	12 J	1,900	11 J	20 U	-	20 U
	07/02/2013	25 U	1,600	2,100	12 J	25 U	-	25 U
	07/31/2013	1 U	1,300	2,300	12	3.3	-	85
	09/04/2013	25 U	120	480	25 U	25 U	-	82
	12/10/2013	1 U	4.2	140	1.7	0.49 J	-	42
	03/17/2014	1 U	300	260	1.2	0.66 J	-	28
	06/04/2014	10 U	900	480	10 U	10 U	-	42
	03/10/2015	10 U	1,600	350	10 U	10 U	-	20
DMW-25	06/05/2009	500 U	81,000	685	500 U	500 U	-	500 U
	08/06/2009	5 U	2,600	351	1.9 J	5 U	-	5 U
	09/15/2009	10 U	7,700	415	10 U	10 U	-	10 U
	03/26/2010	10 U	4,690	151	10 U	10 U	-	3.9 J
	03/22/2011	10 U	6,920	117	10 U	10 U	-	10 U
	02/27/2012	25 U	8,770	202	25 U	25 U	-	25 U
	07/13/2012	10 U	3,860	297	10 U	10 U	-	10 U
	03/20/2013	1 U	540	51	1 U	1 U	-	1 U
	04/15/2013	5 U	1,100	70	5 U	5 U	-	5 U
	06/03/2013	10 U	260	380	10 U	10 U	-	10 U
	07/01/2013	2 U	990	1400	11	1.7 JJ3	-	2.9
	07/31/2013	25 U	2,600	1,400	25 U	25 U	-	20 J
	09/04/2013	25 U	4,600	860	25 U	25 U	-	46
	12/18/2013	50 U	2,800	330	50 U	50 U	-	19 J
	03/17/2014	50 U	4,100	240	50 U	50 U	-	50 U
	06/03/2014	50 U	3,500	220	50 U	50 U	-	50 U
	09/22/2014	5 U	230	130	5 U	5 U	-	12
	12/02/2014	5 U	1,100	220 J[1]	2.1 J,J[1]	2.0 J,J[1]	-	2.0 J,J[1]
	03/10/2015	5 U	360	66	5 U	5 U	-	5 U
	06/10/2015	5 U	370	68	5 U	5 U	-	5 U
	09/01/2015	5 U	646	138	5 U	5 U	-	5 U
	12/15/2015	0.5 U	108	22	0.5 U	0.5 U	-	0.5 U
IMW-25	06/05/2009	500 U	6,670	500 U	500 U	500 U	-	500 U
	08/06/2009	25 U	16,500	275	25 U	25 U	-	25 U
	09/15/2009	50 U	45,800	1,300	50 U	50 U	-	50 U
	03/26/2010	0.5 U	386	6.2	0.5 U	0.5 U	-	0.5 U
	03/23/2011	5 U	1,900	59	5 U	5 U	-	5 U
	03/20/2013	1 U	23	0.95 J	1 U	1 U	-	1 U
	04/15/2013	1 U	310	2.40	1 U	1 U	-	1 U
	07/02/2013	5 U	8,500	1,700	6.3	2.1 J	-	3.1 J
	03/18/2014	1 U	130	11	1 U	1 U	-	1 U
	03/10/2015	1 U	3,900	200	1.2	1 U	-	0.86 J

Table 9
Source Zone Wells Groundwater Analytical Results - VOCs (ug/L)
H&V Fiber Corporation
Corvallis, Oregon

Well	Date	Tetrachloroethene	Trichloroethene	Cis-1,2-dichloroethene	Trans-1,2-dichloroethene	1,1-Dichloroethene	1,1-Dichloroethane	Vinyl chloride
DMW-26	01/07/2015	0.56 J	360	26	1 U	1 U	-	1 U
	03/11/2015	0.61 J	53	6.8	1 U	1 U	-	1 U
	06/11/2015	1 U	100	16	1 U	1 U	-	1 U
	09/02/2015	1 U	38	24	1 U	1 U	-	1 U
	12/14/2015	0.5 U	25	4.4	0.5 U	0.5 U	-	0.5 U
IMW-26	06/10/2009	50 U	128,000	24,600	45 J	26 J	-	31 J
	08/06/2009	100 U	41,400	6,300	100 U	100 U	-	100 U
	09/15/2009	100 U	91,900	8,370	100 U	100 U	-	100 U
	03/26/2010	50 U	32,400	10,000	87	50 U	-	50 U
	03/23/2011	50 U	55,300	16,000	23 J	16 J	-	48 J
	03/20/2013	1 U	430	74	0.53 J	1 U	-	1 U
	03/18/2014	1 UJ3,UJ[1]	64 J[1]	19	1 U	1 U	-	1 U
	03/11/2015	1 U	280	47	1 U	1 U	-	1 U
DMW-27	03/20/2013	1 U	5.8	7.4	1 U	1 U	-	1 U
	04/15/2013	1 U	5.2	7.0	1 U	1 U	-	1 U
	03/18/2014	1 UJ3,UJ[1]	32 J[1]	77	1 U	1 U	-	3.1
	06/04/2014	1 U	0.59 J	21	1 U	1 U	-	18
	09/23/2014	1 U	3.8	12	1 U	1 U	-	6.2
	12/02/2014	1 U	1 U	16 J[1]	1 U	1 U	-	10 J[1]
	03/12/2015	1 U	30	41	1 U	1 U	-	10
	06/11/2015	1 U	2.1	24	1 U	1 U	-	6.8
	09/01/2015	1 U	1.1	19	1 U	1 U	-	3.5
	12/15/2015	0.5 U	0.51	1.1	0.5 U	0.5 U	-	0.5 U
IMW-27	03/20/2013	1 U	16	13	1 U	1 U	-	1 U
	04/15/2013	1 U	16	12	1 U	1 U	-	1 U
	03/18/2014	1 U	4.7	78	1 U	1 U	-	30
	06/04/2014	1 U	1 U	0.65 J	1 U	1 U	-	1 U
	03/12/2015	1 U	160	22	1 U	1 U	-	0.82 J
DMW-28	03/20/2013	0.87 J	700	12	1 U	1 U	-	1 U
	06/04/2013	5.0 U	1,500	18 U	5 U	5 U	-	5 U
	07/02/2013	10.0 U	1,100	15	10 U	10 U	-	10 U
	09/05/2013	0.86 J	1,100	15	1 U	1 U	-	0.54 J
	12/11/2013	0.82 J	500	14	1 U	1 U	-	0.31 J
	03/19/2014	0.76 JJ3,J[1]	1,600 J[1]	14	1 U	1 U	-	1 U
	06/04/2014	50 U	1,400	50 U	50 U	50 U	-	50 U
	09/24/2014	5 U	190	73	5 U	5 U	-	5 U
	12/01/2014	5 U	1,200	43 J[1]	5 U	5 U	-	5 U
	03/11/2015	50 U	1,600	62	50 U	50 U	-	50 U
Duplicate (DMW-99)	03/11/2015	0.93 J	1,500	35	1 U	1 U	-	1 U
	06/11/2015	50 U	1,200	20 J	50 U	50 U	-	50 U
	09/02/2015	50 U	1,260	16 J	50 U	50 U	-	50 U

Table 9
Source Zone Wells Groundwater Analytical Results - VOCs (ug/L)
H&V Fiber Corporation
Corvallis, Oregon

Well	Date	Tetrachloroethene	Trichloroethene	Cis-1,2-dichloroethene	Trans-1,2-dichloroethene	1,1-Dichloroethene	1,1-Dichloroethane	Vinyl chloride
DMW-28 (cont'd)	12/15/2015	0.81	931	6.0	0.5 U	0.5 U	-	0.5 U
IMW-28	03/20/2013	0.50 J	4,200	1,500	9.3	0.58 J	-	4.2
	07/02/2013	25 U	5,100	1,800	25 U	25 U	-	25 U
	12/11/2013	5 U	2,200	1,700	7.2	2.1 J		11
	03/19/2014	10 UJ3,UJ[1]	5,500 J[1]	1,300	5.6 J	10 U	-	3.5 J
	03/11/2015	100 U	8,800	1,400	100 U	100 U	-	100 U
DMW-29	03/19/2013	1 U	28	3.0	1 U	1 U	-	1 U
		1 U	29	14	1 U	1 U	-	1 U
	05/09/2013	1 U	760	120	1.4	1 U	-	1 U
	06/03/2013	0.38	1,300	1.0 U	1.8	1.0 U	-	1.0 U
	07/02/2013	10 U	1,000	140	10 U	10 U	-	10 U
	07/31/2013	10 U	1,200	190	10 U	10 U	-	10 U
	09/04/2013	10 U	1,400	220	10 U	10 U	-	4.2 J
	12/11/2013	1 U	400	85	0.90 J	1 U	-	0.42 J
	03/19/2014	0.45 JJ3,J[1]	1,500 J[1]	160	1.2	1 U	-	0.65 J
Duplicate (DMW-99)	03/19/2014	0.44 JJ3,J[1]	1,600 J[1]	180	1.2	1 U	-	0.73 J
	06/03/2014	50 U	800	140	50 U	50 U	-	50 U
	09/23/2014	5 U	390	95	5 U	5 U	-	5 U
Duplicate (DMW-98)	09/23/2014	1 U	180	74	0.66 J	1 U	-	0.40 JJ3,J[1]
	12/01/2014	5 U	310	75 J[1]	5 U	5 U	-	5 U
	03/09/2015	5 U	630	75	5 U	5 U	-	5 U
	06/11/2015	5 U	160	52	3.6 J	5 U	-	5 U
	09/02/2015	5 U	207	56	5 U	5 U	-	5 U
	12/14/2015	0.5 U	69	22	0.58	0.5 U	-	0.5 U
IMW-29	03/19/2013	50 U	9,400	420	50 U	50 U	-	50 U
	06/04/2013	50 U	8,000	640	50 U	50 U	-	50 U
	07/02/2013	50 U	6,700	560	50 U	50 U	-	50 U
	03/19/2014	20 UJ3,UJ[1]	5,800 J[1]	270	20 U	20 U	-	20 U
	03/11/2015	100 U	1,600	75 J	100 U	100 U	-	100 U
DMW-30	12/14/2015	0.5 U	61	3.7	0.5 U	0.5 U	-	0.5 U
IMW-30	03/20/2013	1 U	38	100	1 U	1 U	-	2.0
	03/19/2014	1 UJ3,UJ[1]	300 J[1]	490	1.7	0.45 J	-	5.0
	03/11/2015	1 U	15	50	1 U	1 U	-	2.0
IMW-31	03/19/2013	1 U	33	9.8	1 U	1 U	-	1 U
	03/19/2014	0.40 JJ3,UJ[1]	2,000 J[1]	85	0.48 J	1 U	-	1 U
	03/11/2015	1 U	59	36	1 U	1 U	-	1.4
DMW-32	01/19/2015	0.47 J	370	0.39 J	1 U	1 U	-	1 U
	03/12/2015	1 U	66	16	1 U	1 U	-	1 U
	06/10/2015	1 U	39	1 U	1 U	1 U	-	1 U
	09/03/2015	1 U	215	0.42 J	1 U	1 U	-	1 U

Table 9
Source Zone Wells Groundwater Analytical Results - VOCs (ug/L)
H&V Fiber Corporation
Corvallis, Oregon

Well	Date	Tetrachloroethene	Trichloroethene	Cis-1,2-dichloroethene	Trans-1,2-dichloroethene	1,1-Dichloroethene	1,1-Dichloroethane	Vinyl chloride
DMW-32 (cont'd)	12/16/2015	0.5 U	366	4.0	0.5 U	0.5 U	-	0.5 U
IMW-32	12/14/2015	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U
DMW-36	01/08/2015	1 U	87	10	1 U	1 U	-	1 U
	03/13/2015	1 U	5.8	7.3	1 U	1 U	-	1 U
	06/11/2015	1 U	5.8	13	1 U	1 U	-	1 U
	09/03/2015	1 U	3.5	15	1 U	1 U	-	1 U
	12/16/2015	0.5 U	4.5	7.0	0.5 U	0.5 U	-	0.5 U
DMW-40	12/14/2015	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U
IMW-40	12/14/2015	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U
DMW-41	12/16/2015	0.5 U	1,650	261	1.3	0.95	-	0.5 U
duplicate (MW-99)	12/16/2015	2.5 U	1,190	254	2.5 U	2.5 U	-	2.5 U
DEQ Screening Level Criteria for Water								
Ingestion and Inhalation of Tap Water (Residential)[a]		12	0.49	36	360	280	2.8	0.027
Volitilization to Outdoor Air (Residential)[b]		64,000	3,300	>S	>S	570,000	16,000	350
Volitilization to Outdoor Air (Occupational)[c]		>S	20,000	>S	>S	2,400,000	68,000	5,900
Vapor Intrusion (Residential)[d]		3,700	200	>S	>S	29,000	1,100	17
Vapor Intrusion (Occupational)[e]		48,000	3,700	>S	>S	360,000	14,000	880
GW in Excavation[f]		5,600	3,000	18,000	180,000	44,000	10,000	960
Portland Harbor JSCS Levels								
Upland Source Control Screening Level[g]		0.33	3.0	NA	1,000	NA	NA	0.24
2004 AWQC (Human Health - Organism Only)[h]		3.3	30	NA	10,000	NA	NA	2.4
2004 AWQC (Ecological Receptors - Chronic)[i]		840	21,900	NA	NA	NA	NA	NA
Oak Ridge Tier II (Ecological Receptors)[j]		98	47	590	590	25[l]	-	930 [k]

Table 9
Source Zone Wells Groundwater Analytical Results - VOCs (ug/L)
H&V Fiber Corporation
Corvallis, Oregon

Notes:

[a] Risk-based concentration (RBC) for ingestion/inhalation in a residential setting (revised November 1, 2015)

[b] RBC for volatilization to outdoor air in a residential setting (revised November 1, 2015)

[c] RBC for volatilization to outdoor air in an occupational setting (revised November 1, 2015)

[d] RBC for vapor intrusion into buildings in a residential setting (revised November 1, 2015)

[e] RBC for vapor intrusion into buildings in an occupational setting (revised November 1, 2015)

[r] RBC for groundwater in excavation by a construction worker (revised November 1, 2015)

[g] DEQ, Portland Harbor JSCS, Table 3-1 (revised 7/16/07). Values listed are based on human health via fish ingestion

[h] DEQ, Portland Harbor JSCS, Table 3-1 (revised 7/16/07). Per DEQ's Ambient Water Quality Criteria for Organisms Only (DEQ 2004)

[i] DEQ, Portland Harbor JSCS, Table 3-1 (revised 7/16/07). Per DEQ's Ambient Water Quality Criteria - Ecologic Receptors - Chronic (DEQ 2004)

[j] DEQ, Portland Harbor JSCS, Table 3-1 (revised 7/16/07). Per Oak Ridge National Laboratory's Water Quality Criteria - Ecological Receptors - Tier II SCV
(Tier II SCV values were taken from Suter II, G.W. and Tsao, C.L., 1996. Toxicological Benchmarks for Screening Potential Contaminants of Concern for Effects on Aquatic Biota: 1996 Revision. ORNL publication ES/ER/TM-96/R2

[k] Ecological screening value adopted by EPA in Regions 3,5 and 6.

ug/L = Micrograms per liter

U = not detected at the associated reporting limit

- = Analyte not analyzed for this parameter

C = results of coelution

E = value reported exceeds linear calibration range; estimated concentration.

J = estimated trace concentration

J^1 = Data Validation Qualifier. The analyte was detected above the method reporting limit. Results should be considered an estimate. See corresponding data validation report for further explanation.

UJ^1 = Data Validation Qualifier. The analyte was analyzed for, but not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

J3 = the associated batch QC was outside the established quality control range for precision, value is estimated

J4 = The associated batch QC was outside the established quality control range for accuracy.

>S = This RBC exceeds the solubility limit

Table 10
Hardboard Area Wells Groundwater Analytical Results - VOCs (ug/L)
H&V Fiber Corporation
Corvallis, Oregon

Well	Date	Tetrachloroethene	Trichloroethene	Cis-1,2-dichloroethene	Trans-1,2-dichloroethene	1,1-Dichloroethene	1,1-Dichloroethane	Vinyl chloride
Hardboard Area Wells								
DMW-2	04/03/1986	-	47,000	-	-	-	-	-
	05/28/1986	-	223,000	-	-	-	-	-
	06/27/1986	1,000 U	260,000	-	6,700	1,000 U	1,000 U	4,200
	07/30/1986	-	129,000	-	-	-	-	-
	09/04/1986	-	358,000	-	-	-	-	-
	10/13/1986	-	335,000	-	-	-	-	-
	11/14/1986	-	87,000	-	-	-	-	-
	12/22/1986	23	290,000	-	26,000	78	26	1,014
	06/29/1987	10,000 U	100,000	-	17,000	5,000 U	5,000 U	10,000 U
	09/23/1987	2,000 U	58,000	-	9,000	1,000 U	1,000 U	2,000 U
	12/22/1987	33	450,000	-	23,000	97	15	1,500
	03/29/1988	1,000 U	460,000	-	1,000 U	1,000 U	1,000 U	1,000 U
	06/01/1988	1,000 U	440,000	76,000	1,000 U	1,000 U	1,000 U	2,000
	09/01/1988	2,000 U	630,000	50,000	2,000 U	2,000 U	2,000 U	2,000 U
	01/03/1989	100 U	710,000	-	41,000	100 U	100 U	3,500
	03/17/1989	700 U	360,000	8,700	700 U	700 U	700 U	2,000
	06/15/1989	4,000 U	860,000	20,000	4,000 U	4,000 U	4,000 U	4,000 U
	09/12/1989	1,000 U	480,000	12,000	1,000 U	1,000 U	1,000 U	1,000 U
	10/27/1989	56	580,000	-	-	130	50 U	3,300 E
	12/28/1989	1,000 U	520,000	-	1,000 U	1,000 U	1,000 U	1,100
	03/16/1990	1,000 U	660,000	16,000	1,000 U	1,000 U	1,000 U	1,000 U
	12/12/1990	3,600 U	400,000	-	-	3,600 U	3,600 U	7,100 U
	03/15/1991	10,000 U	290,000	10,000 U	10,000	10,000 U	10,000 U	10,000 U
	06/04/1991	10,000 U	210,000	10,000 U	10,000 U	10,000 U	10,000 U	10,000 U
	09/04/1991	5,000 U	190,000	-		5,000 U	5,000 U	10,000 U
	12/06/1991	5,000 U	140,000	8,000	5,000 U	5,000 U	5,000 U	5,000 U
	03/16/1992	1,000 U	83,000	5,000	1,000 U	1,000 U	1,000 U	1,000 U
	06/01/1992	-	71,000	-	-	-	-	-
	09/03/1992	5,000 U	44,000	-	-	5,000 U	5,000 U	10,000 U
	11/30/1992	-	53,300	-	-	-	-	-
	03/01/1993	-	28,000	-	-	-	-	-
	06/17/1993	500 U	20,000	5,500	500 U	500 U	500 U	500 U
	09/08/1993	4.0 J	17,000		33	15	5 U	81
	12/01/1993	-	10,200	-	-	-	-	-
	03/01/1994	-	18,000	-	-	-	-	-
	04/25/1994	200 U	12,000	6.9	310	200 U	200 U	200 U
	06/30/1994	2.0 J	8,500	-	-	8.0	5 U	72
	09/01/1994	-	11,000	-	-	-	-	-
	12/01/1994	-	10,000	-	-	-	-	-

Table 10
Hardboard Area Wells Groundwater Analytical Results - VOCs (ug/L)
H&V Fiber Corporation
Corvallis, Oregon

Well	Date	Tetrachloroethene	Trichloroethene	Cis-1,2-dichloroethene	Trans-1,2-dichloroethene	1,1-Dichloroethene	1,1-Dichloroethane	Vinyl chloride
DMW-2 (cont'd)	04/25/1995	-	8,000	-	-	-	-	-
	06/06/1995	2 J	3,800	-	-	7.0	5 U	97
	09/01/1995	-	5,300	-	-	-	-	-
	12/01/1995	-	1,600	-	-	-	-	-
	03/01/1996	-	1,600	-	-	-	-	-
	06/01/1996	-	2,000	-	-	-	-	-
	09/05/1996	1 J	3,400	-	-	5.0	5 U	110
	12/01/1996	-	500	-	-	-	-	-
	03/01/1997	-	1,050	-	-	-	-	-
	06/20/1997	200 U	2,800	1,900	200 U	200 U	200 U	200 U
	09/01/1997	-	600	-	-	-	-	-
	12/01/1997	-	1,270	-	-	-	-	-
	03/01/1998	-	1,480	-	-	-	-	-
	06/19/1998	1	1,710	818	10.0	2.0	1 U	186
	09/01/1998	-	2,810	-	-	-	-	-
	08/30/1999	50 U	2,000	730	50 U	50 U	50 U	91
	08/22/2000	1 U	810	-	1.8	1 U	1 U	72
	07/31/2001	-	1,630	-	-	-	-	-
	09/20/2001	-	1,930	-	-	-	-	-
	12/18/2001	-	820	-	-	-	-	-
	03/06/2002	-	155	-	-	-	-	-
	09/18/2002	-	2,700	-	-	-	-	-
	03/19/2003	-	1,680	-	-	-	-	-
	09/22/2003	-	1,790	-	-	-	-	-
	09/09/2004	-	1,460	-	-	-	-	-
	08/08/2006	-	2,350	-	-	-	-	-
	12/14/2006	0.59	2,690	516	3.1	3.1	0.5 U	18
	09/27/2007	-	1,290	-	-	-	-	-
	03/23/2009	0.27 J	835	183	0.89 J	1.2	-	12
	06/01/2009	1.1 U	717	163	1.1 U	1.1	-	8.1
	09/14/2009	2.5 U	1,150	152	2.5 U	2.5 U	-	2.5 U
	12/03/2009	0.26 J	569	135	0.57 J	1.04 J	-	14.5
	03/24/2010	0.50 J	1,650	183	0.96 J	1.3 J	-	8.9
	12/10/2010	1.1 U	564	154	1.1 U	1.2	-	20
	03/22/2011	0.21 J	501	108	0.50 J	1.1	-	11
	09/26/2011	1.1 U	587	46	1.1 U	1.1 U	-	4.3
	02/27/2012	1.1 U	449	155	0.63 J	0.93 J	-	10
	07/12/2012	0.5 U	78	75	0.5 U	0.72	-	3.5
	03/19/2013	1.0 U	320	160	0.58 J	1.3	-	9.2
	09/04/2013	5.0 U	400	120	5.0 U	5.0 U	-	9.6

Table 10
Hardboard Area Wells Groundwater Analytical Results - VOCs (ug/L)
H&V Fiber Corporation
Corvallis, Oregon

Well	Date	Tetrachloroethene	Trichloroethene	Cis-1,2-dichloroethene	Trans-1,2-dichloroethene	1,1-Dichloroethene	1,1-Dichloroethane	Vinyl chloride
DMW-2 (cont'd)	03/17/2014	5 U	340	120	5 U	5 U	-	12
	06/03/2014	5 U	300	120	5 U	5 U	-	8
	09/22/2014	5 U	230	130	5 U	5 U	-	12 J3,J[1]
Duplicate (DMW-99)	09/22/2014	1 U	190	180	0.58 J	0.99 J	-	16
	12/16/2014	1 U	140	190	0.75 J	0.91 J	-	18
	03/09/2015	5 U	300	100	5 U	5 U	-	2.1 J
	09/02/2015	5 U	402	140	5 U	5 U	-	7.1
Duplicate (DMW-98)	09/02/2015	10 U	394	132	10 U	10 U	-	6.8 J
MW-7	03/02/1987	100 U	160,000	-	13,000	100 U	100 U	2,000 C
	07/01/1987	20,000 U	140,000	-	18,000	10,000 U	10,000 U	20,000 U
	09/24/1987	10,000 U	100,000	-	10,000	5,000 U	5,000 U	10,000 U
	12/22/1987	700 U	200,000	-	700 U	700 U	700 U	700 U
	03/23/1988	1,000 U	248,000	-	1,000 U	1,000 U	1,000 U	1,000 U
	06/01/1988	500 U	170,000	17,000	500 U	500 U	500 U	500 U
	09/01/1988	400 U	92,000	8,000	400 U	400 U	400 U	400 U
	12/30/1988	100 U	200,000	-	100 U	100 U	100 U	1,000 C
	03/17/1989	1 U	104,000	3,000	1 U	1 U	1 U	400
	06/15/1989	1,000 U	280,000	8,000	1,000 U	1,000 U	1,000 U	1,000 U
	09/12/1989	500 U	80,000	5,500	500 U	500 U	500 U	500 U
	12/27/1989	100 U	130,000	-	100 U	100 U	100 U	220
	03/16/1990	1,000 U	180,000	6,000	1,000 U	1,000 U	1,000 U	1,000 U
	06/27/1990	2,000 U	200,000	8,000	2,000 U	2,000 U	2,000 U	2,000 U
	09/24/1990	4,000 U	150,000	6,000	4,000 U	4,000 U	4,000 U	4,000 U
	12/14/1990	2,000 U	150,000	6,000	2,000 U	2,000 U	2,000 U	2,000 U
	03/15/1991	4,000 U	100,000	4,000 U	4,000 U	4,000 U	4,000 U	4,000 U
	06/04/1991	1,000 U	27,000	1,000	1,000 U	1,000 U	1,000 U	1,000 U
	09/04/1991	25 U	1,800	190	25 U	25 U	25 U	25 U
	12/06/1991	100 U	2,000	200	100 U	100 U	100 U	100 U
	03/16/1992	10 U	200	150	10 U	10 U	10 U	10 U
	06/05/1992	10 U	150	40	10 U	10 U	10 U	10 U
	09/04/1992	1 U	99	36	1 U	1 U	1 U	2.0
	12/30/1992	1 U	60	-	1 U	1 U	1 U	4.0
	03/16/1993	5 U	93	-	5 U	5 U	5 U	5 U
	06/17/1993	2 U	100	73	2 U	2 U	2 U	2 U
	09/10/1993	1 U	39	-	1 U	1 U	1 U	1 U
	12/16/1993	1 U	20	-	1 U	1 U	1 U	1 U
	03/10/1994	1 U	20	-	1 U	1 U	1 U	1 U
	06/30/1994	1 U	11	21	1 U	1 U	1 U	1 U
	08/30/1994	1 U	54	-	1 U	1 U	1 U	1.3
	03/21/1995	1 U	66	32	1 U	1 U	1 U	1 U
	09/12/1995	1 U	12	-	1 U	1 U	1 U	1 U
	03/15/1996	1 U	7.3	3.0	1 U	1 U	1 U	1 U

Table 10
Hardboard Area Wells Groundwater Analytical Results - VOCs (ug/L)
H&V Fiber Corporation
Corvallis, Oregon

Well	Date	Tetrachloroethene	Trichloroethene	Cis-1,2-dichloroethene	Trans-1,2-dichloroethene	1,1-Dichloroethene	1,1-Dichloroethane	Vinyl chloride
MW-7 (cont'd)	09/05/1996	1 U	4.1	2.4	1 U	1 U	1 U	1 U
	03/24/1997	1 U	23	5.1	1 U	1 U	1 U	1 U
	09/04/1997	1 U	4.0	1 U	1 U	1 U	1 U	1 U
	03/13/1998	1 U	4.2	1.6	1 U	1 U	1 U	1 U
	09/04/1998	1 U	4.1	1 U	1 U	1 U	1 U	1 U
	04/02/1999	1 U	16	2.0	1 U	1 U	1 U	1 U
	09/02/1999	1 U	1.0	1 U	1 U	1 U	1 U	1 U
	03/01/2000	1 U	3.0	2.0	1 U	1 U	1 U	1 U
	09/12/2000	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	03/07/2001	1 U	68	5.8	1 U	1 U	1 U	1.9
	09/20/2001	0.5 U	0.70	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	12/19/2001	0.5 U	150	11	0.5 U	0.5 U	0.5 U	0.5 U
	03/06/2002	0.5 U	1.4	0.50	0.5 U	0.5 U	0.5 U	0.5 U
	06/13/2002	0.5 U	3.9	0.70	0.5 U	0.5 U	0.5 U	0.5 U
	09/18/2002	0.5 U	3.8	1.0	0.5 U	0.5 U	0.5 U	0.5 U
	03/19/2003	0.5 U	2.6	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	09/24/2003	0.5 U	5.0	0.90	0.5 U	0.5 U	0.5 U	0.5 U
	03/04/2004	0.5 U	4.8	2.0	0.5 U	0.5 U	0.5 U	0.5 U
	09/09/2004	0.5 U	4.1	0.90	0.5 U	0.5 U	0.5 U	0.5 U
	03/08/2005	0.5 U	2.5	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	09/07/2005	0.5 U	3.0	1.1	0.5 U	0.5 U	0.5 U	0.5 U
	03/08/2006	0.5 U	3.6	2.2	0.5 U	0.5 U	0.5 U	0.5 U
	08/08/2006	0.5 U	1.8	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	12/13/2006	0.5 U	312	24	0.5 U	0.5 U	0.5 U	0.5 U
	03/20/2007	0.5 U	4.3	1.2	0.5 U	0.5 U	0.5 U	0.5 U
	09/27/2007	0.5 U	8.4	1.5	0.5 U	0.5 U	0.5 U	0.5 U
	03/13/2008	0.5 U	2.2	2.6	0.5 U	0.5 U	0.5 U	0.5 U
	03/23/2009	0.5 U	2.4	3.4	0.5 U	0.5 U	-	0.5 U
	12/03/2009	0.5 U	8.8	1.2	0.5 U	0.5 U	-	0.5 U
	03/26/2010	0.5 U	1.1	0.31 J	0.5 U	0.5 U	-	0.5 U
	03/23/2011	0.5 U	1.8	1.4	0.5 U	0.5 U	-	0.5 U
	07/16/2012	0.5 U	0.54	1.7	0.5 U	0.5 U	-	0.5 U
	03/20/2013	1 U	0.86 J	1 U	1 U	1 U	-	1 U
Duplicate (MW-99)	03/20/2013	1 U	0.77 J	1 U	1 U	1 U	-	1 U
	09/05/2013	1 U	1.4	0.78 J	1 U	1 U	-	1 U
	03/17/2014	1 U	0.86 J	1 U	1 U	1 U	-	1 U
	09/23/2014	1 U	1 U	0.56 J	1 U	1 U	-	1 UJ3,UJ[1]
	03/13/2015	1 U	0.60 J	1 U	1 U	1 U	-	1 U
	09/01/2015	1 U	6.3	3.2	1 UJ3,UJ[1]	1 UJ3,UJ[1]	-	1 U
MW-8	02/19/1987	100 U	140,000	-	8,800	100 U	100 U	600 C
	03/02/1987	100 U	230,000	-	17,000	100 U	100 U	2,000 C
	06/30/1987	10,000 U	260,000	-	24,000	5,000 U	5,000 U	10,000 U

Table 10
Hardboard Area Wells Groundwater Analytical Results - VOCs (ug/L)
H&V Fiber Corporation
Corvallis, Oregon

Well	Date	Tetrachloroethene	Trichloroethene	Cis-1,2-dichloroethene	Trans-1,2-dichloroethene	1,1-Dichloroethene	1,1-Dichloroethane	Vinyl chloride
MW-8 (cont'd)	09/24/1987	10,000 U	240,000	-	20,000	5,000 U	5,000 U	10,000 U
	12/22/1987	1,000 U	196,000	-	1,000 U	1,000 U	1,000 U	1,000 U
	03/23/1988	1,000 U	292,000	-	1,000 U	1,000 U	1,000 U	1,000 U
	06/01/1988	500 U	125,000	14,000	500 U	500 U	500 U	500 U
	09/01/1988	700 U	186,000	11,000	700 U	700 U	700 U	700 U
	12/30/1988	100 U	270,000		100 U	100 U	100 U	1,200 C
	03/17/1989	100 U	124,000	3,600	100 U	100 U	100 U	500
	06/15/1989	1,000 U	350,000	36,000	1,000 U	1,000 U	1,000 U	1,000
	09/12/1989	500 U	125,000	7,500	500	500 U	500 U	500 U
	12/27/1989	100 U	290,000	-	100 U	100 U	100 U	540
	03/16/1990	2,000 U	220,000	10,000	2,000 U	2,000 U	2,000 U	2,000 U
	06/27/1990	5,000 U	230,000	13,000	5,000 U	5,000 U	5,000 U	5,000 U
	09/24/1990	4,000 U	190,000	7,000	4,000 U	4,000 U	4,000 U	4,000 U
	12/14/1990	4,000 U	230,000	7,000	4,000 U	4,000 U	4,000 U	4,000 U
	03/15/1991	4,000 U	48,000	4,000 U	4,000 U	4,000 U	4,000 U	4,000 U
	06/04/1991	1,000 U	57,000	2,000	1,000 U	1,000 U	1,000 U	1,000 U
	09/04/1991	1,000 U	46,000	2,000	1,000 U	1,000 U	1,000 U	1,000 U
	12/06/1991	1,000 U	27,000	1,200	1,000 U	1,000 U	1,000 U	1,000 U
	03/16/1992	100 U	20,000	800	100 U	100 U	100 U	100 U
	06/05/1992	1,000 U	13,000	1,000 U	1,000 U	1,000 U	1,000 U	1,000 U
	09/04/1992	100 U	9,500	400	100 U	100 U	100 U	100 U
	12/30/1992	100 U	7,000	-	100 U	100 U	100 U	100 U
	03/16/1993	100 U	6,900	-	100 U	100 U	100 U	100 U
	06/17/1993	100 U	5,500	200	100 U	100 U	100 U	100 U
	09/10/1993	1 U	4,000	-	1 U	1 U	1 U	8.2
	12/16/1993	1 U	4,800	-	1 U	1 U	1 U	5.2
	03/10/1994	50 U	2,700	-	50 U	50 U	50 U	50 U
	06/29/1994	100 U	3,400	150	100 U	100 U	100 U	100 U
	08/30/1994	20 U	1,840	-	20 U	20 U	20 U	20 U
	12/22/1994	50 U	1,400	-	50 U	50 U	50 U	50 U
	03/21/1995	20 U	1,600	79	20 U	20 U	20 U	20 U
	06/06/1995	50 U	1,500	-	50 U	50 U	50 U	50 U
	09/12/1995	50 U	1,400	-	50 U	50 U	50 U	50 U
	12/20/1995	10 U	910	20	10 U	10 U	10 U	10 U
	03/15/1996	1 U	660	35	1 U	1 U	1 U	1 U
	06/21/1996	1 U	696	69	1 U	1 U	1 U	1 U
	09/05/1996	1 U	80	9.5	1 U	1 U	1 U	1 U
	03/24/1997	10 U	711	61	10 U	10 U	10 U	10 U
	09/04/1997	1 U	632	61	1 U	1 U	1 U	1 U
	03/13/1998	10 U	527	54	10 U	10 U	10 U	10 U

Table 10
Hardboard Area Wells Groundwater Analytical Results - VOCs (ug/L)
H&V Fiber Corporation
Corvallis, Oregon

Well	Date	Tetrachloroethene	Trichloroethene	Cis-1,2-dichloroethene	Trans-1,2-dichloroethene	1,1-Dichloroethene	1,1-Dichloroethane	Vinyl chloride
MW-8 (cont'd)	09/04/1998	10 U	511	43	10 U	10 U	10 U	10 U
	04/02/1999	10 U	560	33	10 U	10 U	10 U	10 U
	09/02/1999	10 U	536	45	10 U	10 U	10 U	10 U
	03/01/2000	10 U	346	28	10 U	10 U	10 U	10 U
	06/27/2000	1 U	371	43	1.0 U	1 U	1 U	1 U
	09/12/2000	1 U	521	43	1.0 U	1 U	1 U	1
	03/07/2001	1 U	271	44	1.0 U	1.1	1 U	1.0
	09/20/2001	0.5 U	427	51	0.5 U	0.5 U	0.5 U	1.4
	03/05/2002	0.5 U	0.5 U	0.60	0.5 U	0.5 U	0.5 U	0.5 U
	09/18/2002	0.5 U	770	47	0.5 U	0.60	0.5 U	1.4
	03/19/2003	0.5 U	446	33	0.5 U	0.5 U	0.5 U	1.1
	09/24/2003	0.5 U	464	37	0.5 U	0.50	0.5 U	1.2
	03/04/2004	0.5 U	258	24	0.5 U	0.5 U	0.5 U	0.90
	09/09/2004	0.5 U	311	25	0.5 U	0.5 U	0.5 U	0.60
	03/09/2005	0.5 U	507	33	0.5 U	0.63	0.5 U	1.2
	09/07/2005	0.5 U	811	28	1.1 U	1.1 U	1.1 U	1.1 U
	03/08/2006	0.5 U	266	18	0.5 U	0.5 U	0.5 U	0.5 U
	08/08/2006	2.5 U	1,010	48	2.5 U	2.5 U	2.5 U	2.5 U
	12/13/2006	0.5 U	451	43	0.5 U	0.51	0.5 U	1.0
	03/20/2007	0.5 U	285	18	0.15 J	0.28 J	0.5 U	0.52
	09/27/2007	1.1 U	422	26	1.1 U	1.1 U	1.1 U	1.1 U
	03/13/2008	0.5 U	458	23	0.5 U	0.51	0.5 U	0.58
	03/23/2009	0.5 U	14.8	1.9	0.5 U	0.5 U	-	0.5 U
	09/14/2009	1.1 U	414	31	1.1 U	1.1 U	-	1.1 U
	12/03/2009	1.1 U	855	51	0.46 J	1.3	-	0.87 J
	03/26/2010	2.5 U	1,230	61	0.59 J	1.7 J	-	2.5 U
	03/26/2010	2.5 U	1,170	60	2.5 U	1.7 J	-	2.5 U
	06/08/2010	0.06 U	222	19	0.14 J	0.40 J	-	0.22 J
duplicate (MW-98)	06/08/2010	0.06 U	215	19	0.15 J	0.42 J	-	0.24 J
	9/29/2010*	0.5 UJ	150 J	11 UJ	0.5 UJ	0.15 J	-	0.5 UJ
duplicate (MW-98)	9/29/2010*	0.5 UJ	51 J	4.5 UJ	0.10 J	0.31 J	-	0.5 UJ
	03/23/2011	0.5 U	0.63	0.74	0.5 U	0.5 U	-	0.5 U
duplicate (MW-98)	03/23/2011	0.5 U	1.7	0.78	0.5 U	0.5 U	-	0.5 U
	09/26/2011	0.5 U	720	39	0.5 U	0.98	-	0.5 U
duplicate (MW-99)	09/26/2011	0.5 U	749	43	0.5 U	1.1	-	0.5 U
	07/16/2012	1.1 U	715	39	1.1 U	1.1 U	-	1.1 U
	03/20/2013	1.0 U	750	40	1.0 U	0.99 J	-	0.30 J
	09/05/2013	1 U	1.6	0.47 J	1 U	1 U		1 U
duplicate (MW-98)	09/05/2013	1 U	1.9	0.51 J	1 U	1 U		1 U

Table 10
Hardboard Area Wells Groundwater Analytical Results - VOCs (ug/L)
H&V Fiber Corporation
Corvallis, Oregon

Well	Date	Tetrachloroethene	Trichloroethene	Cis-1,2-dichloroethene	Trans-1,2-dichloroethene	1,1-Dichloroethene	1,1-Dichloroethane	Vinyl chloride
MW-8 (cont'd)	03/17/2014	1 U	0.59 J	0.44 J	1 U	1 U	-	1 U
duplicate (MW-98)	03/17/2014	1 U	0.66 J	0.41 J	1 U	1 U	-	1 U
	09/23/2014	1 U	1 U	1 U	1 U	1 U	-	1 UJ3,UJ[1]
	03/13/2015	1 U	0.93 J	0.54 J	1 U	1 U	-	1 U
	09/01/2015	1 U	594	38	0.77 J/J3,J[1]	0.78 J/J3,J[1]	-	0.38 J
DMW-11	06/01/1988	250 U	85,000	2,400	250 U	250 U	250 U	250 U
	09/01/1988	400 U	68,000	1,100	400 U	400 U	400 U	400 U
	12/28/1988	100 U	88,000	-	1,600	100 U	100 U	100 U
	03/17/1989	200 U	71,000	300	200 U	200 U	200 U	200 U
	06/15/1989	1,000 U	180,000	1,000	1,000 U	1,000 U	1,000 U	1,000 U
	09/12/1989	250 U	55,000	750	250 U	250 U	250 U	250 U
	12/28/1989	100 U	91,000	-	100 U	100 U	100 U	100 U
	03/16/1990	1,000 U	93,000	1,000 U	1,000 U	1,000 U	1,000 U	1,000 U
	12/14/1990	200 U	53,000	500	200 U	200 U	200 U	200 U
	03/15/1991	1,000 U	55,000	1,000 U	1,000 U	1,000 U	1,000 U	1,000 U
	06/04/1991	1,000 U	46,000	1,000 U	1,000 U	1,000 U	1,000 U	1,000 U
	09/04/1991	1,000 U	43,000	1,000	1,000 U	1,000 U	1,000 U	1,000 U
	12/06/1991	1,000 U	29,000	1,000 U	1,000 U	1,000 U	1,000 U	1,000 U
	03/16/1992	100 U	21,000	600	100 U	100 U	100 U	100 U
	06/01/1992	-	22,000	-	-	-	-	-
	09/01/1992	-	14,000	-	-	-	-	-
	11/30/1992	-	16,000	-	-	-	-	-
	03/01/1993	-	9,000	-	-	-	-	-
	06/17/1993	100 U	8,000	400	100 U	100 U	100 U	100 U
	09/08/1993	1 U	7,500	-	1 U	1 U	1 U	9.0
	12/01/1993	-	5,800	-	-	-	-	-
	03/01/1994	-	16,000	-	-	-	-	-
	04/25/1994	100 U	3,800	730	100 U	100 U	100 U	100 U
	06/30/1994	250 U	7,800	290	250 U	250 U	250 U	250 U
	09/01/1994	-	10,600	-	-	-	-	-
	12/01/1994	-	9,000	-	-	-	-	-
	04/25/1995	-	2,100	-	-	-	-	-
	06/01/1995	-	4,700	-	-	-	-	-
	09/01/1995	-	3,900	-	-	-	-	-
	12/01/1995	-	2,900	-	-	-	-	-
	03/01/1996	-	6,700	-	-	-	-	-
	06/01/1996	-	860	-	-	-	-	-
	09/01/1996	-	1,140	-	-	-	-	-
	12/01/1996	-	960	-	-	-	-	-
	03/01/1997	-	500	-	-	-	-	-
	06/01/1997	-	880	-	-	-	-	-

Table 10
Hardboard Area Wells Groundwater Analytical Results - VOCs (ug/L)
H&V Fiber Corporation
Corvallis, Oregon

Well	Date	Tetrachloroethene	Trichloroethene	Cis-1,2-dichloroethene	Trans-1,2-dichloroethene	1,1-Dichloroethene	1,1-Dichloroethane	Vinyl chloride
DMW-11 (cont'd)	09/01/1997	-	1,000	-	-	-	-	-
	12/01/1997	-	700	-	-	-	-	-
	03/01/1998	-	500	-	-	-	-	-
	06/01/1998	-	1,700	-	-	-	-	-
	09/01/1998	-	660	-	-	-	-	-
	09/01/1999	-	770	-	-	-	-	-
	09/01/2000	-	220	-	-	-	-	-
	07/31/2001	-	418	-	-	-	-	-
	09/20/2001	-	363	-	-	-	-	-
	12/18/2001	-	309	-	-	-	-	-
	03/06/2002	-	382	-	-	-	-	-
	09/18/2002	-	458	-	-	-	-	-
	03/19/2003	-	394	-	-	-	-	-
	09/22/2003	-	495	-	-	-	-	-
	09/09/2004	-	375	-	-	-	-	-
	09/07/2005	-	320	-	-	-	-	-
	08/08/2006	-	436	-	-	-	-	-
	12/14/2006	0.8	68	119	0.61	0.5 U	0.5 U	2.2
	09/27/2007	-	456	-	-	-	-	-
	03/23/2009	0.17	88	13	0.10 J	0.32 J	-	0.18 J
	06/01/2009	0.79	5.7	4.3	0.5 U	0.5 U	-	0.5 U
	09/14/2009	1.1 U	358	67	1.1 U	1.1 U	-	1.1 U
	12/03/2009	0.31 J	5.7	5.0	0.5 U	0.14 J	-	0.13 J
	03/24/2010	0.26 J	86	22.1	0.14 J	0.24 J	-	0.5 U
	12/10/2010	0.76	2.9	4.2	0.5 U	0.5 U	-	0.5 U
	03/22/2011	0.21 J	46	9.6	0.5 U	0.22 J	-	0.5 U
	09/26/2011	0.5 U	239	51	0.5 U	0.53	-	0.5 U
	07/12/2012	0.5 U	219	36	0.5 U	0.59	-	0.5 U
	03/19/2013	0.46 J	5.2	5.9	1.0 U	1.0 U	-	1.0 U
	09/05/2013	1 U	170	41	0.45 J	0.53 J		1 U
	03/17/2014	1 U	1 U	5.4	1 U	1 U	-	1 U
	09/22/2014	1 U	130	30	1 U	1 U	-	1 U
	03/12/2015	1 U	100	28	1 U	1 U	-	1 U
	09/03/2015	1 U	40	14	1 U	1 U	-	1 U
DMW-12	06/01/1988	500 U	85,000	7,800	500 U	500 U	500 U	500 U
	06/01/1988	500 U	110,000	14,000	500 U	500 U	500 U	500 U
	09/01/1988	400 U	108,000	10,000	400 U	400 U	400 U	400 U
	12/28/1988	100 U	160,000	-	16,000	100 U	100 U	530
	03/17/1989	100 U	66,000	2,400	100 U	100 U	100 U	500
	06/15/1989	500 U	140,000	4,500	500 U	500 U	500 U	500 U
	09/12/1989	250 U	65,000	4,500	250 U	250 U	250 U	250 U

Table 10
Hardboard Area Wells Groundwater Analytical Results - VOCs (ug/L)
H&V Fiber Corporation
Corvallis, Oregon

Well	Date	Tetrachloroethene	Trichloroethene	Cis-1,2-dichloroethene	Trans-1,2-dichloroethene	1,1-Dichloroethene	1,1-Dichloroethane	Vinyl chloride
DMW-12 (cont'd)	12/28/1989	100 U	72,000	-	100 U	100 U	100 U	100 U
	03/16/1990	1,000 U	98,000	4,000	1,000 U	1,000 U	1,000 U	1,000 U
	12/14/1990	1,000 U	150,000	7,000	1,000 U	1,000 U	1,000 U	1,000 U
	03/15/1991	2,000 U	52,000	2,000 U	2,000 U	2,000 U	2,000 U	2,000 U
	06/04/1991	1,000 U	28,000	1,000	1,000 U	1,000 U	1,000 U	1,000 U
	09/04/1991	1,000 U	240,000	6,000	1,000 U	1,000 U	1,000 U	1,000 U
	12/06/1991	1,000 U	20,000	1,000 U	1,000 U	1,000 U	1,000 U	1,000 U
	03/06/1992	100 U	10,000	500	100 U	100 U	100 U	100 U
	06/01/1992	-	10,000	-	-	-	-	-
	09/01/1992	-	9,000	-	-	-	-	-
	11/30/1992	-	8,100	-	-	-	-	-
	03/01/1993	-	5,000	-	-	-	-	-
	06/17/1993	100 U	3,000	300	100 U	100 U	100 U	100 U
	09/08/1993	1 U	2,700	-	1 U	1 U	1 U	4.6
	12/01/1993	-	8,000	-	-	-	-	-
	03/01/1994	-	3,000	-	-	-	-	-
	04/25/1994	10 U	1,500	110	10 U	10 U	10 U	10 U
	06/30/1994	100 U	1,600	100	100 U	100 U	100 U	100 U
	09/01/1994	-	4,000	-	-	-	-	-
	12/01/1994	-	8,000	-	-	-	-	-
	04/25/1995	-	600	-	-	-	-	-
	06/01/1995	-	500	-	-	-	-	-
	09/01/1995	-	500	-	-	-	-	-
	12/01/1995	-	4,100	-	-	-	-	-
	03/01/1996	-	378	-	-	-	-	-
	06/01/1996	-	200	-	-	-	-	-
	09/01/1996	-	340	-	-	-	-	-
	12/01/1996	-	400	-	-	-	-	-
	03/01/1997	-	300	-	-	-	-	-
	06/01/1997	-	280	-	-	-	-	-
	09/01/1997	-	340	-	-	-	-	-
	12/01/1997	-	360	-	-	-	-	-
	03/01/1998	-	220	-	-	-	-	-
	06/01/1998	-	380	-	-	-	-	-
	09/01/1998	-	220	-	-	-	-	-
	09/01/1999	-	360	-	-	-	-	-
	09/01/2000	-	150	-	-	-	-	-
	07/31/2001	-	285	-	-	-	-	-
	09/20/2001	-	227	-	-	-	-	-
	12/18/2001	-	208	-	-	-	-	-

Table 10
Hardboard Area Wells Groundwater Analytical Results - VOCs (ug/L)
H&V Fiber Corporation
Corvallis, Oregon

Well	Date	Tetrachloroethene	Trichloroethene	Cis-1,2-dichloroethene	Trans-1,2-dichloroethene	1,1-Dichloroethene	1,1-Dichloroethane	Vinyl chloride
DMW-12 (cont'd)	03/06/2002	-	182	-	-	-	-	-
	09/18/2002	-	176	-	-	-	-	-
	03/19/2003	-	175	-	-	-	-	-
	09/22/2003	-	253	-	-	-	-	-
	09/09/2004	-	289	-	-	-	-	-
	12/14/2006	0.5 U	329	93	0.70	0.66	0.5 U	0.90
	09/27/2007	-	364	-	-	-	-	-
	03/23/2009	0.13 J	70	11	0.13 J	0.14 J	-	0.44 J
	06/01/2009	0.5 U	23	10	0.5 U	0.5 U	-	0.5 U
	09/12/2009	0.5 U	175	33	0.5 U	0.5 U	-	0.5 U
	12/03/2009	0.14 J	139	28	0.20 J	0.32 J	-	0.24 J
	03/24/2010	0.15 J	138	27	0.24 J	0.29 J	-	0.5 U
(MW-12)	06/07/2011	0.10 J	140	23	0.16 J	0.25 J	-	0.5 U
	09/26/2011	0.5 U	139	28	0.5 U	0.5 U	-	0.5 U
	07/12/2012	0.5 U	3.5	1.3	0.5 U	0.5 U	-	0.5 U
	03/20/2013	1.0 U	47	5.5	1.0 U	1.0 U	-	1.0 U
	09/05/2013	1.1	34	6.1	1 U	1 U	-	1 U
	03/18/2014	1 U,UJ[1]	150 V,J[1]	34	1 U	1 U	-	1 U
	09/23/2014	1 U	5.1	5.0	1 U	1 U	-	0.74 JJ3,J[1]
	03/13/2015	1 U	9.0	3.7	1 U	1 U	-	1 U
	09/02/2015	1 U	2.7	2.0	1 UJ3,UJ[1]	1 UJ3,UJ[1]	-	0.42 J
Duplicate (MW-99)	09/02/2015	1 U	2.8	2.1	1 U	1 U	-	0.46 J
MW-14	06/01/1988	1 U	38	2.0	1 U	1 U	1 U	1 U
	09/01/1988	1 U	42	2.0	1 U	1 U	1 U	1 U
	12/28/1988	1 U	25	-	1 U	1 U	1 U	1 U
	03/17/1989	1 U	22	1 U	1 U	1 U	1 U	1 U
	06/15/1989	1 U	36	1.0	1 U	1 U	1 U	1 U
	09/12/1989	1 U	14	1 U	1 U	1 U	1 U	1 U
	12/28/1989	1 U	23	-	1 U	1 U	1 U	1 U
	03/16/1990	1 U	29	1.0	1 U	1 U	1 U	1 U
	06/27/1990	1 U	40	3.0	1 U	1 U	1 U	1 U
	09/24/1990	1 U	29	3.0	1 U	1 U	1 U	1 U
	12/14/1990	1 U	18	2.0	1 U	1 U	1 U	1 U
	03/15/1991	1 U	28	3.0	1 U	1 U	1 U	1 U
	06/04/1991	1 U	35	8.0	1 U	1 U	1 U	1 U
	09/04/1991	1 U	84	10	1 U	1 U	1 U	1 U
	12/06/1991	5 U	32	5 U	5 U	5 U	5 U	5 U
	03/16/1992	1 U	30	2.0	1 U	1 U	1 U	1 U
	06/05/1992	1 U	40	4.0	1 U	1 U	1 U	1.0
	09/04/1992	1 U	31	2.0	1 U	1 U	1 U	1 U
	12/01/1992	1 U	11	-	1 U	1 U	1 U	1 U
	03/16/1993	1 U	11	-	1 U	1 U	1 U	1 U

Table 10
Hardboard Area Wells Groundwater Analytical Results - VOCs (ug/L)
H&V Fiber Corporation
Corvallis, Oregon

Well	Date	Tetrachloroethene	Trichloroethene	Cis-1,2-dichloroethene	Trans-1,2-dichloroethene	1,1-Dichloroethene	1,1-Dichloroethane	Vinyl chloride
MW-14 (cont'd)	06/16/1993	1 U	10	1 U	1 U	1 U	1 U	1 U
	09/09/1993	1 U	24	-	1 U	1 U	1 U	1 U
	12/16/1993	1 U	3.9	-	1 U	1 U	1 U	1 U
	03/09/1994	1 U	4.0	-	1 U	1 U	1 U	1 U
	06/29/1994	1 U	6.9	1.0	1 U	1 U	1 U	1 U
	08/30/1994	1 U	12	-	1 U	1 U	1 U	1 U
	12/21/1994	1 U	1.4	-	1 U	1 U	1 U	1 U
	03/20/1995	1 U	8.0	2.0	1 U	1 U	1 U	1 U
	06/06/1995	1 U	5.1	-	1 U	1 U	1 U	1 U
	09/11/1995	1 U	3.3	-	1 U	1 U	1 U	1 U
	12/20/1995	1 U	2.5	1 U	1 U	1 U	1 U	1 U
	03/14/1996	1 U	3.9	1 U	1 U	1 U	1 U	1 U
	06/21/1996	1.5	5.0	1 U	1 U	1 U	1 U	1 U
	09/06/1996	1.2	5.8	1 U	1 U	1 U	1 U	1 U
	03/21/1997	2.4	4.2	1 U	1 U	1 U	1 U	1 U
	09/04/1997	2.0	4.0	1 U	1 U	1 U	1 U	1 U
	03/12/1998	2.6	2.4	1 U	1 U	1 U	1 U	1 U
	09/03/1998	2.5	3.6	1 U	1 U	1 U	1 U	1 U
	04/01/1999	3.0	2.0	1 U	1 U	1 U	1 U	1 U
	08/31/1999	2.0	2.0	1 U	1 U	1 U	1 U	1 U
	09/12/2000	3.0	2.0	1 U	1 U	1 U	1 U	1 U
	09/21/2001	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	09/17/2002	3.2	7.1	1.6	0.5 U	0.5 U	0.5 U	0.5 U
	09/23/2003	2.3	2.3	0.80	0.5 U	0.5 U	0.5 U	0.5 U
	09/08/2004	2.5	1.6	0.80	0.5 U	0.5 U	0.5 U	1.1
	09/07/2005	1.7	1.8	1.2	0.5 U	0.5 U	0.5 U	0.5 U
	08/07/2006	1.3	2.3	1.2	0.5 U	0.5 U	0.5 U	0.5 U
	12/13/2006	1.9	2.4	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	09/26/2007	2.2	1.8	0.60	0.5 U	0.5 U	0.5 U	0.5 U
	03/23/2009	0.26 J	0.56	0.65	0.5 U	0.5 U	0.10 J	0.5 U
	03/25/2010	0.23 J	0.72	0.27 J	0.5 U	0.5 U	-	0.5 U
	03/22/2011	0.17 J	0.99	0.20 J	0.5 U	0.5 U	-	0.5 U
duplicate (MW-99)	03/22/2011	0.14 J	0.97	0.19 J	0.5 U	0.5 U	-	0.5 U
	07/13/2012	0.5 U	0.74	0.5 U	0.5 U	0.5 U	-	0.5 U
	09/05/2013	1 U	0.87 J	1.6	1 U	1 U		1 U
	09/22/2014	0.37 J	2.0	3.9	1 U	1 U	-	1 U
	09/01/2015	1 U	1.7	5.2	1 UJ3,UJ[1]	1 UJ3,UJ[1]	-	1 U
DMW-33	01/09/2014	0.88	26	3.1	1 U	1 U	-	1 U
	03/17/2014	1 U	7.6	6.6	1 U	1 U	-	1 U
	06/03/2014	1 U	6.6	2.6	1 U	1 U	-	1 U

Table 10
Hardboard Area Wells Groundwater Analytical Results - VOCs (ug/L)
H&V Fiber Corporation
Corvallis, Oregon

Well	Date	Tetrachloroethene	Trichloroethene	Cis-1,2-dichloroethene	Trans-1,2-dichloroethene	1,1-Dichloroethene	1,1-Dichloroethane	Vinyl chloride
DMW-33 (cont'd)	09/24/2014	0.44 J	11	2.4	1 U	1 U	-	1 UJ3,UJ[1]
	12/01/2014	0.50 J	14	6.1 J5,J[1]	1 UJ5	1 UJ5	-	1 UJ5
	03/13/2015	1 U	7.5	2.5	1 U	1 U	-	1 U
	09/03/2015	1 U	7.4	1.7	1 J3	1 J3	-	1 U
IMW-33	01/09/2014	1 U	0.53 J	1 U	1 U	1 U	-	1 U
	03/17/2014	1 U	1 U	1.6	1 U	1 U	-	1 U
	06/03/2014	1 U	1 U	0.68 J	1 U	1 U	-	1 U
	09/24/2014	1 U	0.54 J	1.3	1 U	1 U	-	1 UJ3
	12/01/2014	1 U	0.48 J	2.0 J[1]	1 U	1 U	-	1 U
	03/13/2015	1 U	0.70 J	1 U	1 U	1 U	-	1 U
	09/15/2015	1 U	1 U	0.45 J	1 UJ[1]	1 UJ[1]	-	1 U
DMW-34	01/09/2014	1 U	800	120	0.70 J	1.9	-	0.87 J
	03/17/2014	20 U	190	26	20 U	20 U	-	20 U
	06/03/2014	1 U	32	4.5	1 U	1 U	-	1 U
	09/22/2014	1 U	34	4.4	1 U	1 U	-	1 U,UJ[1]
	12/16/2014	1 U	610	130	0.59 J	1.5	-	0.56 J
	03/13/2015	1 U	42	6.7	1 U	1 U	-	1 U
	09/03/2015	1 U	39	6.6	1 U	1 U	-	1 U
IMW-34	01/09/2014	1 U	4.1	0.52 J	1 U	1 U	-	1 U
	03/17/2014	1 U	1 U	1 U	1 U	1 U	-	1 U
	06/03/2014	1 U	1 U	1 U	1 U	1 U	-	1 U
	09/22/2014	1 U	1 U	1 U	1 U	1 U	-	1 U
	12/16/2014	1 U	0.66 J	0.37 J	1 U	1 U	-	1 U
	03/13/2015	1 U	0.47 J	1 U	1 U	1 U	-	1 U
	09/03/2015	1 U	1 U	1 U	1 J3	1 J3	-	1 U
DMW-35	01/14/2014	5 U	490	51	1 U	1 J	-	1 U
	03/18/2014	5 U	550	150	5 U	5 U	-	5 U
	06/03/2014	5 U	570	150	5 U	5 U	-	5 U
	09/22/2014	5 U	620	230	5 U	5 U	-	5 U
	12/02/2014	5 U	340	110 J[1]	5 U	5 U	-	5 U
	03/13/2015	5 U	1,700	880	2.2 J	3.0 J	-	2.7 J
	09/03/2015	10 U	475	151	10 U	10 U	-	10 U
IMW-35	01/14/2014	1 U	1 U	0.86 J	1 U	1 U	-	1 U
	03/18/2014	1 U	1 U	0.34 J	1 U	1 U	-	1 U
	06/03/2014	1 U	0.43 J	0.56 J	1 U	1 U	-	1 U
	09/22/2014	1 U	1 U	1 U	1 U	1 U	-	1 U
	12/02/2014	1 U	1 U	0.52 J,J[1]	1 U	1 U	-	1 U
	03/13/2015	1 U	1 U	1.2	1 U	1 U	-	1 U
	09/03/2015	1 U	0.41 J	0.87 J	1 U	1 U	-	1 U
DMW-37	03/13/2015	1 U	22	1.9	1 U	1 U	-	1 U

Table 10
Hardboard Area Wells Groundwater Analytical Results - VOCs (ug/L)
H&V Fiber Corporation
Corvallis, Oregon

Well	Date	Tetrachloroethene	Trichloroethene	Cis-1,2-dichloroethene	Trans-1,2-dichloroethene	1,1-Dichloroethene	1,1-Dichloroethane	Vinyl chloride
	06/10/2015	1 U	8.2	1.0	1 U	1 U	-	1 U
	09/01/2015	1 U	18	3.9	1 UJ3,UJ[1]	1 UJ3,UJ[1]	-	1 U
	12/16/2015	0.5 U	15	1.2	0.5 U	0.5 U	-	0.5 U
DMW-38	01/19/2015	1 U	360	26	1 U	1 U	-	1 U
duplicate (DMW-98)	03/13/2015	10 U	230	24	10 U	10 U	-	10 U
	03/13/2015	1 U	240	23	1 U	1 U	-	1 U
	06/10/2015	1 U	170	20	1 J3	1 J3	-	1 U
	09/03/2015	1 U	176	19	1 U	1 U	-	1 U
	12/16/2015	0.5 U	143	47	0.5 U	0.5 U	-	3.6
DMW-39	01/19/2015	1 U	330	85	1 U	0.82 J	-	0.41 J
	03/13/2015	20 U	49	460	20 U	20 U	-	20 U
	06/10/2015	1 U	2.6	1.6	1 U	1 U	-	1 U
	09/02/2015	1 U	6.7	2.4	1 UJ3,UJ[1]	1 UJ3,UJ[1]	-	1 U
	12/16/2015	0.5 U	21	5.4	0.5 U	0.5 U	-	0.5 U
DMW-42	12/16/2015	0.5 U	13	7.4	0.5 U	0.5 U	-	0.5 U
DEQ Screening Level Criteria for Water								
Ingestion and Inhalation of Tap Water (Residential)[a]		12	0.49	36	360	280	2.8	0.027
Volitilization to Outdoor Air (Residential)[b]		64,000	3,300	>S	>S	570,000	16,000	350
Volitilization to Outdoor Air (Occupational)[c]		>S	20,000	>S	>S	2,400,000	68,000	5,900
Vapor Intrusion (Residential)[d]		3,700	200	>S	>S	29,000	1,100	17
Vapor Intrusion (Occupational)[e]		48,000	3,700	>S	>S	360,000	14,000	880
GW in Excavation[f]		5,600	3,000	18,000	180,000	44,000	10,000	960
Portland Harbor JSCS Levels								
Upland Source Control Screening Level[g]		0.33	3.0	NA	1,000	NA	NA	0.24
2004 AWQC (Human Health - Organism Only)[h]		3.3	30	NA	10,000	NA	NA	2.4
2004 AWQC (Ecological Receptors - Chronic)[i]		840	21,900	NA	NA	NA	NA	NA
Oak Ridge Tier II (Ecological Receptors)[j]		98	47	590	590	25[l]	-	930 [k]

Table 10
Hardboard Area Wells Groundwater Analytical Results - VOCs (ug/L)
H&V Fiber Corporation
Corvallis, Oregon

Notes:

[a] Risk-based concentration (RBC) for ingestion/inhalation in a residential setting (revised November 1, 2015)

[b] RBC for volatilization to outdoor air in a residential setting (revised November 1, 2015)

[c] RBC for volatilization to outdoor air in an occupational setting (revised November 1, 2015)

[d] RBC for vapor intrusion into buildings in a residential setting (revised November 1, 2015)

[e] RBC for vapor intrusion into buildings in an occupational setting (revised November 1, 2015)

[r] RBC for groundwater in excavation by a construction worker (revised November 1, 2015)

[g] DEQ, Portland Harbor JSCS, Table 3-1 (revised 7/16/07). Values listed are based on human health via fish ingestion

[h] DEQ, Portland Harbor JSCS, Table 3-1 (revised 7/16/07). Per DEQ's Ambient Water Quality Criteria for Organisms Only (DEQ 2004)

[i] DEQ, Portland Harbor JSCS, Table 3-1 (revised 7/16/07). Per DEQ's Ambient Water Quality Criteria - Ecologic Receptors - Chronic (DEQ 2004)

[j] DEQ, Portland Harbor JSCS, Table 3-1 (revised 7/16/07). Per Oak Ridge National Laboratory's Water Quality Criteria - Ecological Receptors - Tier II SCV
(Tier II SCV values were taken from Suter II, G.W. and Tsao, C.L., 1996. Toxicological Benchmarks for Screening Potential Contaminants of Concern for Effects on Aquatic Biota: 1996 Revision. ORNL publication ES/ER/TM-96/R2

[k] Ecological screening value adopted by EPA in Regions 3,5 and 6.

ug/L = Micrograms per liter

U = not detected at the associated reporting limit

- = Analyte not analyzed for this parameter

V = The sample concentration is too high to evaluate accurate spike recoveries

C = results of coelution

E = value reported exceeds linear calibration range; estimated concentration.

J = estimated trace concentration

J^1 = Data Validation Qualifier. The analyte was detected above the method reporting limit. Results should be considered an estimate. See corresponding data validation report for

UJ^1 = Data Validation Qualifier. The analyte was analyzed for, but not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

J3 = the associated batch QC was outside the established quality control range for precision, value is estimated

J5 = The smaple matrix interfered with the ability to make any accurate determination; spike value is high

* = data from multiple analyses were not consistant. Results should be considered estimates.

>S = This RBC exceeds the solubility limit

Table 11
Downgradient Area Wells Groundwater Analytical Results - VOCs (ug/L)
H&V Fiber Corporation
Corvallis, Oregon

Well	Date	Tetrachloroethene	Trichloroethene	Cis-1,2-dichloroethene	Trans-1,2-dichloroethene	1,1-Dichloroethene	1,1-Dichloroethane	Vinyl chloride
Downgradient Area Wells								
MW-4	04/03/1986	-	5,320	-	-	-	-	-
	05/28/1986	-	2,360	-	-	-	-	-
	06/27/1986	100 U	4,200		340	100 U	100 U	100 U
	07/30/1986	-	14,300	-	-	-	-	-
	09/04/1986	-	15,900	-	-	-	-	-
	10/13/1986	-	10,700	-	-	-	-	-
	11/14/1986	-	1,260	-	-	-	-	-
	12/22/1986	10 U	780	-	26	10 U	10 U	10 U
	10/06/1987	20 U	720	-	110	10 U	10 U	20 U
	12/22/1987	1 U	1,100	-	1 U	1 U	1 U	3.0
	03/22/1988	10 U	3,100	-	10 U	10 U	10 U	10 U
	06/01/1988	4 U	1,300	33	4 U	4 U	4 U	4 U
	09/01/1988	2 U	710	70	2 U	2 U	2 U	2 U
	12/27/1988	1 U	2,500	-	300	1 U	1 U	9.0 C
	03/17/1989	1 U	2.0	1 U	1 U	1 U	1 U	1 U
	06/15/1989	38	5,300	400	3.0	5.0	1.0	49
	09/12/1989	10 U	2,500	280	10 U	10 U	10 U	10 U
	12/29/1989	1,000 U	17,000		1,000 U	1,000 U	1,000 U	1,000 U
	03/16/1990	5 U	1,600	120	5 U	5 U	5 U	5 U
	06/27/1990	20 U	5,000	440	20 U	20 U	20 U	20 U
	09/24/1990	100 U	7,000	400	100 U	100 U	100 U	100 U
	12/14/1990	30 U	8,800	400	30 U	30 U	30 U	30 U
	03/15/1991	100 U	1,200	100	100 U	100 U	100 U	100
	06/04/1991	100 U	1,500	200	100 U	100 U	100 U	100 U
	09/04/1991	20 U	8,900	1,200	20 U	20 U	20 U	20 U
	12/06/1991	100 U	1,700	400	100 U	100 U	100 U	100 U
	03/16/1992	50 U	6,200	860	50 U	50 U	50 U	50 U
	06/05/1992	100 U	5,800	530	100 U	100 U	100 U	100 U
	09/04/1992	100 U	4,300	600	100 U	100 U	100 U	100
	12/31/1992	5 U	320	-	5 U	5 U	5 U	5 U
	03/16/1993	20 U	1,000	-	20 U	20 U	20 U	20 U
	06/17/1993	20 U	640	140	20 U	20 U	20 U	20 U
	09/09/1993	5 U	2,300	-	5 U	5 U	5 U	15
	12/16/1993	10 U	920	-	10 U	10 U	10 U	10 U
	03/09/1994	25 U	1,000	-	25 U	25 U	25 U	25 U
	06/30/1994	200 U	5,500	1,500	200 U	200 U	200 U	200 U
	08/29/1994	50 U	3,520	-	50 U	50 U	50 U	50 U
	12/31/1994	20 U	730	-	20 U	20 U	20 U	20 U
	03/20/1995	10 U	827	220	10 U	10 U	10 U	10 U
	06/06/1995	25 U	1,400	-	25 U	25 U	25 U	25 U
	09/11/1995	2.0 U	1,400	-	2 U	2 U	2 U	12
	12/20/1995	1 U	250	90	1 U	1 U	1 U	3.2

Table 11
Downgradient Area Wells Groundwater Analytical Results - VOCs (ug/L)
H&V Fiber Corporation
Corvallis, Oregon

Well	Date	Tetrachloroethene	Trichloroethene	Cis-1,2-dichloroethene	Trans-1,2-dichloroethene	1,1-Dichloroethene	1,1-Dichloroethane	Vinyl chloride
MW-4 (cont'd)	03/15/1996	1 U	210 D	51	1 U	1 U	1 U	1 U
	06/21/1996	10 U	728	138	10 U	10 U	10 U	10 U
	09/05/1996	20 U	1,250	299	20 U	20 U	20 U	24
	12/23/1996	1 U	102	70	1 U	1 U	1 U	5.9
	03/21/1997	10 U	191	59	10 U	10 U	10 U	10 U
	06/20/1997	10 U	395	176	10 U	10 U	10 U	10 U
	09/04/1997	5 U	421	181	5 U	5 U	5 U	5 U
	12/05/1997	10 U	164	109	10 U	10 U	10 U	18
	03/12/1998	2 U	135	73	2 U	2 U	2 U	4.1
	06/04/1998	4 U	226	169	4 U	4 U	4 U	9.0
	09/03/1998	5 U	344	190	5 U	5 U	5 U	5.9
	12/28/1998	5 U	118	141	5 U	5 U	5 U	7.0
	04/01/1999	2 U	114	71	2 U	2 U	2 U	3.0
	06/16/1999	2 U	118	94	2 U	2 U	2 U	6.0
	08/31/1999	5 U	353	206	5 U	5 U	5 U	8.0
	12/06/1999	2 U	112	109	2 U	2 U	2 U	11
	03/02/2000	5 U	85	62	5 U	5 U	5 U	5 U
	06/27/2000	1 U	288	308	1.1	1 U	1 U	11
	09/12/2000	1 U	380	345	2.0	1.0	1 U	14
	12/13/2000	1 U	190	179	1 U	1.0	1 U	5.4
	03/08/2001	1 U	231	177	1 U	1.4	1 U	7.0
	09/19/2001	0.5 U	581	473	2.7	2.0	0.5 U	13
	12/18/2001	0.5 U	86	82	0.5 U	0.50	0.5 U	4.4
	03/06/2002	0.5 U	79	140	0.70	0.50	0.5 U	5.8
	06/13/2002	0.5 U	213	217	0.90	0.70	0.5 U	5.1
	09/17/2002	0.5 U	323	332	1.4	1.1	0.5 U	16
	03/19/2003	0.5 U	103	129	0.5 U	0.5 U	0.5 U	9.4
	09/23/2003	0.5 U	407	514	2.5	2.0	0.5 U	20
	03/03/2004	0.5 U	88	119	0.5 U	0.5 U	0.5 U	9.6
	09/08/2004	0.5 U	278	309	1.3	1.0	0.5 U	9.7
	03/08/2005	0.5 U	301	307	1.1	0.81	0.5 U	6.9
	09/06/2005	0.5 U	426	398	1.7	1.2	0.5 U	9.4
	03/08/2006	0.5 U	225	268	1.1	1.0	0.5 U	6.6
	08/07/2006	0.5 U	1,090	1,110	6.2	4.9	0.5 U	30
	12/13/2006	0.5 U	149	306	1.1	1.8	0.5 U	18
	03/20/2007	1.1 U	416	501	1.8	1.4	1.1 U	12
	09/26/2007	5 U	1,580	2,190	8.3	6.7	5 U	65
	03/13/2008	1.1 U	419	468	2.2	1.7	1.1 U	12
	03/23/2009	0.5 U	48	174	0.58	0.29 J	-	0.5 U
	09/15/2009	1.1 U	774	946	5.0	3.8	-	27
	03/25/2010	1.1 U	488	541	2.4	1.8	-	13
	09/29/2010	0.33 J	642	757	3.9	2.4	-	25
	03/22/2011	0.10 J	165	218	0.88	0.72	-	7.3

Table 11
Downgradient Area Wells Groundwater Analytical Results - VOCs (ug/L)
H&V Fiber Corporation
Corvallis, Oregon

Well	Date	Tetrachloroethene	Trichloroethene	Cis-1,2-dichloroethene	Trans-1,2-dichloroethene	1,1-Dichloroethene	1,1-Dichloroethane	Vinyl chloride
MW-6	05/28/1986	-	882	-	-	-	-	-
	06/27/1986	-	815	-	-	-	-	-
	07/30/1986	-	427	-	-	-	-	-
	09/04/1986	-	3,610	-	-	-	-	-
	10/13/1986	-	559	-	-	-	-	-
	11/14/1986	-	435	-	-	-	-	-
	12/22/1986	10 U	450	-	250	10 U	10 U	10 U
	07/01/1987	20 U	3,500	-	880	10 U	10 U	20 U
	09/23/1987	100 U	6,900	-	1,500	50 U	50 U	50 C
	12/22/1987	20 U	3,200	-	20 U	20 U	20 U	20 U
	03/23/1988	1 U	350	-	2.0	1 U	1 U	2.0
	06/01/1988	1 U	400	1,300	2.0	1 U	1 U	8.0
	09/01/1988	1 U	110	90	1 U	1 U	1 U	1.0
	12/27/1988	3.0	15,000	-	2,500	4.0	1 U	160
	03/17/1989	40 U	16,600	2,200	80	40 U	40 U	300
	06/15/1989	40 U	4,500	1,300	40 U	40 U	40 U	70
	09/12/1989	3 U	600	10	3 U	3 U	3 U	3 U
	12/27/1989	1 U	33,000	-	1 U	1 U	1 U	110
	03/16/1990	10 U	15,000	2,000	10 U	10 U	10 U	10 U
	06/27/1990	200 U	22,000	2,400	200 U	200 U	200 U	200 U
	09/24/1990	50 U	2,600	280	50 U	50 U	50 U	50 U
	12/14/1990	50 U	43,000	4,800	50 U	50 U	50 U	200
	03/15/1991	100 U	5,900	2,200	100 U	100 U	100 U	100
	06/04/1991	100 U	30,300	100 U	100 U	100 U	100 U	100 U
	09/04/1991	1,000 U	21,000	2,000	1,000 U	1,000 U	1,000 U	1,000 U
	12/06/1991	1,000 U	4,500	1,000 U	1,000 U	1,000 U	1,000 U	1,000 U
	03/16/1992	100 U	24,000	2,000	100 U	100 U	100 U	100 U
	06/05/1992	100 U	6,600	580	100 U	100 U	100 U	100 U
	09/04/1992	25 U	3,200	310	25 U	25 U	25 U	25 U
	12/01/1992	1 U	84	-	1 U	1 U	1 U	1 U
	03/16/1993	1 U	25	-	1 U	1 U	1 U	1 U
	06/17/1993	250 U	13,000	1,000	250 U	250 U	250 U	250 U
	09/09/1993	1 U	3,600	-	1 U	1 U	1 U	15
	12/16/1993	5 U	2,500	-	5 U	5 U	5 U	5 U
	03/09/1994	50 U	2,200	-	50 U	50 U	50 U	50 U
	06/30/1994	500 U	15,000	1,500	500 U	500 U	500 U	500 U
	08/29/1994	50 U	4,620	-	50 U	50 U	50 U	50 U
	12/21/1994	50 U	990	-	50 U	50 U	50 U	50 U
	03/20/1995	100 U	8,680	1,010	100 U	100 U	100 U	100 U
	06/06/1995	200 U	4,100	-	200 U	200 U	200 U	200 U
	09/11/1995	50 U	3,000	-	50 U	50 U	50 U	50 U
	12/20/1995	1 U	820	110	1 U	1 U	1 U	1.8
	03/14/1996	5 U	9,700 D	1,200 D	5.8	5 U	5 U	43

Table 11
Downgradient Area Wells Groundwater Analytical Results - VOCs (ug/L)
H&V Fiber Corporation
Corvallis, Oregon

Well	Date	Tetrachloroethene	Trichloroethene	Cis-1,2-dichloroethene	Trans-1,2-dichloroethene	1,1-Dichloroethene	1,1-Dichloroethane	Vinyl chloride
MW-6 (cont'd)	06/21/1996	20 U	1,100	112	20 U	20 U	20 U	20 U
	09/06/1996	100 U	3,970	512	100 U	100 U	100 U	100 U
	12/23/1996	10 U	1,160	197	10 U	10 U	10 U	10 U
	03/21/1997	100 U	4,420	1,040	100 U	100 U	100 U	100 U
	06/20/1997	20 U	1,160	174	20 U	20 U	20 U	20 U
	09/04/1997	100 U	1,720	281	100 U	100 U	100 U	100 U
	12/05/1997	50 U	893	125	50 U	50 U	50 U	50 U
	03/12/1998	50 U	4,030	866	50 U	50 U	50 U	50 U
	06/04/1998	50 U	2,690	536	50 U	50 U	50 U	50 U
	09/03/1998	10 U	413	73	10 U	10 U	10 U	10 U
	12/28/1998	10 U	1,440	399	10 U	10 U	10 U	13
	04/01/1999	20 U	310	912	20 U	20 U	20 U	25
	06/16/1999	20 U	959	202	20 U	20 U	20 U	20 U
	08/31/1999	20 U	402	75	20 U	20 U	20 U	20 U
	12/06/1999	1 U	34	17	1 U	1 U	1 U	1.0
	03/02/2000	10 U	1,480	583	10 U	10 U	10 U	15
	06/27/2000	1 U	543	115	1 U	1 U	1 U	4.0
	09/12/2000	1 U	57	14	1 U	1 U	1 U	1 U
	12/13/2000	1 U	1,050	233	1.3	1 U	1 U	5.4
	03/08/2001	1 U	1,020	317	1.4	3.2	1 U	6.5
	09/20/2001	0.5 U	44	18	0.5 U	0.5 U	0.5 U	0.5 U
	03/05/2002	0.5 U	48	32	0.5 U	0.5 U	0.5 U	1.1
	09/17/2002	0.5 U	1,500	606	1.9	1.6	0.5 U	19
	03/19/2003	0.5 U	358	215	0.5 U	0.5 U	0.5 U	7.2
	09/23/2003	0.5 U	10	16	0.5 U	0.5 U	0.5 U	1.7
	03/03/2004	0.5 U	1.3	1.1	0.5 U	0.5 U	0.5 U	0.5 U
	09/08/2004	0.5 U	12	7.2	0.5 U	0.5 U	0.5 U	0.60
	03/08/2005	0.5 U	0.83	4.5	0.5 U	0.5 U	0.5 U	0.5 U
	09/06/2005	0.5 U	14	6.9	0.5 U	0.5 U	0.5 U	0.5 U
	03/08/2006	0.5 U	2.0	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	08/07/2006	0.5 U	395	206	1.2	1.8	0.5 U	9.9
	12/12/2006	0.5 U	3.4	34	0.5 U	0.5 U	0.5 U	1.6
	03/19/2007	0.5 U	3.5	3.3	0.5 U	0.5 U	0.5 U	0.25 J
	09/26/2007	0.5 U	74	156	0.78	0.68	0.5 U	11
	03/12/2008	0.5 U	1.1	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	03/23/2009	0.5 U	0.36 J	0.27 J	0.5 U	0.5 U	-	0.5 U
	09/14/2009	0.5 U	1.4	4.2	0.5 U	0.5 U	-	0.5 U
	03/25/2010	0.5 U	0.31 J	0.5 U	0.5 U	0.5 U	-	0.5 U
	09/29/2010	0.5 U	0.21 J	0.24 J	0.5 U	0.5 U	-	0.5 U
	03/23/2011	0.5 U	75	114	0.40 J	0.76	-	7.4
	06/07/2011	0.5 U	15	138	0.41 J	0.55	-	35
	09/26/2011	0.5 U	159	343	1.2	1.7	-	23
	07/16/2012	0.5 U	0.5 U	0.59	0.5 U	0.5 U	-	0.5 U

Table 11
Downgradient Area Wells Groundwater Analytical Results - VOCs (ug/L)
H&V Fiber Corporation
Corvallis, Oregon

Well	Date	Tetrachloroethene	Trichloroethene	Cis-1,2-dichloroethene	Trans-1,2-dichloroethene	1,1-Dichloroethene	1,1-Dichloroethane	Vinyl chloride
MW-6 (cont'd)	09/05/2013	1 U	14	180	0.49	1.0		46
	09/23/2014	1 U	0.60 J	7.2	1 U	1 U	-	3.4
	09/02/2015	1 U	1.1	12	1 UJ3,UJ[1]	1 UJ3,UJ[1]	-	4.3
MW-13	09/01/1988	1 U	1 U	7.0	1 U	1 U	1 U	1 U
	01/03/1989	1 U	23	-	22	1 U	1 U	1 U
	03/17/1989	1 U	1.0	4.0	1 U	1 U	1 U	1 U
	06/15/1989	1 U	5,000	900	7.0	4.0	1 U	23
	09/12/1989	10 U	2,900	660	10 U	10 U	10 U	10 U
	12/27/1989	1 U	1,800	-	2.0	1.0	1 U	12
	03/16/1990	1 U	120	18	1 U	1 U	1 U	1 U
	12/14/2006	0.5 U	1.2	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
	03/23/2009	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U
	09/14/2009	0.5 U	0.5 U	1.1	0.5 U	0.5 U	-	0.5 U
	03/25/2010	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U
	09/29/2010	0.5 U	0.5 U	0.63	0.5 U	0.5 U	-	0.56
	03/23/2011	0.5 U	0.12 J	0.10 J	0.5 U	0.5 U	-	0.5 U
	06/07/2011	0.5 U	0.11 J	0.5 U	0.5 U	0.5 U	-	0.5 U
	09/26/2011	0.5 U	0.5 U	1.5	0.5 U	0.5 U	-	0.5 U
	07/13/2012	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U
	09/05/2013	1 U	1 U	0.39 J	1 U	1 U		1 U
	09/23/2014	1 U	1 U	1 U	1 U	1 U	-	1 U
	09/02/2015	1 U	1 U	0.44 J	1 U	1 U	-	1 U
MW-15	06/01/1988	500 U	50,000	20,000	500 U	500 U	500 U	250
	09/01/1988	200 U	55,000	14,000	200 U	200 U	200 U	200
	12/28/1988	10 U	33,000	-	11,000	10 U	10 U	48 C
	03/17/1989	70 U	30,500	4,500	70 U	70 U	70 U	600
	06/15/1989	500 U	160,000	44,000	500 U	500 U	500 U	1,500
	09/12/1989	500 U	75,000	13,000	500 U	500 U	500 U	500 U
	12/28/1989	100 U	150,000	-	100 U	100 U	100 U	260
	03/16/1990	1,000 U	74,000	9,000	1,000 U	1,000 U	1,000 U	1,000 U
	06/27/1990	5,000 U	160,000	18,000	5,000 U	5,000 U	5,000 U	5,000 U
	09/24/1990	50 U	4,200	1,200	50 U	50 U	50 U	50 U
	12/14/1990	400 U	120,000	14,000	400 U	400 U	400 U	400
	03/15/1991	2,000 U	100,000	12,000	2,000 U	2,000 U	2,000 U	2,000 U
	06/04/1991	2,000 U	92,000	16,000	2,000 U	2,000 U	2,000 U	2,000 U
	09/04/1991	2,000 U	84,000	12,000	2,000 U	2,000 U	2,000 U	2,000 U
	12/06/1991	20 U	58	6,000	20 U	20 U	20 U	210
	03/16/1992	2,000 U	25,000	20,000	2,000 U	2,000 U	2,000 U	2,000 U
	06/05/1992	2,000 U	16,000	16,000	2,000 U	2,000 U	2,000 U	2,000 U
	09/04/1992	100 U	6,900	13,000	100 U	100 U	100 U	100 U
	12/30/1992	2 U	20	-	2.2	2 U	2 U	170
	03/16/1993	1 U	14	-	1 U	1 U	1 U	14

Table 11
Downgradient Area Wells Groundwater Analytical Results - VOCs (ug/L)
H&V Fiber Corporation
Corvallis, Oregon

Well	Date	Tetrachloroethene	Trichloroethene	Cis-1,2-dichloroethene	Trans-1,2-dichloroethene	1,1-Dichloroethene	1,1-Dichloroethane	Vinyl chloride
MW-15 (cont'd)	06/17/1993	1 U	3.0	9,000	27	18	1 U	110 J
	09/09/1993	1 U	2.4	-	11	7.6	1 U	280
	12/16/1993	1 U	1 U	-	2.2	3.4	1 U	240
	03/09/1994	1 U	1.4	-	7.1	5.2	1 U	390
	06/30/1994	250 U	310	7,500	250 U	250 U	250 U	490
	08/29/1994	100 U	289	-	100 U	100 U	100 U	538
	12/21/1994	2 U	21	-	2 U	2 U	2 U	89
	03/20/1995	20 U	36	1,800	20 U	20 U	20 U	770
	06/06/1995	25 U	45	-	25 U	25 U	25 U	870
	09/11/1995	5 U	13	-	5 U	5 U	5 U	500
	12/20/1995	1 U	22	51	1 U	1 U	1 U	65
	03/14/1996	1 U	22	550 D	1 U	1 U	1 U	350 D
	06/21/1996	20 U	34	874	20 U	20 U	20 U	473
	09/06/1996	10 U	34	955	10 U	10 U	10 U	339
	12/23/1996	1 U	18	30	1 U	1 U	1 U	55
	03/21/1997	10 U	24	42	10 U	10 U	10 U	147
	06/20/1997	1 U	21	965	1 U	2.2	1 U	614
	09/04/1997	5 U	11	1,070	5 U	5 U	5 U	729
	12/05/1997	20 U	26	89	20 U	20 U	20 U	324
	03/12/1998	5 U	18	100	5 U	5 U	5 U	238
	06/04/1998	5 U	18	92	5 U	5 U	5 U	206
	09/03/1998	5 U	15	576	5 U	5 U	5 U	248
	12/28/1998	5 U	11	227	5 U	5 U	5 U	397
	04/01/1999	5 U	10	186	5 U	5 U	5 U	364
	06/16/1999	5 U	10	131	5 U	5 U	5 U	289
	08/31/1999	5 U	11	92	5 U	5 U	5 U	93
	12/06/1999	2 U	9.0	55	2 U	2 U	2 U	164
	03/02/2000	1 U	8.0	44	1 U	1 U	1 U	112
	07/24/2000	1 U	1 U	1 U	1 U	1 U	1 U	1 U
	09/12/2000	1 U	8.0	192	1 U	1 U	1 U	175
	12/13/2000	1 U	6.9	162	1 U	1 U	1 U	202
	03/08/2001	1 U	9.9	206	1 U	1 U	1 U	197
	09/20/2001	0.5 U	6.6	313	0.5 U	1.3	0.5 U	187
	12/18/2001	0.5 U	7.1	137	0.5 U	0.60	0.5 U	270
	03/06/2002	0.5 U	10	150	0.5 U	0.60	0.5 U	183
	06/13/2002	0.5 U	7.1	180	0.5 U	0.60	0.5 U	335
	09/17/2002	0.5 U	7.7	269	0.5 U	0.70	0.5 U	711
	03/19/2003	0.5 U	7.4	70	0.5 U	0.5 U	0.5 U	210
	09/23/2003	0.5 U	14	121	0.5 U	0.5 U	0.5 U	358
	03/03/2004	0.5 U	12	71	0.5 U	0.5 U	0.5 U	177
	09/08/2004	0.5 U	5.0	77	0.5 U	0.5 U	0.5 U	340
	03/08/2005	0.5 U	14	93	0.5 U	0.5 U	0.5 U	99
	09/06/2005	0.5 U	7.8	60	0.5 U	0.5 U	0.5 U	197

Table 11
Downgradient Area Wells Groundwater Analytical Results - VOCs (ug/L)
H&V Fiber Corporation
Corvallis, Oregon

Well	Date	Tetrachloroethene	Trichloroethene	Cis-1,2-dichloroethene	Trans-1,2-dichloroethene	1,1-Dichloroethene	1,1-Dichloroethane	Vinyl chloride
MW-15 (cont'd)	03/08/2006	0.5 U	18	184	0.5 U	1.4	0.5 U	162
	08/07/2006	0.5 U	7.2	82	0.5 U	0.5 U	0.5 U	136
	12/12/2006	0.5 U	5.7	31	0.5 U	0.5 U	0.5 U	96
	03/19/2007	0.5 U	5.8	102	0.18 J	0.34 J	0.5 U	171
	09/26/2007	0.5 U	5.0	21	0.5 U	0.5 U	0.5 U	91
	03/12/2008	0.5 U	5.5	28	0.5 U	0.5 U	0.5 U	82
	03/23/2009	0.5 U	0.5 U	0.44 J	0.5 U	0.5 U	-	2.6
	09/14/2009	0.5 U	0.5 U	0.50 U	0.5 U	0.5 U	-	0.5 U
	03/25/2010	0.5 U	0.5 U	0.27 J	0.5 U	0.5 U	-	1.0
	09/29/2010	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U
	03/23/2011	0.5 U	1.9	0.54	0.5 U	0.5 U	-	0.5 U
	06/07/2011	0.5 U	0.5 U	0.09 J	0.5 U	0.5 U	-	0.5 U
	09/26/2011	0.5 U	3.3	2.1	0.5 U	0.5 U	-	0.5 U
	07/13/2012	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	-	0.5 U
	09/05/2013	1 U	0.52 J	1.5	1 U	1 U		0.39 J
	09/23/2014	1 U	1 U	1 U	1 U	1 U	-	1 U
	09/02/2015	1 U	1 U	1 U	1 UJ3,UJ[1]	1 UJ3,UJ[1]	-	1.7
DEQ Screening Level Criteria for Water								
Ingestion and Inhalation of Tap Water (Residential)[a]		12	0.49	36	360	280	2.8	0.027
Volitilization to Outdoor Air (Residential)[b]		64,000	3,300	>S	>S	570,000	16,000	350
Volitilization to Outdoor Air (Occupational)[c]		>S	20,000	>S	>S	2,400,000	68,000	5,900
Vapor Intrusion (Residential)[d]		3,700	200	>S	>S	29,000	1,100	17
Vapor Intrusion (Occupational)[e]		48,000	3,700	>S	>S	360,000	14,000	880
GW in Excavation[f]		5,600	3,000	18,000	180,000	44,000	10,000	960
Portland Harbor JSCS Levels								
Upland Source Control Screening Level[g]		0.33	3.0	NA	1,000	NA	NA	0.24
2004 AWQC (Human Health - Organism Only)[h]		3.3	30	NA	10,000	NA	NA	2.4
2004 AWQC (Ecological Receptors - Chronic)[i]		840	21,900	NA	NA	NA	NA	NA
Oak Ridge Tier II (Ecological Receptors)[j]		98	47	590	590	25[l]	-	930 [k]

Table 11
Downgradient Area Well Groundwater Analytical Results - VOCs (ug/L)
H&V Fiber Corporation
Corvallis, Oregon

Notes:

[a] Risk-based concentration (RBC) for ingestion/inhalation in a residential setting (revised November 1, 2015)

[b] RBC for volatilization to outdoor air in a residential setting (revised November 1, 2015)

[c] RBC for volatilization to outdoor air in an occupational setting (revised November 1, 2015)

[d] RBC for vapor intrusion into buildings in a residential setting (revised November 1, 2015)

[e] RBC for vapor intrusion into buildings in an occupational setting (revised November 1, 2015)

[r] RBC for groundwater in excavation by a construction worker (revised November 1, 2015)

[g] DEQ, Portland Harbor JSCS, Table 3-1 (revised 7/16/07). Values listed are based on human health via fish ingestion

[h] DEQ, Portland Harbor JSCS, Table 3-1 (revised 7/16/07). Per DEQ's Ambient Water Quality Criteria for Organisms Only (DEQ 2004)

[i] DEQ, Portland Harbor JSCS, Table 3-1 (revised 7/16/07). Per DEQ's Ambient Water Quality Criteria - Ecologic Receptors - Chronic (DEQ 2004)

[j] DEQ, Portland Harbor JSCS, Table 3-1 (revised 7/16/07). Per Oak Ridge National Laboratory's Water Quality Criteria - Ecological Receptors - Tier II SCV
(Tier II SCV values were taken from Suter II, G.W. and Tsao, C.L., 1996. Toxicological Benchmarks for Screening Potential Contaminants of Concern for Effects on Aquatic Biota: 1996 Revision. ORNL publication ES/ER/TM-96/R2

[k] Ecological screening value adopted by EPA in Regions 3,5 and 6.

ug/L = Micrograms per liter

U = not detected at the associated reporting limit

UJ[1] = Data Validation Qualifier. The analyte was analyzed for, but not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

J3 = the associated batch QC was outside the established quality control range for precision, value is estimated

- = Analyte not analyzed for this parameter

C = results of coelution

D = result from diluted analysis

J = estimated trace concentration

>S = This RBC exceeds the solubility limit

Table 12
Pore Water Analytical Results - VOCs (ug/L)
H&V Fiber Corporation
Corvallis, Oregon

Sample ID	Sample Depth[a] (inches)	Date	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,1-Dichloroethene	Vinyl Chloride
Pore Water								
RB0-24	24	09/27/2011	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
RB0-24	24	09/28/2012	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
RB0-24	24	09/25/2013	1 UJ[1]	1 U	1 U	1 U	1 U	1 U
RB0-24	24	10/13/2014	1 U	1 U	1 U	1 U	1 U	1 U
RB0-24	24	09/15/2015	1 U	1 U	1 U	1 U	1 U	1 U
RB0-42	42	09/15/2015	1 U	1 U	1 U	1 U	1 U	1 U
RB1-12	12	09/29/2010	0.50	2.9	1.8	0.5 U	0.5 U	0.11 J
RB1-16	16	09/27/2011	0.64	4.4	1.9	0.5 U	0.5 U	0.5 U
RB1-16	16	09/28/2012	0.5 U	0.34 J	0.37 J	0.5 U	0.5 U	0.5 U
RB1-16	16	09/25/2013	0.55 J,J[1]	3.8	1.8	1 U	1 U	1 U
RB1-16	16	10/13/2014	1 U	1 U	1 U	1 U	1 U	1 U
RB1-24	24	09/15/2015	1 U	1 U	1 U	1 U	1 U	1 U
RB1-48	48	09/15/2015	1 U	1 U	1 U	1 U	1 U	1 U
RB2-12	12	09/29/2010	0.89	23	10	0.12 J	0.5 U	1.1
RB2-18	18	09/29/2010	0.95	14	4.4	0.5 U	0.5 U	0.5 U
RB2-24	24	09/27/2011	0.83	13	3.2	0.5 U	0.5 U	0.5 U
RB2-36	36	09/27/2011	0.5 U	**167**	47	0.5 U	0.51	6.6
RB2-24	24	09/28/2012	0.75	11	3.6	0.5 U	0.5 U	0.5 U
RB2-36	36	09/28/2012	0.81	12	4.2	0.5 U	0.5 U	0.5 U
RB2-24	24	09/25/2013	0.52 J[1]	10	3.5	1 U	1 U	1 U
RB2-36	36	09/25/2013	0.44 J,J[1]	9.0	3.4	1 U	1 U	1 U
RB2-24	24	10/13/2014	1 U	9.1	3.0	1 U	1 U	1 U
RB2-36	36	10/13/2014	1 U	18	5.0	1 U	1 U	1 U
RB2-48	48	09/15/2015	1 U	**152**	109	0.49 J	0.70 J	12
RB3-13	13	09/29/2010	0.5 U	0.63	10	0.5 U	0.21 J	5.1
RB3-10	10	09/27/2011	0.5 U	0.5 U	6.4	0.5 U	0.5 U	0.5 U
RB3-10	10	09/28/2012	0.5 U	0.5 U	3.5	0.5 U	4.3	0.5 U
RB3-10	10	09/25/2013	1 UJ[1]	6.8	7.1	1 U	1 U	1 U
RB3-12	12	10/13/2014	1 U	1 U	0.58 J	1 U	1 U	2.4
RB3-12	12	09/15/2015	1 U	1.8	11	1 U	1 U	1.0 J

Table 12
Pore Water Analytical Results - VOCs (ug/L)
H&V Fiber Corporation
Corvallis, Oregon

Sample ID	Sample Depth[a] (inches)	Date	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,1-Dichloroethene	Vinyl Chloride
RB4-18	18	09/29/2010	0.5 U	0.5 U	0.16 J	0.5 U	0.5 U	0.26 J
RB4-34	34	09/29/2010	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.17 J
RB4-38	38	09/27/2011	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
RB4-24	24	09/28/2012	0.5 U	0.5 U	0.5 U	0.5 U	0.28 J	0.5 U
RB4-18	18	09/25/2013	1 UJ[1]	1 U	1 U	1 U	1 U	1 U
RB4-34	34	09/25/2013	1 UJ[1]	1 U	1 U	1 U	1 U	1 U
RB4-18	18	10/13/2014	1 U	1 U	1 U	1 U	1 U	1 U
RB4-36	36	10/13/2014	1 U	1 U	1 U	1 U	1 U	1 U
RB4-24	24	09/15/2015	1 U	1 U	1 U	1 U	1 U	1 U
RB4-48	48	09/15/2015	1 U	1 U	1 U	1 U	1 U	1 U
RB5-70	70	09/29/2010	0.5 U	0.5 U	0.72	0.5 U	0.5 U	0.27 J
RB5-24	24	09/27/2011	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
RB5-48	48	09/27/2011	0.5	0.5 U	3.3	0.5 U	0.5 U	0.5 U
RB5-24	24	09/28/2012	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
RB5-26	26	09/25/2013	1 UJ[1]	1 U	1 U	1 U	1 U	1 U
RB5-26	26	10/13/2014	1 U	1 U	1 U	1 U	1 U	1 U
RB5-24	24	09/15/2015	1 U	1 U	1 U	1 U	1 U	0.33 J
RB5-48	48	09/15/2015	1 U	1 U	1 U	1 U	1 U	1 U
RB6-30	30	09/29/2010	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
RB6-50	50	09/29/2010	0.5 U	0.5 U	0.08 J	0.5 U	0.5 U	0.5 U
RB6-48	48	09/27/2011	0.5 U	0.5 U	2.7	0.5 U	0.5 U	19
RB6-24	24	09/28/2012	0.5 U	0.5 U	0.5 U	0.5 U	0.65	0.5 U
RB6-48	48	09/28/2012	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
RB6-24	24	09/25/2013	1 UJ[1]	1 U	1 U	1 U	1 U	1 U
RB6-48	48	09/25/2013	1 UJ[1]	1 U	1 U	1 U	1 U	1 U
RB6-24	24	10/13/2014	1 U	1 U	1 U	1 U	1 U	1 U
RB6-48	48	10/13/2014	1 U	1 U	1 U	1 U	1 U	1 U
RB6-24	24	09/15/2015	1 U	1 U	1 U	1 U	1 U	1 U
RB6-48	48	09/15/2015	1 U	1 U	4.8	1 U	1 U	33
Surface Water								
RB2-SW	-	09/28/2012	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
RB2-SW	-	09/25/2013	1 UJ[1]	1 U	1 U	1 U	1 U	1 U
RB2-SW	-	10/13/2014	1 U	1 U	1 U	1 U	1 U	1 U

Table 12
Pore Water Analytical Results - VOCs (ug/L)
H&V Fiber Corporation
Corvallis, Oregon

Sample ID	Sample Depth[a] (inches)	Date	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,1-Dichloroethene	Vinyl Chloride
RB2-SW		09/15/2015	1 U	1 U	1 U	1 U	1 U	1 U
RB3-SW	-	09/27/2011	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
RB5-SW	-	09/27/2011	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
RB6-SW	-	09/27/2011	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
RB6-SW	-	09/28/2012	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
RB6-SW	-	09/25/2013	1 UJ[1]	1 U	1 U	1 U	1 U	1 U
RB6-SW	-	10/13/2014	1 U	1 U	1 U	1 U	1 U	1 U
RB6-SW	-	09/15/2015	1 U	1 U	1 U	1 U	1 U	1 U
Screening Criteria								
Oak Ridge Tier II (Ecological Receptors)[b]			98	47	590	590	25[c]	930[c]

Notes:

[a] Sample depth is relative to in-water sediment elevation. All samples were collected in approximately 12 inches of water.

[b] Per Oak Ridge National Laboratory's Water Quality Criteria - Ecological Receptors - Tier II SCV (Tier II SCV values were taken from Suter II, G.W. and Tsao, C.L., 1996. Toxicological Benchmarks for Screening Potential Contaminants of Concern for Effects on Aquatic Biota: 1996 Revision. ORNL publication ES/ER/TM-96/R2)

[c] Ecological screening value adopted by EPA in Regions 3, 5 and 6.

ug/L = Micrograms per liter

U = not detected at the associated reporting limit

J = estimated trace concentration

J[1] = Data Validation Qualifier. The numerical value reported is approximate. See Data Validation report for further information.

Values in **BOLD** exceed stated screening criteria.

Table 13
Field Parameters in Pore Water
H&V Fiber Corporation
Corvallis, Oregon

Sample ID	Date	pH (S.U.)	Specific Conductance (µS/cm)	Temperature (^{o}F)	Dissolved Oxygen (mg/L)	Redox (ORP) (mV)
RB0-24	09/27/2011	9.19	0.624	61.1	0.38	-162
RB0-24	09/28/2012	7.51	0.395	59.8	0.38	83
RB0-24	09/25/2013	7.19	0.350	58.3	0.31	21
RB0-24	10/13/2014	7.70	0.452	58.8	0.25	2
RB0-24	09/15/2015	6.86	0.304	61.1	0.37	181
RB0-42	09/15/2015	7.11	0.311	61.4	0.29	134
RB1-12	09/29/2010	6.77	0.397	62.4	1.4	23
RB1-16	09/27/2011	9.32	0.424	60.0	0.68	-171
RB1-16	09/28/2012	7.45	0.289	59.5	0.36	22
RB1-16	09/25/2013	7.05	0.324	57.7	1.1	-60
RB1-16	10/13/2014	7.81	0.357	59.1	0.22	-77
RB1-24	09/15/2015	7.09	0.371	62.8	0.12	-37
RB1-48	09/15/2015	7.20	0.315	61.0	0.19	7
RB2-SW	09/28/2012	7.71	0.055	60.3	6.8	8
RB2-SW	09/25/2013	7.11	0.057	58.0	8.8	3
RB2-SW	10/13/2014	7.46	0.061	59.3	6.9	1
RB2-SW	09/15/2015	7.44	0.101	62.0	5.1	-97
RB2-12	09/29/2010	6.29	0.431	61.5	1.0	89
RB2-18	09/29/2010	6.31	0.419	62.7	3.3	119
RB2-24	09/27/2011	8.94	0.462	60.4	2.9	-158
RB2-36	09/27/2011	9.24	0.484	61.0	0.57	-175
RB2-24	09/28/2012	7.09	0.375	59.8	2.5	44
RB2-36	09/28/2012	7.04	0.381	60.3	3.0	46
RB2-24	09/25/2013	6.82	0.328	56.5	0.26	-4
RB2-36	09/25/2013	6.92	0.326	56.3	2.9	-11
RB2-24	10/13/2014	7.57	0.341	59.6	2.2	-14
RB2-36	10/13/2014	7.51	0.348	59.0	1.6	-48
RB2-24	09/15/2015	7.23	0.353	60.9	0.90	-74
RB2-48	09/15/2015	7.27	0.393	60.7	0.22	-83
RB3-SW	09/27/2011	9.94	0.069	61.1	6.9	-210
RB3-13	09/29/2010	6.55	0.475	63.0	0.43	-94
RB3-10	09/27/2011	9.38	0.463	61.6	0.55	-176
RB3-10	09/28/2012	7.31	0.405	62.2	0.42	40
RB3-10	09/25/2013	6.87	0.329	57.6	1.4	34
RB3-12	10/13/2014	7.81	0.417	60.3	0.43	6
RB3-12	09/15/2015	7.20	0.380	63.5	0.34	-50
RB4-18	09/29/2010	6.35	1.05	63.7	0.65	-103
RB4-34	09/29/2010	-	-	-	-	-
RB4-18	09/27/2011	-	-	-	-	-
RB4-38	09/27/2011	9.06	0.494	59.8	0.14	-158

Table 13
Field Parameters in Pore Water
H&V Fiber Corporation
Corvallis, Oregon

Sample ID	Date	pH (S.U.)	Specific Conductance (µS/cm)	Temperature (^{o}F)	Dissolved Oxygen (mg/L)	Redox (ORP) (mV)
RB4-24	09/28/2012	7.13	0.572	64.3	0.34	40
RB4-18	09/25/2013	7.07	0.829	61.1	0.10	-166
RB4-34	09/25/2013	6.83	0.632	58.9	0.34	-67
RB4-18	10/13/2014	7.88	0.295	63.6	0.06	-181
RB4-36	10/13/2014	7.76	1.095	63.4	0.11	-56
RB4-24	09/15/2015	7.20	0.957	64.1	0.21	-114
RB4-48	09/15/2015	6.92	0.702	63.2	0.11	-37
RB5-SW	09/27/2011	9.64	0.114	61.6	6.02	-164
RB5-30	09/29/2010	-	-	-	-	-
RB5-70	09/29/2010	6.21	0.490	58.2	1.0	-42
RB5-24	09/27/2011	9.04	0.876	61.8	0.22	-143
RB5-48	09/27/2011	9.04	0.725	61.1	0.34	-134
RB5-24	09/28/2012	7.38	0.147	61.9	0.40	22
RB5-26	09/25/2013	7.04	0.655	58.0	0.21	-157
RB5-26	10/13/2014	7.64	0.737	61.3	0.20	-129
RB5-24	09/15/2015	7.21	0.446	64.2	0.09	-133
RB5-48	09/15/2015	7.23	0.537	64.1	0.41	-119
RB6-SW	09/27/2011	9.67	0.173	62.7	6.0	-137
RB6-SW	09/28/2012	7.50	0.083	63.1	6.8	-24
RB6-SW	09/25/2013	7.47	0.043	59.5	8.1	-177
RB6-SW	10/13/2014	7.56	0.078	59.9	6.1	-118
RB6-SW	09/15/2015	7.47	0.078	63.1	4.2	-104
RB6-30	09/29/2010	6.37	0.905	62.1	0.74	-110
RB6-50	09/29/2010	6.42	0.537	61.6	0.55	-82
RB6-24	09/27/2011	-	-	-	-	-
RB6-48	09/27/2011	9.12	0.388	61.1	0.33	-115
RB6-24	09/28/2012	7.22	0.911	63.3	0.29	15
RB6-48	09/28/2012	7.12	0.579	62.3	0.22	9
RB6-24	09/25/2013	6.86	0.817	58.6	0.27	-148
RB6-48	09/25/2013	6.95	0.427	58.7	0.16	-162
RB6-24	10/13/2014	7.55	0.940	62.0	0.10	-167
RB6-48	10/13/2014	7.78	0.462	60.6	0.30	-122
RB6-24	09/15/2015	7.10	0.591	64.5	0.19	-121
RB6-48	09/15/2015	7.23	0.350	62.8	0.23	-126

Notes:
S.U. = Standard units
uS/cm = Microsiemens per centimeter
F = degrees Fahrenheit
mg/L = Milligrams per liter
mV = Millivolts

Table 14
Soil Vapor Analytical Results - VOCs
SVE Extraction Wells
H&V Fiber Corporation
Corvallis, Oregon

Location	Date	Tetrachloroethene		Trichloroethene		TCE as a % of VOCs	cis-1,2-Dichloroethene		trans-1,2-Dichloroethene		1,1-Dichloroethene		Vinyl Chloride	
		mg/m^3	ppmv	mg/m^3	*ppmv*		mg/m^3	ppmv	mg/m^3	ppmv	mg/m^3	ppmv	mg/m^3	ppmv
IMW-3	06/10/2009	828 U	120 U	44,100	*8,074*	95%	222 J	55 J	484 U	120 U	484 U	120 U	312 U	120 U
	10/14/2011	4,280 U	620 U	256,000	*46,869*	96%	811 J	201 J	2,500 U	620 U	2,500 U	620 U	1,610 U	619 U
	02/27/2012	1,030 U	149 U	24,700	*4,522*	90%	105 J	26 J	605 U	150 U	605 U	150 U	390 U	150 U
	07/19/2012	205 U	30 U	15,900	*2,911*	96%	101 J	25 J	120 U	30 U	120 U	30 U	77 U	30 U
	07/24/2012	272 U	39 U	14,800	*2,710*	95%	63 J	16 J	159 U	39 U	159 U	39 U	103 U	40 U
	08/01/2012	279 U	40 U	13,100	*2,398*	94%	75 J	19 J	163 U	40 U	163 U	40 U	105 U	40 U
	09/06/2012	138 U	20 U	8,470	*1,551*	95%	58 J	14 J	81 U	20 U	81 U	20 U	52 U	20 U
	02/20/2013	44 U	6.3 U	3,510	*643*	96%	25 J	6.1 J	25 U	6.3 U	25 U	6.3 U	16 U	6.3 U
	05/29/2013	1.1 U	0.16 U	910	*167*	99%	5.5	1.4	0.63 U	0.16 U	0.63 U	0.16 U	0.41 U	0.16 U
	09/04/2013	1.1 U	0.16 U	750	*137*	99%	2.7	0.67	0.63 U	0.16 U	0.63 U	0.16 U	0.41 U	0.16 U
	01/08/2014	1.1 U	0.16 U	490	*90*	98%	6.7	1.7	0.63 U	0.16 U	0.63 U	0.16 U	0.41 U	0.16 U
	03/04/2014	24	3.48	54	*10*	68%	1.8	0.4	0.063 U	0.016 U	0.063 U	0.016 U	0.041 U	0.016 U
	06/03/2014	2.7 U	0.39 U	960	*176*	99%	5.5	1.4	1.6 U	0.40 U	1.6 U	0.40 U	1.0 U	0.385 U
	09/04/2014	1.1 U	0.16 U	640	*117*	99%	5.2	1.3	0.63 U	0.16 U	0.63 U	0.16 U	0.41 U	0.158 U
	12/01/2014	0.12	0.02	160	*29*	98%	3.2	0.8	0.063 U	0.016 U	0.063 U	0.016 U	0.041 U	0.016 U
	03/10/2015	1.1 U	0.16 U	1,100	*201*	99%	3.7	0.9	0.63 U	0.16 U	0.63 U	0.16 U	0.41 U	0.16 U
	06/10/2015	1.1 U	0.16 U	540	*99*	99%	3.1	0.8	0.63 U	0.16 U	0.63 U	0.16 U	0.41 U	0.16 U
	09/01/2015	1.1 U	0.16 U	421	*77*	98%	4.5	1.1	0.63 U	0.16 U	0.63 U	0.16 U	0.41 U	0.16 U
	12/14/2015	0.061	0.009	244	*45*	99%	3.0	0.7	0.027	0.007	0.0077	0.0019	0.019	0.007
IMW-16	06/10/2009	14 U	2.0 U	541	*99*	93%	2.2 J	0.56 J	8.2 U	2.03 U	8.2 U	2.0 U	5.3 U	2.0 U
	10/14/2011	14 U	2.0 U	705	*129*	95%	5.6 J	1.4 J	8.0 U	1.99 U	8.0 U	2.0 U	5.2 U	2.0 U
	07/19/2012	3.6 U	0.52 U	393	*72*	97%	4.6	1.1	2.1 U	0.52 U	2.1 U	0.5 U	1.4 U	0.5 U
	08/01/2012	0.30 U	0.044 U	46	*8.4*	97%	0.67	0.17	0.18 U	0.044 U	0.18 U	0.044 U	0.11 U	0.044 U
	09/06/2012	0.50 U	0.072 U	35	*6.3*	96%	0.29 U	0.072 U	0.29 U	0.072 U	0.29 U	0.072 U	0.19 U	0.073 U
	03/19/2013	0.004	0.0006	0.342	*0.063*	94%	0.014	0.0034	0.0020 U	0.0005 U	0.0020 U	0.0005 U	0.0013 U	0.0005 U
	05/29/2013	0.035	0.0051	9.1	*1.67*	99%	0.071	0.0176	0.0016 U	0.0004 U	0.0016 U	0.0004 U	0.0010 U	0.0004 U
	09/04/2013	0.0075	0.0011	0.64	*0.12*	95%	0.019	0.0047	0.0016 U	0.0004 U	0.0016 U	0.0004 U	0.0010 U	0.0004 U
	01/08/2014	0.018	0.0026	2.7	*0.49*	98%	0.026	0.0065	0.0016 U	0.0004 U	0.0016 U	0.0004 U	0.0010 U	0.0004 U
	03/04/2014	0.004	0.0006	0.86	*0.16*	99%	0.0044	0.0011	0.0016 U	0.0004 U	0.0016 U	0.0004 U	0.0010 U	0.0004 U
	06/03/2014	0.011	0.0016	1.7	*0.31*	99%	0.0087	0.0022	0.0016 U	0.0004 U	0.0016 U	0.0004 U	0.0010 U	0.0004 U
	12/01/2014	0.0036	0.0005	0.11	*0.020*	88%	0.0071	0.0018	0.0016 U	0.0004 U	0.0016 U	0.0004 U	0.0010 U	0.0004 U
IMW-17	06/10/2009	3.4 U	0.499 U	14	*2.5*	8%	94	23	0.87 J	0.22 J	5.4	1.3	50	19
	10/14/2011	43 U	6.3 U	2,330	*427*	86%	264	66	25 U	6.3 U	4.6 J	1.2 J	50	19
	07/19/2012	103 U	15 U	7,150	*1,309*	89%	673	167	60 U	15 U	60 U	15 U	13 J	4.9 J
	03/19/2013	0.043 U	0.006 U	1.5	*0.28*	53%	1.2	0.303	0.019 J	0.0046 J	0.045	0.011	0.032	0.012
	05/29/2013	0.0027 U	0.00039 U	0.160	*0.0293*	46%	0.17	0.042	0.0029	0.00	0.0016 U	0.0004 U	0.013	0.005
	09/04/2013	2.9	0.42	210	*38*	93%	8.7	2.2	1.3 U	0.32 U	1.3 U	0.32 U	0.82 U	0.32 U
	01/08/2014	0.028	0.0041	0.096	*0.018*	15%	0.44	0.11	0.0052	0.0013	0.013	0.0032	0.059	0.023
IMW-24	06/03/2009	4.0 U	0.6 U	143	*26*	81%	7.7	1.9	4.0 U	1.0 U	16 U	3.9 U	2 J	0.67 J
	10/14/2011	2,880 U	417 U	96,100	*17,594*	92%	855 J	212 J	1,680 U	417 U	1,680 U	417 U	1,080 U	415 U
	07/19/2012	94 U	14 U	6,440	*1,179*	93%	240	60	55 U	14 U	55 U	14 U	35 U	14 U
	07/24/2012	69 U	10 U	3,120	*571*	89%	204	51	40 U	10 U	40 U	10 U	26 U	10 U
	08/01/2012	60 U	8.7 U	3,170	*580*	89%	238	59	35 U	8.7 U	35 U	8.7 U	23 U	8.7 U
	09/06/2012	21 U	3.0 U	1,440	*264*	89%	126	31	12 U	3.0 U	12 U	3.0 U	7.8 U	3.0 U
	02/19/2013	3.7 U	0.54 U	471	*86*	93%	26	6.4	2.2 U	0.54 U	2.2 U	0.54 U	1.4 U	0.54 U
	05/29/2013	1.1 U	0.16 U	640	*117*	97%	15	3.7	0.63 U	0.16 U	0.63 U	0.16 U	0.41 U	0.16 U
	09/04/2013	1.1 U	0.16 U	64	*12*	79%	14	3.5	0.63 U	0.16 U	0.63 U	0.16 U	0.41 U	0.16 U
	01/08/2014	2.7 U	0.39 U	700	*128*	96%	19	4.7	1.6 U	0.40 U	1.6 U	0.40 U	1.0 U	0.38 U
	03/04/2014	0.012	0.00	18	*3*	97%	0.52	0.1	0.0063 U	0.0016 U	0.0063 U	0.0016 U	0.0041 U	0.0016 U
	06/03/2014	2.7 U	0.39 U	1,900	*348*	98%	33	8.2	1.6 U	0.40 U	1.6 U	0.40 U	1.0 U	0.38 U
	09/04/2014	1.1 U	0.16 U	330	*60*	96%	11	2.7	0.63 U	0.16 U	0.63 U	0.16 U	0.41 U	0.16 U
	12/01/2014	5.4 U	0.78 U	1,800	*330*	98%	14	3.5	3.2 U	0.79 U	3.2 U	0.79 U	2.0 U	0.77 U
	03/10/2015	5.4 U	0.78 U	5,900	*1,080*	99%	48	12	3.2 U	0.79 U	3.2 U	0.79 U	2.0 U	0.77 U
	06/10/2015	0.11 U	0.016 U	180	*33*	98%	3.3	0.8	0.063 U	0.016 U	0.063 U	0.016 U	0.041 U	0.016 U
	09/01/2015	0.11 U	0.016 U	126	*23*	95%	5.9	1.5	0.063 U	0.016 U	0.063 U	0.016 U	0.041 U	0.016 U
	12/04/2015	0.035	0.005	36	*6.6*	97%	1.1	0.3	0.017	0.004	0.0077	0.0019	0.0023	0.0009

Table 14
Soil Vapor Analytical Results - VOCs
SVE Extraction Wells
H&V Fiber Corporation
Corvallis, Oregon

Location	Date	Tetrachloroethene		Trichloroethene		TCE as a % of VOCs	cis-1,2-Dichloroethene		trans-1,2-Dichloroethene		1,1-Dichloroethene		Vinyl Chloride	
		mg/m^3	ppmv	mg/m^3	*ppmv*		mg/m^3	ppmv	mg/m^3	ppmv	mg/m^3	ppmv	mg/m^3	ppmv
IMW-25	06/10/2009	162 U	23 U	8,520	*1,560*	95%	21 J	5.1 J	95 U	24 U	95 U	24 U	61 U	24 U
	10/14/2011	14 U	2.0 U	737	*135*	95%	7.5 J	1.9 J	8.0 U	2.0 U	8.0 U	2.0 U	5.2 U	2.0 U
	07/19/2012	1.7 U	0.25 U	93	*17*	95%	0.59 J	0.15 J	1.0 U	0.25 U	1.0 U	0.25 U	0.65 U	0.25 U
	07/24/2012	0.75 U	0.11 U	66	*12*	96%	0.54	0.13	0.44 U	0.11 U	0.44 U	0.11 U	0.28 U	0.11 U
	02/19/2013	0.15 U	0.021 U	22	*4.0*	96%	0.56	0.14	0.086 U	0.021 U	0.086 U	0.021 U	0.056 U	0.021 U
	05/29/2013	0.016	0.0023	9.6	*1.8*	97%	0.23	0.057	0.0034	0.0008	0.0016 U	0.0004 U	0.001 U	0.0004 U
	09/04/2013	0.034 U	0.0049 U	1.9	*0.35*	84%	0.27	0.067	0.02 U	0.0050 U	0.0200 U	0.0050 U	0.013 U	0.0050 U
	01/08/2014	0.027 U	0.0039 U	14	*2.6*	98%	0.25	0.062	0.016 U	0.0040 U	0.016 U	0.0040 U	0.010 U	0.0038 U
	03/04/2014	0.0027 U	0.00039 U	0.44	*0.1*	71%	0.17	0.042	0.0016 U	0.0004 U	0.0016 U	0.0004 U	0.001 U	0.0004 U
	06/03/2014	0.011 U	0.0016 U	13	*2.4*	98%	0.22	0.055	0.0063 U	0.0016 U	0.0063 U	0.0016 U	0.004 U	0.0016 U
	12/01/2014	0.0027 U	0.00039 U	0.33	*0.06*	97%	0.0018	0.0004	0.0016 U	0.0004 U	0.0016 U	0.0004 U	0.0010 U	0.0004 U
IMW-26	06/10/2009	84 U	12 U	5,840	*1,069*	90%	472	117	49 U	12 U	49 U	12 U	7.3 J	2.8 J
	10/14/2011	682 U	99 U	34,000	*6,225*	90%	2,010	499	398 U	99 U	398 U	99 U	257 U	99 U
	02/27/2012	150 U	22 U	4,280	*784*	84%	452	112	88 U	22 U	88 U	22 U	56 U	22 U
	07/19/2012	46 U	6.7 U	2,420	*443*	88%	201	50	27 U	6.7 U	27 U	6.7 U	17 U	6.7 U
	07/24/2012	69 U	10 U	4,750	*870*	91%	305	76	40 U	10 U	40 U	10 U	26 U	10 U
	08/01/2012	41 U	6.0 U	1,970	*361*	89%	143	35	24 U	6.0 U	24 U	6.0 U	16 U	6.0 U
	09/06/2012	21 U	3.0 U	1,230	*225*	92%	51	13	12 U	3.0 U	12 U	3.0 U	7.8 U	3.0 U
	02/19/2013	3.5 U	0.50 U	297	*54*	91%	20	5.0	2.0 U	0.51 U	2.0 U	0.51 U	1.3 U	0.50 U
	05/29/2013	0.068	0.0099	75	*14*	93%	5.5	1.4	0.13	0.032	0.024	0.006	0.072	0.028
	09/04/2013	0.27 U	0.039 U	75	*14*	94%	3.7	0.92	0.16 U	0.040 U	0.160 U	0.040 U	0.10 U	0.038 U
	01/08/2014	0.11 U	0.016 U	100	*18*	92%	8.7	2.2	0.075	0.019	0.063 U	0.016 U	0.046	0.018
	03/04/2014	0.011 U	0.0016 U	11	*2*	90%	1.1	0.3	0.021	0.005	0.0063 U	0.002 U	0.017	0.0065
	06/03/2014	0.068 U	0.0099 U	54	*10*	88%	7.1	1.8	0.087	0.022	0.040 U	0.010 U	0.041	0.0158
	09/04/2014	0.056	0.0081	80	*15*	93%	5.9	1.5	0.091	0.023	0.024	0.006	0.087	0.0335
	12/01/2014	1.1 U	0.16 U	350	*64*	97%	7.1	1.8	0.63 U	0.16 U	0.63 U	0.16 U	0.41 U	0.16 U
	03/10/2015	0.067	0.010	40	*7*	94%	2.5	0.6	0.13	0.03	0.025	0.006	0.051	0.020
	06/10/2015	0.11 U	0.016 U	75	*14*	96%	3.1	0.8	0.063 U	0.016 U	0.063 U	0.016 U	0.041 U	0.016 U
	09/01/2015	0.11 U	0.016 U	82	*15*	96%	3.6	0.9	0.063 U	0.016 U	0.063 U	0.016 U	0.041 U	0.016 U
	12/14/2015	0.041	0.006	49	*9*	95%	2.4	0.6	0.020	0.005	0.011	0.003	0.011	0.004
IMW-27	02/19/2013	0.012 U	0.002 U	0.055	*0.010*	32%	0.022	0.006	0.072 U	0.018 U	0.007 U	0.002 U	0.005 U	0.002 U
IMW-28	02/19/2013	17 U	2.5 U	1,890	*346*	85%	289	72	10 U	2.5 U	10 U	2.5 U	13	5.1
	05/29/2013	22 U	3.2 U	1,100	*201*	86%	120	30	13 U	3.2 U	13 U	3.2 U	8.2 U	3.2 U
	09/04/2013	1.1 U	0.16 U	530	*97*	93%	37	9.2	0.63 U	0.16 U	0.63 U	0.16 U	1.6	0.62
	01/08/2014	2.7 U	0.39 U	750	*137*	86%	110	27	1.6 U	0.40 U	1.6 U	0.40 U	2.4	0.92
	03/04/2014	11	1.59	490	*90*	92%	28	7	0.63 U	0.156 U	0.63 U	0.156 U	0.41 U	0.158 U
	06/03/2014	54 U	7.83 U	910	*167*	81%	75	19	32 U	7.9 U	32 U	7.9 U	20 U	7.7 U
	09/04/2014	1.1 U	0.16 U	640	*117*	92%	52	13	0.63 U	0.16 U	0.63 U	0.16 U	0.49	0.19
	12/01/2014	2.7 U	0.39 U	910	*167*	96%	34	8	1.6 U	0.40 U	1.6 U	0.40 U	1.0 U	0.38 U
	03/10/2015	2.7 U	0.39 U	2,600	*476*	94%	150	37	1.6	0.40	1.6 U	0.40 U	1.0 U	0.38 U
	06/10/2015	1.1 U	0.16 U	530	*97*	93%	38	9	0.63 U	0.16 U	0.63 U	0.16 U	0.41 U	0.16 U
	09/01/2015	1.1 U	0.16 U	546	*100*	95%	29	7	0.63 U	0.16 U	0.63 U	0.16 U	0.41 U	0.16 U
	12/14/2015	0.17	0.02	479	*88*	93%	33	8	0.34	0.08	0.076	0.019	0.18	0.07
IMW-29	02/19/2013	43 U	6.2 U	4,950	*906*	97%	60	15	25 U	6.3 U	25 U	6.3 U	16 U	6.3 U
	05/29/2013	5.4 U	0.78 U	3,100	*568*	98%	40	10	3.2 U	0.79 U	3.2 U	0.79 U	2.0 U	0.77 U
	09/04/2013	1.1 U	0.16 U	1,200	*220*	99%	13	3.2	0.63 U	0.16 U	0.63 U	0.16 U	0.41 U	0.16 U
	01/08/2014	11 U	1.6 U	640	*117*	95%	8.3	2.1	6.3 U	1.6 U	6.3 U	1.6 U	4.1 U	1.6 U
	03/04/2014	260	38	3,600	*659*	93%	10	2.5	6.3 U	1.6 U	6.3 U	1.6 U	4.1 U	1.6 U
	06/03/2014	5.4 U	0.78 U	2,600	*476*	99%	23	5.7	3.2 U	0.79 U	3.2 U	0.79 U	2.0 U	0.77 U
	09/04/2014	5.4 U	0.78 U	2,700	*494*	99%	11	2.7	3.2 U	0.79 U	3.2 U	0.79 U	2.0 U	0.77 U
	12/01/2014	0.14	0.020	43	*8*	97%	0.95	0.24	0.063 U	0.016 U	0.063 U	0.016 U	0.041 U	0.016 U
	03/10/2015	81	12	6,400	*1,172*	98%	25	6.2	6.3 U	1.6 U	6.3 U	1.6 U	4.1 U	1.6 U
	06/10/2015	0.42	0.06	1,200	*220*	100%	4.8	1.2	0.075	0.019	0.063 U	0.016 U	0.041 U	0.016 U
	09/01/2015	1.1 U	0.16 U	1,220	*223*	99%	12	3.0	0.63 U	0.16 U	0.63 U	0.16 U	0.41 U	0.16 U
	12/14/2015	0.48	0.07	1,360	*249*		5.1	1.3	0.063 U	0.016 U	0.063 U	0.016 U	0.041 U	0.016 U
IMW-30	02/19/2013	0.012 U	0.002 U	1.2	*0.23*	54%	0.88	0.22	0.011	0.0027	0.0038 J	0.0010 J	0.139	0.053
IMW-31	02/19/2013	0.15 U	0.021 U	5.6	*1.0*	91%	0.19	0.047	0.086 U	0.021 U	0.086 U	0.021 U	0.056 U	0.021 U

Table 14
Soil Vapor Analytical Results - VOCs
SVE Extraction Wells
H&V Fiber Corporation
Corvallis, Oregon

Location	Date	Tetrachloroethene		Trichloroethene		TCE as a % of VOCs	cis-1,2-Dichloroethene		trans-1,2-Dichloroethene		1,1-Dichloroethene		Vinyl Chloride	
		mg/m^3	ppmv	mg/m^3	*ppmv*		mg/m^3	ppmv	mg/m^3	ppmv	mg/m^3	ppmv	mg/m^3	ppmv
Subslab-4	03/04/2014	0.0027 U	0.0004 U	1.1	*0.20*	69%	0.48	0.119	0.0033	0.0008	0.0016 U	0.0004 U	0.001 U	0.0004 U
Subslab-5	03/10/2015	0.059	0.009	1.4	*0.26*	76%	0.38	0.094	0.0044	0.0011	0.0016 U	0.0004 U	0.0033	0.0013
DEQ Screening Level Criteria for Soil Gas Vapor Intrusion into Buildings (occupational)		47	6.8	2.9	*0.53*		>Pv	>Pv	>Pv	>Pv	880	218	2.8	1.1

Notes:
[a] DEQ Generic Risk-Based Concentration (RBC) for soil gas vapor intrusion into buildings in an occupational setting (revised November 1, 2016).
VOCs = Volatile Organic Compounds
mg/m^3 = Milligrams per cubic meter
ppmv = Parts per million volume
U = Undetected at reporting limit shown
J = Estimated value
- = No value
>Pv = The air concentration reported for the RBC exceeds the vapor pressure of the pure chemical. It can be assumed that this constituent cannot create an unacceptable risk by this pathway.

Table 15
Air Analytical Results - VOCs (ug/m^3)
H&V Fiber
Corvallis, Oregon

Submicro Area	Date	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,1-Dichloroethene	1,1-Dichloroethane	Vinyl Chloride
Submicro Interior Samples								
Submicro Warehouse North	01/25/2005	-	5.1	0.51	0.017 J	0.19	0.033 U	0.021 U
Submicro Warehouse North	05/25/2005	-	4.7	0.21	0.021 J	0.031 J	0.047 U	0.029 U
Submicro Warehouse North	12/05/2006	-	7.1	0.74	0.057	0.032 J	0.053 U	0.020 J
Submicro Warehouse North	12/17/2008	0.30 J	37	3.3	1.5 U	-	-	0.983 U
Submicro Warehouse North	01/08/2009	0.11 J	37	3.8	0.056 J	-	-	0.083 J
Submicro Warehouse North	07/13/2009	0.52	68	2.3	0.042 J	-	-	0.078
Submicro Warehouse North[a,b]	01/11/2013	0.053 J	20	0.23	0.061 U	0.061 U	-	0.040 U
Submicro Warehouse North[b]	10/15/2013	0.062 J	14	0.42	0.069 U	0.069 U	-	0.051
Submicro Warehouse North[b]	05/22/2015	0.026 J	4.1	0.088	0.073 U	0.073 U	-	0.047 U
Submicro Warehouse South	01/25/2005	-	13	2.2	0.098 J	0.048 J	0.12 U	0.077 U
Submicro Warehouse South	04/15/2005	-	18	3.2	0.11 J	0.11 J	0.22 U	0.14 U
Submicro Warehouse South	05/25/2005	-	16	0.86	0.21 U	0.21 U	0.22 U	0.14 U
Submicro Warehouse South	12/05/2006	-	16	3.2	0.22 U	0.11 U	0.11 U	0.051 J
Submicro Warehouse South	12/17/2008	9.5 U	98	13	5.5 U	-	-	3.6 U
Submicro Warehouse South	01/08/2009	0.15 U	113	19	0.26 J	-	-	0.37
Submicro Warehouse South	07/13/2009	0.17 J	128	4.2	0.071 J	-	-	0.14
Submicro Warehouse South[a,b]	01/11/2013	1.1 U	150	1.1	0.62 U	0.62 U	-	0.40 U
Submicro Warehouse South[b]	10/15/2013	0.12	81	3.6	0.044 J	0.033 J	-	0.445
Submicro Warehouse South[b]	05/22/2015	0.97	1.8	0.065 U	0.25	0.065 U	-	0.042 U
Treatment Shed Interior Samples								
Inside Treatment Shed	05/05/2005	-	196	9.2	2.2 U	2.2 U	2.3 U	1.4 U
Inside Treatment Shed	12/17/2008	26 U	346	11 J	15 U	-	-	9.8 U
Inside Treatment Shed	01/08/2009	0.28 J	209	7.7	0.18 J	-	-	0.65
Inside Treatment Shed	07/13/2009	4.6	2,060	59	0.91 J	-	-	2.8
Inside Treatment Shed[a,b]	01/11/2013	5.9 U	1,520	10	3.5 U	3.5 U	-	2.2 U
Inside Treatment Shed[b]	10/15/2013	1.8	5,680	146	1.1	1.1	-	17
Inside Treatment Shed[b]	05/22/2015	6.5 U	601	15	3.8 U	3.8 U	-	1.1 J
Submicro Outdoor Samples								
North Landfill	12/02/2006	-	0.70	0.015 U	0.015 U	0.014 J	0.02 U	0.014
North Landfill	12/17/2008	0.063 J	1.6	0.086	0.078 U	-	-	0.050 U
North Landfill	01/08/2009	0.12	2.3	0.14	0.0040 J	-	-	0.0088 J
North Landfill	07/13/2009	1.6	6.8	0.38	0.027 J	-	-	0.024 J
North Landfill[a,b]	01/11/2013	0.054 J	2.5	0.089	0.067 U	0.067 U	-	0.043 U
North Landfill[b]	10/15/2013	0.084 J	0.97	0.070	0.065 U	0.065 U	-	0.042 U
North Landfill[b]	05/22/2015	0.14 U	0.16	0.082 U	0.082 U	0.082 U	-	0.053 U
South Landfill	12/02/2006	-	0.78	0.016 U	0.016 U	0.016	0.0086 J	0.0078 J
South Landfill	12/17/2008	0.055 J	0.71	0.030 J	0.038 U	-	-	0.0033 J
South Landfill	01/08/2009	0.17	3.0	0.19	0.016 J	-	-	0.016 J
South Landfill	07/13/2009	0.089	3.0	0.088	0.018 J	-	-	0.025 J
South Landfill[a,b]	01/11/2013	0.080 J	6.6	0.11	0.072 U	0.072 U	-	0.046 U
South Landfill[b]	10/15/2013	0.066 J	0.18	0.074 U	0.074 U	0.074 U	-	0.048 U
South Landfill[b]	05/22/2015	0.13 U	1.4	0.084	0.075 U	0.075 U	-	0.048 U
South Property Line[a,b]	01/11/2013	0.097 J	5.7	0.13	0.014 J	0.065 U	-	0.042 U
South Property Line[b]	10/15/2013	0.050 J	0.29	0.044 J	0.069 U	0.069 U	-	0.045 U
South Property Line[b]	05/22/2015	0.15 U	0.15	0.085 U	0.085 U	0.085 U	-	0.055 U
South Cooling Ponds[b]	05/22/2015	0.88	1.0	0.44	0.24	0.063 J	-	0.056 U

Table 15
Air Analytical Results - VOCs (ug/m^3)
H&V Fiber
Corvallis, Oregon

Submicro Area	Date	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,1-Dichloroethene	1,1-Dichloroethane	Vinyl Chloride
DEQ Screening Level Criteria for Air[c]								
	Exposure Assumptions							
Air (Residential)	24 hrs per day for 30 to 70 years	11	0.47	>Pv	>Pv	210	1.50	0.17
Air (Occupational)	40 hrs per week for 25 years	47	2.9	>Pv	>Pv	880	7.7	2.8
Air (Occupational Submicro)[d]	1 hour per day for 5 day work week	380	24	>Pv	>Pv	7,000	>Pv	22
OSHA Worker Scenario								
8-hour Daily TWA		678,000	537,000	790,000	790,000	N/A	405,000	2,560
Background Outdoor Air[e]								
Portland Oregon 1984 Mean			1.50					
US Mean 1985-1998 Urban			1.61					
US Mean 1985-1998 Suburban			1.26					
US Mean 1985-1998 Commercial			1.84					
US Mean 1985-1998 Agricultural			1.08					
Background Indoor Air								
USEPA 2011[f]	Range of 50th Percentile	<RL-2.2	<RL-1.1	<RL	-	<RL	<RL	<RL
	Range of 90th Percentile	<RL-7	<RL-2.1	<RL	-	<RL-0.8	<RL	<RL-0.04

Notes:

[a] Groundwater air stripping operational with no SVE operating for one sampling event only - January 11, 2013. SVE Operation for all other sampling events.

[b] Wind from 0 to 5 mph towards south; primarily calm

[c] Oregon Department of Environmental Quality (DEQ) Risk-Based Concentrations for Air (revised November 1, 2016)

[d] Site-specific occupational RBC for current operations of one hour exposure per day for five day work week.

[e] USEPA. Toxiciological Review of Trichloroethene, September 2011

[f] USEPA. Background Indoor Air Concentrations of Volatile Organic Compounds in North American Residences (1900-2005): A Compilation of Statistics for Assessing Vapor Intrusion, Table 2. June 2011.

ug/m^3 = Micrograms per cubic meter

>Pv = The air concentration reported for the RBC exceeds the vapor pressure of the pure chemical. It can be assumed that this constituent cannot create an unacceptable risk by this pathway

<RL = Below laboratory reporting limits.

- = Not analyzed for this parameter or not applicable

N/A = Not applicable

Table 16
Wind Data - Corvallis Airport (mph)
May 22, 2015
H & V Fiber Corporation
Corvallis, Oregon

Time	Wind Speed	Wind Direction
7:55	4.6	West/Northwest
8:15	0.0	-
8:35	0.0	-
8:55	3.5	West/Northwest
9:15	3.5	West/Southwest
9:35	3.5	Southwest
9:55	0.0	-
10:15	0.0	-
10:35	0.0	-
10:55	0.0	-
11:15	0.0	-
11:35	3.5	West/Northwest
11:55	5.8	West/Northwest
12:15	6.9	North/Northwest
12:35	8.1	North
12:55	5.8	Northwest
13:15	5.8	West/Northwest
13:35	4.6	North/Northwest
13:55	9.2	North/Northwest
14:15	10.4	Northwest
14:35	16.1	Northwest
14:55	12.7	Northwest
15:15	11.5	North/Northwest
15:35	13.8	North/Northwest
15:55	9.2	Northwest
16:15	8.1	West/Northwest
16:35	10.4	Northwest

Notes:
mph = Miles Per Hour

Table 17

SVE Performance Analytical Results - VOCs (ug/m^3)

SVE Pre-Treatment

H&V Fiber Corporation

Covallis, Oregon

Location	Date	PCE	TCE	TCE as % of Total VOCs	cis -1,2-DCE	trans -1,2-DCE	1,1-DCE	Vinyl Chloride
Submicro Subslab SVE Legs	01/23/2007	-	2,870,000	93%	113,000	39,800 U	39,800 U	25,700 U
	04/14/2009	5,300 U	298,000	79%	69,800	682 J	-	2,000 U
	06/04/2009	849 U	50,900	91%	3,380	496 U	-	320 U
	07/13/2009	821 U	55,200	93%	3,230	26 J	-	309 U
	10/14/2011	17,200 U	1,160,000	95%	21,400	10,100 U	10,100 U	6,500 U
	02/27/2012	3,080 U	138,000	90%	8,150	1,800 U	1,800 U	510 J
	07/24/2012	369 U	10,300	87%	561	216 U	216 U	139 U
	08/01/2012	301 U	27,900	94%	1,100	176 U	176 U	114 U
Plus IMW-28 and IMW-29	05/09/2013	1,100 U	1,300,000	86%	200,000	630 U	630 U	1,600
	05/29/2013	5,400 U	3,100,000	94%	170,000	3,200 U	3,200 U	5,400
	07/03/2013	5,400 U	3,800,000	97%	120,000	3,200 U	3,200 U	2,100
	08/01/2013	1,100 U	1,700,000	96%	59,000	630 U	630 U	740
	09/04/2013	590	1,100,000	96%	48,000	400	160 U	740
	10/01/2013	2,700 U	960,000	96%	33,000	1,600 U	1,600 U	1,000 U
	11/06/2013	470 U	1,400,000	96%	55,000	630 U	630 U	1,500
	01/08/2014	5,400 U	500,000	94%	16,000	3,200 U	3,200 U	2,000 U
	02/04/2014	5,400 U	1,800,000	97%	40,000	3,200 U	3,200 U	2,000 U
With Subslab-4 Open	03/04/2014	27 U	16,000	96%	630	16 U	16 U	10 U
With Subslab-4 Open	04/04/2014	3.8	3,400	90%	380	3.6	1.6 U	1.5
	05/15/2014	11,000 U	2,700,000	95%	100,000	6,300 U	6,300 U	4,100 U
	06/03/2014	11,000 U	3,000,000	97%	71,000	6,300 U	6,300 U	4,100 U
	07/09/2014	2,700 U	410,000	96%	10,000	1,600 U	1,600 U	1,000 U
	08/14/2014	2,700 U	1,600,000	98%	23,000	1,600 U	1,600 U	1,000 U
	09/04/2014	540 U	1,000,000	97%	26,000	320 U	320 U	200 U
	10/07/2014	2,700 U	700,000	96%	19,000	1,600 U	1,600 U	1,000 U
	11/05/2014	1,100 U	270,000	95%	11,000	630 U	630 U	410 U
	12/01/2014	1,100 U	410,000	96%	14,000	630 U	630 U	410 U
With Subslab-4 Open	01/21/2015	34 U	37,000	96%	1,500	5 U	5 U	13 U
With Subslab-5 Open	03/10/2015	88	400,000	99%	3,100	26	20 U	15
	05/18/2015	2,700 U	1,700,000	94%	99,000	1,600 U	1,600 U	1,000 U
	06/10/2015	1,100 U	750,000	98%	16,000	630 U	630 U	410 U
	07/08/2015	1,300	700,000	97%	19,000	150	63 U	120
	09/01/2015	1,090 U	900,000	98%	19,700	634 U	634 U	409 U
	11/05/2015	576	769,000	98%	10,800	634 U	634 U	409 U
	12/14/2015	271	630,000	98%	10,200	94	63 U	62
[a]	01/29/2016	1.4 U	1,750	67%	861	1.9	0.79 U	0.51 U

Table 17

SVE Performance Analytical Results - VOCs (ug/m^3)

SVE Pre-Treatment

H&V Fiber Corporation

Covallis, Oregon

Location	Date	PCE	TCE	TCE as % of Total VOCs	cis -1,2-DCE	trans -1,2-DCE	1,1-DCE	Vinyl Chloride
SVE Systems Discharge	08/04/2010	129,560 U	6,182,368	94%	115,376	75,728 U	75,736 U	6,902 J
	10/14/2011	177,000 U	10,300,000	94%	204,000	103,000 U	103,000 U	66,600 U
	07/19/2012	59,000 U	3,300,000	94%	53,600	34,500 U	34,500 U	22,200 U
	07/24/2012	53,800 U	3,930,000	96%	41,900	31,500 U	31,500 U	20,300 U
	08/01/2012	60,000 U	2,790,000	94%	40,700	35,100 U	35,100 U	22,600 U
	09/06/2012	40,700 U	2,100,000	94%	38,400	23,800 U	23,800 U	15,300 U
	02/15/2013	17,600 U	2,230,000	94%	102,000	10,300 U	10,300 U	6,630 U
	02/19/2013	17,200 U	2,240,000	96%	52,400	10,100 U	10,100 U	6,500 U
	04/09/2013	1,400 U	260,000	92%	17,000	790 U	790 U	2,500
	05/09/2013	1,100 U	39,000	68%	16,000	630 U	630 U	410 U
	05/29/2013	1,100 U	640,000	98%	8,700	630 U	630 U	410 U
	07/03/2013	1,100 U	500,000	98%	7,500	630 U	630 U	410 U
SVE Systems Discharge	08/01/2013	240	480,000	98%	7,500	67	63 U	110
(cont'd)	09/04/2013	200	750,000	98%	11,000	100	63 U	170
	10/01/2013	1,100 U	750,000	98%	11,000	630 U	630 U	410 U
	11/06/2013	190	860,000	99%	7,500	75	67	180
	01/08/2014	1,100 U	390,000	95%	17,000	630 U	630 U	410 U
	02/04/2014	1,100 U	460,000	98%	8,300	630 U	630 U	410 U
	03/04/2014	27 U	20,000	95%	990	16 U	16 U	10 U
	04/04/2014	5.4 U	11,000	94%	630	4.8	3.2 U	2 U
	05/15/2014	1,100 U	410,000	98%	5,500	630 U	630 U	410 U
	06/03/2014	1,100 U	400,000	98%	5,500	630 U	630 U	410 U
	07/09/2014	1,100 U	400,000	98%	7,100	630 U	630 U	410 U
	08/14/2014	2,700 U	1,100,000	98%	11,000	1,600 U	1,600 U	1,000 U
	09/04/2014	2,700 U	750,000	98%	9,900	1,600 U	1,600 U	1,000 U
	10/07/2014	2,700 U	640,000	97%	12,000	1,600 U	1,600 U	1,000 U
	11/05/2014	1,100 U	290,000	96%	8,300	630 U	630 U	410 U
	12/01/2014	110 U	210,000	98%	4,800	63 U	63 U	130
	01/21/2015	34 U	54,000	97%	1,600	20 U	20 U	13 U
	03/10/2015	110 U	340,000	99%	2,700	63 U	63 U	41 U
	05/18/2015	1,100 U	700,000	96%	29,000	630 U	630 U	410 U
	06/10/2015	150	520,000	98%	7,900	63 U	63 U	49
	07/08/2015	1,600	640,000	98%	11,000	630 U	630 U	410 U
	09/01/2015	1,090 U	435,000	97%	9,510	634 U	634 U	409 U
	11/05/2015	164	371,000	98%	5,410	63 U	63 U	41 U
	12/14/2015	201	432,000	98%	6,430	63 U	63 U	41 U
[a]	01/15/2016	2.7 U	2,400	71%	987	3.8	1.6 U	1.0 U

Table 17

SVE Performance Analytical Results - VOCs (ug/m^3)

SVE Pre-Treatment

H&V Fiber Corporation

Covallis, Oregon

Location	Date	PCE	TCE	TCE as % of Total VOCs	cis -1,2-DCE	trans -1,2-DCE	1,1-DCE	Vinyl Chloride
Combined SVE + Stripper at Submicro	08/04/2010	86,825	5,266,748	94%	100,310	50,750 U	50,755 U	32,720 U
	09/29/2010	29,982 U	20,422,086	98%	380,227	26,485 U	30,731 U	14,545 J
	09/28/2011	15,000 U	252,000	78%	9,630 J	15,000 U	15,000 U	15,000 U
	10/14/2011	172,000 U	7,970,000	93%	146,000	100,000 U	100,000 U	64,700 U
	02/27/2012	21,800 U	1,260,000	93%	41,900	12,700 U	12,700 U	1,770 J
	07/19/2012	23,000 U	1,530,000	95%	28,200	13,400 U	13,400 U	8,660 U
	07/24/2012	59,000 U	2,830,000	94%	31,900 J	34,500 U	34,500 U	22,200 U
	08/01/2012	14,800 U	1,720,000	96%	26,200	8,670 U	8,670 U	5,590 U
	09/06/2012	31,700 U	1,760,000	94%	32,300	18,600 U	18,600 U	12,000 U
	09/28/2012	17,200 U	1,660,000	96%	31,900	10,100 U	10,100 U	6,500 U
	02/15/2013	20,400 U	2,550,000	95%	100,000	11,900 U	11,900 U	4,080 U
	02/19/2013	13,900 U	1,840,000	96%	35,900	8,110 U	8,110 U	5,230 U
	05/09/2013	240	960,000	99%	12,000	71	32 U	210
	05/29/2013	1,100 U	800,000	98%	11,000	630 U	630 U	410 U
	07/03/2013	200	270,000	98%	4,800	63 U	63 U	72
	08/01/2013	240	480,000	98%	7,100	67	63 U	110
	09/04/2013	140	330,000	97%	11,000	87	63 U	330
	10/01/2013	150	190,000	97%	6,300	63 U	63 U	120
	11/06/2013	140	310,000	99%	4,000	63 U	63 U	110
	01/08/2014	1,100 U	260,000	94%	13,000	630 U	630 U	410 U
	02/04/2014	1,100 U	350,000	97%	7,900	630 U	630 U	410 U
	03/04/2014	27 U	17,000	96%	630	16 U	16 U	10 U
	04/04/2014	110 U	44,000	93%	2,800	63 U	63 U	51
	05/15/2014	110 U	290,000	99%	3,000	63 U	63 U	49
	06/03/2014	1,100 U	350,000	97%	6,700	630 U	630 U	410 U
	07/09/2014	110 U	260,000	97%	7,900	63 U	63 U	69
	08/14/2014	1,100 U	410,000	97%	8,300	630 U	630 U	410 U
	09/04/2014	1,100 U	350,000	97%	6,700	630 U	630 U	410 U
	10/07/2014	540 U	280,000	97%	7,100	320 U	320 U	200 U
	11/05/2014	140	170,000	97%	4,400	63 U	63 U	69
	12/01/2014	110 U	170,000	97%	4,400	63 U	63 U	49
	01/21/2015	110 U	70,000	96%	2,400	63 U	63 U	41 U
	03/10/2015	110 U	160,000	98%	2,700	63 U	63 U	41 U
	05/18/2015	1,100 U	700,000	96%	27,000	630 U	630 U	410 U
	06/10/2015	110 U	380,000	98%	7,100	63 U	63 U	64
	07/08/2015	750	540,000	98%	10,000	87	63 U	87
	09/01/2015	135	303,000	97%	7,820	63 U	63 U	41 U

Table 17

SVE Performance Analytical Results - VOCs (ug/m^3)

SVE Pre-Treatment

H&V Fiber Corporation

Covallis, Oregon

Location	Date	PCE	TCE	TCE as % of Total VOCs	cis -1,2-DCE	trans -1,2-DCE	1,1-DCE	Vinyl Chloride
Combined SVE + Stripper	11/05/2015	112	253,000	98%	5,330	63 U	63 U	41 U
at Submicro (cont'd)	12/14/2015	77	483,000	97%	12,600	50	23	65
CatOx Influent After Bleed Air	09/28/2011	5,920 U	268,000	89%	9,770	5,920 U	5,920 U	5,920 U
	10/14/2011	71,100 U	5,340,000	95%	108,000	41,500 U	41,500 U	4,130 J
	07/19/2012	11,800 U	1,260,000	96%	24,100	6,900 U	6,900 U	4,450 U
	07/24/2012	14,500 U	1,190,000	96%	12,700	8,470 U	8,470 U	5,460 U
	08/01/2012	9,110 U	666,000	95%	9,920	5,320 U	5,320 U	3,430 U
	09/06/2012	8,760 U	808,000	96%	13,300	5,120 U	5,120 U	3,300 U
	09/28/2012	6,970 U	1,020,000	97%	17,200	4,070 U	4,070 U	2,630 U
	11/13/2012	20,700 U	994,000	94%	7,700 J	12,100 U	12,100 U	7,800 U
	12/07/2012	3,520 U	358,000	96%	4,680	2,060 U	2,060 U	1,330 U
	01/11/2013	1,750 U	192,000	97%	2,470	1,020 U	1,020 U	658 U
	02/19/2013	3,400 U	346,000	96%	6,210	1,990 U	1,990 U	1,280 U
	04/09/2013	220 U	220,000	99%	2,500	130 U	130 U	200
	04/23/2013	410 U	70,000	94%	1,100 U	630 U	1,900	630 U
	05/09/2013	120	290,000	99%	2,900	63 U	63 U	59
	05/22/2013	28	140,000	99%	1,400	9.5	6.3 U	36
	05/29/2013	45	110,000	99%	1,300	16 U	16 U	51
	06/18/2013	54 U	200,000	99%	2,600	32 U	32 U	38
	07/03/2013	110 U	240,000	98%	4,000	63 U	63 U	61
	07/16/2013	130	150,000	98%	2,800	63 U	63 U	69
	09/04/2013	180	59,000	96%	2,400	63 U	63 U	61
	10/01/2013	110 U	100,000	98%	1,700	63 U	63 U	41 U
	10/17/2013	160	110,000	98%	1,800	63 U	63 U	41 U
	11/06/2013	27 U	96,000	99%	1,000	16 U	16 U	22
	11/20/2013	110	86,000	97%	2,000	63 U	63 U	41 U
	01/08/2014	110 U	140,000	96%	5,200	63 U	63 U	130
	01/22/2014	110 U	120,000	97%	3,300	63 U	63 U	66
	02/04/2014	110 U	110,000	98%	2,400	63 U	63 U	41 U
	02/21/2014	68 U	44,000	96%	1,800	40 U	40 U	38
	03/04/2014	5.4	3,600	90%	380	5.5	3.8	18
	04/04/2014	110 U	54,000	95%	2,600	63 U	63 U	54
	04/16/2014	110 U	140,000	99%	870	63 U	63 U	41 U
	05/15/2014	110 U	49,000	96%	1,700	63 U	63 U	41 U
	06/03/2014	110 U	75,000	97%	1,900	63 U	63 U	41 U
	06/26/2014	110 U	86,000	97%	2,100	63 U	63 U	41 U

Table 17

SVE Performance Analytical Results - VOCs (ug/m^3)

SVE Pre-Treatment

H&V Fiber Corporation

Covallis, Oregon

Location	Date	PCE	TCE	TCE as % of Total VOCs	cis -1,2-DCE	trans -1,2-DCE	1,1-DCE	Vinyl Chloride
CatOx Influent After Bleed Air (cont'd)	07/09/2014	110 U	64,000	98%	1,100	63 U	63 U	41 U
	07/22/2014	110 U	120,000	97%	3,700	63 U	63 U	41 U
	08/14/2014	110 U	170,000	98%	3,700	63 U	63 U	41 U
	09/04/2014	1,100 U	180,000	97%	3,700	630 U	630 U	410 U
	09/30/2014	110 U	130,000	97%	3,800	63 U	63 U	51
	10/07/2014	110 U	160,000	98%	3,100	630	63 U	41 U
	10/29/2014	130	240,000	98%	3,700	40 U	40 U	26 U
	11/05/2014	120	100,000	97%	2,900	63 U	63 U	41
	12/01/2014	180	80,000	96%	3,000	63 U	63 U	41 U
	12/18/2014	140	140,000	98%	2,700	63 U	63 U	41 U
	01/21/2015	54 U	42,000	94%	2,400	32 U	32 U	25
	02/04/2015	34 U	140,000	99%	1,900	20 U	20 U	20
	03/10/2015	110 U	140,000	98%	3,100	63 U	63 U	41 U
	04/07/2015	110	160,000	97%	3,900	63 U	63 U	41
	05/18/2015	110 U	260,000	97%	7,900	87	63 U	54
	06/10/2015	110 U	190,000	98%	3,400	63 U	63 U	41 U
	07/08/2015	880	200,000	98%	4,000	63 U	63 U	41 U
	08/10/2015	132	169,000	98%	3,890	63 U	63 U	41 U
	09/01/2015	43	130,000	98%	2,820	20 U	20 U	13 U
	10/13/2015	44	152,000	97%	3,920	20 U	23	19
	11/05/2015	39	144,000	99%	2,000	20 U	20 U	13 U
	12/14/2015	33	112,000	97%	2,960	22	11	30
CatOx Effluent	09/28/2011	16 J	3,190	94%	52	38 J	50 U	50 U
	10/14/2011	1,230 J	203,000	95%	1,990 J	1,400 J	3,460 U	2,230 U
	02/27/2012	918	4,880	80%	193	23 J	34 J	42 U
	07/19/2012	204 J	26,300	96%	291	188 J	204 U	131 U
	07/24/2012	309 J	43,500	97%	302 J	108 J	349 U	225 U
	08/01/2012	157 J	25,400	97%	241	98 J	214 U	138 U
	09/06/2012	215 J	30,900	97%	364	201 U	201 U	129 U
	09/28/2012	201 J	25,300	95%	318	304 U	305 U	196 U
	11/13/2012	266 J	35,700	98%	149 J	75 J	210 U	135 U
	12/07/2012	92 J	16,500	98%	103	41 J	100 U	64 U
	01/11/2013	175 U	8,630	94%	89 J	102 U	102 U	66 U
	02/19/2013	149 U	10,800	96%	158	87 U	27 J	56 U
	04/09/2013	34 U	8,600	98%	55	23 U	20 U	13.0 U
	04/23/2013	1 U	2.9	25%	2.7 U	1.6 U	1.6 U	1.6 U
	05/09/2013	36	10,000	98%	91	14	11	3.1

Table 17

SVE Performance Analytical Results - VOCs (ug/m^3)

SVE Pre-Treatment

H&V Fiber Corporation

Covallis, Oregon

Location	Date	PCE	TCE	TCE as % of Total VOCs	cis -1,2-DCE	trans -1,2-DCE	1,1-DCE	Vinyl Chloride
CatOx Effluent	05/22/2013	17	6,400	99%	59	4.8	11	1.7 U
(cont'd)	05/29/2013	19	4,300	98%	71	4.8	5.9	2.4
	06/18/2013	43	9,600	98%	99	32	7.9	4.1 U
	07/03/2013	22	5,400	98%	52	20	6.7	2.0 U
	07/16/2013	29	5,900	98%	63	36	6.3 U	4.1 U
	09/04/2013	20	5,400	98%	59	18	4.8	1.7
	10/01/2013	14	2,900	97%	48	5.2	5.9	1.9
	10/17/2013	16	3,600	98%	44	6.3	6.3	2.4
	11/06/2013	14	2,500	96%	71	6.7	8.3	2.5
	11/20/2013	18	7,500	98%	87	14	7.1	4.1 U
	01/08/2014	35	10,000	98%	170	28	13	5.4
	01/22/2014	19	5,000	97%	100	16	7.1	2.8
	02/04/2014	21	8,600	99%	83	11	8.3	4.1 U
	02/21/2014	5.4 U	1,800	96%	52	3.8	3.2 U	2.0 U
	03/04/2014	4.3	1,900	97%	39	3.9	2.3	1.4
	04/04/2014	3.7	1,300	95%	48	14	2.8	1.5
	04/16/2014	10	2,000	97%	28	12	5.5	1.3
	05/15/2014	8.8	2,000	97%	32	15	1.7	1.0 U
	06/03/2014	19	3,400	97%	52	27	3.2 U	2.0 U
	06/26/2014	51	9,100	98%	100	34	6.3 U	4.1 U
	07/09/2014	8.1	3,500	98%	30	11	3.2 U	2.0 U
	07/22/2014	13	4,100	98%	44	19	3.0	1.0 U
	08/14/2014	34 U	12,000	99%	75	39	20 U	13 U
	09/04/2014	29	6,400	98%	59	37	16 U	10 U
	09/30/2014	31	5,900	97%	75	44	6.3	2.6
	10/07/2014	36	7,000	98%	59	44	7.5	4.1 U
	10/29/2014	33	9,600	98%	67	48	7.1	4.1 U
	11/05/2014	16	4,200	97%	63	28	4.0	1.5
	12/01/2014	12	4,800	98%	52	19	2.8	1.0 U
	12/18/2015	31	8,600	98%	75	31	6.3 U	4.1 U
	01/21/2015	5.8	3,300	98%	44	12	3.2 U	2.0 U
	02/04/2015	18	8,600	99%	44	21	6.3 U	4.1 U
	03/10/2015	23	6,400	98%	75	32	5.5	1.8
	04/07/2015	30	7,500	98%	55	36	6.7	1.7
	05/18/2015	81	26,000	98%	270	170	13	4.1 U
	06/10/2015	29	9,600	98%	95	28	9.1	2.6
	07/08/2015	38	11,000	98%	99	32	9.1	2.5

Table 17

SVE Performance Analytical Results - VOCs (ug/m^3)

SVE Pre-Treatment

H&V Fiber Corporation

Covallis, Oregon

Location	Date	PCE	TCE	TCE as % of Total VOCs	cis -1,2-DCE	trans -1,2-DCE	1,1-DCE	Vinyl Chloride
CatOx Effluent	08/10/2015	65	17,400	99%	120	59	8.3	4.1 U
(cont'd)	09/01/2015	24	6,380	98%	65	23	5.3	1.0 U
	10/13/2015	36	12,600	98%	124	9.3	30	2.6
	11/05/2015	28	14,300	99%	110	15	9.4	4.1 U
	12/14/2015	24	11,300	99%	99	21	11	3.0

Notes:

[a] Only Subslab 4 and 5 active in SVE during sampling event.

PCE = Tetrachloroethene

TCE = Trichloroethene

DCE = Dichloroethene

ug/m^3 = Micrograms per cubic meter of air

U = Undetected at Method Reporting Limit shown

B = Sample results restated as undetected because analyte was detected in the method blank, and associated sample results were less than five times the concentration detected in the corresponding method blank

J = Estimated value

- = Not applicable

>Pv = The air concentration reported for the RBC exceeds the vapor pressure of the pure chemical. It can be assumed that this constituent cannot create an unacceptable risk by this pathway

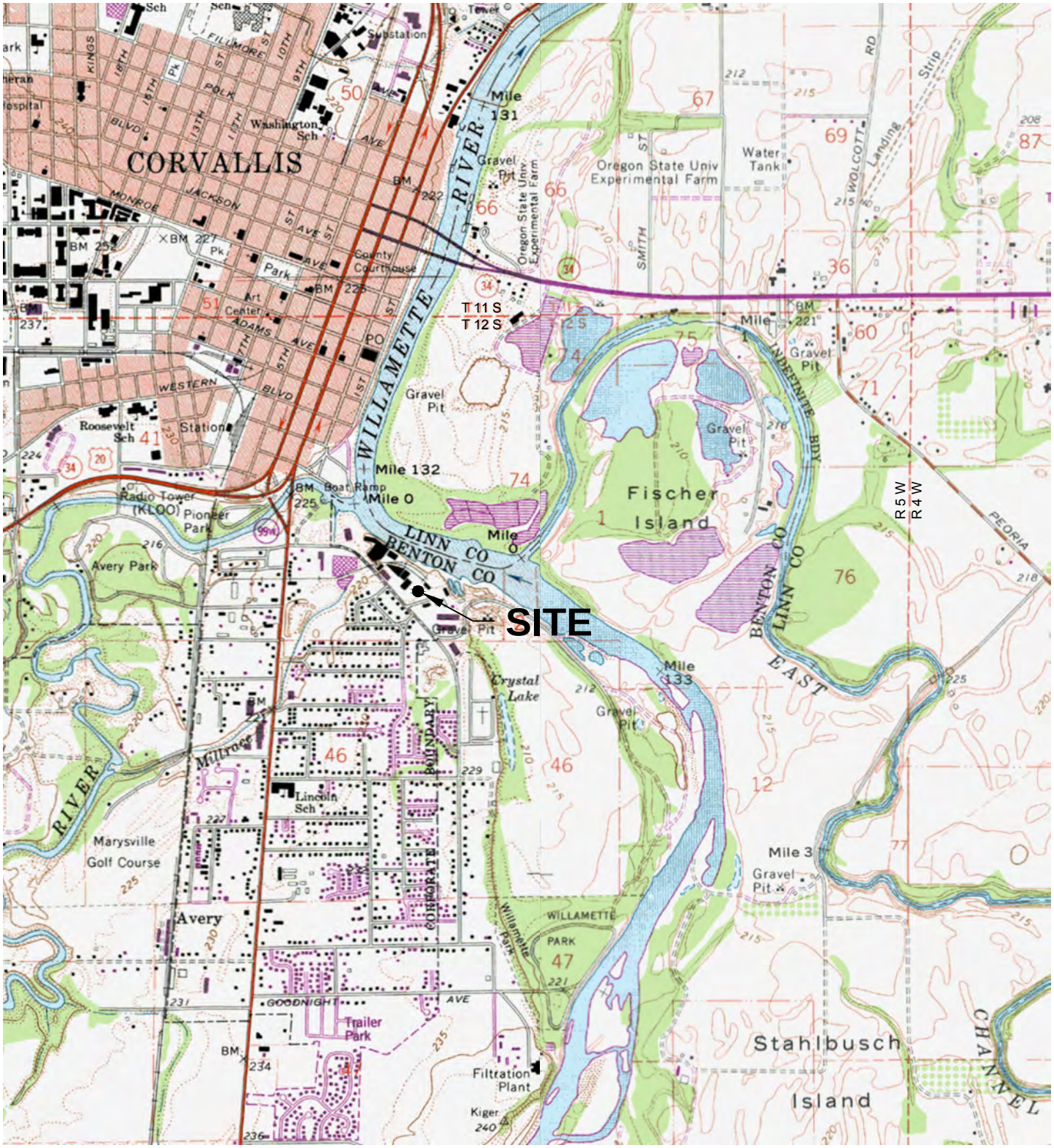
Note: Subslab 4 is a leg of the Submicro subslab SVE mitigation system.

Table 18
TCE Groundwater Treatment System Performance
H&V Fiber Corporation
Corvallis, Oregon

Date	Average Extraction Rate (gpm)	Gallons Extracted for Period	Influent Concentration (ug/L)	Effluent Concentration (ug/L)	Efficiency (%)	Scrubber Blowdown (ug/L)
03/19/2013	-	-	24,000	4,300	82.1%	-
04/15/2013	38.6	1,555,557	13,300	-	-	-
05/07/2013	38.6	1,222,223	-	-	-	-
05/09/2013	-	-	10,000	2,500	75.0%	-
06/03/2013	24.0	933,120	9,700	610	93.7%	-
07/01/2013	13.5	544,540	7,500	150	98.0%	-
08/01/2013	18.9	844,900	11,000	200	98.2%	-
09/04/2013	20.4	1,000,400	4,600	120	97.4%	-
10/01/2013	22.3	865,500	3,900	120	96.9%	-
11/06/2013	23.5	1,220,100	4,500	140	96.9%	-
12/10/2013	32.9	1,609,000	5,700	190	96.7%	-
01/09/2014	30.9	1,336,280	5,400	150	97.2%	-
02/04/2014	32.4	1,212,440	4,700	160	96.6%	-
03/04/2014	30.0	1,210,200	4,700	130	97.2%	-
04/01/2014	24.1	971,900	4,700	160	96.6%	-
05/15/2014	33.2	2,103,900	4,500	95	97.9%	-
06/03/2014	35.7	976,100	2,900	86	97.0%	-
07/09/2014	34.9	1,809,800	6,800	89	98.7%	-
08/14/2014	24.4	1,262,900	3,600	14	99.6%	-
09/04/2014	21.8	658,000	4,500	57	98.7%	-
10/07/2014	25.5	1,210,400	4,200	56	98.7%	-
11/05/2014	35.9	1,497,600	3,400	35	99.0%	-
12/01/2014	33.2	1,242,500	3,900	61	98.4%	-
01/21/2015	30.9	2,271,900	5,100	64	98.7%	-
03/09/2015	19.4	1,311,423	6,800	100	98.5%	-
05/18/2015	-	-	5,100	120	97.6%	-
06/11/2015	37.7	5,104,999	3,700	76	97.9%	-
07/08/2015	48.1	1,869,870	3,300	49	98.5%	-
09/01/2015	26.8	2,124,824	4,490	60	98.7%	-
11/05/2015	35.2	3,294,218	3,610	56	98.4%	-
12/16/2015	37.9	2,239,115	3,560	56	98.4%	-

Notes:
°F = Degrees Fahrenheit
ug/L = Micrograms per liter
% = Percent
U = undetected at detection limit shown
- = Not available

FIGURES



APPROXIMATE SCALE IN FEET

0 1000 2000 4000

NOTE:
USGS, Corvallis-Riverside Quadrangle
Oregon
7.5 Minute Series (Topographic)
Lat: 44°33'12.02"N, Long: 123°15'31.82"W

PNG ENVIRONMENTAL, INC.
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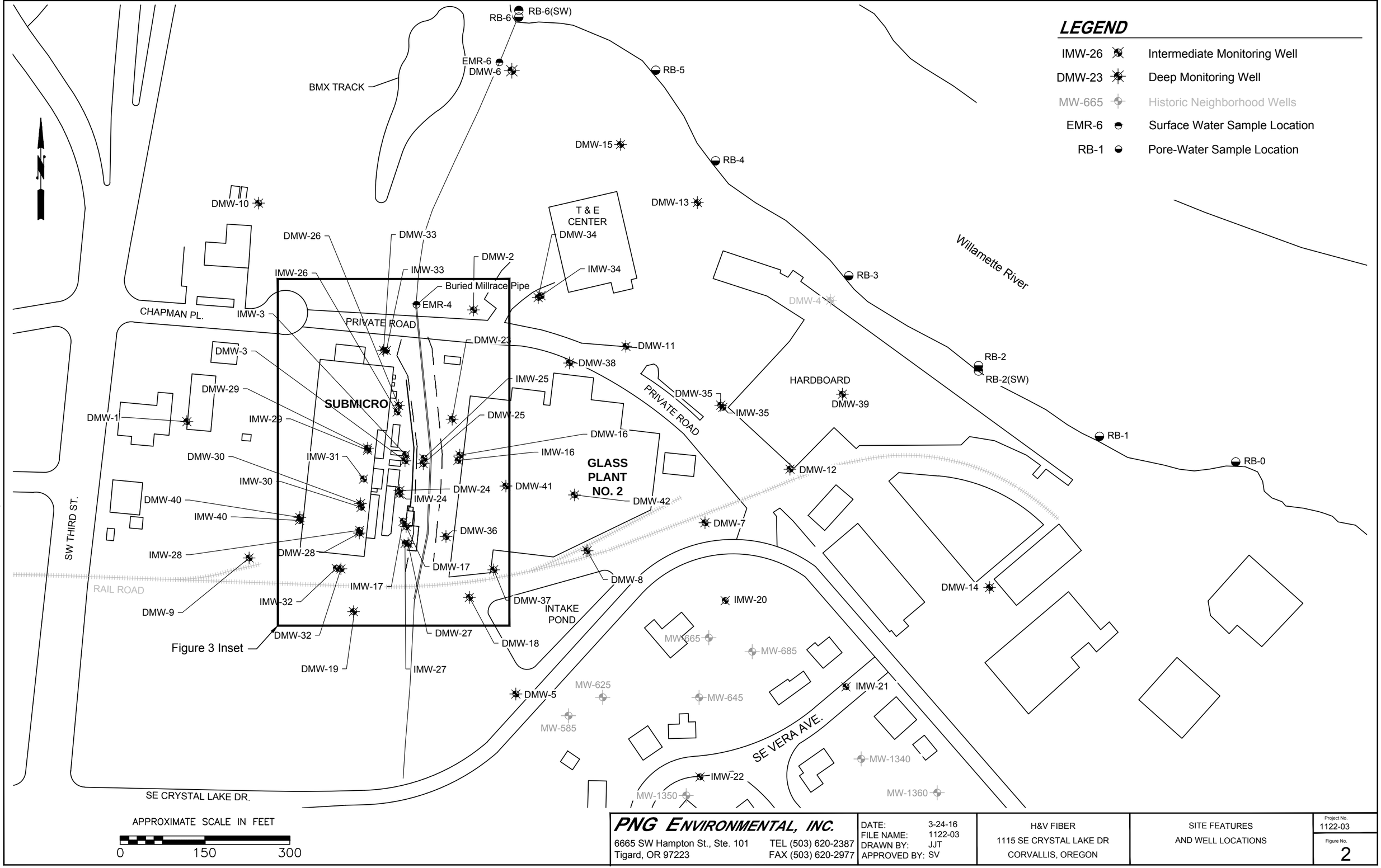
DATE:	6-12-14
FILE NAME:	1122-01
DRAWN BY:	JJT
APPROVED BY:	SV

H&V FIBER
1115 SE CRYSTAL LAKE DR
CORVALLIS, OREGON

SITE LOCATION MAP

Project No. 1122-03
Figure No. 1



PNG ENVIRONMENTAL, INC.
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FILE NAME: 1122-03
DRAWN BY: JJT
APPROVED BY: SV

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1115 SE CRYSTAL LAKE DR
CORVALLIS, OREGON

SITE FEATURES
AND WELL LOCATIONS

Project No. 1122-03

Figure No. 2

LEGEND

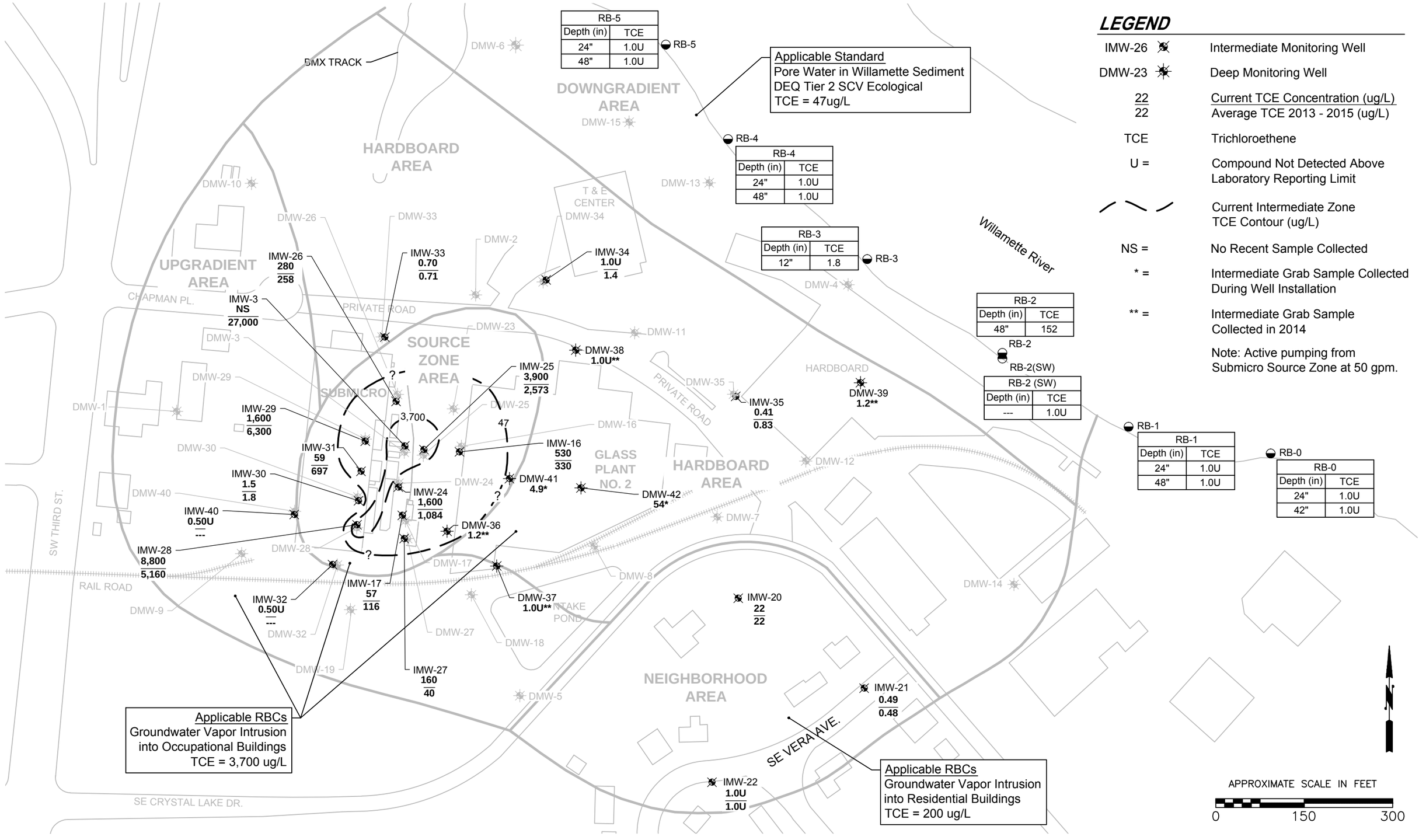
- IMW-26 — Intermediate Monitoring Well
- DMW-27 — Deep Monitoring Well
- GP-8 — Geoprobe
- SB-10 — Soil Boring/SVE Test Well
- VW-3 — Vapor Well
- VMP-6 — Vapor Monitoring Point
- SVE-2 — Soil Vapor Extraction Well
- A-8 — Air Sample Locations
- Concrete Filled Trench
- Observed Trench
- Former Floor Drains to Subslab

DMW-2
PRIVATE ROAD
DMW-33
IMW-33
Electrical Room
VW-1
SB-4
North Landfill
SUBMICRO
VMP-4
(1978 Addition)
VMP-1
Original Building Constructed (1974)
VW-2
DMW-26
Submicro North
IMW-26
DMW-23
SVE-3
GP-6
GP-5
SB-6
GP-4
VW-3
(1977 Addition)
VMP-6
Storage
DMW-29
IMW-29
Chiller
IMW-3
DMW-16
IMW-25
DMW-3
IMW-16
SB-2
DMW-25
Waste Water Pump
GP-8
SB-7
SVE-4
VW-4
GLASS PLANT NO. 2
VMP-3
IMW-31
SVE-2
VMP-2
GP-7
DMW-24
DMW-41
SB-1
GP-1
IMW-24
Submicro South
(1987 Addition)
DMW-30
Treatment Shed
South Landfill
IMW-30
VW-5
SB-8
SVE-6
SVE-5
VMP-7
GP-2
DMW-40
Former TCE Containing Extraction Pans
Treatment Shed
IMW-17
IMW-40
DMW-17
IMW-28
DMW-28
GP-3
DMW-36
VMP-5
VMP-9
VMP-8
SVE-1
VW-6
IMW-27
DMW-27
Buried Millrace Pipe
(1979 Addition)
B-32
Former Open Millrace Bankline
South Property Line
IMW-32
DMW-32
DMW-37
B-101
RAIL ROAD
Former Ditch
DMW-18
DMW-19
INTAKE POND

APPROXIMATE SCALE IN FEET
0 40 80

N

PNG ENVIRONMENTAL, INC. 6665 SW Hampton St., Ste. 101 TEL (503) 620-2387 Tigard, OR 97223 FAX (503) 620-2977	DATE: 1-26-16 FILE NAME: 1122-03 DRAWN BY: JJT APPROVED BY: SV	H&V FIBER 1115 SE CRYSTAL LAKE DR. CORVALLIS, OREGON	SITE FEATURES SUBMICRO DNAPL SOURCE ZONE	Project No. 1122-03 Figure No. 3



LEGEND

IMW-26	Intermediate Monitoring Well
DMW-23	Deep Monitoring Well
22 / 22	Current TCE Concentration (ug/L) / Average TCE 2013 - 2015 (ug/L)
TCE	Trichloroethene
U =	Compound Not Detected Above Laboratory Reporting Limit
	Current Intermediate Zone TCE Contour (ug/L)
NS =	No Recent Sample Collected
* =	Intermediate Grab Sample Collected During Well Installation
** =	Intermediate Grab Sample Collected in 2014

Note: Active pumping from Submicro Source Zone at 50 gpm.

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DATE: 3-7-16
FILE NAME: 1122-03
DRAWN BY: JJT
APPROVED BY: SV

H&V FIBER
1115 SE CRYSTAL LAKE DR
CORVALLIS, OREGON

TCE IN GROUNDWATER
CURRENT INTERMEDIATE CONDITIONS

Project No. 1122-03

Figure No. 4

LEGEND

IMW-26	Intermediate Monitoring Well
DMW-23	Deep Monitoring Well
RB-1	Pore Water Sample Location
RB-2(SW)	Surface Water Sample Location
143 / 220	Current TCE Concentration (ug/L) / Average TCE 2012 - 2014 (ug/L)
TCE	Trichloroethene
U =	Compound Not Detected Above Laboratory Reporting Limit
	Current Deep Zone TCE Contour (ug/L)

Note: Active pumping from Submicro Source Zone at 50 gpm.

Applicable Standard
Pore Water in Willamette Sediment
DEQ Tier 2 SCV Ecological
TCE = 47ug/L

Applicable RBCs
Groundwater Vapor Intrusion into Occupational Buildings
TCE = 3,700 ug/L

Applicable RBCs
Groundwater Vapor Intrusion into Residential Buildings
TCE = 200 ug/L

RB-5	
Depth (in)	TCE
24"	1.0U
48"	1.0U

RB-4	
Depth (in)	TCE
24"	1.0U
48"	1.0U

RB-3	
Depth (in)	TCE
12"	1.8

RB-2	
Depth (in)	TCE
48"	152

RB-2 (SW)	
Depth (in)	TCE
---	1.0U

RB-1	
Depth (in)	TCE
24"	1.0U
48"	1.0U

RB-0	
Depth (in)	TCE
24"	1.0U
42"	1.0U

BMX TRACK
HARDBOARD AREA
DOWNGRADIENT AREA
UPGRADIENT AREA
SOURCE ZONE AREA
SUBMICRO
GLASS PLANT NO. 2
HARDBOARD AREA
NEIGHBORHOOD AREA
T & E CENTER
INTAKE POND
Willamette River
CHAPMAN PL.
PRIVATE ROAD
RAIL ROAD
SW THIRD ST.
SE CRYSTAL LAKE DR.
SE VERA AVE.

DMW-1 1.0U / 1.4
DMW-3 2,210 / 2,114
DMW-29 69 / 665
DMW-30 61 / ---
DMW-40 0.50U / ---
DMW-9 1.0U / 1.0U
DMW-10 1.6 / 1.6
DMW-26 25 / 115
DMW-33 7.4 / 11
DMW-6 1.1 / 5.2
DMW-15 1.0U / 0.84
DMW-13 1.0U / 1.0U
DMW-34 39 / 190
DMW-2 394 / 320
DMW-23 12,500 / 16,254
DMW-38 143 / 220
DMW-11 40 / 74
DMW-35 475 / 678
DMW-39 21 / 82
DMW-12 2.8 / 36
DMW-7 6.3 / 1.7
DMW-14 1.7 / 1.0
DMW-25 108 / 1,554
DMW-16 8,120 / 9,155
DMW-24 619 / 1,635
DMW-41 1,650 / ---
DMW-42 13 / ---
DMW-36 4.5 / 21
DMW-28 931 / 1,127
DMW-17 14 / 39
DMW-8 594 / 169
DMW-37 18 / 16
DMW-27 0.51 / 8.2
DMW-18 8.9 / 3.7
DMW-32 366 / 211
DMW-19 1.0U / 0.80
DMW-5 1.0U / 1.0U
3,700
47

IMW-26, IMW-33, IMW-34, IMW-3, IMW-25, IMW-29, IMW-35, IMW-31, IMW-16, IMW-30, IMW-24, IMW-40, IMW-28, IMW-17, IMW-32, IMW-27, IMW-20, IMW-21, IMW-22

APPROXIMATE SCALE IN FEET
0 150 300

N

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DATE: 2-3-15
FILE NAME: 1122-03
DRAWN BY: JJT
APPROVED BY: SV

H&V FIBER
1115 SE CRYSTAL LAKE DR
CORVALLIS, OREGON

TCE IN GROUNDWATER
CURRENT DEEP CONDITIONS

Project No. 1122-03
Figure No. 5

LEGEND

IMW-26	Intermediate Monitoring Well
DMW-23	Deep Monitoring Well
196.87	Groundwater Elevation (Feet)
NM	Not Measured
	Groundwater Contour
	Groundwater Flow Direction

GROUNDWATER EXTRACTION RATES (gpm)*	
DMW-2	6.0
DMW-3	14.0
DMW-23	11.0
DMW-24	15.0
DMW-29	6.5
TOTAL	52.5

*Groundwater Extraction Rate at time of Elevation Measurement

BMX TRACK
DMW-6 196.27
DMW-15 195.49
DMW-13 195.78
DMW-10 198.19
T & E CENTER
DMW-34 194.92
IMW-34 195.31
DMW-26 193.90
DMW-33 194.91
DMW-2 188.66
IMW-26 198.97
IMW-33 195.39
Willamette River
DMW-4 NM
CHAPMAN PL.
IMW-3 NM
PRIVATE ROAD
DMW-3 188.79
DMW-23 187.89
DMW-11 196.87
DMW-38 196.02
DMW-29 189.73
IMW-25 NM
HARDBOARD
DMW-35 197.57
DMW-39 196.71
DMW-1
IMW-35 197.59
IMW-29 NM
DMW-25 193.14
DMW-16 194.75
IMW-31 NM
IMW-16 NM
GLASS PLANT NO. 2
DMW-12 197.49
IMW-30 NM
DMW-24 192.41
IMW-24 202.60
NM
DMW-7 198.24
IMW-28
D195.28
DMW-36 195.14
DMW-17 194.52
SW THIRD ST.
DMW-8 198.30
DMW-14 199.95
RAIL ROAD
IMW-17 195.89
DMW-37 197.71
INTAKE POND
IMW-20 199.32
DMW-9 198.74
DMW-32 197.16
DMW-27 195.60
DMW-18 197.75
DMW-19 198.44
IMW-27 196.28
DMW-5 199.60
IMW-21 200.55
SE VERA AVE.
IMW-22 200.76
SE CRYSTAL LAKE DR.

APPROXIMATE SCALE IN FEET
0 150 300

PNG ENVIRONMENTAL, INC. 6665 SW Hampton St., Ste. 101 Tigard, OR 97223 TEL (503) 620-2387 FAX (503) 620-2977	DATE: 3-8-16 FILE NAME: 1122-03 DRAWN BY: JJT APPROVED BY: SV	H&V FIBER 1115 SE CRYSTAL LAKE DR CORVALLIS, OREGON	GROUNDWATER ELEVATION CONTOURS FOR SEPTEMBER 1, 2015	Project No. 1122-03	Figure No. 6

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LEGEND

IMW-26	Intermediate Monitoring Well
DMW-23	Deep Monitoring Well
207.73	Groundwater Elevation (Feet)
NM	Not Measured
	Groundwater Contour
	* Pumping wells off since 12/24/15

BMX TRACK

DMW-6 **206.43**

DMW-15 **206.51**

207

DMW-13 **206.81**

DMW-10 **207.54**

T & E CENTER

DMW-34 **209.26**

DMW-33 **208.73**

DMW-26 **209.42**

DMW-2 **209.38**

IMW-34 **208.93**

IMW-26 **209.47**

IMW-33 **208.32**

Willamette River

DMW-4 **NM**

CHAPMAN PL.

IMW-3 **210.82**

PRIVATE ROAD

208

DMW-23 **208.76**

DMW-11 **209.61**

DMW-3 **209.57**

DMW-38 **209.76**

IMW-25 **209.07**

HARDBOARD

DMW-29 **209.19**

DMW-35 **209.25**

DMW-39 **207.73**

SUBMICRON

PRIVATE ROAD

DMW-1 **208.41**

DMW-25 **209.59**

IMW-35 **208.78**

IMW-29 **209.58**

DMW-16 **209.70**

DMW-30 **209.55**

IMW-31 **209.55**

IMW-16 **209.57**

GLASS PLANT NO. 2

DMW-12 **209.16**

209

IMW-30 **209.58**

DMW-24 **209.61**

DMW-41 **210.07**

DMW-40 **209.34**

IMW-24 **209.68**

DMW-42 **210.35**

IMW-40 **209.40**

DMW-7 **209.90**

DMW-36 **209.76**

SW THIRD ST.

IMW-28 **209.73**

DMW-28 **209.55**

210

DMW-17 **209.64**

DMW-8 **210.56**

RAIL ROAD

IMW-17 **209.63**

DMW-14 **210.28**

IMW-32 **209.52**

DMW-37 **210.35**

INTAKE POND

IMW-20 **210.63**

DMW-9 **209.50**

DMW-32 **209.54**

DMW-27 **210.02**

DMW-18 **210.30**

211

DMW-19 **209.80**

IMW-27 **210.09**

IMW-21 **211.22**

DMW-5 **210.76**

SE VERA AVE.

IMW-22 **211.54**

SE CRYSTAL LAKE DR.

N

APPROXIMATE SCALE IN FEET

0 150 300

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PNG ENVIRONMENTAL, INC.
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TEL (503) 620-2387
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DATE:	3-24-16
FILE NAME:	1122-03
DRAWN BY:	JJT
APPROVED BY:	SV

H&V FIBER
1115 SE CRYSTAL LAKE DR
CORVALLIS, OREGON

GROUNDWATER ELEVATION CONTOURS
JANUARY 27, 2016

Project No. 1122-03

Figure No. 7

LEGEND

IMW-26	Intermediate Monitoring Well
DMW-23	Deep Monitoring Well
RB-1	Pore Water Sample Location
RB-2(SW)	Surface Water Sample Location
EMR-4	Millrace Surface Water Sample
10	TCE Concentration (ug/L)
TCE	Trichloroethene
U =	Compound Not Detected Above Laboratory Reporting Limit
J =	Estimated value
SW =	Surface Water
	Current Deep Zone TCE Contour (ug/L)

Applicable Standard
Pore Water in Willamette Sediment
DEQ Tier 2 SCV Ecological
TCE = 47ug/L

Applicable Standard
River Water
TCE = 3.0 ug/L

RB-6	
Depth (in)	TCE
24"	1.0U
48"	1.0U

RB-6 (SW)	
Depth (in)	TCE
---	1.0U

RB-5	
Depth (in)	TCE
24"	1.0U
48"	1.0U

RB-4	
Depth (in)	TCE
24"	1.0U
48"	1.0U

RB-3	
Depth (in)	TCE
12"	1.8

RB-2	
Depth (in)	TCE
48"	152

RB-2 (SW)	
Depth (in)	TCE
---	1.0U

RB-1	
Depth (in)	TCE
24"	1.0U
48"	1.0U

RB-0	
Depth (in)	TCE
24"	1.0U
42"	1.0U

RB-6 RB-6(SW) RB-5 RB-4 RB-3 RB-2(SW) RB-2 RB-1 RB-0

EMR-6 EMR-4

DMW-6 DMW-15 DMW-13 DMW-10 DMW-26 DMW-33 DMW-2 DMW-34 IMW-26 IMW-33 IMW-34 IMW-3 DMW-4 DMW-3 DMW-23 DMW-11 DMW-38 DMW-29 DMW-1 IMW-29 IMW-25 DMW-25 DMW-35 IMW-35 DMW-39 DMW-16 IMW-16 DMW-30 IMW-31 DMW-12 IMW-30 DMW-24 DMW-41 DMW-42 DMW-40 IMW-40 IMW-24 DMW-7 DMW-36 IMW-28 DMW-28 DMW-17 DMW-8 IMW-17 DMW-37 IMW-32 DMW-14 IMW-20 DMW-9 DMW-32 DMW-27 DMW-18 DMW-19 IMW-27 DMW-5 IMW-21

3,700

47

EXERCISE YARD
BMX TRACK
T & E CENTER
CHAPMAN PL.
PRIVATE ROAD
SUBMICRO
GLASS PLANT NO. 2
HARDBOARD
INTAKE POND
SW THIRD ST.
RAIL ROAD
SE VERA AVE.
Willamette River

N

APPROXIMATE SCALE IN FEET
0 150 300

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PNG ENVIRONMENTAL, INC.
6665 SW Hampton St., Ste. 101
Tigard, OR 97223
TEL (503) 620-2387
FAX (503) 620-2977

DATE: 2-8-16
FILE NAME: 1122-03
DRAWN BY: JJT
APPROVED BY: SV

H&V FIBER
1115 SE CRYSTAL LAKE DR.
CORVALLIS, OREGON

TCE IN PORE WATER
SEPTEMBER 2015

Project No. 1122-03
Figure No. 8

LEGEND

IMW-26	Intermediate Monitoring Well
DMW-23	Deep Monitoring Well
MW-665	Historic Neighborhood Wells
⧗	Air Sample Locations
601	TCE Concentration (ug/m³) May 2015

PRIVATE ROAD

DMW-34 IMW-34

DMW-33 IMW-33

DMW-11

DMW-38

PRIVATE ROAD

DMW-35 IMW-35

SUBMICRO

North Landfill 0.16

Submicro North 4.1

DMW-26 IMW-26

IMW-3 DMW-3 DMW-29 IMW-29

DMW-23

IMW-25 DMW-25

DMW-16 IMW-16

GLASS PLANT NO. 2

DMW-12

IMW-31

DMW-24 IMW-24

DMW-41

DMW-42

Submicro South 1.8

DMW-30 IMW-30

South Landfill 1.4

DMW-40 IMW-40

Treatment Shed 601

IMW-17

IMW-28 DMW-28

DMW-17

DMW-36

DMW-7

DMW-9

IMW-27 DMW-27

DMW-8

South Property Line 0.15

IMW-32 DMW-32

DMW-37

DMW-18

IMW-20

DMW-19

INTAKE POND

South Cooling Ponds 1.0

DMW-5

IMW-21

N

APPROXIMATE SCALE IN FEET

0 80 160

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Tigard, OR 97223
TEL (503) 620-2387
FAX (503) 620-2977

DATE: 3-24-16
FILE NAME: 1122-03
DRAWN BY: JJT
APPROVED BY: SV

H&V FIBER
1115 SE CRYSTAL LAKE DR
CORVALLIS, OREGON

AIR SAMPLE LOCATIONS

Project No. 1122-03

Figure No. 9

Figure 10
TCE in Groundwater - DMW-3 and DMW-17
H&V Fiber Corporation

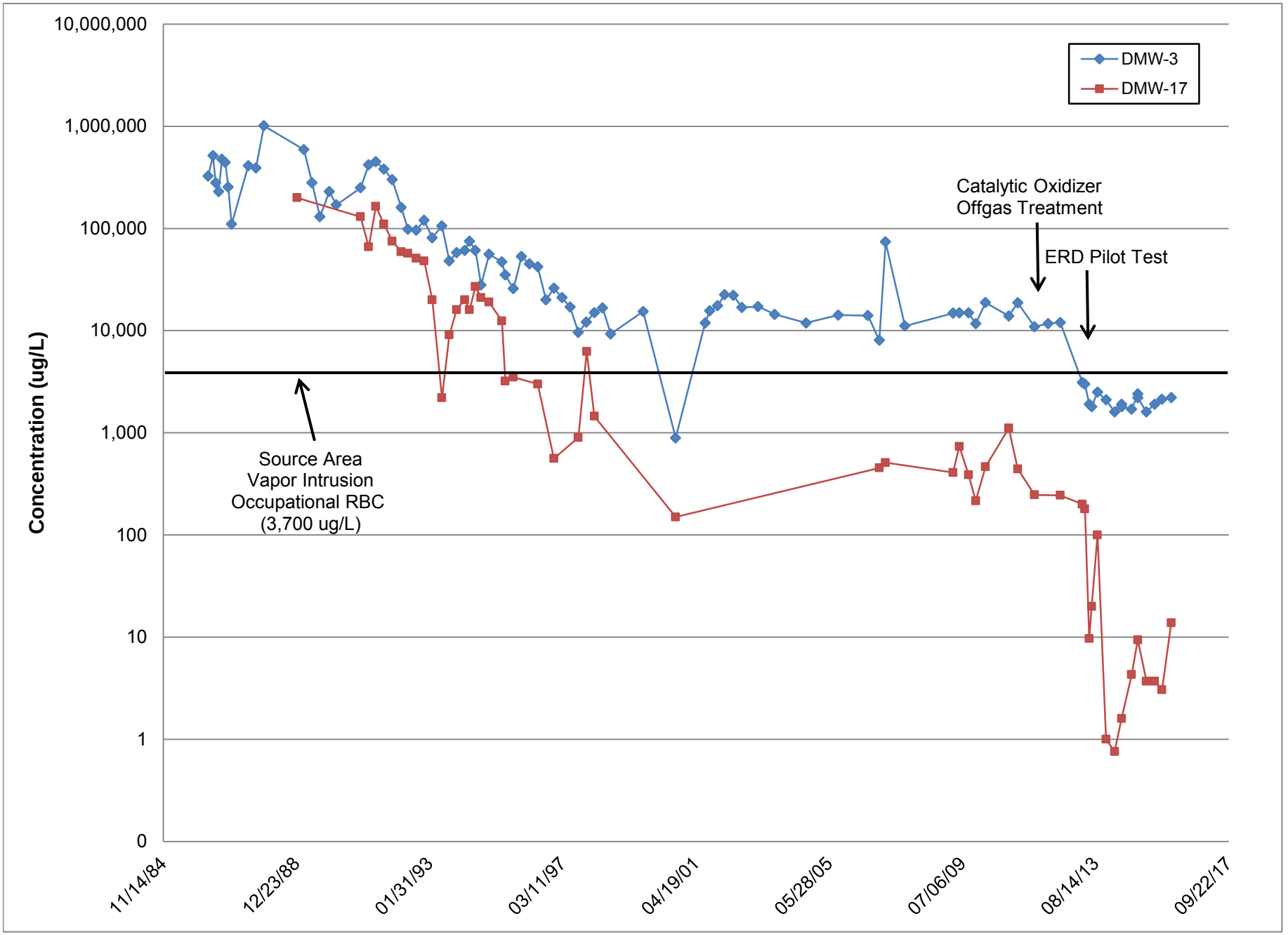
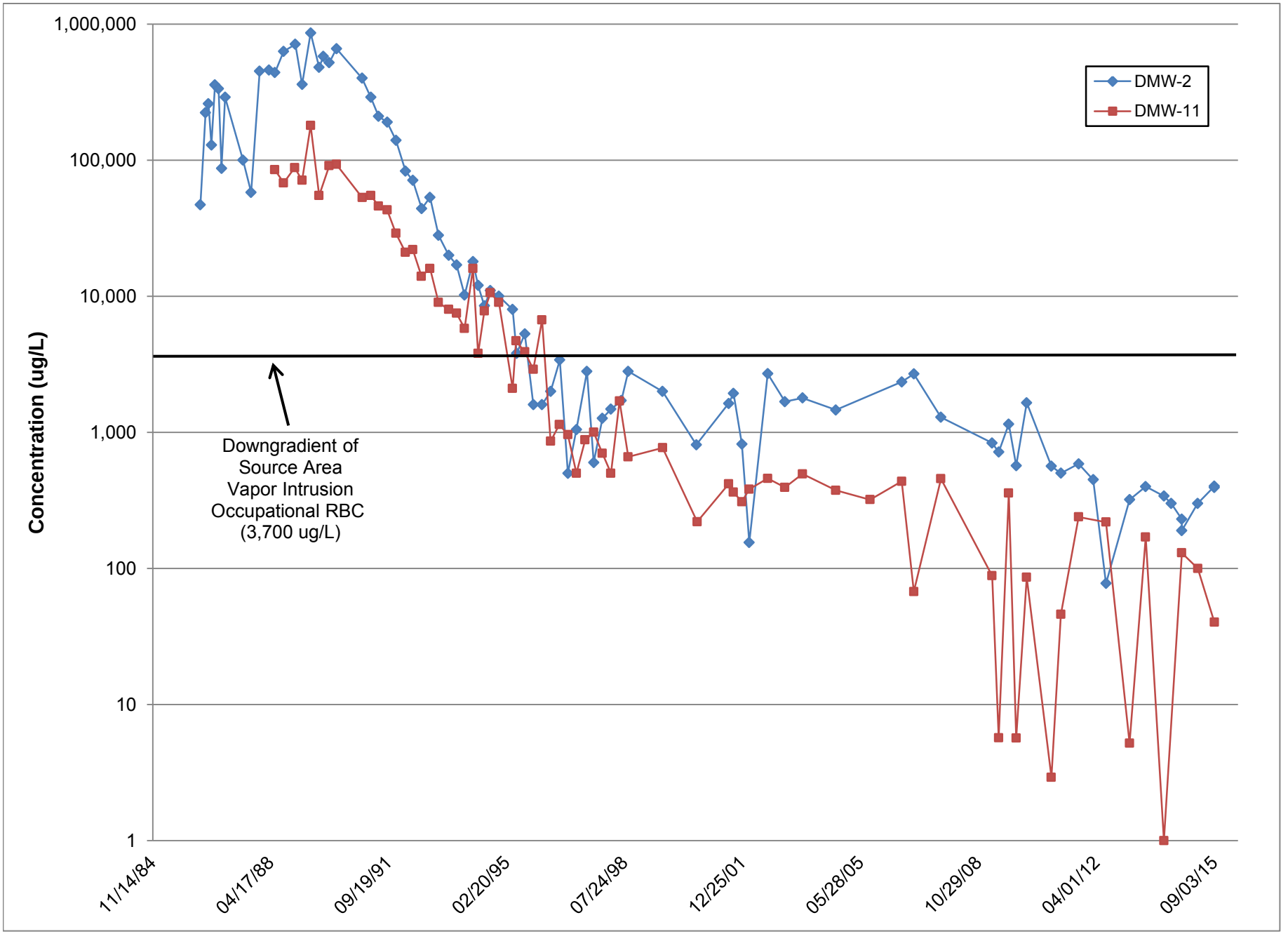


Figure 11
TCE in Groundwater - DMW-2 and DMW-11
H&V Fiber Corporation



LEGEND

- IMW-26 — Intermediate Monitoring Well
- DMW-23 — Deep Monitoring Well
- MW-665 — Historic Neighborhood Wells
- Target Capture Zone
- 47 ug/L Concentration Contour Current Conditions
- Groundwater Flow Direction

BMX TRACK
DMW-6
DMW-15
DMW-10
DMW-13
T & E CENTER
DMW-34
IMW-34
DMW-26
DMW-33
IMW-26
IMW-33
DMW-2
CHAPMAN PL.
IMW-3
PRIVATE ROAD
DMW-23
DMW-11
DMW-3
DMW-38
IMW-25
DMW-29
SUBMICRO
DMW-1
IMW-29
DMW-25
DMW-16
IMW-16
DMW-30
IMW-31
GLASS PLANT NO. 2
IMW-30
DMW-24
DMW-41
DMW-40
HB-1
IMW-24
DMW-42
IMW-40
DMW-36
DMW-7
IMW-28
DMW-28
DMW-17
DMW-8
SW THIRD ST.
RAIL ROAD
IMW-17
DMW-37
IMW-32
INTAKE POND
DMW-9
DMW-32
DMW-27
DMW-18
DMW-19
IMW-27
DMW-5
MW-625
MW-585
STATIC GROUNDWATER FLOW
SE CRYSTAL LAKE DR.
Willamette River
DMW-4
HARDBOARD
DMW-39
DMW-35
IMW-35
PRIVATE ROAD
DMW-12
30 GPM CAPTURE BOUNDARY
DMW-14
IMW-20
MW-665
MW-685
MW-645
IMW-21
SE VERA AVE.
MW-1340
IMW-22
MW-1350
MW-1360

APPROXIMATE SCALE IN FEET
0 150 300

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TEL (503) 620-2387
FAX (503) 620-2977

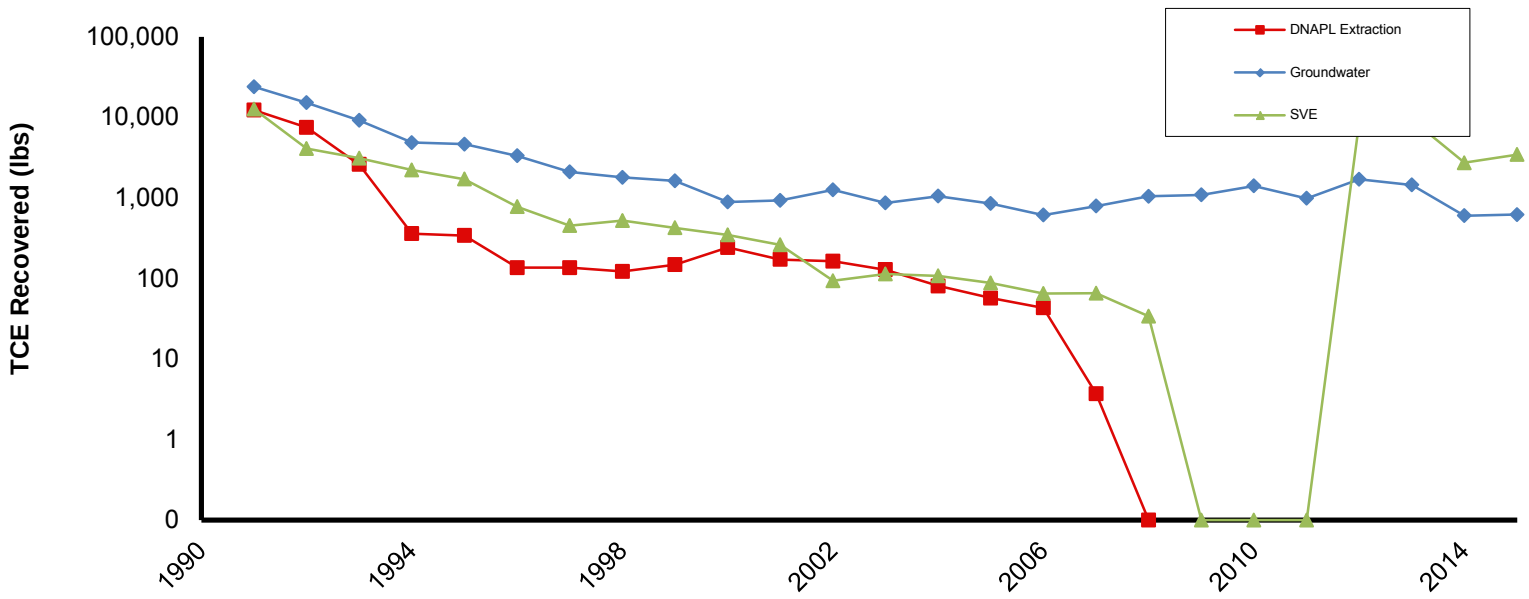
DATE: 3-24-16
FILE NAME: 1122-03
DRAWN BY: JJT
APPROVED BY: SV

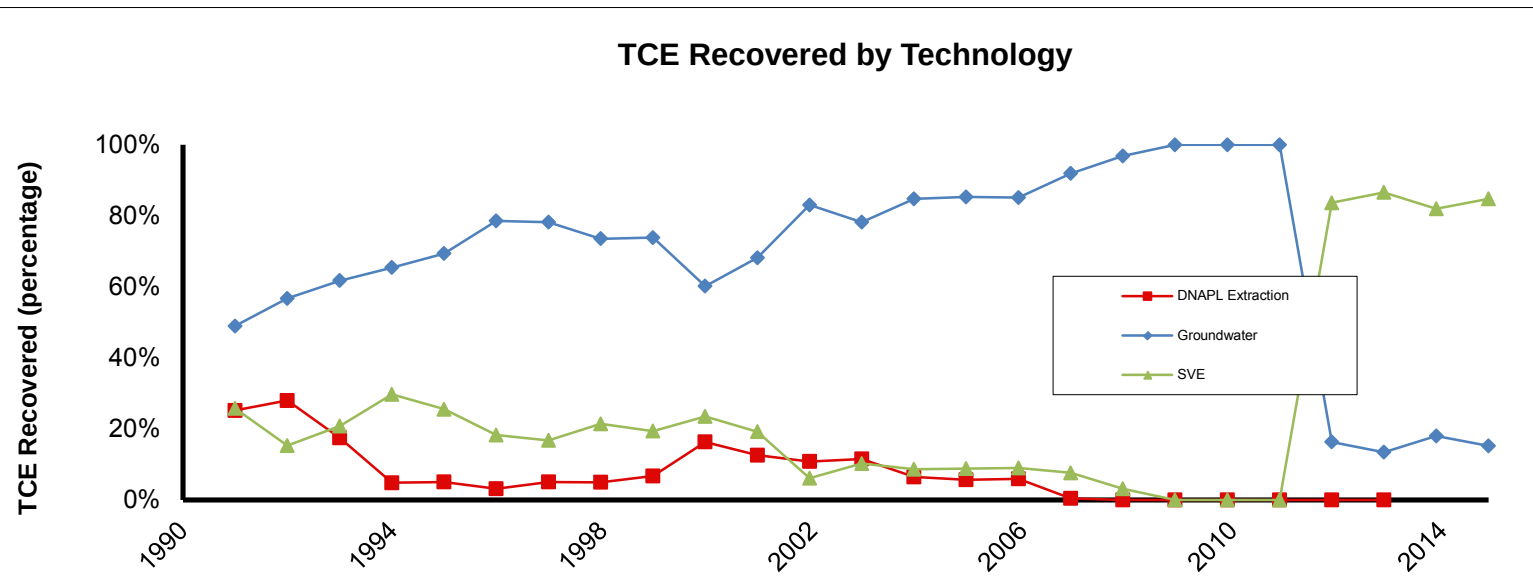
H&V FIBER
1115 SE CRYSTAL LAKE DR
CORVALLIS, OREGON

TARGET CAPTURE ZONE

Project No. 1122-03
Figure No. 12

Figure 13
Groundwater, DNAPL Recovery, and Soil Vapor Extraction Performance Data
H & V Fiber Corporation
Corvallis, Oregon

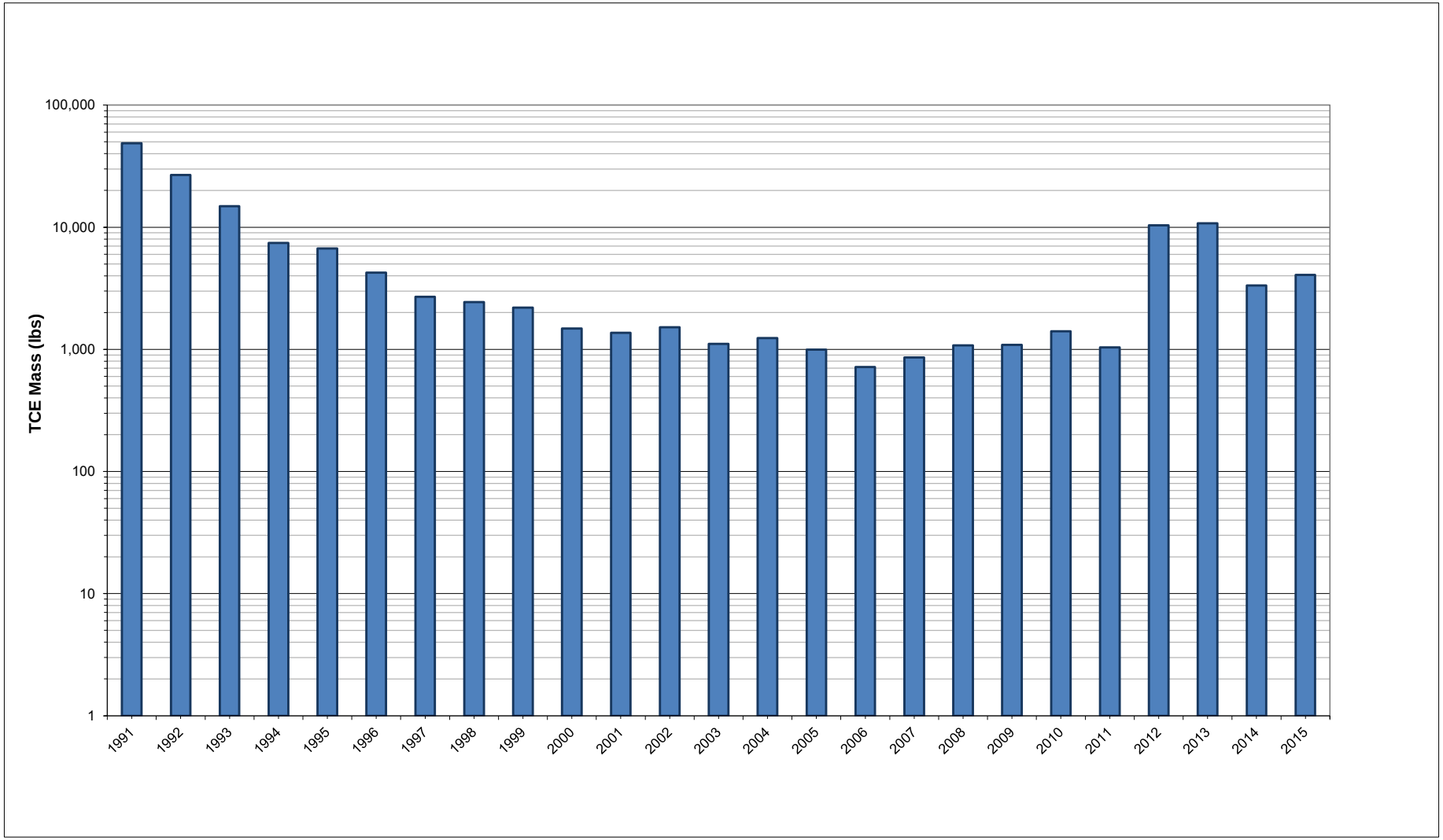


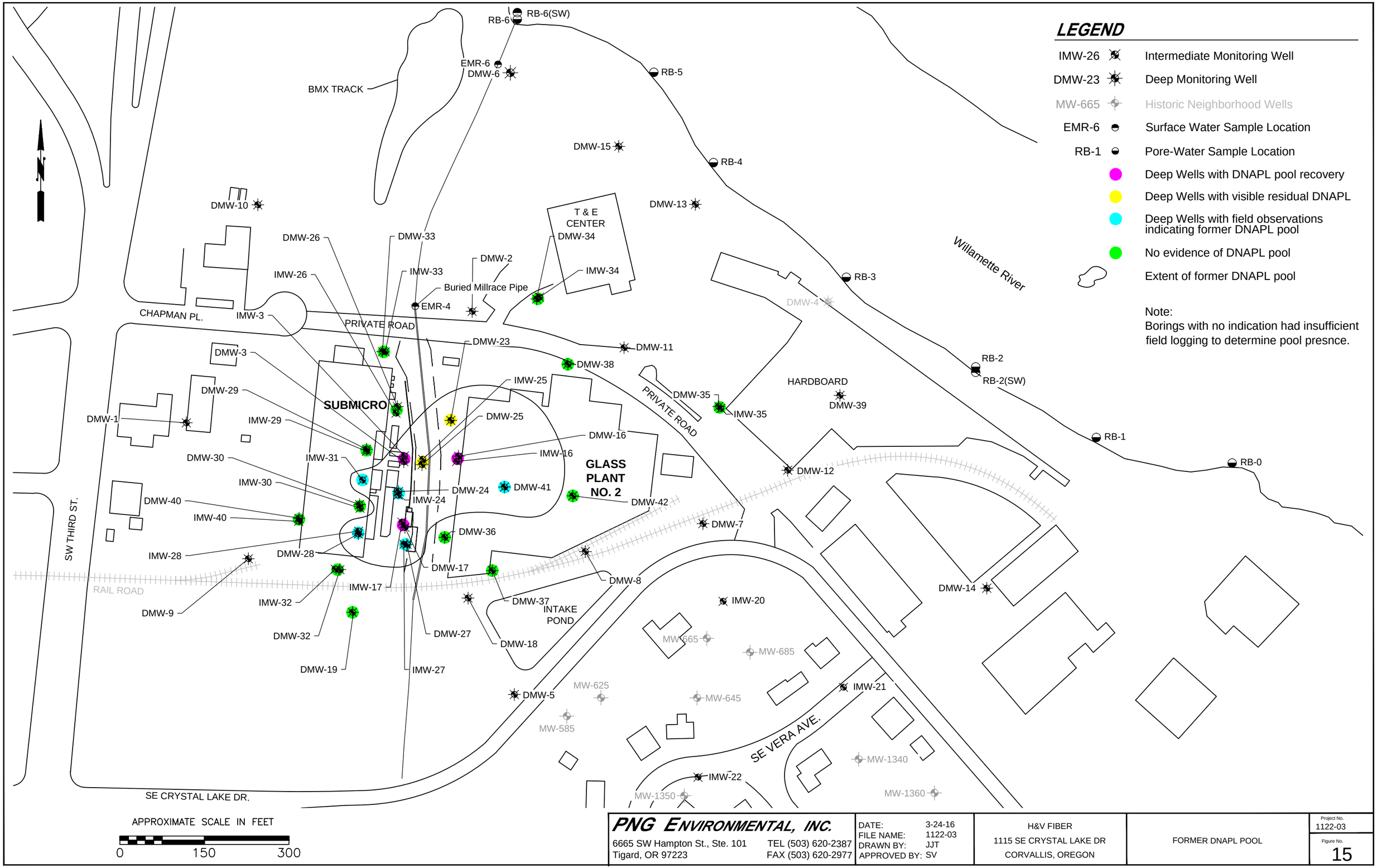


Time Period	Groundwater Gallons	Groundwater TCE (lbs)	DNAPL Extraction DNAPL (gallons)	DNAPL Extraction TCE (lbs)	DNAPL Extraction Oil (gallons)	SVE (lbs)	Total TCE (lbs)	Contribution byTechnology GW%	DNAPL%	SVE%	Total%
1991	21,000,100	23,900	1,484	12,300	478	12,600	48,800	49.0%	25.2%	25.8%	100%
1992	25,349,700	15,200	892	7,500	286	4,100	26,800	56.7%	28.0%	15.3%	100%
1993	25,931,500	9,200	315	2,600	102	3,100	14,900	61.7%	17.4%	20.8%	100%
1994	26,459,400	4,860	40	360	13	2,210	7,430	65.4%	4.8%	29.7%	100%
1995	25,698,500	4,640	41	340	14	1,710	6,690	69.4%	5.1%	25.6%	100%
1996	25,295,100	3,333	16.9	136	5.4	776	4,245	78.5%	3.2%	18.3%	100%
1997	24,324,600	2,110	16.6	136	5.3	452	2,698	78.2%	5.0%	16.8%	100%
1998	24,471,200	1,794	14.7	122	4.6	523	2,439	73.6%	5.0%	21.4%	100%
1999	24,184,200	1,620	17.5	148	5.7	425	2,193	73.9%	6.7%	19.4%	100%
2000	20,990,000	892	29.2	242	9.4	348	1,482	60.2%	16.3%	23.5%	100%
2001	17,967,500	930	20.9	172	6.7	262	1,364	68.2%	12.6%	19.2%	100%
2002	18,150,000	1,259	20.0	164	6.4	94	1,517	83.0%	10.8%	6.2%	100%
2003	16,807,400	868	15	128	5	114	1,110	78.2%	11.6%	10.3%	100%
2004	16,402,400	1,050	9.7	81	3.1	108	1,238	84.8%	6.5%	8.7%	100%
2005	13,624,300	848	6.7	57	2.2	88	994	85.3%	5.7%	8.9%	100%
2006	13,087,100	611	5.1	43	1.6	65	718	85.1%	6.0%	9.1%	100%
2007	14,556,200	790	0.5	4	0.1	66	859	91.9%	0.4%	7.6%	100%
2008	14,379,800	1,045	0.0	0	0.0	34	1,079	96.8%	0.0%	3.2%	100%
2009	14,197,700	1,087	0.0	0	0.0	0	1,088	100.0%	0.0%	0.0%	100%
2010	15,218,100	1,408	0.0	0	0.0	0	1,408	100.0%	0.0%	0.0%	100%
2011	11,895,138	986	0.0	0	0.0	0	986	100.0%	0.0%	0.0%	100%
2012	19,357,192	1,697	0.0	0	0.0	8,692	10,389	16.3%	0.0%	83.7%	100%
2013	15,048,449	1,449	0.0	0	0.0	9,331	10,780	13.4%	0.0%	86.6%	100%
2014	15,910,300	602	0.0	0	0.0	2,734	3,336	18.1%	0.0%	81.9%	100%
2015	15,152,906	621	0.0	0	0.0	3,450	4,071	15.2%	0.0%	84.8%	100%
Totals	475,458,785	82,799	2,945	24,533	949	51,280	158,612	52.2%	15.5%	32.3%	100%

Notes:
Data provided by Evanite 1991-2008
PNG Began Project Management in 2009
TCE = Trichloroethene
SVE = Soil vapor extraction
DNAPL = Dense non-aqueous phase liquids
lbs = Pounds

Figure 14
TCE Mass Removal
H&V Fiber Corporation
Corvallis, Oregon





LEGEND

IMW-26	Intermediate Monitoring Well
DMW-23	Deep Monitoring Well
MW-665	Historic Neighborhood Wells
EMR-6	Surface Water Sample Location
RB-1	Pore-Water Sample Location
	Deep Wells with DNAPL pool recovery
	Deep Wells with visible residual DNAPL
	Deep Wells with field observations indicating former DNAPL pool
	No evidence of DNAPL pool
	Extent of former DNAPL pool

Note:
Borings with no indication had insufficient field logging to determine pool presnce.

APPROXIMATE SCALE IN FEET

0 150 300

PNG ENVIRONMENTAL, INC.
6665 SW Hampton St., Ste. 101
Tigard, OR 97223
TEL (503) 620-2387
FAX (503) 620-2977

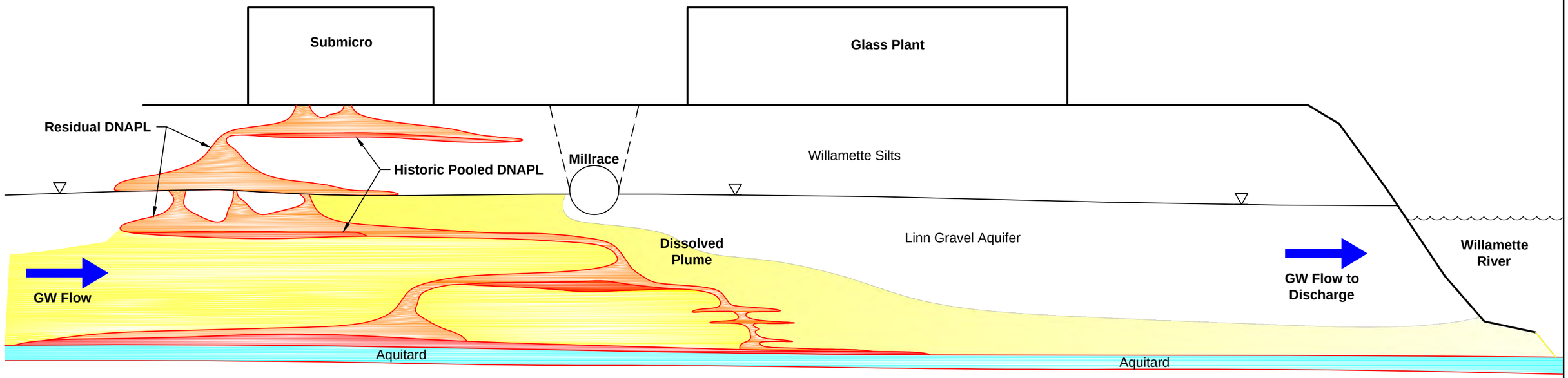
DATE: 3-24-16
FILE NAME: 1122-03
DRAWN BY: JJT
APPROVED BY: SV

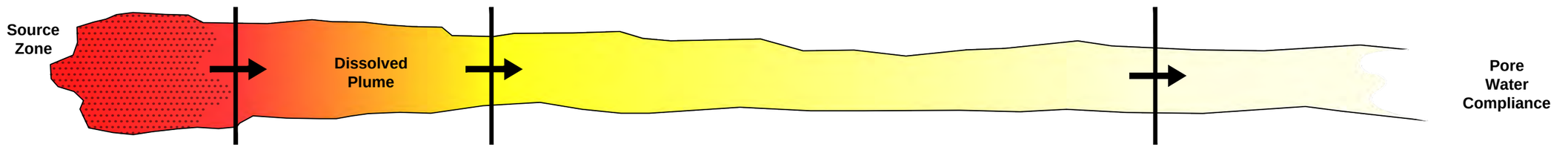
H&V FIBER
1115 SE CRYSTAL LAKE DR
CORVALLIS, OREGON

FORMER DNAPL POOL

Project No. 1122-03

Figure No. 15





PNG ENVIRONMENTAL, INC.
6665 SW Hampton St., Ste. 101
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TEL (503) 620-2387
FAX (503) 620-2977

DATE: 3-23-16
FILE NAME: 1122-03
DRAWN BY: JJT
APPROVED BY: SV

H&V FIBER
1115 SE CRYSTAL LAKE DR.
CORVALLIS, OREGON

CONCEPTUAL
MASS FLUX MIGRATION

Project No. 1122-03
Figure No. 16

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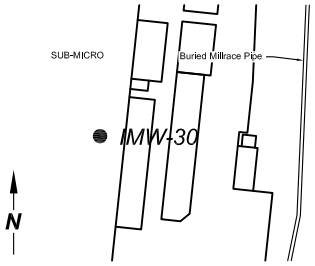
APPENDIX A
BORING AND WELL CONSTRUCTION LOGS

PNG ENVIRONMENTAL, INC.
6665 SW Hampton St., Suite 101
Tigard, Oregon 97223
TEL (503) 620-2387
FAX (503) 620-2977

LOCATION MAP



WELL/BORING NUMBER
WELL ID : L110919
START CARD : 1018893

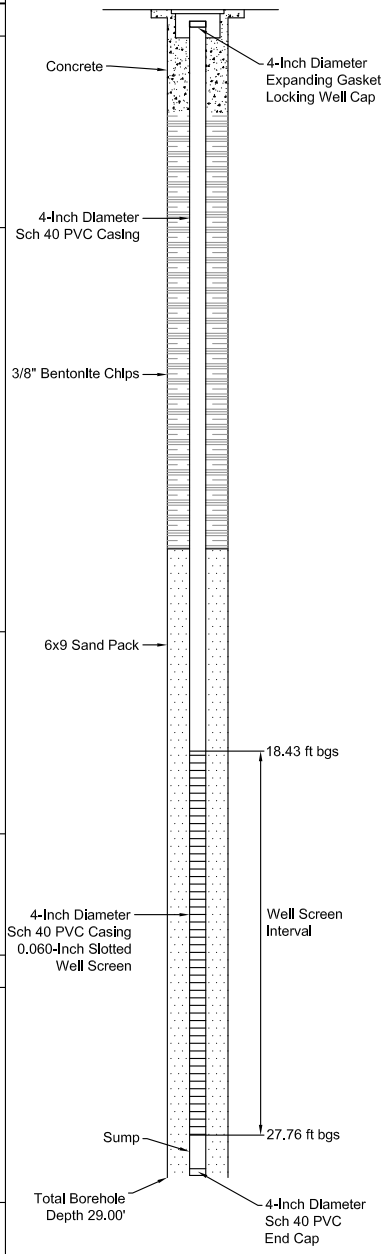
IMW-30

PROJECT NAME: Evanite
PROJECT NUMBER: 1122-03
LOCATION: Corvallis, OR.
LOGGED BY: M. Acaster
REVIEWED BY: ---
DATE: 4-18-13

SAMPLE INFORMATION

SAMPLE TYPE	Blow Counts	PID (ppm)	REC %	First Water	LAB SAMPLE I.D.	DEPTH bgs (ft)	SAMPLE INTERVAL	STRATA	SOIL TYPE	DESCRIPTION (USCS Classification, Depth Interval, Color, Grain Size, Plasticity, Shapes, Mineral Composition, Density or Consistency, Moisture, Odor, Geological Interpretation)
										Concrete (0-6")
		0							GW	Sandy Gravel (GW) Brown, well graded trace fines, clasts subangular to subrounded up to 2" diameter, damp, no odor.
		0								
		0								
		7.6								
		37.9				5				
		361							ML	Silt (ML) Greenish gray silt with minor gravel 5.5' tp 6', becomes loose, dark brown mottled with orange brown, oxidation from 6' to 7.5', moist at 7.5' becomes dense with color change to light brown, less moist, moderate plasticity.
		312								
		213								
		165								
		127				10				
		17.2								As above, light brown silt, moist, dense, no odor.
		5.0								
		7.0								
		18.4								
		30.5				15				
		81.8							SM	Silty Sand (SM) Orange brown heavily oxidized fine silty sand mottled to light brown by 17', becomes medium sand, medium brown, damp to moist, less fines.
		112								
		180								
		195								Color change to greenish gray at 19' and increased moderate plasticity fines.
		191				20				
		93.2							GP	Sandy Gravel (GP) Greenish gray, some silt, clasts subrounded to rounded, color change to medium brown at 23', decreasing silt content, moist to wet.
		135								
		257								
		155							SW	Sand with Gravel (SW) Dark brown, 6" thick.
		11				25			GW	Sandy Gravel (GW) Greenish gray, trace silt, moist to wet.
		7.5								Saturated at 26' with increasing silt content to 26.5', moist to damp dark brown sand layer at 27' to 27.5'.
		41								
		0								Color change to greenish gray, sandy gravel with silt, up to 25% fines, damp to moist, clasts subround to round up to 1.5" diameter.
		0								
						30				Total Borehole Depth @ 29' bgs.
						35				

BOREHOLE/WELL CONSTRUCTION DETAIL



DRILLING CONTRACTOR: Boart Longyear
DRILLING METHOD: Sonic
SAMPLING METHOD: Continuous Core
DRILLING START DATE: 2-12-13
DRILLING END DATE: 2-12-13

COORDINATES: --
SURFACE ELEVATION: 223.99
CASING ELEVATION: 223.67
SITE DATUM: NAVD 88
--

TIME	DATE	DTW

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PNG ENVIRONMENTAL, INC.
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Tigard, Oregon 97223
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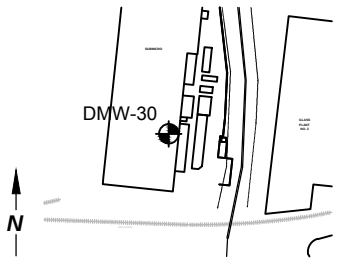
FAX (503) 620-2977

LOCATION MAP



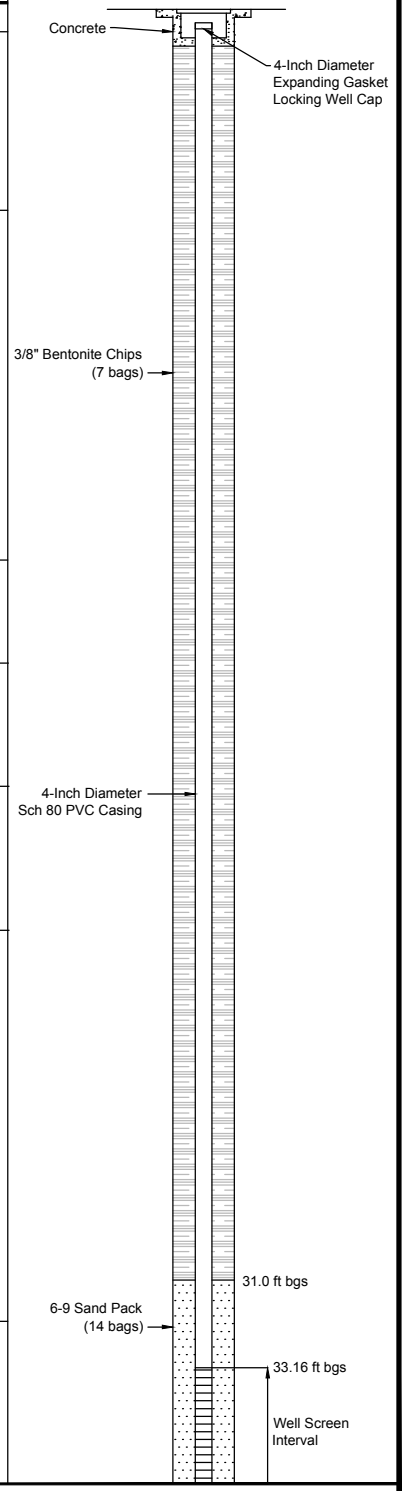
WELL/BORING NUMBER
WELL ID : L115785
START CARD : 1025189

DMW-30

PROJECT NAME: Evanite
PROJECT NUMBER: 1122-03
LOCATION: Corvallis. OR.
LOGGED BY: S. Ducar
REVIEWED BY: P. McBeth
DATE: 1-5-16

SAMPLE INFORMATION / DESCRIPTION / BOREHOLE/WELL CONSTRUCTION DETAIL

SAMPLE TYPE	BLOW COUNTS	PID (ppm)	REC %	FIRST WATER	LAB SAMPLE I.D.	DEPTH bgs (ft)	STRATA	SOIL TYPE	DESCRIPTION (USCS Classification – Group name (Group Symbol) [grading, angularity optional] Color, moisture, consistency/density, plasticity, other observations.)
									Concrete 6"
		0.2						GW	Sandy Gravel with trace Silt (GW) [rounded to subrounded well graded gravel, fine to coarse grain angular to subangular well graded sand] Dark brown, moist, loose, non plastic.
		8.1							
		3.5							
		21.3							
		33.5				5			
Soil		35.3 54.4			DMW30-6			ML	Silt (ML) Dark brown with gray mottling, moist, stiff, medium plastic.
		8.2							
		1.0							Silt (ML) As above.
		1.2							
		12.2				10			
		1.3							
		0.6							
		0.9							
Soil		1.6			DMW30-14			SP	Sand with trace Silt (SP) [fine to coarse angular poorly graded sand] Brown to orange brown, moist, loose.
		0.7				15			
		3.7						SM	Silty Sand (SM) [fine angular sand] Blue gray, moist, loose, non plastic.
		7.7							
		15.2							
Soil		7.1			DMW30-18.5				
		0.7				20		GM	Sandy Gravel with some Silt (GM) [rounded to subrounded well graded gravel, fine to coarse subangular to angular sand] Brown, moist, loose, non plastic.
		47.8 17.0							
		48.4						GW	Sandy Gravel with trace Silt (GM) [rounded to subrounded well graded gravel, fine to coarse angular sand] Brown, moist, loose, non plastic.
		6.2							
		2.2							
		5.8				25			
		0.5							
		7.6							Sandy Gravel with trace Silt (GM) As above, becomes gray.
		3.2							
		3.9							
		13.4		12-2-15		30			Sandy Gravel with trace Silt (GM) As above, brown, wet.
		3.1							
		1.2						GW	Gravel with some Sand (GW) [rounded to subrounded well graded gravel, fine to coarse angular to subangular well graded sand] Brown, wet, loose, non plastic.
		5.2							
		3.8							
		3.0				35			



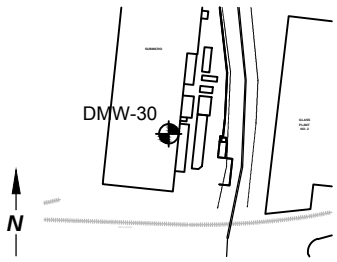
DRILLING CONTRACTOR: Cascade Drilling
DRILLING METHOD: Sonic
SAMPLING METHOD: Continuous Core
DRILLING START DATE: 12-2-15
DRILLING END DATE: 12-2-15

COORDINATES: N335775.50, E7482830.03
SURFACE ELEVATION: 223.97
CASING ELEVATION: 223.66
SITE DATUM: NAVD 88
-

TIME	DATE	DTW

PNG ENVIRONMENTAL, INC.
6665 SW Hampton St., Suite 101
Tigard, Oregon 97223
TEL (503) 620-2387
FAX (503) 620-2977

LOCATION MAP



WELL/BORING NUMBER
WELL ID : L115785
START CARD : 1025189

DMW-30

PROJECT NAME: Evanite
PROJECT NUMBER: 1122-03
LOCATION: Corvallis. OR.
LOGGED BY: S. Ducar
REVIEWED BY: P. McBeth
DATE: 1-5-16

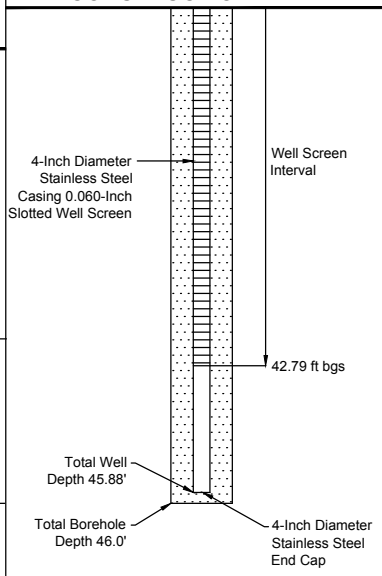
SAMPLE INFORMATION

SAMPLE TYPE	BLOW COUNTS	PID (ppm)	REC %	FIRST WATER	LAB SAMPLE I.D.	DEPTH bgs (ft)
		5.2				
		2.9				
		2.6				
		6.4				
		1.7				40
		2.0				
Soil		0.2			DMW30-42	
		4.4				
Soil		1.5			DMW30-44	
		1.0				45
Soil		4.4			DMW30-46	
						50
						55
						60
						65
						70

DESCRIPTION

STRATA	SOIL TYPE	USCS Classification – Group name (Group Symbol) [grading, angularity optional] Color, moisture, consistency/density, plasticity, other observations.
	CL	Clay (CL) Brown, moist, hard, plastic. Clay (CL) As above, becomes gray.
		Bottom of Borehole @ 46' bgs

BOREHOLE/WELL CONSTRUCTION DETAIL



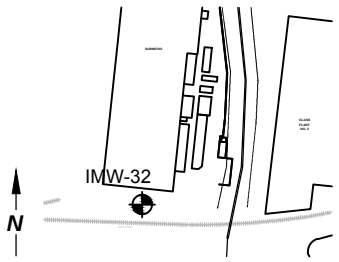
DRILLING CONTRACTOR: Cascade Drilling
DRILLING METHOD: Sonic
SAMPLING METHOD: Continuous Core
DRILLING START DATE: 12-2-15
DRILLING END DATE: 12-2-15

COORDINATES: N335581.71, E7481977.76
SURFACE ELEVATION: 223.97
CASING ELEVATION: 223.66
SITE DATUM: NAVD 88
-

TIME	DATE	DTW

PNG ENVIRONMENTAL, INC.
6665 SW Hampton St., Suite 101
Tigard, Oregon 97223
TEL (503) 620-2387
FAX (503) 620-2977

LOCATION MAP



WELL/BORING NUMBER
WELL ID : L115785
START CARD : 1025189

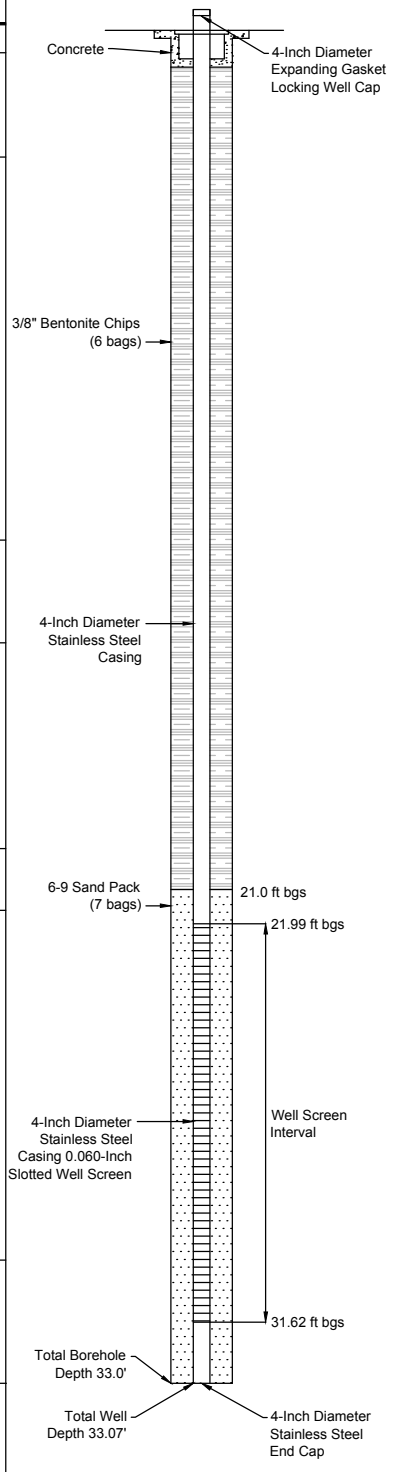
IMW-32

PROJECT NAME: Evanite
PROJECT NUMBER: 1122-03
LOCATION: Corvallis. OR.
LOGGED BY: S. Ducar
REVIEWED BY: P. McBeth
DATE: 1-5-16

SAMPLE INFORMATION

SAMPLE TYPE	BLOW COUNTS	PID (ppm)	REC %	FIRST WATER	LAB SAMPLE I.D.	DEPTH bgs (ft)	STRATA	SOIL TYPE	DESCRIPTION
									Asphalt 6"
		0						GP	Sandy Gravel with trace Silt (GP) [rounded to subrounded poorly graded gravel, coarse grain angular sand] Brown, moist, loose, non plastic.
		0.2							
		0							
		0.1						ML	Silt (ML) Dark brown, moist, medium stiff, medium plastic.
		0				5			
		0							
		0							
		0.1							Silt (ML) As above, soft.
		0							
		0				10			
		0							
		0.2						SP	Sand (SP) [fine to coarse angular to subangular sand] Dark brown, moist, loose, non plastic.
		0.1							
		1.1							
		0				15		GW	Sandy Gravel with trace Silt (GW) [rounded to subrounded well graded gravel, fine to coarse angular to subangular sand] Brown with gray mottling, moist, loose, non plastic.
		0.1							
		0.2							
		2.6							
		0							
		0				20		SP	Sand with trace Silt (SP) [fine to medium angular sand] Gray, moist, loose, non plastic.
		4.6						GW	Sandy Gravel with trace Silt (GW) [rounded to subrounded gravel, fine to coarse angular sand] Brown, moist, loose, non plastic.
		1.2							
		4.4							
		1.0							
		1.6		12-7-15		25			Sandy Gravel with trace Silt (GW) As above, wet.
		1.9							
		0.5							
		0.5							
		0.3							
		0.2				30		GW	Gravel with some Sand (GW) [rounded well graded gravel, fine to coarse angular sand] Brown, wet, loose, non plastic.
		0							
		0.4							
		0							Bottom of Borehole @ 33' bgs
						35			

BOREHOLE/WELL CONSTRUCTION DETAIL



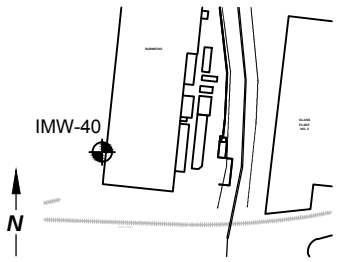
DRILLING CONTRACTOR: Cascade Drilling
DRILLING METHOD: Sonic
SAMPLING METHOD: Continuous Core
DRILLING START DATE: 12-7-15
DRILLING END DATE: 12-7-15

COORDINATES: N335467.08, E7481934.69
SURFACE ELEVATION: 222.48
CASING ELEVATION: 221.89
SITE DATUM: NAVD 88
-

TIME	DATE	DTW

PNG ENVIRONMENTAL, INC.
6665 SW Hampton St., Suite 101
Tigard, Oregon 97223
TEL (503) 620-2387
FAX (503) 620-2977

LOCATION MAP



WELL/BORING NUMBER
WELL ID : L115785
START CARD : 1025189

IMW-40

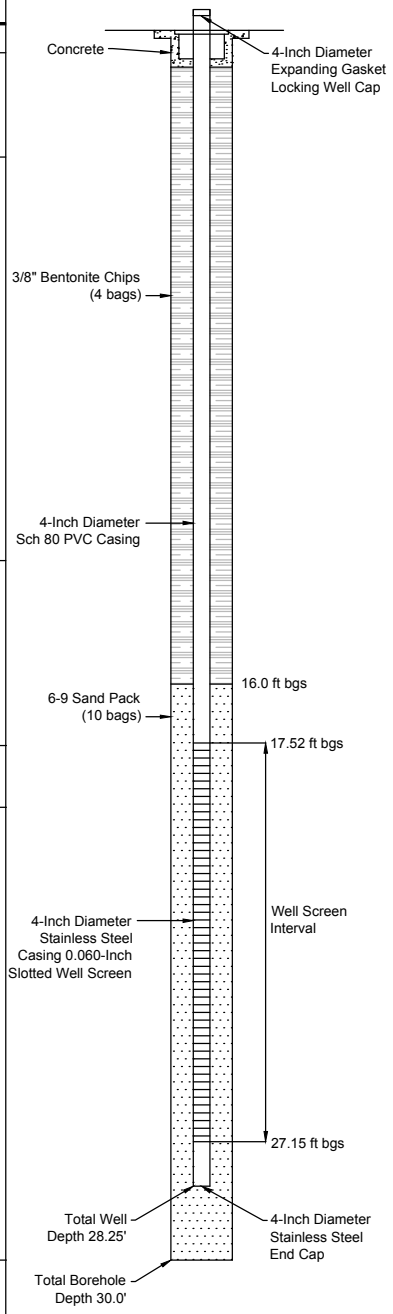
PROJECT NAME: Evanite
PROJECT NUMBER: 1122-03
LOCATION: Corvallis. OR.
LOGGED BY: S. Ducar
REVIEWED BY: P. McBeth
DATE: 1-5-16

SAMPLE INFORMATION

SAMPLE TYPE	BLOW COUNTS	PID (ppm)	REC %	FIRST WATER	LAB SAMPLE I.D.	DEPTH bgs (ft)
		0				
		0				
		0				
		0				
		0				5
		0.1				
		0				
		0				
		0				
		0				10
		0				
		0				
		0.1				
		0.1				
		0.1				15
		0.1				
		0.1				
		0.1				
		0.1				
		0.1		12-1-15		20
		0				
		0				
		0				
		0				25
		0				
		0				
		0.3				
		0				
		0				30
						35

STRATA	SOIL TYPE	DESCRIPTION (USCS Classification – Group name (Group Symbol) [grading, angularity optional] Color, moisture, consistency/density, plasticity, other observations.)
		Asphalt 6"
	GM	Sandy Gravel with trace Silt (GM) [rounded to subrounded gravel, fine to coarse angular to subangular sand] Dark brown, moist, loose, non plastic.
	ML	Silt (ML) Dark brown with gray mottling, moist, very stiff, medium plastic.
		Silt (ML) As above, very hard.
	ML	Silt with trace Sand (ML) Gray, moist, soft, medium plastic.
	SP	Sand (SP) [fine to medium poorly graded angular sand] Brown, moist, loose.
	GW	Sandy Gravel with trace Silt (GW) [rounded to subrounded well graded gravel, fine to coarse well graded angular sand] Brown, wet, loose, non plastic.
		Sandy Gravel with trace Silt (GW) As above, gray.
		Bottom of Borehole @ 30' bgs

BOREHOLE/WELL CONSTRUCTION DETAIL



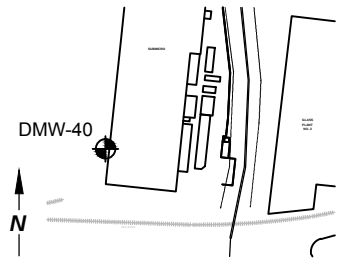
DRILLING CONTRACTOR: Cascade Drilling
DRILLING METHOD: Sonic
SAMPLING METHOD: Continuous Core
DRILLING START DATE: 12-1-15
DRILLING END DATE: 12-2-15

COORDINATES: N335552.02, E7481869.86
SURFACE ELEVATION: 220.67
CASING ELEVATION: 222.50
SITE DATUM: NAVD 88
-

TIME	DATE	DTW

PNG ENVIRONMENTAL, INC.
6665 SW Hampton St., Suite 101
Tigard, Oregon 97223
TEL (503) 620-2387
FAX (503) 620-2977

LOCATION MAP



WELL/BORING NUMBER
WELL ID : L115785
START CARD : 1025189

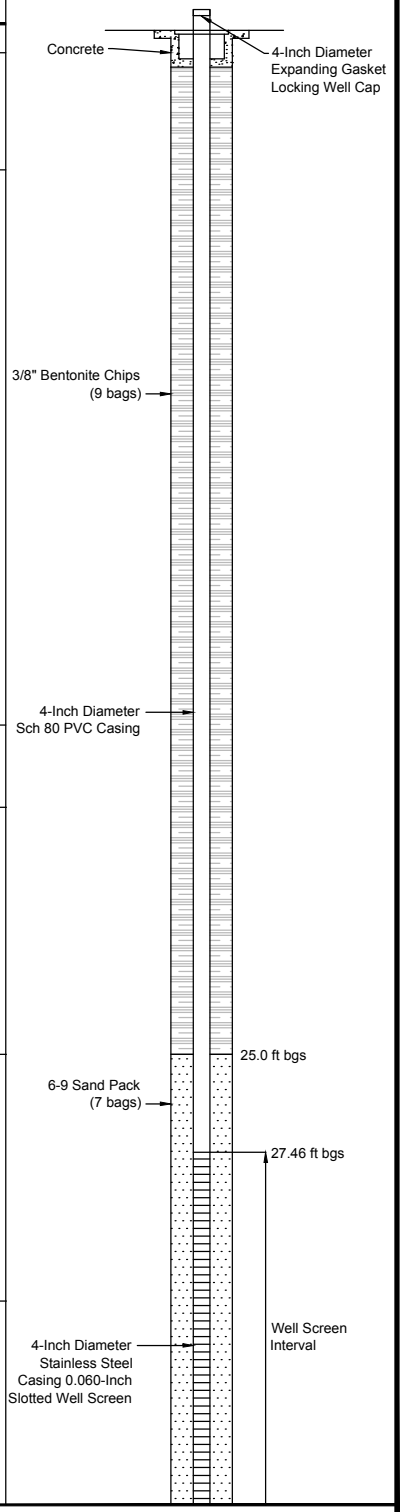
DMW-40

PROJECT NAME: Evanite
PROJECT NUMBER: 1122-03
LOCATION: Corvallis. OR.
LOGGED BY: S. Ducar/G. Tanz
REVIEWED BY: P. McBeth
DATE: 1-5-16

SAMPLE INFORMATION

SAMPLE TYPE	BLOW COUNTS	PID (ppm)	REC %	FIRST WATER	LAB SAMPLE I.D.	DEPTH bgs (ft)	STRATA	SOIL TYPE	DESCRIPTION
		0							Asphalt 6"
		0						GM	Sandy Gravel with trace Silt (GM) Dark brown, moist, loose to medium dense, non plastic.
		0.1							
		0.4							
		0.3				5		ML	Silt (ML) Dark brown, moist, soft, medium plastic.
		0.1							
		0.2							
		0.1							
		0.9							
		1.0				10			Silt (ML) As above, very hard.
		0.1							
		0.1							
		0.1							
		0.1							
Soil		0.1			DMW40-15	15			Silt (ML) As above, brown with gray mottling.
		0.1							
		0.1							
Soil					DMW40-17.5			SP	Sand (SP) [fine to medium poorly graded angular sand] Brown, moist, loose, non plastic.
		0.1							
		0.3							
		0.7				20		GW	Sandy Gravel with trace Silt (GW) [rounded to subrounded well graded gravel, fine to coarse well graded angular sand] Brown, moist, loose.
		0.3		12-1-15					
		0							Sandy Gravel with trace Silt (GW) As above, gray, wet.
		0.1							
		0							
		0				25		GW	Sandy Gravel with trace to some Silt (GW) [rounded to subrounded poorly graded gravel, fine to coarse well graded angular sand] Brown, wet, loose, non plastic.
		1.2							
		0.2							
		1.3							
		0.7							
		0.1				30			
		0						GW	Gravel with trace Sand and trace Silt (GW) [rounded to subrounded well graded gravel, fine to coarse well graded angular sand, silt] Brown, wet, loose, non plastic.
		0							
		0							
		0							
		0				35			

BOREHOLE/WELL CONSTRUCTION DETAIL



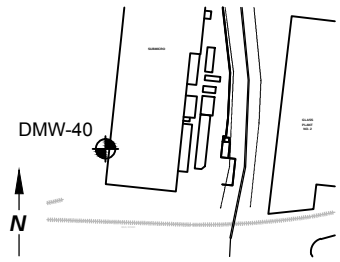
DRILLING CONTRACTOR: Cascade Drilling
DRILLING METHOD: Sonic
SAMPLING METHOD: Continuous Core
DRILLING START DATE: 11-30-15
DRILLING END DATE: 12-1-15

COORDINATES: N335557.35, E7481870.37
SURFACE ELEVATION: 220.64
CASING ELEVATION: 222.61
SITE DATUM: NAVD 88
-

TIME	DATE	DTW

PNG ENVIRONMENTAL, INC.
6665 SW Hampton St., Suite 101
Tigard, Oregon 97223
TEL (503) 620-2387
FAX (503) 620-2977

LOCATION MAP



WELL/BORING NUMBER
WELL ID : L115785
START CARD : 1025189

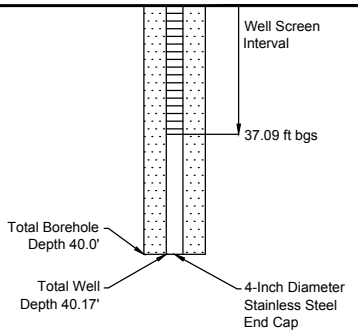
DMW-40

PROJECT NAME: Evanite
PROJECT NUMBER: 1122-03
LOCATION: Corvallis. OR.
LOGGED BY: S. Ducar/G. Tanz
REVIEWED BY: P. McBeth
DATE: 1-5-16

SAMPLE INFORMATION

SAMPLE TYPE	BLOW COUNTS	PID (ppm)	REC %	FIRST WATER	LAB SAMPLE I.D.	DEPTH bgs (ft)	STRATA	SOIL TYPE	DESCRIPTION (USCS Classification – Group name (Group Symbol) [grading, angularity optional] Color, moisture, consistency/density, plasticity, other observations.)
		0.2							
Soil		0.1			DMW40-37			CL	Clay (CL) Brown, wet, very hard, plastic.
		0.1							
Soil					DMW40-38.5				Clay (CL) As above, becomes gray.
		0.1							
		0.1				40			Bottom of Borehole @ 40' bgs
						45			
						50			
						55			
						60			
						65			
						70			

BOREHOLE/WELL CONSTRUCTION DETAIL



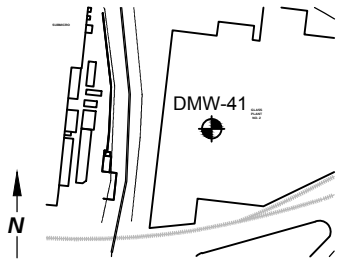
DRILLING CONTRACTOR: Cascade Drilling
DRILLING METHOD: Sonic
SAMPLING METHOD: Continuous Core
DRILLING START DATE: 11-30-15
DRILLING END DATE: 12-1-15

COORDINATES: N335557.35, E7481870.37
SURFACE ELEVATION: 220.64
CASING ELEVATION: 222.61
SITE DATUM: NAVD 88
-

TIME	DATE	DTW

PNG ENVIRONMENTAL, INC.
6665 SW Hampton St., Suite 101
Tigard, Oregon 97223
TEL (503) 620-2387
FAX (503) 620-2977

LOCATION MAP



WELL/BORING NUMBER
WELL ID : L115785
START CARD : 1025189

DMW-41

PROJECT NAME: Evanite
PROJECT NUMBER: 1122-03
LOCATION: Corvallis. OR.
LOGGED BY: S. Ducar
REVIEWED BY: P. McBeth
DATE: 1-5-16

SAMPLE INFORMATION

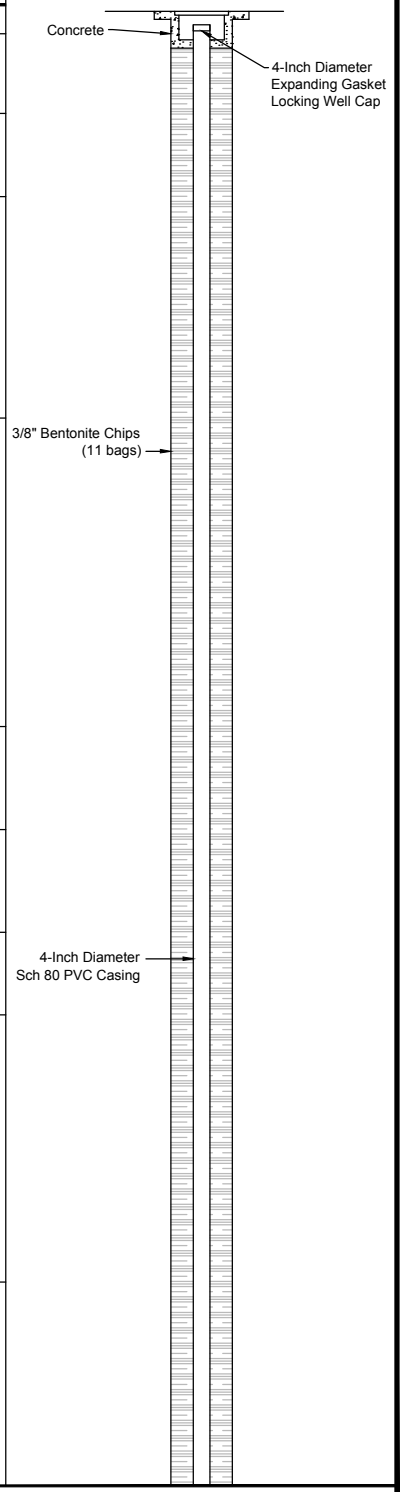
SAMPLE TYPE	BLOW COUNTS	PID (ppm)	REC %	FIRST WATER	LAB SAMPLE I.D.	DEPTH bgs (ft)
		7.6				
		0.8				
		0.8				
		1.3				
		3.1				5
		0.9				
		3.4				
Soil		7.8			DMW41-8	
		0.4				
		0..2				10
		0.1				
		0.3				
		0.2				
		0				
		0.1				15
		7.1				
		6.6				
		8.1				
		2.6				
Soil		2.5			DMW41-19.5	20
		10.5				
		12.7				
		18.6				
		1.9				
		6.7				25
		3.9				
		13.6				
		6.6				
GW		1.5			DMW41-GW	
		5.6		12-3-15 ▼		30
		3.5				
		4.6				
		1.4				
		1.1				
		5.4				35

DESCRIPTION

USCS Classification – Group name (Group Symbol) [grading, angularity optional] Color, moisture, consistency/density, plasticity, other observations.

STRATA	SOIL TYPE	DESCRIPTION
		Concrete 5"
	GP	Gravel with trace Sand (GP) [rounded poorly graded gravel, coarse angular sand] Brown, dry, loose. (Fill material)
	GW	Sandy Gravel with trace Silt (GW) [rounded to subrounded well graded gravel, fine to coarse angular sand] Brown, moist, loose, non plastic.
	ML	Silt (ML) Dark brown, moist, stiff, medium plastic.
	ML	Silt (ML) As above, light brown with gray mottling.
	SP	Sand with trace Silt (SP) [fine poorly graded angular sand] Gray with light brown mottling, moist, loose, non plastic.
	GW	Sandy Gravel with trace Silt (GW) [rounded to subrounded well graded gravel, fine to coarse well graded angular sand] Brown, moist, loose, non plastic.
	SW	Gravelly Sand (SW) [fine to coarse well graded angular sand, rounded gravel] Gray, moist, non plastic.
	GW	Sandy Gravel with trace Silt (GW) [rounded to subrounded well graded gravel, fine to medium angular sand] Dark brown, wet, loose, non plastic.
	GW	Sandy Gravel (GW) [rounded to subrounded well graded gravel, fine to coarse angular sand] Brown to orange brown, wet, loose, non plastic.

BOREHOLE/WELL CONSTRUCTION DETAIL



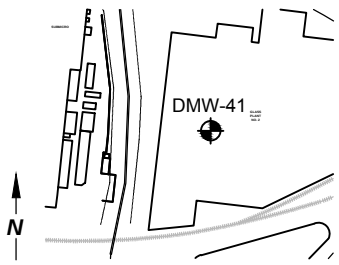
DRILLING CONTRACTOR: Cascade Drilling
DRILLING METHOD: Sonic
SAMPLING METHOD: Continuous Core
DRILLING START DATE: 12-3-15
DRILLING END DATE: 12-3-15

COORDINATES: N335612.92, E7482235.12
SURFACE ELEVATION: 224.45
CASING ELEVATION: 224.16
SITE DATUM: NAVD 88
-

TIME	DATE	DTW

PNG ENVIRONMENTAL, INC.
6665 SW Hampton St., Suite 101
Tigard, Oregon 97223
TEL (503) 620-2387
FAX (503) 620-2977

LOCATION MAP



WELL/BORING NUMBER
WELL ID : L115785
START CARD : 1025189

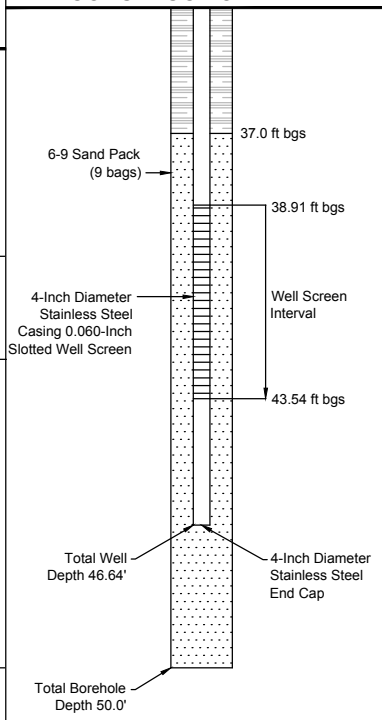
DMW-41

PROJECT NAME: Evanite
PROJECT NUMBER: 1122-03
LOCATION: Corvallis. OR.
LOGGED BY: S. Ducar
REVIEWED BY: P. McBeth
DATE: 1-5-16

SAMPLE INFORMATION / DESCRIPTION

SAMPLE TYPE	BLOW COUNTS	PID (ppm)	REC %	FIRST WATER	LAB SAMPLE I.D.	DEPTH bgs (ft)	STRATA	SOIL TYPE	DESCRIPTION (USCS Classification – Group name (Group Symbol) [grading, angularity optional] Color, moisture, consistency/density, plasticity, other observations.)
		4.3						GW	Sandy Gravel (GW) As above.
		2.4							
		9.2							
		8.6							
		29.1				40		GW	Gravel with some Sand (GW) [rounded to subrounded well graded gravel, medium to coarse angular sand] Brown, wet, loose, non plastic.
		3.3							
		6.4							
Soil		63.5			DMW41-42.5			CL	Clay (CL) Brown, wet, very hard, plastic, slight odor, sheen, discolored.
		438.5							
		286.3							Clay (CL) As above, blue gray, odor.
Soil		144.3			DMW41-45	45			
		63.8							
		42.2							
		4.0							
		5.0							
		1.7							
Soil		1.6			DMW41-49.5	50			Bottom of Borehole @ 50' bgs
						55			
						60			
						65			
						70			

BOREHOLE/WELL CONSTRUCTION DETAIL



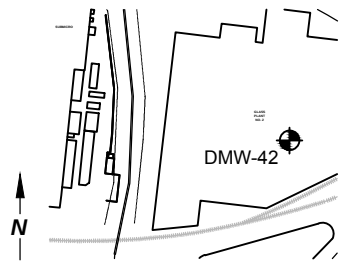
DRILLING CONTRACTOR: Cascade Drilling
DRILLING METHOD: Sonic
SAMPLING METHOD: Continuous Core
DRILLING START DATE: 12-3-15
DRILLING END DATE: 12-3-15

COORDINATES: N335612.92, E7482235.12
SURFACE ELEVATION: 224.45
CASING ELEVATION: 224.16
SITE DATUM: NAVD 88
-

TIME	DATE	DTW

PNG ENVIRONMENTAL, INC.
6665 SW Hampton St., Suite 101
Tigard, Oregon 97223
TEL (503) 620-2387
FAX (503) 620-2977

LOCATION MAP



WELL/BORING NUMBER
WELL ID : L115785
START CARD : 1025189

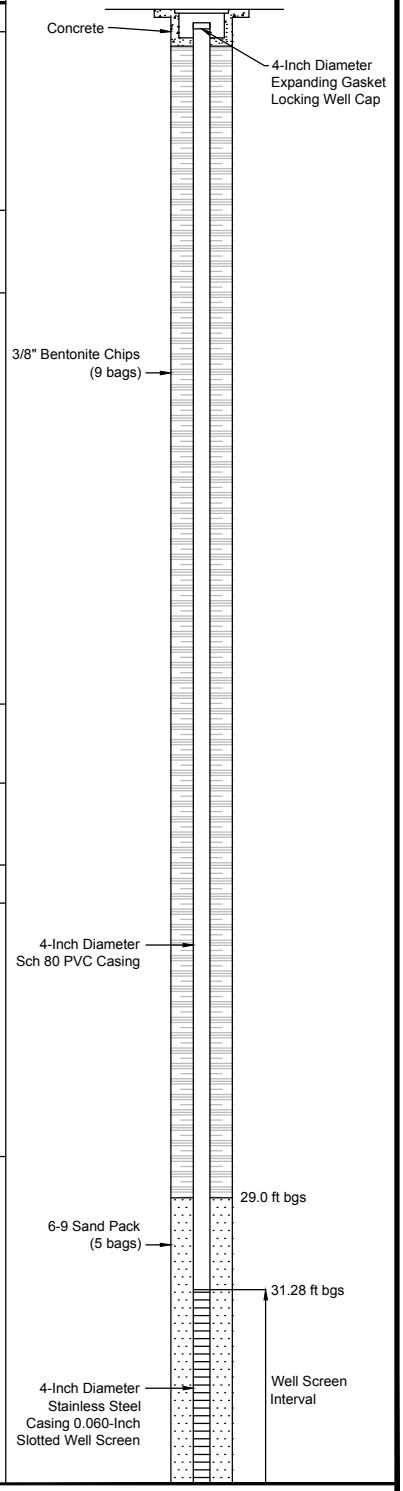
DMW-42

PROJECT NAME: Evanite
PROJECT NUMBER: 1122-03
LOCATION: Corvallis. OR.
LOGGED BY: S. Ducar
REVIEWED BY: P. McBeth
DATE: 1-5-16

SAMPLE INFORMATION

SAMPLE TYPE	BLOW COUNTS	PID (ppm)	REC %	FIRST WATER	LAB SAMPLE I.D.	DEPTH bgs (ft)	STRATA	SOIL TYPE	DESCRIPTION
									Concrete 6"
								GP	Gravel (GP) [rounded poorly graded gravel] Brown to gray, dry, very loose, non plastic. (Fill material)
		1.8				5		GW	Gravel with trace Sand (GW) [rounded well graded gravel, coarse angular sand] Brown to gray, moist, loose, no plastic.
		0.1						ML	Silt (ML) Dark brown, moist, stiff, medium plastic.
		0							
		0.1							
		0.3				10			
		0.1							
		0.2							
		0							
		0.1							
		0				15			
		0.3							
Soil		0.1			DMW42-17			SP	Sand with trace Silt (SP) [fine to medium poorly graded angular to subangular sand] Gray, moist, loose, non plastic.
		0							
		0.1						GW	Sandy Gravel with trace Silt (GW) [rounded to subrounded well graded gravel, fine to coarse angular sand] Brown, moist, loose, non plastic.
		0				20			
		2.6						GW	Sandy Gravel with trace Silt (GW) As above, gray.
		1.5						GW	Sandy Gravel with trace Silt (GW) As above, dark brown.
		4.5							
		2.6							
		9.0				25			
		1.1							
GW		1.6			DMW42-GW				
		1.3							
		0.9						GW	Sandy Gravel (GW) [rounded to subrounded gravel, medium to coarse angular sand] Brown, wet, loose, non plastic.
		1.1		12-4-15		30			
		0.9							
		1.4							
		3.8							
		6.9							
		3.0				35			

BOREHOLE/WELL CONSTRUCTION DETAIL



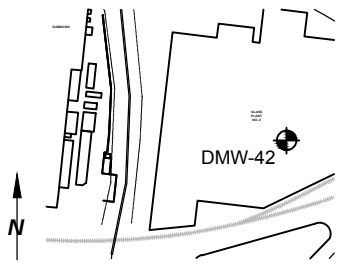
DRILLING CONTRACTOR: Cascade Drilling
DRILLING METHOD: Sonic
SAMPLING METHOD: Continuous Core
DRILLING START DATE: 12-4-15
DRILLING END DATE: 12-4-15

COORDINATES: N335597.15, E7482356.34
SURFACE ELEVATION: 224.39
CASING ELEVATION: 224.09
SITE DATUM: NAVD 88
-

TIME	DATE	DTW

PNG ENVIRONMENTAL, INC.
6665 SW Hampton St., Suite 101
Tigard, Oregon 97223
TEL (503) 620-2387
FAX (503) 620-2977

LOCATION MAP



WELL/BORING NUMBER
WELL ID : L115785
START CARD : 1025189

DMW-42

PROJECT NAME: Evanite
PROJECT NUMBER: 1122-03
LOCATION: Corvallis. OR.
LOGGED BY: S. Biles/J. Greifer
REVIEWED BY: P. McBeth
DATE: 1-5-16

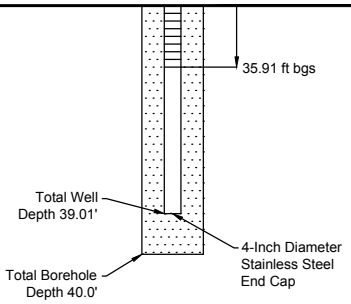
SAMPLE INFORMATION

SAMPLE TYPE	BLOW COUNTS	PID (ppm)	REC %	FIRST WATER	LAB SAMPLE I.D.	DEPTH bgs (ft)
Soil		8.1			DMW42-35.5	
		190.2				
Soil		92.5			DMW42-37	
		14.9				
		17.3				
Soil		2.4			DMW42-40	40
						45
						50
						55
						60
						65
						70

DESCRIPTION

STRATA	SOIL TYPE	USCS Classification – Group name (Group Symbol) [grading, angularity optional] Color, moisture, consistency/density, plasticity, other observations.
	CL	Clay (CL) Blue gray, wet, very hard, medium plastic.
		Bottom of Borehole @ 40' bgs

BOREHOLE/WELL CONSTRUCTION DETAIL



DRILLING CONTRACTOR: Cascade Drilling
DRILLING METHOD: Sonic
SAMPLING METHOD: Continuous Core
DRILLING START DATE: 12-4-15
DRILLING END DATE: 12-4-15

COORDINATES: N335597.15, E7482356.34
SURFACE ELEVATION: 224.39
CASING ELEVATION: 224.09
SITE DATUM: NAVD 88
-

TIME	DATE	DTW

APPENDIX B
WELL DEVELOPMENT FORMS

PNG Environmental, Inc. **WELL DEVELOPMENT FORM**

Well ID no	D MW-30	Project name	EVANITE
State Well ID #	L118639 / 1025985	Project no.	1122
Date	12/09 /2015	Collector	Jay G

Well Information

Monument condition: Good / Needs repair

Well cap condition: Good / Locked / Replaced / Needs replacement

Headspace reading: Not measured / _____ ppm Odor Y (N)

Elevation mark: Yes / Added / Other

Well diameter: 2-inch / 4-inch / 6-inch / Other

Top of well casing from ground surface 0.00'= -0.31

Purge Data

45.52 static

Total well depth: 45.55 ft — Clean bottom / Muddy bottom / Not measured

Depth to product: ND/ND ft — Pump/Tubing Intake Depth EV TWD ft bgs

Depth to water: 29.11 ft

10 gal

Casing volume	16.44 ft H_2O X	.65	gpf =	10.06	X 5 (min) =	106.3
Casing volumes (GPF)		3/4"=0.02	1"=0.04	2"=0.16	4"=0.65	6"=1.47

Surge Device

Surge Block Y / N — Bailer = Stainless / Disposable / Teflon / PVC / Other

Purge Method

Pump type: Peristaltic / Submersible / Bladder / Pneumatic / Other

Purge tubing: New LDPE / New Teflon / Other

Purge start time 1347 — Purge stop time 1401 — Purge rate 10 gpm

Field Parameters

Meter used: QED / YSI / Hanna / Other

Gallons	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbity (NTU)	ORP mV	Comments
20	59.5	0.466	3.19	7.89	0.3	-67	Cloudy
30	59.5	0.465	2.32	7.89	0.3	-80	"
40	59.6	0.464	2.01	7.89	0.3	-91	"
50	59.6	0.464	2.05	7.90	0.3	-96	"
60	59.6	0.465	2.01	7.90	0.3	-103	
70	59.6	0.465	2.02	7.91	0.3	-103	
80	59.6	0.465	1.97	7.92	0.3	-103	
85	59.6	0.465	2.01	7.94	0.3	-104	
90	59.6	0.465	2.01	7.95	0.3	-94	Clear
100	59.6	0.466	1.80	7.95	0.3	-96	
110	59.6	0.466	1.85	7.95	0.3	-92	

Comments: Purge w/ 1gal. tubing w/ Bailer. Set w/ Bail Prev. Purge
Measured 10+gal Steels / Sand, set Set Pump (Hard bottom 45.55)
Continued 10+ well Steels - Clear Steels

Sampler's Signature _____ Date 12/09 /2015

PNG Environmental, Inc. **WELL DEVELOPMENT FORM**

Well ID no	I MW-32	Project name	EVANITE
State Well ID #	L 115630 1023997 1023941	Project no.	1122
Date	12/09/2015	Collector	Jay G

Well Information

Monument condition: (Good) / Needs repair

Well cap condition: (Good) / Locked / Replaced / Needs replacement

Headspace reading: (Not measured) / _____ ppm Odor Y (N)

Elevation mark: Yes / (Added) / Other

Well diameter: 2-inch / [4-inch] / 6-inch / Other

Top of well casing from ground surface 0.00'= 1.83

Purge Data

Total well depth: ~~34.81~~ 34.38 ft — Clean bottom / Muddy bottom / Not measured

Depth to product: ND / ND ft — Pump/Tubing Intake Depth ~~E~~ TWD ft bgs

Depth to water: 25.32 ft

Casing volume: 9.49 ft H_2O X .65 gpf = 6.16 X ~~3~~ 10 (min) = 61.6

Casing volumes (GPF): 3/4"=0.02 1"=0.04 2"=0.16 4"=0.65 6"=1.47

Surge Device

Surge Block Y / N — Bailer = [Stainless] / Disposable / Teflon / PVC / Other

Purge Method

Pump type: Peristaltic / [Submersible] / Bladder / [Pneumatic] / Other

Purge tubing: New LDPE / New Teflon / Other

Purge start time 1219 — Purge stop time 1233 — Purge rate ~2.10 gpm

Field Parameters

Meter used: [QED] / YSI / Hanna / Other

Gallons	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbity (NTU)	ORP mV	Comments
10	59.4	0.409	3.89	7.71	0.3	137	turbid
20	59.6	0.633	2.97	7.75	0.3	87	cleaning
40	59.5	0.634	2.16	7.71	0.3	15	"
60	59.9	0.630	2.37	7.71	0.4	-18	" EB collected
70	59.5	0.635	2.81	7.69	0.4	-31	"
75	59.6	0.637	2.82	7.68	0.4	-33	" stop pump, set ET
80	60.2	0.642	2.91	7.65	0.4	-56	cleaning
85	59.6	0.642	2.68	7.66	0.4	-54	"
90	59.5	0.636	2.67	7.67	0.3	-73	clear
95	59.5	0.641	2.57	7.66	0.4	-65	"
100	60.1	0.639	3.03	7.66	0.4	-60	" ET collected - stop

1223
1229
on

Comments: set flow rate pump removed 10 g water + sand/silt (formation)
set sub pump 100 gal well volume

Sampler's Signature — Date 12/09/2015

PNG Environmental, Inc. **WELL DEVELOPMENT FORM**

Well ID no	IMW-4D	Project name	EVANITE
State Well ID #	L119623 1029990	Project no.	1122
Date	12/09/2015 12-10-15	Collector	Jay G & Scott D

Well Information

Monument condition: Good / Needs repair — NOT INSTALLED YET

Well cap condition: (Good) / Locked / Replaced / Needs replacement

Headspace reading: ~~Not measured~~ _____ ppm Odor Y / (N)

Elevation mark: Yes / (Added) / Other

Well diameter: 2-inch / [4-inch] / 6-inch / Other

Top of well casing from ground surface 0.00'= 1.90

Purge Data 28.8 ~~30.05~~ 30.07

Total well depth: (30.03) ft +/- Clean bottom / Muddy bottom / Not measured

Depth to product: ND/ND ft 12-10-15 Pump/Tubing Intake Depth _____ ft bgs

Depth to water: 24.21 ft 24.54

Casing volume: 4.54 ft H_2O X ~~0.16~~ 0.65 gpf = 2.94 X 5 (min) =

Casing volumes (GPF): 3/4"=0.02 1"=0.04 2"=0.16 4"=0.65 6"=1.47

Surge Device

Surge Block Y / N Bailer = [Stainless] / Disposable / Teflon / PVC / Other

Purge Method

Pump type: Peristaltic / [Submersible] / Bladder / [Pneumatic] / Other

Purge tubing: New LDPE / New Teflon / Other

Purge start time _____ Purge stop time _____ Purge rate _____

Field Parameters

Meter used: [QED] / YSI / Hanna / Other

Gallons	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbity (NTU)	ORP mV	Comments
~~4~~							
2	57.6	0.127	3.16	8.11	0.1	99	Slt turbid
4	57.7	0.117	2.54	8.23	0.1	83	clearing => Dry
6	59.1	0.147	2.80	8.46	0.1	79	" / clear => Dry

Comments: 10' screen. 1' sump. SLT Product level pump @ TWD

V bail pump - purged @ 1 V of 3 V TWD = 30.00 => 55 Bailer - Bailed to retain on bailer

Sand. Cleaned up TWD = 30.07 V bail pump

Sampler's Signature _____ Date 12/09/2015

12-10-15 well purged dry x2 (1 well vol each) Sand still present - TWD = ~~30.10~~ 30.07

12-10-15 Dry @ 5th gal - allow RC

12-10-15 RC ~20 min / LT 12-10-15 = 24.54 Back up sand, stop out OMR

Purged dry x2 12-09-15 & 12-10-15

PNG Environmental, Inc. **WELL DEVELOPMENT FORM**

Well ID no	DMW-40	Project name	EVANITE
State Well ID #	L118027 102 3969	Project no.	1122
Date	12/9/2015	Collector	Jay G Scott D

Well Information

Monument condition (Good) / Needs repair

Well cap condition (Good) / Locked / Replaced / Needs replacement

Headspace reading Not measured ____ ppm Odor Y (N)

Elevation mark Yes (Added) / Other

Well diameter 2-inch / [4-inch] / 6-inch / Other Acts 80

Top of well casing from ground surface 0.00'= 1.97'

Purge Data

Total well depth pred. 42.03 (42.14) ft Clean bottom / (Muddy bottom) / Not measured

Depth to product ND ft Dual ND Pump/Tubing Intake Depth TUBD ↑ E ft bgs

Depth to water 25.48 ft 25.48 ↓ 10 ↓

Casing volume 16.60 ft H_2O X 0.65 gpf = 10.79 X ~~5~~(min) = 107.9

Casing volumes (GPF) 3/4"=0.02 1"=0.04 2"=0.16 4"=0.65 6"=1.47

Surge Device

Surge Block (Y) / N Bailer = [Stainless] / Disposable / Teflon / PVC / Other

Purge Method

Pump type Peristaltic / [Submersible] / Bladder / [Pneumatic] / Other

Purge tubing New LDPE / New Teflon / Other

Purge start time 0915 Purge stop time 0929 Purge rate ≈ 1.0 gpm

Field Parameters

Meter used [QED] / YSI / Hanna / Other

Gallons	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbity (NTU)	ORP mV	Comments
20	61.7	0.383	3.91	7.17	0.3	237	sl Turbid
30	61.6	0.394	2.47	7.35	0.3	224	" "
40	61.6	0.397	2.20	7.47	0.3	211	clearing
50	61.7	0.399	2.04	7.54	0.3	203	"
60	61.6	0.403	1.95	7.61	0.3	193	"
70	61.8	0.396	1.88	7.66	0.3	182	"
80	61.9	0.383	1.90	7.72	0.3	176	"
90	61.7	0.400	1.92	7.73	0.3	169	"
100	61.6	0.400	1.79	7.75	0.3	164	"
110	61.6	0.405	1.78	7.78	0.3	157	Clear
120	61.6	0.404	1.64	7.81	0.3	150	"

Comments: 10' Screen ; 3' Slot

08:16 SS Bailer removed 2.5+g of Purolite / Well pumps removed 15-20g

Removed ≈ 140 gals - Well Water ⇒ Clear (11+1/4 of 1 Vol Pump) 13 Vol Total

Sampler's Signature Date 12/9/2015

PNG Environmental, Inc. **WELL DEVELOPMENT FORM**

Well ID no	D MW-11	Project name	EVANITE
State Well ID #	L11864 9 1025957	Project no.	1122
Date	12/10/2015	Collector	Jay G Scott D

Well Information

Monument condition (Good) / Needs repair

Well cap condition (Good) / Locked / Replaced / Needs replacement

Headspace reading ~~Not measured~~ / _____ ppm Odor Y (N)

Elevation mark Yes / ~~Added~~ Other

Well diameter 2-inch / (4-inch) / 6-inch / Other

Top of well casing from ground surface 0.00'= 0.29

Purge Data

Total well depth 46.35 ft Clean bottom / Muddy bottom / Not measured

Depth to product 38.09 ft Pump/Tubing Intake Depth TBD ± ft bgs

Depth to water 28.09 ft Mod ND DMPL 10 µL

Casing volume 18.26 ft H_2O X 0.65 gpf = 11.86 X ~~5~~ (min) = 119

Casing volumes (GPF) 3/4"=0.02 1"=0.04 2"=0.16 4"=0.65 6"=1.47

Surge Device

Surge Block Y / N Bailer = (Stainless) / Disposable / Teflon / PVC / Other

Purge Method

Pump type Peristaltic / (Submersible) / Bladder / ~~Pneumatic~~ / Other

Purge tubing New LDPE / New Teflon / Other

Purge start time ~~0825~~ 0833 Purge stop time 0853 Purge rate ≈ 3+ gpm

Field Parameters FTC

Meter used (QED) / YSI / Hanna / Other

Gallons	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbity (NTU)	ORP mV	Comments
10	57.1	0.488	1.62	7.91	0.3	-309	turbid - cloudy TD
20+	56.4	0.493	0.53	7.99	0.3	-333	cloudy
30	57.3	0.433	0.29	8.01	0.3	-326	" TD
50	57.6	0.407	0.17	8.04	0.3	-316	" large clay content
70	57.5	0.399	0.13	7.99	0.3	-306	almost clear
80	57.4	0.393	0.07	7.98	0.3	-298	" "
100	57.4	0.393	0.06	7.96	0.3	-290	CLEAR
125	57.5	0.393	0.05	7.94	0.3	-287	"
150	57.7	0.394	0.09	7.93	0.3	-280	"

Comments: Surge / Set pump TBD ± Hydrostatic Mystic Oil on D

Purged 12.6+ Well Dry; Very cloudy + turbid.

Sampler's Signature Date 12/10/2015

3' Slot 5' Screen

PNG Environmental, Inc. **WELL DEVELOPMENT FORM**

Well ID no	D MW-42	Project name	EVANITE
State Well ID #	1028986 L 118650	Project no.	1122
Date	12/10/2015	Collector	Jay G + Scott D

Well Information

Monument condition: Good / Needs repair

Well cap condition: Good / Locked / Replaced / Needs replacement

Headspace reading: Not measured _____ ppm Odor Y (N)

Elevation mark: Yes / Added / Other

Well diameter: 2-inch / 4-inch / 6-inch / Other

Top of well casing from ground surface 0.00'= 0.31

Purge Data

Total well depth: 38.71 ft (V)

Depth to product: ND/ND ft

Depth to water: 26.33 ft

Clean bottom / Muddy bottom / Not measured

Pump/Tubing Intake Depth _____ ft bgs

Casing volume: 12.38 ft H_2O X 0.65 gpf = 8.04 X 10 (min) = 80

Casing volumes (GPF): 3/4"=0.02 1"=0.04 2"=0.16 4"=0.65 6"=1.47

Surge Device

Surge Block Y / N Bailer = Stainless / Disposable / Teflon / PVC / Other

Purge Method

Pump type: Peristaltic / Submersible / Bladder / Pneumatic / Other

Purge tubing: New LDPE / New Teflon / Other

Purge start time 1002 Purge stop time 1022 Purge rate 8+ gpm

Field Parameters

Meter used: QED (=TC) / YSI / Hanna / Other

Gallons	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbity (NTU)	ORP mV	Comments
10	58.5	0.398	2.51	7.95	0.3	-251	Slt Turbid
30+	58.6	0.404	0.49	8.00	0.3	-258	Clearing
50	58.5	0.405	0.31	8.00	0.3	-260	"
65	58.3	0.406	0.30	8.00	0.3	-257	"
80	58.4	0.403	0.14	7.99	0.3	-257	CLEAR
100+	58.2	0.402	0.12	7.96	0.3	-254	"
125	58.2	0.402	0.10	7.96	0.3	-254	"
140	58.3	0.401	0.11	7.96	0.3	-254	"
150	58.2	0.400	0.09	7.95	0.3	-253	"

Comments: Hand bailed, Augered last 4ft TWO DE

Removed 150 well Vols very clear

Sampler's Signature Date 12/10/2015

3' Auger
5' Total

APPENDIX C
LABORATORY ANALYTICAL REPORTS
AND DATA VALIDATION

PNG ENVIRONMENTAL, INC.

MEMORANDUM

To: H&V Fiber Corporation (1122)

From: Crystal Jones

Date: March 31, 2016

Subject: Data Quality Review (SDG Number L753667)

INTRODUCTION

The following is a summary of a data quality review for water samples collected March 10th and 11th, 2015. Samples were collected as part of an investigation of the H&V Fiber Corporation (formerly Evanite Fiber Corporation) site by PNG Environmental, Inc. (PNG). Laboratory analyses were performed by ESC Lab Sciences (Mt. Juliet, Tennessee) in accordance with U.S. Environmental Protection Agency (USEPA) methods. A total of nine water samples were submitted for analysis as one sample delivery group (SDG L753667). The samples were analyzed for volatile organic compounds (VOCs) by EPA Method 8260B and total organic carbon (TOC) by EPA 9060A. Analytical results reviewed were consistent with procedures presented in USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (USEPA 2008) and Inorganic Review (USEPA 2010), in addition to appropriate laboratory and method quality control criteria.

VOLATILE ORGANIC COMPOUNDS IN WATER BY EPA 8260B

Completeness

All samples were analyzed as requested.

Holding Times

All samples were analyzed within the method-specified holding time criteria (14 days).

Method Blanks

Method blank analyses were conducted at the required frequency for all analyses. No target analytes were detected in the method blanks above the reported detection limit (RDL).

Surrogate Compounds

Surrogate recoveries for all samples were within control limits, with the exception of Toluene-d8 (85.6 percent) for sample DMW-99 (L753667-04). This recovery is below the control limit. The two remaining surrogates were within control limits. No results were qualified.

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Tigard, Oregon 97223
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Laboratory Control Samples/Laboratory Control Sample Duplicates

Percent recoveries for all laboratory control samples (LCS) were within control limits.

Relative percent difference (RPD) results for all laboratory control sample/laboratory control sample duplicate (LCS/LCSD) pairs were within control limits.

Matrix Spike/Matrix Spike Duplicate Samples

Percent recoveries for all matrix spike (MS) samples were within control limits.

RPD results for all matrix spike/matrix spike duplicate (MS/MSD) pairs were within control limits.

Laboratory Flags

The laboratory flagged some analytes with a J, indicating that the reported detection was below the RDL and above the method detection limit (MDL). Result should be considered an estimate.

Summary

No results were qualified.

TOTAL ORGANIC CARBON BY EPA 9060A

Completeness

All samples were analyzed as requested.

Holding Times

All samples were analyzed within the method-specified holding time criteria (28 days).

Method Blanks

Method blank analyses were conducted at the required frequency for all analyses. No target analytes were detected in the method blanks above the RDL.

Laboratory Control Samples/Laboratory Control Sample Duplicates

Percent recoveries for all LCS were within control limits.

RPD results for all LCS/LCSD pairs were within control limits.

Laboratory Duplicates

RPD results for all laboratory duplicates were within control limits.

Matrix Spike/Matrix Spike Duplicate Samples

Percent recoveries for all MS samples were within control limits.

RPD results for all MS/MSD pairs were within control limits.

Laboratory Flags

The laboratory flagged some analytes with a J, indicating that the reported detection was below the RDL and above the method detection limit (MDL). Result should be considered an estimate.

Summary

No results were qualified.

REFERENCES

USEPA, 2008*, USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review*, Office of Superfund Remediation and Technology Innovation, United States Environmental Protection Agency, USEPA 540-R-08-01, June.

USEPA, 2010, *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review*, Office of Superfund Remediation and Technology Innovation, United States Environmental Protection Agency, USEPA-540-R-10-011, January.

PNG ENVIRONMENTAL, INC.

MEMORANDUM

To: H&V Fiber Corporation (1122)

From: Crystal Jones

Date: March 31, 2015

Subject: Data Quality Review (SDG Number L753670)

INTRODUCTION

The following is a summary of a data quality review for water samples collected March 9th and 10th, 2015. Samples were collected as part of an investigation of the H&V Fiber Corporation (formerly Evanite Fiber Corporation) site by PNG Environmental, Inc. (PNG). Laboratory analyses were performed by ESC Lab Sciences (Mt. Juliet, Tennessee) in accordance with U.S. Environmental Protection Agency (USEPA) methods. A total of nine water samples were submitted for analysis as one sample delivery group (SDG L753670). The samples were analyzed for volatile organic compounds (VOCs) by EPA Method 8260B and total organic carbon by EPA 9060A. Analytical results reviewed were consistent with procedures presented in USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (USEPA 2008) and Inorganic Review (USEPA 2010), in addition to appropriate laboratory and method quality control criteria.

VOLATILE ORGANIC COMPOUNDS IN WATER BY EPA 8260B

Completeness

All samples were analyzed as requested.

Holding Times

All samples were analyzed within the method-specified holding time criteria (14 days).

Method Blanks

Method blank analyses were conducted at the required frequency for all analyses. No target analytes were detected in the method blanks above the reported detection limit (RDL).

Surrogate Compounds

Surrogate recoveries for all samples were within control limits, with the exception of the Toluene-d8 recoveries for sample IMW-25 (L753670-09) (68.2 percent) and quality control (QC) samples WG775860-MS/MSD (L753670-09) (69.7 percent/70.40 percent). These recoveries were below the control limit. The two remaining surrogates were within control limits for all samples. No results were qualified.

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FAX (503) 620-2977

Laboratory Control Samples/Laboratory Control Sample Duplicates

Percent recoveries for all laboratory control samples (LCS) were within control limits.

Relative percent difference (RPD) results for all laboratory control sample/laboratory control sample duplicate (LCS/LCSD) pairs were within control limits.

Matrix Spike/Matrix Spike Duplicate Samples

Percent recoveries for all matrix spike (MS) samples were within control limits.

RPD results for all matrix spike/matrix spike duplicate (MS/MSD) pairs were within control limits.

Laboratory Flags

The laboratory flagged some analytes with a J, indicating that the reported detection was below the RDL and above the method detection limit (MDL). Result should be considered an estimate.

Summary

No results were qualified.

TOTAL ORGANIC CARBON BY EPA 9060A

Completeness

All samples were analyzed as requested.

Holding Times

All samples were analyzed within the method-specified holding time criteria (28 days).

Method Blanks

Method blank analyses were conducted at the required frequency for all analyses. No target analytes were detected in the method blanks above the RDL.

Laboratory Control Samples/Laboratory Control Sample Duplicates

Percent recoveries for all LCS were within control limits.

RPD results for all LCS/LCSD pairs were within control limits.

Laboratory Duplicates

RPD results for all laboratory duplicates were within control limits.

Matrix Spike/Matrix Spike Duplicate Samples

Percent recoveries for all MS samples were within control limits.

RPD results for all MS/MSD pairs were within control limits.

Summary

No results were qualified.

REFERENCES

USEPA, 2008*, USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review*, Office of Superfund Remediation and Technology Innovation, United States Environmental Protection Agency, USEPA 540-R-08-01, June.

USEPA, 2010, *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review*, Office of Superfund Remediation and Technology Innovation, United States Environmental Protection Agency, USEPA-540-R-10-011, January.

PNG ENVIRONMENTAL, INC.

MEMORANDUM

To: H&V Fiber Corporation (1122)

From: Crystal Jones

Date: March 31, 2015

Subject: Data Quality Review (SDG Number L753673)

INTRODUCTION

The following is a summary of a data quality review for water samples collected March 13th, 2015. Samples were collected as part of an investigation of the H&V Fiber Corporation (formerly Evanite Fiber Corporation) site by PNG Environmental, Inc. (PNG). Laboratory analyses were performed by ESC Lab Sciences (Mt. Juliet, Tennessee) in accordance with U.S. Environmental Protection Agency (USEPA) methods. A total of seven water samples submitted for analysis as one sample delivery group (SDG L753673). The samples were analyzed for volatile organic compounds (VOCs) by EPA Method 8260B. Analytical results reviewed were consistent with procedures presented in USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (USEPA 2008), in addition to appropriate laboratory and method quality control criteria.

VOLATILE ORGANIC COMPOUNDS IN WATER BY EPA 8260B

Completeness

All samples were analyzed as requested.

Holding Times

All samples were analyzed within the method-specified holding time criteria (14 days).

Method Blanks

Method blank analyses were conducted at the required frequency for all analyses. No target analytes were detected in the method blanks above the reported detection limit (RDL).

Surrogate Compounds

Surrogate recoveries for all samples were within control limits, with the exception of the Toluene-d8 recoveries for quality control (QC) samples WG775860-MS/MSD (L753670-09) (69.7 percent/70.40 percent). These recoveries were below the control limit. This sample was from the Evanite site. The two remaining surrogates were within control limits. No results were qualified.

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Laboratory Control Samples/Laboratory Control Sample Duplicates

Percent recoveries for all laboratory control samples (LCS) were within control limits.

Relative percent difference (RPD) results for all laboratory control sample/laboratory control sample duplicate (LCS/LCSD) pairs were within control limits.

Matrix Spike/Matrix Spike Duplicate Samples

Percent recoveries for all matrix spike (MS) samples were within control limits, with the exception of cis-1,2-Dichloroethene and Trichloroethene for QC samples WG775860-MS/MSD (L753670-09) (0 percent/0 percent). These recoveries were below the control limit, but the analyte concentration in the sample was greater than five-times the spike level. No results were qualified.

RPD results for all matrix spike/matrix spike duplicate (MS/MSD) pairs were within control limits.

Laboratory Flags

The laboratory flagged some analytes with a J, indicating that the reported detection was below the RDL and above the method detection limit (MDL). Result should be considered an estimate.

Summary

No results were qualified.

REFERENCES

USEPA, 2008*, USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review*, Office of Superfund Remediation and Technology Innovation, United States Environmental Protection Agency, USEPA 540-R-08-01, June.

PNG ENVIRONMENTAL, INC.

MEMORANDUM

To: H&V Fiber Corporation (1122)

From: Crystal Jones

Date: March 31, 2015

Subject: Data Quality Review (SDG Number L753675)

INTRODUCTION

The following is a summary of a data quality review for water samples collected March 13th, 2015. Samples were collected as part of an investigation of the H&V Fiber Corporation (formerly Evanite Fiber Corporation) site by PNG Environmental, Inc. (PNG). Laboratory analyses were performed by ESC Lab Sciences (Mt. Juliet, Tennessee) in accordance with U.S. Environmental Protection Agency (USEPA) methods. A total of eight water samples, including one trip blank and one field duplicate, were submitted for analysis as one sample delivery group (SDG L753675). The samples were analyzed for volatile organic compounds (VOCs) by EPA Method 8260B. Analytical results reviewed were consistent with procedures presented in USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (USEPA 2008), in addition to appropriate laboratory and method quality control criteria.

VOLATILE ORGANIC COMPOUNDS IN WATER BY EPA 8260B

Completeness

All samples were analyzed as requested.

Holding Times

All samples were analyzed within the method-specified holding time criteria (14 days).

Method Blanks

Method blank analyses were conducted at the required frequency for all analyses. No target analytes were detected in the method blanks above the reported detection limit (RDL).

Surrogate Compounds

Surrogate recoveries for all samples were within control limits, with the exception of the following:

- The Toluene-d8 recoveries for samples DMW-98 (L753675-02) (87.6 percent) and DMW-35 (L753675-04) (86.9 percent) were below the control limit. These

recoveries were only slightly below the control limit. The two remaining surrogates were within control limits for both samples. No results were qualified.

- The Toluene-d8 recoveries for quality control (QC) samples WG7758601-MS/MSD (L753670-09) (69.7 percent/70.40 percent) were below the control limit. This sample was from the Evanite site. The two remaining surrogates were within control limits. No results were qualified.

Laboratory Control Samples/Laboratory Control Sample Duplicates

Percent recoveries for all laboratory control samples (LCS) were within control limits.

Relative percent difference (RPD) results for all laboratory control sample/laboratory control sample duplicate (LCS/LCSD) pairs were within control limits.

Matrix Spike/Matrix Spike Duplicate Samples

Percent recoveries for all matrix spike (MS) samples were within control limits, with the exception of cis-1,2-Dichloroethene and Trichloroethene for QC samples WG775860-MS/MSD (L753670-09) (0 percent/0 percent). These recoveries were below the control limit, but the analyte concentration in the sample was greater than five-times the spike level. No results were qualified.

RPD results for all matrix spike/matrix spike duplicate (MS/MSD) pairs were within control limits.

Trip Blanks

One trip blank was submitted with this SDG. No detections were reported.

Field Duplicates

One field duplicate was submitted with this SDG. RPD results for all detected analytes were within control limits (50 percent).

Laboratory Flags

The laboratory flagged some analytes with a J, indicating that the reported detection was below the RDL and above the method detection limit (MDL). Result should be considered an estimate.

Summary

No results were qualified.

REFERENCES

USEPA, 2008, *USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review*, Office of Superfund Remediation and

Technology Innovation, United States Environmental Protection Agency, USEPA 540-R-08-01, June.

PNG ENVIRONMENTAL, INC.

MEMORANDUM

To: H&V Fiber Corporation (1122)

From: Crystal Jones

Date: March 31, 2015

Subject: Data Quality Review (SDG Number L753676)

INTRODUCTION

The following is a summary of a data quality review for water samples collected March 11th through 13th, 2015. Samples were collected as part of an investigation of the H&V Fiber Corporation (formerly Evanite Fiber Corporation) site by PNG Environmental, Inc. (PNG). Laboratory analyses were performed by ESC Lab Sciences (Mt. Juliet, Tennessee) in accordance with U.S. Environmental Protection Agency (USEPA) methods. A total of nine water samples were submitted for analysis as one sample delivery group (SDG L753676). The samples were analyzed for volatile organic compounds (VOCs) by EPA Method 8260B and total organic carbon by EPA 9060A. Analytical results reviewed were consistent with procedures presented in USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (USEPA 2008) and Inorganic Review (USEPA 2010), in addition to appropriate laboratory and method quality control criteria.

VOLATILE ORGANIC COMPOUNDS IN WATER BY EPA 8260B

Completeness

All samples were analyzed as requested.

Holding Times

All samples were analyzed within the method-specified holding time criteria (14 days).

Method Blanks

Method blank analyses were conducted at the required frequency for all analyses. No target analytes were detected in the method blanks above the reported detection limit (RDL).

Surrogate Compounds

Surrogate recoveries for all samples were within control limits, with the exception of the following:

- The Toluene-d8 recovery for sample IMW-26 (L753676-02) (85.7 percent) was below the control limit. This recovery was only slightly below the control limit.

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The two remaining surrogates were within control limits. No results were qualified.

- The Toluene-d8 recovery for sample DMW-16 (L753676-03) (121 percent) was above the control limit. This recovery was only slightly above the control limit. The two remaining surrogates were within control limits. No results were qualified.
- The Toluene-d8 recovery for quality control (QC) sample WG775861-MSD (L753676-05) (112 percent) was above the control limit. This sample was from the Evanite site. The two remaining surrogates were within control limits. No results were qualified.
- The Dibromofluoromethane recovery for QC sample WG777418-MSD (L753638-04) (125 percent) was above the control limit. This sample was not from the Evanite site. No results were qualified.

Laboratory Control Samples/Laboratory Control Sample Duplicates

Percent recoveries for all laboratory control samples (LCS) were within control limits.

Relative percent difference (RPD) results for all laboratory control sample/laboratory control sample duplicate (LCS/LCSD) pairs were within control limits.

Matrix Spike/Matrix Spike Duplicate Samples

Percent recoveries for all matrix spike (MS) samples were within control limits.

RPD results for all matrix spike/matrix spike duplicate (MS/MSD) pairs were within control limits.

Laboratory Flags

The laboratory flagged some analytes with a J, indicating that the reported detection was below the RDL and above the method detection limit (MDL). Result should be considered an estimate.

Summary

No results were qualified.

TOTAL ORGANIC CARBON BY EPA 9060A

Completeness

All samples were analyzed as requested.

Holding Times

All samples were analyzed within the method-specified holding time criteria (28 days).

Method Blanks

Method blank analyses were conducted at the required frequency for all analyses. No target analytes were detected in the method blanks above the RDL.

Laboratory Control Samples/Laboratory Control Sample Duplicates

Percent recoveries for all LCS were within control limits.

RPD results for all LCS/LCSD pairs were within control limits.

Laboratory Duplicates

RPD results for all laboratory duplicates were within control limits.

Matrix Spike/Matrix Spike Duplicate Samples

Percent recoveries for all MS samples were within control limits.

RPD results for all MS/MSD pairs were within control limits.

Laboratory Flags

The laboratory flagged some analytes with a J, indicating that the reported detection was below the RDL and above the MDL. Result should be considered an estimate.

Summary

No results were qualified.

REFERENCES

USEPA, 2008*, USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review*, Office of Superfund Remediation and Technology Innovation, United States Environmental Protection Agency, USEPA 540-R-08-01, June.

USEPA, 2010, *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review*, Office of Superfund Remediation and Technology Innovation, United States Environmental Protection Agency, USEPA-540-R-10-011, January.

PNG ENVIRONMENTAL, INC.

MEMORANDUM

To: H&V Fiber Corporation (1122)

From: Crystal Jones

Date: March 31, 2016

Subject: Data Quality Review (SDG Number L771187)

INTRODUCTION

The following is a summary of a data quality review for water samples collected June 10th and 11th, 2015. Samples were collected as part of an investigation of the H&V Fiber Corporation (formerly Evanite Fiber Corporation) site by PNG Environmental, Inc. (PNG). Laboratory analyses were performed by ESC Lab Sciences (Mt. Juliet, Tennessee) in accordance with U.S. Environmental Protection Agency (USEPA) methods. A total of eighteen water samples, including one trip blank, were submitted for analysis as one sample delivery group (SDG L771187). The samples were analyzed for volatile organic compounds (VOCs) by EPA Method 8260B and total organic carbon (TOC) by EPA 9060A. Analytical results reviewed were consistent with procedures presented in USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (USEPA 2008) and Inorganic Review (USEPA 2010), in addition to appropriate laboratory and method quality control criteria.

VOLATILE ORGANIC COMPOUNDS IN WATER BY EPA 8260B

Completeness

All samples were analyzed as requested.

Holding Times

All samples were analyzed within the method-specified holding time criteria (14 days).

Method Blanks

Method blank analyses were conducted at the required frequency for all analyses. No target analytes were detected in the method blanks above the reported detection limit (RDL).

Surrogate Compounds

Surrogate recoveries for all samples were within control limits.

Laboratory Control Samples/Laboratory Control Sample Duplicates

Percent recoveries for all laboratory control samples (LCS) were within control limits.

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Relative percent difference (RPD) results for all laboratory control sample/laboratory control sample duplicate (LCS/LCSD) pairs were within control limits.

Matrix Spike/Matrix Spike Duplicate Samples

Percent recoveries for all matrix spike (MS) samples were within control limits, with the exception of cis-1,2-Dichloroethene (0/0 percent) and Vinyl chloride (25/1.46 percent) for quality control (QC) sample WG796194-MS/MSD (L771163-13). These recoveries were below the control limit. This sample was not from the Evanite site. No results were qualified.

RPD results for all matrix spike/matrix spike duplicate (MS/MSD) pairs were within control limits.

Laboratory Flags

The laboratory flagged some analytes with a J, indicating that the reported detection was below the RDL and above the method detection limit (MDL). Result should be considered an estimate.

Summary

No results were qualified.

TOTAL ORGANIC CARBON BY EPA 9060A

Completeness

All samples were analyzed as requested.

Holding Times

All samples were analyzed within the method-specified holding time criteria (28 days).

Method Blanks

Method blank analyses were conducted at the required frequency for all analyses. No target analytes were detected in the method blanks above the RDL.

Laboratory Control Samples/Laboratory Control Sample Duplicates

Percent recoveries for all LCS were within control limits.

RPD results for all LCS/LCSD pairs were within control limits.

Laboratory Duplicates

RPD results for all laboratory duplicates were within control limits.

Matrix Spike/Matrix Spike Duplicate Samples

Percent recoveries for all MS samples were within control limits.

RPD results for all MS/MSD pairs were within control limits.

Laboratory Flags

The laboratory flagged some analytes with a J, indicating that the reported detection was below the RDL and above the method detection limit (MDL). Result should be considered an estimate.

Summary

No results were qualified.

REFERENCES

USEPA, 2008*, USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review*, Office of Superfund Remediation and Technology Innovation, United States Environmental Protection Agency, USEPA 540-R-08-01, June.

USEPA, 2010, *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review*, Office of Superfund Remediation and Technology Innovation, United States Environmental Protection Agency, USEPA-540-R-10-011, January.

PNG ENVIRONMENTAL, INC.

MEMORANDUM

To: H&V Fiber Corporation (1122)

From: Crystal Jones

Date: September 22, 2015

Subject: Data Quality Review (SDG Number L786941)

INTRODUCTION

The following is a summary of a data quality review for water samples collected September 1st through 3rd, 2015. Samples were collected as part of an investigation of the H&V Fiber Corporation (formerly Evanite Fiber Corporation) site by PNG Environmental, Inc. (PNG). Laboratory analyses were performed by ESC Lab Sciences (Mt. Juliet, Tennessee) in accordance with U.S. Environmental Protection Agency (USEPA) methods. A total of forty-one water samples were submitted for analysis as one sample delivery group (SDG L786941). The samples were analyzed for ammonia nitrogen by EPA Method 350.1; nitrate and sulfate by EPA method 9056MOD; total organic carbon by EPA Method 9060A; dissolved iron and manganese by EPA Method 6010B; methane, ethane, and ethene by Method RSK175; and volatile organic compounds (VOCs) by EPA Method 8260B. Analytical results reviewed were consistent with procedures presented in USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (USEPA 2008) and Inorganic Data (USEPA 2010), in addition to appropriate laboratory and method quality control criteria. See Table 1 at the end of this report for a summary of qualified data.

AMMONIA NITROGEN IN WATER BY EPA 350.1

Completeness

All samples were analyzed as requested.

Holding Times

All samples were analyzed within the method-specified holding time criteria (28 days).

Method Blanks

Method blank analyses were conducted at the required frequency for all analyses. No target analytes were detected in the method blanks above the reported detection limit (RDL).

Laboratory Control Samples/Laboratory Control Sample Duplicates

Percent recoveries for all laboratory control samples (LCS) were within control limits (90-110 percent).

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Relative percent difference (RPD) results for all laboratory control sample/laboratory control sample duplicate (LCS/LCSD) pairs were within control limits (20 percent).

Laboratory Duplicate Samples

RPD results for all laboratory duplicates were within control limits (20 percent), with the exception of quality control (QC) sample WG815054-DUP (L786941-21) (63 percent). This sample was from the Evanite site. The detections reported for this QC sample were both below the RDL. No results were qualified.

Matrix Spike/Matrix Spike Duplicate Samples

Percent recoveries for all matrix spike (MS) samples were within control limits (90-110 percent), with the exception of the recoveries for QC sample WG815051-MS/MSD (L786909-01) (87 percent/88 percent). This sample was not from the Evanite site. No results were qualified.

RPD results for all matrix spike/matrix spike duplicate (MS/MSD) pairs were within control limits (20 percent).

Laboratory Flags

The laboratory flagged some results with a J, indicating that the reported detection was below the RDL and above the method detection limit (MDL). Result should be considered an estimate.

Summary

No results were qualified.

NITRATE AND SULFATE IN WATER BY EPA 9056MOD

Completeness

All samples were analyzed as requested.

Holding Times

All samples were analyzed within the method-specified holding time criteria (48 hours for nitrate/28 days for sulfate), with the exception of samples MW-39 (L786941-14), DMW-12 (L786941-15), MW-6 (L786941-17) and MW-15 (L786941-18). The nitrate analysis for these samples was performed past the recommended holding time. Results were qualified (J/UJ) estimated (see Table 1).

Method Blanks

Method blank analyses were conducted at the required frequency for all analyses. No target analytes were detected in the method blanks above the RDL.

Laboratory Control Samples/Laboratory Control Sample Duplicates

Percent recoveries for all LCS were within control limits (90-110 percent).

RPD results for all LCS/LCSD pairs were within control limits (20 percent).

Laboratory Duplicate Samples

RPD results for all laboratory duplicates were within control limits (20 percent).

Matrix Spike/Matrix Spike Duplicate Samples

Percent recoveries for all MS samples were within control limits (80-120 percent).

RPD results for all MS/MSD pairs were within control limits (20 percent).

Laboratory Flags

The laboratory flagged some results with a J, indicating that the reported detection was below the RDL and above the MDL. Result should be considered an estimate.

Summary

Select results were qualified (see Table 1).

TOTAL ORGANIC CARBON IN WATER BY EPA 9060A

Completeness

All samples were analyzed as requested.

Holding Times

All samples were analyzed within the method-specified holding time criteria (28 days).

Method Blanks

Method blank analyses were conducted at the required frequency for all analyses. No target analytes were detected in the method blanks above the reported detection limit (RDL).

Laboratory Control Samples/Laboratory Control Sample Duplicates

Percent recoveries for all LCS were within control limits (85-115 percent).

RPD results for all LCS/LCSD pairs were within control limits (20 percent).

Laboratory Duplicate Samples

RPD results for all laboratory duplicates were within control limits (20 percent).

Matrix Spike/Matrix Spike Duplicate Samples

Percent recoveries for all MS samples were within control limits (80-120 percent).

RPD results for all MS/MSD pairs were within control limits (20 percent).

Laboratory Flags

The laboratory flagged some results with a J, indicating that the reported detection was below the RDL and above the MDL. Result should be considered an estimate.

Summary

No results were qualified.

DISSOLVED IRON AND MANGANESE BY EPA 6010B

Completeness

All samples were analyzed as requested.

Holding Times

All samples were analyzed within the method-specified holding time criteria (128 days).

Method Blanks

Method blank analyses were conducted at the required frequency for all analyses. No target analytes were detected in the method blanks above the RDL.

Laboratory Control Samples/Laboratory Control Sample Duplicates

Percent recoveries for all LCS were within control limits (80-120 percent).

RPD results for all LCS/LCSD pairs were within control limits (20 percent).

Matrix Spike/Matrix Spike Duplicate Samples

Percent recoveries for all MS samples were within control limits (75-125 percent).

RPD results for all MS/MSD pairs were within control limits (20 percent).

Laboratory Flags

The laboratory flagged some results with a J, indicating that the reported detection was below the RDL and above the MDL. Result should be considered an estimate.

Summary

No results were qualified.

METHANE, ETHANE, ETHENE BY RSK 175

Completeness

All samples were analyzed as requested.

Holding Times

All samples were analyzed within the method-specified holding time criteria (14 days).

Method Blanks

Method blank analyses were conducted at the required frequency for all analyses. No target analytes were detected in the method blanks above the RDL.

Laboratory Control Samples/Laboratory Control Sample Duplicates

Percent recoveries for all LCS were within control limits (85-115 percent).

RPD results for all LCS/LCSD pairs were within control limits (20 percent).

Laboratory Flags

The laboratory flagged some results with a J, indicating that the reported detection was below the RDL and above the MDL. Result should be considered an estimate.

Summary

No results were qualified.

VOLATILE ORGANIC COMPOUNDS IN WATER BY EPA 8260B

Completeness

All samples were analyzed as requested.

Holding Times

All samples were analyzed within the method-specified holding time criteria (14 days).

Method Blanks

Method blank analyses were conducted at the required frequency for all analyses. No target analytes were detected in the method blanks above the RDL.

Surrogate Compounds

Surrogate recoveries for all samples were within control limits, with the exception of the Toluene-d8 recovery for sample MW-8 (L786941-07) (88.4 percent). This recovery was slightly below the control limit. The two remaining surrogates were within control limits. No results were qualified.

Laboratory Control Samples/Laboratory Control Sample Duplicates

Percent recoveries for all LCS were within control limits.

RPD results for all LCS/LCSD pairs were within control limits, with the exception of 1,1-Dichloroethene (21.7 percent) and trans-1,2-Dichloroethene (29.2 percent) for QC sample WG813651-LCS/LCSD. Related sample results were qualified (J/UJ) estimated (see Table 1).

Matrix Spike/Matrix Spike Duplicate Samples

Percent recoveries for all MS samples were within control limits, with the exception of QC sample WG815187-MS/MSD (L787843-06) (0 percent/0 percent). This sample was not from the Evanite site. No results were qualified.

RPD results for all MS/MSD pairs were within control limits (20 percent).

Laboratory Flags

The laboratory flagged some analytes with a J, indicating that the reported detection was below the RDL and above the MDL. Result should be considered an estimate.

Summary

Select results were qualified (see Table 1).

REFERENCES

USEPA, 2008*, USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review*, Office of Superfund Remediation and Technology Innovation, United States Environmental Protection Agency, USEPA 540-R-08-01, June.

USEPA, 2010, *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review*, Office of Superfund Remediation and Technology Innovation, United States Environmental Protection Agency, USEPA-540-R-10-011, January.

PNG ENVIRONMENTAL, INC.

MEMORANDUM

To: H&V Fiber Corporation (1122)

From: Crystal Jones

Date: March 31, 2016

Subject: Data Quality Review (SDG Number L789249)

INTRODUCTION

The following is a summary of a data quality review for water samples collected September 15th, 2015. Samples were collected as part of an investigation of the H&V Fiber Corporation (formerly Evanite Fiber Corporation) site by PNG Environmental, Inc. (PNG). Laboratory analyses were performed by ESC Lab Sciences (Mt. Juliet, Tennessee) in accordance with U.S. Environmental Protection Agency (USEPA) methods. A total of fifteen water samples, including one trip blank, were submitted for analysis as one sample delivery group (SDG L789249). The samples were analyzed for volatile organic compounds (VOCs) by EPA Method 8260B. Analytical results reviewed were consistent with procedures presented in USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (USEPA 2008) and Inorganic Review (USEPA 2010), in addition to appropriate laboratory and method quality control criteria. See Table 1 at the end of this report for a summary of qualified data.

VOLATILE ORGANIC COMPOUNDS IN WATER BY EPA 8260B

Completeness

All samples were analyzed as requested.

Holding Times

All samples were analyzed within the method-specified holding time criteria (14 days).

Method Blanks

Method blank analyses were conducted at the required frequency for all analyses. No target analytes were detected in the method blanks above the reported detection limit (RDL).

Surrogate Compounds

Surrogate recoveries for all samples were within control limits.

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Laboratory Control Samples/Laboratory Control Sample Duplicates

Percent recoveries for all laboratory control samples (LCS) were within control limits, with the exception the recoveries for 1,4-Dichlorobenzene (80.7 percent) and 1,2-Dichloropropane (73.8 percent) for quality control (QC) sample WG816421-LCS. These recoveries were below the control limit. No detections were reported in related site samples. Results were qualified (UJ) estimated (see Table 1).

Relative percent difference (RPD) results for all laboratory control sample/laboratory control sample duplicate (LCS/LCSD) pairs were within control limits, with the exception of the following:

- The RPDs for Acrolein (26.1 percent) and 1,1,2-Trichlorotrifluoroethane (21.4 percent) for QC sample WG816421-LCS/LCSD were above the control limit. No detections were reported in related site samples. Results were qualified (UJ) estimated (see Table 1).
- The RPD for Acrolein (56.3 percent) for QC sample WG817274-LCS/LCSD was above the control limit. No detections were reported in related site samples. Results were qualified (UJ) estimated (see Table 1).

Matrix Spike/Matrix Spike Duplicate Samples

Percent recoveries for all matrix spike (MS) samples were within control limits, with the exception of the following:

- The Acrolein recoveries for QC sample WG816421-MS/MSD (L789270-01) (1110 percent/1220 percent) were above the control limit. This sample was not from the Evanite site. No results were qualified.
- The 2-Chloroethyl vinyl ether recovery for QC sample WG816421-MSD (L789270-01) (2.67 percent) was below the control limit. This sample was not from the Evanite site. No results were qualified.
- The recoveries for 2-Chloroethyl vinyl ether (2.20/1.48 percent) and cis-1,2-Dichloroethene (58.4/59.4 percent) for QC sample WG816703-MS/MSD (L789243-13) were below the control limit. This sample was not from the Evanite site. No results were qualified.
- The recoveries for 2-Chloroethyl vinyl ether (0.361/0.318 percent) for QC sample WG817274-MS/MSD (L789226-04) were below the control limit. This sample was not from the Evanite site. No results were qualified.

RPD results for all matrix spike/matrix spike duplicate (MS/MSD) pairs were within control limits, with the following exceptions:

- The RPD result for 2-Chloroethyl vinyl ether (62.8 percent) for QC sample WG816421-MS/MSD (L789270-01) was above the control limit. This sample was not from the Evanite site. No results were qualified.
- The RPD results for Acrolein (23.7 percent), Acrylonitrile (20.4 percent), 2-Chloroethyl vinyl ether (39.4 percent), 1,2-Dibromo-3-chloropropane (23.1 percent), 2-Butanone (21.0 percent) and 4-Methyl-2-pentanone (20.4 percent) for QC sample WG816703-MS/MSD (L789243-13) were above

the control limit. This sample was not from the Evanite site. No results were qualified.

Laboratory Flags

The laboratory flagged some analytes with a J, indicating that the reported detection was below the RDL and above the method detection limit (MDL). Result should be considered an estimate.

Summary

Select results were qualified (see Table 1).

REFERENCES

USEPA, 2008*, USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review*, Office of Superfund Remediation and Technology Innovation, United States Environmental Protection Agency, USEPA 540-R-08-01, June.

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Table 1
Data Validation Qualifier Summary
H&V Fiber Corporation
Corvallis, Oregon

Sample ID	Lab ID	Method	Analyte	Qualifier	Justification for Qualifier
RB0-42	L789249-03	EPA 8260B	1,4-Dichlorobenzene, 1,2-Dichloropropane	UJ	The recoveries for WG816421-LCS were below the control limit.
RB1-48	L789249-04	EPA 8260B	1,4-Dichlorobenzene, 1,2-Dichloropropane	UJ	The recoveries for WG816421-LCS were below the control limit.
RB1-24	L789249-05	EPA 8260B	1,4-Dichlorobenzene, 1,2-Dichloropropane	UJ	The recoveries for WG816421-LCS were below the control limit.
RB2-SW	L789249-06	EPA 8260B	1,4-Dichlorobenzene, 1,2-Dichloropropane	UJ	The recoveries for WG816421-LCS were below the control limit.
RB2-48	L789249-07	EPA 8260B	1,4-Dichlorobenzene, 1,2-Dichloropropane	UJ	The recoveries for WG816421-LCS were below the control limit.
RB3-12	L789249-08	EPA 8260B	1,4-Dichlorobenzene, 1,2-Dichloropropane	UJ	The recoveries for WG816421-LCS were below the control limit.
RB4-48	L789249-09	EPA 8260B	1,4-Dichlorobenzene, 1,2-Dichloropropane	UJ	The recoveries for WG816421-LCS were below the control limit.
RB4-24	L789249-10	EPA 8260B	1,4-Dichlorobenzene, 1,2-Dichloropropane	UJ	The recoveries for WG816421-LCS were below the control limit.
RB5-48	L789249-11	EPA 8260B	1,4-Dichlorobenzene, 1,2-Dichloropropane	UJ	The recoveries for WG816421-LCS were below the control limit.
RB5-24	L789249-12	EPA 8260B	1,4-Dichlorobenzene, 1,2-Dichloropropane	UJ	The recoveries for WG816421-LCS were below the control limit.
RB6-SW	L789249-13	EPA 8260B	1,4-Dichlorobenzene, 1,2-Dichloropropane	UJ	The recoveries for WG816421-LCS were below the control limit.
RB6-48	L789249-14	EPA 8260B	1,4-Dichlorobenzene, 1,2-Dichloropropane	UJ	The recoveries for WG816421-LCS were below the control limit.
RB6-24	L789249-15	EPA 8260B	1,4-Dichlorobenzene, 1,2-Dichloropropane	UJ	The recoveries for WG816421-LCS were below the control limit.
RB0-42	L789249-03	EPA 8260B	Acrolein, 1,1,2-Trichlorotrifluoroethane	UJ	The RPD for WG816421-LCS/LCSD was above the control limit.
RB1-48	L789249-04	EPA 8260B	Acrolein, 1,1,2-Trichlorotrifluoroethane	UJ	The RPD for WG816421-LCS/LCSD was above the control limit.
RB1-24	L789249-05	EPA 8260B	Acrolein, 1,1,2-Trichlorotrifluoroethane	UJ	The RPD for WG816421-LCS/LCSD was above the control limit.
RB2-SW	L789249-06	EPA 8260B	Acrolein, 1,1,2-Trichlorotrifluoroethane	UJ	The RPD for WG816421-LCS/LCSD was above the control limit.
RB2-48	L789249-07	EPA 8260B	Acrolein, 1,1,2-Trichlorotrifluoroethane	UJ	The RPD for WG816421-LCS/LCSD was above the control limit.

Table 1
Data Validation Qualifier Summary
H&V Fiber Corporation
Corvallis, Oregon

Sample ID	Lab ID	Method	Analyte	Qualifier	Justification for Qualifier
RB3-12	L789249-08	EPA 8260B	Acrolein, 1,1,2-Trichlorotrifluoroethane	UJ	The RPD for WG816421-LCS/LCSD was above the control limit.
RB4-48	L789249-09	EPA 8260B	Acrolein, 1,1,2-Trichlorotrifluoroethane	UJ	The RPD for WG816421-LCS/LCSD was above the control limit.
RB4-24	L789249-10	EPA 8260B	Acrolein, 1,1,2-Trichlorotrifluoroethane	UJ	The RPD for WG816421-LCS/LCSD was above the control limit.
RB5-48	L789249-11	EPA 8260B	Acrolein, 1,1,2-Trichlorotrifluoroethane	UJ	The RPD for WG816421-LCS/LCSD was above the control limit.
RB5-24	L789249-12	EPA 8260B	Acrolein, 1,1,2-Trichlorotrifluoroethane	UJ	The RPD for WG816421-LCS/LCSD was above the control limit.
RB6-SW	L789249-13	EPA 8260B	Acrolein, 1,1,2-Trichlorotrifluoroethane	UJ	The RPD for WG816421-LCS/LCSD was above the control limit.
RB6-48	L789249-14	EPA 8260B	Acrolein, 1,1,2-Trichlorotrifluoroethane	UJ	The RPD for WG816421-LCS/LCSD was above the control limit.
RB6-24	L789249-15	EPA 8260B	Acrolein, 1,1,2-Trichlorotrifluoroethane	UJ	The RPD for WG816421-LCS/LCSD was above the control limit.
RB0-24	L789249-02	EPA 8260B	Acrolein	UJ	The RPD for WG817274-LCS/LCSD was above the control limit.

Notes:

UJ = The analyte was analyzed for, but not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

RPD = Relative Percent Difference

LCS/LCSD = Laboratory Control Sample/Laboratory Control Sample Duplicate

PNG ENVIRONMENTAL, INC.

MEMORANDUM

To: H&V Fiber Corporation (1122)

From: Crystal Jones

Date: September 29, 2015

Subject: Data Quality Review (SDG Number L789269)

INTRODUCTION

The following is a summary of a data quality review for water samples collected September 15th, 2015. Samples were collected as part of an investigation of the H&V Fiber Corporation (formerly Evanite Fiber Corporation) site by PNG Environmental, Inc. (PNG). Laboratory analyses were performed by ESC Lab Sciences (Mt. Juliet, Tennessee) in accordance with U.S. Environmental Protection Agency (USEPA) methods. A total of one water sample was submitted for analysis as one sample delivery group (SDG L789269). The samples were analyzed for volatile organic compounds (VOCs) by EPA Method 8260B. Analytical results reviewed were consistent with procedures presented in USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (USEPA 2008) and Inorganic Review (USEPA 2010), in addition to appropriate laboratory and method quality control criteria. See Table 1 at the end of this report for a summary of qualified data.

VOLATILE ORGANIC COMPOUNDS IN WATER BY EPA 8260B

Completeness

All samples were analyzed as requested.

Holding Times

All samples were analyzed within the method-specified holding time criteria (14 days).

Method Blanks

Method blank analyses were conducted at the required frequency for all analyses. No target analytes were detected in the method blanks above the reported detection limit (RDL).

Surrogate Compounds

Surrogate recoveries for all samples were within control limits.

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Laboratory Control Samples/Laboratory Control Sample Duplicates

Percent recoveries for all laboratory control samples (LCS) were within control limits, with the exception of the recoveries for 1,4-Dichlorobenzene (80.7 percent) and 1,2-Dichloropropane (73.8 percent) for quality control (QC) sample WG816421-LCS. No detections were reported in related site samples. Results were qualified (UJ) estimated (see Table 1).

Relative percent difference (RPD) results for all laboratory control sample/laboratory control sample duplicate (LCS/LCSD) pairs were within control limits, with the exception of Acrolein (26.1 percent) and 1,1,2-Trichlorotrifluoroethane (21.4 percent) for QC sample WG816421-LCS/LCSD. No detections were reported in related site samples. Results were qualified (UJ) estimated (see Table 1).

Matrix Spike/Matrix Spike Duplicate Samples

Percent recoveries for all matrix spike (MS) samples were within control limits, with the exception of the following:

- The Acrolein recoveries for QC sample WG816421-MS/MSD (L789269-01) (1110 percent/1220 percent) were above the control limit. This sample was from the Evanite site. No detections were reported in related site samples. Results were qualified (UJ) estimated (see Table 1).
- The 2-Chloroethyl vinyl ether recovery for QC sample WG816421-MSD (L789269-01) (2.67 percent) was below the control limit. This sample was from the Evanite site. No detections were reported in related site samples. Results were qualified (UJ) estimated (see Table 1).

RPD results for all matrix spike/matrix spike duplicate (MS/MSD) pairs were within control limits, with the exception of 2-Chloroethyl vinyl ether (62.8 percent) for QC sample WG816421-MS/MSD (L789269-01). This sample was from the Evanite site. No detections were reported in related site samples. Results were qualified (UJ) estimated (see Table 1).

Laboratory Flags

The laboratory flagged some analytes with a J, indicating that the reported detection was below the RDL and above the method detection limit (MDL). Result should be considered an estimate.

Summary

Select results were qualified (see Table 1).

REFERENCES

USEPA, 2008*, USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review*, Office of Superfund Remediation and Technology Innovation, United States Environmental Protection Agency, USEPA 540-R-08-01, June.

USEPA, 2010, *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review*, Office of Superfund Remediation and Technology Innovation, United States Environmental Protection Agency, USEPA-540-R-10-011, January.

Table 1
Data Validation Qualifier Summary
H&V Fiber Corporation
Corvallis, Oregon

Sample ID	Lab ID	Method	Analyte	Qualifier	Justification for Qualifier
IMW-33	L789269-01	EPA 8260B	1,4-Dichlorobenzene, 1,2-Dichloropropane	UJ	The recoveries for WG816421-LCS were below the control limit.
IMW-33	L789269-01	EPA 8260B	Acrolein, 1,1,2-Trichlorotrifluoroethane	UJ	The RPD for WG816421-LCS/LCSD was above the control limit.
IMW-33	L789269-01	EPA 8260B	Acrolein	UJ	The recoveries for WG816421-MS/MSD were above the control limit.
IMW-33	L789269-01	EPA 8260B	2-Chloroethyl vinyl ether	UJ	The recovery for WG816421-MSD was below the control limit.
IMW-33	L789269-01	EPA 8260B	2-Chloroethyl vinyl ether	UJ	The RPD for WG816421-MS/MSD was above the control limit.

Notes:

UJ = The analyte was analyzed for, but not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

RPD = Relative Percent Difference

LCS/LCSD = Laboratory Control Sample/Laboratory Control Sample Duplicate

PNG ENVIRONMENTAL, INC.

MEMORANDUM

To: H&V Fiber Corporation (1122)

From: Crystal Jones

Date: January 26, 2016

Subject: Data Quality Review (SDG Number L805690)

INTRODUCTION

The following is a summary of a data quality review for soil and water samples collected November 30th through December 4th, 2015. Samples were collected as part of an investigation of the H&V Fiber Corporation (formerly Evanite Fiber Corporation) site by PNG Environmental, Inc. (PNG). Laboratory analyses were performed by ESC Lab Sciences (Mt. Juliet, Tennessee) in accordance with U.S. Environmental Protection Agency (USEPA) methods. A total of nineteen soil and two water samples were submitted for analysis as one sample delivery group (SDG L805690). The samples were analyzed for volatile organic compounds (VOCs) by EPA Method 8260B. Analytical results reviewed were consistent with procedures presented in USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (USEPA 2008), in addition to appropriate laboratory and method quality control criteria. See Table 1 at the end of this report for a summary of qualified data.

VOLATILE ORGANIC COMPOUNDS IN WATER BY EPA 8260B

Completeness

All samples were analyzed as requested.

Holding Times

All samples were analyzed within the method-specified holding time criteria (14 days).

Method Blanks

Method blank analyses were conducted at the required frequency for all analyses. No target analytes were detected in the method blanks above the reported detection limit (RDL).

Surrogate Compounds

Surrogate recoveries for all samples were within control limits.

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Laboratory Control Samples/Laboratory Control Sample Duplicates

Percent recoveries for all laboratory control samples (LCS) were within control limits, with the exception of the following:

- The recoveries for 2-Chloroethyl vinyl ether (169 percent/181 percent) for quality control (QC) sample WG835314-LCS/LCSD were above the control limit. No detections were reported in related site samples. No results were qualified.
- The recovery for Dibromomethane (120 percent) for QC sample WG835314-LCSD was above the control limit. No detections were reported in related site samples. No results were qualified.
- The recovery for 2-Chloroethyl vinyl ether (164 percent) for QC sample WG836587-LCS was above the control limit. No detections were reported in related site samples. No results were qualified.

Relative percent difference (RPD) results for all laboratory control sample/laboratory control sample duplicate (LCS/LCSD) pairs were within control limits.

Matrix Spike/Matrix Spike Duplicate Samples

Percent recoveries for all matrix spike (MS) samples were within control limits, with the following exceptions:

- The recoveries for 2-Chloroethyl vinyl ether (168 percent/154 percent) for QC sample WG835314-MS/MSD (L806497-04) were above the control limit. This sample was not from the Evanite site. No results were qualified.
- The recovery for 2-Chloroethyl vinyl ether (2.4 percent) for QC sample WG836587-MSD (L806551-07) was below the control limit. This sample was not from the Evanite site. No results were qualified.

RPD results for all matrix spike/matrix spike duplicate (MS/MSD) pairs were within control limits, with the exception of 2-Chloroethyl vinyl ether (137 percent) for QC sample WG836587-MS/MSD (L806551-07). This RPD was above the control limit. This sample was not from the Evanite site. No results were qualified.

Summary

No results were qualified.

VOLATILE ORGANIC COMPOUNDS IN SOIL BY EPA 8260B

Completeness

All samples were analyzed as requested.

Holding Times

All samples were analyzed within the method-specified holding time criteria (14 days).

Method Blanks

Method blank analyses were conducted at the required frequency for all analyses. No target analytes were detected in the method blanks above the RDL.

Surrogate Compounds

Surrogate recoveries for all samples were within control limits, with the following exceptions:

- The recoveries for Toluene-d8 (83.1 percent) and a,a,a-Trifluorotoluene (86.4 percent) for sample DMW-30/18.5 (L805690-07) were slightly below the control limit. The remaining two surrogates were within control limits. No results were qualified.
- The recovery for a,a,a-Trifluorotoluene (86.2 percent) for sample DMW-30/46 (L805690-10) was slightly below the control limit. The remaining three surrogates were within control limits. No results were qualified.
- The recoveries for Toluene-d8 (817 percent) and a,a,a-Trifluorotoluene (703 percent) for sample DMW-41/42.5 (L805690-13) were above the control limit. The two remaining surrogates were within control limits. No results were qualified.
- The recoveries for Toluene-d8 (311 percent) and a,a,a-Trifluorotoluene (269 percent) for sample DMW-41/45 (L805690-14) were above the control limit. The two remaining surrogates were within control limits. No results were qualified.
- The recovery for Toluene-d8 (131 percent) for sample DMW-42/35.5 (L805690-16) was above the control limit. The three remaining surrogates were within limits. No results were qualified.
- The recovery for a,a,a-Trifluorotoluene (84 percent) for sample DMW-42/40 (L805690-18) was below the control limit. The remaining three surrogates were within control limits. No results were qualified.

Laboratory Control Samples/Laboratory Control Sample Duplicates

Percent recoveries for all laboratory control samples (LCS) were within control limits, with the exception of the following:

- The recoveries for 2-Chloroethyl vinyl ether (670 percent/564 percent) for QC sample WG834880-LCS/LCSD were above the control limit. No detections were reported in related site samples. No results were qualified.
- The recovery for 1,1-Dichloroethene (134 percent) for QC sample WG835371-laboratory control sample duplicate (LCSD) was above the control limit. No detections were reported in related site samples. No results were qualified.

Relative percent difference (RPD) results for all LCS/LCSD pairs were within control limits.

Matrix Spike/Matrix Spike Duplicate Samples

Percent recoveries for all matrix spike (MS) samples were within control limits, with the following exceptions:

- The recoveries for 2-Chloroethyl vinyl ether (485 percent/451 percent) for QC sample WG834880-MS/MSD (L805680-02) were above the control limit. This sample was not from the Evanite site. No results were qualified.
- Multiple recoveries for QC sample WG835371-MS/MSD (L806591-01) were below the control limit. This sample was not from the Evanite site. No results were qualified.

RPD results for all matrix spike/matrix spike duplicate (MS/MSD) pairs were within control limits, with the exception of 1,1,2-Trichlorotrifluoroethane (31.1 percent) for QC sample WG835371-MS/MSD (L806591-01). This RPD was above the control limit. This sample was not from the Evanite site. No results were qualified.

Laboratory Flags

The laboratory flagged toluene results and Toluene-d8 and a,a,a-Trifluorotoluene surrogate recoveries for samples DMW-41/42.5 (L805690-13) and DMW-41/45 (L805690-14). The internal standard exhibited poor recovery due to sample matrix interference. Results are biased high. Toluene detections were qualified (J) estimated (see Table 1).

Summary

Select results were qualified (see Table 1).

REFERENCES

USEPA, 2008*, USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review*, Office of Superfund Remediation and Technology Innovation, United States Environmental Protection Agency, USEPA 540-R-08-01, June.

Table 1
Data Validation Qualifier Summary
H&V Fiber Corporation
Corvallis, Oregon

Sample ID	Lab ID	Method	Analyte	Qualifier	Justification for Qualifier
DMW-41/42.5	L805690-13	EPA 8260B	Toluene	J	The internal standard recovery was below control limits.

Notes:

J = The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

PNG ENVIRONMENTAL, INC.

MEMORANDUM

To: H&V Fiber Corporation (1122)

From: Crystal Jones

Date: March 31, 2016

Subject: Data Quality Review (SDG Number L807433)

INTRODUCTION

The following is a summary of a data quality review for water samples collected December 14th through 16th, 2015. Samples were collected as part of an investigation of the H&V Fiber Corporation (formerly Evanite Fiber Corporation) site by PNG Environmental, Inc. (PNG). Laboratory analyses were performed by ESC Lab Sciences (Mt. Juliet, Tennessee) in accordance with U.S. Environmental Protection Agency (USEPA) methods. A total of twenty-three water samples, including one trip blank and one field duplicate, were submitted for analysis as one sample delivery group (SDG L807433). The samples were analyzed for ammonia nitrogen by EPA Method 350.1; nitrate and sulfate by EPA method 9056MOD; total organic carbon (TOC) by EPA Method 9060A; dissolved iron and manganese by EPA Method 6010B; methane, ethane, and ethene by Method RSK175; and volatile organic compounds (VOCs) by EPA Method 8260B. Analytical results reviewed were consistent with procedures presented in USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (USEPA 2008) and Inorganic Data (USEPA 2010), in addition to appropriate laboratory and method quality control criteria.

AMMONIA NITROGEN IN WATER BY EPA 350.1

Completeness

All samples were analyzed as requested.

Holding Times

All samples were analyzed within the method-specified holding time criteria (28 days).

Method Blanks

Method blank analyses were conducted at the required frequency for all analyses. No target analytes were detected in the method blanks above the reported detection limit (RDL).

Laboratory Control Samples/Laboratory Control Sample Duplicates

Percent recoveries for all laboratory control samples (LCS) were within control limits (90-110 percent).

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Relative percent difference (RPD) results for all laboratory control sample/laboratory control sample duplicate (LCS/LCSD) pairs were within control limits (20 percent).

Laboratory Duplicate Samples

RPD results for all laboratory duplicates were within control limits (20 percent).

Matrix Spike/Matrix Spike Duplicate Samples

Percent recoveries for all matrix spike (MS) samples were within control limits (90-110 percent), with the exception of the recoveries for QC sample WG837955-MS/MSD (L807447-08) (0/0 percent). This sample was not from the Evanite site. No results were qualified.

RPD results for all matrix spike/matrix spike duplicate (MS/MSD) pairs were within control limits (20 percent).

Summary

No results were qualified.

NITRATE AND SULFATE IN WATER BY EPA 9056MOD

Completeness

All samples were analyzed as requested.

Holding Times

All samples were analyzed within the method-specified holding time criteria (48 hours for nitrate/28 days for sulfate).

Method Blanks

Method blank analyses were conducted at the required frequency for all analyses. No target analytes were detected in the method blanks above the RDL.

Laboratory Control Samples/Laboratory Control Sample Duplicates

Percent recoveries for all LCS were within control limits (80-120 percent).

RPD results for all LCS/LCSD pairs were within control limits (15 percent).

Laboratory Duplicate Samples

RPD results for all laboratory duplicates were within control limits (15 percent).

Matrix Spike/Matrix Spike Duplicate Samples

Percent recoveries for all MS samples were within control limits (80-120 percent).

RPD results for all MS/MSD pairs were within control limits (15 percent).

Summary

No results were qualified.

TOTAL ORGANIC CARBON IN WATER BY EPA 9060A

Completeness

All samples were analyzed as requested.

Holding Times

All samples were analyzed within the method-specified holding time criteria (28 days).

Method Blanks

Method blank analyses were conducted at the required frequency for all analyses. No target analytes were detected in the method blanks above the RDL.

Laboratory Control Samples/Laboratory Control Sample Duplicates

Percent recoveries for all LCS were within control limits (85-115 percent).

RPD results for all LCS/LCSD pairs were within control limits (20 percent).

Laboratory Duplicate Samples

RPD results for all laboratory duplicates were within control limits (20 percent).

Matrix Spike/Matrix Spike Duplicate Samples

Percent recoveries for all MS samples were within control limits (80-120 percent).

RPD results for all MS/MSD pairs were within control limits (20 percent).

Summary

No results were qualified.

DISSOLVED IRON AND MANGANESE BY EPA 6010B

Completeness

All samples were analyzed as requested.

Holding Times

All samples were analyzed within the method-specified holding time criteria (128 days).

Method Blanks

Method blank analyses were conducted at the required frequency for all analyses. No target analytes were detected in the method blanks above the RDL.

Laboratory Control Samples/Laboratory Control Sample Duplicates

Percent recoveries for all LCS were within control limits (80-120 percent).

RPD results for all LCS/LCSD pairs were within control limits (20 percent).

Matrix Spike/Matrix Spike Duplicate Samples

Percent recoveries for all MS samples were within control limits (75-125 percent).

RPD results for all MS/MSD pairs were within control limits (20 percent).

Summary

No results were qualified.

METHANE, ETHANE, AND ETHENE BY RSK 175

Completeness

All samples were analyzed as requested.

Holding Times

All samples were analyzed within the method-specified holding time criteria (14 days).

Method Blanks

Method blank analyses were conducted at the required frequency for all analyses. No target analytes were detected in the method blanks above the RDL.

Laboratory Control Samples/Laboratory Control Sample Duplicates

Percent recoveries for all LCS were within control limits (85-115 percent).

RPD results for all LCS/LCSD pairs were within control limits (20 percent).

Summary

No results were qualified.

VOLATILE ORGANIC COMPOUNDS IN WATER BY EPA 8260B

Completeness

All samples were analyzed as requested.

Holding Times

All samples were analyzed within the method-specified holding time criteria (14 days).

Method Blanks

Method blank analyses were conducted at the required frequency for all analyses. No target analytes were detected in the method blanks above the RDL.

Surrogate Compounds

Surrogate recoveries for all samples were within control limits, with the exception of the Toluene-d8 recovery for samples DMW-24 (L807433-04) (87.1 percent), DMW-28 (L807433-11) (83.6 percent), DMW-16 (L807433-13) (83.2 percent) and DMW-41 (L807433-21) (84.3 percent). These recoveries were slightly below the control limit. The two remaining surrogates were within control limits. No results were qualified.

Laboratory Control Samples/Laboratory Control Sample Duplicates

Percent recoveries for all LCS were within control limits.

RPD results for all LCS/LCSD pairs were within control limits.

Matrix Spike/Matrix Spike Duplicate Samples

Percent recoveries for all MS samples were within control limits.

RPD results for all MS/MSD pairs were within control limits.

Trip Blanks

One trip blank was submitted with this SDG. No detections were reported.

Field Duplicates

One field duplicate was submitted with this SDG. RPD results for all detected compounds were within control limits (50 percent).

Summary

No results were qualified.

REFERENCES

USEPA, 2008*, USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review*, Office of Superfund Remediation and Technology Innovation, United States Environmental Protection Agency, USEPA 540-R-08-01, June.

USEPA, 2010, *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review*, Office of Superfund Remediation and Technology Innovation, United States Environmental Protection Agency, USEPA-540-R-10-011, January.

PNG ENVIRONMENTAL, INC.

MEMORANDUM

To: H&V Fiber Corporation (1122)

From: Crystal Jones

Date: August 4, 2015

Subject: Data Quality Review (SDG Number P2167)

INTRODUCTION

The following is a summary of a data quality review for vapor samples collected May 22nd, 2015. Samples were collected as part of an investigation of the H&V Fiber Corporation (formerly Evanite Fiber Corporation) site by PNG Environmental, Inc. (PNG). Laboratory analyses were performed by CH2M Hill Applied Sciences Laboratory (Corvallis, Oregon) in accordance with U.S. Environmental Protection Agency (USEPA) methods. A total of seven vapor samples were submitted for analysis as one sample delivery group (SDG P2167). The samples were analyzed for volatile organic compounds (VOCs) by EPA Methods TO-15 SIM. Analytical results reviewed were consistent with procedures presented in USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (USEPA 2008), in addition to appropriate laboratory and method quality control criteria.

VOLATILE ORGANIC COMPOUNDS IN VAPOR BY TO-15 SIM

Completeness

All samples were analyzed as requested.

Holding Times

All samples were analyzed within the method-specified holding time criteria (30 days).

Method Blanks

Method blank analyses were conducted at the required frequency for all analyses. No target analytes were detected in the method blanks above the practical quantitation limit (PQL).

Surrogate Compounds

Surrogate recoveries for all samples were within laboratory control limits (70-130 percent).

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Laboratory Control Samples

Percent recoveries for all laboratory control samples were within control limits (70-130 percent).

Sample Equipment Certifications

The flow controllers and summa canisters were analyzed to insure sampling equipment and containers were clean before site samples were collected. No detections above the PQL were reported.

Laboratory Flags

The laboratory flagged the following:

- All laboratory quality control samples were within established control limits, per the laboratory supplied case narrative.
- Results with reported detections between the PQL and detection limit (MDL) were flagged (J) estimated.

Summary

No results were qualified.

REFERENCES

USEPA, 2008*, USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review*, Office of Superfund Remediation and Technology Innovation, United States Environmental Protection Agency, USEPA 540-R-08-01, June.

GROUNDWATER DATA

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Paul McBeth
PNG Environmental
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Report Summary

Monday March 23, 2015

Report Number: L753667
Samples Received: 03/14/15
Client Project: 1122

Description: Evanite

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By: Jarred Willis

Jarred Willis , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197, FL - E87487, GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704/BIO041, ND - R-140. NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1, TX - T104704245-11-3, OK - 9915, PA - 68-02979, IA Lab #364, EPA - TN002

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

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REPORT OF ANALYSIS

Paul McBeth
PNG Environmental
6665 SW Hampton St., Suite 101
Tigard, OR 97223

March 23, 2015

ESC Sample # : L753667-01

Site ID :

Project # : 1122

Date Received : March 14, 2015
Description : Evanite

Sample ID : MILLRACE 1

Collected By : S. Biles
Collection Date : 03/10/15 15:00

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Volatile Organics								
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	03/20/15	1
cis-1,2-Dichloroethene	U	0.26	1.0	ug/l		8260B	03/20/15	1
trans-1,2-Dichloroethene	U	0.40	1.0	ug/l		8260B	03/20/15	1
Tetrachloroethene	U	0.37	1.0	ug/l		8260B	03/20/15	1
Trichloroethene	U	0.40	1.0	ug/l		8260B	03/20/15	1
Vinyl chloride	U	0.26	1.0	ug/l		8260B	03/20/15	1
Surrogate Recovery								
Toluene-d8	104.			% Rec.		8260B	03/20/15	1
Dibromofluoromethane	92.0			% Rec.		8260B	03/20/15	1
4-Bromofluorobenzene	101.			% Rec.		8260B	03/20/15	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
Note:
The reported analytical results relate only to the sample submitted.

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REPORT OF ANALYSIS

Paul McBeth
PNG Environmental
6665 SW Hampton St., Suite 101
Tigard, OR 97223

March 23, 2015

ESC Sample # : L753667-02

Date Received : March 14, 2015
Description : Evanite

Site ID :

Sample ID : MILLRACE 2

Project # : 1122

Collected By : S. Biles
Collection Date : 03/10/15 15:20

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Volatile Organics								
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	03/20/15	1
cis-1,2-Dichloroethene	U	0.26	1.0	ug/l		8260B	03/20/15	1
trans-1,2-Dichloroethene	U	0.40	1.0	ug/l		8260B	03/20/15	1
Tetrachloroethene	U	0.37	1.0	ug/l		8260B	03/20/15	1
Trichloroethene	U	0.40	1.0	ug/l		8260B	03/20/15	1
Vinyl chloride	U	0.26	1.0	ug/l		8260B	03/20/15	1
Surrogate Recovery								
Toluene-d8	105.			% Rec.		8260B	03/20/15	1
Dibromofluoromethane	92.8			% Rec.		8260B	03/20/15	1
4-Bromofluorobenzene	101.			% Rec.		8260B	03/20/15	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
Note:
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6665 SW Hampton St., Suite 101
Tigard, OR 97223

March 23, 2015

ESC Sample # : L753667-03

Site ID :

Project # : 1122

Date Received : March 14, 2015
Description : Evanite

Sample ID : DMW-28

Collected By : S. Biles
Collection Date : 03/11/15 09:55

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
TOC (Total Organic Carbon)	1700	100	1000	ug/l		9060A	03/22/15	1
Volatile Organics								
1,1-Dichloroethene	U	20.	50.	ug/l		8260B	03/20/15	50
cis-1,2-Dichloroethene	62.	13.	50.	ug/l		8260B	03/20/15	50
trans-1,2-Dichloroethene	U	20.	50.	ug/l		8260B	03/20/15	50
Tetrachloroethene	U	19.	50.	ug/l		8260B	03/20/15	50
Trichloroethene	1600	20.	50.	ug/l		8260B	03/20/15	50
Vinyl chloride	U	13.	50.	ug/l		8260B	03/20/15	50
Surrogate Recovery								
Toluene-d8	101.			% Rec.		8260B	03/20/15	1
Dibromofluoromethane	94.9			% Rec.		8260B	03/20/15	1
4-Bromofluorobenzene	100.			% Rec.		8260B	03/20/15	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
Note:
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REPORT OF ANALYSIS

Paul McBeth
PNG Environmental
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Tigard, OR 97223

March 23, 2015

ESC Sample # : L753667-04

Site ID :

Project # : 1122

Date Received : March 14, 2015
Description : Evanite

Sample ID : DMW-99

Collected By : S. Biles
Collection Date : 03/11/15 09:57

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Volatile Organics								
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	03/20/15	1
cis-1,2-Dichloroethene	35.	0.26	1.0	ug/l		8260B	03/20/15	1
trans-1,2-Dichloroethene	U	0.40	1.0	ug/l		8260B	03/20/15	1
Tetrachloroethene	0.93	0.37	1.0	ug/l	J	8260B	03/20/15	1
Trichloroethene	1500	20.	50.	ug/l		8260B	03/22/15	50
Vinyl chloride	U	0.26	1.0	ug/l		8260B	03/20/15	1
Surrogate Recovery								
Toluene-d8	85.6			% Rec.	J2	8260B	03/20/15	1
Dibromofluoromethane	92.6			% Rec.		8260B	03/20/15	1
4-Bromofluorobenzene	103.			% Rec.		8260B	03/20/15	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
Note:
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REPORT OF ANALYSIS

Paul McBeth
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Tigard, OR 97223

March 23, 2015

ESC Sample # : L753667-05

Site ID :

Project # : 1122

Date Received : March 14, 2015
Description : Evanite

Sample ID : IMW-28

Collected By : S. Biles
Collection Date : 03/11/15 10:24

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
TOC (Total Organic Carbon)	1100	100	1000	ug/l		9060A	03/22/15	1
Volatile Organics								
1,1-Dichloroethene	U	40.	100	ug/l		8260B	03/22/15	100
cis-1,2-Dichloroethene	1400	26.	100	ug/l		8260B	03/22/15	100
trans-1,2-Dichloroethene	U	40.	100	ug/l		8260B	03/22/15	100
Tetrachloroethene	U	37.	100	ug/l		8260B	03/22/15	100
Trichloroethene	8800	40.	100	ug/l		8260B	03/22/15	100
Vinyl chloride	U	26.	100	ug/l		8260B	03/22/15	100
Surrogate Recovery								
Toluene-d8	103.			% Rec.		8260B	03/22/15	1
Dibromofluoromethane	93.6			% Rec.		8260B	03/22/15	1
4-Bromofluorobenzene	96.3			% Rec.		8260B	03/22/15	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
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March 23, 2015

ESC Sample # : L753667-06

Site ID :

Project # : 1122

Date Received : March 14, 2015
Description : Evanite

Sample ID : IMW-30

Collected By : S. Biles
Collection Date : 03/11/15 11:42

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
TOC (Total Organic Carbon)	1900	100	1000	ug/l		9060A	03/22/15	1
Volatile Organics								
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	03/22/15	1
cis-1,2-Dichloroethene	50.	0.26	1.0	ug/l		8260B	03/22/15	1
trans-1,2-Dichloroethene	U	0.40	1.0	ug/l		8260B	03/22/15	1
Tetrachloroethene	U	0.37	1.0	ug/l		8260B	03/22/15	1
Trichloroethene	15.	0.40	1.0	ug/l		8260B	03/22/15	1
Vinyl chloride	2.0	0.26	1.0	ug/l		8260B	03/22/15	1
Surrogate Recovery								
Toluene-d8	104.			% Rec.		8260B	03/22/15	1
Dibromofluoromethane	96.4			% Rec.		8260B	03/22/15	1
4-Bromofluorobenzene	95.4			% Rec.		8260B	03/22/15	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
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REPORT OF ANALYSIS

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March 23, 2015

ESC Sample # : L753667-07

Site ID :

Project # : 1122

Date Received : March 14, 2015
Description : Evanite

Sample ID : IMW-31

Collected By : S. Biles
Collection Date : 03/11/15 12:22

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
TOC (Total Organic Carbon)	1600	100	1000	ug/l		9060A	03/22/15	1
Volatile Organics								
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	03/22/15	1
cis-1,2-Dichloroethene	36.	0.26	1.0	ug/l		8260B	03/22/15	1
trans-1,2-Dichloroethene	U	0.40	1.0	ug/l		8260B	03/22/15	1
Tetrachloroethene	U	0.37	1.0	ug/l		8260B	03/22/15	1
Trichloroethene	59.	0.40	1.0	ug/l		8260B	03/22/15	1
Vinyl chloride	1.4	0.26	1.0	ug/l		8260B	03/22/15	1
Surrogate Recovery								
Toluene-d8	103.			% Rec.		8260B	03/22/15	1
Dibromofluoromethane	96.1			% Rec.		8260B	03/22/15	1
4-Bromofluorobenzene	97.6			% Rec.		8260B	03/22/15	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
Note:
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March 23, 2015

ESC Sample # : L753667-08

Site ID :

Project # : 1122

Date Received : March 14, 2015
Description : Evanite

Sample ID : IMW-29

Collected By : S. Biles
Collection Date : 03/11/15 12:55

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
TOC (Total Organic Carbon)	980	100	1000	ug/l	J	9060A	03/22/15	1
Volatile Organics								
1,1-Dichloroethene	U	40.	100	ug/l		8260B	03/20/15	100
cis-1,2-Dichloroethene	75.	26.	100	ug/l	J	8260B	03/20/15	100
trans-1,2-Dichloroethene	U	40.	100	ug/l		8260B	03/20/15	100
Tetrachloroethene	U	37.	100	ug/l		8260B	03/20/15	100
Trichloroethene	1600	40.	100	ug/l		8260B	03/20/15	100
Vinyl chloride	U	26.	100	ug/l		8260B	03/20/15	100
Surrogate Recovery								
Toluene-d8	103.			% Rec.		8260B	03/20/15	1
Dibromofluoromethane	91.1			% Rec.		8260B	03/20/15	1
4-Bromofluorobenzene	103.			% Rec.		8260B	03/20/15	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
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Tigard, OR 97223

March 23, 2015

ESC Sample # : L753667-09

Site ID :

Project # : 1122

Date Received : March 14, 2015
Description : Evanite

Sample ID : DMW-24

Collected By : S. Biles
Collection Date : 03/11/15 13:30

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
TOC (Total Organic Carbon)	1500	100	1000	ug/l		9060A	03/22/15	1
Volatile Organics								
1,1-Dichloroethene	U	8.0	20.	ug/l		8260B	03/20/15	20
cis-1,2-Dichloroethene	200	5.2	20.	ug/l		8260B	03/20/15	20
trans-1,2-Dichloroethene	U	7.9	20.	ug/l		8260B	03/20/15	20
Tetrachloroethene	U	7.4	20.	ug/l		8260B	03/20/15	20
Trichloroethene	890	8.0	20.	ug/l		8260B	03/20/15	20
Vinyl chloride	U	5.2	20.	ug/l		8260B	03/20/15	20
Surrogate Recovery								
Toluene-d8	106.			% Rec.		8260B	03/20/15	1
Dibromofluoromethane	91.5			% Rec.		8260B	03/20/15	1
4-Bromofluorobenzene	102.			% Rec.		8260B	03/20/15	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
Note:
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Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L753667-04	WG775857	SAMP	Tetrachloroethene	R3025973	J
	WG775857	SAMP	Toluene-d8	R3025973	J2
L753667-08	WG775857	SAMP	cis-1,2-Dichloroethene	R3025973	J
	WG777028	SAMP	TOC (Total Organic Carbon)	R3026196	J

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J	(EPA) - Estimated value below the lowest calibration point. Confidence correlates with concentration.
J2	Surrogate recovery limits have been exceeded; values are outside lower control limits

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC.
Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods,it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable "unless qualified as 'R' (Rejected)."

Definitions

Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.

Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Differrence.

Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromotography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.

TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

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6665 SW Hampton St., Suite 101

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Quality Assurance Report
Level II

L753667

March 23, 2015

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
1,1-Dichloroethene	< .001	mg/l			WG775857	03/20/15 00:29
cis-1,2-Dichloroethene	< .001	mg/l			WG775857	03/20/15 00:29
Tetrachloroethene	< .001	mg/l			WG775857	03/20/15 00:29
trans-1,2-Dichloroethene	< .001	mg/l			WG775857	03/20/15 00:29
Trichloroethene	< .001	mg/l			WG775857	03/20/15 00:29
Vinyl chloride	< .001	mg/l			WG775857	03/20/15 00:29
4-Bromofluorobenzene		% Rec.	101.0	71-126	WG775857	03/20/15 00:29
Dibromofluoromethane		% Rec.	91.70	78.3-121	WG775857	03/20/15 00:29
Toluene-d8		% Rec.	105.0	88.5-111	WG775857	03/20/15 00:29
TOC (Total Organic Carbon)	< 1	mg/l			WG777028	03/22/15 01:51
1,1-Dichloroethene	< .001	mg/l			WG777249	03/22/15 10:11
cis-1,2-Dichloroethene	< .001	mg/l			WG777249	03/22/15 10:11
Tetrachloroethene	< .001	mg/l			WG777249	03/22/15 10:11
trans-1,2-Dichloroethene	< .001	mg/l			WG777249	03/22/15 10:11
Trichloroethene	< .001	mg/l			WG777249	03/22/15 10:11
Vinyl chloride	< .001	mg/l			WG777249	03/22/15 10:11
4-Bromofluorobenzene		% Rec.	98.20	71-126	WG777249	03/22/15 10:11
Dibromofluoromethane		% Rec.	94.60	78.3-121	WG777249	03/22/15 10:11
Toluene-d8		% Rec.	104.0	88.5-111	WG777249	03/22/15 10:11

Duplicate

Analyte	Units	Result	Duplicate	RPD	Limit	Ref Samp	Batch
TOC (Total Organic Carbon)	mg/l	12.0	11.0	5.31	20	L753093-02	WG777028
TOC (Total Organic Carbon)	mg/l	1.60	1.60	0.0	20	L753667-07	WG777028

Laboratory Control Sample

Analyte	Units	Known Val	Result	% Rec	Limit	Batch
1,1-Dichloroethene	mg/l	.025	0.0201	80.3	67.8-129	WG775857
cis-1,2-Dichloroethene	mg/l	.025	0.0226	90.3	76-119	WG775857
Tetrachloroethene	mg/l	.025	0.0260	104.	72.6-126	WG775857
trans-1,2-Dichloroethene	mg/l	.025	0.0246	98.5	72.6-121	WG775857
Trichloroethene	mg/l	.025	0.0235	94.1	77.7-118	WG775857
Vinyl chloride	mg/l	.025	0.0198	79.3	65.9-128	WG775857
4-Bromofluorobenzene				101.0	71-126	WG775857
Dibromofluoromethane				93.20	78.3-121	WG775857
Toluene-d8				106.0	88.5-111	WG775857
TOC (Total Organic Carbon)	mg/l	75	78.6	105.	85-115	WG777028
1,1-Dichloroethene	mg/l	.025	0.0241	96.3	67.8-129	WG777249
cis-1,2-Dichloroethene	mg/l	.025	0.0247	98.8	76-119	WG777249
Tetrachloroethene	mg/l	.025	0.0221	88.6	72.6-126	WG777249
trans-1,2-Dichloroethene	mg/l	.025	0.0241	96.3	72.6-121	WG777249
Trichloroethene	mg/l	.025	0.0239	95.4	77.7-118	WG777249
Vinyl chloride	mg/l	.025	0.0233	93.3	65.9-128	WG777249
4-Bromofluorobenzene				98.80	71-126	WG777249
Dibromofluoromethane				97.90	78.3-121	WG777249
Toluene-d8				106.0	88.5-111	WG777249

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Quality Assurance Report
Level II

L753667

March 23, 2015

Analyte	Units	Laboratory Control Sample Duplicate Result	Ref	%Rec	Limit	RPD	Limit	Batch
1,1-Dichloroethene	mg/l	0.0186	0.0201	74.0	67.8-129	7.52	20	WG775857
cis-1,2-Dichloroethene	mg/l	0.0215	0.0226	86.0	76-119	4.76	20	WG775857
Tetrachloroethene	mg/l	0.0232	0.0260	93.0	72.6-126	11.4	20	WG775857
trans-1,2-Dichloroethene	mg/l	0.0231	0.0246	92.0	72.6-121	6.21	20	WG775857
Trichloroethene	mg/l	0.0216	0.0235	86.0	77.7-118	8.49	20	WG775857
Vinyl chloride	mg/l	0.0181	0.0198	72.0	65.9-128	8.94	20	WG775857
4-Bromofluorobenzene				99.80	71-126			WG775857
Dibromofluoromethane				94.00	78.3-121			WG775857
Toluene-d8				103.0	88.5-111			WG775857
TOC (Total Organic Carbon)	mg/l	78.2	78.6	104.	85-115	0.434	20	WG777028
1,1-Dichloroethene	mg/l	0.0232	0.0241	93.0	67.8-129	3.81	20	WG777249
cis-1,2-Dichloroethene	mg/l	0.0231	0.0247	92.0	76-119	6.54	20	WG777249
Tetrachloroethene	mg/l	0.0199	0.0221	79.0	72.6-126	10.8	20	WG777249
trans-1,2-Dichloroethene	mg/l	0.0230	0.0241	92.0	72.6-121	4.71	20	WG777249
Trichloroethene	mg/l	0.0221	0.0239	88.0	77.7-118	7.64	20	WG777249
Vinyl chloride	mg/l	0.0240	0.0233	96.0	65.9-128	3.00	20	WG777249
4-Bromofluorobenzene				97.90	71-126			WG777249
Dibromofluoromethane				98.90	78.3-121			WG777249
Toluene-d8				106.0	88.5-111			WG777249

Analyte	Units	Matrix Spike MS Res	Ref Res	TV	% Rec	Limit	Ref Samp	Batch
1,1-Dichloroethene	mg/l	0.0192	0.0	.025	77.0	51.1-140	L753667-01	WG775857
cis-1,2-Dichloroethene	mg/l	0.0221	0.0	.025	88.0	59.2-129	L753667-01	WG775857
Tetrachloroethene	mg/l	0.0239	0.0	.025	96.0	53-139	L753667-01	WG775857
trans-1,2-Dichloroethene	mg/l	0.0236	0.0	.025	94.0	56.5-129	L753667-01	WG775857
Trichloroethene	mg/l	0.0225	0.0	.025	90.0	44.1-149	L753667-01	WG775857
Vinyl chloride	mg/l	0.0184	0.0	.025	74.0	47.8-137	L753667-01	WG775857
4-Bromofluorobenzene					99.60	71-126		WG775857
Dibromofluoromethane					95.40	78.3-121		WG775857
Toluene-d8					105.0	88.5-111		WG775857
TOC (Total Organic Carbon)	mg/l	66.9	17.0	50	100.	80-120	L753181-03	WG777028
1,1-Dichloroethene	mg/l	0.0296	0.00548	.025	96.0	51.1-140	L753136-08	WG777249
cis-1,2-Dichloroethene	mg/l	0.0273	0.00316	.025	97.0	59.2-129	L753136-08	WG777249
Tetrachloroethene	mg/l	0.0235	0.0	.025	94.0	53-139	L753136-08	WG777249
trans-1,2-Dichloroethene	mg/l	0.0251	0.0	.025	100.	56.5-129	L753136-08	WG777249
Trichloroethene	mg/l	0.0248	0.0	.025	99.0	44.1-149	L753136-08	WG777249
Vinyl chloride	mg/l	0.0269	0.00115	.025	100.	47.8-137	L753136-08	WG777249
4-Bromofluorobenzene					96.70	71-126		WG777249
Dibromofluoromethane					94.40	78.3-121		WG777249
Toluene-d8					105.0	88.5-111		WG777249

Analyte	Units	Matrix Spike Duplicate MSD	Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
1,1-Dichloroethene	mg/l	0.0194	0.0192	77.6	51.1-140	1.06	20.2	L753667-01	WG775857
cis-1,2-Dichloroethene	mg/l	0.0222	0.0221	89.0	59.2-129	0.600	20	L753667-01	WG775857
Tetrachloroethene	mg/l	0.0230	0.0239	92.0	53-139	3.76	20	L753667-01	WG775857
trans-1,2-Dichloroethene	mg/l	0.0245	0.0236	98.0	56.5-129	3.78	20	L753667-01	WG775857
Trichloroethene	mg/l	0.0233	0.0225	93.1	44.1-149	3.49	20	L753667-01	WG775857
Vinyl chloride	mg/l	0.0188	0.0184	75.3	47.8-137	2.21	20	L753667-01	WG775857

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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PNG Environmental
Paul McBeth
6665 SW Hampton St., Suite 101

Tigard, OR 97223

Quality Assurance Report
Level II

L753667

March 23, 2015

Analyte	Units	Matrix Spike MSD	Duplicate Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
4-Bromofluorobenzene				96.10	71-126				
Dibromofluoromethane				97.10	78.3-121				
Toluene-d8				104.0	88.5-111				
TOC (Total Organic Carbon)	mg/l	64.8	66.9	95.6	80-120	3.18	20	L753181-03	WG777028
1,1-Dichloroethene	mg/l	0.0284	0.0296	91.7	51.1-140	3.92	20.2	L753136-08	WG777249
cis-1,2-Dichloroethene	mg/l	0.0264	0.0273	93.2	59.2-129	3.16	20	L753136-08	WG777249
Tetrachloroethene	mg/l	0.0232	0.0235	92.7	53-139	1.28	20	L753136-08	WG777249
trans-1,2-Dichloroethene	mg/l	0.0246	0.0251	98.5	56.5-129	1.98	20	L753136-08	WG777249
Trichloroethene	mg/l	0.0246	0.0248	98.5	44.1-149	0.750	20	L753136-08	WG777249
Vinyl chloride	mg/l	0.0260	0.0269	99.2	47.8-137	3.66	20	L753136-08	WG777249
4-Bromofluorobenzene				99.30	71-126				WG777249
Dibromofluoromethane				93.60	78.3-121				WG777249
Toluene-d8				106.0	88.5-111				WG777249

Batch number /Run number / Sample number cross reference

WG775857: R3025973: L753667-01 02 03 04 08 09
WG777028: R3026196: L753667-03 05 06 07 08 09
WG777249: R3026218: L753667-04 05 06 07

* * Calculations are performed prior to rounding of reported values.
* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Tigard, OR 97223

Quality Assurance Report
Level II

L753667

March 23, 2015

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.

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Paul McBeth
PNG Environmental
6665 SW Hampton St., Suite 101
Tigard, OR 97223

Report Summary

Monday March 23, 2015

Report Number: L753670
Samples Received: 03/14/15
Client Project: 1122

Description: Evanite

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

Jarred Willis , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197, FL - E87487, GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704/BIO041, ND - R-140. NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1, TX - T104704245-11-3, OK - 9915, PA - 68-02979, IA Lab #364, EPA - TN002

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

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REPORT OF ANALYSIS

Paul McBeth
PNG Environmental
6665 SW Hampton St., Suite 101
Tigard, OR 97223

March 23, 2015

ESC Sample # : L753670-01

Site ID :

Project # : 1122

Date Received : March 14, 2015
Description : Evanite

Sample ID : DMW-3

Collected By : S. Biles
Collection Date : 03/09/15 14:25

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
TOC (Total Organic Carbon)	1400	100	1000	ug/l		9060A	03/22/15	1
Volatile Organics								
1,1-Dichloroethene	U	20.	50.	ug/l		8260B	03/20/15	50
cis-1,2-Dichloroethene	290	13.	50.	ug/l		8260B	03/20/15	50
trans-1,2-Dichloroethene	U	20.	50.	ug/l		8260B	03/20/15	50
Tetrachloroethene	U	19.	50.	ug/l		8260B	03/20/15	50
Trichloroethene	1600	20.	50.	ug/l		8260B	03/20/15	50
Vinyl chloride	U	13.	50.	ug/l		8260B	03/20/15	50
Surrogate Recovery								
Toluene-d8	103.			% Rec.		8260B	03/20/15	1
Dibromofluoromethane	90.3			% Rec.		8260B	03/20/15	1
4-Bromofluorobenzene	102.			% Rec.		8260B	03/20/15	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
Note:
The reported analytical results relate only to the sample submitted.

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REPORT OF ANALYSIS

Paul McBeth
PNG Environmental
6665 SW Hampton St., Suite 101
Tigard, OR 97223

March 23, 2015

ESC Sample # : L753670-02

Site ID :

Project # : 1122

Date Received : March 14, 2015
Description : Evanite

Sample ID : DMW-29

Collected By : S. Biles
Collection Date : 03/09/15 15:00

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
TOC (Total Organic Carbon)	1200	100	1000	ug/l		9060A	03/22/15	1
Volatile Organics								
1,1-Dichloroethene	U	2.0	5.0	ug/l		8260B	03/20/15	5
cis-1,2-Dichloroethene	75.	1.3	5.0	ug/l		8260B	03/20/15	5
trans-1,2-Dichloroethene	U	2.0	5.0	ug/l		8260B	03/20/15	5
Tetrachloroethene	U	1.9	5.0	ug/l		8260B	03/20/15	5
Trichloroethene	630	2.0	5.0	ug/l		8260B	03/20/15	5
Vinyl chloride	U	1.3	5.0	ug/l		8260B	03/20/15	5
Surrogate Recovery								
Toluene-d8	103.			% Rec.		8260B	03/20/15	1
Dibromofluoromethane	93.1			% Rec.		8260B	03/20/15	1
4-Bromofluorobenzene	101.			% Rec.		8260B	03/20/15	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
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REPORT OF ANALYSIS

Paul McBeth
PNG Environmental
6665 SW Hampton St., Suite 101
Tigard, OR 97223

March 23, 2015

ESC Sample # : L753670-03

Date Received : March 14, 2015
Description : Evanite

Site ID :

Sample ID : DMW-2

Project # : 1122

Collected By : S. Biles
Collection Date : 03/09/15 15:12

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Volatile Organics								
1,1-Dichloroethene	U	2.0	5.0	ug/l		8260B	03/20/15	5
cis-1,2-Dichloroethene	100	1.3	5.0	ug/l		8260B	03/20/15	5
trans-1,2-Dichloroethene	U	2.0	5.0	ug/l		8260B	03/20/15	5
Tetrachloroethene	U	1.9	5.0	ug/l		8260B	03/20/15	5
Trichloroethene	300	2.0	5.0	ug/l		8260B	03/20/15	5
Vinyl chloride	2.1	1.3	5.0	ug/l	J	8260B	03/20/15	5
Surrogate Recovery								
Toluene-d8	103.			% Rec.		8260B	03/20/15	1
Dibromofluoromethane	95.0			% Rec.		8260B	03/20/15	1
4-Bromofluorobenzene	102.			% Rec.		8260B	03/20/15	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
Note:
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REPORT OF ANALYSIS

Paul McBeth
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March 23, 2015

ESC Sample # : L753670-04

Site ID :

Project # : 1122

Date Received : March 14, 2015
Description : Evanite

Sample ID : DMW-23

Collected By : S. Biles
Collection Date : 03/09/15 15:33

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
TOC (Total Organic Carbon)	1100	100	1000	ug/l		9060A	03/22/15	1
Volatile Organics								
1,1-Dichloroethene	U	80.	200	ug/l		8260B	03/20/15	200
cis-1,2-Dichloroethene	340	52.	200	ug/l		8260B	03/20/15	200
trans-1,2-Dichloroethene	U	79.	200	ug/l		8260B	03/20/15	200
Tetrachloroethene	U	74.	200	ug/l		8260B	03/20/15	200
Trichloroethene	12000	80.	200	ug/l		8260B	03/20/15	200
Vinyl chloride	U	52.	200	ug/l		8260B	03/20/15	200
Surrogate Recovery								
Toluene-d8	102.			% Rec.		8260B	03/20/15	1
Dibromofluoromethane	92.6			% Rec.		8260B	03/20/15	1
4-Bromofluorobenzene	102.			% Rec.		8260B	03/20/15	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
Note:
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REPORT OF ANALYSIS

Paul McBeth
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March 23, 2015

ESC Sample # : L753670-05

Site ID :

Project # : 1122

Date Received : March 14, 2015
Description : Evanite

Sample ID : DMW-17

Collected By : S. Biles
Collection Date : 03/10/15 10:25

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
TOC (Total Organic Carbon)	1800	100	1000	ug/l		9060A	03/22/15	1
Volatile Organics								
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	03/20/15	1
cis-1,2-Dichloroethene	110	0.26	1.0	ug/l		8260B	03/20/15	1
trans-1,2-Dichloroethene	0.81	0.40	1.0	ug/l	J	8260B	03/20/15	1
Tetrachloroethene	U	0.37	1.0	ug/l		8260B	03/20/15	1
Trichloroethene	3.7	0.40	1.0	ug/l		8260B	03/20/15	1
Vinyl chloride	5.8	0.26	1.0	ug/l		8260B	03/20/15	1
Surrogate Recovery								
Toluene-d8	106.			% Rec.		8260B	03/20/15	1
Dibromofluoromethane	94.0			% Rec.		8260B	03/20/15	1
4-Bromofluorobenzene	103.			% Rec.		8260B	03/20/15	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
Note:
The reported analytical results relate only to the sample submitted.

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REPORT OF ANALYSIS

Paul McBeth
PNG Environmental
6665 SW Hampton St., Suite 101
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March 23, 2015

ESC Sample # : L753670-06

Date Received : March 14, 2015
Description : Evanite

Site ID :

Sample ID : IMW-17

Project # : 1122

Collected By : S. Biles
Collection Date : 03/10/15 11:55

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
TOC (Total Organic Carbon)	1100	100	1000	ug/l		9060A	03/22/15	1
Volatile Organics								
1,1-Dichloroethene	U	10.	25.	ug/l		8260B	03/20/15	25
cis-1,2-Dichloroethene	240	6.5	25.	ug/l		8260B	03/20/15	25
trans-1,2-Dichloroethene	U	9.9	25.	ug/l		8260B	03/20/15	25
Tetrachloroethene	U	9.3	25.	ug/l		8260B	03/20/15	25
Trichloroethene	57.	10.	25.	ug/l		8260B	03/20/15	25
Vinyl chloride	U	6.5	25.	ug/l		8260B	03/20/15	25
Surrogate Recovery								
Toluene-d8	106.			% Rec.		8260B	03/20/15	1
Dibromofluoromethane	93.1			% Rec.		8260B	03/20/15	1
4-Bromofluorobenzene	102.			% Rec.		8260B	03/20/15	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
Note:
The reported analytical results relate only to the sample submitted.

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Reported: 03/23/15 22:29 Printed: 03/23/15 22:30

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REPORT OF ANALYSIS

Paul McBeth
PNG Environmental
6665 SW Hampton St., Suite 101
Tigard, OR 97223

March 23, 2015

ESC Sample # : L753670-07

Site ID :

Project # : 1122

Date Received : March 14, 2015
Description : Evanite

Sample ID : IMW-24

Collected By : S. Biles
Collection Date : 03/10/15 12:33

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
TOC (Total Organic Carbon)	1700	100	1000	ug/l		9060A	03/22/15	1
Volatile Organics								
1,1-Dichloroethene	U	4.0	10.	ug/l		8260B	03/20/15	10
cis-1,2-Dichloroethene	350	2.6	10.	ug/l		8260B	03/20/15	10
trans-1,2-Dichloroethene	U	4.0	10.	ug/l		8260B	03/20/15	10
Tetrachloroethene	U	3.7	10.	ug/l		8260B	03/20/15	10
Trichloroethene	1600	4.0	10.	ug/l		8260B	03/20/15	10
Vinyl chloride	20.	2.6	10.	ug/l		8260B	03/20/15	10
Surrogate Recovery								
Toluene-d8	103.			% Rec.		8260B	03/20/15	1
Dibromofluoromethane	97.9			% Rec.		8260B	03/20/15	1
4-Bromofluorobenzene	103.			% Rec.		8260B	03/20/15	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
Note:
The reported analytical results relate only to the sample submitted.

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REPORT OF ANALYSIS

Paul McBeth
PNG Environmental
6665 SW Hampton St., Suite 101
Tigard, OR 97223

March 23, 2015

ESC Sample # : L753670-08

Site ID :

Project # : 1122

Date Received : March 14, 2015
Description : Evanite

Sample ID : DMW-25

Collected By : S. Biles
Collection Date : 03/10/15 14:15

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Volatile Organics								
1,1-Dichloroethene	U	2.0	5.0	ug/l		8260B	03/23/15	5
cis-1,2-Dichloroethene	66.	1.3	5.0	ug/l		8260B	03/23/15	5
trans-1,2-Dichloroethene	U	2.0	5.0	ug/l		8260B	03/23/15	5
Tetrachloroethene	U	1.9	5.0	ug/l		8260B	03/23/15	5
Trichloroethene	360	2.0	5.0	ug/l		8260B	03/23/15	5
Vinyl chloride	U	1.3	5.0	ug/l		8260B	03/23/15	5
Surrogate Recovery								
Toluene-d8	91.1			% Rec.		8260B	03/23/15	1
Dibromofluoromethane	98.4			% Rec.		8260B	03/23/15	1
4-Bromofluorobenzene	98.1			% Rec.		8260B	03/23/15	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
Note:
The reported analytical results relate only to the sample submitted.

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REPORT OF ANALYSIS

Paul McBeth
PNG Environmental
6665 SW Hampton St., Suite 101
Tigard, OR 97223

March 23, 2015

ESC Sample # : L753670-09

Site ID :

Project # : 1122

Date Received : March 14, 2015
Description : Evanite

Sample ID : IMW-25

Collected By : S. Biles
Collection Date : 03/09/15 14:40

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Volatile Organics								
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	03/20/15	1
cis-1,2-Dichloroethene	200	52.	200	ug/l		8260B	03/23/15	200
trans-1,2-Dichloroethene	1.2	0.40	1.0	ug/l		8260B	03/20/15	1
Tetrachloroethene	U	0.37	1.0	ug/l		8260B	03/20/15	1
Trichloroethene	3900	80.	200	ug/l		8260B	03/23/15	200
Vinyl chloride	0.86	0.26	1.0	ug/l	J	8260B	03/20/15	1
Surrogate Recovery								
Toluene-d8	68.2			% Rec.	J2	8260B	03/20/15	1
Dibromofluoromethane	105.			% Rec.		8260B	03/20/15	1
4-Bromofluorobenzene	99.5			% Rec.		8260B	03/20/15	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
Note:
The reported analytical results relate only to the sample submitted.

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Reported: 03/23/15 22:29 Printed: 03/23/15 22:30

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L753670-03	WG775857	SAMP	Vinyl chloride	R3025973	J
L753670-05	WG775857	SAMP	trans-1,2-Dichloroethene	R3025973	J
L753670-09	WG775860	SAMP	Vinyl chloride	R3026374	J
	WG775860	SAMP	Toluene-d8	R3026374	J2

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J	(EPA) - Estimated value below the lowest calibration point. Confidence correlates with concentration.
J2	Surrogate recovery limits have been exceeded; values are outside lower control limits

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods,it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable "unless qualified as 'R' (Rejected)."

Definitions

Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.

Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Differrence.

Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromotography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.

TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

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Quality Assurance Report
Level II

L753670

March 23, 2015

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
1,1-Dichloroethene	< .001	mg/l			WG775857	03/20/15 00:29
cis-1,2-Dichloroethene	< .001	mg/l			WG775857	03/20/15 00:29
Tetrachloroethene	< .001	mg/l			WG775857	03/20/15 00:29
trans-1,2-Dichloroethene	< .001	mg/l			WG775857	03/20/15 00:29
Trichloroethene	< .001	mg/l			WG775857	03/20/15 00:29
Vinyl chloride	< .001	mg/l			WG775857	03/20/15 00:29
4-Bromofluorobenzene		% Rec.	101.0	71-126	WG775857	03/20/15 00:29
Dibromofluoromethane		% Rec.	91.70	78.3-121	WG775857	03/20/15 00:29
Toluene-d8		% Rec.	105.0	88.5-111	WG775857	03/20/15 00:29
TOC (Total Organic Carbon)	< 1	mg/l			WG777028	03/22/15 01:51
1,1-Dichloroethene	< .001	mg/l			WG775860	03/20/15 19:34
Tetrachloroethene	< .001	mg/l			WG775860	03/20/15 19:34
trans-1,2-Dichloroethene	< .001	mg/l			WG775860	03/20/15 19:34
Vinyl chloride	< .001	mg/l			WG775860	03/20/15 19:34
4-Bromofluorobenzene		% Rec.	100.0	71-126	WG775860	03/20/15 19:34
Dibromofluoromethane		% Rec.	105.0	78.3-121	WG775860	03/20/15 19:34
Toluene-d8		% Rec.	105.0	88.5-111	WG775860	03/20/15 19:34
cis-1,2-Dichloroethene	< .001	mg/l			WG775855	03/23/15 11:43
Trichloroethene	< .001	mg/l			WG775855	03/23/15 11:43
4-Bromofluorobenzene		% Rec.	104.0	71-126	WG775855	03/23/15 11:43
Dibromofluoromethane		% Rec.	107.0	78.3-121	WG775855	03/23/15 11:43
Toluene-d8		% Rec.	106.0	88.5-111	WG775855	03/23/15 11:43
1,1-Dichloroethene	< .001	mg/l			WG777247	03/23/15 10:47
cis-1,2-Dichloroethene	< .001	mg/l			WG777247	03/23/15 10:47
Tetrachloroethene	< .001	mg/l			WG777247	03/23/15 10:47
trans-1,2-Dichloroethene	< .001	mg/l			WG777247	03/23/15 10:47
Trichloroethene	< .001	mg/l			WG777247	03/23/15 10:47
Vinyl chloride	< .001	mg/l			WG777247	03/23/15 10:47
4-Bromofluorobenzene		% Rec.	101.0	71-126	WG777247	03/23/15 10:47
Dibromofluoromethane		% Rec.	98.20	78.3-121	WG777247	03/23/15 10:47
Toluene-d8		% Rec.	98.50	88.5-111	WG777247	03/23/15 10:47

Duplicate

Analyte	Units	Result	Duplicate	RPD	Limit	Ref Samp	Batch
TOC (Total Organic Carbon)	mg/l	12.0	11.0	5.31	20	L753093-02	WG777028
TOC (Total Organic Carbon)	mg/l	1.60	1.60	0.0	20	L753667-07	WG777028

Laboratory Control Sample

Analyte	Units	Known Val	Result	% Rec	Limit	Batch
1,1-Dichloroethene	mg/l	.025	0.0201	80.3	67.8-129	WG775857
cis-1,2-Dichloroethene	mg/l	.025	0.0226	90.3	76-119	WG775857
Tetrachloroethene	mg/l	.025	0.0260	104.	72.6-126	WG775857
trans-1,2-Dichloroethene	mg/l	.025	0.0246	98.5	72.6-121	WG775857
Trichloroethene	mg/l	.025	0.0235	94.1	77.7-118	WG775857
Vinyl chloride	mg/l	.025	0.0198	79.3	65.9-128	WG775857
4-Bromofluorobenzene				101.0	71-126	WG775857
Dibromofluoromethane				93.20	78.3-121	WG775857
Toluene-d8				106.0	88.5-111	WG775857

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Level II

L753670

March 23, 2015

Analyte	Units	Laboratory Control Sample Known Val	Result	% Rec	Limit	Batch
TOC (Total Organic Carbon)	mg/l	75	78.6	105.	85-115	WG777028
1,1-Dichloroethene	mg/l	.025	0.0255	102.	67.8-129	WG775860
Tetrachloroethene	mg/l	.025	0.0279	112.	72.6-126	WG775860
trans-1,2-Dichloroethene	mg/l	.025	0.0256	103.	72.6-121	WG775860
Vinyl chloride	mg/l	.025	0.0244	97.4	65.9-128	WG775860
4-Bromofluorobenzene				97.40	71-126	WG775860
Dibromofluoromethane				97.50	78.3-121	WG775860
Toluene-d8				99.60	88.5-111	WG775860
cis-1,2-Dichloroethene	mg/l	.025	0.0238	95.3	76-119	WG775855
Trichloroethene	mg/l	.025	0.0226	90.4	77.7-118	WG775855
4-Bromofluorobenzene				102.0	71-126	WG775855
Dibromofluoromethane				105.0	78.3-121	WG775855
Toluene-d8				107.0	88.5-111	WG775855
1,1-Dichloroethene	mg/l	.025	0.0238	95.0	67.8-129	WG777247
cis-1,2-Dichloroethene	mg/l	.025	0.0253	101.	76-119	WG777247
Tetrachloroethene	mg/l	.025	0.0285	114.	72.6-126	WG777247
trans-1,2-Dichloroethene	mg/l	.025	0.0247	98.8	72.6-121	WG777247
Trichloroethene	mg/l	.025	0.0264	106.	77.7-118	WG777247
Vinyl chloride	mg/l	.025	0.0226	90.3	65.9-128	WG777247
4-Bromofluorobenzene				95.40	71-126	WG777247
Dibromofluoromethane				94.40	78.3-121	WG777247
Toluene-d8				97.40	88.5-111	WG777247

Analyte	Units	Laboratory Control Sample Duplicate Result	Ref	%Rec	Limit	RPD	Limit	Batch
1,1-Dichloroethene	mg/l	0.0186	0.0201	74.0	67.8-129	7.52	20	WG775857
cis-1,2-Dichloroethene	mg/l	0.0215	0.0226	86.0	76-119	4.76	20	WG775857
Tetrachloroethene	mg/l	0.0232	0.0260	93.0	72.6-126	11.4	20	WG775857
trans-1,2-Dichloroethene	mg/l	0.0231	0.0246	92.0	72.6-121	6.21	20	WG775857
Trichloroethene	mg/l	0.0216	0.0235	86.0	77.7-118	8.49	20	WG775857
Vinyl chloride	mg/l	0.0181	0.0198	72.0	65.9-128	8.94	20	WG775857
4-Bromofluorobenzene				99.80	71-126			WG775857
Dibromofluoromethane				94.00	78.3-121			WG775857
Toluene-d8				103.0	88.5-111			WG775857
TOC (Total Organic Carbon)	mg/l	78.2	78.6	104.	85-115	0.434	20	WG777028
1,1-Dichloroethene	mg/l	0.0259	0.0255	104.	67.8-129	1.55	20	WG775860
Tetrachloroethene	mg/l	0.0266	0.0279	106.	72.6-126	5.00	20	WG775860
trans-1,2-Dichloroethene	mg/l	0.0261	0.0256	104.	72.6-121	1.90	20	WG775860
Vinyl chloride	mg/l	0.0248	0.0244	99.0	65.9-128	1.84	20	WG775860
4-Bromofluorobenzene				101.0	71-126			WG775860
Dibromofluoromethane				101.0	78.3-121			WG775860
Toluene-d8				102.0	88.5-111			WG775860
cis-1,2-Dichloroethene	mg/l	0.0240	0.0238	96.0	76-119	0.640	20	WG775855
Trichloroethene	mg/l	0.0220	0.0226	88.0	77.7-118	2.71	20	WG775855
4-Bromofluorobenzene				99.50	71-126			WG775855

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Level II

L753670

March 23, 2015

Analyte	Units	Laboratory Control Sample Result	Ref	%Rec	Limit	RPD	Limit	Batch
Dibromofluoromethane				105.0	78.3-121			
Toluene-d8				105.0	88.5-111			
1,1-Dichloroethene	mg/l	0.0245	0.0238	98.0	67.8-129	2.95	20	WG777247
cis-1,2-Dichloroethene	mg/l	0.0275	0.0253	110.	76-119	8.07	20	WG777247
Tetrachloroethene	mg/l	0.0290	0.0285	116.	72.6-126	1.64	20	WG777247
trans-1,2-Dichloroethene	mg/l	0.0252	0.0247	101.	72.6-121	2.06	20	WG777247
Trichloroethene	mg/l	0.0269	0.0264	107.	77.7-118	1.77	20	WG777247
Vinyl chloride	mg/l	0.0236	0.0226	94.0	65.9-128	4.54	20	WG777247
4-Bromofluorobenzene				99.50	71-126			WG777247
Dibromofluoromethane				99.10	78.3-121			WG777247
Toluene-d8				99.60	88.5-111			WG777247

Analyte	Units	Matrix Spike MS Res	Ref Res	TV	% Rec	Limit	Ref Samp	Batch
1,1-Dichloroethene	mg/l	0.0192	0.0	.025	77.0	51.1-140	L753667-01	WG775857
cis-1,2-Dichloroethene	mg/l	0.0221	0.0	.025	88.0	59.2-129	L753667-01	WG775857
Tetrachloroethene	mg/l	0.0239	0.0	.025	96.0	53-139	L753667-01	WG775857
trans-1,2-Dichloroethene	mg/l	0.0236	0.0	.025	94.0	56.5-129	L753667-01	WG775857
Trichloroethene	mg/l	0.0225	0.0	.025	90.0	44.1-149	L753667-01	WG775857
Vinyl chloride	mg/l	0.0184	0.0	.025	74.0	47.8-137	L753667-01	WG775857
4-Bromofluorobenzene					99.60	71-126		WG775857
Dibromofluoromethane					95.40	78.3-121		WG775857
Toluene-d8					105.0	88.5-111		WG775857
TOC (Total Organic Carbon)	mg/l	66.9	17.0	50	100.	80-120	L753181-03	WG777028
1,1-Dichloroethene	mg/l	0.0263	0.0	.025	100.	51.1-140	L753670-09	WG775860
Tetrachloroethene	mg/l	0.0288	0.000361	.025	110.	53-139	L753670-09	WG775860
trans-1,2-Dichloroethene	mg/l	0.0270	0.00125	.025	100.	56.5-129	L753670-09	WG775860
Vinyl chloride	mg/l	0.0261	0.000862	.025	100.	47.8-137	L753670-09	WG775860
4-Bromofluorobenzene					96.00	71-126		WG775860
Dibromofluoromethane					97.70	78.3-121		WG775860
Toluene-d8					69.70*	88.5-111		WG775860
cis-1,2-Dichloroethene	mg/l	0.0237	0.0	.025	95.0	59.2-129	L753631-06	WG775855
Trichloroethene	mg/l	0.0218	0.0	.025	87.0	44.1-149	L753631-06	WG775855
4-Bromofluorobenzene					104.0	71-126		WG775855
Dibromofluoromethane					107.0	78.3-121		WG775855
Toluene-d8					110.0	88.5-111		WG775855
1,1-Dichloroethene	mg/l	0.0213	0.0	.025	85.0	51.1-140	L753705-21	WG777247
cis-1,2-Dichloroethene	mg/l	0.0231	0.0	.025	92.0	59.2-129	L753705-21	WG777247
Tetrachloroethene	mg/l	0.0260	0.0	.025	100.	53-139	L753705-21	WG777247
trans-1,2-Dichloroethene	mg/l	0.0216	0.0	.025	86.0	56.5-129	L753705-21	WG777247
Trichloroethene	mg/l	0.0236	0.0	.025	94.0	44.1-149	L753705-21	WG777247
Vinyl chloride	mg/l	0.0215	0.0	.025	86.0	47.8-137	L753705-21	WG777247
4-Bromofluorobenzene					96.90	71-126		WG777247
Dibromofluoromethane					92.50	78.3-121		WG777247
Toluene-d8					97.40	88.5-111		WG777247

Analyte	Units	Matrix Spike Duplicate MSD	Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
1,1-Dichloroethene	mg/l	0.0194	0.0192	77.6	51.1-140	1.06	20.2	L753667-01	WG775857

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Quality Assurance Report
Level II

L753670

March 23, 2015

Analyte	Units	Matrix Spike MSD	Ref	Duplicate %Rec	Limit	RPD	Limit	Ref Samp	Batch
cis-1,2-Dichloroethene	mg/l	0.0222	0.0221	89.0	59.2-129	0.600	20	L753667-01	WG775857
Tetrachloroethene	mg/l	0.0230	0.0239	92.0	53-139	3.76	20	L753667-01	WG775857
trans-1,2-Dichloroethene	mg/l	0.0245	0.0236	98.0	56.5-129	3.78	20	L753667-01	WG775857
Trichloroethene	mg/l	0.0233	0.0225	93.1	44.1-149	3.49	20	L753667-01	WG775857
Vinyl chloride	mg/l	0.0188	0.0184	75.3	47.8-137	2.21	20	L753667-01	WG775857
4-Bromofluorobenzene				96.10	71-126				WG775857
Dibromofluoromethane				97.10	78.3-121				WG775857
Toluene-d8				104.0	88.5-111				WG775857
TOC (Total Organic Carbon)	mg/l	64.8	66.9	95.6	80-120	3.18	20	L753181-03	WG777028
1,1-Dichloroethene	mg/l	0.0266	0.0263	106.	51.1-140	1.34	20.2	L753670-09	WG775860
Tetrachloroethene	mg/l	0.0288	0.0288	114.	53-139	0.190	20	L753670-09	WG775860
trans-1,2-Dichloroethene	mg/l	0.0276	0.0270	106.	56.5-129	2.48	20	L753670-09	WG775860
Vinyl chloride	mg/l	0.0261	0.0261	101.	47.8-137	0.150	20	L753670-09	WG775860
4-Bromofluorobenzene				98.50	71-126				WG775860
Dibromofluoromethane				98.70	78.3-121				WG775860
Toluene-d8				70.40*	88.5-111				WG775860
cis-1,2-Dichloroethene	mg/l	0.0248	0.0237	99.0	59.2-129	4.26	20	L753631-06	WG775855
Trichloroethene	mg/l	0.0229	0.0218	91.8	44.1-149	5.16	20	L753631-06	WG775855
4-Bromofluorobenzene				97.40	71-126				WG775855
Dibromofluoromethane				105.0	78.3-121				WG775855
Toluene-d8				106.0	88.5-111				WG775855
1,1-Dichloroethene	mg/l	0.0220	0.0213	88.1	51.1-140	3.38	20.2	L753705-21	WG777247
cis-1,2-Dichloroethene	mg/l	0.0243	0.0231	97.3	59.2-129	4.98	20	L753705-21	WG777247
Tetrachloroethene	mg/l	0.0257	0.0260	103.	53-139	1.48	20	L753705-21	WG777247
trans-1,2-Dichloroethene	mg/l	0.0226	0.0216	90.3	56.5-129	4.45	20	L753705-21	WG777247
Trichloroethene	mg/l	0.0245	0.0236	98.2	44.1-149	3.86	20	L753705-21	WG777247
Vinyl chloride	mg/l	0.0213	0.0215	85.2	47.8-137	0.860	20	L753705-21	WG777247
4-Bromofluorobenzene				96.80	71-126				WG777247
Dibromofluoromethane				93.00	78.3-121				WG777247
Toluene-d8				98.60	88.5-111				WG777247

Batch number /Run number / Sample number cross reference

WG775857: R3025973: L753670-01 02 03 04 05 06 07
WG777028: R3026196: L753670-01 02 04 05 06 07
WG775860: R3026374: L753670-09
WG775855: R3026422: L753670-09
WG777247: R3026441: L753670-08

* * Calculations are performed prior to rounding of reported values.
* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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PNG Environmental
Paul McBeth
6665 SW Hampton St., Suite 101

Tigard, OR 97223

Quality Assurance Report
Level II

L753670

March 23, 2015

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.

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Paul McBeth
PNG Environmental
6665 SW Hampton St., Suite 101
Tigard, OR 97223

Report Summary

Monday March 23, 2015

Report Number: L753673
Samples Received: 03/14/15
Client Project: 1122

Description: Evanite

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

Jarred Willis , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197, FL - E87487, GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704/BIO041, ND - R-140. NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1, TX - T104704245-11-3, OK - 9915, PA - 68-02979, IA Lab #364, EPA - TN002

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

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REPORT OF ANALYSIS

Paul McBeth
PNG Environmental
6665 SW Hampton St., Suite 101
Tigard, OR 97223

March 23, 2015

ESC Sample # : L753673-01

Site ID : 1122

Project # : 1122

Date Received : March 14, 2015
Description : Evanite

Sample ID : MW-20

Collected By : Jay Greifer
Collection Date : 03/13/15 09:31

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Volatile Organics								
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	03/20/15	1
cis-1,2-Dichloroethene	1.0	0.26	1.0	ug/l		8260B	03/20/15	1
trans-1,2-Dichloroethene	U	0.40	1.0	ug/l		8260B	03/20/15	1
Tetrachloroethene	U	0.37	1.0	ug/l		8260B	03/20/15	1
Trichloroethene	16.	0.40	1.0	ug/l		8260B	03/20/15	1
Vinyl chloride	U	0.26	1.0	ug/l		8260B	03/20/15	1
Surrogate Recovery								
Toluene-d8	101.			% Rec.		8260B	03/20/15	1
Dibromofluoromethane	105.			% Rec.		8260B	03/20/15	1
4-Bromofluorobenzene	99.0			% Rec.		8260B	03/20/15	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
Note:
The reported analytical results relate only to the sample submitted.

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REPORT OF ANALYSIS

Paul McBeth
PNG Environmental
6665 SW Hampton St., Suite 101
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March 23, 2015

ESC Sample # : L753673-02

Site ID : 1122

Project # : 1122

Date Received : March 14, 2015
Description : Evanite

Sample ID : MW-7

Collected By : Jay Greifer
Collection Date : 03/13/15 10:01

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Volatile Organics								
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	03/20/15	1
cis-1,2-Dichloroethene	U	0.26	1.0	ug/l		8260B	03/20/15	1
trans-1,2-Dichloroethene	U	0.40	1.0	ug/l		8260B	03/20/15	1
Tetrachloroethene	U	0.37	1.0	ug/l		8260B	03/20/15	1
Trichloroethene	0.60	0.40	1.0	ug/l	J	8260B	03/20/15	1
Vinyl chloride	U	0.26	1.0	ug/l		8260B	03/20/15	1
Surrogate Recovery								
Toluene-d8	104.			% Rec.		8260B	03/20/15	1
Dibromofluoromethane	105.			% Rec.		8260B	03/20/15	1
4-Bromofluorobenzene	95.3			% Rec.		8260B	03/20/15	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
Note:
The reported analytical results relate only to the sample submitted.

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REPORT OF ANALYSIS

Paul McBeth
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6665 SW Hampton St., Suite 101
Tigard, OR 97223

March 23, 2015

ESC Sample # : L753673-03

Site ID : 1122

Project # : 1122

Date Received : March 14, 2015
Description : Evanite

Sample ID : MW-8

Collected By : Jay Greifer
Collection Date : 03/13/15 10:28

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Volatile Organics								
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	03/20/15	1
cis-1,2-Dichloroethene	0.54	0.26	1.0	ug/l	J	8260B	03/20/15	1
trans-1,2-Dichloroethene	U	0.40	1.0	ug/l		8260B	03/20/15	1
Tetrachloroethene	U	0.37	1.0	ug/l		8260B	03/20/15	1
Trichloroethene	0.93	0.40	1.0	ug/l	J	8260B	03/20/15	1
Vinyl chloride	U	0.26	1.0	ug/l		8260B	03/20/15	1
Surrogate Recovery								
Toluene-d8	104.			% Rec.		8260B	03/20/15	1
Dibromofluoromethane	106.			% Rec.		8260B	03/20/15	1
4-Bromofluorobenzene	99.1			% Rec.		8260B	03/20/15	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
Note:
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REPORT OF ANALYSIS

Paul McBeth
PNG Environmental
6665 SW Hampton St., Suite 101
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March 23, 2015

ESC Sample # : L753673-04

Site ID : 1122

Project # : 1122

Date Received : March 14, 2015
Description : Evanite

Sample ID : MW-37

Collected By : Jay Greifer
Collection Date : 03/13/15 10:58

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Volatile Organics								
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	03/20/15	1
cis-1,2-Dichloroethene	1.9	0.26	1.0	ug/l		8260B	03/20/15	1
trans-1,2-Dichloroethene	U	0.40	1.0	ug/l		8260B	03/20/15	1
Tetrachloroethene	U	0.37	1.0	ug/l		8260B	03/20/15	1
Trichloroethene	22.	0.40	1.0	ug/l		8260B	03/20/15	1
Vinyl chloride	U	0.26	1.0	ug/l		8260B	03/20/15	1
Surrogate Recovery								
Toluene-d8	102.			% Rec.		8260B	03/20/15	1
Dibromofluoromethane	106.			% Rec.		8260B	03/20/15	1
4-Bromofluorobenzene	101.			% Rec.		8260B	03/20/15	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
Note:
The reported analytical results relate only to the sample submitted.

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March 23, 2015

ESC Sample # : L753673-05

Site ID : 1122

Project # : 1122

Date Received : March 14, 2015
Description : Evanite

Sample ID : DMW-12

Collected By : Jay Greifer
Collection Date : 03/13/15 11:31

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Volatile Organics								
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	03/20/15	1
cis-1,2-Dichloroethene	3.7	0.26	1.0	ug/l		8260B	03/20/15	1
trans-1,2-Dichloroethene	U	0.40	1.0	ug/l		8260B	03/20/15	1
Tetrachloroethene	U	0.37	1.0	ug/l		8260B	03/20/15	1
Trichloroethene	9.0	0.40	1.0	ug/l		8260B	03/20/15	1
Vinyl chloride	U	0.26	1.0	ug/l		8260B	03/20/15	1
Surrogate Recovery								
Toluene-d8	104.			% Rec.		8260B	03/20/15	1
Dibromofluoromethane	107.			% Rec.		8260B	03/20/15	1
4-Bromofluorobenzene	100.			% Rec.		8260B	03/20/15	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
Note:

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REPORT OF ANALYSIS

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March 23, 2015

ESC Sample # : L753673-06

Site ID : 1122

Project # : 1122

Date Received : March 14, 2015
Description : Evanite

Sample ID : DMW-33

Collected By : Jay Greifer
Collection Date : 03/13/15 12:18

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Volatile Organics								
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	03/21/15	1
cis-1,2-Dichloroethene	2.5	0.26	1.0	ug/l		8260B	03/21/15	1
trans-1,2-Dichloroethene	U	0.40	1.0	ug/l		8260B	03/21/15	1
Tetrachloroethene	U	0.37	1.0	ug/l		8260B	03/21/15	1
Trichloroethene	7.5	0.40	1.0	ug/l		8260B	03/21/15	1
Vinyl chloride	U	0.26	1.0	ug/l		8260B	03/21/15	1
Surrogate Recovery								
Toluene-d8	103.			% Rec.		8260B	03/21/15	1
Dibromofluoromethane	109.			% Rec.		8260B	03/21/15	1
4-Bromofluorobenzene	102.			% Rec.		8260B	03/21/15	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
Note:
The reported analytical results relate only to the sample submitted.

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REPORT OF ANALYSIS

Paul McBeth
PNG Environmental
6665 SW Hampton St., Suite 101
Tigard, OR 97223

March 23, 2015

ESC Sample # : L753673-07

Site ID : 1122

Project # : 1122

Date Received : March 14, 2015
Description : Evanite

Sample ID : IMW-33

Collected By : Jay Greifer
Collection Date : 03/13/15 12:43

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Volatile Organics								
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	03/21/15	1
cis-1,2-Dichloroethene	U	0.26	1.0	ug/l		8260B	03/21/15	1
trans-1,2-Dichloroethene	U	0.40	1.0	ug/l		8260B	03/21/15	1
Tetrachloroethene	U	0.37	1.0	ug/l		8260B	03/21/15	1
Trichloroethene	0.70	0.40	1.0	ug/l	J	8260B	03/21/15	1
Vinyl chloride	U	0.26	1.0	ug/l		8260B	03/21/15	1
Surrogate Recovery								
Toluene-d8	104.			% Rec.		8260B	03/21/15	1
Dibromofluoromethane	107.			% Rec.		8260B	03/21/15	1
4-Bromofluorobenzene	99.7			% Rec.		8260B	03/21/15	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
Note:
The reported analytical results relate only to the sample submitted.

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Reported: 03/23/15 16:12 Printed: 03/23/15 16:12

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L753673-02	WG775860	SAMP	Trichloroethene	R3026374	J
L753673-03	WG775860	SAMP	cis-1,2-Dichloroethene	R3026374	J
	WG775860	SAMP	Trichloroethene	R3026374	J
L753673-07	WG775860	SAMP	Trichloroethene	R3026374	J

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J	(EPA) - Estimated value below the lowest calibration point. Confidence correlates with concentration.

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods,it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable "unless qualified as 'R' (Rejected)."

Definitions

Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.

Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Differrence.

Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromotography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.

TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

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PNG Environmental
Paul McBeth
6665 SW Hampton St., Suite 101

Tigard, OR 97223

Quality Assurance Report
Level II

L753673

March 23, 2015

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
1,1-Dichloroethene	< .001	mg/l			WG775860	03/20/15 19:34
cis-1,2-Dichloroethene	< .001	mg/l			WG775860	03/20/15 19:34
Tetrachloroethene	< .001	mg/l			WG775860	03/20/15 19:34
trans-1,2-Dichloroethene	< .001	mg/l			WG775860	03/20/15 19:34
Trichloroethene	< .001	mg/l			WG775860	03/20/15 19:34
Vinyl chloride	< .001	mg/l			WG775860	03/20/15 19:34
4-Bromofluorobenzene		% Rec.	100.0	71-126	WG775860	03/20/15 19:34
Dibromofluoromethane		% Rec.	105.0	78.3-121	WG775860	03/20/15 19:34
Toluene-d8		% Rec.	105.0	88.5-111	WG775860	03/20/15 19:34

Laboratory Control Sample

Analyte	Units	Known Val	Result	% Rec	Limit	Batch
1,1-Dichloroethene	mg/l	.025	0.0255	102.	67.8-129	WG775860
cis-1,2-Dichloroethene	mg/l	.025	0.0263	105.	76-119	WG775860
Tetrachloroethene	mg/l	.025	0.0279	112.	72.6-126	WG775860
trans-1,2-Dichloroethene	mg/l	.025	0.0256	103.	72.6-121	WG775860
Trichloroethene	mg/l	.025	0.0268	107.	77.7-118	WG775860
Vinyl chloride	mg/l	.025	0.0244	97.4	65.9-128	WG775860
4-Bromofluorobenzene				97.40	71-126	WG775860
Dibromofluoromethane				97.50	78.3-121	WG775860
Toluene-d8				99.60	88.5-111	WG775860

Laboratory Control Sample Duplicate

Analyte	Units	Result	Ref	%Rec	Limit	RPD	Limit	Batch
1,1-Dichloroethene	mg/l	0.0259	0.0255	104.	67.8-129	1.55	20	WG775860
cis-1,2-Dichloroethene	mg/l	0.0274	0.0263	109.	76-119	3.95	20	WG775860
Tetrachloroethene	mg/l	0.0266	0.0279	106.	72.6-126	5.00	20	WG775860
trans-1,2-Dichloroethene	mg/l	0.0261	0.0256	104.	72.6-121	1.90	20	WG775860
Trichloroethene	mg/l	0.0271	0.0268	108.	77.7-118	1.02	20	WG775860
Vinyl chloride	mg/l	0.0248	0.0244	99.0	65.9-128	1.84	20	WG775860
4-Bromofluorobenzene				101.0	71-126			WG775860
Dibromofluoromethane				101.0	78.3-121			WG775860
Toluene-d8				102.0	88.5-111			WG775860

Matrix Spike

Analyte	Units	MS Res	Ref Res	TV	% Rec	Limit	Ref Samp	Batch
1,1-Dichloroethene	mg/l	0.0263	0.0	.025	100.	51.1-140	L753670-09	WG775860
cis-1,2-Dichloroethene	mg/l	0.247	0.254	.025	0.0*	59.2-129	L753670-09	WG775860
Tetrachloroethene	mg/l	0.0288	0.000361	.025	110.	53-139	L753670-09	WG775860
trans-1,2-Dichloroethene	mg/l	0.0270	0.00125	.025	100.	56.5-129	L753670-09	WG775860
Trichloroethene	mg/l	3.14	3.33	.025	0.0*	44.1-149	L753670-09	WG775860
Vinyl chloride	mg/l	0.0261	0.000862	.025	100.	47.8-137	L753670-09	WG775860
4-Bromofluorobenzene					96.00	71-126		WG775860
Dibromofluoromethane					97.70	78.3-121		WG775860
Toluene-d8					69.70*	88.5-111		WG775860

Matrix Spike Duplicate

Analyte	Units	MSD	Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
1,1-Dichloroethene	mg/l	0.0266	0.0263	106.	51.1-140	1.34	20.2	L753670-09	WG775860
cis-1,2-Dichloroethene	mg/l	0.240	0.247	0*	59.2-129	3.05	20	L753670-09	WG775860
Tetrachloroethene	mg/l	0.0288	0.0288	114.	53-139	0.190	20	L753670-09	WG775860
trans-1,2-Dichloroethene	mg/l	0.0276	0.0270	106.	56.5-129	2.48	20	L753670-09	WG775860
Trichloroethene	mg/l	3.16	3.14	0*	44.1-149	0.730	20	L753670-09	WG775860
Vinyl chloride	mg/l	0.0261	0.0261	101.	47.8-137	0.150	20	L753670-09	WG775860
4-Bromofluorobenzene				98.50	71-126				WG775860

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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6665 SW Hampton St., Suite 101

Tigard, OR 97223

Quality Assurance Report
Level II

L753673

March 23, 2015

Analyte	Units	MSD Ref	Matrix Spike Duplicate %Rec	Limit	RPD	Limit	Ref Samp	Batch
Dibromofluoromethane			98.70	78.3-121				
Toluene-d8			70.40*	88.5-111				

Batch number /Run number / Sample number cross reference

WG775860: R3026374: L753673-01 02 03 04 05 06 07

* * Calculations are performed prior to rounding of reported values.
* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Quality Assurance Report
Level II

L753673

March 23, 2015

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.

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Paul McBeth
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Tigard, OR 97223

Report Summary

Tuesday March 24, 2015

Report Number: L753675
Samples Received: 03/14/15
Client Project: 1122

Description: Evanite

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

Jarred Willis , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197, FL - E87487, GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704/BIO041, ND - R-140. NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1, TX - T104704245-11-3, OK - 9915, PA - 68-02979, IA Lab #364, EPA - TN002

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

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REPORT OF ANALYSIS

Paul McBeth
PNG Environmental
6665 SW Hampton St., Suite 101
Tigard, OR 97223

March 24, 2015

ESC Sample # : L753675-01

Site ID :

Project # : 1122

Date Received : March 14, 2015
Description : Evanite

Sample ID : DMW-38

Collected By : S. Biles
Collection Date : 03/13/15 09:50

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Volatile Organics								
1,1-Dichloroethene	U	4.0	10.	ug/l		8260B	03/21/15	10
cis-1,2-Dichloroethene	24.	2.6	10.	ug/l		8260B	03/21/15	10
trans-1,2-Dichloroethene	U	4.0	10.	ug/l		8260B	03/21/15	10
Tetrachloroethene	U	3.7	10.	ug/l		8260B	03/21/15	10
Trichloroethene	230	4.0	10.	ug/l		8260B	03/21/15	10
Vinyl chloride	U	2.6	10.	ug/l		8260B	03/21/15	10
Surrogate Recovery								
Toluene-d8	101.			% Rec.		8260B	03/21/15	1
Dibromofluoromethane	106.			% Rec.		8260B	03/21/15	1
4-Bromofluorobenzene	100.			% Rec.		8260B	03/21/15	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
Note:
The reported analytical results relate only to the sample submitted.

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REPORT OF ANALYSIS

Paul McBeth
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March 24, 2015

ESC Sample # : L753675-02

Site ID :

Project # : 1122

Date Received : March 14, 2015
Description : Evanite

Sample ID : DMW-98

Collected By : S. Biles
Collection Date : 03/13/15 09:52

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Volatile Organics								
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	03/21/15	1
cis-1,2-Dichloroethene	23.	0.26	1.0	ug/l		8260B	03/21/15	1
trans-1,2-Dichloroethene	U	0.40	1.0	ug/l		8260B	03/21/15	1
Tetrachloroethene	U	0.37	1.0	ug/l		8260B	03/21/15	1
Trichloroethene	240	4.0	10.	ug/l		8260B	03/24/15	10
Vinyl chloride	U	0.26	1.0	ug/l		8260B	03/21/15	1
Surrogate Recovery								
Toluene-d8	87.6			% Rec.	J2	8260B	03/21/15	1
Dibromofluoromethane	106.			% Rec.		8260B	03/21/15	1
4-Bromofluorobenzene	95.1			% Rec.		8260B	03/21/15	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
Note:
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REPORT OF ANALYSIS

Paul McBeth
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March 24, 2015

ESC Sample # : L753675-03

Site ID :

Project # : 1122

Date Received : March 14, 2015
Description : Evanite

Sample ID : DMW-39

Collected By : S. Biles
Collection Date : 03/13/15 10:31

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Volatile Organics								
1,1-Dichloroethene	U	8.0	20.	ug/l		8260B	03/21/15	20
cis-1,2-Dichloroethene	460	5.2	20.	ug/l		8260B	03/21/15	20
trans-1,2-Dichloroethene	U	7.9	20.	ug/l		8260B	03/21/15	20
Tetrachloroethene	U	7.4	20.	ug/l		8260B	03/21/15	20
Trichloroethene	49.	8.0	20.	ug/l		8260B	03/21/15	20
Vinyl chloride	U	5.2	20.	ug/l		8260B	03/21/15	20
Surrogate Recovery								
Toluene-d8	103.			% Rec.		8260B	03/21/15	1
Dibromofluoromethane	105.			% Rec.		8260B	03/21/15	1
4-Bromofluorobenzene	100.			% Rec.		8260B	03/21/15	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
Note:
The reported analytical results relate only to the sample submitted.

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REPORT OF ANALYSIS

Paul McBeth
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March 24, 2015

ESC Sample # : L753675-04

Site ID :

Project # : 1122

Date Received : March 14, 2015
Description : Evanite

Sample ID : DMW-35

Collected By : S. Biles
Collection Date : 03/13/15 11:09

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Volatile Organics								
1,1-Dichloroethene	3.0	2.0	5.0	ug/l	J	8260B	03/21/15	5
cis-1,2-Dichloroethene	880	1.3	5.0	ug/l		8260B	03/21/15	5
trans-1,2-Dichloroethene	2.2	2.0	5.0	ug/l	J	8260B	03/21/15	5
Tetrachloroethene	U	1.9	5.0	ug/l		8260B	03/21/15	5
Trichloroethene	1700	20.	50.	ug/l		8260B	03/24/15	50
Vinyl chloride	2.7	1.3	5.0	ug/l	J	8260B	03/21/15	5
Surrogate Recovery								
Toluene-d8	86.9			% Rec.	J2	8260B	03/21/15	1
Dibromofluoromethane	106.			% Rec.		8260B	03/21/15	1
4-Bromofluorobenzene	98.8			% Rec.		8260B	03/21/15	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
Note:
The reported analytical results relate only to the sample submitted.

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REPORT OF ANALYSIS

Paul McBeth
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March 24, 2015

ESC Sample # : L753675-05

Date Received : March 14, 2015
Description : Evanite

Site ID :

Sample ID : IMW-35

Project # : 1122

Collected By : S. Biles
Collection Date : 03/13/15 11:36

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Volatile Organics								
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	03/21/15	1
cis-1,2-Dichloroethene	1.2	0.26	1.0	ug/l		8260B	03/21/15	1
trans-1,2-Dichloroethene	U	0.40	1.0	ug/l		8260B	03/21/15	1
Tetrachloroethene	U	0.37	1.0	ug/l		8260B	03/21/15	1
Trichloroethene	U	0.40	1.0	ug/l		8260B	03/24/15	1
Vinyl chloride	U	0.26	1.0	ug/l		8260B	03/21/15	1
Surrogate Recovery								
Toluene-d8	104.			% Rec.		8260B	03/21/15	1
Dibromofluoromethane	110.			% Rec.		8260B	03/21/15	1
4-Bromofluorobenzene	98.0			% Rec.		8260B	03/21/15	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
Note:
The reported analytical results relate only to the sample submitted.

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REPORT OF ANALYSIS

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March 24, 2015

ESC Sample # : L753675-06

Site ID :

Project # : 1122

Date Received : March 14, 2015
Description : Evanite

Sample ID : DMW-34

Collected By : S. Biles
Collection Date : 03/13/15 12:23

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Volatile Organics								
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	03/21/15	1
cis-1,2-Dichloroethene	6.7	0.26	1.0	ug/l		8260B	03/21/15	1
trans-1,2-Dichloroethene	U	0.40	1.0	ug/l		8260B	03/21/15	1
Tetrachloroethene	U	0.37	1.0	ug/l		8260B	03/21/15	1
Trichloroethene	42.	0.40	1.0	ug/l		8260B	03/21/15	1
Vinyl chloride	U	0.26	1.0	ug/l		8260B	03/21/15	1
Surrogate Recovery								
Toluene-d8	96.0			% Rec.		8260B	03/21/15	1
Dibromofluoromethane	108.			% Rec.		8260B	03/21/15	1
4-Bromofluorobenzene	101.			% Rec.		8260B	03/21/15	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
Note:
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REPORT OF ANALYSIS

Paul McBeth
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March 24, 2015

ESC Sample # : L753675-07

Site ID :

Project # : 1122

Date Received : March 14, 2015
Description : Evanite

Sample ID : IMW-34

Collected By : S. Biles
Collection Date : 03/13/15 12:48

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Volatile Organics								
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	03/21/15	1
cis-1,2-Dichloroethene	U	0.26	1.0	ug/l		8260B	03/21/15	1
trans-1,2-Dichloroethene	U	0.40	1.0	ug/l		8260B	03/21/15	1
Tetrachloroethene	U	0.37	1.0	ug/l		8260B	03/21/15	1
Trichloroethene	0.47	0.40	1.0	ug/l	J	8260B	03/21/15	1
Vinyl chloride	U	0.26	1.0	ug/l		8260B	03/21/15	1
Surrogate Recovery								
Toluene-d8	104.			% Rec.		8260B	03/21/15	1
Dibromofluoromethane	110.			% Rec.		8260B	03/21/15	1
4-Bromofluorobenzene	97.6			% Rec.		8260B	03/21/15	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
Note:
The reported analytical results relate only to the sample submitted.

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Reported: 03/24/15 11:19 Printed: 03/24/15 11:19

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REPORT OF ANALYSIS

Paul McBeth
PNG Environmental
6665 SW Hampton St., Suite 101
Tigard, OR 97223

March 24, 2015

ESC Sample # : L753675-08

Date Received : March 14, 2015
Description : Evanite

Site ID :

Sample ID : TB-031315

Project # : 1122

Collected By : S. Biles
Collection Date : 03/13/15 13:00

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Volatile Organics								
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	03/24/15	1
cis-1,2-Dichloroethene	U	0.26	1.0	ug/l		8260B	03/24/15	1
trans-1,2-Dichloroethene	U	0.40	1.0	ug/l		8260B	03/24/15	1
Tetrachloroethene	U	0.37	1.0	ug/l		8260B	03/24/15	1
Trichloroethene	U	0.40	1.0	ug/l		8260B	03/24/15	1
Vinyl chloride	U	0.26	1.0	ug/l		8260B	03/24/15	1
Surrogate Recovery								
Toluene-d8	103.			% Rec.		8260B	03/24/15	1
Dibromofluoromethane	104.			% Rec.		8260B	03/24/15	1
4-Bromofluorobenzene	102.			% Rec.		8260B	03/24/15	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
Note:
The reported analytical results relate only to the sample submitted.

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Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L753675-02	WG775860	SAMP	Toluene-d8	R3026374	J2
L753675-04	WG775860	SAMP	1,1-Dichloroethene	R3026374	J
	WG775860	SAMP	trans-1,2-Dichloroethene	R3026374	J
	WG775860	SAMP	Vinyl chloride	R3026374	J
	WG775860	SAMP	Toluene-d8	R3026374	J2
L753675-07	WG775860	SAMP	Trichloroethene	R3026374	J

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J	(EPA) - Estimated value below the lowest calibration point. Confidence correlates with concentration.
J2	Surrogate recovery limits have been exceeded; values are outside lower control limits

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods,it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable "unless qualified as 'R' (Rejected)."

Definitions

Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.

Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Differrence.

Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromotography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.

TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

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PNG Environmental
Paul McBeth
6665 SW Hampton St., Suite 101

Tigard, OR 97223

Quality Assurance Report
Level II

L753675

March 24, 2015

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
1,1-Dichloroethene	< .001	mg/l			WG775860	03/20/15 19:34
cis-1,2-Dichloroethene	< .001	mg/l			WG775860	03/20/15 19:34
Tetrachloroethene	< .001	mg/l			WG775860	03/20/15 19:34
trans-1,2-Dichloroethene	< .001	mg/l			WG775860	03/20/15 19:34
Trichloroethene	< .001	mg/l			WG775860	03/20/15 19:34
Vinyl chloride	< .001	mg/l			WG775860	03/20/15 19:34
4-Bromofluorobenzene		% Rec.	100.0	71-126	WG775860	03/20/15 19:34
Dibromofluoromethane		% Rec.	105.0	78.3-121	WG775860	03/20/15 19:34
Toluene-d8		% Rec.	105.0	88.5-111	WG775860	03/20/15 19:34
1,1-Dichloroethene	< .001	mg/l			WG777627	03/24/15 01:10
cis-1,2-Dichloroethene	< .001	mg/l			WG777627	03/24/15 01:10
Tetrachloroethene	< .001	mg/l			WG777627	03/24/15 01:10
trans-1,2-Dichloroethene	< .001	mg/l			WG777627	03/24/15 01:10
Trichloroethene	< .001	mg/l			WG777627	03/24/15 01:10
Vinyl chloride	< .001	mg/l			WG777627	03/24/15 01:10
4-Bromofluorobenzene		% Rec.	101.0	71-126	WG777627	03/24/15 01:10
Dibromofluoromethane		% Rec.	100.0	78.3-121	WG777627	03/24/15 01:10
Toluene-d8		% Rec.	102.0	88.5-111	WG777627	03/24/15 01:10

Laboratory Control Sample

Analyte	Units	Known Val	Result	% Rec	Limit	Batch
1,1-Dichloroethene	mg/l	.025	0.0255	102.	67.8-129	WG775860
cis-1,2-Dichloroethene	mg/l	.025	0.0263	105.	76-119	WG775860
Tetrachloroethene	mg/l	.025	0.0279	112.	72.6-126	WG775860
trans-1,2-Dichloroethene	mg/l	.025	0.0256	103.	72.6-121	WG775860
Trichloroethene	mg/l	.025	0.0268	107.	77.7-118	WG775860
Vinyl chloride	mg/l	.025	0.0244	97.4	65.9-128	WG775860
4-Bromofluorobenzene				97.40	71-126	WG775860
Dibromofluoromethane				97.50	78.3-121	WG775860
Toluene-d8				99.60	88.5-111	WG775860
1,1-Dichloroethene	mg/l	.025	0.0250	100.	67.8-129	WG777627
cis-1,2-Dichloroethene	mg/l	.025	0.0250	100.	76-119	WG777627
Tetrachloroethene	mg/l	.025	0.0308	123.	72.6-126	WG777627
trans-1,2-Dichloroethene	mg/l	.025	0.0257	103.	72.6-121	WG777627
Trichloroethene	mg/l	.025	0.0279	112.	77.7-118	WG777627
Vinyl chloride	mg/l	.025	0.0242	96.7	65.9-128	WG777627
4-Bromofluorobenzene				95.60	71-126	WG777627
Dibromofluoromethane				92.50	78.3-121	WG777627
Toluene-d8				98.60	88.5-111	WG777627

Laboratory Control Sample Duplicate

Analyte	Units	Result	Ref	%Rec	Limit	RPD	Limit	Batch
1,1-Dichloroethene	mg/l	0.0259	0.0255	104.	67.8-129	1.55	20	WG775860
cis-1,2-Dichloroethene	mg/l	0.0274	0.0263	109.	76-119	3.95	20	WG775860
Tetrachloroethene	mg/l	0.0266	0.0279	106.	72.6-126	5.00	20	WG775860
trans-1,2-Dichloroethene	mg/l	0.0261	0.0256	104.	72.6-121	1.90	20	WG775860
Trichloroethene	mg/l	0.0271	0.0268	108.	77.7-118	1.02	20	WG775860
Vinyl chloride	mg/l	0.0248	0.0244	99.0	65.9-128	1.84	20	WG775860
4-Bromofluorobenzene				101.0	71-126			WG775860
Dibromofluoromethane				101.0	78.3-121			WG775860
Toluene-d8				102.0	88.5-111			WG775860

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Tigard, OR 97223

Quality Assurance Report
Level II

L753675

March 24, 2015

Laboratory Control Sample Duplicate

Analyte	Units	Result	Ref	%Rec	Limit	RPD	Limit	Batch
1,1-Dichloroethene	mg/l	0.0248	0.0250	99.0	67.8-129	1.02	20	WG777627
cis-1,2-Dichloroethene	mg/l	0.0259	0.0250	104.	76-119	3.35	20	WG777627
Tetrachloroethene	mg/l	0.0294	0.0308	118.	72.6-126	4.71	20	WG777627
trans-1,2-Dichloroethene	mg/l	0.0256	0.0257	102.	72.6-121	0.200	20	WG777627
Trichloroethene	mg/l	0.0279	0.0279	112.	77.7-118	0.0500	20	WG777627
Vinyl chloride	mg/l	0.0236	0.0242	94.0	65.9-128	2.42	20	WG777627
4-Bromofluorobenzene				95.40	71-126			WG777627
Dibromofluoromethane				93.90	78.3-121			WG777627
Toluene-d8				98.00	88.5-111			WG777627

Matrix Spike

Analyte	Units	MS Res	Ref Res	TV	% Rec	Limit	Ref Samp	Batch
1,1-Dichloroethene	mg/l	0.0263	0.0	.025	100.	51.1-140	L753670-09	WG775860
cis-1,2-Dichloroethene	mg/l	0.247	0.254	.025	0.0*	59.2-129	L753670-09	WG775860
Tetrachloroethene	mg/l	0.0288	0.000361	.025	110.	53-139	L753670-09	WG775860
trans-1,2-Dichloroethene	mg/l	0.0270	0.00125	.025	100.	56.5-129	L753670-09	WG775860
Trichloroethene	mg/l	3.14	3.33	.025	0.0*	44.1-149	L753670-09	WG775860
Vinyl chloride	mg/l	0.0261	0.000862	.025	100.	47.8-137	L753670-09	WG775860
4-Bromofluorobenzene					96.00	71-126		WG775860
Dibromofluoromethane					97.70	78.3-121		WG775860
Toluene-d8					69.70*	88.5-111		WG775860
1,1-Dichloroethene	mg/l	0.0222	0.0	.025	89.0	51.1-140	L753618-01	WG777627
cis-1,2-Dichloroethene	mg/l	0.0234	0.0	.025	94.0	59.2-129	L753618-01	WG777627
Tetrachloroethene	mg/l	0.0265	0.0	.025	110.	53-139	L753618-01	WG777627
trans-1,2-Dichloroethene	mg/l	0.0223	0.0	.025	89.0	56.5-129	L753618-01	WG777627
Trichloroethene	mg/l	0.0265	0.00160	.025	100.	44.1-149	L753618-01	WG777627
Vinyl chloride	mg/l	0.0221	0.0	.025	88.0	47.8-137	L753618-01	WG777627
4-Bromofluorobenzene					96.10	71-126		WG777627
Dibromofluoromethane					92.50	78.3-121		WG777627
Toluene-d8					97.60	88.5-111		WG777627

Matrix Spike Duplicate

Analyte	Units	MSD	Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
1,1-Dichloroethene	mg/l	0.0266	0.0263	106.	51.1-140	1.34	20.2	L753670-09	WG775860
cis-1,2-Dichloroethene	mg/l	0.240	0.247	0*	59.2-129	3.05	20	L753670-09	WG775860
Tetrachloroethene	mg/l	0.0288	0.0288	114.	53-139	0.190	20	L753670-09	WG775860
trans-1,2-Dichloroethene	mg/l	0.0276	0.0270	106.	56.5-129	2.48	20	L753670-09	WG775860
Trichloroethene	mg/l	3.16	3.14	0*	44.1-149	0.730	20	L753670-09	WG775860
Vinyl chloride	mg/l	0.0261	0.0261	101.	47.8-137	0.150	20	L753670-09	WG775860
4-Bromofluorobenzene				98.50	71-126				WG775860
Dibromofluoromethane				98.70	78.3-121				WG775860
Toluene-d8				70.40*	88.5-111				WG775860
1,1-Dichloroethene	mg/l	0.0223	0.0222	89.3	51.1-140	0.640	20.2	L753618-01	WG777627
cis-1,2-Dichloroethene	mg/l	0.0239	0.0234	95.7	59.2-129	2.06	20	L753618-01	WG777627
Tetrachloroethene	mg/l	0.0268	0.0265	107.	53-139	1.14	20	L753618-01	WG777627
trans-1,2-Dichloroethene	mg/l	0.0223	0.0223	89.2	56.5-129	0.0100	20	L753618-01	WG777627
Trichloroethene	mg/l	0.0266	0.0265	100.	44.1-149	0.360	20	L753618-01	WG777627
Vinyl chloride	mg/l	0.0222	0.0221	88.9	47.8-137	0.470	20	L753618-01	WG777627
4-Bromofluorobenzene				95.20	71-126				WG777627
Dibromofluoromethane				94.30	78.3-121				WG777627
Toluene-d8				97.80	88.5-111				WG777627

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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PNG Environmental
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6665 SW Hampton St., Suite 101

Tigard, OR 97223

Quality Assurance Report
Level II

L753675

March 24, 2015

Batch number /Run number / Sample number cross reference

WG775860: R3026374: L753675-01 02 03 04 05 06 07
WG777627: R3026593: L753675-02 04 05 08

* * Calculations are performed prior to rounding of reported values.
* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Quality Assurance Report
Level II

L753675

March 24, 2015

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.

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Paul McBeth
PNG Environmental
6665 SW Hampton St., Suite 101
Tigard, OR 97223

Report Summary

Wednesday March 25, 2015

Report Number: L753676
Samples Received: 03/14/15
Client Project: 1122

Description: Evanite

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

Jarred Willis , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197, FL - E87487, GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704/BIO041, ND - R-140. NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1, TX - T104704245-11-3, OK - 9915, PA - 68-02979, IA Lab #364, EPA - TN002

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

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REPORT OF ANALYSIS

Paul McBeth
PNG Environmental
6665 SW Hampton St., Suite 101
Tigard, OR 97223

March 25, 2015

ESC Sample # : L753676-01

Site ID :

Project # : 1122

Date Received : March 14, 2015
Description : Evanite

Sample ID : DMW-26

Collected By : S. Biles
Collection Date : 03/11/15 14:45

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Volatile Organics								
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	03/25/15	1
cis-1,2-Dichloroethene	6.8	0.26	1.0	ug/l		8260B	03/25/15	1
trans-1,2-Dichloroethene	U	0.40	1.0	ug/l		8260B	03/25/15	1
Tetrachloroethene	0.61	0.37	1.0	ug/l	J	8260B	03/25/15	1
Trichloroethene	53.	0.40	1.0	ug/l		8260B	03/25/15	1
Vinyl chloride	U	0.26	1.0	ug/l		8260B	03/25/15	1
Surrogate Recovery								
Toluene-d8	93.9			% Rec.		8260B	03/25/15	1
Dibromofluoromethane	100.			% Rec.		8260B	03/25/15	1
4-Bromofluorobenzene	98.7			% Rec.		8260B	03/25/15	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
Note:
The reported analytical results relate only to the sample submitted.

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Reported: 03/25/15 16:11 Printed: 03/25/15 16:12

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REPORT OF ANALYSIS

Paul McBeth
PNG Environmental
6665 SW Hampton St., Suite 101
Tigard, OR 97223

March 25, 2015

ESC Sample # : L753676-02

Site ID :

Project # : 1122

Date Received : March 14, 2015
Description : Evanite

Sample ID : IMW-26

Collected By : S. Biles
Collection Date : 03/11/15 15:08

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Volatile Organics								
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	03/25/15	1
cis-1,2-Dichloroethene	47.	0.26	1.0	ug/l		8260B	03/25/15	1
trans-1,2-Dichloroethene	U	0.40	1.0	ug/l		8260B	03/25/15	1
Tetrachloroethene	U	0.37	1.0	ug/l		8260B	03/25/15	1
Trichloroethene	280	4.0	10.	ug/l		8260B	03/25/15	10
Vinyl chloride	U	0.26	1.0	ug/l		8260B	03/25/15	1
Surrogate Recovery								
Toluene-d8	85.7			% Rec.	J2	8260B	03/25/15	1
Dibromofluoromethane	103.			% Rec.		8260B	03/25/15	1
4-Bromofluorobenzene	98.2			% Rec.		8260B	03/25/15	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
Note:
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REPORT OF ANALYSIS

Paul McBeth
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Tigard, OR 97223

March 25, 2015

ESC Sample # : L753676-03

Site ID :

Project # : 1122

Date Received : March 14, 2015
Description : Evanite

Sample ID : DMW-16

Collected By : S. Biles
Collection Date : 03/12/15 10:30

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
TOC (Total Organic Carbon)	650	100	1000	ug/l	J	9060A	03/22/15	1
Volatile Organics								
1,1-Dichloroethene	U	10.	25.	ug/l		8260B	03/21/15	25
cis-1,2-Dichloroethene	690	6.5	25.	ug/l		8260B	03/21/15	25
trans-1,2-Dichloroethene	U	9.9	25.	ug/l		8260B	03/21/15	25
Tetrachloroethene	U	9.3	25.	ug/l		8260B	03/21/15	25
Trichloroethene	8600	100	250	ug/l		8260B	03/23/15	250
Vinyl chloride	U	6.5	25.	ug/l		8260B	03/21/15	25
Surrogate Recovery								
Toluene-d8	121.			% Rec.	J1	8260B	03/21/15	1
Dibromofluoromethane	97.2			% Rec.		8260B	03/21/15	1
4-Bromofluorobenzene	107.			% Rec.		8260B	03/21/15	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
Note:
The reported analytical results relate only to the sample submitted.

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Reported: 03/25/15 16:11 Printed: 03/25/15 16:12

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REPORT OF ANALYSIS

Paul McBeth
PNG Environmental
6665 SW Hampton St., Suite 101
Tigard, OR 97223

March 25, 2015

ESC Sample # : L753676-04

Site ID :

Project # : 1122

Date Received : March 14, 2015
Description : Evanite

Sample ID : IMW-16

Collected By : S. Biles
Collection Date : 03/12/15 11:00

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Volatile Organics								
1,1-Dichloroethene	U	2.0	5.0	ug/l		8260B	03/21/15	5
cis-1,2-Dichloroethene	8.9	1.3	5.0	ug/l		8260B	03/21/15	5
trans-1,2-Dichloroethene	U	2.0	5.0	ug/l		8260B	03/21/15	5
Tetrachloroethene	U	1.9	5.0	ug/l		8260B	03/21/15	5
Trichloroethene	530	2.0	5.0	ug/l		8260B	03/21/15	5
Vinyl chloride	U	1.3	5.0	ug/l		8260B	03/21/15	5
Surrogate Recovery								
Toluene-d8	111.			% Rec.		8260B	03/21/15	1
Dibromofluoromethane	93.9			% Rec.		8260B	03/21/15	1
4-Bromofluorobenzene	109.			% Rec.		8260B	03/21/15	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
Note:

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Reported: 03/25/15 16:11 Printed: 03/25/15 16:12

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REPORT OF ANALYSIS

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March 25, 2015

ESC Sample # : L753676-05

Date Received : March 14, 2015
Description : Evanite

Site ID :

Sample ID : DMW-11

Project # : 1122

Collected By : S. Biles
Collection Date : 03/12/15 11:33

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Volatile Organics								
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	03/21/15	1
cis-1,2-Dichloroethene	28.	0.26	1.0	ug/l		8260B	03/21/15	1
trans-1,2-Dichloroethene	U	0.40	1.0	ug/l		8260B	03/21/15	1
Tetrachloroethene	U	0.37	1.0	ug/l		8260B	03/21/15	1
Trichloroethene	100	0.40	1.0	ug/l		8260B	03/21/15	1
Vinyl chloride	U	0.26	1.0	ug/l		8260B	03/21/15	1
Surrogate Recovery								
Toluene-d8	110.			% Rec.		8260B	03/21/15	1
Dibromofluoromethane	101.			% Rec.		8260B	03/21/15	1
4-Bromofluorobenzene	111.			% Rec.		8260B	03/21/15	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
Note:
The reported analytical results relate only to the sample submitted.

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Reported: 03/25/15 16:11 Printed: 03/25/15 16:12

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REPORT OF ANALYSIS

Paul McBeth
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March 25, 2015

ESC Sample # : L753676-06

Date Received : March 14, 2015
Description : Evanite

Site ID :

Sample ID : IMW-27

Project # : 1122

Collected By : S. Biles
Collection Date : 03/12/15 12:36

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Volatile Organics								
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	03/21/15	1
cis-1,2-Dichloroethene	22.	0.26	1.0	ug/l		8260B	03/21/15	1
trans-1,2-Dichloroethene	U	0.40	1.0	ug/l		8260B	03/21/15	1
Tetrachloroethene	U	0.37	1.0	ug/l		8260B	03/21/15	1
Trichloroethene	160	0.40	1.0	ug/l		8260B	03/21/15	1
Vinyl chloride	0.82	0.26	1.0	ug/l	J	8260B	03/21/15	1
Surrogate Recovery								
Toluene-d8	111.			% Rec.		8260B	03/21/15	1
Dibromofluoromethane	97.9			% Rec.		8260B	03/21/15	1
4-Bromofluorobenzene	108.			% Rec.		8260B	03/21/15	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
Note:
The reported analytical results relate only to the sample submitted.

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Reported: 03/25/15 16:11 Printed: 03/25/15 16:12

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REPORT OF ANALYSIS

Paul McBeth
PNG Environmental
6665 SW Hampton St., Suite 101
Tigard, OR 97223

March 25, 2015

ESC Sample # : L753676-07

Date Received : March 14, 2015
Description : Evanite

Site ID :

Sample ID : DMW-27

Project # : 1122

Collected By : S. Biles
Collection Date : 03/12/15 13:27

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Volatile Organics								
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	03/21/15	1
cis-1,2-Dichloroethene	41.	0.26	1.0	ug/l		8260B	03/21/15	1
trans-1,2-Dichloroethene	U	0.40	1.0	ug/l		8260B	03/21/15	1
Tetrachloroethene	U	0.37	1.0	ug/l		8260B	03/21/15	1
Trichloroethene	30.	0.40	1.0	ug/l		8260B	03/21/15	1
Vinyl chloride	10.	0.26	1.0	ug/l		8260B	03/21/15	1
Surrogate Recovery								
Toluene-d8	109.			% Rec.		8260B	03/21/15	1
Dibromofluoromethane	97.4			% Rec.		8260B	03/21/15	1
4-Bromofluorobenzene	107.			% Rec.		8260B	03/21/15	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
Note:

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REPORT OF ANALYSIS

Paul McBeth
PNG Environmental
6665 SW Hampton St., Suite 101
Tigard, OR 97223

March 25, 2015

ESC Sample # : L753676-08

Date Received : March 14, 2015
Description : Evanite

Site ID :

Sample ID : DMW-32

Project # : 1122

Collected By : S. Biles
Collection Date : 03/12/15 14:40

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Volatile Organics								
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	03/23/15	1
cis-1,2-Dichloroethene	16.	0.26	1.0	ug/l		8260B	03/23/15	1
trans-1,2-Dichloroethene	U	0.40	1.0	ug/l		8260B	03/23/15	1
Tetrachloroethene	U	0.37	1.0	ug/l		8260B	03/23/15	1
Trichloroethene	66.	0.40	1.0	ug/l		8260B	03/23/15	1
Vinyl chloride	U	0.26	1.0	ug/l		8260B	03/23/15	1
Surrogate Recovery								
Toluene-d8	105.			% Rec.		8260B	03/23/15	1
Dibromofluoromethane	104.			% Rec.		8260B	03/23/15	1
4-Bromofluorobenzene	98.5			% Rec.		8260B	03/23/15	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
Note:
The reported analytical results relate only to the sample submitted.

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REPORT OF ANALYSIS

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6665 SW Hampton St., Suite 101
Tigard, OR 97223

March 25, 2015

ESC Sample # : L753676-09

Date Received : March 14, 2015
Description : Evanite

Site ID :

Sample ID : DMW-36

Project # : 1122

Collected By : S. Biles
Collection Date : 03/13/15 09:07

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Volatile Organics								
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	03/21/15	1
cis-1,2-Dichloroethene	7.3	0.26	1.0	ug/l		8260B	03/21/15	1
trans-1,2-Dichloroethene	U	0.40	1.0	ug/l		8260B	03/21/15	1
Tetrachloroethene	U	0.37	1.0	ug/l		8260B	03/21/15	1
Trichloroethene	5.8	0.40	1.0	ug/l		8260B	03/21/15	1
Vinyl chloride	U	0.26	1.0	ug/l		8260B	03/21/15	1
Surrogate Recovery								
Toluene-d8	109.			% Rec.		8260B	03/21/15	1
Dibromofluoromethane	95.9			% Rec.		8260B	03/21/15	1
4-Bromofluorobenzene	106.			% Rec.		8260B	03/21/15	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
Note:
The reported analytical results relate only to the sample submitted.

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Reported: 03/25/15 16:11 Printed: 03/25/15 16:12

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L753676-01	WG777982	SAMP	Tetrachloroethene	R3026941	J
L753676-02	WG777982	SAMP	Toluene-d8	R3026941	J2
L753676-03	WG775861	SAMP	Toluene-d8	R3026207	J1
	WG777028	SAMP	TOC (Total Organic Carbon)	R3026196	J
L753676-06	WG775861	SAMP	Vinyl chloride	R3026207	J

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J	(EPA) - Estimated value below the lowest calibration point. Confidence correlates with concentration.
J1	Surrogate recovery limits have been exceeded; values are outside upper control limits
J2	Surrogate recovery limits have been exceeded; values are outside lower control limits

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods,it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable "unless qualified as 'R' (Rejected)."

Definitions

Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.

Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Differrence.

Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromotography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.

TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

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Quality Assurance Report
Level II

L753676

March 25, 2015

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
TOC (Total Organic Carbon)	< 1	mg/l			WG777028	03/22/15 01:51
1,1-Dichloroethene	< .001	mg/l			WG775861	03/20/15 23:44
cis-1,2-Dichloroethene	< .001	mg/l			WG775861	03/20/15 23:44
Tetrachloroethene	< .001	mg/l			WG775861	03/20/15 23:44
trans-1,2-Dichloroethene	< .001	mg/l			WG775861	03/20/15 23:44
Trichloroethene	< .001	mg/l			WG775861	03/20/15 23:44
Vinyl chloride	< .001	mg/l			WG775861	03/20/15 23:44
4-Bromofluorobenzene		% Rec.	109.0	71-126	WG775861	03/20/15 23:44
Dibromofluoromethane		% Rec.	95.50	78.3-121	WG775861	03/20/15 23:44
Toluene-d8		% Rec.	106.0	88.5-111	WG775861	03/20/15 23:44
Trichloroethene	< .001	mg/l			WG777418	03/23/15 00:41
4-Bromofluorobenzene		% Rec.	105.0	71-126	WG777418	03/23/15 00:41
Dibromofluoromethane		% Rec.	108.0	78.3-121	WG777418	03/23/15 00:41
Toluene-d8		% Rec.	105.0	88.5-111	WG777418	03/23/15 00:41
1,1-Dichloroethene	< .001	mg/l			WG777519	03/23/15 16:15
cis-1,2-Dichloroethene	< .001	mg/l			WG777519	03/23/15 16:15
Tetrachloroethene	< .001	mg/l			WG777519	03/23/15 16:15
trans-1,2-Dichloroethene	< .001	mg/l			WG777519	03/23/15 16:15
Trichloroethene	< .001	mg/l			WG777519	03/23/15 16:15
Vinyl chloride	< .001	mg/l			WG777519	03/23/15 16:15
4-Bromofluorobenzene		% Rec.	102.0	71-126	WG777519	03/23/15 16:15
Dibromofluoromethane		% Rec.	107.0	78.3-121	WG777519	03/23/15 16:15
Toluene-d8		% Rec.	104.0	88.5-111	WG777519	03/23/15 16:15
1,1-Dichloroethene	< .001	mg/l			WG777982	03/25/15 12:14
cis-1,2-Dichloroethene	< .001	mg/l			WG777982	03/25/15 12:14
Tetrachloroethene	< .001	mg/l			WG777982	03/25/15 12:14
trans-1,2-Dichloroethene	< .001	mg/l			WG777982	03/25/15 12:14
Trichloroethene	< .001	mg/l			WG777982	03/25/15 12:14
Vinyl chloride	< .001	mg/l			WG777982	03/25/15 12:14
4-Bromofluorobenzene		% Rec.	95.30	71-126	WG777982	03/25/15 12:14
Dibromofluoromethane		% Rec.	99.80	78.3-121	WG777982	03/25/15 12:14
Toluene-d8		% Rec.	102.0	88.5-111	WG777982	03/25/15 12:14

Duplicate

Analyte	Units	Result	Duplicate	RPD	Limit	Ref Samp	Batch
TOC (Total Organic Carbon)	mg/l	12.0	11.0	5.31	20	L753093-02	WG777028
TOC (Total Organic Carbon)	mg/l	1.60	1.60	0.0	20	L753667-07	WG777028

Laboratory Control Sample

Analyte	Units	Known Val	Result	% Rec	Limit	Batch
TOC (Total Organic Carbon)	mg/l	75	78.6	105.	85-115	WG777028
1,1-Dichloroethene	mg/l	.025	0.0223	89.4	67.8-129	WG775861
cis-1,2-Dichloroethene	mg/l	.025	0.0233	93.2	76-119	WG775861
Tetrachloroethene	mg/l	.025	0.0277	111.	72.6-126	WG775861
trans-1,2-Dichloroethene	mg/l	.025	0.0233	93.3	72.6-121	WG775861
Trichloroethene	mg/l	.025	0.0260	104.	77.7-118	WG775861
Vinyl chloride	mg/l	.025	0.0255	102.	65.9-128	WG775861

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Level II

L753676

March 25, 2015

Analyte	Units	Known Val	Result	% Rec	Limit	Batch
Laboratory Control Sample						
4-Bromofluorobenzene				104.0	71-126	
Dibromofluoromethane				96.70	78.3-121	
Toluene-d8				108.0	88.5-111	
Trichloroethene	mg/l	.025	0.0241	96.6	77.7-118	WG777418
4-Bromofluorobenzene				99.10	71-126	WG777418
Dibromofluoromethane				119.0	78.3-121	WG777418
Toluene-d8				109.0	88.5-111	WG777418
1,1-Dichloroethene	mg/l	.025	0.0224	89.7	67.8-129	WG777519
cis-1,2-Dichloroethene	mg/l	.025	0.0246	98.4	76-119	WG777519
Tetrachloroethene	mg/l	.025	0.0272	109.	72.6-126	WG777519
trans-1,2-Dichloroethene	mg/l	.025	0.0233	93.3	72.6-121	WG777519
Trichloroethene	mg/l	.025	0.0259	103.	77.7-118	WG777519
Vinyl chloride	mg/l	.025	0.0244	97.7	65.9-128	WG777519
4-Bromofluorobenzene				105.0	71-126	WG777519
Dibromofluoromethane				102.0	78.3-121	WG777519
Toluene-d8				107.0	88.5-111	WG777519
1,1-Dichloroethene	mg/l	.025	0.0236	94.5	67.8-129	WG777982
cis-1,2-Dichloroethene	mg/l	.025	0.0254	102.	76-119	WG777982
Tetrachloroethene	mg/l	.025	0.0267	107.	72.6-126	WG777982
trans-1,2-Dichloroethene	mg/l	.025	0.0242	96.6	72.6-121	WG777982
Trichloroethene	mg/l	.025	0.0266	106.	77.7-118	WG777982
Vinyl chloride	mg/l	.025	0.0223	89.3	65.9-128	WG777982
4-Bromofluorobenzene				96.20	71-126	WG777982
Dibromofluoromethane				97.40	78.3-121	WG777982
Toluene-d8				99.30	88.5-111	WG777982

Analyte	Units	Result	Ref	%Rec	Limit	RPD	Limit	Batch
Laboratory Control Sample Duplicate								
TOC (Total Organic Carbon)	mg/l	78.2	78.6	104.	85-115	0.434	20	WG777028
1,1-Dichloroethene	mg/l	0.0234	0.0223	93.0	67.8-129	4.51	20	WG775861
cis-1,2-Dichloroethene	mg/l	0.0239	0.0233	96.0	76-119	2.72	20	WG775861
Tetrachloroethene	mg/l	0.0276	0.0277	110.	72.6-126	0.470	20	WG775861
trans-1,2-Dichloroethene	mg/l	0.0235	0.0233	94.0	72.6-121	0.770	20	WG775861
Trichloroethene	mg/l	0.0260	0.0260	104.	77.7-118	0.130	20	WG775861
Vinyl chloride	mg/l	0.0254	0.0255	102.	65.9-128	0.450	20	WG775861
4-Bromofluorobenzene				105.0	71-126			WG775861
Dibromofluoromethane				99.10	78.3-121			WG775861
Toluene-d8				106.0	88.5-111			WG775861
Trichloroethene	mg/l	0.0235	0.0241	94.0	77.7-118	2.65	20	WG777418
4-Bromofluorobenzene				108.0	71-126			WG777418
Dibromofluoromethane				118.0	78.3-121			WG777418
Toluene-d8				108.0	88.5-111			WG777418
1,1-Dichloroethene	mg/l	0.0227	0.0224	91.0	67.8-129	1.04	20	WG777519
cis-1,2-Dichloroethene	mg/l	0.0249	0.0246	100.	76-119	1.12	20	WG777519
Tetrachloroethene	mg/l	0.0271	0.0272	108.	72.6-126	0.430	20	WG777519
trans-1,2-Dichloroethene	mg/l	0.0233	0.0233	93.0	72.6-121	0.0900	20	WG777519
Trichloroethene	mg/l	0.0263	0.0259	105.	77.7-118	1.56	20	WG777519
Vinyl chloride	mg/l	0.0242	0.0244	97.0	65.9-128	0.810	20	WG777519

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Tigard, OR 97223

Quality Assurance Report
Level II

L753676

March 25, 2015

Analyte	Units	Laboratory Control Sample Duplicate Result	Ref	%Rec	Limit	RPD	Limit	Batch
4-Bromofluorobenzene				107.0	71-126			
Dibromofluoromethane				101.0	78.3-121			
Toluene-d8				104.0	88.5-111			
1,1-Dichloroethene	mg/l	0.0223	0.0236	89.0	67.8-129	5.67	20	WG777982
cis-1,2-Dichloroethene	mg/l	0.0243	0.0254	97.0	76-119	4.46	20	WG777982
Tetrachloroethene	mg/l	0.0262	0.0267	105.	72.6-126	1.76	20	WG777982
trans-1,2-Dichloroethene	mg/l	0.0232	0.0242	93.0	72.6-121	3.99	20	WG777982
Trichloroethene	mg/l	0.0255	0.0266	102.	77.7-118	4.31	20	WG777982
Vinyl chloride	mg/l	0.0212	0.0223	85.0	65.9-128	5.06	20	WG777982
4-Bromofluorobenzene				97.00	71-126			WG777982
Dibromofluoromethane				96.00	78.3-121			WG777982
Toluene-d8				98.70	88.5-111			WG777982

Analyte	Units	Matrix Spike MS Res	Ref Res	TV	% Rec	Limit	Ref Samp	Batch
TOC (Total Organic Carbon)	mg/l	66.9	17.0	50	100.	80-120	L753181-03	WG777028
1,1-Dichloroethene	mg/l	0.0228	0.0	.025	91.0	51.1-140	L753676-05	WG775861
cis-1,2-Dichloroethene	mg/l	0.0522	0.0278	.025	98.0	59.2-129	L753676-05	WG775861
Tetrachloroethene	mg/l	0.0259	0.0	.025	100.	53-139	L753676-05	WG775861
trans-1,2-Dichloroethene	mg/l	0.0241	0.0	.025	96.0	56.5-129	L753676-05	WG775861
Trichloroethene	mg/l	0.126	0.104	.025	88.0	44.1-149	L753676-05	WG775861
Vinyl chloride	mg/l	0.0252	0.0	.025	100.	47.8-137	L753676-05	WG775861
4-Bromofluorobenzene					104.0	71-126		WG775861
Dibromofluoromethane					98.40	78.3-121		WG775861
Toluene-d8					109.0	88.5-111		WG775861
Trichloroethene	mg/l	0.0229	0.0	.025	92.0	44.1-149	L753638-04	WG777418
4-Bromofluorobenzene					116.0	71-126		WG777418
Dibromofluoromethane					101.0	78.3-121		WG777418
Toluene-d8					98.30	88.5-111		WG777418
1,1-Dichloroethene	mg/l	0.0172	0.0	.025	69.0	51.1-140	L753210-16	WG777519
cis-1,2-Dichloroethene	mg/l	0.0207	0.0	.025	83.0	59.2-129	L753210-16	WG777519
Tetrachloroethene	mg/l	0.0220	0.0	.025	88.0	53-139	L753210-16	WG777519
trans-1,2-Dichloroethene	mg/l	0.0182	0.0	.025	73.0	56.5-129	L753210-16	WG777519
Trichloroethene	mg/l	0.0209	0.0	.025	84.0	44.1-149	L753210-16	WG777519
Vinyl chloride	mg/l	0.0168	0.0	.025	67.0	47.8-137	L753210-16	WG777519
4-Bromofluorobenzene					104.0	71-126		WG777519
Dibromofluoromethane					99.10	78.3-121		WG777519
Toluene-d8					104.0	88.5-111		WG777519

Analyte	Units	Matrix Spike Duplicate MSD	Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
TOC (Total Organic Carbon)	mg/l	64.8	66.9	95.6	80-120	3.18	20	L753181-03	WG777028
1,1-Dichloroethene	mg/l	0.0196	0.0228	78.3	51.1-140	15.4	20.2	L753676-05	WG775861
cis-1,2-Dichloroethene	mg/l	0.0461	0.0522	73.0	59.2-129	12.6	20	L753676-05	WG775861
Tetrachloroethene	mg/l	0.0255	0.0259	102.	53-139	1.55	20	L753676-05	WG775861
trans-1,2-Dichloroethene	mg/l	0.0204	0.0241	81.7	56.5-129	16.5	20	L753676-05	WG775861
Trichloroethene	mg/l	0.122	0.126	69.7	44.1-149	3.65	20	L753676-05	WG775861
Vinyl chloride	mg/l	0.0216	0.0252	86.5	47.8-137	15.1	20	L753676-05	WG775861
4-Bromofluorobenzene				104.0	71-126				WG775861

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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PNG Environmental
Paul McBeth
6665 SW Hampton St., Suite 101

Tigard, OR 97223

Quality Assurance Report
Level II

L753676

March 25, 2015

Analyte	Units	Matrix Spike MSD	Ref	Duplicate %Rec	Limit	RPD	Limit	Ref Samp	Batch
Dibromofluoromethane				93.60	78.3-121				
Toluene-d8				112.0*	88.5-111				
Trichloroethene	mg/l	0.0236	0.0229	94.2	44.1-149	2.91	20	L753638-04	WG777418
4-Bromofluorobenzene				105.0	71-126				WG777418
Dibromofluoromethane				125.0*	78.3-121				WG777418
Toluene-d8				109.0	88.5-111				WG777418
1,1-Dichloroethene	mg/l	0.0172	0.0172	68.8	51.1-140	0.110	20.2	L753210-16	WG777519
cis-1,2-Dichloroethene	mg/l	0.0209	0.0207	83.8	59.2-129	1.43	20	L753210-16	WG777519
Tetrachloroethene	mg/l	0.0220	0.0220	88.0	53-139	0.130	20	L753210-16	WG777519
trans-1,2-Dichloroethene	mg/l	0.0179	0.0182	71.6	56.5-129	1.46	20	L753210-16	WG777519
Trichloroethene	mg/l	0.0209	0.0209	83.7	44.1-149	0.0700	20	L753210-16	WG777519
Vinyl chloride	mg/l	0.0171	0.0168	68.4	47.8-137	1.94	20	L753210-16	WG777519
4-Bromofluorobenzene				109.0	71-126				WG777519
Dibromofluoromethane				102.0	78.3-121				WG777519
Toluene-d8				105.0	88.5-111				WG777519

Batch number /Run number / Sample number cross reference

WG777028: R3026196: L753676-03
WG775861: R3026207: L753676-03 04 05 06 07 09
WG777418: R3026403: L753676-03
WG777519: R3026508: L753676-08
WG777982: R3026941: L753676-01 02

* * Calculations are performed prior to rounding of reported values.
* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Paul McBeth
6665 SW Hampton St., Suite 101

Tigard, OR 97223

Quality Assurance Report
Level II

L753676

March 25, 2015

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.

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Paul McBeth
PNG Environmental
6665 SW Hampton St., Suite 101
Tigard, OR 97223

Report Summary

Monday June 22, 2015

Report Number: L771187
Samples Received: 06/13/15
Client Project: 1122

Description: Evanite

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

Jarred Willis , ESC Representative

Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197, FL - E87487, GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016, NC - ENV375/DW21704/BIO041, ND - R-140. NJ - TN002, NJ NELAP - TN002, SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612, MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1, TX - T104704245-11-3, OK - 9915, PA - 68-02979, IA Lab #364, EPA - TN002

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

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REPORT OF ANALYSIS

Paul McBeth
PNG Environmental
6665 SW Hampton St., Suite 101
Tigard, OR 97223

June 22, 2015

ESC Sample # : L771187-01

Site ID :

Project # : 1122

Date Received : June 13, 2015
Description : Evanite

Sample ID : DMW-39

Collected By : Jay Greifer
Collection Date : 06/10/15 12:06

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Volatile Organics								
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	06/21/15	1
cis-1,2-Dichloroethene	1.6	0.26	1.0	ug/l		8260B	06/21/15	1
trans-1,2-Dichloroethene	U	0.40	1.0	ug/l		8260B	06/21/15	1
Tetrachloroethene	U	0.37	1.0	ug/l		8260B	06/21/15	1
Trichloroethene	2.6	0.40	1.0	ug/l		8260B	06/21/15	1
Vinyl chloride	U	0.26	1.0	ug/l		8260B	06/21/15	1
Surrogate Recovery								
Toluene-d8	103.			% Rec.		8260B	06/21/15	1
Dibromofluoromethane	102.			% Rec.		8260B	06/21/15	1
4-Bromofluorobenzene	100.			% Rec.		8260B	06/21/15	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
Note:
The reported analytical results relate only to the sample submitted.

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Paul McBeth
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6665 SW Hampton St., Suite 101
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June 22, 2015

ESC Sample # : L771187-02

Site ID :

Project # : 1122

Date Received : June 13, 2015
Description : Evanite

Sample ID : DMW-38

Collected By : Jay Greifer
Collection Date : 06/10/15 12:43

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Volatile Organics								
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	06/21/15	1
cis-1,2-Dichloroethene	20.	0.26	1.0	ug/l		8260B	06/21/15	1
trans-1,2-Dichloroethene	U	0.40	1.0	ug/l		8260B	06/21/15	1
Tetrachloroethene	U	0.37	1.0	ug/l		8260B	06/21/15	1
Trichloroethene	170	0.40	1.0	ug/l		8260B	06/21/15	1
Vinyl chloride	U	0.26	1.0	ug/l		8260B	06/21/15	1
Surrogate Recovery								
Toluene-d8	99.7			% Rec.		8260B	06/21/15	1
Dibromofluoromethane	99.4			% Rec.		8260B	06/21/15	1
4-Bromofluorobenzene	98.4			% Rec.		8260B	06/21/15	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
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REPORT OF ANALYSIS

Paul McBeth
PNG Environmental
6665 SW Hampton St., Suite 101
Tigard, OR 97223

June 22, 2015

ESC Sample # : L771187-03

Site ID :

Project # : 1122

Date Received : June 13, 2015
Description : Evanite

Sample ID : DMW-37

Collected By : Jay Greifer
Collection Date : 06/10/15 13:24

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Volatile Organics								
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	06/21/15	1
cis-1,2-Dichloroethene	1.0	0.26	1.0	ug/l		8260B	06/21/15	1
trans-1,2-Dichloroethene	U	0.40	1.0	ug/l		8260B	06/21/15	1
Tetrachloroethene	U	0.37	1.0	ug/l		8260B	06/21/15	1
Trichloroethene	8.2	0.40	1.0	ug/l		8260B	06/21/15	1
Vinyl chloride	U	0.26	1.0	ug/l		8260B	06/21/15	1
Surrogate Recovery								
Toluene-d8	102.			% Rec.		8260B	06/21/15	1
Dibromofluoromethane	102.			% Rec.		8260B	06/21/15	1
4-Bromofluorobenzene	101.			% Rec.		8260B	06/21/15	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
Note:
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REPORT OF ANALYSIS

Paul McBeth
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June 22, 2015

ESC Sample # : L771187-04

Site ID :

Project # : 1122

Date Received : June 13, 2015
Description : Evanite

Sample ID : DMW-32

Collected By : Jay Greifer
Collection Date : 06/10/15 14:24

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Volatile Organics								
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	06/21/15	1
cis-1,2-Dichloroethene	U	0.26	1.0	ug/l		8260B	06/21/15	1
trans-1,2-Dichloroethene	U	0.40	1.0	ug/l		8260B	06/21/15	1
Tetrachloroethene	U	0.37	1.0	ug/l		8260B	06/21/15	1
Trichloroethene	39.	0.40	1.0	ug/l		8260B	06/21/15	1
Vinyl chloride	U	0.26	1.0	ug/l		8260B	06/21/15	1
Surrogate Recovery								
Toluene-d8	102.			% Rec.		8260B	06/21/15	1
Dibromofluoromethane	103.			% Rec.		8260B	06/21/15	1
4-Bromofluorobenzene	101.			% Rec.		8260B	06/21/15	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
Note:
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Paul McBeth
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June 22, 2015

ESC Sample # : L771187-05

Site ID :

Project # : 1122

Date Received : June 13, 2015
Description : Evanite

Sample ID : DMW-36

Collected By : Jay Greifer
Collection Date : 06/11/15 09:30

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Volatile Organics								
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	06/21/15	1
cis-1,2-Dichloroethene	13.	0.26	1.0	ug/l		8260B	06/21/15	1
trans-1,2-Dichloroethene	U	0.40	1.0	ug/l		8260B	06/21/15	1
Tetrachloroethene	U	0.37	1.0	ug/l		8260B	06/21/15	1
Trichloroethene	5.8	0.40	1.0	ug/l		8260B	06/21/15	1
Vinyl chloride	U	0.26	1.0	ug/l		8260B	06/21/15	1
Surrogate Recovery								
Toluene-d8	102.			% Rec.		8260B	06/21/15	1
Dibromofluoromethane	107.			% Rec.		8260B	06/21/15	1
4-Bromofluorobenzene	100.			% Rec.		8260B	06/21/15	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
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REPORT OF ANALYSIS

Paul McBeth
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June 22, 2015

ESC Sample # : L771187-06

Site ID :

Project # : 1122

Date Received : June 13, 2015
Description : Evanite

Sample ID : DMW-26

Collected By : Jay Greifer
Collection Date : 06/11/15 10:12

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Volatile Organics								
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	06/21/15	1
cis-1,2-Dichloroethene	16.	0.26	1.0	ug/l		8260B	06/21/15	1
trans-1,2-Dichloroethene	U	0.40	1.0	ug/l		8260B	06/21/15	1
Tetrachloroethene	U	0.37	1.0	ug/l		8260B	06/21/15	1
Trichloroethene	100	0.40	1.0	ug/l		8260B	06/21/15	1
Vinyl chloride	U	0.26	1.0	ug/l		8260B	06/21/15	1
Surrogate Recovery								
Toluene-d8	98.6			% Rec.		8260B	06/21/15	1
Dibromofluoromethane	109.			% Rec.		8260B	06/21/15	1
4-Bromofluorobenzene	106.			% Rec.		8260B	06/21/15	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
Note:
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REPORT OF ANALYSIS

Paul McBeth
PNG Environmental
6665 SW Hampton St., Suite 101
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June 22, 2015

ESC Sample # : L771187-07

Site ID :

Project # : 1122

Date Received : June 13, 2015
Description : Evanite

Sample ID : DMW-29

Collected By : Jay Greifer
Collection Date : 06/11/15 10:48

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
TOC (Total Organic Carbon)	590	100	1000	ug/l	J	9060A	06/16/15	1
Volatile Organics								
1,1-Dichloroethene	U	2.0	5.0	ug/l		8260B	06/21/15	5
cis-1,2-Dichloroethene	52.	1.3	5.0	ug/l		8260B	06/21/15	5
trans-1,2-Dichloroethene	3.6	2.0	5.0	ug/l	J	8260B	06/21/15	5
Tetrachloroethene	U	1.9	5.0	ug/l		8260B	06/21/15	5
Trichloroethene	160	2.0	5.0	ug/l		8260B	06/21/15	5
Vinyl chloride	U	1.3	5.0	ug/l		8260B	06/21/15	5
Surrogate Recovery								
Toluene-d8	102.			% Rec.		8260B	06/21/15	1
Dibromofluoromethane	111.			% Rec.		8260B	06/21/15	1
4-Bromofluorobenzene	98.0			% Rec.		8260B	06/21/15	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
Note:
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REPORT OF ANALYSIS

Paul McBeth
PNG Environmental
6665 SW Hampton St., Suite 101
Tigard, OR 97223

June 22, 2015

ESC Sample # : L771187-08

Site ID :

Project # : 1122

Date Received : June 13, 2015
Description : Evanite

Sample ID : DMW-24

Collected By : Jay Greifer
Collection Date : 06/11/15 11:00

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
TOC (Total Organic Carbon)	910	100	1000	ug/l	J	9060A	06/18/15	1
Volatile Organics								
1,1-Dichloroethene	U	8.0	20.	ug/l		8260B	06/21/15	20
cis-1,2-Dichloroethene	160	5.2	20.	ug/l		8260B	06/21/15	20
trans-1,2-Dichloroethene	U	7.9	20.	ug/l		8260B	06/21/15	20
Tetrachloroethene	U	7.4	20.	ug/l		8260B	06/21/15	20
Trichloroethene	680	8.0	20.	ug/l		8260B	06/21/15	20
Vinyl chloride	U	5.2	20.	ug/l		8260B	06/21/15	20
Surrogate Recovery								
Toluene-d8	101.			% Rec.		8260B	06/21/15	1
Dibromofluoromethane	100.			% Rec.		8260B	06/21/15	1
4-Bromofluorobenzene	101.			% Rec.		8260B	06/21/15	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
Note:
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REPORT OF ANALYSIS

Paul McBeth
PNG Environmental
6665 SW Hampton St., Suite 101
Tigard, OR 97223

June 22, 2015

ESC Sample # : L771187-09

Site ID :

Project # : 1122

Date Received : June 13, 2015
Description : Evanite

Sample ID : DMW-3

Collected By : Jay Greifer
Collection Date : 06/11/15 11:11

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
TOC (Total Organic Carbon)	2600	100	1000	ug/l		9060A	06/17/15	1
Volatile Organics								
1,1-Dichloroethene	U	20.	50.	ug/l		8260B	06/21/15	50
cis-1,2-Dichloroethene	230	13.	50.	ug/l		8260B	06/21/15	50
trans-1,2-Dichloroethene	U	20.	50.	ug/l		8260B	06/21/15	50
Tetrachloroethene	U	19.	50.	ug/l		8260B	06/21/15	50
Trichloroethene	1900	20.	50.	ug/l		8260B	06/21/15	50
Vinyl chloride	U	13.	50.	ug/l		8260B	06/21/15	50
Surrogate Recovery								
Toluene-d8	101.			% Rec.		8260B	06/21/15	1
Dibromofluoromethane	102.			% Rec.		8260B	06/21/15	1
4-Bromofluorobenzene	100.			% Rec.		8260B	06/21/15	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
Note:
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Paul McBeth
PNG Environmental
6665 SW Hampton St., Suite 101
Tigard, OR 97223

June 22, 2015

ESC Sample # : L771187-10

Site ID :

Project # : 1122

Date Received : June 13, 2015
Description : Evanite

Sample ID : DMW-17

Collected By : Jay Greifer
Collection Date : 06/10/15 12:29

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
TOC (Total Organic Carbon)	3500	100	1000	ug/l		9060A	06/17/15	1
Volatile Organics								
1,1-Dichloroethene	0.43	0.40	1.0	ug/l	J	8260B	06/21/15	1
cis-1,2-Dichloroethene	93.	0.26	1.0	ug/l		8260B	06/21/15	1
trans-1,2-Dichloroethene	0.52	0.40	1.0	ug/l	J	8260B	06/21/15	1
Tetrachloroethene	U	0.37	1.0	ug/l		8260B	06/21/15	1
Trichloroethene	3.7	0.40	1.0	ug/l		8260B	06/21/15	1
Vinyl chloride	7.9	0.26	1.0	ug/l		8260B	06/21/15	1
Surrogate Recovery								
Toluene-d8	102.			% Rec.		8260B	06/21/15	1
Dibromofluoromethane	101.			% Rec.		8260B	06/21/15	1
4-Bromofluorobenzene	98.2			% Rec.		8260B	06/21/15	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
Note:
The reported analytical results relate only to the sample submitted.

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REPORT OF ANALYSIS

Paul McBeth
PNG Environmental
6665 SW Hampton St., Suite 101
Tigard, OR 97223

June 22, 2015

ESC Sample # : L771187-11

Site ID :

Project # : 1122

Date Received : June 13, 2015
Description : Evanite

Sample ID : DMW-25

Collected By : Jay Greifer
Collection Date : 06/10/15 13:18

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Volatile Organics								
1,1-Dichloroethene	U	2.0	5.0	ug/l		8260B	06/21/15	5
cis-1,2-Dichloroethene	68.	1.3	5.0	ug/l		8260B	06/21/15	5
trans-1,2-Dichloroethene	U	2.0	5.0	ug/l		8260B	06/21/15	5
Tetrachloroethene	U	1.9	5.0	ug/l		8260B	06/21/15	5
Trichloroethene	370	2.0	5.0	ug/l		8260B	06/21/15	5
Vinyl chloride	U	1.3	5.0	ug/l		8260B	06/21/15	5
Surrogate Recovery								
Toluene-d8	101.			% Rec.		8260B	06/21/15	1
Dibromofluoromethane	98.8			% Rec.		8260B	06/21/15	1
4-Bromofluorobenzene	101.			% Rec.		8260B	06/21/15	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
Note:

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Tigard, OR 97223

June 22, 2015

ESC Sample # : L771187-12

Site ID :

Project # : 1122

Date Received : June 13, 2015
Description : Evanite

Sample ID : DMW-16

Collected By : Jay Greifer
Collection Date : 06/10/15 14:19

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
TOC (Total Organic Carbon)	2300	100	1000	ug/l		9060A	06/17/15	1
Volatile Organics								
1,1-Dichloroethene	U	100	250	ug/l		8260B	06/21/15	250
cis-1,2-Dichloroethene	490	65.	250	ug/l		8260B	06/21/15	250
trans-1,2-Dichloroethene	U	99.	250	ug/l		8260B	06/21/15	250
Tetrachloroethene	U	93.	250	ug/l		8260B	06/21/15	250
Trichloroethene	9800	100	250	ug/l		8260B	06/21/15	250
Vinyl chloride	U	65.	250	ug/l		8260B	06/21/15	250
Surrogate Recovery								
Toluene-d8	101.			% Rec.		8260B	06/21/15	1
Dibromofluoromethane	102.			% Rec.		8260B	06/21/15	1
4-Bromofluorobenzene	104.			% Rec.		8260B	06/21/15	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
Note:
The reported analytical results relate only to the sample submitted.

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REPORT OF ANALYSIS

Paul McBeth
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6665 SW Hampton St., Suite 101
Tigard, OR 97223

June 22, 2015

ESC Sample # : L771187-13

Site ID :

Project # : 1122

Date Received : June 13, 2015
Description : Evanite

Sample ID : DMW-27

Collected By : Jay Greifer
Collection Date : 06/11/15 09:40

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Volatile Organics								
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	06/21/15	1
cis-1,2-Dichloroethene	24.	0.26	1.0	ug/l		8260B	06/21/15	1
trans-1,2-Dichloroethene	U	0.40	1.0	ug/l		8260B	06/21/15	1
Tetrachloroethene	U	0.37	1.0	ug/l		8260B	06/21/15	1
Trichloroethene	2.1	0.40	1.0	ug/l		8260B	06/21/15	1
Vinyl chloride	6.8	0.26	1.0	ug/l		8260B	06/21/15	1
Surrogate Recovery								
Toluene-d8	104.			% Rec.		8260B	06/21/15	1
Dibromofluoromethane	107.			% Rec.		8260B	06/21/15	1
4-Bromofluorobenzene	101.			% Rec.		8260B	06/21/15	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
Note:
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REPORT OF ANALYSIS

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6665 SW Hampton St., Suite 101
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June 22, 2015

ESC Sample # : L771187-14

Site ID :

Project # : 1122

Date Received : June 13, 2015
Description : Evanite

Sample ID : DMW-28

Collected By : Jay Greifer
Collection Date : 06/11/15 10:35

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
TOC (Total Organic Carbon)	5600	100	1000	ug/l		9060A	06/17/15	1
Volatile Organics								
1,1-Dichloroethene	U	20.	50.	ug/l		8260B	06/21/15	50
cis-1,2-Dichloroethene	20.	13.	50.	ug/l	J	8260B	06/21/15	50
trans-1,2-Dichloroethene	U	20.	50.	ug/l		8260B	06/21/15	50
Tetrachloroethene	U	19.	50.	ug/l		8260B	06/21/15	50
Trichloroethene	1200	20.	50.	ug/l		8260B	06/21/15	50
Vinyl chloride	U	13.	50.	ug/l		8260B	06/21/15	50
Surrogate Recovery								
Toluene-d8	101.			% Rec.		8260B	06/21/15	1
Dibromofluoromethane	112.			% Rec.		8260B	06/21/15	1
4-Bromofluorobenzene	106.			% Rec.		8260B	06/21/15	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
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REPORT OF ANALYSIS

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6665 SW Hampton St., Suite 101
Tigard, OR 97223

June 22, 2015

ESC Sample # : L771187-15

Site ID :

Project # : 1122

Date Received : June 13, 2015
Description : Evanite

Sample ID : DMW-23

Collected By : Jay Greifer
Collection Date : 06/11/15 11:16

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
TOC (Total Organic Carbon)	2300	100	1000	ug/l		9060A	06/17/15	1
Volatile Organics								
1,1-Dichloroethene	U	80.	200	ug/l		8260B	06/21/15	200
cis-1,2-Dichloroethene	280	52.	200	ug/l		8260B	06/21/15	200
trans-1,2-Dichloroethene	U	79.	200	ug/l		8260B	06/21/15	200
Tetrachloroethene	U	74.	200	ug/l		8260B	06/21/15	200
Trichloroethene	12000	80.	200	ug/l		8260B	06/21/15	200
Vinyl chloride	U	52.	200	ug/l		8260B	06/21/15	200
Surrogate Recovery								
Toluene-d8	100.			% Rec.		8260B	06/21/15	1
Dibromofluoromethane	109.			% Rec.		8260B	06/21/15	1
4-Bromofluorobenzene	102.			% Rec.		8260B	06/21/15	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
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REPORT OF ANALYSIS

Paul McBeth
PNG Environmental
6665 SW Hampton St., Suite 101
Tigard, OR 97223

June 22, 2015

ESC Sample # : L771187-16

Site ID :

Project # : 1122

Date Received : June 13, 2015
Description : Evanite

Sample ID : TB-061115

Collected By : Jay Greifer
Collection Date : 06/11/15 11:30

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Volatile Organics								
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	06/21/15	1
cis-1,2-Dichloroethene	U	0.26	1.0	ug/l		8260B	06/21/15	1
trans-1,2-Dichloroethene	U	0.40	1.0	ug/l		8260B	06/21/15	1
Tetrachloroethene	U	0.37	1.0	ug/l		8260B	06/21/15	1
Trichloroethene	U	0.40	1.0	ug/l		8260B	06/21/15	1
Vinyl chloride	U	0.26	1.0	ug/l		8260B	06/21/15	1
Surrogate Recovery								
Toluene-d8	102.			% Rec.		8260B	06/21/15	1
Dibromofluoromethane	101.			% Rec.		8260B	06/21/15	1
4-Bromofluorobenzene	101.			% Rec.		8260B	06/21/15	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
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REPORT OF ANALYSIS

Paul McBeth
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Tigard, OR 97223

June 22, 2015

ESC Sample # : L771187-17

Site ID :

Project # : 1122

Date Received : June 13, 2015
Description : Evanite

Sample ID : STRIPPER INF

Collected By : Jay Greifer
Collection Date : 06/11/15 10:55

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Volatile Organics								
1,1-Dichloroethene	U	20.	50.	ug/l		8260B	06/21/15	50
cis-1,2-Dichloroethene	200	13.	50.	ug/l		8260B	06/21/15	50
trans-1,2-Dichloroethene	U	20.	50.	ug/l		8260B	06/21/15	50
Tetrachloroethene	U	19.	50.	ug/l		8260B	06/21/15	50
Trichloroethene	3700	20.	50.	ug/l		8260B	06/21/15	50
Vinyl chloride	U	13.	50.	ug/l		8260B	06/21/15	50
Surrogate Recovery								
Toluene-d8	101.			% Rec.		8260B	06/21/15	1
Dibromofluoromethane	110.			% Rec.		8260B	06/21/15	1
4-Bromofluorobenzene	104.			% Rec.		8260B	06/21/15	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
Note:
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REPORT OF ANALYSIS

Paul McBeth
PNG Environmental
6665 SW Hampton St., Suite 101
Tigard, OR 97223

June 22, 2015

ESC Sample # : L771187-18

Site ID :

Project # : 1122

Date Received : June 13, 2015
Description : Evanite

Sample ID : STRIPPER EFF

Collected By : Jay Greifer
Collection Date : 06/11/15 10:57

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Volatile Organics								
1,1-Dichloroethene	U	0.40	1.0	ug/l		8260B	06/21/15	1
cis-1,2-Dichloroethene	15.	0.26	1.0	ug/l		8260B	06/21/15	1
trans-1,2-Dichloroethene	U	0.40	1.0	ug/l		8260B	06/21/15	1
Tetrachloroethene	U	0.37	1.0	ug/l		8260B	06/21/15	1
Trichloroethene	76.	0.40	1.0	ug/l		8260B	06/21/15	1
Vinyl chloride	U	0.26	1.0	ug/l		8260B	06/21/15	1
Surrogate Recovery								
Toluene-d8	101.			% Rec.		8260B	06/21/15	1
Dibromofluoromethane	104.			% Rec.		8260B	06/21/15	1
4-Bromofluorobenzene	99.4			% Rec.		8260B	06/21/15	1

U = ND (Not Detected)
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL
MDL = Minimum Detection Limit = LOD = TRRP SDL
Note:
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Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L771187-07	WG796194	SAMP	trans-1,2-Dichloroethene	R3045007	J
	WG795877	SAMP	TOC (Total Organic Carbon)	R3043869	J
L771187-08	WG796434	SAMP	TOC (Total Organic Carbon)	R3044427	J
L771187-10	WG796194	SAMP	1,1-Dichloroethene	R3045007	J
	WG796194	SAMP	trans-1,2-Dichloroethene	R3045007	J
L771187-14	WG796194	SAMP	cis-1,2-Dichloroethene	R3045007	J

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J	(EPA) - Estimated value below the lowest calibration point. Confidence correlates with concentration.

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods,it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable "unless qualified as 'R' (Rejected)."

Definitions

Accuracy - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.

Precision - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Differrence.

Surrogate - Organic compounds that are similar in chemical composition, extraction, and chromotography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.

TIC - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.

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PNG Environmental
Paul McBeth
6665 SW Hampton St., Suite 101

Tigard, OR 97223

Quality Assurance Report
Level II

L771187

June 22, 2015

Laboratory Blank

Analyte	Result	Units	% Rec	Limit	Batch	Date Analyzed
TOC (Total Organic Carbon)	< 1	mg/l			WG795877	06/16/15 08:18
TOC (Total Organic Carbon)	< 1	mg/l			WG795895	06/17/15 07:18
TOC (Total Organic Carbon)	< 1	mg/l			WG796434	06/18/15 08:29
1,1-Dichloroethene	< .001	mg/l			WG796194	06/20/15 22:14
cis-1,2-Dichloroethene	< .001	mg/l			WG796194	06/20/15 22:14
Tetrachloroethene	< .001	mg/l			WG796194	06/20/15 22:14
trans-1,2-Dichloroethene	< .001	mg/l			WG796194	06/20/15 22:14
Trichloroethene	< .001	mg/l			WG796194	06/20/15 22:14
Vinyl chloride	< .001	mg/l			WG796194	06/20/15 22:14
4-Bromofluorobenzene		% Rec.	103.0	80.1-120	WG796194	06/20/15 22:14
Dibromofluoromethane		% Rec.	101.0	79-121	WG796194	06/20/15 22:14
Toluene-d8		% Rec.	103.0	90-115	WG796194	06/20/15 22:14

Duplicate

Analyte	Units	Result	Duplicate	RPD	Limit	Ref Samp	Batch
TOC (Total Organic Carbon)	mg/l	0.470	0.520	9.26	20	L770921-02	WG795877
TOC (Total Organic Carbon)	mg/l	450.	450.	0.0	20	L771012-07	WG795877
TOC (Total Organic Carbon)	mg/l	6.60	8.00	19.2	20	L770547-08	WG795895
TOC (Total Organic Carbon)	mg/l	0.890	0.910	2.56	20	L771187-08	WG796434
TOC (Total Organic Carbon)	mg/l	2.40	2.60	8.00	20	L771611-01	WG796434

Laboratory Control Sample

Analyte	Units	Known Val	Result	% Rec	Limit	Batch
TOC (Total Organic Carbon)	mg/l	75	73.4	97.8	85-115	WG795877
TOC (Total Organic Carbon)	mg/l	75	75.6	101.	85-115	WG795895
TOC (Total Organic Carbon)	mg/l	75	75.2	100.	85-115	WG796434
1,1-Dichloroethene	mg/l	.025	0.0256	102.	59.9-137	WG796194
cis-1,2-Dichloroethene	mg/l	.025	0.0257	103.	77.3-122	WG796194
Tetrachloroethene	mg/l	.025	0.0246	98.4	73.5-130	WG796194
trans-1,2-Dichloroethene	mg/l	.025	0.0235	94.0	72.6-125	WG796194
Trichloroethene	mg/l	.025	0.0251	100.	79.5-121	WG796194
Vinyl chloride	mg/l	.025	0.0236	94.3	61.5-134	WG796194
4-Bromofluorobenzene				99.40	80.1-120	WG796194
Dibromofluoromethane				100.0	79-121	WG796194
Toluene-d8				101.0	90-115	WG796194

Laboratory Control Sample Duplicate

Analyte	Units	Result	Ref	%Rec	Limit	RPD	Limit	Batch
TOC (Total Organic Carbon)	mg/l	75.9	73.4	101.	85-115	3.42	20	WG795877

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Paul McBeth
6665 SW Hampton St., Suite 101

Tigard, OR 97223

Quality Assurance Report
Level II

L771187

June 22, 2015

Analyte	Units	Laboratory Control Sample Duplicate Result	Ref	%Rec	Limit	RPD	Limit	Batch
TOC (Total Organic Carbon)	mg/l	76.3	75.6	102.	85-115	0.856	20	WG795895
TOC (Total Organic Carbon)	mg/l	74.2	75.2	99.0	85-115	1.38	20	WG796434
1,1-Dichloroethene	mg/l	0.0225	0.0256	90.0	59.9-137	13.0	20	WG796194
cis-1,2-Dichloroethene	mg/l	0.0230	0.0257	92.0	77.3-122	11.1	20	WG796194
Tetrachloroethene	mg/l	0.0222	0.0246	89.0	73.5-130	10.4	20	WG796194
trans-1,2-Dichloroethene	mg/l	0.0212	0.0235	85.0	72.6-125	10.1	20	WG796194
Trichloroethene	mg/l	0.0225	0.0251	90.0	79.5-121	10.6	20	WG796194
Vinyl chloride	mg/l	0.0207	0.0236	83.0	61.5-134	12.8	20	WG796194
4-Bromofluorobenzene				101.0	80.1-120			WG796194
Dibromofluoromethane				98.50	79-121			WG796194
Toluene-d8				101.0	90-115			WG796194

Analyte	Units	Matrix Spike MS Res	Ref Res	TV	% Rec	Limit	Ref Samp	Batch
TOC (Total Organic Carbon)	mg/l	50.5	0.0	50	100.	80-120	L770921-05	WG795877
TOC (Total Organic Carbon)	mg/l	55.7	4.10	50	100.	80-120	L770634-03	WG795895
TOC (Total Organic Carbon)	mg/l	51.7	0.740	50	100.	80-120	L771514-05	WG796434
1,1-Dichloroethene	mg/l	0.0342	0.0105	.025	95.0	48.8-144	L771163-13	WG796194
cis-1,2-Dichloroethene	mg/l	0.255	0.272	.025	0.0*	60.6-136	L771163-13	WG796194
Tetrachloroethene	mg/l	0.0244	0.0	.025	98.0	57.4-141	L771163-13	WG796194
trans-1,2-Dichloroethene	mg/l	0.0300	0.00671	.025	93.0	61-132	L771163-13	WG796194
Trichloroethene	mg/l	0.0247	0.000444	.025	97.0	48.9-148	L771163-13	WG796194
Vinyl chloride	mg/l	0.0868	0.0806	.025	25.0*	44.3-143	L771163-13	WG796194
4-Bromofluorobenzene					98.30	80.1-120		WG796194
Dibromofluoromethane					104.0	79-121		WG796194
Toluene-d8					101.0	90-115		WG796194

Analyte	Units	Matrix Spike Duplicate MSD	Ref	%Rec	Limit	RPD	Limit	Ref Samp	Batch
TOC (Total Organic Carbon)	mg/l	50.2	50.5	100.	80-120	0.676	20	L770921-05	WG795877
TOC (Total Organic Carbon)	mg/l	55.4	55.7	102.	80-120	0.648	20	L770634-03	WG795895
TOC (Total Organic Carbon)	mg/l	50.0	51.7	98.5	80-120	3.27	20	L771514-05	WG796434
1,1-Dichloroethene	mg/l	0.0324	0.0342	87.8	48.8-144	5.45	20	L771163-13	WG796194
cis-1,2-Dichloroethene	mg/l	0.241	0.255	0*	60.6-136	5.63	20	L771163-13	WG796194
Tetrachloroethene	mg/l	0.0243	0.0244	97.2	57.4-141	0.370	20	L771163-13	WG796194
trans-1,2-Dichloroethene	mg/l	0.0290	0.0300	89.1	61-132	3.57	20	L771163-13	WG796194
Trichloroethene	mg/l	0.0244	0.0247	96.0	48.9-148	1.11	20	L771163-13	WG796194
Vinyl chloride	mg/l	0.0810	0.0868	1.46*	44.3-143	6.94	20	L771163-13	WG796194
4-Bromofluorobenzene				100.0	80.1-120				WG796194
Dibromofluoromethane				99.10	79-121				WG796194

* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

ESC LAB SCIENCES
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Est. 1970

PNG Environmental
Paul McBeth
6665 SW Hampton St., Suite 101

Tigard, OR 97223

Quality Assurance Report
Level II

L771187

June 22, 2015

Analyte	Units	MSD Ref	Matrix Spike Duplicate %Rec	Limit	RPD	Limit	Ref Samp	Batch
Toluene-d8			101.0	90-115				

Batch number /Run number / Sample number cross reference

WG795877: R3043869: L771187-07
WG795895: R3044181: L771187-09 10 12 14 15
WG796434: R3044427: L771187-08
WG796194: R3045007: L771187-01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17

* * Calculations are performed prior to rounding of reported values.
* Performance of this Analyte is outside of established criteria.
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'

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Quality Assurance Report
Level II

L771187

June 22, 2015

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.

ANALYTICAL REPORT

September 16, 2015

PNG Environmental

Sample Delivery Group:	L786941
Samples Received:	09/04/2015
Project Number:	1122
Description:	Evanite

Report To: Paul McBeth
6665 SW Hampton St., Suite 101
Tigard, OR 97223

Entire Report Reviewed By:

Jarred Willis
Technical Service Representative

MW-10 L786941-01 GW

Collected by: Jay Greifer | Collected date/time: 09/01/15 11:27 | Received date/time: 09/04/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG813651	1	09/09/15 00:31	09/09/15 00:31	MCB

MW-1 L786941-02 GW

Collected by: Jay Greifer | Collected date/time: 09/01/15 12:00 | Received date/time: 09/04/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG813651	1	09/09/15 00:51	09/09/15 00:51	MCB

MW-9 L786941-03 GW

Collected by: Jay Greifer | Collected date/time: 09/01/15 12:43 | Received date/time: 09/04/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG813651	1	09/09/15 01:12	09/09/15 01:12	MCB

MW-19 L786941-04 GW

Collected by: Jay Greifer | Collected date/time: 09/01/15 13:15 | Received date/time: 09/04/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG813651	1	09/09/15 01:32	09/09/15 01:32	MCB

MW-18 L786941-05 GW

Collected by: Jay Greifer | Collected date/time: 09/01/15 13:50 | Received date/time: 09/04/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG813651	1	09/09/15 01:53	09/09/15 01:53	MCB

DMW-37 L786941-06 GW

Collected by: Jay Greifer | Collected date/time: 09/01/15 14:20 | Received date/time: 09/04/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG813651	1	09/09/15 02:13	09/09/15 02:13	MCB
Wet Chemistry by Method 9060A	WG813552	1	09/09/15 17:22	09/09/15 17:22	LLS

MW-8 L786941-07 GW

Collected by: Jay Greifer | Collected date/time: 09/01/15 14:51 | Received date/time: 09/04/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG813651	1	09/09/15 02:34	09/09/15 02:34	MCB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG815143	20	09/15/15 03:36	09/15/15 03:36	KLO
Wet Chemistry by Method 9060A	WG813552	1	09/09/15 18:22	09/09/15 18:22	LLS

MW-7 L786941-08 GW

Collected by: Jay Greifer | Collected date/time: 09/01/15 15:25 | Received date/time: 09/04/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG813651	1	09/09/15 02:54	09/09/15 02:54	MCB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG815143	1	09/15/15 03:53	09/15/15 03:53	KLO
Wet Chemistry by Method 9060A	WG813552	1	09/09/15 18:46	09/09/15 18:46	LLS

MW-21 L786941-09 GW

Collected by: Jay Greifer | Collected date/time: 09/01/15 00:00 | Received date/time: 09/04/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG813651	1	09/09/15 03:14	09/09/15 03:14	MCB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG815143	1	09/15/15 04:10	09/15/15 04:10	KLO

MW-22 L786941-10 GW

Collected by: Jay Greifer | Collected date/time: 09/02/15 08:36 | Received date/time: 09/04/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG813651	1	09/09/15 03:35	09/09/15 03:35	MCB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG815143	1	09/15/15 04:27	09/15/15 04:27	KLO

MW-20 L786941-11 GW

Collected by: Jay Greifer | Collected date/time: 09/02/15 08:36 | Received date/time: 09/04/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG813651	1	09/09/15 03:55	09/09/15 03:55	MCB
Wet Chemistry by Method 9060A	WG813552	1	09/09/15 19:00	09/09/15 19:00	LLS

MW-5 L786941-12 GW

Collected by: Jay Greifer | Collected date/time: 09/02/15 08:36 | Received date/time: 09/04/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG813651	1	09/09/15 04:16	09/09/15 04:16	MCB

MW-14 L786941-13 GW

Collected by: Jay Greifer | Collected date/time: 09/02/15 08:36 | Received date/time: 09/04/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG813651	1	09/09/15 04:36	09/09/15 04:36	MCB

MW-39 L786941-14 GW

Collected by: Jay Greifer | Collected date/time: 09/02/15 08:36 | Received date/time: 09/04/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Metals (ICP) by Method 6010B	WG814266	1	09/10/15 16:55	09/10/15 20:01	WBD
Volatile Organic Compounds (GC) by Method RSK175	WG814747	1	09/11/15 13:43	09/11/15 13:43	MBF
Volatile Organic Compounds (GC/MS) by Method 8260B	WG813651	1	09/09/15 04:56	09/09/15 04:56	MCB
Wet Chemistry by Method 350.1	WG815051	1	09/14/15 11:35	09/14/15 11:35	JAL
Wet Chemistry by Method 9056MOD	WG814536	1	09/14/15 20:20	09/14/15 20:20	NJM
Wet Chemistry by Method 9060A	WG813552	1	09/09/15 19:12	09/09/15 19:12	LLS

DMW-12 L786941-15 GW

Collected by: Jay Greifer | Collected date/time: 09/02/15 08:36 | Received date/time: 09/04/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Metals (ICP) by Method 6010B	WG814266	1	09/10/15 16:55	09/10/15 20:37	WBD
Volatile Organic Compounds (GC) by Method RSK175	WG814747	1	09/11/15 13:53	09/11/15 13:53	MBF
Volatile Organic Compounds (GC/MS) by Method 8260B	WG813651	1	09/09/15 05:17	09/09/15 05:17	MCB
Wet Chemistry by Method 350.1	WG815051	1	09/14/15 11:37	09/14/15 11:37	JAL
Wet Chemistry by Method 9056MOD	WG814536	1	09/14/15 20:53	09/14/15 20:53	NJM
Wet Chemistry by Method 9060A	WG813552	1	09/09/15 19:24	09/09/15 19:24	LLS

MW-99 L786941-16 GW

Collected by: Jay Greifer
Collected date/time: 09/02/15 08:36
Received date/time: 09/04/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG815187	1	09/15/15 00:14	09/15/15 00:14	MCB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG815364	1	09/15/15 16:20	09/15/15 16:20	KLO

MW-6 L786941-17 GW

Collected by: Jay Greifer
Collected date/time: 09/02/15 08:36
Received date/time: 09/04/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Metals (ICP) by Method 6010B	WG814266	1	09/10/15 16:55	09/10/15 20:40	WBD
Volatile Organic Compounds (GC) by Method RSK175	WG814844	1	09/12/15 11:47	09/12/15 11:47	MBF
Volatile Organic Compounds (GC/MS) by Method 8260B	WG813651	1	09/09/15 05:58	09/09/15 05:58	MCB
Wet Chemistry by Method 350.1	WG815051	1	09/14/15 11:40	09/14/15 11:40	JAL
Wet Chemistry by Method 9056MOD	WG814536	1	09/14/15 21:09	09/14/15 21:09	NJM
Wet Chemistry by Method 9060A	WG813552	1	09/09/15 19:43	09/09/15 19:43	LLS

MW-15 L786941-18 GW

Collected by: Jay Greifer
Collected date/time: 09/02/15 08:36
Received date/time: 09/04/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Metals (ICP) by Method 6010B	WG814266	1	09/10/15 16:55	09/10/15 20:43	WBD
Volatile Organic Compounds (GC) by Method RSK175	WG814844	1	09/12/15 11:51	09/12/15 11:51	MBF
Volatile Organic Compounds (GC) by Method RSK175	WG814885	10	09/14/15 11:17	09/14/15 11:17	MBF
Volatile Organic Compounds (GC/MS) by Method 8260B	WG813651	1	09/09/15 06:18	09/09/15 06:18	MCB
Wet Chemistry by Method 350.1	WG815051	1	09/14/15 11:42	09/14/15 11:42	JAL
Wet Chemistry by Method 9056MOD	WG814536	1	09/14/15 21:26	09/14/15 21:26	NJM
Wet Chemistry by Method 9060A	WG813552	1	09/09/15 19:57	09/09/15 19:57	LLS

DMW-33 L786941-19 GW

Collected by: Jay Greifer
Collected date/time: 09/03/15 08:42
Received date/time: 09/04/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Metals (ICP) by Method 6010B	WG814266	1	09/10/15 16:55	09/10/15 20:46	WBD
Volatile Organic Compounds (GC) by Method RSK175	WG814844	1	09/12/15 11:58	09/12/15 11:58	MBF
Volatile Organic Compounds (GC/MS) by Method 8260B	WG813651	1	09/09/15 06:39	09/09/15 06:39	MCB
Wet Chemistry by Method 350.1	WG815051	1	09/14/15 11:45	09/14/15 11:45	JAL
Wet Chemistry by Method 9056MOD	WG813294	1	09/04/15 17:31	09/04/15 17:31	DJD
Wet Chemistry by Method 9060A	WG813552	1	09/09/15 20:09	09/09/15 20:09	LLS

IMW-34 L786941-20 GW

Collected by: Jay Greifer
Collected date/time: 09/03/15 09:27
Received date/time: 09/04/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Metals (ICP) by Method 6010B	WG814266	1	09/10/15 16:55	09/10/15 20:49	WBD
Volatile Organic Compounds (GC) by Method RSK175	WG814844	1	09/12/15 12:01	09/12/15 12:01	MBF
Volatile Organic Compounds (GC/MS) by Method 8260B	WG813651	1	09/09/15 06:59	09/09/15 06:59	MCB
Wet Chemistry by Method 350.1	WG815051	1	09/14/15 11:48	09/14/15 11:48	JAL
Wet Chemistry by Method 9056MOD	WG813294	1	09/04/15 17:47	09/04/15 17:47	DJD
Wet Chemistry by Method 9060A	WG813552	1	09/09/15 20:21	09/09/15 20:21	LLS

DMW-34 L786941-21 GW

Collected by: Jay Greifer | Collected date/time: 09/03/15 10:00 | Received date/time: 09/04/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Metals (ICP) by Method 6010B	WG814266	1	09/10/15 16:55	09/10/15 20:52	WBD
Volatile Organic Compounds (GC) by Method RSK175	WG814844	1	09/12/15 12:04	09/12/15 12:04	MBF
Volatile Organic Compounds (GC/MS) by Method 8260B	WG813652	1	09/09/15 00:53	09/09/15 00:53	MCB
Wet Chemistry by Method 350.1	WG815054	1	09/14/15 15:11	09/14/15 15:11	JAL
Wet Chemistry by Method 9056MOD	WG813294	1	09/04/15 18:04	09/04/15 18:04	DJD
Wet Chemistry by Method 9060A	WG813552	1	09/09/15 20:33	09/09/15 20:33	LLS

DMW-35 L786941-22 GW

Collected by: Jay Greifer | Collected date/time: 09/03/15 10:42 | Received date/time: 09/04/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Metals (ICP) by Method 6010B	WG814266	1	09/10/15 16:55	09/10/15 20:55	WBD
Volatile Organic Compounds (GC) by Method RSK175	WG814844	1	09/12/15 12:06	09/12/15 12:06	MBF
Volatile Organic Compounds (GC/MS) by Method 8260B	WG815187	10	09/15/15 00:34	09/15/15 00:34	MCB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG815364	10	09/15/15 16:43	09/15/15 16:43	KLO
Wet Chemistry by Method 350.1	WG815054	1	09/14/15 15:16	09/14/15 15:16	JAL
Wet Chemistry by Method 9056MOD	WG813295	1	09/04/15 16:37	09/04/15 16:37	DJD
Wet Chemistry by Method 9060A	WG813610	1	09/09/15 13:37	09/09/15 13:37	LLS

IMW-35 L786941-23 GW

Collected by: Jay Greifer | Collected date/time: 09/03/15 11:11 | Received date/time: 09/04/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Metals (ICP) by Method 6010B	WG814266	1	09/10/15 16:55	09/10/15 21:04	WBD
Volatile Organic Compounds (GC) by Method RSK175	WG814844	1	09/12/15 12:08	09/12/15 12:08	MBF
Volatile Organic Compounds (GC/MS) by Method 8260B	WG813652	1	09/09/15 01:29	09/09/15 01:29	MCB
Wet Chemistry by Method 350.1	WG815054	1	09/14/15 15:19	09/14/15 15:19	JAL
Wet Chemistry by Method 9056MOD	WG813295	1	09/04/15 16:53	09/04/15 16:53	DJD
Wet Chemistry by Method 9060A	WG813610	1	09/09/15 13:59	09/09/15 13:59	LLS

DMW-17 L786941-24 GW

Collected by: Jay Greifer | Collected date/time: 09/01/15 13:38 | Received date/time: 09/04/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG813652	1	09/09/15 01:47	09/09/15 01:47	MCB
Wet Chemistry by Method 9060A	WG813610	1	09/09/15 15:42	09/09/15 15:42	LLS

DMW-27 L786941-25 GW

Collected by: Jay Greifer | Collected date/time: 09/01/15 14:25 | Received date/time: 09/04/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG813652	1	09/09/15 02:06	09/09/15 02:06	MCB
Wet Chemistry by Method 9060A	WG813610	1	09/09/15 15:53	09/09/15 15:53	LLS

DMW-24 L786941-26 GW

Collected by: Jay Greifer | Collected date/time: 09/01/15 14:40 | Received date/time: 09/04/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG813652	20	09/09/15 02:24	09/09/15 02:24	MCB
Wet Chemistry by Method 9060A	WG813610	1	09/09/15 16:04	09/09/15 16:04	LLS

DMW-3 L786941-27 GW

Collected by: Jay Greifer | Collected date/time: 09/01/15 14:50 | Received date/time: 09/04/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG813652	50	09/09/15 02:42	09/09/15 02:42	MCB
Wet Chemistry by Method 9060A	WG813610	1	09/09/15 16:15	09/09/15 16:15	LLS

DMW-25 L786941-28 GW

Collected by: Jay Greifer | Collected date/time: 09/01/15 15:40 | Received date/time: 09/04/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG813652	5	09/09/15 03:00	09/09/15 03:00	MCB
Wet Chemistry by Method 9060A	WG813610	1	09/09/15 16:26	09/09/15 16:26	LLS

DMW-28 L786941-29 GW

Collected by: Jay Greifer | Collected date/time: 09/02/15 09:04 | Received date/time: 09/04/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG813652	50	09/09/15 03:19	09/09/15 03:19	MCB
Wet Chemistry by Method 9060A	WG813610	1	09/09/15 16:38	09/09/15 16:38	LLS

DMW-29 L786941-30 GW

Collected by: Jay Greifer | Collected date/time: 09/02/15 09:22 | Received date/time: 09/04/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG813652	5	09/09/15 03:37	09/09/15 03:37	MCB
Wet Chemistry by Method 9060A	WG813610	1	09/09/15 16:49	09/09/15 16:49	LLS

DMW-16 L786941-31 GW

Collected by: Jay Greifer | Collected date/time: 09/02/15 10:28 | Received date/time: 09/04/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG815187	50	09/15/15 00:54	09/15/15 00:54	MCB
Wet Chemistry by Method 9060A	WG813610	1	09/09/15 17:37	09/09/15 17:37	LLS

DMW-23 L786941-32 GW

Collected by: Jay Greifer | Collected date/time: 09/02/15 10:45 | Received date/time: 09/04/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG813652	200	09/09/15 04:13	09/09/15 04:13	MCB
Wet Chemistry by Method 9060A	WG813610	1	09/09/15 18:00	09/09/15 18:00	LLS

DMW-2 L786941-33 GW

Collected by: Jay Greifer | Collected date/time: 09/02/15 11:25 | Received date/time: 09/04/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG813652	5	09/09/15 04:32	09/09/15 04:32	MCB
Wet Chemistry by Method 9060A	WG813610	1	09/09/15 18:17	09/09/15 18:17	LLS

DMW-98 L786941-34 GW

Collected by: Jay Greifer | Collected date/time: 09/02/15 11:27 | Received date/time: 09/04/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG813652	10	09/09/15 04:50	09/09/15 04:50	MCB

DMW-11 L786941-35 GW

Collected by: Jay Greifer | Collected date/time: 09/03/15 12:34 | Received date/time: 09/04/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Metals (ICP) by Method 6010B	WG814266	1	09/10/15 16:55	09/10/15 21:07	WBD
Volatile Organic Compounds (GC) by Method RSK175	WG814844	1	09/12/15 12:11	09/12/15 12:11	MBF
Volatile Organic Compounds (GC/MS) by Method 8260B	WG813652	1	09/09/15 05:08	09/09/15 05:08	MCB
Wet Chemistry by Method 350.1	WG815054	1	09/14/15 15:26	09/14/15 15:26	JAL
Wet Chemistry by Method 9056MOD	WG813295	1	09/04/15 17:08	09/04/15 17:08	DJD
Wet Chemistry by Method 9060A	WG813610	1	09/09/15 18:29	09/09/15 18:29	LLS

DMW-26 L786941-36 GW

Collected by: Jay Greifer | Collected date/time: 09/02/15 14:51 | Received date/time: 09/04/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG813652	1	09/09/15 05:27	09/09/15 05:27	MCB
Wet Chemistry by Method 9060A	WG813610	1	09/09/15 18:40	09/09/15 18:40	LLS

MW-13 L786941-37 GW

Collected by: Jay Greifer | Collected date/time: 09/02/15 14:18 | Received date/time: 09/04/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Metals (ICP) by Method 6010B	WG814266	1	09/10/15 16:55	09/10/15 21:10	WBD
Volatile Organic Compounds (GC) by Method RSK175	WG814844	1	09/12/15 12:13	09/12/15 12:13	MBF
Volatile Organic Compounds (GC/MS) by Method 8260B	WG813652	1	09/09/15 05:45	09/09/15 05:45	MCB
Wet Chemistry by Method 350.1	WG815054	1	09/14/15 15:29	09/14/15 15:29	JAL
Wet Chemistry by Method 9056MOD	WG813295	1	09/04/15 13:51	09/04/15 13:51	DJD
Wet Chemistry by Method 9060A	WG813610	1	09/09/15 18:51	09/09/15 18:51	LLS

DMW-32 L786941-38 GW

Collected by: Jay Greifer | Collected date/time: 09/03/15 08:53 | Received date/time: 09/04/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG813652	1	09/09/15 06:03	09/09/15 06:03	MCB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG815187	10	09/15/15 01:14	09/15/15 01:14	MCB
Wet Chemistry by Method 9060A	WG813610	1	09/09/15 19:02	09/09/15 19:02	LLS

DMW-36 L786941-39 GW

Collected by: Jay Greifer | Collected date/time: 09/03/15 09:25 | Received date/time: 09/04/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG813652	1	09/09/15 06:21	09/09/15 06:21	MCB
Volatile Organic Compounds (GC/MS) by Method 8260B	WG815187	1	09/15/15 01:34	09/15/15 01:34	MCB
Wet Chemistry by Method 9060A	WG813610	1	09/09/15 19:14	09/09/15 19:14	LLS

DMW-38 L786941-40 GW

Collected by: Jay Greifer
Collected date/time: 09/03/15 10:15
Received date/time: 09/04/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG813652	1	09/09/15 06:40	09/09/15 06:40	MCB
Wet Chemistry by Method 9060A	WG813610	1	09/09/15 19:25	09/09/15 19:25	LLS

TB-9/3 L786941-41 GW

Collected by: Jay Greifer
Collected date/time: 09/03/15 11:00
Received date/time: 09/04/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG813656	1	09/07/15 11:28	09/07/15 11:28	MCB

All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Jarred Willis
Technical Service Representative

Sample Handling and Receiving

The following samples were prepared and/or analyzed past recommended holding time. Concentrations should be considered minimum values.

ESC Sample ID	Project Sample ID	Method
L786941-14	MW-39	9056MOD
L786941-15	DMW-12	9056MOD
L786941-17	MW-6	9056MOD
L786941-18	MW-15	9056MOD

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1-Dichloroethene	U		0.398	1.00	1	09/09/2015 00:31	WG813651
cis-1,2-Dichloroethene	0.596	J	0.260	1.00	1	09/09/2015 00:31	WG813651
trans-1,2-Dichloroethene	U		0.396	1.00	1	09/09/2015 00:31	WG813651
Tetrachloroethene	1.81		0.372	1.00	1	09/09/2015 00:31	WG813651
Trichloroethene	1.64		0.398	1.00	1	09/09/2015 00:31	WG813651
Vinyl chloride	U		0.259	1.00	1	09/09/2015 00:31	WG813651
(S) Toluene-d8	*98.0*			*90.0-115*		*09/09/2015 00:31*	WG813651
(S) Dibromofluoromethane	*99.9*			*79.0-121*		*09/09/2015 00:31*	WG813651
(S) 4-Bromofluorobenzene	*99.6*			*80.1-120*		*09/09/2015 00:31*	WG813651

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1-Dichloroethene	U	J3	0.398	1.00	1	09/09/2015 00:51	WG813651
cis-1,2-Dichloroethene	U		0.260	1.00	1	09/09/2015 00:51	WG813651
trans-1,2-Dichloroethene	U	J3	0.396	1.00	1	09/09/2015 00:51	WG813651
Tetrachloroethene	U		0.372	1.00	1	09/09/2015 00:51	WG813651
Trichloroethene	U		0.398	1.00	1	09/09/2015 00:51	WG813651
Vinyl chloride	U		0.259	1.00	1	09/09/2015 00:51	WG813651
(S) Toluene-d8	*99.6*			*90.0-115*		*09/09/2015 00:51*	WG813651
(S) Dibromofluoromethane	*96.0*			*79.0-121*		*09/09/2015 00:51*	WG813651
(S) 4-Bromofluorobenzene	*101*			*80.1-120*		*09/09/2015 00:51*	WG813651

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1-Dichloroethene	U	J3	0.398	1.00	1	09/09/2015 01:12	WG813651
cis-1,2-Dichloroethene	U		0.260	1.00	1	09/09/2015 01:12	WG813651
trans-1,2-Dichloroethene	U	J3	0.396	1.00	1	09/09/2015 01:12	WG813651
Tetrachloroethene	U		0.372	1.00	1	09/09/2015 01:12	WG813651
Trichloroethene	U		0.398	1.00	1	09/09/2015 01:12	WG813651
Vinyl chloride	U		0.259	1.00	1	09/09/2015 01:12	WG813651
(S) Toluene-d8	*99.4*			*90.0-115*		*09/09/2015 01:12*	WG813651
(S) Dibromofluoromethane	*96.9*			*79.0-121*		*09/09/2015 01:12*	WG813651
(S) 4-Bromofluorobenzene	*102*			*80.1-120*		*09/09/2015 01:12*	WG813651

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1-Dichloroethene	U	J3	0.398	1.00	1	09/09/2015 01:32	WG813651
cis-1,2-Dichloroethene	U		0.260	1.00	1	09/09/2015 01:32	WG813651
trans-1,2-Dichloroethene	U	J3	0.396	1.00	1	09/09/2015 01:32	WG813651
Tetrachloroethene	U		0.372	1.00	1	09/09/2015 01:32	WG813651
Trichloroethene	U		0.398	1.00	1	09/09/2015 01:32	WG813651
Vinyl chloride	U		0.259	1.00	1	09/09/2015 01:32	WG813651
(S) Toluene-d8	*98.8*			*90.0-115*		*09/09/2015 01:32*	WG813651
(S) Dibromofluoromethane	*94.6*			*79.0-121*		*09/09/2015 01:32*	WG813651
(S) 4-Bromofluorobenzene	*94.9*			*80.1-120*		*09/09/2015 01:32*	WG813651

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1-Dichloroethene	U	J3	0.398	1.00	1	09/09/2015 01:53	WG813651
cis-1,2-Dichloroethene	4.60		0.260	1.00	1	09/09/2015 01:53	WG813651
trans-1,2-Dichloroethene	U	J3	0.396	1.00	1	09/09/2015 01:53	WG813651
Tetrachloroethene	U		0.372	1.00	1	09/09/2015 01:53	WG813651
Trichloroethene	8.86		0.398	1.00	1	09/09/2015 01:53	WG813651
Vinyl chloride	U		0.259	1.00	1	09/09/2015 01:53	WG813651
(S) Toluene-d8	*100*			*90.0-115*		*09/09/2015 01:53*	WG813651
(S) Dibromofluoromethane	*94.5*			*79.0-121*		*09/09/2015 01:53*	WG813651
(S) 4-Bromofluorobenzene	*101*			*80.1-120*		*09/09/2015 01:53*	WG813651

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	800	J	102	1000	1	09/09/2015 17:22	WG813552

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1-Dichloroethene	U	J3	0.398	1.00	1	09/09/2015 02:13	WG813651
cis-1,2-Dichloroethene	3.90		0.260	1.00	1	09/09/2015 02:13	WG813651
trans-1,2-Dichloroethene	U	J3	0.396	1.00	1	09/09/2015 02:13	WG813651
Tetrachloroethene	U		0.372	1.00	1	09/09/2015 02:13	WG813651
Trichloroethene	17.6		0.398	1.00	1	09/09/2015 02:13	WG813651
Vinyl chloride	U		0.259	1.00	1	09/09/2015 02:13	WG813651
(S) Toluene-d8	*99.2*			*90.0-115*		*09/09/2015 02:13*	WG813651
(S) Dibromofluoromethane	*98.3*			*79.0-121*		*09/09/2015 02:13*	WG813651
(S) 4-Bromofluorobenzene	*101*			*80.1-120*		*09/09/2015 02:13*	WG813651

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	680	J	102	1000	1	09/09/2015 18:22	WG813552

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1-Dichloroethene	0.777	J J3	0.398	1.00	1	09/09/2015 02:34	WG813651
cis-1,2-Dichloroethene	38.3		0.260	1.00	1	09/09/2015 02:34	WG813651
trans-1,2-Dichloroethene	0.772	J J3	0.396	1.00	1	09/09/2015 02:34	WG813651
Tetrachloroethene	U		0.372	1.00	1	09/09/2015 02:34	WG813651
Trichloroethene	594		7.96	20.0	20	09/15/2015 03:36	WG815143
Vinyl chloride	0.380	J	0.259	1.00	1	09/09/2015 02:34	WG813651
(S) Toluene-d8	*88.4*	J2		*90.0-115*		*09/09/2015 02:34*	WG813651
(S) Dibromofluoromethane	*97.7*			*79.0-121*		*09/09/2015 02:34*	WG813651
(S) 4-Bromofluorobenzene	*99.5*			*80.1-120*		*09/09/2015 02:34*	WG813651

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	1340		102	1000	1	09/09/2015 18:46	WG813552

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1-Dichloroethene	U	J3	0.398	1.00	1	09/09/2015 02:54	WG813651
cis-1,2-Dichloroethene	3.24		0.260	1.00	1	09/09/2015 02:54	WG813651
trans-1,2-Dichloroethene	U	J3	0.396	1.00	1	09/09/2015 02:54	WG813651
Tetrachloroethene	U		0.372	1.00	1	09/09/2015 02:54	WG813651
Trichloroethene	6.33		0.398	1.00	1	09/15/2015 03:53	WG815143
Vinyl chloride	U		0.259	1.00	1	09/09/2015 02:54	WG813651
(S) Toluene-d8	*98.8*			*90.0-115*		*09/09/2015 02:54*	WG813651
(S) Dibromofluoromethane	*97.5*			*79.0-121*		*09/09/2015 02:54*	WG813651
(S) 4-Bromofluorobenzene	*95.4*			*80.1-120*		*09/09/2015 02:54*	WG813651

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1-Dichloroethene	U	J3	0.398	1.00	1	09/09/2015 03:14	WG813651
cis-1,2-Dichloroethene	U		0.260	1.00	1	09/09/2015 03:14	WG813651
trans-1,2-Dichloroethene	U	J3	0.396	1.00	1	09/09/2015 03:14	WG813651
Tetrachloroethene	U		0.372	1.00	1	09/09/2015 03:14	WG813651
Trichloroethene	0.487	J	0.398	1.00	1	09/15/2015 04:10	WG815143
Vinyl chloride	U		0.259	1.00	1	09/09/2015 03:14	WG813651
(S) Toluene-d8	*99.7*			*90.0-115*		*09/09/2015 03:14*	WG813651
(S) Dibromofluoromethane	*101*			*79.0-121*		*09/09/2015 03:14*	WG813651
(S) 4-Bromofluorobenzene	*102*			*80.1-120*		*09/09/2015 03:14*	WG813651

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1-Dichloroethene	U	J3	0.398	1.00	1	09/09/2015 03:35	WG813651
cis-1,2-Dichloroethene	U		0.260	1.00	1	09/09/2015 03:35	WG813651
trans-1,2-Dichloroethene	U	J3	0.396	1.00	1	09/09/2015 03:35	WG813651
Tetrachloroethene	U		0.372	1.00	1	09/09/2015 03:35	WG813651
Trichloroethene	U		0.398	1.00	1	09/15/2015 04:27	WG815143
Vinyl chloride	U		0.259	1.00	1	09/09/2015 03:35	WG813651
(S) Toluene-d8	*99.6*			*90.0-115*		*09/09/2015 03:35*	WG813651
(S) Dibromofluoromethane	*95.8*			*79.0-121*		*09/09/2015 03:35*	WG813651
(S) 4-Bromofluorobenzene	*94.4*			*80.1-120*		*09/09/2015 03:35*	WG813651

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	480	J	102	1000	1	09/09/2015 19:00	WG813552

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1-Dichloroethene	U	J3	0.398	1.00	1	09/09/2015 03:55	WG813651
cis-1,2-Dichloroethene	1.27		0.260	1.00	1	09/09/2015 03:55	WG813651
trans-1,2-Dichloroethene	U	J3	0.396	1.00	1	09/09/2015 03:55	WG813651
Tetrachloroethene	U		0.372	1.00	1	09/09/2015 03:55	WG813651
Trichloroethene	22.3		0.398	1.00	1	09/09/2015 03:55	WG813651
Vinyl chloride	U		0.259	1.00	1	09/09/2015 03:55	WG813651
(S) Toluene-d8	*98.6*			*90.0-115*		*09/09/2015 03:55*	WG813651
(S) Dibromofluoromethane	*98.2*			*79.0-121*		*09/09/2015 03:55*	WG813651
(S) 4-Bromofluorobenzene	*98.7*			*80.1-120*		*09/09/2015 03:55*	WG813651

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1-Dichloroethene	U	J3	0.398	1.00	1	09/09/2015 04:16	WG813651
cis-1,2-Dichloroethene	U		0.260	1.00	1	09/09/2015 04:16	WG813651
trans-1,2-Dichloroethene	U	J3	0.396	1.00	1	09/09/2015 04:16	WG813651
Tetrachloroethene	U		0.372	1.00	1	09/09/2015 04:16	WG813651
Trichloroethene	U		0.398	1.00	1	09/09/2015 04:16	WG813651
Vinyl chloride	U		0.259	1.00	1	09/09/2015 04:16	WG813651
(S) Toluene-d8	*99.4*			*90.0-115*		*09/09/2015 04:16*	WG813651
(S) Dibromofluoromethane	*100*			*79.0-121*		*09/09/2015 04:16*	WG813651
(S) 4-Bromofluorobenzene	*97.2*			*80.1-120*		*09/09/2015 04:16*	WG813651

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1-Dichloroethene	U	J3	0.398	1.00	1	09/09/2015 04:36	WG813651
cis-1,2-Dichloroethene	5.22		0.260	1.00	1	09/09/2015 04:36	WG813651
trans-1,2-Dichloroethene	U	J3	0.396	1.00	1	09/09/2015 04:36	WG813651
Tetrachloroethene	U		0.372	1.00	1	09/09/2015 04:36	WG813651
Trichloroethene	1.72		0.398	1.00	1	09/09/2015 04:36	WG813651
Vinyl chloride	U		0.259	1.00	1	09/09/2015 04:36	WG813651
(S) Toluene-d8	*98.7*			*90.0-115*		*09/09/2015 04:36*	WG813651
(S) Dibromofluoromethane	*99.2*			*79.0-121*		*09/09/2015 04:36*	WG813651
(S) 4-Bromofluorobenzene	*101*			*80.1-120*		*09/09/2015 04:36*	WG813651

Wet Chemistry by Method 350.1

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Ammonia Nitrogen	250	J	38.0	250	1	09/14/2015 11:35	WG815051

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate	466		22.7	100	1	09/14/2015 20:20	WG814536
Sulfate	16200		77.4	5000	1	09/14/2015 20:20	WG814536

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	1120		102	1000	1	09/09/2015 19:12	WG813552

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron,Dissolved	U		14.1	100	1	09/10/2015 20:01	WG814266
Manganese,Dissolved	U		1.20	10.0	1	09/10/2015 20:01	WG814266

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	U		2.91	10.0	1	09/11/2015 13:43	WG814747
Ethane	U		4.07	13.0	1	09/11/2015 13:43	WG814747
Ethene	U		4.26	13.0	1	09/11/2015 13:43	WG814747

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1-Dichloroethene	U	J3	0.398	1.00	1	09/09/2015 04:56	WG813651
cis-1,2-Dichloroethene	2.41		0.260	1.00	1	09/09/2015 04:56	WG813651
trans-1,2-Dichloroethene	U	J3	0.396	1.00	1	09/09/2015 04:56	WG813651
Tetrachloroethene	U		0.372	1.00	1	09/09/2015 04:56	WG813651
Trichloroethene	6.70		0.398	1.00	1	09/09/2015 04:56	WG813651
Vinyl chloride	U		0.259	1.00	1	09/09/2015 04:56	WG813651
(S) Toluene-d8	*98.4*			*90.0-115*		*09/09/2015 04:56*	WG813651
(S) Dibromofluoromethane	*99.1*			*79.0-121*		*09/09/2015 04:56*	WG813651
(S) 4-Bromofluorobenzene	*97.9*			*80.1-120*		*09/09/2015 04:56*	WG813651

Wet Chemistry by Method 350.1

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Ammonia Nitrogen	159	J	38.0	250	1	09/14/2015 11:37	WG815051

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate	417		22.7	100	1	09/14/2015 20:53	WG814536
Sulfate	12800		77.4	5000	1	09/14/2015 20:53	WG814536

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	840	J	102	1000	1	09/09/2015 19:24	WG813552

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron,Dissolved	71.7	J	14.1	100	1	09/10/2015 20:37	WG814266
Manganese,Dissolved	309		1.20	10.0	1	09/10/2015 20:37	WG814266

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	8.02	J	2.91	10.0	1	09/11/2015 13:53	WG814747
Ethane	U		4.07	13.0	1	09/11/2015 13:53	WG814747
Ethene	U		4.26	13.0	1	09/11/2015 13:53	WG814747

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1-Dichloroethene	U	J3	0.398	1.00	1	09/09/2015 05:17	WG813651
cis-1,2-Dichloroethene	2.04		0.260	1.00	1	09/09/2015 05:17	WG813651
trans-1,2-Dichloroethene	U	J3	0.396	1.00	1	09/09/2015 05:17	WG813651
Tetrachloroethene	U		0.372	1.00	1	09/09/2015 05:17	WG813651
Trichloroethene	2.68		0.398	1.00	1	09/09/2015 05:17	WG813651
Vinyl chloride	0.419	J	0.259	1.00	1	09/09/2015 05:17	WG813651
(S) Toluene-d8	*100*			*90.0-115*		*09/09/2015 05:17*	WG813651
(S) Dibromofluoromethane	*94.7*			*79.0-121*		*09/09/2015 05:17*	WG813651
(S) 4-Bromofluorobenzene	*96.9*			*80.1-120*		*09/09/2015 05:17*	WG813651

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1-Dichloroethene	U		0.398	1.00	1	09/15/2015 16:20	WG815364
cis-1,2-Dichloroethene	2.09		0.260	1.00	1	09/15/2015 00:14	WG815187
trans-1,2-Dichloroethene	U		0.396	1.00	1	09/15/2015 00:14	WG815187
Tetrachloroethene	U		0.372	1.00	1	09/15/2015 00:14	WG815187
Trichloroethene	2.79		0.398	1.00	1	09/15/2015 00:14	WG815187
Vinyl chloride	0.463	J	0.259	1.00	1	09/15/2015 00:14	WG815187
(S) Toluene-d8	*103*			*90.0-115*		*09/15/2015 00:14*	WG815187
(S) Dibromofluoromethane	*104*			*79.0-121*		*09/15/2015 00:14*	WG815187
(S) 4-Bromofluorobenzene	*95.0*			*80.1-120*		*09/15/2015 00:14*	WG815187

Wet Chemistry by Method 350.1

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Ammonia Nitrogen	135	J	38.0	250	1	09/14/2015 11:40	WG815051

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate	116		22.7	100	1	09/14/2015 21:09	WG814536
Sulfate	40300		77.4	5000	1	09/14/2015 21:09	WG814536

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	9040		102	1000	1	09/09/2015 19:43	WG813552

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron,Dissolved	5330		14.1	100	1	09/10/2015 20:40	WG814266
Manganese,Dissolved	160		1.20	10.0	1	09/10/2015 20:40	WG814266

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	321		2.91	10.0	1	09/12/2015 11:47	WG814844
Ethane	U		4.07	13.0	1	09/12/2015 11:47	WG814844
Ethene	U		4.26	13.0	1	09/12/2015 11:47	WG814844

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1-Dichloroethene	U	J3	0.398	1.00	1	09/09/2015 05:58	WG813651
cis-1,2-Dichloroethene	11.7		0.260	1.00	1	09/09/2015 05:58	WG813651
trans-1,2-Dichloroethene	U	J3	0.396	1.00	1	09/09/2015 05:58	WG813651
Tetrachloroethene	U		0.372	1.00	1	09/09/2015 05:58	WG813651
Trichloroethene	1.10		0.398	1.00	1	09/09/2015 05:58	WG813651
Vinyl chloride	4.27		0.259	1.00	1	09/09/2015 05:58	WG813651
(S) Toluene-d8	*99.9*			*90.0-115*		*09/09/2015 05:58*	WG813651
(S) Dibromofluoromethane	*99.1*			*79.0-121*		*09/09/2015 05:58*	WG813651
(S) 4-Bromofluorobenzene	*101*			*80.1-120*		*09/09/2015 05:58*	WG813651

Wet Chemistry by Method 350.1

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Ammonia Nitrogen	2210		38.0	250	1	09/14/2015 11:42	WG815051

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate	U		22.7	100	1	09/14/2015 21:26	WG814536
Sulfate	U		77.4	5000	1	09/14/2015 21:26	WG814536

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	12100		102	1000	1	09/09/2015 19:57	WG813552

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron,Dissolved	76000		14.1	100	1	09/10/2015 20:43	WG814266
Manganese,Dissolved	9460		1.20	10.0	1	09/10/2015 20:43	WG814266

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	2510		29.1	100	10	09/14/2015 11:17	WG814885
Ethane	18.0		4.07	13.0	1	09/12/2015 11:51	WG814844
Ethene	U		4.26	13.0	1	09/12/2015 11:51	WG814844

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1-Dichloroethene	U	J3	0.398	1.00	1	09/09/2015 06:18	WG813651
cis-1,2-Dichloroethene	U		0.260	1.00	1	09/09/2015 06:18	WG813651
trans-1,2-Dichloroethene	U	J3	0.396	1.00	1	09/09/2015 06:18	WG813651
Tetrachloroethene	U		0.372	1.00	1	09/09/2015 06:18	WG813651
Trichloroethene	U		0.398	1.00	1	09/09/2015 06:18	WG813651
Vinyl chloride	1.73		0.259	1.00	1	09/09/2015 06:18	WG813651
(S) Toluene-d8	*98.3*			*90.0-115*		*09/09/2015 06:18*	WG813651
(S) Dibromofluoromethane	*100*			*79.0-121*		*09/09/2015 06:18*	WG813651
(S) 4-Bromofluorobenzene	*99.8*			*80.1-120*		*09/09/2015 06:18*	WG813651

Wet Chemistry by Method 350.1

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Ammonia Nitrogen	U		38.0	250	1	09/14/2015 11:45	WG815051

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate	376		22.7	100	1	09/04/2015 17:31	WG813294
Sulfate	44900		77.4	5000	1	09/04/2015 17:31	WG813294

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	790	J	102	1000	1	09/09/2015 20:09	WG813552

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron,Dissolved	19.7	J	14.1	100	1	09/10/2015 20:46	WG814266
Manganese,Dissolved	620		1.20	10.0	1	09/10/2015 20:46	WG814266

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	U		2.91	10.0	1	09/12/2015 11:58	WG814844
Ethane	U		4.07	13.0	1	09/12/2015 11:58	WG814844
Ethene	U		4.26	13.0	1	09/12/2015 11:58	WG814844

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1-Dichloroethene	U	J3	0.398	1.00	1	09/09/2015 06:39	WG813651
cis-1,2-Dichloroethene	1.66		0.260	1.00	1	09/09/2015 06:39	WG813651
trans-1,2-Dichloroethene	U	J3	0.396	1.00	1	09/09/2015 06:39	WG813651
Tetrachloroethene	U		0.372	1.00	1	09/09/2015 06:39	WG813651
Trichloroethene	7.39		0.398	1.00	1	09/09/2015 06:39	WG813651
Vinyl chloride	U		0.259	1.00	1	09/09/2015 06:39	WG813651
(S) Toluene-d8	*99.4*			*90.0-115*		*09/09/2015 06:39*	WG813651
(S) Dibromofluoromethane	*99.0*			*79.0-121*		*09/09/2015 06:39*	WG813651
(S) 4-Bromofluorobenzene	*101*			*80.1-120*		*09/09/2015 06:39*	WG813651

Wet Chemistry by Method 350.1

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Ammonia Nitrogen	66.0	J	38.0	250	1	09/14/2015 11:48	WG815051

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate	U		22.7	100	1	09/04/2015 17:47	WG813294
Sulfate	9710		77.4	5000	1	09/04/2015 17:47	WG813294

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	3070		102	1000	1	09/09/2015 20:21	WG813552

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron,Dissolved	170		14.1	100	1	09/10/2015 20:49	WG814266
Manganese,Dissolved	96.2		1.20	10.0	1	09/10/2015 20:49	WG814266

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	130		2.91	10.0	1	09/12/2015 12:01	WG814844
Ethane	U		4.07	13.0	1	09/12/2015 12:01	WG814844
Ethene	U		4.26	13.0	1	09/12/2015 12:01	WG814844

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1-Dichloroethene	U	J3	0.398	1.00	1	09/09/2015 06:59	WG813651
cis-1,2-Dichloroethene	U		0.260	1.00	1	09/09/2015 06:59	WG813651
trans-1,2-Dichloroethene	U	J3	0.396	1.00	1	09/09/2015 06:59	WG813651
Tetrachloroethene	U		0.372	1.00	1	09/09/2015 06:59	WG813651
Trichloroethene	U		0.398	1.00	1	09/09/2015 06:59	WG813651
Vinyl chloride	U		0.259	1.00	1	09/09/2015 06:59	WG813651
(S) Toluene-d8	*100*			*90.0-115*		*09/09/2015 06:59*	WG813651
(S) Dibromofluoromethane	*100*			*79.0-121*		*09/09/2015 06:59*	WG813651
(S) 4-Bromofluorobenzene	*101*			*80.1-120*		*09/09/2015 06:59*	WG813651

Wet Chemistry by Method 350.1

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Ammonia Nitrogen	66.0	J P1	38.0	250	1	09/14/2015 15:11	WG815054

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate	U		22.7	100	1	09/04/2015 18:04	WG813294
Sulfate	10800		77.4	5000	1	09/04/2015 18:04	WG813294

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	1630		102	1000	1	09/09/2015 20:33	WG813552

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron,Dissolved	25.2	J	14.1	100	1	09/10/2015 20:52	WG814266
Manganese,Dissolved	411		1.20	10.0	1	09/10/2015 20:52	WG814266

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	69.1		2.91	10.0	1	09/12/2015 12:04	WG814844
Ethane	U		4.07	13.0	1	09/12/2015 12:04	WG814844
Ethene	U		4.26	13.0	1	09/12/2015 12:04	WG814844

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1-Dichloroethene	U		0.398	1.00	1	09/09/2015 00:53	WG813652
cis-1,2-Dichloroethene	6.62		0.260	1.00	1	09/09/2015 00:53	WG813652
trans-1,2-Dichloroethene	U		0.396	1.00	1	09/09/2015 00:53	WG813652
Tetrachloroethene	U		0.372	1.00	1	09/09/2015 00:53	WG813652
Trichloroethene	39.0		0.398	1.00	1	09/09/2015 00:53	WG813652
Vinyl chloride	U		0.259	1.00	1	09/09/2015 00:53	WG813652
(S) Toluene-d8	*103*			*90.0-115*		*09/09/2015 00:53*	WG813652
(S) Dibromofluoromethane	*113*			*79.0-121*		*09/09/2015 00:53*	WG813652
(S) 4-Bromofluorobenzene	*104*			*80.1-120*		*09/09/2015 00:53*	WG813652

Wet Chemistry by Method 350.1

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Ammonia Nitrogen	249	J	38.0	250	1	09/14/2015 15:16	WG815054

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate	U		22.7	100	1	09/04/2015 16:37	WG813295
Sulfate	12700		77.4	5000	1	09/04/2015 16:37	WG813295

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	1150		102	1000	1	09/09/2015 13:37	WG813610

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron,Dissolved	108		14.1	100	1	09/10/2015 20:55	WG814266
Manganese,Dissolved	1930		1.20	10.0	1	09/10/2015 20:55	WG814266

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	78.0		2.91	10.0	1	09/12/2015 12:06	WG814844
Ethane	U		4.07	13.0	1	09/12/2015 12:06	WG814844
Ethene	U		4.26	13.0	1	09/12/2015 12:06	WG814844

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1-Dichloroethene	U		3.98	10.0	10	09/15/2015 16:43	WG815364
cis-1,2-Dichloroethene	151		2.60	10.0	10	09/15/2015 00:34	WG815187
trans-1,2-Dichloroethene	U		3.96	10.0	10	09/15/2015 00:34	WG815187
Tetrachloroethene	U		3.72	10.0	10	09/15/2015 00:34	WG815187
Trichloroethene	475		3.98	10.0	10	09/15/2015 00:34	WG815187
Vinyl chloride	U		2.59	10.0	10	09/15/2015 00:34	WG815187
(S) Toluene-d8	*99.7*			*90.0-115*		*09/15/2015 00:34*	WG815187
(S) Dibromofluoromethane	*101*			*79.0-121*		*09/15/2015 00:34*	WG815187
(S) 4-Bromofluorobenzene	*95.4*			*80.1-120*		*09/15/2015 00:34*	WG815187

Wet Chemistry by Method 350.1

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Ammonia Nitrogen	325		38.0	250	1	09/14/2015 15:19	WG815054

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate	U		22.7	100	1	09/04/2015 16:53	WG813295
Sulfate	3360	J	77.4	5000	1	09/04/2015 16:53	WG813295

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	2300		102	1000	1	09/09/2015 13:59	WG813610

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron,Dissolved	2090		14.1	100	1	09/10/2015 21:04	WG814266
Manganese,Dissolved	5430		1.20	10.0	1	09/10/2015 21:04	WG814266

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	30.8		2.91	10.0	1	09/12/2015 12:08	WG814844
Ethane	U		4.07	13.0	1	09/12/2015 12:08	WG814844
Ethene	U		4.26	13.0	1	09/12/2015 12:08	WG814844

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1-Dichloroethene	U		0.398	1.00	1	09/09/2015 01:29	WG813652
cis-1,2-Dichloroethene	0.873	J	0.260	1.00	1	09/09/2015 01:29	WG813652
trans-1,2-Dichloroethene	U		0.396	1.00	1	09/09/2015 01:29	WG813652
Tetrachloroethene	U		0.372	1.00	1	09/09/2015 01:29	WG813652
Trichloroethene	0.406	J	0.398	1.00	1	09/09/2015 01:29	WG813652
Vinyl chloride	U		0.259	1.00	1	09/09/2015 01:29	WG813652
(S) Toluene-d8	*106*			*90.0-115*		*09/09/2015 01:29*	WG813652
(S) Dibromofluoromethane	*114*			*79.0-121*		*09/09/2015 01:29*	WG813652
(S) 4-Bromofluorobenzene	*103*			*80.1-120*		*09/09/2015 01:29*	WG813652

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	1050		102	1000	1	09/09/2015 15:42	WG813610

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1-Dichloroethene	U		0.398	1.00	1	09/09/2015 01:47	WG813652
cis-1,2-Dichloroethene	36.0		0.260	1.00	1	09/09/2015 01:47	WG813652
trans-1,2-Dichloroethene	U		0.396	1.00	1	09/09/2015 01:47	WG813652
Tetrachloroethene	U		0.372	1.00	1	09/09/2015 01:47	WG813652
Trichloroethene	3.05		0.398	1.00	1	09/09/2015 01:47	WG813652
Vinyl chloride	4.28		0.259	1.00	1	09/09/2015 01:47	WG813652
(S) Toluene-d8	*106*			*90.0-115*		*09/09/2015 01:47*	WG813652
(S) Dibromofluoromethane	*110*			*79.0-121*		*09/09/2015 01:47*	WG813652
(S) 4-Bromofluorobenzene	*98.4*			*80.1-120*		*09/09/2015 01:47*	WG813652

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	2270		102	1000	1	09/09/2015 15:53	WG813610

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1-Dichloroethene	U		0.398	1.00	1	09/09/2015 02:06	WG813652
cis-1,2-Dichloroethene	19.1		0.260	1.00	1	09/09/2015 02:06	WG813652
trans-1,2-Dichloroethene	U		0.396	1.00	1	09/09/2015 02:06	WG813652
Tetrachloroethene	U		0.372	1.00	1	09/09/2015 02:06	WG813652
Trichloroethene	1.11		0.398	1.00	1	09/09/2015 02:06	WG813652
Vinyl chloride	3.51		0.259	1.00	1	09/09/2015 02:06	WG813652
(S) Toluene-d8	*106*			*90.0-115*		*09/09/2015 02:06*	WG813652
(S) Dibromofluoromethane	*110*			*79.0-121*		*09/09/2015 02:06*	WG813652
(S) 4-Bromofluorobenzene	*103*			*80.1-120*		*09/09/2015 02:06*	WG813652

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	1030		102	1000	1	09/09/2015 16:04	WG813610

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1-Dichloroethene	U		7.96	20.0	20	09/09/2015 02:24	WG813652
cis-1,2-Dichloroethene	230		5.20	20.0	20	09/09/2015 02:24	WG813652
trans-1,2-Dichloroethene	U		7.92	20.0	20	09/09/2015 02:24	WG813652
Tetrachloroethene	U		7.44	20.0	20	09/09/2015 02:24	WG813652
Trichloroethene	923		7.96	20.0	20	09/09/2015 02:24	WG813652
Vinyl chloride	U		5.18	20.0	20	09/09/2015 02:24	WG813652
(S) Toluene-d8	*102*			*90.0-115*		*09/09/2015 02:24*	WG813652
(S) Dibromofluoromethane	*113*			*79.0-121*		*09/09/2015 02:24*	WG813652
(S) 4-Bromofluorobenzene	*101*			*80.1-120*		*09/09/2015 02:24*	WG813652

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	1220		102	1000	1	09/09/2015 16:15	WG813610

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1-Dichloroethene	U		19.9	50.0	50	09/09/2015 02:42	WG813652
cis-1,2-Dichloroethene	293		13.0	50.0	50	09/09/2015 02:42	WG813652
trans-1,2-Dichloroethene	U		19.8	50.0	50	09/09/2015 02:42	WG813652
Tetrachloroethene	U		18.6	50.0	50	09/09/2015 02:42	WG813652
Trichloroethene	2120		19.9	50.0	50	09/09/2015 02:42	WG813652
Vinyl chloride	U		13.0	50.0	50	09/09/2015 02:42	WG813652
(S) Toluene-d8	*105*			*90.0-115*		*09/09/2015 02:42*	WG813652
(S) Dibromofluoromethane	*112*			*79.0-121*		*09/09/2015 02:42*	WG813652
(S) 4-Bromofluorobenzene	*99.1*			*80.1-120*		*09/09/2015 02:42*	WG813652

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	590	J	102	1000	1	09/09/2015 16:26	WG813610

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1-Dichloroethene	U		1.99	5.00	5	09/09/2015 03:00	WG813652
cis-1,2-Dichloroethene	138		1.30	5.00	5	09/09/2015 03:00	WG813652
trans-1,2-Dichloroethene	U		1.98	5.00	5	09/09/2015 03:00	WG813652
Tetrachloroethene	U		1.86	5.00	5	09/09/2015 03:00	WG813652
Trichloroethene	646		1.99	5.00	5	09/09/2015 03:00	WG813652
Vinyl chloride	U		1.30	5.00	5	09/09/2015 03:00	WG813652
(S) Toluene-d8	*101*			*90.0-115*		*09/09/2015 03:00*	WG813652
(S) Dibromofluoromethane	*109*			*79.0-121*		*09/09/2015 03:00*	WG813652
(S) 4-Bromofluorobenzene	*104*			*80.1-120*		*09/09/2015 03:00*	WG813652

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	1430		102	1000	1	09/09/2015 16:38	WG813610

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1-Dichloroethene	U		19.9	50.0	50	09/09/2015 03:19	WG813652
cis-1,2-Dichloroethene	16.0	J	13.0	50.0	50	09/09/2015 03:19	WG813652
trans-1,2-Dichloroethene	U		19.8	50.0	50	09/09/2015 03:19	WG813652
Tetrachloroethene	U		18.6	50.0	50	09/09/2015 03:19	WG813652
Trichloroethene	1260		19.9	50.0	50	09/09/2015 03:19	WG813652
Vinyl chloride	U		13.0	50.0	50	09/09/2015 03:19	WG813652
(S) Toluene-d8	*101*			*90.0-115*		*09/09/2015 03:19*	WG813652
(S) Dibromofluoromethane	*106*			*79.0-121*		*09/09/2015 03:19*	WG813652
(S) 4-Bromofluorobenzene	*103*			*80.1-120*		*09/09/2015 03:19*	WG813652

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	620	J	102	1000	1	09/09/2015 16:49	WG813610

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1-Dichloroethene	U		1.99	5.00	5	09/09/2015 03:37	WG813652
cis-1,2-Dichloroethene	56.2		1.30	5.00	5	09/09/2015 03:37	WG813652
trans-1,2-Dichloroethene	U		1.98	5.00	5	09/09/2015 03:37	WG813652
Tetrachloroethene	U		1.86	5.00	5	09/09/2015 03:37	WG813652
Trichloroethene	207		1.99	5.00	5	09/09/2015 03:37	WG813652
Vinyl chloride	U		1.30	5.00	5	09/09/2015 03:37	WG813652
(S) Toluene-d8	*103*			*90.0-115*		*09/09/2015 03:37*	WG813652
(S) Dibromofluoromethane	*102*			*79.0-121*		*09/09/2015 03:37*	WG813652
(S) 4-Bromofluorobenzene	*107*			*80.1-120*		*09/09/2015 03:37*	WG813652

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	430	J	102	1000	1	09/09/2015 17:37	WG813610

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1-Dichloroethene	U		19.9	50.0	50	09/15/2015 00:54	WG815187
cis-1,2-Dichloroethene	502		13.0	50.0	50	09/15/2015 00:54	WG815187
trans-1,2-Dichloroethene	U		19.8	50.0	50	09/15/2015 00:54	WG815187
Tetrachloroethene	U		18.6	50.0	50	09/15/2015 00:54	WG815187
Trichloroethene	2390		19.9	50.0	50	09/15/2015 00:54	WG815187
Vinyl chloride	U		13.0	50.0	50	09/15/2015 00:54	WG815187
(S) Toluene-d8	*100*			*90.0-115*		*09/15/2015 00:54*	WG815187
(S) Dibromofluoromethane	*105*			*79.0-121*		*09/15/2015 00:54*	WG815187
(S) 4-Bromofluorobenzene	*95.4*			*80.1-120*		*09/15/2015 00:54*	WG815187

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	590	J	102	1000	1	09/09/2015 18:00	WG813610

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1-Dichloroethene	U		79.6	200	200	09/09/2015 04:13	WG813652
cis-1,2-Dichloroethene	436		52.0	200	200	09/09/2015 04:13	WG813652
trans-1,2-Dichloroethene	U		79.2	200	200	09/09/2015 04:13	WG813652
Tetrachloroethene	U		74.4	200	200	09/09/2015 04:13	WG813652
Trichloroethene	15600		79.6	200	200	09/09/2015 04:13	WG813652
Vinyl chloride	U		51.8	200	200	09/09/2015 04:13	WG813652
(S) Toluene-d8	*98.5*			*90.0-115*		*09/09/2015 04:13*	WG813652
(S) Dibromofluoromethane	*107*			*79.0-121*		*09/09/2015 04:13*	WG813652
(S) 4-Bromofluorobenzene	*103*			*80.1-120*		*09/09/2015 04:13*	WG813652

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	1010		102	1000	1	09/09/2015 18:17	WG813610

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1-Dichloroethene	U		1.99	5.00	5	09/09/2015 04:32	WG813652
cis-1,2-Dichloroethene	140		1.30	5.00	5	09/09/2015 04:32	WG813652
trans-1,2-Dichloroethene	U		1.98	5.00	5	09/09/2015 04:32	WG813652
Tetrachloroethene	U		1.86	5.00	5	09/09/2015 04:32	WG813652
Trichloroethene	402		1.99	5.00	5	09/09/2015 04:32	WG813652
Vinyl chloride	7.10		1.30	5.00	5	09/09/2015 04:32	WG813652
(S) Toluene-d8	*101*			*90.0-115*		*09/09/2015 04:32*	WG813652
(S) Dibromofluoromethane	*102*			*79.0-121*		*09/09/2015 04:32*	WG813652
(S) 4-Bromofluorobenzene	*105*			*80.1-120*		*09/09/2015 04:32*	WG813652

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1-Dichloroethene	U		3.98	10.0	10	09/09/2015 04:50	WG813652
cis-1,2-Dichloroethene	132		2.60	10.0	10	09/09/2015 04:50	WG813652
trans-1,2-Dichloroethene	U		3.96	10.0	10	09/09/2015 04:50	WG813652
Tetrachloroethene	U		3.72	10.0	10	09/09/2015 04:50	WG813652
Trichloroethene	394		3.98	10.0	10	09/09/2015 04:50	WG813652
Vinyl chloride	6.79	J	2.59	10.0	10	09/09/2015 04:50	WG813652
(S) Toluene-d8	*102*			*90.0-115*		*09/09/2015 04:50*	WG813652
(S) Dibromofluoromethane	*100*			*79.0-121*		*09/09/2015 04:50*	WG813652
(S) 4-Bromofluorobenzene	*103*			*80.1-120*		*09/09/2015 04:50*	WG813652

Wet Chemistry by Method 350.1

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Ammonia Nitrogen	117	J	38.0	250	1	09/14/2015 15:26	WG815054

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate	U		22.7	100	1	09/04/2015 17:08	WG813295
Sulfate	3380	J	77.4	5000	1	09/04/2015 17:08	WG813295

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	1610		102	1000	1	09/09/2015 18:29	WG813610

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron,Dissolved	514		14.1	100	1	09/10/2015 21:07	WG814266
Manganese,Dissolved	5420		1.20	10.0	1	09/10/2015 21:07	WG814266

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	24.4		2.91	10.0	1	09/12/2015 12:11	WG814844
Ethane	U		4.07	13.0	1	09/12/2015 12:11	WG814844
Ethene	U		4.26	13.0	1	09/12/2015 12:11	WG814844

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1-Dichloroethene	U		0.398	1.00	1	09/09/2015 05:08	WG813652
cis-1,2-Dichloroethene	13.9		0.260	1.00	1	09/09/2015 05:08	WG813652
trans-1,2-Dichloroethene	U		0.396	1.00	1	09/09/2015 05:08	WG813652
Tetrachloroethene	U		0.372	1.00	1	09/09/2015 05:08	WG813652
Trichloroethene	40.2		0.398	1.00	1	09/09/2015 05:08	WG813652
Vinyl chloride	U		0.259	1.00	1	09/09/2015 05:08	WG813652
(S) Toluene-d8	*102*			*90.0-115*		*09/09/2015 05:08*	WG813652
(S) Dibromofluoromethane	*104*			*79.0-121*		*09/09/2015 05:08*	WG813652
(S) 4-Bromofluorobenzene	*106*			*80.1-120*		*09/09/2015 05:08*	WG813652

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	520	J	102	1000	1	09/09/2015 18:40	WG813610

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1-Dichloroethene	U		0.398	1.00	1	09/09/2015 05:27	WG813652
cis-1,2-Dichloroethene	24.0		0.260	1.00	1	09/09/2015 05:27	WG813652
trans-1,2-Dichloroethene	U		0.396	1.00	1	09/09/2015 05:27	WG813652
Tetrachloroethene	U		0.372	1.00	1	09/09/2015 05:27	WG813652
Trichloroethene	37.9		0.398	1.00	1	09/09/2015 05:27	WG813652
Vinyl chloride	U		0.259	1.00	1	09/09/2015 05:27	WG813652
(S) Toluene-d8	*106*			*90.0-115*		*09/09/2015 05:27*	WG813652
(S) Dibromofluoromethane	*104*			*79.0-121*		*09/09/2015 05:27*	WG813652
(S) 4-Bromofluorobenzene	*107*			*80.1-120*		*09/09/2015 05:27*	WG813652

Wet Chemistry by Method 350.1

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Ammonia Nitrogen	2460		38.0	250	1	09/14/2015 15:29	WG815054

Wet Chemistry by Method 9056MOD

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Nitrate	U		22.7	100	1	09/04/2015 13:51	WG813295
Sulfate	21700		77.4	5000	1	09/04/2015 13:51	WG813295

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	4140		102	1000	1	09/09/2015 18:51	WG813610

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron,Dissolved	16400		14.1	100	1	09/10/2015 21:10	WG814266
Manganese,Dissolved	7360		1.20	10.0	1	09/10/2015 21:10	WG814266

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	U		2.91	10.0	1	09/12/2015 12:13	WG814844
Ethane	U		4.07	13.0	1	09/12/2015 12:13	WG814844
Ethene	U		4.26	13.0	1	09/12/2015 12:13	WG814844

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1-Dichloroethene	U		0.398	1.00	1	09/09/2015 05:45	WG813652
cis-1,2-Dichloroethene	0.436	J	0.260	1.00	1	09/09/2015 05:45	WG813652
trans-1,2-Dichloroethene	U		0.396	1.00	1	09/09/2015 05:45	WG813652
Tetrachloroethene	U		0.372	1.00	1	09/09/2015 05:45	WG813652
Trichloroethene	U		0.398	1.00	1	09/09/2015 05:45	WG813652
Vinyl chloride	U		0.259	1.00	1	09/09/2015 05:45	WG813652
(S) Toluene-d8	*106*			*90.0-115*		*09/09/2015 05:45*	WG813652
(S) Dibromofluoromethane	*106*			*79.0-121*		*09/09/2015 05:45*	WG813652
(S) 4-Bromofluorobenzene	*103*			*80.1-120*		*09/09/2015 05:45*	WG813652

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	1510		102	1000	1	09/09/2015 19:02	WG813610

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1-Dichloroethene	U		0.398	1.00	1	09/09/2015 06:03	WG813652
cis-1,2-Dichloroethene	0.416	J	0.260	1.00	1	09/09/2015 06:03	WG813652
trans-1,2-Dichloroethene	U		0.396	1.00	1	09/09/2015 06:03	WG813652
Tetrachloroethene	U		0.372	1.00	1	09/09/2015 06:03	WG813652
Trichloroethene	215		3.98	10.0	10	09/15/2015 01:14	WG815187
Vinyl chloride	U		0.259	1.00	1	09/09/2015 06:03	WG813652
(S) Toluene-d8	*102*			*90.0-115*		*09/09/2015 06:03*	WG813652
(S) Dibromofluoromethane	*103*			*79.0-121*		*09/09/2015 06:03*	WG813652
(S) 4-Bromofluorobenzene	*103*			*80.1-120*		*09/09/2015 06:03*	WG813652

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	510	J	102	1000	1	09/09/2015 19:14	WG813610

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1-Dichloroethene	U		0.398	1.00	1	09/09/2015 06:21	WG813652
cis-1,2-Dichloroethene	15.0		0.260	1.00	1	09/09/2015 06:21	WG813652
trans-1,2-Dichloroethene	U		0.396	1.00	1	09/09/2015 06:21	WG813652
Tetrachloroethene	U		0.372	1.00	1	09/09/2015 06:21	WG813652
Trichloroethene	3.45		0.398	1.00	1	09/15/2015 01:34	WG815187
Vinyl chloride	U		0.259	1.00	1	09/09/2015 06:21	WG813652
(S) Toluene-d8	*102*			*90.0-115*		*09/09/2015 06:21*	WG813652
(S) Dibromofluoromethane	*102*			*79.0-121*		*09/09/2015 06:21*	WG813652
(S) 4-Bromofluorobenzene	*103*			*80.1-120*		*09/09/2015 06:21*	WG813652

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	1040		102	1000	1	09/09/2015 19:25	WG813610

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1-Dichloroethene	U		0.398	1.00	1	09/09/2015 06:40	WG813652
cis-1,2-Dichloroethene	19.3		0.260	1.00	1	09/09/2015 06:40	WG813652
trans-1,2-Dichloroethene	U		0.396	1.00	1	09/09/2015 06:40	WG813652
Tetrachloroethene	U		0.372	1.00	1	09/09/2015 06:40	WG813652
Trichloroethene	176		0.398	1.00	1	09/09/2015 06:40	WG813652
Vinyl chloride	U		0.259	1.00	1	09/09/2015 06:40	WG813652
(S) Toluene-d8	*102*			*90.0-115*		*09/09/2015 06:40*	WG813652
(S) Dibromofluoromethane	*102*			*79.0-121*		*09/09/2015 06:40*	WG813652
(S) 4-Bromofluorobenzene	*104*			*80.1-120*		*09/09/2015 06:40*	WG813652

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1-Dichloroethene	U		0.398	1.00	1	09/07/2015 11:28	WG813656
cis-1,2-Dichloroethene	U		0.260	1.00	1	09/07/2015 11:28	WG813656
trans-1,2-Dichloroethene	U		0.396	1.00	1	09/07/2015 11:28	WG813656
Tetrachloroethene	U		0.372	1.00	1	09/07/2015 11:28	WG813656
Trichloroethene	U		0.398	1.00	1	09/07/2015 11:28	WG813656
Vinyl chloride	U		0.259	1.00	1	09/07/2015 11:28	WG813656
(S) Toluene-d8	*99.6*			*90.0-115*		*09/07/2015 11:28*	WG813656
(S) Dibromofluoromethane	*99.9*			*79.0-121*		*09/07/2015 11:28*	WG813656
(S) 4-Bromofluorobenzene	*96.3*			*80.1-120*		*09/07/2015 11:28*	WG813656

Method Blank (MB)

(MB) 09/14/15 10:30

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Ammonia Nitrogen	0.08		0.038	0.250

L786920-02 Original Sample (OS) • Duplicate (DUP)

(OS) 09/14/15 11:22 • (DUP) 09/14/15 11:25

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Ammonia Nitrogen	0.624	0.679	1	8		20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 09/14/15 10:35 • (LCSD) 09/14/15 10:37

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ammonia Nitrogen	7.50	7.04	7.02	94	94	90-110			0	20

L786909-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 09/14/15 10:47 • (MS) 09/14/15 10:50 • (MSD) 09/14/15 10:52

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Ammonia Nitrogen	10.0	0.388	9.09	9.17	87	88	1	90-110	J6	J6	1	20

Method Blank (MB)

(MB) 09/14/15 14:59

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Ammonia Nitrogen	0.103		0.038	0.250

L786941-21 Original Sample (OS) • Duplicate (DUP)

(OS) 09/14/15 15:11 • (DUP) 09/14/15 15:14

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Ammonia Nitrogen	0.0660	0.127	1	63	J P1	20

L787260-01 Original Sample (OS) • Duplicate (DUP)

(OS) 09/14/15 15:54 • (DUP) 09/14/15 15:56

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Ammonia Nitrogen	0.279	0.308	1	10		20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 09/14/15 15:04 • (LCSD) 09/14/15 15:06

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ammonia Nitrogen	7.50	7.65	7.41	102	99	90-110			3	20

L786941-23 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 09/14/15 15:19 • (MS) 09/14/15 15:21 • (MSD) 09/14/15 15:24

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Ammonia Nitrogen	10.0	0.325	10.3	10.2	100	99	1	90-110			1	20

Method Blank (MB)

(MB) 09/04/15 06:32

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/l		mg/l	mg/l
Nitrate	U		0.0227	0.100
Sulfate	U		0.0774	5.00

L786667-03 Original Sample (OS) • Duplicate (DUP)

(OS) 09/04/15 10:26 • (DUP) 09/04/15 10:42

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	mg/l	mg/l		%		%
Nitrate	0.100	0.100	1	0		20
Sulfate	95.8	96.4	1	1		20

L786941-21 Original Sample (OS) • Duplicate (DUP)

(OS) 09/04/15 18:04 • (DUP) 09/04/15 18:20

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	mg/l	mg/l		%		%
Nitrate	ND	0.000	1	0		20
Sulfate	10.8	10.6	1	2		20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 09/04/15 06:49 • (LCSD) 09/04/15 07:05

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/l	mg/l	mg/l	%	%	%			%	%
Nitrate	8.00	8.18	8.20	102	102	90-110			0	20
Sulfate	40.0	40.5	40.3	101	101	90-110			0	20

L786699-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 09/04/15 12:45 • (MS) 09/04/15 13:01 • (MSD) 09/04/15 13:17

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Nitrate	5.00	0.0267	4.96	4.96	99	99	1	80-120			0	20
Sulfate	50.0	68.9	116	116	95	94	1	80-120			0	20

Method Blank (MB)

(MB) 09/04/15 06:30

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Nitrate	U		0.0227	0.100
Sulfate	U		0.0774	5.00

L786909-04 Original Sample (OS) • Duplicate (DUP)

(OS) 09/04/15 11:28 • (DUP) 09/04/15 11:43

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Nitrate	1.49	1.49	1	0		20

L786699-03 Original Sample (OS) • Duplicate (DUP)

(OS) 09/04/15 12:29 • (DUP) 09/04/15 13:05

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Nitrate	ND	0.000	1	0		20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 09/04/15 06:46 • (LCSD) 09/04/15 07:01

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Nitrate	8.00	8.33	7.78	104	97	90-110			7	20
Sulfate	40.0	40.4	37.7	101	94	90-110			7	20

L786876-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 09/04/15 15:51 • (MS) 09/04/15 16:07 • (MSD) 09/04/15 16:22

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Nitrate	5.00	ND	5.27	5.36	105	107	1	80-120			2	20
Sulfate	50.0	23.9	74.1	74.9	100	102	1	80-120			1	20

Method Blank (MB)

(MB) 09/14/15 18:25

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/l		mg/l	mg/l
Nitrate	U		0.0227	0.100
Sulfate	U		0.0774	5.00

L786941-18 Original Sample (OS) • Duplicate (DUP)

(OS) 09/14/15 21:26 • (DUP) 09/14/15 21:42

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	mg/l	mg/l		%		%
Nitrate	ND	0.000	1	0		20
Sulfate	0.0201	0.0168	1	0		20

L787048-05 Original Sample (OS) • Duplicate (DUP)

(OS) 09/15/15 01:16 • (DUP) 09/15/15 01:32

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	mg/l	mg/l		%		%
Nitrate	0.0268	0.0290	1	8		20

L787048-05 Original Sample (OS) • Duplicate (DUP)

(OS) 09/15/15 16:40 • (DUP) 09/15/15 16:57

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	mg/l	mg/l		%		%
Sulfate	431	424	10	2		20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 09/14/15 18:42 • (LCSD) 09/14/15 18:58

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/l	mg/l	mg/l	%	%	%			%	%
Nitrate	8.00	8.09	8.06	101	101	90-110			0	20
Sulfate	40.0	39.9	39.7	100	99	90-110			1	20

L786941-14 Original Sample (OS) • Matrix Spike (MS)

(OS) 09/14/15 20:20 • (MS) 09/14/15 20:37

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Nitrate	5.00	0.466	5.59	103	1	80-120	
Sulfate	50.0	16.2	66.8	101	1	80-120	

L787074-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 09/15/15 01:48 • (MS) 09/15/15 02:05 • (MSD) 09/15/15 02:21

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Nitrate	5.00	0.118	5.22	5.10	102	100	1	80-120			2	20
Sulfate	50.0	3.62	54.6	52.9	102	99	1	80-120			3	20

Method Blank (MB)

(MB) 09/09/15 11:35

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
TOC	U		0.102	1.00

L786805-01 Original Sample (OS) • Duplicate (DUP)

(OS) 09/09/15 14:20 • (DUP) 09/09/15 14:34

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
TOC	12	11	1	6.8		20

L786941-07 Original Sample (OS) • Duplicate (DUP)

(OS) 09/09/15 18:22 • (DUP) 09/09/15 18:34

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
TOC	ND	ND	1	1.8	J	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 09/09/15 13:03 • (LCSD) 09/09/15 13:21

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TOC	75.0	71.4	72.7	95.2	96.9	85.0-115			1.75	20

L786805-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 09/09/15 14:51 • (MS) 09/09/15 15:08 • (MSD) 09/09/15 15:26

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TOC	50.0	2.30	50.6	50.2	96.5	95.8	1	80.0-120			0.715	20

Method Blank (MB)

(MB) 09/09/15 11:16

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/l		mg/l	mg/l
TOC	U		0.102	1.00

L786941-22 Original Sample (OS) • Duplicate (DUP)

(OS) 09/09/15 13:37 • (DUP) 09/09/15 13:48

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	mg/l	mg/l		%		%
TOC	1.2	1.1	1	5.4		20

L786941-31 Original Sample (OS) • Duplicate (DUP)

(OS) 09/09/15 17:37 • (DUP) 09/09/15 17:49

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	mg/l	mg/l		%		%
TOC	ND	ND	1	2.1	J	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 09/09/15 12:14 • (LCSD) 09/09/15 12:40

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/l	mg/l	mg/l	%	%	%			%	%
TOC	75.0	76.1	76.5	101	102	85.0-115			0.433	20

L786941-23 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 09/09/15 13:59 • (MS) 09/09/15 14:14 • (MSD) 09/09/15 14:30

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
TOC	50.0	2.30	52.3	51.6	99.9	98.5	1	80.0-120			1.33	20

Method Blank (MB)

(MB) 09/10/15 19:53

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/l		mg/l	mg/l
Iron,Dissolved	U		0.0141	0.100
Manganese,Dissolved	U		0.0012	0.0100

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 09/10/15 19:56 • (LCSD) 09/10/15 19:58

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/l	mg/l	mg/l	%	%	%			%	%
Iron,Dissolved	1.00	1.01	0.984	101	98	80-120			2	20
Manganese,Dissolved	1.00	0.995	0.966	100	97	80-120			3	20

L786941-14 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 09/10/15 20:01 • (MS) 09/10/15 20:07 • (MSD) 09/10/15 20:10

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Iron,Dissolved	1.00	0.00435	0.977	0.993	97	99	1	75-125			2	20
Manganese,Dissolved	1.00	0.000259	0.954	0.972	95	97	1	75-125			2	20

Method Blank (MB)

(MB) 09/11/15 13:28

Analyte	MB Result ppm	MB Qualifier	MB MDL ppm	MB RDL ppm
Methane	U		0.00291	0.0100
Ethane	U		0.00407	0.0130
Ethene	U		0.00426	0.0130

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 09/11/15 13:59 • (LCSD) 09/11/15 14:03

Analyte	Spike Amount ppm	LCS Result ppm	LCSD Result ppm	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Methane	0.0678	0.0747	0.0716	110	106	85.0-115			4.35	20
Ethane	0.129	0.131	0.131	102	102	85.0-115			0.270	20
Ethene	0.127	0.128	0.128	101	101	85.0-115			0.0100	20

Method Blank (MB)

(MB) 09/12/15 11:39

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ppm		ppm	ppm
Methane	U		0.00291	0.0100
Ethane	U		0.00407	0.0130
Ethene	U		0.00426	0.0130

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 09/12/15 12:59 • (LCSD) 09/12/15 13:02

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ppm	ppm	ppm	%	%	%			%	%
Methane	0.0678	0.0717	0.0737	106	109	85.0-115			2.73	20
Ethane	0.129	0.130	0.132	101	102	85.0-115			0.870	20
Ethene	0.127	0.129	0.130	102	102	85.0-115			0.650	20

Method Blank (MB)

(MB) 09/14/15 11:13

Analyte	MB Result ppm	MB Qualifier	MB MDL ppm	MB RDL ppm
Methane	U		0.00291	0.0100

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 09/14/15 14:22 • (LCSD) 09/14/15 14:25

Analyte	Spike Amount ppm	LCS Result ppm	LCSD Result ppm	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Methane	0.0678	0.0741	0.0725	109	107	85.0-115			2.14	20

Method Blank (MB)

(MB) 09/08/15 21:42

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
1,1-Dichloroethene	U		0.000398	0.00100
cis-1,2-Dichloroethene	U		0.000260	0.00100
trans-1,2-Dichloroethene	U		0.000396	0.00100
Tetrachloroethene	U		0.000372	0.00100
Trichloroethene	U		0.000398	0.00100
Vinyl chloride	U		0.000259	0.00100
(S) Toluene-d8	*96.2*			*90.0-115*
(S) Dibromofluoromethane	*88.6*			*79.0-121*
(S) 4-Bromofluorobenzene	*105*			*80.1-120*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 09/08/15 20:35 • (LCSD) 09/08/15 20:55

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,1-Dichloroethene	0.0250	0.0197	0.0245	78.7	97.9	59.9-137		J3	21.7	20
cis-1,2-Dichloroethene	0.0250	0.0242	0.0261	96.7	104	77.3-122			7.50	20
trans-1,2-Dichloroethene	0.0250	0.0199	0.0268	79.8	107	72.6-125		J3	29.2	20
Tetrachloroethene	0.0250	0.0273	0.0261	109	105	73.5-130			4.41	20
Trichloroethene	0.0250	0.0277	0.0274	111	110	79.5-121			1.01	20
Vinyl chloride	0.0250	0.0199	0.0203	79.6	81.1	61.5-134			1.83	20
(S) Toluene-d8				*99.2*	*100*	*90.0-115*				
(S) Dibromofluoromethane				*96.1*	*95.5*	*79.0-121*				
(S) 4-Bromofluorobenzene				*102*	*99.0*	*80.1-120*				

L786941-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 09/09/15 00:31 • (MS) 09/08/15 22:03 • (MSD) 09/08/15 22:23

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
1,1-Dichloroethene	0.0250	ND	0.0211	0.0208	84.2	83.4	1	48.8-144			1.02	20
cis-1,2-Dichloroethene	0.0250	0.000596	0.0244	0.0251	95.0	98.0	1	60.6-136			2.97	20
trans-1,2-Dichloroethene	0.0250	ND	0.0213	0.0223	85.1	89.4	1	61.0-132			4.97	20
Tetrachloroethene	0.0250	0.00181	0.0251	0.0262	93.2	97.5	1	57.4-141			4.20	20
Trichloroethene	0.0250	0.00164	0.0251	0.0267	93.8	100	1	48.9-148			6.31	20

L786941-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 09/09/15 00:31 • (MS) 09/08/15 22:03 • (MSD) 09/08/15 22:23

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Vinyl chloride	0.0250	ND	0.0178	0.0183	71.2	73.1	1	44.3-143			2.64	20
(S) Toluene-d8					*98.7*	*99.3*		*90.0-115*				
(S) Dibromofluoromethane					*95.1*	*93.7*		*79.0-121*				
(S) 4-Bromofluorobenzene					*96.2*	*97.0*		*80.1-120*				

Method Blank (MB)

(MB) 09/08/15 23:10

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
1,1-Dichloroethene	U		0.000398	0.00100
cis-1,2-Dichloroethene	U		0.000260	0.00100
trans-1,2-Dichloroethene	U		0.000396	0.00100
Tetrachloroethene	U		0.000372	0.00100
Trichloroethene	U		0.000398	0.00100
Vinyl chloride	U		0.000259	0.00100
(S) Toluene-d8	*102*			*90.0-115*
(S) Dibromofluoromethane	*114*			*79.0-121*
(S) 4-Bromofluorobenzene	*102*			*80.1-120*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 09/08/15 21:57 • (LCSD) 09/08/15 22:15

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,1-Dichloroethene	0.0250	0.0254	0.0245	102	98.2	59.9-137			3.40	20
cis-1,2-Dichloroethene	0.0250	0.0295	0.0289	118	116	77.3-122			2.10	20
trans-1,2-Dichloroethene	0.0250	0.0259	0.0251	104	100	72.6-125			3.08	20
Tetrachloroethene	0.0250	0.0233	0.0231	93.4	92.3	73.5-130			1.21	20
Trichloroethene	0.0250	0.0251	0.0248	100	99.1	79.5-121			1.33	20
Vinyl chloride	0.0250	0.0210	0.0209	83.9	83.8	61.5-134			0.140	20
(S) Toluene-d8				*108*	*106*	*90.0-115*				
(S) Dibromofluoromethane				*114*	*113*	*79.0-121*				
(S) 4-Bromofluorobenzene				*105*	*103*	*80.1-120*				

L786941-21 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 09/09/15 00:53 • (MS) 09/08/15 23:58 • (MSD) 09/09/15 00:16

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
1,1-Dichloroethene	0.0250	ND	0.0258	0.0218	103	87.2	1	48.8-144			16.7	20
cis-1,2-Dichloroethene	0.0250	0.00662	0.0366	0.0343	120	111	1	60.6-136			6.50	20
trans-1,2-Dichloroethene	0.0250	ND	0.0259	0.0243	104	97.1	1	61.0-132			6.54	20
Tetrachloroethene	0.0250	ND	0.0226	0.0233	90.4	93.1	1	57.4-141			2.92	20
Trichloroethene	0.0250	0.0390	0.0611	0.0593	88.2	81.3	1	48.9-148			2.86	20

L786941-21 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 09/09/15 00:53 • (MS) 09/08/15 23:58 • (MSD) 09/09/15 00:16

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Vinyl chloride	0.0250	ND	0.0225	0.0187	89.9	74.9	1	44.3-143			18.2	20
(S) Toluene-d8					*105*	*101*		*90.0-115*				
(S) Dibromofluoromethane					*117*	*110*		*79.0-121*				
(S) 4-Bromofluorobenzene					*101*	*102*		*80.1-120*				

Method Blank (MB)

(MB) 09/07/15 04:47

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
1,1-Dichloroethene	U		0.000398	0.00100
cis-1,2-Dichloroethene	U		0.000260	0.00100
trans-1,2-Dichloroethene	U		0.000396	0.00100
Tetrachloroethene	U		0.000372	0.00100
Trichloroethene	U		0.000398	0.00100
Vinyl chloride	U		0.000259	0.00100
(S) Toluene-d8	*102*			*90.0-115*
(S) Dibromofluoromethane	*101*			*79.0-121*
(S) 4-Bromofluorobenzene	*97.2*			*80.1-120*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 09/07/15 03:05 • (LCSD) 09/07/15 03:25

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,1-Dichloroethene	0.0250	0.0276	0.0271	110	109	59.9-137			1.62	20
cis-1,2-Dichloroethene	0.0250	0.0260	0.0254	104	102	77.3-122			2.25	20
trans-1,2-Dichloroethene	0.0250	0.0262	0.0255	105	102	72.6-125			2.74	20
Tetrachloroethene	0.0250	0.0260	0.0256	104	102	73.5-130			1.46	20
Trichloroethene	0.0250	0.0259	0.0254	104	102	79.5-121			1.97	20
Vinyl chloride	0.0250	0.0264	0.0262	106	105	61.5-134			0.690	20
(S) Toluene-d8				*101*	*101*	*90.0-115*				
(S) Dibromofluoromethane				*103*	*105*	*79.0-121*				
(S) 4-Bromofluorobenzene				*95.3*	*96.2*	*80.1-120*				

L786951-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 09/07/15 11:48 • (MS) 09/07/15 10:09 • (MSD) 09/07/15 10:29

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
1,1-Dichloroethene	0.0250	ND	0.0273	0.0258	109	103	1	48.8-144			5.57	20
cis-1,2-Dichloroethene	0.0250	ND	0.0258	0.0247	103	98.7	1	60.6-136			4.54	20
trans-1,2-Dichloroethene	0.0250	ND	0.0255	0.0246	102	98.5	1	61.0-132			3.66	20
Tetrachloroethene	0.0250	ND	0.0262	0.0263	105	105	1	57.4-141			0.350	20
Trichloroethene	0.0250	ND	0.0262	0.0251	105	101	1	48.9-148			4.20	20

L786951-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 09/07/15 11:48 • (MS) 09/07/15 10:09 • (MSD) 09/07/15 10:29

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Vinyl chloride	0.0250	ND	0.0262	0.0250	105	99.8	1	44.3-143			4.79	20
(S) Toluene-d8					*100*	*99.9*		*90.0-115*				
(S) Dibromofluoromethane					*102*	*100*		*79.0-121*				
(S) 4-Bromofluorobenzene					*95.4*	*94.7*		*80.1-120*				

Method Blank (MB)

(MB) 09/15/15 01:18

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Trichloroethene	U		0.000398	0.00100

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 09/15/15 00:10 • (LCSD) 09/15/15 00:27

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Trichloroethene	0.0250	0.0291	0.0279	116	111	79.5-121			4.30	20

L788056-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 09/15/15 02:27 • (MS) 09/15/15 01:36 • (MSD) 09/15/15 01:53

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Trichloroethene	0.0250	ND	0.0260	0.0268	104	107	1	48.9-148			3.03	20

Method Blank (MB)

(MB) 09/14/15 19:17

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/l		mg/l	mg/l
1,1-Dichloroethene	U		0.000398	0.00100
cis-1,2-Dichloroethene	U		0.000260	0.00100
trans-1,2-Dichloroethene	U		0.000396	0.00100
Tetrachloroethene	U		0.000372	0.00100
Trichloroethene	U		0.000398	0.00100
Vinyl chloride	U		0.000259	0.00100
(S) Toluene-d8	*101*			*90.0-115*
(S) Dibromofluoromethane	*103*			*79.0-121*
(S) 4-Bromofluorobenzene	*97.6*			*80.1-120*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 09/14/15 17:56 • (LCSD) 09/14/15 18:16

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/l	mg/l	mg/l	%	%	%			%	%
1,1-Dichloroethene	0.0250	0.0273	0.0274	109	110	59.9-137			0.400	20
cis-1,2-Dichloroethene	0.0250	0.0261	0.0259	105	104	77.3-122			0.870	20
trans-1,2-Dichloroethene	0.0250	0.0267	0.0266	107	107	72.6-125			0.250	20
Tetrachloroethene	0.0250	0.0264	0.0260	106	104	73.5-130			1.57	20
Trichloroethene	0.0250	0.0263	0.0267	105	107	79.5-121			1.40	20
Vinyl chloride	0.0250	0.0274	0.0274	110	110	61.5-134			0.0300	20
(S) Toluene-d8				*98.8*	*99.9*	*90.0-115*				
(S) Dibromofluoromethane				*102*	*102*	*79.0-121*				
(S) 4-Bromofluorobenzene				*98.0*	*96.7*	*80.1-120*				

L787843-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 09/14/15 21:54 • (MS) 09/14/15 20:14 • (MSD) 09/14/15 20:34

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
1,1-Dichloroethene	0.0250	0.685	0.659	0.613	0.000	0.000	1	48.8-144	J6	J6	7.20	20
cis-1,2-Dichloroethene	0.0250	0.00286	0.0272	0.0250	97.4	88.7	1	60.6-136			8.32	20
trans-1,2-Dichloroethene	0.0250	ND	0.0243	0.0220	97.2	88.1	1	61.0-132			9.77	20
Tetrachloroethene	0.0250	0.0121	0.0351	0.0332	92.1	84.4	1	57.4-141			5.66	20
Trichloroethene	0.0250	0.0208	0.0438	0.0413	92.2	81.9	1	48.9-148			6.03	20

L787843-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 09/14/15 21:54 • (MS) 09/14/15 20:14 • (MSD) 09/14/15 20:34

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Vinyl chloride	0.0250	0.00191	0.0266	0.0247	98.8	91.0	1	44.3-143			7.62	20
(S) Toluene-d8					*99.1*	*101*		*90.0-115*				
(S) Dibromofluoromethane					*106*	*105*		*79.0-121*				
(S) 4-Bromofluorobenzene					*94.7*	*97.8*		*80.1-120*				

Method Blank (MB)

(MB) 09/15/15 15:18

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
1,1-Dichloroethene	U		0.000398	0.00100

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 09/15/15 14:10 • (LCSD) 09/15/15 14:32

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,1-Dichloroethene	0.0250	0.0295	0.0280	118	112	59.9-137			5.28	20

L788430-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 09/15/15 22:50 • (MS) 09/15/15 23:35 • (MSD) 09/15/15 23:58

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
1,1-Dichloroethene	0.0250	ND	1.37	1.34	110	107	50	48.8-144			2.44	20

Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
ND,U	Not detected at the Reporting Limit (or MDL where applicable).
RPD	Relative Percent Difference.
(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
Rec.	Recovery.
SDL	Sample Detection Limit.
MQL	Method Quantitation Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.
J2	Surrogate recovery limits have been exceeded; values are outside lower control limits.
J3	The associated batch QC was outside the established quality control range for precision.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.

ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our "one location" design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be **YOUR LAB OF CHOICE.**

State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey–NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Conneticut	PH-0197	North Carolina [1]	DW21704
Florida	E87487	North Carolina [2]	41
Georgia	NELAP	North Dakota	R-140
Georgia [1]	923	Ohio–VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky [1]	90010	South Dakota	n/a
Kentucky [2]	16	Tennessee [1 4]	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

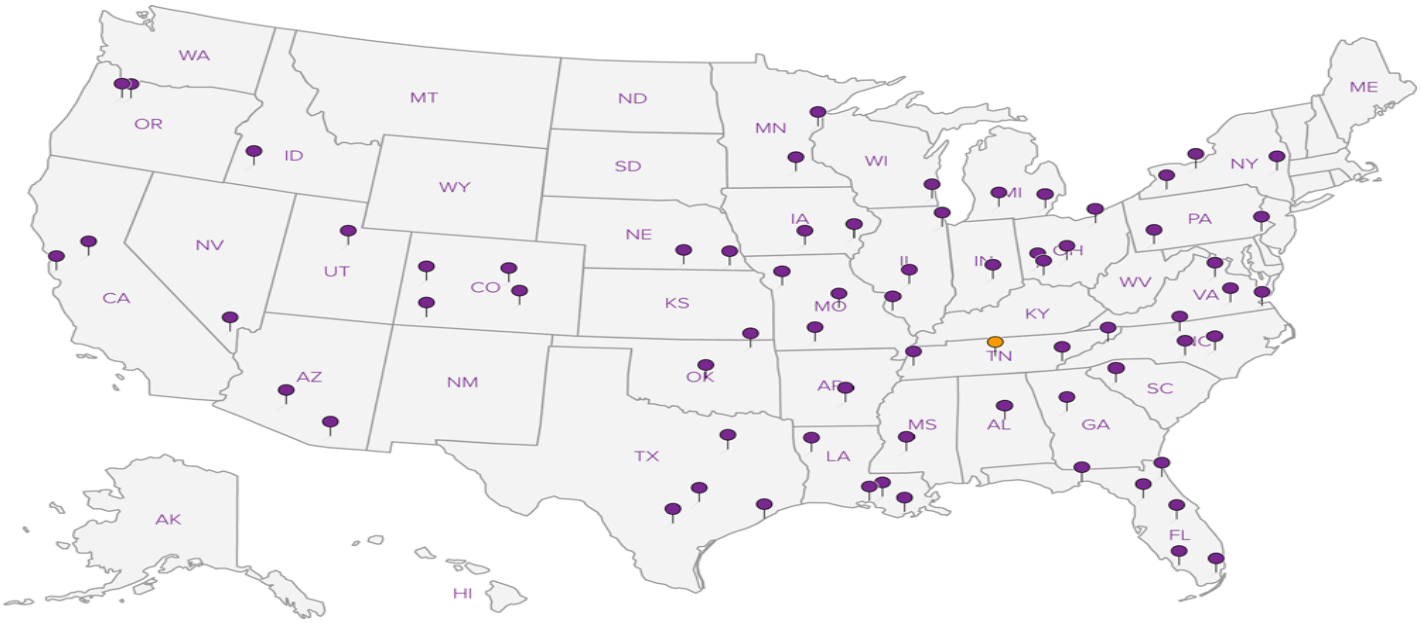
[1.] Drinking Water [2.] Underground Storage Tanks [3.] Aquatic Toxicity [4.] Chemical/Microbiological [5.] Mold [n/a] Accreditation not applicable

Third Party & Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA	100789
Canada	1461.01	DOD	1461.01
EPA–Crypto	TN00003	USDA	S-67674

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. **ESC Lab Sciences performs all testing at our central laboratory.**



PNG Environmental
6665 SW Hampton St.
Suite 101
Tigard, OR. 97223

Billing Information:
Accounts Payable- Betsy Brandner
6665 SW Hampton St. Suite 101
Tigard, OR. 97223

Report to: Paul McBeth
Email to: pmcbeth@pngenv.com

Project Description: Evanite
City/State Collected:
Phone: 503-620-2387
FAX:
Client Project #: 1122
ESC Key: PNGENVTOR-EVANITE
Collected by: Jay Greiner
Site/Facility ID#:
P.O.#:
Collected by (signature):
Immediately Packed on Ice N Y

Rush? (Lab MUST Be Notified)
____ Same Day.....200%
____ Next Day.....100%
____ Two Day.....50%
____ Three Day.....25%

Date Results Needed:
Email? __No__Yes
FAX? __No__Yes

Analysis/Container/Preservative

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	Nitrate (48 hour hold time) / Sulfate	RSK175	Dissolved Iron and Manganese (6010)	Ammonia	TOC	VOC Method 8260	Remarks/Contaminant	Sample # (lab only)
MW-10	G	GW		09-01 2015	1127	3						X		786541-01
MW-1					1200							X		02
MW-9					1243							X		03
MW-19					1315							X		04
MW-18					1350							X		05
DMW-37					1420	4					X	X		06
MW-8					1451						X	X		07
MW-7					1525						X	X		08
MW-21						3						X		09

*Matrix: SS - Soil/Solid GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other

5413 4725 6855 6866 6888

pH ____ Temp ____ Flow ____ Other ____

Remarks:

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Samples returned via: ☐ UPS	Condition: (lab use only)
	9/3/15	1336			9.4.15 09W

TOTAL = 205 <2 NCF

Chain of Custody
Page 1 of 1

ESC LABORATORIES
12065 Lebanon Road
Mt. Juliet, TN 37122
Phone: (800) 767-5859
Phone: (615) 758-5858
Fax: (615) 758-5859

J031

CoCode PNGENVTOR (lab use only)
Template/Prelogin
Shipped Via:

GOII 3.2

PNG Environmental
6665 SW Hampton St.
Suite 101
Tigard, OR. 97223

Billing Information:
Accounts Payable- Betsy Brandner
6665 SW Hampton St. Suite 101
Tigard, OR. 97223

Report to: Paul McBeth
Email to: pmcbeth@pngenv.com

Project Description: Evanite
City/State Collected:
Phone: 503-620-2387
FAX:
Client Project #: 1122
ESC Key: PNGENVTOR-EVANITE
Collected by: Jay Griffith
Site/Facility ID#:
P.O.#:
Collected by (signature):
Immediately Packed on Ice N Y

Rush? (Lab MUST Be Notified)
____ Same Day.....200%
____ Next Day.....100%
____ Two Day.....50%
____ Three Day.....25%

Date Results Needed:
Email? __No__Yes
FAX? __No__Yes

Chain of Custody Page 1 of 1

ESC LAB SCIENCES
12065 Lebanon Road
Mt. Juliet, TN 37122
Phone: (800) 767-5859
Phone: (615) 758-5858
Fax: (615) 758-5859

CoCode PNGENVTOR (lab use only)
Template/Prelogin
Shipped Via:

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	Nitrate (48 hour hold time) / Sulfate	RSK175	Dissolved Iron and Manganese (6010) Field Filtered	Ammonia	TOC	VOC Method 8260	Remarks/Contaminant	Sample # (lab only)
MW-22	G	GW		09-02-2015	0836	3						X		786941-10
MW-20					0911	4					X	X		11
MW-5					0942	3						X		12
MW-14					1017	3						X		13
MW-39					1051	9	X	X	X	X	X	X	500mL HNO3 FF	14
DMW-12					1146	9	X	X	X	X	X	X	500mL HNO3 FF	15
MW-99					1138	3						X		16
MW-6					1249	9	X	X	X	X	X	X	500mL HNO3 FF	17
MW-15					1335	9	X	X	X	X	X	X	500mL HNO3 FF	18

Analysis/Container/Preservative

*Matrix: SS - Soil/Solid GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other

pH ____ Temp ____
Flow ____ Other NA

Remarks:

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Samples returned via: ☐ UPS	Condition: (lab use only)
Sam Vitt	9/3/15	1336			
				9.4.15	0900

Total = 205 C2

GD11 3.2°

PNG Environmental
6665 SW Hampton St.
Suite 101
Tigard, OR. 97223

Billing Information:
Accounts Payable- Betsy Brandner
6665 SW Hampton St. Suite 101
Tigard, OR. 97223

Report to: Paul McBeth
Email to: pmcbeth@pngenv.com

Project Description: EVANITE
City/State Collected: Cervallis, OR
Phone: 503-620-2387
FAX:
Client Project #: 1122
ESC Key: PNGENVTOR
Collected by: Jay Brooks
Site/Facility ID#:
P.O.#: 1122
Collected by (signature):
Immediately Packed on Ice N (Y)

Rush? (Lab MUST Be Notified)
____ Same Day.....200%
____ Next Day.....100%
____ Two Day.....50%
____ Three Day.....25%

Date Results Needed:
Email? __No ✓Yes
FAX? ✓No __Yes

Analysis/Container/Preservative

Chain of Custody Page 11 of 15

ESC LABORATORY SCIENCES
12065 Lebanon Road
Mt. Juliet, TN 37122
Phone: (800) 767-5859
Phone: (615) 758-5858
Fax: (615) 758-5859

CoCode PNGENVTOR (lab use only)
Template/Prelogin
Shipped Via:

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	Nitrate / Sulfate	RSK 175	Diss Iron + Manganese (Field Filtered)	Ammonia	TOC	VOC's 8260	Remarks/Contaminant	Sample # (lab only)
DMW-33	G	GW		09/03/2015	0842	9	+	+	+	+	+	+		786441-19
IMW-34					0927	9	+	+	+	+	+	+		20
DMW-34					1000	9	+	+	+	+	+	+		21
DMW-35					1042	9	+	+	+	+	+	+		22
IMW-35					1111	9	+	+	+	+	+	+		23

*Matrix: SS - Soil/Solid GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other_____

pH _____ Temp _____
Flow _____ Other _____

Remarks:

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
Sam VB	9/3/15	1336	
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)

Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ _____
Temp: 3.2°C
Bottles Received: 205
Date: 9.4.15
Time: 900
Condition: (lab use only) (GOOD)
CoC Seals Intact: ____ Y ____ N ✓ NA
pH Checked: C2
NCF: X

PNG Environmental
6665 SW Hampton St.
Suite 101
Tigard, OR. 97223

Billing Information:
Accounts Payable- Betsy Brandner
6665 SW Hampton St. Suite 101
Tigard, OR. 97223

Report to: Paul McBeth
Email to: pmcbeth@pngenv.com

Project Description: Evanite
City/State Collected: Corvallis, OR
Phone: 503-620-2387
FAX:
Client Project #: 1122
ESC Key: PNGENVTOR-EVANITE
Collected by: S. Biles
Site/Facility ID#:
P.O.#:
Collected by (signature): Sam VBS
Immediately Packed on Ice N (Y)

Rush? (Lab MUST Be Notified)
____ Same Day.....200%
____ Next Day.....100%
____ Two Day.....50%
____ Three Day.....25%

Date Results Needed:
Email? __No__Yes
FAX? __No__Yes

Analysis/Container/Preservative

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	Nitrate (48 hour hold time) / Sulfate	RSK175	Dissolved Iron and Manganese (6010)	Ammonia	TOC	VOC Method 8260			Remarks/Contaminant	Sample # (lab only)
DMW-17	Grab	GW		9/1/15	1338	4					x	x				578694 27
DMW-27					1425	4					x	x				25
DMW-24					1440	4					x	x				26
DMW-3					1450	4					x	x				27
DMW-25					1540	4					x	x				28
DMW-28				9/2/15	0904	4					x	x				29
DMW-29					0922	4					x	x				30
DMW-16					1028	4					x	x				31
DMW-23					1045	4					x	x				32

*Matrix: SS - Soil/Solid GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other_____

pH _____ Temp _____

Remarks:

Flow _____ Other _____

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Samples returned via: ☐ UPS	Condition: (lab use only)
Sam VBS	9/3/15	1336			
				9.4.15	0900

total = 205 <2

Chain of Custody
Page 1 of 1

ESC LABORATORY SCIENCES
12065 Lebanon Road
Mt. Juliet, TN 37122
Phone: (800) 767-5859
Phone: (615) 758-5858
Fax: (615) 758-5859

CoCode PNGENVTOR (lab use only)
Template/Prelogin
Shipped Via:

PNG Environmental
6665 SW Hampton St.
Suite 101
Tigard, OR. 97223

Billing Information:
Accounts Payable- Betsy Brandner
6665 SW Hampton St. Suite 101
Tigard, OR. 97223

Report to: Paul McBeth
Email to: pmcbeth@pngenv.com

Project Description: Evanite
City/State Collected: Corvallis, OR
Phone: 503-620-2387
FAX:
Client Project #: 1122
ESC Key: PNGENVTOR-EVANITE
Collected by: Samantha Biles
Site/Facility ID#:
P.O.#:
Collected by (signature): Sam VBS
Immediately Packed on Ice: N (Y)

Rush? (Lab MUST Be Notified)
____ Same Day.....200%
____ Next Day.....100%
____ Two Day.....50%
____ Three Day.....25%

Date Results Needed:
Email? __No __Yes
FAX? __No __Yes

Analysis/Container/Preservative

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	Nitrate (48 hour hold time) / Sulfate	RSK175	Dissolved Iron and Manganese (6010)	Ammonia	TOC	VOC Method 8260	Remarks/Contaminant	Sample # (lab only)
DMW-2	Grab	GW		9/2/15	1125	4						X		941-3379
DMW-98					1127	3						X		98
DMW-11					1234	9	X	X	X	X	X	X		15
DMW-26					1451	4					X	X		16
MW-13					1418	9	X	X	X	X	X	X		12
DMW-32				9/3/15	0853	4					X	X		8
DMW-36					0925	4					X	X		10
DMW-38					1015	4					X	X		4
TB-9/3					1100							X		

*Matrix: SS - Soil/Solid GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other_____

Remarks:

pH _____ Temp _____
Flow _____ Other _____

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
Sam VBS	9/3/15	1336	RA

Samples returned via: ☐ UPS
Condition: (lab use only)

9.4.15 0900
<2
total: 2015

Chain of Custody
Page 1 of 1

ESC LABORATORY SCIENCES
12065 Lebanon Road
Mt. Juliet, TN 37122
Phone: (800) 767-5859
Phone: (615) 758-5858
Fax: (615) 758-5859

CoCode PNGENVTOR (lab use only)
Template/Prelogin
Shipped Via:

Matt Shacklock

ESC Lab Sciences
Non-Conformance Form

Login #L786941	Client: PNGENVTOR	Date:9/4/15	Evaluated by:Matt S

Non-Conformance (check applicable items)

	Sample Integrity		Chain of Custody Clarification		
x	Parameter(s) past holding time		Login Clarification Needed		**If Broken Container:**
	Improper temperature		Chain of custody is incomplete		Insufficient packing material around container
	Improper container type		Please specify Metals requested.		Insufficient packing material inside cooler
	Improper preservation		Please specify TCLP requested.		Improper handling by carrier (FedEx / UPS / Courie
	Insufficient sample volume.		Received additional samples not listed on coc.		Sample was frozen
	Sample is biphasic.		Sample ids on containers do not match ids on coc		Container lid not intact
	Vials received with headspace.		Trip Blank not received.		**If no Chain of Custody:**
	Broken container		Client did not "X" analysis.		Received by:
	Broken container:		Chain of Custody is missing		Date/Time:
	Sufficient sample remains				Temp./Cont. Rec./pH:
					Carrier:
					Tracking#

Login Comments: some Nitrates received OOH

Client informed by:	Call X	Email	Voice Mail	Date: 9/4/15	Time: 1310
TSR Initials: JW	Client Contact: Sam Vant-Biles				

Login Instructions: Client informed. Run them as quickly as possible and qualify any OOH samples accordingly.

ANALYTICAL REPORT

September 24, 2015

PNG Environmental

Sample Delivery Group:	L789269
Samples Received:	09/17/2015
Project Number:	1122
Description:	Evanite

Report To: Paul McBeth
6665 SW Hampton St., Suite 101
Tigard, OR 97223

Entire Report Reviewed By:

Jarred Willis
Technical Service Representative

TABLE OF CONTENTS

IMW-33 L789269-01 GW

Collected by	Collected date/time	Received date/time
	09/15/15 08:28	09/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG816421	1	09/21/15 14:57	09/21/15 14:57	KLO

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Jarred Willis
Technical Service Representative

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	11.6	J	10.0	50.0	1	09/21/2015 14:57	WG816421
Acrolein	U	J3	8.87	50.0	1	09/21/2015 14:57	WG816421
Acrylonitrile	U		1.87	10.0	1	09/21/2015 14:57	WG816421
Benzene	U		0.331	1.00	1	09/21/2015 14:57	WG816421
Bromobenzene	U		0.352	1.00	1	09/21/2015 14:57	WG816421
Bromodichloromethane	U		0.380	1.00	1	09/21/2015 14:57	WG816421
Bromoform	U		0.469	1.00	1	09/21/2015 14:57	WG816421
Bromomethane	U		0.866	5.00	1	09/21/2015 14:57	WG816421
n-Butylbenzene	U		0.361	1.00	1	09/21/2015 14:57	WG816421
sec-Butylbenzene	U		0.365	1.00	1	09/21/2015 14:57	WG816421
tert-Butylbenzene	U		0.399	1.00	1	09/21/2015 14:57	WG816421
Carbon tetrachloride	U		0.379	1.00	1	09/21/2015 14:57	WG816421
Chlorobenzene	U		0.348	1.00	1	09/21/2015 14:57	WG816421
Chlorodibromomethane	U		0.327	1.00	1	09/21/2015 14:57	WG816421
Chloroethane	U		0.453	5.00	1	09/21/2015 14:57	WG816421
2-Chloroethyl vinyl ether	U		3.01	50.0	1	09/21/2015 14:57	WG816421
Chloroform	U		0.324	5.00	1	09/21/2015 14:57	WG816421
Chloromethane	U		0.276	2.50	1	09/21/2015 14:57	WG816421
2-Chlorotoluene	U		0.375	1.00	1	09/21/2015 14:57	WG816421
4-Chlorotoluene	U		0.351	1.00	1	09/21/2015 14:57	WG816421
1,2-Dibromo-3-Chloropropane	U		1.33	5.00	1	09/21/2015 14:57	WG816421
1,2-Dibromoethane	U		0.381	1.00	1	09/21/2015 14:57	WG816421
Dibromomethane	U		0.346	1.00	1	09/21/2015 14:57	WG816421
1,2-Dichlorobenzene	U		0.349	1.00	1	09/21/2015 14:57	WG816421
1,3-Dichlorobenzene	U		0.220	1.00	1	09/21/2015 14:57	WG816421
1,4-Dichlorobenzene	U	J4	0.274	1.00	1	09/21/2015 14:57	WG816421
Dichlorodifluoromethane	U		0.551	5.00	1	09/21/2015 14:57	WG816421
1,1-Dichloroethane	U		0.259	1.00	1	09/21/2015 14:57	WG816421
1,2-Dichloroethane	U		0.361	1.00	1	09/21/2015 14:57	WG816421
1,1-Dichloroethene	U		0.398	1.00	1	09/21/2015 14:57	WG816421
cis-1,2-Dichloroethene	0.453	J	0.260	1.00	1	09/21/2015 14:57	WG816421
trans-1,2-Dichloroethene	U		0.396	1.00	1	09/21/2015 14:57	WG816421
1,2-Dichloropropane	U	J4	0.306	1.00	1	09/21/2015 14:57	WG816421
1,1-Dichloropropene	U		0.352	1.00	1	09/21/2015 14:57	WG816421
1,3-Dichloropropane	U		0.366	1.00	1	09/21/2015 14:57	WG816421
cis-1,3-Dichloropropene	U		0.418	1.00	1	09/21/2015 14:57	WG816421
trans-1,3-Dichloropropene	U		0.419	1.00	1	09/21/2015 14:57	WG816421
2,2-Dichloropropane	U		0.321	1.00	1	09/21/2015 14:57	WG816421
Di-isopropyl ether	U		0.320	1.00	1	09/21/2015 14:57	WG816421
Ethylbenzene	U		0.384	1.00	1	09/21/2015 14:57	WG816421
Hexachloro-1,3-butadiene	U		0.256	1.00	1	09/21/2015 14:57	WG816421
Isopropylbenzene	U		0.326	1.00	1	09/21/2015 14:57	WG816421
p-Isopropyltoluene	U		0.350	1.00	1	09/21/2015 14:57	WG816421
2-Butanone (MEK)	U		3.93	10.0	1	09/21/2015 14:57	WG816421
Methylene Chloride	6.18		1.00	5.00	1	09/21/2015 14:57	WG816421
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	09/21/2015 14:57	WG816421
Methyl tert-butyl ether	U		0.367	1.00	1	09/21/2015 14:57	WG816421
Naphthalene	U		1.00	5.00	1	09/21/2015 14:57	WG816421
n-Propylbenzene	U		0.349	1.00	1	09/21/2015 14:57	WG816421
Styrene	U		0.307	1.00	1	09/21/2015 14:57	WG816421
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	09/21/2015 14:57	WG816421
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	09/21/2015 14:57	WG816421
1,1,2-Trichlorotrifluoroethane	U	J3	0.303	1.00	1	09/21/2015 14:57	WG816421
Tetrachloroethene	U		0.372	1.00	1	09/21/2015 14:57	WG816421
Toluene	U		0.780	5.00	1	09/21/2015 14:57	WG816421
1,2,3-Trichlorobenzene	U		0.230	1.00	1	09/21/2015 14:57	WG816421

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,2,4-Trichlorobenzene	U		0.355	1.00	1	09/21/2015 14:57	WG816421
1,1,1-Trichloroethane	U		0.319	1.00	1	09/21/2015 14:57	WG816421
1,1,2-Trichloroethane	U		0.383	1.00	1	09/21/2015 14:57	WG816421
Trichloroethene	U		0.398	1.00	1	09/21/2015 14:57	WG816421
Trichlorofluoromethane	U		1.20	5.00	1	09/21/2015 14:57	WG816421
1,2,3-Trichloropropane	U		0.807	2.50	1	09/21/2015 14:57	WG816421
1,2,4-Trimethylbenzene	U		0.373	1.00	1	09/21/2015 14:57	WG816421
1,2,3-Trimethylbenzene	U		0.321	1.00	1	09/21/2015 14:57	WG816421
1,3,5-Trimethylbenzene	U		0.387	1.00	1	09/21/2015 14:57	WG816421
Vinyl chloride	U		0.259	1.00	1	09/21/2015 14:57	WG816421
Xylenes, Total	U		1.06	3.00	1	09/21/2015 14:57	WG816421
(S) Toluene-d8	*106*			*90.0-115*		*09/21/2015 14:57*	WG816421
(S) Dibromofluoromethane	*116*			*79.0-121*		*09/21/2015 14:57*	WG816421
(S) 4-Bromofluorobenzene	*108*			*80.1-120*		*09/21/2015 14:57*	WG816421

Method Blank (MB)

(MB) 09/21/15 06:33

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Acetone	U		0.0100	0.0500
Acrolein	U		0.00887	0.0500
Acrylonitrile	U		0.00187	0.0100
Benzene	U		0.000331	0.00100
Bromobenzene	U		0.000352	0.00100
Bromodichloromethane	U		0.000380	0.00100
Bromoform	U		0.000469	0.00100
Bromomethane	U		0.000866	0.00500
n-Butylbenzene	U		0.000361	0.00100
sec-Butylbenzene	U		0.000365	0.00100
tert-Butylbenzene	U		0.000399	0.00100
Carbon tetrachloride	U		0.000379	0.00100
Chlorobenzene	U		0.000348	0.00100
Chlorodibromomethane	U		0.000327	0.00100
Chloroethane	U		0.000453	0.00500
2-Chloroethyl vinyl ether	U		0.00301	0.0500
Chloroform	U		0.000324	0.00500
Chloromethane	U		0.000276	0.00250
2-Chlorotoluene	U		0.000375	0.00100
4-Chlorotoluene	U		0.000351	0.00100
1,2-Dibromo-3-Chloropropane	U		0.00133	0.00500
1,2-Dibromoethane	U		0.000381	0.00100
Dibromomethane	U		0.000346	0.00100
1,2-Dichlorobenzene	U		0.000349	0.00100
1,3-Dichlorobenzene	U		0.000220	0.00100
1,4-Dichlorobenzene	U		0.000274	0.00100
Dichlorodifluoromethane	U		0.000551	0.00500
1,1-Dichloroethane	U		0.000259	0.00100
1,2-Dichloroethane	U		0.000361	0.00100
1,1-Dichloroethene	U		0.000398	0.00100
cis-1,2-Dichloroethene	U		0.000260	0.00100
trans-1,2-Dichloroethene	U		0.000396	0.00100
1,2-Dichloropropane	U		0.000306	0.00100
1,1-Dichloropropene	U		0.000352	0.00100
1,3-Dichloropropane	U		0.000366	0.00100
cis-1,3-Dichloropropene	U		0.000418	0.00100

Method Blank (MB)

(MB) 09/21/15 06:33

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/l		mg/l	mg/l
trans-1,3-Dichloropropene	U		0.000419	0.00100
2,2-Dichloropropane	U		0.000321	0.00100
Di-isopropyl ether	U		0.000320	0.00100
Ethylbenzene	U		0.000384	0.00100
Hexachloro-1,3-butadiene	U		0.000256	0.00100
Isopropylbenzene	U		0.000326	0.00100
p-Isopropyltoluene	U		0.000350	0.00100
2-Butanone (MEK)	U		0.00393	0.0100
Methylene Chloride	U		0.00100	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100
Methyl tert-butyl ether	U		0.000367	0.00100
Naphthalene	U		0.00100	0.00500
n-Propylbenzene	U		0.000349	0.00100
Styrene	U		0.000307	0.00100
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100
Tetrachloroethene	U		0.000372	0.00100
Toluene	U		0.000780	0.00500
1,1,2-Trichlorotrifluoroethane	U		0.000303	0.00100
1,2,3-Trichlorobenzene	U		0.000230	0.00100
1,2,4-Trichlorobenzene	U		0.000355	0.00100
1,1,1-Trichloroethane	U		0.000319	0.00100
1,1,2-Trichloroethane	U		0.000383	0.00100
Trichloroethene	U		0.000398	0.00100
Trichlorofluoromethane	U		0.00120	0.00500
1,2,3-Trichloropropane	U		0.000807	0.00250
1,2,3-Trimethylbenzene	U		0.000321	0.00100
1,2,4-Trimethylbenzene	U		0.000373	0.00100
1,3,5-Trimethylbenzene	U		0.000387	0.00100
Vinyl chloride	U		0.000259	0.00100
Xylenes, Total	U		0.00106	0.00300
(S) Toluene-d8	*103*			*90.0-115*
(S) Dibromofluoromethane	*109*			*79.0-121*
(S) 4-Bromofluorobenzene	*109*			*80.1-120*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 09/21/15 04:28 • (LCSD) 09/21/15 04:49

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.0891	0.100	71.2	80.1	28.7-175			11.7	20.9
Acrolein	0.125	0.0847	0.110	67.8	88.1	40.4-172		J3	26.1	20
Acrylonitrile	0.125	0.0926	0.103	74.1	82.3	58.2-145			10.5	20
Benzene	0.0250	0.0205	0.0232	82.2	92.9	73.0-122			12.3	20
Bromobenzene	0.0250	0.0208	0.0240	83.2	96.1	81.5-115			14.4	20
Bromodichloromethane	0.0250	0.0226	0.0257	90.3	103	75.5-121			13.0	20
Bromoform	0.0250	0.0258	0.0301	103	120	71.5-131			15.3	20
Bromomethane	0.0250	0.0247	0.0275	98.7	110	22.4-187			11.0	20
n-Butylbenzene	0.0250	0.0215	0.0244	86.1	97.6	75.9-134			12.5	20
sec-Butylbenzene	0.0250	0.0240	0.0276	95.8	110	80.6-126			14.2	20
tert-Butylbenzene	0.0250	0.0240	0.0279	96.1	112	79.3-127			14.9	20
Carbon tetrachloride	0.0250	0.0243	0.0278	97.3	111	70.9-129			13.5	20
Chlorobenzene	0.0250	0.0218	0.0254	87.1	102	79.7-122			15.3	20
Chlorodibromomethane	0.0250	0.0249	0.0291	99.6	117	78.2-124			15.7	20
Chloroethane	0.0250	0.0190	0.0200	75.9	80.2	41.2-153			5.51	20
2-Chloroethyl vinyl ether	0.125	0.0933	0.108	74.6	86.5	23.4-162			14.7	23.5
Chloroform	0.0250	0.0220	0.0248	87.9	99.2	73.2-125			12.1	20
Chloromethane	0.0250	0.0162	0.0177	64.6	71.0	55.8-134			9.36	20
2-Chlorotoluene	0.0250	0.0227	0.0259	91.0	104	76.4-125			12.9	20
4-Chlorotoluene	0.0250	0.0223	0.0258	89.2	103	81.5-121			14.6	20
1,2-Dibromo-3-Chloropropane	0.0250	0.0245	0.0271	98.2	108	64.8-131			9.87	20
1,2-Dibromoethane	0.0250	0.0230	0.0268	91.9	107	79.8-122			15.5	20
Dibromomethane	0.0250	0.0234	0.0267	93.5	107	79.5-118			13.4	20
1,2-Dichlorobenzene	0.0250	0.0215	0.0241	86.0	96.5	84.7-118			11.5	20
1,3-Dichlorobenzene	0.0250	0.0225	0.0261	90.0	104	77.6-127			14.7	20
1,4-Dichlorobenzene	0.0250	0.0202	0.0232	80.7	92.6	82.2-114	J4		13.7	20
Dichlorodifluoromethane	0.0250	0.0223	0.0247	89.0	98.7	56.0-134			10.4	20
1,1-Dichloroethane	0.0250	0.0190	0.0214	76.0	85.5	71.7-127			11.8	20
1,2-Dichloroethane	0.0250	0.0211	0.0233	84.6	93.3	65.3-126			9.83	20
1,1-Dichloroethene	0.0250	0.0182	0.0204	72.7	81.7	59.9-137			11.6	20
cis-1,2-Dichloroethene	0.0250	0.0221	0.0245	88.5	98.2	77.3-122			10.3	20
trans-1,2-Dichloroethene	0.0250	0.0222	0.0248	88.9	99.2	72.6-125			10.9	20
1,2-Dichloropropane	0.0250	0.0184	0.0212	73.8	84.6	77.4-125	J4		13.7	20
1,1-Dichloropropene	0.0250	0.0209	0.0236	83.7	94.3	72.5-127			12.0	20
1,3-Dichloropropane	0.0250	0.0206	0.0239	82.5	95.8	80.6-115			14.9	20
cis-1,3-Dichloropropene	0.0250	0.0219	0.0251	87.8	100	77.7-124			13.4	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 09/21/15 04:28 • (LCSD) 09/21/15 04:49

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
trans-1,3-Dichloropropene	0.0250	0.0224	0.0265	89.7	106	73.5-127			16.6	20
2,2-Dichloropropane	0.0250	0.0217	0.0246	86.8	98.6	61.3-134			12.8	20
Di-isopropyl ether	0.0250	0.0164	0.0184	65.4	73.4	65.1-135			11.6	20
Ethylbenzene	0.0250	0.0225	0.0263	90.1	105	80.9-121			15.6	20
Hexachloro-1,3-butadiene	0.0250	0.0252	0.0281	101	112	73.7-133			10.6	20
Isopropylbenzene	0.0250	0.0232	0.0269	93.0	107	81.6-124			14.5	20
p-Isopropyltoluene	0.0250	0.0245	0.0282	98.0	113	77.6-129			14.0	20
2-Butanone (MEK)	0.125	0.0711	0.0809	56.9	64.7	46.4-155			12.9	20
Methylene Chloride	0.0250	0.0200	0.0225	80.1	90.0	69.5-120			11.7	20
4-Methyl-2-pentanone (MIBK)	0.125	0.0856	0.0970	68.5	77.6	63.3-138			12.5	20
Methyl tert-butyl ether	0.0250	0.0218	0.0242	87.0	96.8	70.1-125			10.7	20
Naphthalene	0.0250	0.0221	0.0250	88.4	100	69.7-134			12.4	20
n-Propylbenzene	0.0250	0.0223	0.0260	89.4	104	81.9-122			15.2	20
Styrene	0.0250	0.0234	0.0273	93.8	109	79.9-124			15.3	20
1,1,1,2-Tetrachloroethane	0.0250	0.0242	0.0279	96.9	111	78.5-125			14.0	20
1,1,2,2-Tetrachloroethane	0.0250	0.0231	0.0266	92.4	106	79.3-123			14.0	20
Tetrachloroethene	0.0250	0.0239	0.0284	95.7	114	73.5-130			17.2	20
Toluene	0.0250	0.0209	0.0238	83.4	95.4	77.9-116			13.4	20
1,1,2-Trichlorotrifluoroethane	0.0250	0.0218	0.0270	87.1	108	62.0-141		J3	21.4	20
1,2,3-Trichlorobenzene	0.0250	0.0232	0.0263	92.9	105	75.7-134			12.5	20
1,2,4-Trichlorobenzene	0.0250	0.0221	0.0251	88.5	100	76.1-136			12.5	20
1,1,1-Trichloroethane	0.0250	0.0236	0.0267	94.5	107	71.1-129			12.4	20
1,1,2-Trichloroethane	0.0250	0.0227	0.0263	90.9	105	81.6-120			14.7	20
Trichloroethene	0.0250	0.0220	0.0256	87.9	102	79.5-121			15.2	20
Trichlorofluoromethane	0.0250	0.0247	0.0273	98.8	109	49.1-157			9.84	20
1,2,3-Trichloropropane	0.0250	0.0258	0.0297	103	119	74.9-124			13.9	20
1,2,3-Trimethylbenzene	0.0250	0.0214	0.0242	85.7	96.9	79.9-118			12.2	20
1,2,4-Trimethylbenzene	0.0250	0.0238	0.0272	95.1	109	79.0-122			13.5	20
1,3,5-Trimethylbenzene	0.0250	0.0239	0.0275	95.4	110	81.0-123			14.3	20
Vinyl chloride	0.0250	0.0188	0.0210	75.1	83.8	61.5-134			11.0	20
Xylenes, Total	0.0750	0.0680	0.0791	90.7	105	79.2-122			15.1	20
(S) Toluene-d8				*102*	*103*	*90.0-115*				
(S) Dibromofluoromethane				*105*	*103*	*79.0-121*				
(S) 4-Bromofluorobenzene				*105*	*107*	*80.1-120*				

L789270-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 09/21/15 09:40 • (MS) 09/21/15 08:16 • (MSD) 09/21/15 08:37

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.00196	0.0884	0.0933	69.2	73.1	1	25.0-156			5.39	21.5
Acrolein	0.125	ND	1.39	1.53	1110	1220	1	34.0-194	J5	J5	9.25	21.5
Acrylonitrile	0.125	ND	0.102	0.111	81.3	89.1	1	55.9-161			9.21	20
Benzene	0.0250	ND	0.0225	0.0243	90.0	97.2	1	58.6-133			7.69	20
Bromobenzene	0.0250	ND	0.0228	0.0250	91.2	100	1	70.6-125			9.44	20
Bromodichloromethane	0.0250	ND	0.0241	0.0265	96.2	106	1	69.2-127			9.79	20
Bromoform	0.0250	ND	0.0284	0.0319	114	128	1	66.3-140			11.7	20
Bromomethane	0.0250	ND	0.0265	0.0271	106	109	1	16.6-183			2.28	20.5
n-Butylbenzene	0.0250	ND	0.0255	0.0275	102	110	1	64.8-145			7.73	20
sec-Butylbenzene	0.0250	ND	0.0281	0.0307	112	123	1	66.8-139			8.81	20
tert-Butylbenzene	0.0250	ND	0.0279	0.0308	112	123	1	67.1-138			9.95	20
Carbon tetrachloride	0.0250	ND	0.0288	0.0308	115	123	1	60.6-139			6.64	20
Chlorobenzene	0.0250	ND	0.0242	0.0267	96.9	107	1	70.1-130			9.89	20
Chlorodibromomethane	0.0250	ND	0.0267	0.0303	107	121	1	71.6-132			12.9	20
Chloroethane	0.0250	ND	0.0197	0.0211	78.9	84.6	1	33.3-155			6.99	20
2-Chloroethyl vinyl ether	0.125	ND	0.00639	0.00333	5.11	2.67	1	5.00-149		J3 J6	62.8	40
Chloroform	0.0250	ND	0.0238	0.0260	95.2	104	1	66.1-133			8.86	20
Chloromethane	0.0250	ND	0.0174	0.0186	69.5	74.2	1	40.7-139			6.67	20
2-Chlorotoluene	0.0250	ND	0.0256	0.0279	103	112	1	66.9-134			8.61	20
4-Chlorotoluene	0.0250	ND	0.0253	0.0274	101	110	1	66.8-134			8.18	20
1,2-Dibromo-3-Chloropropane	0.0250	ND	0.0270	0.0292	108	117	1	63.9-142			7.82	20.2
1,2-Dibromoethane	0.0250	ND	0.0254	0.0283	102	113	1	73.8-131			10.6	20
Dibromomethane	0.0250	ND	0.0256	0.0278	102	111	1	72.8-127			8.18	20
1,2-Dichlorobenzene	0.0250	ND	0.0234	0.0256	93.6	102	1	77.4-127			9.03	20
1,3-Dichlorobenzene	0.0250	ND	0.0253	0.0277	101	111	1	67.9-136			8.87	20
1,4-Dichlorobenzene	0.0250	ND	0.0224	0.0247	89.7	98.7	1	74.4-123			9.58	20
Dichlorodifluoromethane	0.0250	ND	0.0265	0.0273	106	109	1	42.2-146			2.97	20
1,1-Dichloroethane	0.0250	ND	0.0208	0.0224	83.3	89.5	1	64.0-134			7.18	20
1,2-Dichloroethane	0.0250	ND	0.0222	0.0239	88.9	95.8	1	60.7-132			7.39	20
1,1-Dichloroethene	0.0250	ND	0.0207	0.0237	82.6	94.9	1	48.8-144			13.9	20
cis-1,2-Dichloroethene	0.0250	ND	0.0240	0.0259	95.8	104	1	60.6-136			7.78	20
trans-1,2-Dichloroethene	0.0250	ND	0.0245	0.0266	98.2	106	1	61.0-132			7.93	20
1,2-Dichloropropane	0.0250	ND	0.0197	0.0219	78.8	87.8	1	69.7-130			10.8	20
1,1-Dichloropropene	0.0250	ND	0.0240	0.0256	96.0	102	1	61.5-136			6.32	20
1,3-Dichloropropane	0.0250	ND	0.0229	0.0249	91.8	99.4	1	74.3-123			7.99	20
cis-1,3-Dichloropropene	0.0250	ND	0.0231	0.0254	92.5	102	1	71.1-129			9.53	20

L789270-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 09/21/15 09:40 • (MS) 09/21/15 08:16 • (MSD) 09/21/15 08:37

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
trans-1,3-Dichloropropene	0.0250	ND	0.0246	0.0268	98.4	107	1	66.3-136			8.38	20
2,2-Dichloropropane	0.0250	ND	0.0253	0.0274	101	109	1	54.9-142			7.69	20
Di-isopropyl ether	0.0250	ND	0.0175	0.0189	69.9	75.6	1	59.9-140			7.91	20
Ethylbenzene	0.0250	ND	0.0258	0.0280	103	112	1	62.7-136			7.94	20
Hexachloro-1,3-butadiene	0.0250	ND	0.0295	0.0312	118	125	1	61.1-144			5.68	20.1
Isopropylbenzene	0.0250	ND	0.0268	0.0292	107	117	1	67.4-136			8.53	20
p-Isopropyltoluene	0.0250	ND	0.0288	0.0309	115	124	1	62.8-143			7.23	20
2-Butanone (MEK)	0.125	ND	0.0791	0.0835	63.3	66.8	1	45.0-156			5.46	20.8
Methylene Chloride	0.0250	0.00492	0.0253	0.0265	81.4	86.3	1	61.5-125			4.68	20
4-Methyl-2-pentanone (MIBK)	0.125	ND	0.0943	0.101	75.4	80.6	1	60.7-150			6.64	20
Methyl tert-butyl ether	0.0250	ND	0.0231	0.0249	92.4	99.7	1	61.4-136			7.52	20
Naphthalene	0.0250	ND	0.0242	0.0263	96.9	105	1	61.8-143			8.30	20
n-Propylbenzene	0.0250	ND	0.0262	0.0284	105	114	1	63.2-139			8.24	20
Styrene	0.0250	ND	0.0261	0.0288	104	115	1	68.2-133			9.91	20
1,1,1,2-Tetrachloroethane	0.0250	ND	0.0262	0.0294	105	117	1	70.5-132			11.2	20
1,1,2,2-Tetrachloroethane	0.0250	ND	0.0259	0.0282	104	113	1	64.9-145			8.27	20
Tetrachloroethene	0.0250	ND	0.0276	0.0303	111	121	1	57.4-141			9.28	20
Toluene	0.0250	ND	0.0233	0.0252	93.4	101	1	67.8-124			7.76	20
1,1,2-Trichlorotrifluoroethane	0.0250	ND	0.0278	0.0316	111	126	1	53.7-150			12.7	20
1,2,3-Trichlorobenzene	0.0250	ND	0.0259	0.0280	104	112	1	65.7-143			7.59	20
1,2,4-Trichlorobenzene	0.0250	ND	0.0246	0.0265	98.4	106	1	67.0-146			7.57	20
1,1,1-Trichloroethane	0.0250	ND	0.0273	0.0293	109	117	1	58.7-134			7.07	20
1,1,2-Trichloroethane	0.0250	ND	0.0246	0.0272	98.5	109	1	74.1-130			10.0	20
Trichloroethene	0.0250	ND	0.0245	0.0267	98.1	107	1	48.9-148			8.30	20
Trichlorofluoromethane	0.0250	ND	0.0286	0.0302	115	121	1	39.9-165			5.46	20
1,2,3-Trichloropropane	0.0250	ND	0.0285	0.0309	114	124	1	71.5-134			7.90	20
1,2,3-Trimethylbenzene	0.0250	ND	0.0236	0.0256	94.2	102	1	62.7-133			8.34	20
1,2,4-Trimethylbenzene	0.0250	ND	0.0271	0.0294	108	118	1	60.5-137			8.19	20
1,3,5-Trimethylbenzene	0.0250	ND	0.0272	0.0298	109	119	1	67.9-134			9.38	20
Vinyl chloride	0.0250	ND	0.0213	0.0225	85.3	90.0	1	44.3-143			5.46	20
Xylenes, Total	0.0750	ND	0.0770	0.0845	103	113	1	65.6-133			9.30	20
(S) Toluene-d8					*102*	*102*		*90.0-115*				
(S) Dibromofluoromethane					*104*	*103*		*79.0-121*				
(S) 4-Bromofluorobenzene					*108*	*107*		*80.1-120*				

Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
ND,U	Not detected at the Reporting Limit (or MDL where applicable).
RPD	Relative Percent Difference.
(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
Rec.	Recovery.
SDL	Sample Detection Limit.
MQL	Method Quantitation Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.

ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our "one location" design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be **YOUR LAB OF CHOICE.**

State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey–NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Conneticut	PH-0197	North Carolina [1]	DW21704
Florida	E87487	North Carolina [2]	41
Georgia	NELAP	North Dakota	R-140
Georgia [1]	923	Ohio–VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky [1]	90010	South Dakota	n/a
Kentucky [2]	16	Tennessee [1 4]	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

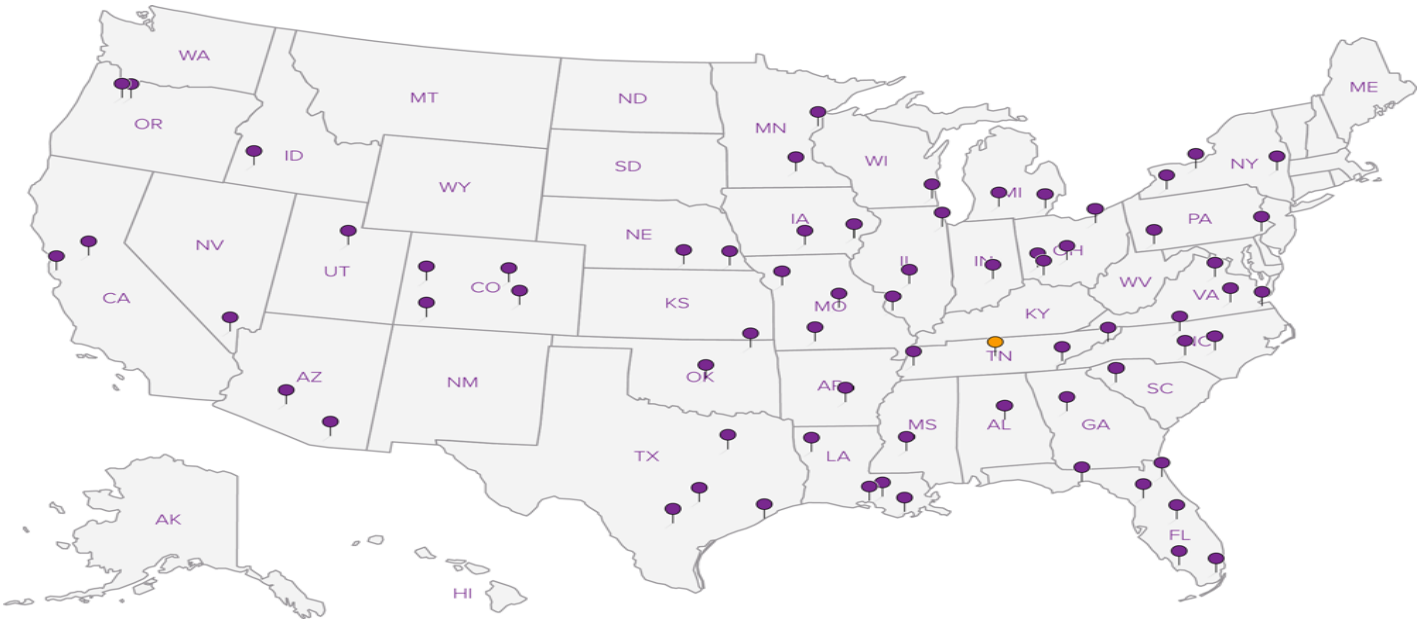
[1.] Drinking Water [2.] Underground Storage Tanks [3.] Aquatic Toxicity [4.] Chemical/Microbiological [5.] Mold [n/a] Accreditation not applicable

Third Party & Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA	100789
Canada	1461.01	DOD	1461.01
EPA–Crypto	TN00003	USDA	S-67674

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. **ESC Lab Sciences performs all testing at our central laboratory.**



PNG Environmental
6665 SW Hampton St.
Suite 101
Tigard, OR. 97223

Billing Information:
Accounts Payable- Betsy Brandner
6665 SW Hampton St. Suite 101
Tigard, OR. 97223

Report to: Paul McBeth
Email to: pmcbeth@pngenv.com

Project Description: BVHWTP
City/State Collected:
Phone: 503-620-2387
FAX:
Client Project #: 1122
ESC Key: PNGENVTOR
Collected by:
Site/Facility ID#:
P.O.#: 1122
Collected by (signature):
Immediately Packed on Ice N (Y)

Rush? (Lab MUST Be Notified)
____ Same Day.....200%
____ Next Day.....100%
____ Two Day.....50%
____ Three Day.....25%

Date Results Needed:
Email? __No__Yes
FAX? __No__Yes

Analysis/Container/Preservative
VOC's BTEX 8260

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	Remarks/Contaminant	Sample # (lab only)
MW-33		GW		9/15/15	0825	3 X		L789269-01

*Matrix: SS - Soil/Solid GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other_____

Remarks:

pH _____ Temp _____
Flow _____ Other _____

Relinquished by: (Signature) — Date: 9-16-15 — Time: 1130 — Received by: (Signature)
Relinquished by: (Signature) — Date: — Time: — Received by: (Signature)
Relinquished by: (Signature) — Date: — Time: — Received for lab by: (Signature)

Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ _____
Temp: 5.8 °C — Bottles Received: 18 3 3
Date: 9-17-15 — Time: 0400

Condition: 7F (lab use only)
CoC Seals Intact: ____ Y ____ N ____ NA
pH Checked: — NCF:

Chain of Custody
Page 1 of 1

ESC LABORATORY SCIENCES
12065 Lebanon Road
Mt. Juliet, TN 37122
Phone: (800) 767-5859
Phone: (615) 758-5858
Fax: (615) 758-5859

J040

CoCode PNGENVTOR (lab use only)
Template/Prelogin
Shipped Via:

ANALYTICAL REPORT

January 05, 2016

PNG Environmental

Sample Delivery Group:	L807433
Samples Received:	12/17/2015
Project Number:	1122
Description:	Evanite

Report To: Paul McBeth
6665 SW Hampton St., Suite 101
Tigard, OR 97223

Entire Report Reviewed By:

Jarred Willis
Technical Service Representative

DMW-40 L807433-01 GW

Collected by: S. Biles | Collected date/time: 12/14/15 14:14 | Received date/time: 12/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG836734	1	12/28/15 12:37	12/28/15 12:37	DWR

IMW-40 L807433-02 GW

Collected by: S. Biles | Collected date/time: 12/14/15 14:45 | Received date/time: 12/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG836734	1	12/28/15 12:58	12/28/15 12:58	DWR

IMW-32 L807433-03 GW

Collected by: S. Biles | Collected date/time: 12/14/15 15:18 | Received date/time: 12/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG836734	1	12/28/15 13:18	12/28/15 13:18	DWR

DMW-24 L807433-04 GW

Collected by: S. Biles | Collected date/time: 12/14/15 15:32 | Received date/time: 12/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG836734	1	12/28/15 13:39	12/28/15 13:39	DWR
Volatile Organic Compounds (GC/MS) by Method 8260B	WG836734	10	12/28/15 15:42	12/28/15 15:42	DWR

DMW-3 L807433-05 GW

Collected by: S. Biles | Collected date/time: 12/14/15 15:42 | Received date/time: 12/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG836734	1	12/28/15 14:00	12/28/15 14:00	DWR
Volatile Organic Compounds (GC/MS) by Method 8260B	WG836734	50	12/28/15 16:03	12/28/15 16:03	DWR

DMW-26 L807433-06 GW

Collected by: S. Biles | Collected date/time: 12/14/15 16:45 | Received date/time: 12/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG836734	1	12/28/15 12:16	12/28/15 12:16	DWR

DMW-30 L807433-07 GW

Collected by: S. Biles | Collected date/time: 12/14/15 17:29 | Received date/time: 12/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG836734	1	12/28/15 14:20	12/28/15 14:20	DWR

DMW-29 L807433-08 GW

Collected by: S. Biles | Collected date/time: 12/14/15 17:42 | Received date/time: 12/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG836734	1	12/28/15 14:41	12/28/15 14:41	DWR

DMW-17 L807433-09 GW

Collected by: S. Biles
Collected date/time: 12/15/15 09:20
Received date/time: 12/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG836734	1	12/28/15 15:01	12/28/15 15:01	DWR

DMW-27 L807433-10 GW

Collected by: S. Biles
Collected date/time: 12/15/15 10:10
Received date/time: 12/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG836734	1	12/28/15 17:20	12/28/15 17:20	DWR

DMW-28 L807433-11 GW

Collected by: S. Biles
Collected date/time: 12/15/15 11:06
Received date/time: 12/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG836734	1	12/28/15 17:40	12/28/15 17:40	DWR
Volatile Organic Compounds (GC/MS) by Method 8260B	WG838847	20	12/29/15 10:36	12/29/15 10:36	JHH

DMW-25 L807433-12 GW

Collected by: S. Biles
Collected date/time: 12/15/15 12:02
Received date/time: 12/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG836734	1	12/28/15 18:00	12/28/15 18:00	DWR

DMW-16 L807433-13 GW

Collected by: S. Biles
Collected date/time: 12/15/15 13:05
Received date/time: 12/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG837018	1	12/22/15 10:27	12/22/15 14:10	ST
Volatile Organic Compounds (GC) by Method RSK175	WG837119	1	12/20/15 14:52	12/20/15 14:52	JC
Volatile Organic Compounds (GC/MS) by Method 8260B	WG836734	1	12/28/15 18:21	12/28/15 18:21	DWR
Volatile Organic Compounds (GC/MS) by Method 8260B	WG838847	100	12/29/15 15:44	12/29/15 15:44	DAH
Wet Chemistry by Method 350.1	WG837771	1	12/22/15 18:43	12/22/15 18:43	JAL
Wet Chemistry by Method 9056A	WG836336	1	12/17/15 12:55	12/17/15 12:55	DJD
Wet Chemistry by Method 9060A	WG836613	1	12/18/15 21:17	12/18/15 21:17	AS

DMW-23 L807433-14 GW

Collected by: S. Biles
Collected date/time: 12/15/15 13:35
Received date/time: 12/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG837018	1	12/22/15 10:27	12/22/15 14:22	ST
Volatile Organic Compounds (GC) by Method RSK175	WG837119	1	12/20/15 15:02	12/20/15 15:02	JC
Volatile Organic Compounds (GC/MS) by Method 8260B	WG836734	1	12/28/15 18:42	12/28/15 18:42	DWR
Volatile Organic Compounds (GC/MS) by Method 8260B	WG838847	100	12/29/15 16:05	12/29/15 16:05	DAH
Wet Chemistry by Method 350.1	WG837955	1	12/28/15 11:27	12/28/15 11:27	ASK
Wet Chemistry by Method 9056A	WG836336	1	12/17/15 13:09	12/17/15 13:09	DJD
Wet Chemistry by Method 9060A	WG836613	1	12/18/15 22:04	12/18/15 22:04	AS

DMW-39 L807433-15 GW

Collected by: S. Biles | Collected date/time: 12/16/15 09:05 | Received date/time: 12/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG837018	1	12/22/15 10:27	12/22/15 14:25	ST
Volatile Organic Compounds (GC) by Method RSK175	WG837119	1	12/20/15 15:05	12/20/15 15:05	JC
Volatile Organic Compounds (GC/MS) by Method 8260B	WG838847	1	12/29/15 13:41	12/29/15 13:41	DAH
Wet Chemistry by Method 350.1	WG837955	1	12/28/15 11:29	12/28/15 11:29	ASK
Wet Chemistry by Method 9056A	WG836377	1	12/17/15 17:38	12/17/15 17:38	DJD
Wet Chemistry by Method 9060A	WG836613	1	12/18/15 22:24	12/18/15 22:24	AS

DMW-37 L807433-16 GW

Collected by: S. Biles | Collected date/time: 12/16/15 09:45 | Received date/time: 12/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG837018	1	12/22/15 10:27	12/22/15 14:28	ST
Volatile Organic Compounds (GC) by Method RSK175	WG837119	1	12/20/15 15:07	12/20/15 15:07	JC
Volatile Organic Compounds (GC/MS) by Method 8260B	WG838847	1	12/29/15 14:02	12/29/15 14:02	DAH
Wet Chemistry by Method 350.1	WG837955	1	12/28/15 11:32	12/28/15 11:32	ASK
Wet Chemistry by Method 9056A	WG836377	1	12/17/15 18:09	12/17/15 18:09	DJD
Wet Chemistry by Method 9060A	WG836613	1	12/18/15 22:48	12/18/15 22:48	AS

DMW-38 L807433-17 GW

Collected by: S. Biles | Collected date/time: 12/16/15 10:36 | Received date/time: 12/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG837018	1	12/22/15 10:27	12/22/15 14:41	ST
Volatile Organic Compounds (GC) by Method RSK175	WG837119	1	12/20/15 15:09	12/20/15 15:09	JC
Volatile Organic Compounds (GC/MS) by Method 8260B	WG838847	1	12/29/15 14:22	12/29/15 14:22	DAH
Wet Chemistry by Method 350.1	WG837955	1	12/28/15 11:42	12/28/15 11:42	ASK
Wet Chemistry by Method 9056A	WG836377	1	12/17/15 19:42	12/17/15 19:42	DJD
Wet Chemistry by Method 9060A	WG836613	1	12/18/15 23:12	12/18/15 23:12	AS

DMW-32 L807433-18 GW

Collected by: S. Biles | Collected date/time: 12/16/15 11:20 | Received date/time: 12/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG837018	1	12/22/15 10:27	12/22/15 14:44	ST
Volatile Organic Compounds (GC) by Method RSK175	WG837119	1	12/20/15 15:11	12/20/15 15:11	JC
Volatile Organic Compounds (GC/MS) by Method 8260B	WG837451	5	12/30/15 10:44	12/30/15 10:44	JHH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG838847	1	12/29/15 14:43	12/29/15 14:43	DAH
Wet Chemistry by Method 350.1	WG837955	1	12/28/15 11:44	12/28/15 11:44	ASK
Wet Chemistry by Method 9056A	WG836377	1	12/17/15 19:57	12/17/15 19:57	DJD
Wet Chemistry by Method 9060A	WG836613	1	12/18/15 23:25	12/18/15 23:25	AS

DMW-36 L807433-19 GW

Collected by: S. Biles | Collected date/time: 12/16/15 12:18 | Received date/time: 12/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG837018	1	12/22/15 10:27	12/22/15 14:47	ST
Volatile Organic Compounds (GC) by Method RSK175	WG837119	1	12/20/15 15:13	12/20/15 15:13	JC
Volatile Organic Compounds (GC/MS) by Method 8260B	WG836765	1	12/28/15 22:35	12/28/15 22:35	JHH
Wet Chemistry by Method 350.1	WG837955	1	12/28/15 11:47	12/28/15 11:47	ASK
Wet Chemistry by Method 9056A	WG836377	1	12/17/15 20:13	12/17/15 20:13	DJD
Wet Chemistry by Method 9060A	WG836613	1	12/18/15 23:37	12/18/15 23:37	AS

DMW-42 L807433-20 GW

Collected by: S. Biles
Collected date/time: 12/16/15 13:07
Received date/time: 12/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG837018	1	12/22/15 10:27	12/22/15 14:50	ST
Metals (ICP) by Method 6010B	WG837018	2	12/22/15 10:27	12/22/15 23:49	ST
Volatile Organic Compounds (GC) by Method RSK175	WG837119	1	12/20/15 15:16	12/20/15 15:16	JC
Volatile Organic Compounds (GC/MS) by Method 8260B	WG836765	1	12/28/15 22:56	12/28/15 22:56	JHH
Wet Chemistry by Method 350.1	WG837955	1	12/28/15 11:49	12/28/15 11:49	ASK
Wet Chemistry by Method 9056A	WG836377	1	12/17/15 23:18	12/17/15 23:18	DJD
Wet Chemistry by Method 9060A	WG836368	1	12/18/15 15:30	12/18/15 15:30	AS

DMW-41 L807433-21 GW

Collected by: S. Biles
Collected date/time: 12/16/15 13:54
Received date/time: 12/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Metals (ICP) by Method 6010B	WG837018	1	12/22/15 10:27	12/22/15 14:53	ST
Volatile Organic Compounds (GC) by Method RSK175	WG837119	1	12/20/15 15:19	12/20/15 15:19	JC
Volatile Organic Compounds (GC/MS) by Method 8260B	WG836765	1	12/28/15 23:17	12/28/15 23:17	JHH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG838847	25	12/29/15 15:03	12/29/15 15:03	DAH
Wet Chemistry by Method 350.1	WG837955	1	12/28/15 11:52	12/28/15 11:52	ASK
Wet Chemistry by Method 9056A	WG836377	1	12/18/15 00:04	12/18/15 00:04	DJD
Wet Chemistry by Method 9060A	WG836368	1	12/18/15 15:46	12/18/15 15:46	AS

TB-121615 L807433-22 GW

Collected by: S. Biles
Collected date/time: 12/14/15 14:00
Received date/time: 12/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG836734	1	12/28/15 16:24	12/28/15 16:24	DWR

MW-99 L807433-23 GW

Collected by: S. Biles
Collected date/time: 12/14/15 13:56
Received date/time: 12/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG836734	25	12/28/15 16:54	12/28/15 16:54	DWR
Volatile Organic Compounds (GC/MS) by Method 8260B	WG836734	5	12/28/15 15:22	12/28/15 15:22	DWR

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Jarred Willis
Technical Service Representative

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Acetone	ND		25.0	1	12/28/2015 12:37	WG836734
Acrylonitrile	ND		2.50	1	12/28/2015 12:37	WG836734
Benzene	ND		0.500	1	12/28/2015 12:37	WG836734
Bromobenzene	ND		0.500	1	12/28/2015 12:37	WG836734
Bromodichloromethane	ND		0.500	1	12/28/2015 12:37	WG836734
Bromochloromethane	ND		0.500	1	12/28/2015 12:37	WG836734
Bromoform	ND		0.500	1	12/28/2015 12:37	WG836734
Bromomethane	ND		0.500	1	12/28/2015 12:37	WG836734
n-Butylbenzene	ND		0.500	1	12/28/2015 12:37	WG836734
sec-Butylbenzene	ND		0.500	1	12/28/2015 12:37	WG836734
tert-Butylbenzene	ND		0.500	1	12/28/2015 12:37	WG836734
Carbon disulfide	ND		0.500	1	12/28/2015 12:37	WG836734
Carbon tetrachloride	ND		0.500	1	12/28/2015 12:37	WG836734
Chlorobenzene	ND		0.500	1	12/28/2015 12:37	WG836734
Chlorodibromomethane	ND		0.500	1	12/28/2015 12:37	WG836734
Chloroethane	ND		0.500	1	12/28/2015 12:37	WG836734
2-Chloroethyl vinyl ether	ND		25.0	1	12/28/2015 12:37	WG836734
Chloroform	ND		0.500	1	12/28/2015 12:37	WG836734
Chloromethane	ND		0.500	1	12/28/2015 12:37	WG836734
2-Chlorotoluene	ND		0.500	1	12/28/2015 12:37	WG836734
4-Chlorotoluene	ND		0.500	1	12/28/2015 12:37	WG836734
1,2-Dibromo-3-Chloropropane	ND		1.00	1	12/28/2015 12:37	WG836734
1,2-Dibromoethane	ND		0.500	1	12/28/2015 12:37	WG836734
Dibromomethane	ND		0.500	1	12/28/2015 12:37	WG836734
1,2-Dichlorobenzene	ND		0.500	1	12/28/2015 12:37	WG836734
1,3-Dichlorobenzene	ND		0.500	1	12/28/2015 12:37	WG836734
1,4-Dichlorobenzene	ND		0.500	1	12/28/2015 12:37	WG836734
Dichlorodifluoromethane	ND		0.500	1	12/28/2015 12:37	WG836734
1,1-Dichloroethane	ND		0.500	1	12/28/2015 12:37	WG836734
1,2-Dichloroethane	ND		0.500	1	12/28/2015 12:37	WG836734
1,1-Dichloroethene	ND		0.500	1	12/28/2015 12:37	WG836734
cis-1,2-Dichloroethene	ND		0.500	1	12/28/2015 12:37	WG836734
trans-1,2-Dichloroethene	ND		0.500	1	12/28/2015 12:37	WG836734
1,2-Dichloropropane	ND		0.500	1	12/28/2015 12:37	WG836734
1,1-Dichloropropene	ND		0.500	1	12/28/2015 12:37	WG836734
1,3-Dichloropropane	ND		0.500	1	12/28/2015 12:37	WG836734
cis-1,3-Dichloropropene	ND		0.500	1	12/28/2015 12:37	WG836734
trans-1,3-Dichloropropene	ND		0.500	1	12/28/2015 12:37	WG836734
trans-1,4-Dichloro-2-butene	ND		5.00	1	12/28/2015 12:37	WG836734
2,2-Dichloropropane	ND		0.500	1	12/28/2015 12:37	WG836734
Di-isopropyl ether	ND		0.500	1	12/28/2015 12:37	WG836734
Ethylbenzene	ND		0.500	1	12/28/2015 12:37	WG836734
Hexachloro-1,3-butadiene	ND		1.00	1	12/28/2015 12:37	WG836734
2-Hexanone	ND		2.50	1	12/28/2015 12:37	WG836734
n-Hexane	ND		1.00	1	12/28/2015 12:37	WG836734
Iodomethane	ND		10.0	1	12/28/2015 12:37	WG836734
Isopropylbenzene	ND		0.500	1	12/28/2015 12:37	WG836734
p-Isopropyltoluene	ND		0.500	1	12/28/2015 12:37	WG836734
2-Butanone (MEK)	ND		2.50	1	12/28/2015 12:37	WG836734
Methylene Chloride	ND		2.50	1	12/28/2015 12:37	WG836734
4-Methyl-2-pentanone (MIBK)	ND		2.50	1	12/28/2015 12:37	WG836734
Methyl tert-butyl ether	ND		0.500	1	12/28/2015 12:37	WG836734
Naphthalene	ND		0.500	1	12/28/2015 12:37	WG836734
n-Propylbenzene	ND		0.500	1	12/28/2015 12:37	WG836734
Styrene	ND		0.500	1	12/28/2015 12:37	WG836734
1,1,1,2-Tetrachloroethane	ND		0.500	1	12/28/2015 12:37	WG836734

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
1,1,2,2-Tetrachloroethane	ND		0.500	1	12/28/2015 12:37	WG836734
1,1,2-Trichlorotrifluoroethane	ND		0.500	1	12/28/2015 12:37	WG836734
Tetrachloroethene	ND		0.500	1	12/28/2015 12:37	WG836734
Toluene	ND		0.500	1	12/28/2015 12:37	WG836734
1,2,3-Trichlorobenzene	ND		0.500	1	12/28/2015 12:37	WG836734
1,2,4-Trichlorobenzene	ND		0.500	1	12/28/2015 12:37	WG836734
1,1,1-Trichloroethane	ND		0.500	1	12/28/2015 12:37	WG836734
1,1,2-Trichloroethane	ND		0.500	1	12/28/2015 12:37	WG836734
Trichloroethene	ND		0.500	1	12/28/2015 12:37	WG836734
Trichlorofluoromethane	ND		0.500	1	12/28/2015 12:37	WG836734
1,2,3-Trichloropropane	ND		2.50	1	12/28/2015 12:37	WG836734
1,2,4-Trimethylbenzene	ND		0.500	1	12/28/2015 12:37	WG836734
1,2,3-Trimethylbenzene	ND		0.500	1	12/28/2015 12:37	WG836734
1,3,5-Trimethylbenzene	ND		0.500	1	12/28/2015 12:37	WG836734
Vinyl acetate	ND		2.50	1	12/28/2015 12:37	WG836734
Vinyl chloride	ND		0.500	1	12/28/2015 12:37	WG836734
Xylenes, Total	ND		1.50	1	12/28/2015 12:37	WG836734
(S) Toluene-d8	*104*		*90.0-115*		*12/28/2015 12:37*	WG836734
(S) Dibromofluoromethane	*104*		*79.0-121*		*12/28/2015 12:37*	WG836734
(S) 4-Bromofluorobenzene	*103*		*80.1-120*		*12/28/2015 12:37*	WG836734

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Acetone	ND		25.0	1	12/28/2015 12:58	WG836734
Acrylonitrile	ND		2.50	1	12/28/2015 12:58	WG836734
Benzene	ND		0.500	1	12/28/2015 12:58	WG836734
Bromobenzene	ND		0.500	1	12/28/2015 12:58	WG836734
Bromodichloromethane	ND		0.500	1	12/28/2015 12:58	WG836734
Bromochloromethane	ND		0.500	1	12/28/2015 12:58	WG836734
Bromoform	ND		0.500	1	12/28/2015 12:58	WG836734
Bromomethane	ND		0.500	1	12/28/2015 12:58	WG836734
n-Butylbenzene	ND		0.500	1	12/28/2015 12:58	WG836734
sec-Butylbenzene	ND		0.500	1	12/28/2015 12:58	WG836734
tert-Butylbenzene	ND		0.500	1	12/28/2015 12:58	WG836734
Carbon disulfide	ND		0.500	1	12/28/2015 12:58	WG836734
Carbon tetrachloride	ND		0.500	1	12/28/2015 12:58	WG836734
Chlorobenzene	ND		0.500	1	12/28/2015 12:58	WG836734
Chlorodibromomethane	ND		0.500	1	12/28/2015 12:58	WG836734
Chloroethane	ND		0.500	1	12/28/2015 12:58	WG836734
2-Chloroethyl vinyl ether	ND		25.0	1	12/28/2015 12:58	WG836734
Chloroform	ND		0.500	1	12/28/2015 12:58	WG836734
Chloromethane	ND		0.500	1	12/28/2015 12:58	WG836734
2-Chlorotoluene	ND		0.500	1	12/28/2015 12:58	WG836734
4-Chlorotoluene	ND		0.500	1	12/28/2015 12:58	WG836734
1,2-Dibromo-3-Chloropropane	ND		1.00	1	12/28/2015 12:58	WG836734
1,2-Dibromoethane	ND		0.500	1	12/28/2015 12:58	WG836734
Dibromomethane	ND		0.500	1	12/28/2015 12:58	WG836734
1,2-Dichlorobenzene	ND		0.500	1	12/28/2015 12:58	WG836734
1,3-Dichlorobenzene	ND		0.500	1	12/28/2015 12:58	WG836734
1,4-Dichlorobenzene	ND		0.500	1	12/28/2015 12:58	WG836734
Dichlorodifluoromethane	ND		0.500	1	12/28/2015 12:58	WG836734
1,1-Dichloroethane	ND		0.500	1	12/28/2015 12:58	WG836734
1,2-Dichloroethane	ND		0.500	1	12/28/2015 12:58	WG836734
1,1-Dichloroethene	ND		0.500	1	12/28/2015 12:58	WG836734
cis-1,2-Dichloroethene	ND		0.500	1	12/28/2015 12:58	WG836734
trans-1,2-Dichloroethene	ND		0.500	1	12/28/2015 12:58	WG836734
1,2-Dichloropropane	ND		0.500	1	12/28/2015 12:58	WG836734
1,1-Dichloropropene	ND		0.500	1	12/28/2015 12:58	WG836734
1,3-Dichloropropane	ND		0.500	1	12/28/2015 12:58	WG836734
cis-1,3-Dichloropropene	ND		0.500	1	12/28/2015 12:58	WG836734
trans-1,3-Dichloropropene	ND		0.500	1	12/28/2015 12:58	WG836734
trans-1,4-Dichloro-2-butene	ND		5.00	1	12/28/2015 12:58	WG836734
2,2-Dichloropropane	ND		0.500	1	12/28/2015 12:58	WG836734
Di-isopropyl ether	ND		0.500	1	12/28/2015 12:58	WG836734
Ethylbenzene	ND		0.500	1	12/28/2015 12:58	WG836734
Hexachloro-1,3-butadiene	ND		1.00	1	12/28/2015 12:58	WG836734
2-Hexanone	ND		2.50	1	12/28/2015 12:58	WG836734
n-Hexane	ND		1.00	1	12/28/2015 12:58	WG836734
Iodomethane	ND		10.0	1	12/28/2015 12:58	WG836734
Isopropylbenzene	ND		0.500	1	12/28/2015 12:58	WG836734
p-Isopropyltoluene	ND		0.500	1	12/28/2015 12:58	WG836734
2-Butanone (MEK)	ND		2.50	1	12/28/2015 12:58	WG836734
Methylene Chloride	ND		2.50	1	12/28/2015 12:58	WG836734
4-Methyl-2-pentanone (MIBK)	ND		2.50	1	12/28/2015 12:58	WG836734
Methyl tert-butyl ether	ND		0.500	1	12/28/2015 12:58	WG836734
Naphthalene	ND		0.500	1	12/28/2015 12:58	WG836734
n-Propylbenzene	ND		0.500	1	12/28/2015 12:58	WG836734
Styrene	ND		0.500	1	12/28/2015 12:58	WG836734
1,1,1,2-Tetrachloroethane	ND		0.500	1	12/28/2015 12:58	WG836734

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
1,1,2,2-Tetrachloroethane	ND		0.500	1	12/28/2015 12:58	WG836734
1,1,2-Trichlorotrifluoroethane	ND		0.500	1	12/28/2015 12:58	WG836734
Tetrachloroethene	ND		0.500	1	12/28/2015 12:58	WG836734
Toluene	ND		0.500	1	12/28/2015 12:58	WG836734
1,2,3-Trichlorobenzene	ND		0.500	1	12/28/2015 12:58	WG836734
1,2,4-Trichlorobenzene	ND		0.500	1	12/28/2015 12:58	WG836734
1,1,1-Trichloroethane	ND		0.500	1	12/28/2015 12:58	WG836734
1,1,2-Trichloroethane	ND		0.500	1	12/28/2015 12:58	WG836734
Trichloroethene	ND		0.500	1	12/28/2015 12:58	WG836734
Trichlorofluoromethane	ND		0.500	1	12/28/2015 12:58	WG836734
1,2,3-Trichloropropane	ND		2.50	1	12/28/2015 12:58	WG836734
1,2,4-Trimethylbenzene	ND		0.500	1	12/28/2015 12:58	WG836734
1,2,3-Trimethylbenzene	ND		0.500	1	12/28/2015 12:58	WG836734
1,3,5-Trimethylbenzene	ND		0.500	1	12/28/2015 12:58	WG836734
Vinyl acetate	ND		2.50	1	12/28/2015 12:58	WG836734
Vinyl chloride	ND		0.500	1	12/28/2015 12:58	WG836734
Xylenes, Total	ND		1.50	1	12/28/2015 12:58	WG836734
(S) Toluene-d8	*104*		*90.0-115*		*12/28/2015 12:58*	WG836734
(S) Dibromofluoromethane	*105*		*79.0-121*		*12/28/2015 12:58*	WG836734
(S) 4-Bromofluorobenzene	*101*		*80.1-120*		*12/28/2015 12:58*	WG836734

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Acetone	ND		25.0	1	12/28/2015 13:18	WG836734
Acrylonitrile	ND		2.50	1	12/28/2015 13:18	WG836734
Benzene	ND		0.500	1	12/28/2015 13:18	WG836734
Bromobenzene	ND		0.500	1	12/28/2015 13:18	WG836734
Bromodichloromethane	ND		0.500	1	12/28/2015 13:18	WG836734
Bromochloromethane	ND		0.500	1	12/28/2015 13:18	WG836734
Bromoform	ND		0.500	1	12/28/2015 13:18	WG836734
Bromomethane	ND		0.500	1	12/28/2015 13:18	WG836734
n-Butylbenzene	ND		0.500	1	12/28/2015 13:18	WG836734
sec-Butylbenzene	ND		0.500	1	12/28/2015 13:18	WG836734
tert-Butylbenzene	ND		0.500	1	12/28/2015 13:18	WG836734
Carbon disulfide	ND		0.500	1	12/28/2015 13:18	WG836734
Carbon tetrachloride	ND		0.500	1	12/28/2015 13:18	WG836734
Chlorobenzene	ND		0.500	1	12/28/2015 13:18	WG836734
Chlorodibromomethane	ND		0.500	1	12/28/2015 13:18	WG836734
Chloroethane	ND		0.500	1	12/28/2015 13:18	WG836734
2-Chloroethyl vinyl ether	ND		25.0	1	12/28/2015 13:18	WG836734
Chloroform	ND		0.500	1	12/28/2015 13:18	WG836734
Chloromethane	ND		0.500	1	12/28/2015 13:18	WG836734
2-Chlorotoluene	ND		0.500	1	12/28/2015 13:18	WG836734
4-Chlorotoluene	ND		0.500	1	12/28/2015 13:18	WG836734
1,2-Dibromo-3-Chloropropane	ND		1.00	1	12/28/2015 13:18	WG836734
1,2-Dibromoethane	ND		0.500	1	12/28/2015 13:18	WG836734
Dibromomethane	ND		0.500	1	12/28/2015 13:18	WG836734
1,2-Dichlorobenzene	ND		0.500	1	12/28/2015 13:18	WG836734
1,3-Dichlorobenzene	ND		0.500	1	12/28/2015 13:18	WG836734
1,4-Dichlorobenzene	ND		0.500	1	12/28/2015 13:18	WG836734
Dichlorodifluoromethane	ND		0.500	1	12/28/2015 13:18	WG836734
1,1-Dichloroethane	ND		0.500	1	12/28/2015 13:18	WG836734
1,2-Dichloroethane	ND		0.500	1	12/28/2015 13:18	WG836734
1,1-Dichloroethene	ND		0.500	1	12/28/2015 13:18	WG836734
cis-1,2-Dichloroethene	ND		0.500	1	12/28/2015 13:18	WG836734
trans-1,2-Dichloroethene	ND		0.500	1	12/28/2015 13:18	WG836734
1,2-Dichloropropane	ND		0.500	1	12/28/2015 13:18	WG836734
1,1-Dichloropropene	ND		0.500	1	12/28/2015 13:18	WG836734
1,3-Dichloropropane	ND		0.500	1	12/28/2015 13:18	WG836734
cis-1,3-Dichloropropene	ND		0.500	1	12/28/2015 13:18	WG836734
trans-1,3-Dichloropropene	ND		0.500	1	12/28/2015 13:18	WG836734
trans-1,4-Dichloro-2-butene	ND		5.00	1	12/28/2015 13:18	WG836734
2,2-Dichloropropane	ND		0.500	1	12/28/2015 13:18	WG836734
Di-isopropyl ether	ND		0.500	1	12/28/2015 13:18	WG836734
Ethylbenzene	ND		0.500	1	12/28/2015 13:18	WG836734
Hexachloro-1,3-butadiene	ND		1.00	1	12/28/2015 13:18	WG836734
2-Hexanone	ND		2.50	1	12/28/2015 13:18	WG836734
n-Hexane	ND		1.00	1	12/28/2015 13:18	WG836734
Iodomethane	ND		10.0	1	12/28/2015 13:18	WG836734
Isopropylbenzene	ND		0.500	1	12/28/2015 13:18	WG836734
p-Isopropyltoluene	ND		0.500	1	12/28/2015 13:18	WG836734
2-Butanone (MEK)	ND		2.50	1	12/28/2015 13:18	WG836734
Methylene Chloride	ND		2.50	1	12/28/2015 13:18	WG836734
4-Methyl-2-pentanone (MIBK)	ND		2.50	1	12/28/2015 13:18	WG836734
Methyl tert-butyl ether	2.22		0.500	1	12/28/2015 13:18	WG836734
Naphthalene	ND		0.500	1	12/28/2015 13:18	WG836734
n-Propylbenzene	ND		0.500	1	12/28/2015 13:18	WG836734
Styrene	ND		0.500	1	12/28/2015 13:18	WG836734
1,1,1,2-Tetrachloroethane	ND		0.500	1	12/28/2015 13:18	WG836734

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
1,1,2,2-Tetrachloroethane	ND		0.500	1	12/28/2015 13:18	WG836734
1,1,2-Trichlorotrifluoroethane	ND		0.500	1	12/28/2015 13:18	WG836734
Tetrachloroethene	ND		0.500	1	12/28/2015 13:18	WG836734
Toluene	ND		0.500	1	12/28/2015 13:18	WG836734
1,2,3-Trichlorobenzene	ND		0.500	1	12/28/2015 13:18	WG836734
1,2,4-Trichlorobenzene	ND		0.500	1	12/28/2015 13:18	WG836734
1,1,1-Trichloroethane	ND		0.500	1	12/28/2015 13:18	WG836734
1,1,2-Trichloroethane	ND		0.500	1	12/28/2015 13:18	WG836734
Trichloroethene	ND		0.500	1	12/28/2015 13:18	WG836734
Trichlorofluoromethane	ND		0.500	1	12/28/2015 13:18	WG836734
1,2,3-Trichloropropane	ND		2.50	1	12/28/2015 13:18	WG836734
1,2,4-Trimethylbenzene	ND		0.500	1	12/28/2015 13:18	WG836734
1,2,3-Trimethylbenzene	ND		0.500	1	12/28/2015 13:18	WG836734
1,3,5-Trimethylbenzene	ND		0.500	1	12/28/2015 13:18	WG836734
Vinyl acetate	ND		2.50	1	12/28/2015 13:18	WG836734
Vinyl chloride	ND		0.500	1	12/28/2015 13:18	WG836734
Xylenes, Total	ND		1.50	1	12/28/2015 13:18	WG836734
(S) Toluene-d8	*103*		*90.0-115*		*12/28/2015 13:18*	WG836734
(S) Dibromofluoromethane	*104*		*79.0-121*		*12/28/2015 13:18*	WG836734
(S) 4-Bromofluorobenzene	*102*		*80.1-120*		*12/28/2015 13:18*	WG836734

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Acetone	ND		25.0	1	12/28/2015 13:39	WG836734
Acrylonitrile	ND		2.50	1	12/28/2015 13:39	WG836734
Benzene	ND		0.500	1	12/28/2015 13:39	WG836734
Bromobenzene	ND		0.500	1	12/28/2015 13:39	WG836734
Bromodichloromethane	ND		0.500	1	12/28/2015 13:39	WG836734
Bromochloromethane	ND		0.500	1	12/28/2015 13:39	WG836734
Bromoform	ND		0.500	1	12/28/2015 13:39	WG836734
Bromomethane	ND		0.500	1	12/28/2015 13:39	WG836734
n-Butylbenzene	ND		0.500	1	12/28/2015 13:39	WG836734
sec-Butylbenzene	ND		0.500	1	12/28/2015 13:39	WG836734
tert-Butylbenzene	ND		0.500	1	12/28/2015 13:39	WG836734
Carbon disulfide	ND		0.500	1	12/28/2015 13:39	WG836734
Carbon tetrachloride	ND		0.500	1	12/28/2015 13:39	WG836734
Chlorobenzene	ND		0.500	1	12/28/2015 13:39	WG836734
Chlorodibromomethane	ND		0.500	1	12/28/2015 13:39	WG836734
Chloroethane	ND		0.500	1	12/28/2015 13:39	WG836734
2-Chloroethyl vinyl ether	ND		25.0	1	12/28/2015 13:39	WG836734
Chloroform	ND		0.500	1	12/28/2015 13:39	WG836734
Chloromethane	ND		0.500	1	12/28/2015 13:39	WG836734
2-Chlorotoluene	ND		0.500	1	12/28/2015 13:39	WG836734
4-Chlorotoluene	ND		0.500	1	12/28/2015 13:39	WG836734
1,2-Dibromo-3-Chloropropane	ND		1.00	1	12/28/2015 13:39	WG836734
1,2-Dibromoethane	ND		0.500	1	12/28/2015 13:39	WG836734
Dibromomethane	ND		0.500	1	12/28/2015 13:39	WG836734
1,2-Dichlorobenzene	ND		0.500	1	12/28/2015 13:39	WG836734
1,3-Dichlorobenzene	ND		0.500	1	12/28/2015 13:39	WG836734
1,4-Dichlorobenzene	ND		0.500	1	12/28/2015 13:39	WG836734
Dichlorodifluoromethane	ND		0.500	1	12/28/2015 13:39	WG836734
1,1-Dichloroethane	ND		0.500	1	12/28/2015 13:39	WG836734
1,2-Dichloroethane	ND		0.500	1	12/28/2015 13:39	WG836734
1,1-Dichloroethene	0.577		0.500	1	12/28/2015 13:39	WG836734
cis-1,2-Dichloroethene	141		0.500	1	12/28/2015 13:39	WG836734
trans-1,2-Dichloroethene	0.795		0.500	1	12/28/2015 13:39	WG836734
1,2-Dichloropropane	ND		0.500	1	12/28/2015 13:39	WG836734
1,1-Dichloropropene	ND		0.500	1	12/28/2015 13:39	WG836734
1,3-Dichloropropane	ND		0.500	1	12/28/2015 13:39	WG836734
cis-1,3-Dichloropropene	ND		0.500	1	12/28/2015 13:39	WG836734
trans-1,3-Dichloropropene	ND		0.500	1	12/28/2015 13:39	WG836734
trans-1,4-Dichloro-2-butene	ND		5.00	1	12/28/2015 13:39	WG836734
2,2-Dichloropropane	ND		0.500	1	12/28/2015 13:39	WG836734
Di-isopropyl ether	ND		0.500	1	12/28/2015 13:39	WG836734
Ethylbenzene	ND		0.500	1	12/28/2015 13:39	WG836734
Hexachloro-1,3-butadiene	ND		1.00	1	12/28/2015 13:39	WG836734
2-Hexanone	ND		2.50	1	12/28/2015 13:39	WG836734
n-Hexane	ND		1.00	1	12/28/2015 13:39	WG836734
Iodomethane	ND		10.0	1	12/28/2015 13:39	WG836734
Isopropylbenzene	ND		0.500	1	12/28/2015 13:39	WG836734
p-Isopropyltoluene	ND		0.500	1	12/28/2015 13:39	WG836734
2-Butanone (MEK)	ND		2.50	1	12/28/2015 13:39	WG836734
Methylene Chloride	ND		2.50	1	12/28/2015 13:39	WG836734
4-Methyl-2-pentanone (MIBK)	ND		2.50	1	12/28/2015 13:39	WG836734
Methyl tert-butyl ether	2.30		0.500	1	12/28/2015 13:39	WG836734
Naphthalene	ND		0.500	1	12/28/2015 13:39	WG836734
n-Propylbenzene	ND		0.500	1	12/28/2015 13:39	WG836734
Styrene	ND		0.500	1	12/28/2015 13:39	WG836734
1,1,1,2-Tetrachloroethane	ND		0.500	1	12/28/2015 13:39	WG836734

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
1,1,2,2-Tetrachloroethane	ND		0.500	1	12/28/2015 13:39	WG836734
1,1,2-Trichlorotrifluoroethane	ND		0.500	1	12/28/2015 13:39	WG836734
Tetrachloroethene	ND		0.500	1	12/28/2015 13:39	WG836734
Toluene	ND		0.500	1	12/28/2015 13:39	WG836734
1,2,3-Trichlorobenzene	ND		0.500	1	12/28/2015 13:39	WG836734
1,2,4-Trichlorobenzene	ND		0.500	1	12/28/2015 13:39	WG836734
1,1,1-Trichloroethane	ND		0.500	1	12/28/2015 13:39	WG836734
1,1,2-Trichloroethane	ND		0.500	1	12/28/2015 13:39	WG836734
Trichloroethene	619		5.00	10	12/28/2015 15:42	WG836734
Trichlorofluoromethane	ND		0.500	1	12/28/2015 13:39	WG836734
1,2,3-Trichloropropane	ND		2.50	1	12/28/2015 13:39	WG836734
1,2,4-Trimethylbenzene	ND		0.500	1	12/28/2015 13:39	WG836734
1,2,3-Trimethylbenzene	ND		0.500	1	12/28/2015 13:39	WG836734
1,3,5-Trimethylbenzene	ND		0.500	1	12/28/2015 13:39	WG836734
Vinyl acetate	ND		2.50	1	12/28/2015 13:39	WG836734
Vinyl chloride	1.10		0.500	1	12/28/2015 13:39	WG836734
Xylenes, Total	ND		1.50	1	12/28/2015 13:39	WG836734
(S) Toluene-d8	*87.1*	J2	*90.0-115*		*12/28/2015 13:39*	WG836734
(S) Dibromofluoromethane	*107*		*79.0-121*		*12/28/2015 13:39*	WG836734
(S) 4-Bromofluorobenzene	*105*		*80.1-120*		*12/28/2015 13:39*	WG836734

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Acetone	ND		25.0	1	12/28/2015 14:00	WG836734
Acrylonitrile	ND		2.50	1	12/28/2015 14:00	WG836734
Benzene	ND		0.500	1	12/28/2015 14:00	WG836734
Bromobenzene	ND		0.500	1	12/28/2015 14:00	WG836734
Bromodichloromethane	ND		0.500	1	12/28/2015 14:00	WG836734
Bromochloromethane	ND		0.500	1	12/28/2015 14:00	WG836734
Bromoform	ND		0.500	1	12/28/2015 14:00	WG836734
Bromomethane	ND		0.500	1	12/28/2015 14:00	WG836734
n-Butylbenzene	ND		0.500	1	12/28/2015 14:00	WG836734
sec-Butylbenzene	ND		0.500	1	12/28/2015 14:00	WG836734
tert-Butylbenzene	ND		0.500	1	12/28/2015 14:00	WG836734
Carbon disulfide	ND		0.500	1	12/28/2015 14:00	WG836734
Carbon tetrachloride	ND		0.500	1	12/28/2015 14:00	WG836734
Chlorobenzene	ND		0.500	1	12/28/2015 14:00	WG836734
Chlorodibromomethane	ND		0.500	1	12/28/2015 14:00	WG836734
Chloroethane	ND		0.500	1	12/28/2015 14:00	WG836734
2-Chloroethyl vinyl ether	ND		25.0	1	12/28/2015 14:00	WG836734
Chloroform	ND		0.500	1	12/28/2015 14:00	WG836734
Chloromethane	ND		0.500	1	12/28/2015 14:00	WG836734
2-Chlorotoluene	ND		0.500	1	12/28/2015 14:00	WG836734
4-Chlorotoluene	ND		0.500	1	12/28/2015 14:00	WG836734
1,2-Dibromo-3-Chloropropane	ND		1.00	1	12/28/2015 14:00	WG836734
1,2-Dibromoethane	ND		0.500	1	12/28/2015 14:00	WG836734
Dibromomethane	ND		0.500	1	12/28/2015 14:00	WG836734
1,2-Dichlorobenzene	ND		0.500	1	12/28/2015 14:00	WG836734
1,3-Dichlorobenzene	ND		0.500	1	12/28/2015 14:00	WG836734
1,4-Dichlorobenzene	ND		0.500	1	12/28/2015 14:00	WG836734
Dichlorodifluoromethane	ND		0.500	1	12/28/2015 14:00	WG836734
1,1-Dichloroethane	ND		0.500	1	12/28/2015 14:00	WG836734
1,2-Dichloroethane	ND		0.500	1	12/28/2015 14:00	WG836734
1,1-Dichloroethene	0.720		0.500	1	12/28/2015 14:00	WG836734
cis-1,2-Dichloroethene	164		0.500	1	12/28/2015 14:00	WG836734
trans-1,2-Dichloroethene	1.12		0.500	1	12/28/2015 14:00	WG836734
1,2-Dichloropropane	ND		0.500	1	12/28/2015 14:00	WG836734
1,1-Dichloropropene	ND		0.500	1	12/28/2015 14:00	WG836734
1,3-Dichloropropane	ND		0.500	1	12/28/2015 14:00	WG836734
cis-1,3-Dichloropropene	ND		0.500	1	12/28/2015 14:00	WG836734
trans-1,3-Dichloropropene	ND		0.500	1	12/28/2015 14:00	WG836734
trans-1,4-Dichloro-2-butene	ND		5.00	1	12/28/2015 14:00	WG836734
2,2-Dichloropropane	ND		0.500	1	12/28/2015 14:00	WG836734
Di-isopropyl ether	ND		0.500	1	12/28/2015 14:00	WG836734
Ethylbenzene	ND		0.500	1	12/28/2015 14:00	WG836734
Hexachloro-1,3-butadiene	ND		1.00	1	12/28/2015 14:00	WG836734
2-Hexanone	ND		2.50	1	12/28/2015 14:00	WG836734
n-Hexane	ND		1.00	1	12/28/2015 14:00	WG836734
Iodomethane	ND		10.0	1	12/28/2015 14:00	WG836734
Isopropylbenzene	ND		0.500	1	12/28/2015 14:00	WG836734
p-Isopropyltoluene	ND		0.500	1	12/28/2015 14:00	WG836734
2-Butanone (MEK)	ND		2.50	1	12/28/2015 14:00	WG836734
Methylene Chloride	ND		2.50	1	12/28/2015 14:00	WG836734
4-Methyl-2-pentanone (MIBK)	ND		2.50	1	12/28/2015 14:00	WG836734
Methyl tert-butyl ether	ND		0.500	1	12/28/2015 14:00	WG836734
Naphthalene	ND		0.500	1	12/28/2015 14:00	WG836734
n-Propylbenzene	ND		0.500	1	12/28/2015 14:00	WG836734
Styrene	ND		0.500	1	12/28/2015 14:00	WG836734
1,1,1,2-Tetrachloroethane	ND		0.500	1	12/28/2015 14:00	WG836734

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
1,1,2,2-Tetrachloroethane	ND		0.500	1	12/28/2015 14:00	WG836734
1,1,2-Trichlorotrifluoroethane	ND		0.500	1	12/28/2015 14:00	WG836734
Tetrachloroethene	ND		0.500	1	12/28/2015 14:00	WG836734
Toluene	ND		0.500	1	12/28/2015 14:00	WG836734
1,2,3-Trichlorobenzene	ND		0.500	1	12/28/2015 14:00	WG836734
1,2,4-Trichlorobenzene	ND		0.500	1	12/28/2015 14:00	WG836734
1,1,1-Trichloroethane	ND		0.500	1	12/28/2015 14:00	WG836734
1,1,2-Trichloroethane	ND		0.500	1	12/28/2015 14:00	WG836734
Trichloroethene	2210		25.0	50	12/28/2015 16:03	WG836734
Trichlorofluoromethane	ND		0.500	1	12/28/2015 14:00	WG836734
1,2,3-Trichloropropane	ND		2.50	1	12/28/2015 14:00	WG836734
1,2,4-Trimethylbenzene	ND		0.500	1	12/28/2015 14:00	WG836734
1,2,3-Trimethylbenzene	ND		0.500	1	12/28/2015 14:00	WG836734
1,3,5-Trimethylbenzene	ND		0.500	1	12/28/2015 14:00	WG836734
Vinyl acetate	ND		2.50	1	12/28/2015 14:00	WG836734
Vinyl chloride	0.761		0.500	1	12/28/2015 14:00	WG836734
Xylenes, Total	ND		1.50	1	12/28/2015 14:00	WG836734
(S) Toluene-d8	*90.6*		*90.0-115*		*12/28/2015 14:00*	WG836734
(S) Dibromofluoromethane	*104*		*79.0-121*		*12/28/2015 14:00*	WG836734
(S) 4-Bromofluorobenzene	*104*		*80.1-120*		*12/28/2015 14:00*	WG836734

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Acetone	ND		25.0	1	12/28/2015 12:16	WG836734
Acrylonitrile	ND		2.50	1	12/28/2015 12:16	WG836734
Benzene	ND		0.500	1	12/28/2015 12:16	WG836734
Bromobenzene	ND		0.500	1	12/28/2015 12:16	WG836734
Bromodichloromethane	ND		0.500	1	12/28/2015 12:16	WG836734
Bromochloromethane	ND		0.500	1	12/28/2015 12:16	WG836734
Bromoform	ND		0.500	1	12/28/2015 12:16	WG836734
Bromomethane	ND		0.500	1	12/28/2015 12:16	WG836734
n-Butylbenzene	ND		0.500	1	12/28/2015 12:16	WG836734
sec-Butylbenzene	ND		0.500	1	12/28/2015 12:16	WG836734
tert-Butylbenzene	ND		0.500	1	12/28/2015 12:16	WG836734
Carbon disulfide	ND		0.500	1	12/28/2015 12:16	WG836734
Carbon tetrachloride	ND		0.500	1	12/28/2015 12:16	WG836734
Chlorobenzene	ND		0.500	1	12/28/2015 12:16	WG836734
Chlorodibromomethane	ND		0.500	1	12/28/2015 12:16	WG836734
Chloroethane	ND		0.500	1	12/28/2015 12:16	WG836734
2-Chloroethyl vinyl ether	ND		25.0	1	12/28/2015 12:16	WG836734
Chloroform	ND		0.500	1	12/28/2015 12:16	WG836734
Chloromethane	ND		0.500	1	12/28/2015 12:16	WG836734
2-Chlorotoluene	ND		0.500	1	12/28/2015 12:16	WG836734
4-Chlorotoluene	ND		0.500	1	12/28/2015 12:16	WG836734
1,2-Dibromo-3-Chloropropane	ND		1.00	1	12/28/2015 12:16	WG836734
1,2-Dibromoethane	ND		0.500	1	12/28/2015 12:16	WG836734
Dibromomethane	ND		0.500	1	12/28/2015 12:16	WG836734
1,2-Dichlorobenzene	ND		0.500	1	12/28/2015 12:16	WG836734
1,3-Dichlorobenzene	ND		0.500	1	12/28/2015 12:16	WG836734
1,4-Dichlorobenzene	ND		0.500	1	12/28/2015 12:16	WG836734
Dichlorodifluoromethane	ND		0.500	1	12/28/2015 12:16	WG836734
1,1-Dichloroethane	ND		0.500	1	12/28/2015 12:16	WG836734
1,2-Dichloroethane	ND		0.500	1	12/28/2015 12:16	WG836734
1,1-Dichloroethene	ND		0.500	1	12/28/2015 12:16	WG836734
cis-1,2-Dichloroethene	4.41		0.500	1	12/28/2015 12:16	WG836734
trans-1,2-Dichloroethene	ND		0.500	1	12/28/2015 12:16	WG836734
1,2-Dichloropropane	ND		0.500	1	12/28/2015 12:16	WG836734
1,1-Dichloropropene	ND		0.500	1	12/28/2015 12:16	WG836734
1,3-Dichloropropane	ND		0.500	1	12/28/2015 12:16	WG836734
cis-1,3-Dichloropropene	ND		0.500	1	12/28/2015 12:16	WG836734
trans-1,3-Dichloropropene	ND		0.500	1	12/28/2015 12:16	WG836734
trans-1,4-Dichloro-2-butene	ND		5.00	1	12/28/2015 12:16	WG836734
2,2-Dichloropropane	ND		0.500	1	12/28/2015 12:16	WG836734
Di-isopropyl ether	ND		0.500	1	12/28/2015 12:16	WG836734
Ethylbenzene	ND		0.500	1	12/28/2015 12:16	WG836734
Hexachloro-1,3-butadiene	ND		1.00	1	12/28/2015 12:16	WG836734
2-Hexanone	ND		2.50	1	12/28/2015 12:16	WG836734
n-Hexane	ND		1.00	1	12/28/2015 12:16	WG836734
Iodomethane	ND		10.0	1	12/28/2015 12:16	WG836734
Isopropylbenzene	ND		0.500	1	12/28/2015 12:16	WG836734
p-Isopropyltoluene	ND		0.500	1	12/28/2015 12:16	WG836734
2-Butanone (MEK)	ND		2.50	1	12/28/2015 12:16	WG836734
Methylene Chloride	ND		2.50	1	12/28/2015 12:16	WG836734
4-Methyl-2-pentanone (MIBK)	ND		2.50	1	12/28/2015 12:16	WG836734
Methyl tert-butyl ether	ND		0.500	1	12/28/2015 12:16	WG836734
Naphthalene	0.589		0.500	1	12/28/2015 12:16	WG836734
n-Propylbenzene	ND		0.500	1	12/28/2015 12:16	WG836734
Styrene	ND		0.500	1	12/28/2015 12:16	WG836734
1,1,1,2-Tetrachloroethane	ND		0.500	1	12/28/2015 12:16	WG836734

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
1,1,2,2-Tetrachloroethane	ND		0.500	1	12/28/2015 12:16	WG836734
1,1,2-Trichlorotrifluoroethane	ND		0.500	1	12/28/2015 12:16	WG836734
Tetrachloroethene	ND		0.500	1	12/28/2015 12:16	WG836734
Toluene	ND		0.500	1	12/28/2015 12:16	WG836734
1,2,3-Trichlorobenzene	ND		0.500	1	12/28/2015 12:16	WG836734
1,2,4-Trichlorobenzene	ND		0.500	1	12/28/2015 12:16	WG836734
1,1,1-Trichloroethane	ND		0.500	1	12/28/2015 12:16	WG836734
1,1,2-Trichloroethane	ND		0.500	1	12/28/2015 12:16	WG836734
Trichloroethene	24.5		0.500	1	12/28/2015 12:16	WG836734
Trichlorofluoromethane	ND		0.500	1	12/28/2015 12:16	WG836734
1,2,3-Trichloropropane	ND		2.50	1	12/28/2015 12:16	WG836734
1,2,4-Trimethylbenzene	ND		0.500	1	12/28/2015 12:16	WG836734
1,2,3-Trimethylbenzene	ND		0.500	1	12/28/2015 12:16	WG836734
1,3,5-Trimethylbenzene	ND		0.500	1	12/28/2015 12:16	WG836734
Vinyl acetate	ND		2.50	1	12/28/2015 12:16	WG836734
Vinyl chloride	ND		0.500	1	12/28/2015 12:16	WG836734
Xylenes, Total	ND		1.50	1	12/28/2015 12:16	WG836734
(S) Toluene-d8	*103*		*90.0-115*		*12/28/2015 12:16*	WG836734
(S) Dibromofluoromethane	*102*		*79.0-121*		*12/28/2015 12:16*	WG836734
(S) 4-Bromofluorobenzene	*103*		*80.1-120*		*12/28/2015 12:16*	WG836734

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Acetone	ND		25.0	1	12/28/2015 14:20	WG836734
Acrylonitrile	ND		2.50	1	12/28/2015 14:20	WG836734
Benzene	ND		0.500	1	12/28/2015 14:20	WG836734
Bromobenzene	ND		0.500	1	12/28/2015 14:20	WG836734
Bromodichloromethane	ND		0.500	1	12/28/2015 14:20	WG836734
Bromochloromethane	ND		0.500	1	12/28/2015 14:20	WG836734
Bromoform	ND		0.500	1	12/28/2015 14:20	WG836734
Bromomethane	ND		0.500	1	12/28/2015 14:20	WG836734
n-Butylbenzene	ND		0.500	1	12/28/2015 14:20	WG836734
sec-Butylbenzene	ND		0.500	1	12/28/2015 14:20	WG836734
tert-Butylbenzene	ND		0.500	1	12/28/2015 14:20	WG836734
Carbon disulfide	ND		0.500	1	12/28/2015 14:20	WG836734
Carbon tetrachloride	ND		0.500	1	12/28/2015 14:20	WG836734
Chlorobenzene	ND		0.500	1	12/28/2015 14:20	WG836734
Chlorodibromomethane	ND		0.500	1	12/28/2015 14:20	WG836734
Chloroethane	ND		0.500	1	12/28/2015 14:20	WG836734
2-Chloroethyl vinyl ether	ND		25.0	1	12/28/2015 14:20	WG836734
Chloroform	ND		0.500	1	12/28/2015 14:20	WG836734
Chloromethane	ND		0.500	1	12/28/2015 14:20	WG836734
2-Chlorotoluene	ND		0.500	1	12/28/2015 14:20	WG836734
4-Chlorotoluene	ND		0.500	1	12/28/2015 14:20	WG836734
1,2-Dibromo-3-Chloropropane	ND		1.00	1	12/28/2015 14:20	WG836734
1,2-Dibromoethane	ND		0.500	1	12/28/2015 14:20	WG836734
Dibromomethane	ND		0.500	1	12/28/2015 14:20	WG836734
1,2-Dichlorobenzene	ND		0.500	1	12/28/2015 14:20	WG836734
1,3-Dichlorobenzene	ND		0.500	1	12/28/2015 14:20	WG836734
1,4-Dichlorobenzene	ND		0.500	1	12/28/2015 14:20	WG836734
Dichlorodifluoromethane	ND		0.500	1	12/28/2015 14:20	WG836734
1,1-Dichloroethane	ND		0.500	1	12/28/2015 14:20	WG836734
1,2-Dichloroethane	ND		0.500	1	12/28/2015 14:20	WG836734
1,1-Dichloroethene	ND		0.500	1	12/28/2015 14:20	WG836734
cis-1,2-Dichloroethene	3.67		0.500	1	12/28/2015 14:20	WG836734
trans-1,2-Dichloroethene	ND		0.500	1	12/28/2015 14:20	WG836734
1,2-Dichloropropane	ND		0.500	1	12/28/2015 14:20	WG836734
1,1-Dichloropropene	ND		0.500	1	12/28/2015 14:20	WG836734
1,3-Dichloropropane	ND		0.500	1	12/28/2015 14:20	WG836734
cis-1,3-Dichloropropene	ND		0.500	1	12/28/2015 14:20	WG836734
trans-1,3-Dichloropropene	ND		0.500	1	12/28/2015 14:20	WG836734
trans-1,4-Dichloro-2-butene	ND		5.00	1	12/28/2015 14:20	WG836734
2,2-Dichloropropane	ND		0.500	1	12/28/2015 14:20	WG836734
Di-isopropyl ether	ND		0.500	1	12/28/2015 14:20	WG836734
Ethylbenzene	ND		0.500	1	12/28/2015 14:20	WG836734
Hexachloro-1,3-butadiene	ND		1.00	1	12/28/2015 14:20	WG836734
2-Hexanone	ND		2.50	1	12/28/2015 14:20	WG836734
n-Hexane	ND		1.00	1	12/28/2015 14:20	WG836734
Iodomethane	ND		10.0	1	12/28/2015 14:20	WG836734
Isopropylbenzene	ND		0.500	1	12/28/2015 14:20	WG836734
p-Isopropyltoluene	ND		0.500	1	12/28/2015 14:20	WG836734
2-Butanone (MEK)	ND		2.50	1	12/28/2015 14:20	WG836734
Methylene Chloride	ND		2.50	1	12/28/2015 14:20	WG836734
4-Methyl-2-pentanone (MIBK)	ND		2.50	1	12/28/2015 14:20	WG836734
Methyl tert-butyl ether	0.960		0.500	1	12/28/2015 14:20	WG836734
Naphthalene	ND		0.500	1	12/28/2015 14:20	WG836734
n-Propylbenzene	ND		0.500	1	12/28/2015 14:20	WG836734
Styrene	ND		0.500	1	12/28/2015 14:20	WG836734
1,1,1,2-Tetrachloroethane	ND		0.500	1	12/28/2015 14:20	WG836734

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
1,1,2,2-Tetrachloroethane	ND		0.500	1	12/28/2015 14:20	WG836734
1,1,2-Trichlorotrifluoroethane	ND		0.500	1	12/28/2015 14:20	WG836734
Tetrachloroethene	ND		0.500	1	12/28/2015 14:20	WG836734
Toluene	ND		0.500	1	12/28/2015 14:20	WG836734
1,2,3-Trichlorobenzene	ND		0.500	1	12/28/2015 14:20	WG836734
1,2,4-Trichlorobenzene	ND		0.500	1	12/28/2015 14:20	WG836734
1,1,1-Trichloroethane	ND		0.500	1	12/28/2015 14:20	WG836734
1,1,2-Trichloroethane	ND		0.500	1	12/28/2015 14:20	WG836734
Trichloroethene	61.2		0.500	1	12/28/2015 14:20	WG836734
Trichlorofluoromethane	ND		0.500	1	12/28/2015 14:20	WG836734
1,2,3-Trichloropropane	ND		2.50	1	12/28/2015 14:20	WG836734
1,2,4-Trimethylbenzene	ND		0.500	1	12/28/2015 14:20	WG836734
1,2,3-Trimethylbenzene	ND		0.500	1	12/28/2015 14:20	WG836734
1,3,5-Trimethylbenzene	ND		0.500	1	12/28/2015 14:20	WG836734
Vinyl acetate	ND		2.50	1	12/28/2015 14:20	WG836734
Vinyl chloride	ND		0.500	1	12/28/2015 14:20	WG836734
Xylenes, Total	ND		1.50	1	12/28/2015 14:20	WG836734
(S) Toluene-d8	*102*		*90.0-115*		*12/28/2015 14:20*	WG836734
(S) Dibromofluoromethane	*106*		*79.0-121*		*12/28/2015 14:20*	WG836734
(S) 4-Bromofluorobenzene	*103*		*80.1-120*		*12/28/2015 14:20*	WG836734

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Acetone	ND		25.0	1	12/28/2015 14:41	WG836734
Acrylonitrile	ND		2.50	1	12/28/2015 14:41	WG836734
Benzene	ND		0.500	1	12/28/2015 14:41	WG836734
Bromobenzene	ND		0.500	1	12/28/2015 14:41	WG836734
Bromodichloromethane	ND		0.500	1	12/28/2015 14:41	WG836734
Bromochloromethane	ND		0.500	1	12/28/2015 14:41	WG836734
Bromoform	ND		0.500	1	12/28/2015 14:41	WG836734
Bromomethane	ND		0.500	1	12/28/2015 14:41	WG836734
n-Butylbenzene	ND		0.500	1	12/28/2015 14:41	WG836734
sec-Butylbenzene	ND		0.500	1	12/28/2015 14:41	WG836734
tert-Butylbenzene	ND		0.500	1	12/28/2015 14:41	WG836734
Carbon disulfide	ND		0.500	1	12/28/2015 14:41	WG836734
Carbon tetrachloride	ND		0.500	1	12/28/2015 14:41	WG836734
Chlorobenzene	ND		0.500	1	12/28/2015 14:41	WG836734
Chlorodibromomethane	ND		0.500	1	12/28/2015 14:41	WG836734
Chloroethane	ND		0.500	1	12/28/2015 14:41	WG836734
2-Chloroethyl vinyl ether	ND		25.0	1	12/28/2015 14:41	WG836734
Chloroform	ND		0.500	1	12/28/2015 14:41	WG836734
Chloromethane	ND		0.500	1	12/28/2015 14:41	WG836734
2-Chlorotoluene	ND		0.500	1	12/28/2015 14:41	WG836734
4-Chlorotoluene	ND		0.500	1	12/28/2015 14:41	WG836734
1,2-Dibromo-3-Chloropropane	ND		1.00	1	12/28/2015 14:41	WG836734
1,2-Dibromoethane	ND		0.500	1	12/28/2015 14:41	WG836734
Dibromomethane	ND		0.500	1	12/28/2015 14:41	WG836734
1,2-Dichlorobenzene	ND		0.500	1	12/28/2015 14:41	WG836734
1,3-Dichlorobenzene	ND		0.500	1	12/28/2015 14:41	WG836734
1,4-Dichlorobenzene	ND		0.500	1	12/28/2015 14:41	WG836734
Dichlorodifluoromethane	ND		0.500	1	12/28/2015 14:41	WG836734
1,1-Dichloroethane	ND		0.500	1	12/28/2015 14:41	WG836734
1,2-Dichloroethane	ND		0.500	1	12/28/2015 14:41	WG836734
1,1-Dichloroethene	ND		0.500	1	12/28/2015 14:41	WG836734
cis-1,2-Dichloroethene	22.0		0.500	1	12/28/2015 14:41	WG836734
trans-1,2-Dichloroethene	0.576		0.500	1	12/28/2015 14:41	WG836734
1,2-Dichloropropane	ND		0.500	1	12/28/2015 14:41	WG836734
1,1-Dichloropropene	ND		0.500	1	12/28/2015 14:41	WG836734
1,3-Dichloropropane	ND		0.500	1	12/28/2015 14:41	WG836734
cis-1,3-Dichloropropene	ND		0.500	1	12/28/2015 14:41	WG836734
trans-1,3-Dichloropropene	ND		0.500	1	12/28/2015 14:41	WG836734
trans-1,4-Dichloro-2-butene	ND		5.00	1	12/28/2015 14:41	WG836734
2,2-Dichloropropane	ND		0.500	1	12/28/2015 14:41	WG836734
Di-isopropyl ether	ND		0.500	1	12/28/2015 14:41	WG836734
Ethylbenzene	ND		0.500	1	12/28/2015 14:41	WG836734
Hexachloro-1,3-butadiene	ND		1.00	1	12/28/2015 14:41	WG836734
2-Hexanone	ND		2.50	1	12/28/2015 14:41	WG836734
n-Hexane	ND		1.00	1	12/28/2015 14:41	WG836734
Iodomethane	ND		10.0	1	12/28/2015 14:41	WG836734
Isopropylbenzene	ND		0.500	1	12/28/2015 14:41	WG836734
p-Isopropyltoluene	ND		0.500	1	12/28/2015 14:41	WG836734
2-Butanone (MEK)	ND		2.50	1	12/28/2015 14:41	WG836734
Methylene Chloride	ND		2.50	1	12/28/2015 14:41	WG836734
4-Methyl-2-pentanone (MIBK)	ND		2.50	1	12/28/2015 14:41	WG836734
Methyl tert-butyl ether	ND		0.500	1	12/28/2015 14:41	WG836734
Naphthalene	ND		0.500	1	12/28/2015 14:41	WG836734
n-Propylbenzene	ND		0.500	1	12/28/2015 14:41	WG836734
Styrene	ND		0.500	1	12/28/2015 14:41	WG836734
1,1,1,2-Tetrachloroethane	ND		0.500	1	12/28/2015 14:41	WG836734

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
1,1,2,2-Tetrachloroethane	ND		0.500	1	12/28/2015 14:41	WG836734
1,1,2-Trichlorotrifluoroethane	ND		0.500	1	12/28/2015 14:41	WG836734
Tetrachloroethene	ND		0.500	1	12/28/2015 14:41	WG836734
Toluene	ND		0.500	1	12/28/2015 14:41	WG836734
1,2,3-Trichlorobenzene	ND		0.500	1	12/28/2015 14:41	WG836734
1,2,4-Trichlorobenzene	ND		0.500	1	12/28/2015 14:41	WG836734
1,1,1-Trichloroethane	ND		0.500	1	12/28/2015 14:41	WG836734
1,1,2-Trichloroethane	ND		0.500	1	12/28/2015 14:41	WG836734
Trichloroethene	68.8		0.500	1	12/28/2015 14:41	WG836734
Trichlorofluoromethane	ND		0.500	1	12/28/2015 14:41	WG836734
1,2,3-Trichloropropane	ND		2.50	1	12/28/2015 14:41	WG836734
1,2,4-Trimethylbenzene	ND		0.500	1	12/28/2015 14:41	WG836734
1,2,3-Trimethylbenzene	ND		0.500	1	12/28/2015 14:41	WG836734
1,3,5-Trimethylbenzene	ND		0.500	1	12/28/2015 14:41	WG836734
Vinyl acetate	ND		2.50	1	12/28/2015 14:41	WG836734
Vinyl chloride	ND		0.500	1	12/28/2015 14:41	WG836734
Xylenes, Total	ND		1.50	1	12/28/2015 14:41	WG836734
(S) Toluene-d8	*100*		*90.0-115*		*12/28/2015 14:41*	WG836734
(S) Dibromofluoromethane	*105*		*79.0-121*		*12/28/2015 14:41*	WG836734
(S) 4-Bromofluorobenzene	*102*		*80.1-120*		*12/28/2015 14:41*	WG836734

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Acetone	ND		25.0	1	12/28/2015 15:01	WG836734
Acrylonitrile	ND		2.50	1	12/28/2015 15:01	WG836734
Benzene	ND		0.500	1	12/28/2015 15:01	WG836734
Bromobenzene	ND		0.500	1	12/28/2015 15:01	WG836734
Bromodichloromethane	ND		0.500	1	12/28/2015 15:01	WG836734
Bromochloromethane	ND		0.500	1	12/28/2015 15:01	WG836734
Bromoform	ND		0.500	1	12/28/2015 15:01	WG836734
Bromomethane	ND		0.500	1	12/28/2015 15:01	WG836734
n-Butylbenzene	ND		0.500	1	12/28/2015 15:01	WG836734
sec-Butylbenzene	ND		0.500	1	12/28/2015 15:01	WG836734
tert-Butylbenzene	ND		0.500	1	12/28/2015 15:01	WG836734
Carbon disulfide	ND		0.500	1	12/28/2015 15:01	WG836734
Carbon tetrachloride	ND		0.500	1	12/28/2015 15:01	WG836734
Chlorobenzene	ND		0.500	1	12/28/2015 15:01	WG836734
Chlorodibromomethane	ND		0.500	1	12/28/2015 15:01	WG836734
Chloroethane	ND		0.500	1	12/28/2015 15:01	WG836734
2-Chloroethyl vinyl ether	ND		25.0	1	12/28/2015 15:01	WG836734
Chloroform	ND		0.500	1	12/28/2015 15:01	WG836734
Chloromethane	ND		0.500	1	12/28/2015 15:01	WG836734
2-Chlorotoluene	ND		0.500	1	12/28/2015 15:01	WG836734
4-Chlorotoluene	ND		0.500	1	12/28/2015 15:01	WG836734
1,2-Dibromo-3-Chloropropane	ND		1.00	1	12/28/2015 15:01	WG836734
1,2-Dibromoethane	ND		0.500	1	12/28/2015 15:01	WG836734
Dibromomethane	ND		0.500	1	12/28/2015 15:01	WG836734
1,2-Dichlorobenzene	ND		0.500	1	12/28/2015 15:01	WG836734
1,3-Dichlorobenzene	ND		0.500	1	12/28/2015 15:01	WG836734
1,4-Dichlorobenzene	ND		0.500	1	12/28/2015 15:01	WG836734
Dichlorodifluoromethane	ND		0.500	1	12/28/2015 15:01	WG836734
1,1-Dichloroethane	ND		0.500	1	12/28/2015 15:01	WG836734
1,2-Dichloroethane	ND		0.500	1	12/28/2015 15:01	WG836734
1,1-Dichloroethene	ND		0.500	1	12/28/2015 15:01	WG836734
cis-1,2-Dichloroethene	35.3		0.500	1	12/28/2015 15:01	WG836734
trans-1,2-Dichloroethene	ND		0.500	1	12/28/2015 15:01	WG836734
1,2-Dichloropropane	ND		0.500	1	12/28/2015 15:01	WG836734
1,1-Dichloropropene	ND		0.500	1	12/28/2015 15:01	WG836734
1,3-Dichloropropane	ND		0.500	1	12/28/2015 15:01	WG836734
cis-1,3-Dichloropropene	ND		0.500	1	12/28/2015 15:01	WG836734
trans-1,3-Dichloropropene	ND		0.500	1	12/28/2015 15:01	WG836734
trans-1,4-Dichloro-2-butene	ND		5.00	1	12/28/2015 15:01	WG836734
2,2-Dichloropropane	ND		0.500	1	12/28/2015 15:01	WG836734
Di-isopropyl ether	ND		0.500	1	12/28/2015 15:01	WG836734
Ethylbenzene	ND		0.500	1	12/28/2015 15:01	WG836734
Hexachloro-1,3-butadiene	ND		1.00	1	12/28/2015 15:01	WG836734
2-Hexanone	ND		2.50	1	12/28/2015 15:01	WG836734
n-Hexane	ND		1.00	1	12/28/2015 15:01	WG836734
Iodomethane	ND		10.0	1	12/28/2015 15:01	WG836734
Isopropylbenzene	ND		0.500	1	12/28/2015 15:01	WG836734
p-Isopropyltoluene	ND		0.500	1	12/28/2015 15:01	WG836734
2-Butanone (MEK)	ND		2.50	1	12/28/2015 15:01	WG836734
Methylene Chloride	ND		2.50	1	12/28/2015 15:01	WG836734
4-Methyl-2-pentanone (MIBK)	ND		2.50	1	12/28/2015 15:01	WG836734
Methyl tert-butyl ether	0.582		0.500	1	12/28/2015 15:01	WG836734
Naphthalene	ND		0.500	1	12/28/2015 15:01	WG836734
n-Propylbenzene	ND		0.500	1	12/28/2015 15:01	WG836734
Styrene	ND		0.500	1	12/28/2015 15:01	WG836734
1,1,1,2-Tetrachloroethane	ND		0.500	1	12/28/2015 15:01	WG836734

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
1,1,2,2-Tetrachloroethane	ND		0.500	1	12/28/2015 15:01	WG836734
1,1,2-Trichlorotrifluoroethane	ND		0.500	1	12/28/2015 15:01	WG836734
Tetrachloroethene	ND		0.500	1	12/28/2015 15:01	WG836734
Toluene	ND		0.500	1	12/28/2015 15:01	WG836734
1,2,3-Trichlorobenzene	ND		0.500	1	12/28/2015 15:01	WG836734
1,2,4-Trichlorobenzene	ND		0.500	1	12/28/2015 15:01	WG836734
1,1,1-Trichloroethane	ND		0.500	1	12/28/2015 15:01	WG836734
1,1,2-Trichloroethane	ND		0.500	1	12/28/2015 15:01	WG836734
Trichloroethene	13.8		0.500	1	12/28/2015 15:01	WG836734
Trichlorofluoromethane	ND		0.500	1	12/28/2015 15:01	WG836734
1,2,3-Trichloropropane	ND		2.50	1	12/28/2015 15:01	WG836734
1,2,4-Trimethylbenzene	ND		0.500	1	12/28/2015 15:01	WG836734
1,2,3-Trimethylbenzene	ND		0.500	1	12/28/2015 15:01	WG836734
1,3,5-Trimethylbenzene	ND		0.500	1	12/28/2015 15:01	WG836734
Vinyl acetate	ND		2.50	1	12/28/2015 15:01	WG836734
Vinyl chloride	1.18		0.500	1	12/28/2015 15:01	WG836734
Xylenes, Total	ND		1.50	1	12/28/2015 15:01	WG836734
(S) Toluene-d8	*104*		*90.0-115*		*12/28/2015 15:01*	WG836734
(S) Dibromofluoromethane	*104*		*79.0-121*		*12/28/2015 15:01*	WG836734
(S) 4-Bromofluorobenzene	*101*		*80.1-120*		*12/28/2015 15:01*	WG836734

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Acetone	ND		25.0	1	12/28/2015 17:20	WG836734
Acrylonitrile	ND		2.50	1	12/28/2015 17:20	WG836734
Benzene	ND		0.500	1	12/28/2015 17:20	WG836734
Bromobenzene	ND		0.500	1	12/28/2015 17:20	WG836734
Bromodichloromethane	ND		0.500	1	12/28/2015 17:20	WG836734
Bromochloromethane	ND		0.500	1	12/28/2015 17:20	WG836734
Bromoform	ND		0.500	1	12/28/2015 17:20	WG836734
Bromomethane	ND		0.500	1	12/28/2015 17:20	WG836734
n-Butylbenzene	ND		0.500	1	12/28/2015 17:20	WG836734
sec-Butylbenzene	ND		0.500	1	12/28/2015 17:20	WG836734
tert-Butylbenzene	ND		0.500	1	12/28/2015 17:20	WG836734
Carbon disulfide	ND		0.500	1	12/28/2015 17:20	WG836734
Carbon tetrachloride	ND		0.500	1	12/28/2015 17:20	WG836734
Chlorobenzene	ND		0.500	1	12/28/2015 17:20	WG836734
Chlorodibromomethane	ND		0.500	1	12/28/2015 17:20	WG836734
Chloroethane	ND		0.500	1	12/28/2015 17:20	WG836734
2-Chloroethyl vinyl ether	ND		25.0	1	12/28/2015 17:20	WG836734
Chloroform	ND		0.500	1	12/28/2015 17:20	WG836734
Chloromethane	ND		0.500	1	12/28/2015 17:20	WG836734
2-Chlorotoluene	ND		0.500	1	12/28/2015 17:20	WG836734
4-Chlorotoluene	ND		0.500	1	12/28/2015 17:20	WG836734
1,2-Dibromo-3-Chloropropane	ND		1.00	1	12/28/2015 17:20	WG836734
1,2-Dibromoethane	ND		0.500	1	12/28/2015 17:20	WG836734
Dibromomethane	ND		0.500	1	12/28/2015 17:20	WG836734
1,2-Dichlorobenzene	ND		0.500	1	12/28/2015 17:20	WG836734
1,3-Dichlorobenzene	ND		0.500	1	12/28/2015 17:20	WG836734
1,4-Dichlorobenzene	ND		0.500	1	12/28/2015 17:20	WG836734
Dichlorodifluoromethane	ND		0.500	1	12/28/2015 17:20	WG836734
1,1-Dichloroethane	ND		0.500	1	12/28/2015 17:20	WG836734
1,2-Dichloroethane	ND		0.500	1	12/28/2015 17:20	WG836734
1,1-Dichloroethene	ND		0.500	1	12/28/2015 17:20	WG836734
cis-1,2-Dichloroethene	1.08		0.500	1	12/28/2015 17:20	WG836734
trans-1,2-Dichloroethene	ND		0.500	1	12/28/2015 17:20	WG836734
1,2-Dichloropropane	ND		0.500	1	12/28/2015 17:20	WG836734
1,1-Dichloropropene	ND		0.500	1	12/28/2015 17:20	WG836734
1,3-Dichloropropane	ND		0.500	1	12/28/2015 17:20	WG836734
cis-1,3-Dichloropropene	ND		0.500	1	12/28/2015 17:20	WG836734
trans-1,3-Dichloropropene	ND		0.500	1	12/28/2015 17:20	WG836734
trans-1,4-Dichloro-2-butene	ND		5.00	1	12/28/2015 17:20	WG836734
2,2-Dichloropropane	ND		0.500	1	12/28/2015 17:20	WG836734
Di-isopropyl ether	ND		0.500	1	12/28/2015 17:20	WG836734
Ethylbenzene	ND		0.500	1	12/28/2015 17:20	WG836734
Hexachloro-1,3-butadiene	ND		1.00	1	12/28/2015 17:20	WG836734
2-Hexanone	ND		2.50	1	12/28/2015 17:20	WG836734
n-Hexane	ND		1.00	1	12/28/2015 17:20	WG836734
Iodomethane	ND		10.0	1	12/28/2015 17:20	WG836734
Isopropylbenzene	ND		0.500	1	12/28/2015 17:20	WG836734
p-Isopropyltoluene	ND		0.500	1	12/28/2015 17:20	WG836734
2-Butanone (MEK)	ND		2.50	1	12/28/2015 17:20	WG836734
Methylene Chloride	ND		2.50	1	12/28/2015 17:20	WG836734
4-Methyl-2-pentanone (MIBK)	ND		2.50	1	12/28/2015 17:20	WG836734
Methyl tert-butyl ether	ND		0.500	1	12/28/2015 17:20	WG836734
Naphthalene	ND		0.500	1	12/28/2015 17:20	WG836734
n-Propylbenzene	ND		0.500	1	12/28/2015 17:20	WG836734
Styrene	ND		0.500	1	12/28/2015 17:20	WG836734
1,1,1,2-Tetrachloroethane	ND		0.500	1	12/28/2015 17:20	WG836734

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
1,1,2,2-Tetrachloroethane	ND		0.500	1	12/28/2015 17:20	WG836734
1,1,2-Trichlorotrifluoroethane	ND		0.500	1	12/28/2015 17:20	WG836734
Tetrachloroethene	ND		0.500	1	12/28/2015 17:20	WG836734
Toluene	ND		0.500	1	12/28/2015 17:20	WG836734
1,2,3-Trichlorobenzene	ND		0.500	1	12/28/2015 17:20	WG836734
1,2,4-Trichlorobenzene	ND		0.500	1	12/28/2015 17:20	WG836734
1,1,1-Trichloroethane	ND		0.500	1	12/28/2015 17:20	WG836734
1,1,2-Trichloroethane	ND		0.500	1	12/28/2015 17:20	WG836734
Trichloroethene	0.506		0.500	1	12/28/2015 17:20	WG836734
Trichlorofluoromethane	ND		0.500	1	12/28/2015 17:20	WG836734
1,2,3-Trichloropropane	ND		2.50	1	12/28/2015 17:20	WG836734
1,2,4-Trimethylbenzene	ND		0.500	1	12/28/2015 17:20	WG836734
1,2,3-Trimethylbenzene	ND		0.500	1	12/28/2015 17:20	WG836734
1,3,5-Trimethylbenzene	ND		0.500	1	12/28/2015 17:20	WG836734
Vinyl acetate	ND		2.50	1	12/28/2015 17:20	WG836734
Vinyl chloride	ND		0.500	1	12/28/2015 17:20	WG836734
Xylenes, Total	ND		1.50	1	12/28/2015 17:20	WG836734
(S) Toluene-d8	*104*		*90.0-115*		*12/28/2015 17:20*	WG836734
(S) Dibromofluoromethane	*106*		*79.0-121*		*12/28/2015 17:20*	WG836734
(S) 4-Bromofluorobenzene	*104*		*80.1-120*		*12/28/2015 17:20*	WG836734

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	ND		25.0	1	12/28/2015 17:40	WG836734
Acrylonitrile	ND		2.50	1	12/28/2015 17:40	WG836734
Benzene	ND		0.500	1	12/28/2015 17:40	WG836734
Bromobenzene	ND		0.500	1	12/28/2015 17:40	WG836734
Bromodichloromethane	ND		0.500	1	12/28/2015 17:40	WG836734
Bromochloromethane	ND		0.500	1	12/28/2015 17:40	WG836734
Bromoform	ND		0.500	1	12/28/2015 17:40	WG836734
Bromomethane	ND		0.500	1	12/28/2015 17:40	WG836734
n-Butylbenzene	ND		0.500	1	12/28/2015 17:40	WG836734
sec-Butylbenzene	ND		0.500	1	12/28/2015 17:40	WG836734
tert-Butylbenzene	ND		0.500	1	12/28/2015 17:40	WG836734
Carbon disulfide	ND		0.500	1	12/28/2015 17:40	WG836734
Carbon tetrachloride	ND		0.500	1	12/28/2015 17:40	WG836734
Chlorobenzene	ND		0.500	1	12/28/2015 17:40	WG836734
Chlorodibromomethane	ND		0.500	1	12/28/2015 17:40	WG836734
Chloroethane	ND		0.500	1	12/28/2015 17:40	WG836734
2-Chloroethyl vinyl ether	ND		25.0	1	12/28/2015 17:40	WG836734
Chloroform	ND		0.500	1	12/28/2015 17:40	WG836734
Chloromethane	ND		0.500	1	12/28/2015 17:40	WG836734
2-Chlorotoluene	ND		0.500	1	12/28/2015 17:40	WG836734
4-Chlorotoluene	ND		0.500	1	12/28/2015 17:40	WG836734
1,2-Dibromo-3-Chloropropane	ND		1.00	1	12/28/2015 17:40	WG836734
1,2-Dibromoethane	ND		0.500	1	12/28/2015 17:40	WG836734
Dibromomethane	ND		0.500	1	12/28/2015 17:40	WG836734
1,2-Dichlorobenzene	ND		0.500	1	12/28/2015 17:40	WG836734
1,3-Dichlorobenzene	ND		0.500	1	12/28/2015 17:40	WG836734
1,4-Dichlorobenzene	ND		0.500	1	12/28/2015 17:40	WG836734
Dichlorodifluoromethane	ND		0.500	1	12/28/2015 17:40	WG836734
1,1-Dichloroethane	ND		0.500	1	12/28/2015 17:40	WG836734
1,2-Dichloroethane	ND		0.500	1	12/28/2015 17:40	WG836734
1,1-Dichloroethene	ND		0.500	1	12/28/2015 17:40	WG836734
cis-1,2-Dichloroethene	5.96		0.500	1	12/28/2015 17:40	WG836734
trans-1,2-Dichloroethene	ND		0.500	1	12/28/2015 17:40	WG836734
1,2-Dichloropropane	ND		0.500	1	12/28/2015 17:40	WG836734
1,1-Dichloropropene	ND		0.500	1	12/28/2015 17:40	WG836734
1,3-Dichloropropane	ND		0.500	1	12/28/2015 17:40	WG836734
cis-1,3-Dichloropropene	ND		0.500	1	12/28/2015 17:40	WG836734
trans-1,3-Dichloropropene	ND		0.500	1	12/28/2015 17:40	WG836734
trans-1,4-Dichloro-2-butene	ND		5.00	1	12/28/2015 17:40	WG836734
2,2-Dichloropropane	ND		0.500	1	12/28/2015 17:40	WG836734
Di-isopropyl ether	ND		0.500	1	12/28/2015 17:40	WG836734
Ethylbenzene	ND		0.500	1	12/28/2015 17:40	WG836734
Hexachloro-1,3-butadiene	ND		1.00	1	12/28/2015 17:40	WG836734
2-Hexanone	ND		2.50	1	12/28/2015 17:40	WG836734
n-Hexane	ND		1.00	1	12/28/2015 17:40	WG836734
Iodomethane	ND		10.0	1	12/28/2015 17:40	WG836734
Isopropylbenzene	ND		0.500	1	12/28/2015 17:40	WG836734
p-Isopropyltoluene	ND		0.500	1	12/28/2015 17:40	WG836734
2-Butanone (MEK)	ND		2.50	1	12/28/2015 17:40	WG836734
Methylene Chloride	ND		2.50	1	12/28/2015 17:40	WG836734
4-Methyl-2-pentanone (MIBK)	ND		2.50	1	12/28/2015 17:40	WG836734
Methyl tert-butyl ether	3.77		0.500	1	12/28/2015 17:40	WG836734
Naphthalene	ND		0.500	1	12/28/2015 17:40	WG836734
n-Propylbenzene	ND		0.500	1	12/28/2015 17:40	WG836734
Styrene	ND		0.500	1	12/28/2015 17:40	WG836734
1,1,1,2-Tetrachloroethane	ND		0.500	1	12/28/2015 17:40	WG836734

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
1,1,2,2-Tetrachloroethane	ND		0.500	1	12/28/2015 17:40	WG836734
1,1,2-Trichlorotrifluoroethane	ND		0.500	1	12/28/2015 17:40	WG836734
Tetrachloroethene	0.808		0.500	1	12/28/2015 17:40	WG836734
Toluene	ND		0.500	1	12/28/2015 17:40	WG836734
1,2,3-Trichlorobenzene	ND		0.500	1	12/28/2015 17:40	WG836734
1,2,4-Trichlorobenzene	ND		0.500	1	12/28/2015 17:40	WG836734
1,1,1-Trichloroethane	ND		0.500	1	12/28/2015 17:40	WG836734
1,1,2-Trichloroethane	ND		0.500	1	12/28/2015 17:40	WG836734
Trichloroethene	931		10.0	20	12/29/2015 10:36	WG838847
Trichlorofluoromethane	ND		0.500	1	12/28/2015 17:40	WG836734
1,2,3-Trichloropropane	ND		2.50	1	12/28/2015 17:40	WG836734
1,2,4-Trimethylbenzene	ND		0.500	1	12/28/2015 17:40	WG836734
1,2,3-Trimethylbenzene	ND		0.500	1	12/28/2015 17:40	WG836734
1,3,5-Trimethylbenzene	ND		0.500	1	12/28/2015 17:40	WG836734
Vinyl acetate	ND		2.50	1	12/28/2015 17:40	WG836734
Vinyl chloride	ND		0.500	1	12/28/2015 17:40	WG836734
Xylenes, Total	ND		1.50	1	12/28/2015 17:40	WG836734
(S) Toluene-d8	*83.6*	J2	*90.0-115*		*12/28/2015 17:40*	WG836734
(S) Dibromofluoromethane	*104*		*79.0-121*		*12/28/2015 17:40*	WG836734
(S) 4-Bromofluorobenzene	*102*		*80.1-120*		*12/28/2015 17:40*	WG836734

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Acetone	ND		25.0	1	12/28/2015 18:00	WG836734
Acrylonitrile	ND		2.50	1	12/28/2015 18:00	WG836734
Benzene	ND		0.500	1	12/28/2015 18:00	WG836734
Bromobenzene	ND		0.500	1	12/28/2015 18:00	WG836734
Bromodichloromethane	ND		0.500	1	12/28/2015 18:00	WG836734
Bromochloromethane	ND		0.500	1	12/28/2015 18:00	WG836734
Bromoform	ND		0.500	1	12/28/2015 18:00	WG836734
Bromomethane	ND		0.500	1	12/28/2015 18:00	WG836734
n-Butylbenzene	ND		0.500	1	12/28/2015 18:00	WG836734
sec-Butylbenzene	ND		0.500	1	12/28/2015 18:00	WG836734
tert-Butylbenzene	ND		0.500	1	12/28/2015 18:00	WG836734
Carbon disulfide	ND		0.500	1	12/28/2015 18:00	WG836734
Carbon tetrachloride	ND		0.500	1	12/28/2015 18:00	WG836734
Chlorobenzene	ND		0.500	1	12/28/2015 18:00	WG836734
Chlorodibromomethane	ND		0.500	1	12/28/2015 18:00	WG836734
Chloroethane	ND		0.500	1	12/28/2015 18:00	WG836734
2-Chloroethyl vinyl ether	ND		25.0	1	12/28/2015 18:00	WG836734
Chloroform	ND		0.500	1	12/28/2015 18:00	WG836734
Chloromethane	ND		0.500	1	12/28/2015 18:00	WG836734
2-Chlorotoluene	ND		0.500	1	12/28/2015 18:00	WG836734
4-Chlorotoluene	ND		0.500	1	12/28/2015 18:00	WG836734
1,2-Dibromo-3-Chloropropane	ND		1.00	1	12/28/2015 18:00	WG836734
1,2-Dibromoethane	ND		0.500	1	12/28/2015 18:00	WG836734
Dibromomethane	ND		0.500	1	12/28/2015 18:00	WG836734
1,2-Dichlorobenzene	ND		0.500	1	12/28/2015 18:00	WG836734
1,3-Dichlorobenzene	ND		0.500	1	12/28/2015 18:00	WG836734
1,4-Dichlorobenzene	ND		0.500	1	12/28/2015 18:00	WG836734
Dichlorodifluoromethane	ND		0.500	1	12/28/2015 18:00	WG836734
1,1-Dichloroethane	ND		0.500	1	12/28/2015 18:00	WG836734
1,2-Dichloroethane	ND		0.500	1	12/28/2015 18:00	WG836734
1,1-Dichloroethene	ND		0.500	1	12/28/2015 18:00	WG836734
cis-1,2-Dichloroethene	21.8		0.500	1	12/28/2015 18:00	WG836734
trans-1,2-Dichloroethene	ND		0.500	1	12/28/2015 18:00	WG836734
1,2-Dichloropropane	ND		0.500	1	12/28/2015 18:00	WG836734
1,1-Dichloropropene	ND		0.500	1	12/28/2015 18:00	WG836734
1,3-Dichloropropane	ND		0.500	1	12/28/2015 18:00	WG836734
cis-1,3-Dichloropropene	ND		0.500	1	12/28/2015 18:00	WG836734
trans-1,3-Dichloropropene	ND		0.500	1	12/28/2015 18:00	WG836734
trans-1,4-Dichloro-2-butene	ND		5.00	1	12/28/2015 18:00	WG836734
2,2-Dichloropropane	ND		0.500	1	12/28/2015 18:00	WG836734
Di-isopropyl ether	ND		0.500	1	12/28/2015 18:00	WG836734
Ethylbenzene	ND		0.500	1	12/28/2015 18:00	WG836734
Hexachloro-1,3-butadiene	ND		1.00	1	12/28/2015 18:00	WG836734
2-Hexanone	ND		2.50	1	12/28/2015 18:00	WG836734
n-Hexane	ND		1.00	1	12/28/2015 18:00	WG836734
Iodomethane	ND		10.0	1	12/28/2015 18:00	WG836734
Isopropylbenzene	ND		0.500	1	12/28/2015 18:00	WG836734
p-Isopropyltoluene	ND		0.500	1	12/28/2015 18:00	WG836734
2-Butanone (MEK)	ND		2.50	1	12/28/2015 18:00	WG836734
Methylene Chloride	ND		2.50	1	12/28/2015 18:00	WG836734
4-Methyl-2-pentanone (MIBK)	ND		2.50	1	12/28/2015 18:00	WG836734
Methyl tert-butyl ether	ND		0.500	1	12/28/2015 18:00	WG836734
Naphthalene	ND		0.500	1	12/28/2015 18:00	WG836734
n-Propylbenzene	ND		0.500	1	12/28/2015 18:00	WG836734
Styrene	ND		0.500	1	12/28/2015 18:00	WG836734
1,1,1,2-Tetrachloroethane	ND		0.500	1	12/28/2015 18:00	WG836734

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
1,1,2,2-Tetrachloroethane	ND		0.500	1	12/28/2015 18:00	WG836734
1,1,2-Trichlorotrifluoroethane	ND		0.500	1	12/28/2015 18:00	WG836734
Tetrachloroethene	ND		0.500	1	12/28/2015 18:00	WG836734
Toluene	ND		0.500	1	12/28/2015 18:00	WG836734
1,2,3-Trichlorobenzene	ND		0.500	1	12/28/2015 18:00	WG836734
1,2,4-Trichlorobenzene	ND		0.500	1	12/28/2015 18:00	WG836734
1,1,1-Trichloroethane	ND		0.500	1	12/28/2015 18:00	WG836734
1,1,2-Trichloroethane	ND		0.500	1	12/28/2015 18:00	WG836734
Trichloroethene	108		0.500	1	12/28/2015 18:00	WG836734
Trichlorofluoromethane	ND		0.500	1	12/28/2015 18:00	WG836734
1,2,3-Trichloropropane	ND		2.50	1	12/28/2015 18:00	WG836734
1,2,4-Trimethylbenzene	ND		0.500	1	12/28/2015 18:00	WG836734
1,2,3-Trimethylbenzene	ND		0.500	1	12/28/2015 18:00	WG836734
1,3,5-Trimethylbenzene	ND		0.500	1	12/28/2015 18:00	WG836734
Vinyl acetate	ND		2.50	1	12/28/2015 18:00	WG836734
Vinyl chloride	ND		0.500	1	12/28/2015 18:00	WG836734
Xylenes, Total	ND		1.50	1	12/28/2015 18:00	WG836734
(S) Toluene-d8	*101*		*90.0-115*		*12/28/2015 18:00*	WG836734
(S) Dibromofluoromethane	*106*		*79.0-121*		*12/28/2015 18:00*	WG836734
(S) 4-Bromofluorobenzene	*104*		*80.1-120*		*12/28/2015 18:00*	WG836734

Wet Chemistry by Method 350.1

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Ammonia Nitrogen	ND		250	1	12/22/2015 18:43	WG837771

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Nitrate	ND		100	1	12/17/2015 12:55	WG836336
Sulfate	12900		5000	1	12/17/2015 12:55	WG836336

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
TOC (Total Organic Carbon)	1440		1000	1	12/18/2015 21:17	WG836613

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Iron,Dissolved	524		100	1	12/22/2015 14:10	WG837018
Manganese,Dissolved	1230		10.0	1	12/22/2015 14:10	WG837018

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Methane	16.4		10.0	1	12/20/2015 14:52	WG837119
Ethane	ND		13.0	1	12/20/2015 14:52	WG837119
Ethene	ND		13.0	1	12/20/2015 14:52	WG837119

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Acetone	ND		25.0	1	12/28/2015 18:21	WG836734
Acrylonitrile	ND		2.50	1	12/28/2015 18:21	WG836734
Benzene	ND		0.500	1	12/28/2015 18:21	WG836734
Bromobenzene	ND		0.500	1	12/28/2015 18:21	WG836734
Bromodichloromethane	ND		0.500	1	12/28/2015 18:21	WG836734
Bromochloromethane	ND		0.500	1	12/28/2015 18:21	WG836734
Bromoform	ND		0.500	1	12/28/2015 18:21	WG836734
Bromomethane	ND		0.500	1	12/28/2015 18:21	WG836734
n-Butylbenzene	ND		0.500	1	12/28/2015 18:21	WG836734
sec-Butylbenzene	ND		0.500	1	12/28/2015 18:21	WG836734
tert-Butylbenzene	ND		0.500	1	12/28/2015 18:21	WG836734
Carbon disulfide	ND		0.500	1	12/28/2015 18:21	WG836734
Carbon tetrachloride	ND		0.500	1	12/28/2015 18:21	WG836734
Chlorobenzene	ND		0.500	1	12/28/2015 18:21	WG836734
Chlorodibromomethane	ND		0.500	1	12/28/2015 18:21	WG836734
Chloroethane	ND		0.500	1	12/28/2015 18:21	WG836734
2-Chloroethyl vinyl ether	ND		25.0	1	12/28/2015 18:21	WG836734
Chloroform	ND		0.500	1	12/28/2015 18:21	WG836734
Chloromethane	ND		0.500	1	12/28/2015 18:21	WG836734
2-Chlorotoluene	ND		0.500	1	12/28/2015 18:21	WG836734
4-Chlorotoluene	ND		0.500	1	12/28/2015 18:21	WG836734
1,2-Dibromo-3-Chloropropane	ND		1.00	1	12/28/2015 18:21	WG836734
1,2-Dibromoethane	ND		0.500	1	12/28/2015 18:21	WG836734
Dibromomethane	ND		0.500	1	12/28/2015 18:21	WG836734

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
1,2-Dichlorobenzene	ND		0.500	1	12/28/2015 18:21	WG836734
1,3-Dichlorobenzene	ND		0.500	1	12/28/2015 18:21	WG836734
1,4-Dichlorobenzene	ND		0.500	1	12/28/2015 18:21	WG836734
Dichlorodifluoromethane	ND		0.500	1	12/28/2015 18:21	WG836734
1,1-Dichloroethane	ND		0.500	1	12/28/2015 18:21	WG836734
1,2-Dichloroethane	ND		0.500	1	12/28/2015 18:21	WG836734
1,1-Dichloroethene	ND		0.500	1	12/28/2015 18:21	WG836734
cis-1,2-Dichloroethene	134		0.500	1	12/28/2015 18:21	WG836734
trans-1,2-Dichloroethene	0.877		0.500	1	12/28/2015 18:21	WG836734
1,2-Dichloropropane	ND		0.500	1	12/28/2015 18:21	WG836734
1,1-Dichloropropene	ND		0.500	1	12/28/2015 18:21	WG836734
1,3-Dichloropropane	ND		0.500	1	12/28/2015 18:21	WG836734
cis-1,3-Dichloropropene	ND		0.500	1	12/28/2015 18:21	WG836734
trans-1,3-Dichloropropene	ND		0.500	1	12/28/2015 18:21	WG836734
trans-1,4-Dichloro-2-butene	ND		5.00	1	12/28/2015 18:21	WG836734
2,2-Dichloropropane	ND		0.500	1	12/28/2015 18:21	WG836734
Di-isopropyl ether	ND		0.500	1	12/28/2015 18:21	WG836734
Ethylbenzene	ND		0.500	1	12/28/2015 18:21	WG836734
Hexachloro-1,3-butadiene	ND		1.00	1	12/28/2015 18:21	WG836734
2-Hexanone	ND		2.50	1	12/28/2015 18:21	WG836734
n-Hexane	ND		1.00	1	12/28/2015 18:21	WG836734
Iodomethane	ND		10.0	1	12/28/2015 18:21	WG836734
Isopropylbenzene	ND		0.500	1	12/28/2015 18:21	WG836734
p-Isopropyltoluene	ND		0.500	1	12/28/2015 18:21	WG836734
2-Butanone (MEK)	ND		2.50	1	12/28/2015 18:21	WG836734
Methylene Chloride	ND		2.50	1	12/28/2015 18:21	WG836734
4-Methyl-2-pentanone (MIBK)	ND		2.50	1	12/28/2015 18:21	WG836734
Methyl tert-butyl ether	ND		0.500	1	12/28/2015 18:21	WG836734
Naphthalene	ND		0.500	1	12/28/2015 18:21	WG836734
n-Propylbenzene	ND		0.500	1	12/28/2015 18:21	WG836734
Styrene	ND		0.500	1	12/28/2015 18:21	WG836734
1,1,1,2-Tetrachloroethane	ND		0.500	1	12/28/2015 18:21	WG836734
1,1,2,2-Tetrachloroethane	ND		0.500	1	12/28/2015 18:21	WG836734
1,1,2-Trichlorotrifluoroethane	ND		0.500	1	12/28/2015 18:21	WG836734
Tetrachloroethene	ND		0.500	1	12/28/2015 18:21	WG836734
Toluene	ND		0.500	1	12/28/2015 18:21	WG836734
1,2,3-Trichlorobenzene	ND		0.500	1	12/28/2015 18:21	WG836734
1,2,4-Trichlorobenzene	ND		0.500	1	12/28/2015 18:21	WG836734
1,1,1-Trichloroethane	ND		0.500	1	12/28/2015 18:21	WG836734
1,1,2-Trichloroethane	ND		0.500	1	12/28/2015 18:21	WG836734
Trichloroethene	8120		50.0	100	12/29/2015 15:44	WG838847
Trichlorofluoromethane	ND		0.500	1	12/28/2015 18:21	WG836734
1,2,3-Trichloropropane	ND		2.50	1	12/28/2015 18:21	WG836734
1,2,4-Trimethylbenzene	ND		0.500	1	12/28/2015 18:21	WG836734
1,2,3-Trimethylbenzene	ND		0.500	1	12/28/2015 18:21	WG836734
1,3,5-Trimethylbenzene	ND		0.500	1	12/28/2015 18:21	WG836734
Vinyl acetate	ND		2.50	1	12/28/2015 18:21	WG836734
Vinyl chloride	ND		0.500	1	12/28/2015 18:21	WG836734
Xylenes, Total	ND		1.50	1	12/28/2015 18:21	WG836734
(S) Toluene-d8	*83.2*	J2	*90.0-115*		*12/28/2015 18:21*	WG836734
(S) Dibromofluoromethane	*105*		*79.0-121*		*12/28/2015 18:21*	WG836734
(S) 4-Bromofluorobenzene	*101*		*80.1-120*		*12/28/2015 18:21*	WG836734

Wet Chemistry by Method 350.1

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Ammonia Nitrogen	ND		250	1	12/28/2015 11:27	WG837955

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Nitrate	134		100	1	12/17/2015 13:09	WG836336
Sulfate	15000		5000	1	12/17/2015 13:09	WG836336

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
TOC (Total Organic Carbon)	2020		1000	1	12/18/2015 22:04	WG836613

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Iron,Dissolved	ND		100	1	12/22/2015 14:22	WG837018
Manganese,Dissolved	1550		10.0	1	12/22/2015 14:22	WG837018

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Methane	29.4		10.0	1	12/20/2015 15:02	WG837119
Ethane	ND		13.0	1	12/20/2015 15:02	WG837119
Ethene	ND		13.0	1	12/20/2015 15:02	WG837119

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Acetone	ND		25.0	1	12/28/2015 18:42	WG836734
Acrylonitrile	ND		2.50	1	12/28/2015 18:42	WG836734
Benzene	ND		0.500	1	12/28/2015 18:42	WG836734
Bromobenzene	ND		0.500	1	12/28/2015 18:42	WG836734
Bromodichloromethane	ND		0.500	1	12/28/2015 18:42	WG836734
Bromochloromethane	ND		0.500	1	12/28/2015 18:42	WG836734
Bromoform	ND		0.500	1	12/28/2015 18:42	WG836734
Bromomethane	ND		0.500	1	12/28/2015 18:42	WG836734
n-Butylbenzene	ND		0.500	1	12/28/2015 18:42	WG836734
sec-Butylbenzene	ND		0.500	1	12/28/2015 18:42	WG836734
tert-Butylbenzene	ND		0.500	1	12/28/2015 18:42	WG836734
Carbon disulfide	ND		0.500	1	12/28/2015 18:42	WG836734
Carbon tetrachloride	ND		0.500	1	12/28/2015 18:42	WG836734
Chlorobenzene	ND		0.500	1	12/28/2015 18:42	WG836734
Chlorodibromomethane	ND		0.500	1	12/28/2015 18:42	WG836734
Chloroethane	ND		0.500	1	12/28/2015 18:42	WG836734
2-Chloroethyl vinyl ether	ND		25.0	1	12/28/2015 18:42	WG836734
Chloroform	ND		0.500	1	12/28/2015 18:42	WG836734
Chloromethane	ND		0.500	1	12/28/2015 18:42	WG836734
2-Chlorotoluene	ND		0.500	1	12/28/2015 18:42	WG836734
4-Chlorotoluene	ND		0.500	1	12/28/2015 18:42	WG836734
1,2-Dibromo-3-Chloropropane	ND		1.00	1	12/28/2015 18:42	WG836734
1,2-Dibromoethane	ND		0.500	1	12/28/2015 18:42	WG836734
Dibromomethane	ND		0.500	1	12/28/2015 18:42	WG836734

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
1,2-Dichlorobenzene	ND		0.500	1	12/28/2015 18:42	WG836734
1,3-Dichlorobenzene	ND		0.500	1	12/28/2015 18:42	WG836734
1,4-Dichlorobenzene	ND		0.500	1	12/28/2015 18:42	WG836734
Dichlorodifluoromethane	ND		0.500	1	12/28/2015 18:42	WG836734
1,1-Dichloroethane	ND		0.500	1	12/28/2015 18:42	WG836734
1,2-Dichloroethane	ND		0.500	1	12/28/2015 18:42	WG836734
1,1-Dichloroethene	ND		0.500	1	12/28/2015 18:42	WG836734
cis-1,2-Dichloroethene	67.2		0.500	1	12/28/2015 18:42	WG836734
trans-1,2-Dichloroethene	0.728		0.500	1	12/28/2015 18:42	WG836734
1,2-Dichloropropane	ND		0.500	1	12/28/2015 18:42	WG836734
1,1-Dichloropropene	ND		0.500	1	12/28/2015 18:42	WG836734
1,3-Dichloropropane	ND		0.500	1	12/28/2015 18:42	WG836734
cis-1,3-Dichloropropene	ND		0.500	1	12/28/2015 18:42	WG836734
trans-1,3-Dichloropropene	ND		0.500	1	12/28/2015 18:42	WG836734
trans-1,4-Dichloro-2-butene	ND		5.00	1	12/28/2015 18:42	WG836734
2,2-Dichloropropane	ND		0.500	1	12/28/2015 18:42	WG836734
Di-isopropyl ether	ND		0.500	1	12/28/2015 18:42	WG836734
Ethylbenzene	ND		0.500	1	12/28/2015 18:42	WG836734
Hexachloro-1,3-butadiene	ND		1.00	1	12/28/2015 18:42	WG836734
2-Hexanone	ND		2.50	1	12/28/2015 18:42	WG836734
n-Hexane	ND		1.00	1	12/28/2015 18:42	WG836734
Iodomethane	ND		10.0	1	12/28/2015 18:42	WG836734
Isopropylbenzene	ND		0.500	1	12/28/2015 18:42	WG836734
p-Isopropyltoluene	ND		0.500	1	12/28/2015 18:42	WG836734
2-Butanone (MEK)	ND		2.50	1	12/28/2015 18:42	WG836734
Methylene Chloride	ND		2.50	1	12/28/2015 18:42	WG836734
4-Methyl-2-pentanone (MIBK)	ND		2.50	1	12/28/2015 18:42	WG836734
Methyl tert-butyl ether	ND		0.500	1	12/28/2015 18:42	WG836734
Naphthalene	ND		0.500	1	12/28/2015 18:42	WG836734
n-Propylbenzene	ND		0.500	1	12/28/2015 18:42	WG836734
Styrene	ND		0.500	1	12/28/2015 18:42	WG836734
1,1,1,2-Tetrachloroethane	ND		0.500	1	12/28/2015 18:42	WG836734
1,1,2,2-Tetrachloroethane	ND		0.500	1	12/28/2015 18:42	WG836734
1,1,2-Trichlorotrifluoroethane	ND		0.500	1	12/28/2015 18:42	WG836734
Tetrachloroethene	ND		0.500	1	12/28/2015 18:42	WG836734
Toluene	ND		0.500	1	12/28/2015 18:42	WG836734
1,2,3-Trichlorobenzene	ND		0.500	1	12/28/2015 18:42	WG836734
1,2,4-Trichlorobenzene	ND		0.500	1	12/28/2015 18:42	WG836734
1,1,1-Trichloroethane	ND		0.500	1	12/28/2015 18:42	WG836734
1,1,2-Trichloroethane	ND		0.500	1	12/28/2015 18:42	WG836734
Trichloroethene	12500		50.0	100	12/29/2015 16:05	WG838847
Trichlorofluoromethane	ND		0.500	1	12/28/2015 18:42	WG836734
1,2,3-Trichloropropane	ND		2.50	1	12/28/2015 18:42	WG836734
1,2,4-Trimethylbenzene	ND		0.500	1	12/28/2015 18:42	WG836734
1,2,3-Trimethylbenzene	ND		0.500	1	12/28/2015 18:42	WG836734
1,3,5-Trimethylbenzene	ND		0.500	1	12/28/2015 18:42	WG836734
Vinyl acetate	ND		2.50	1	12/28/2015 18:42	WG836734
Vinyl chloride	ND		0.500	1	12/28/2015 18:42	WG836734
Xylenes, Total	ND		1.50	1	12/28/2015 18:42	WG836734
(S) Toluene-d8	*94.2*		*90.0-115*		*12/28/2015 18:42*	WG836734
(S) Dibromofluoromethane	*102*		*79.0-121*		*12/28/2015 18:42*	WG836734
(S) 4-Bromofluorobenzene	*102*		*80.1-120*		*12/28/2015 18:42*	WG836734

Wet Chemistry by Method 350.1

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Ammonia Nitrogen	ND		250	1	12/28/2015 11:29	WG837955

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Nitrate	277		100	1	12/17/2015 17:38	WG836377
Sulfate	10200		5000	1	12/17/2015 17:38	WG836377

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
TOC (Total Organic Carbon)	1880		1000	1	12/18/2015 22:24	WG836613

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Iron,Dissolved	ND		100	1	12/22/2015 14:25	WG837018
Manganese,Dissolved	ND		10.0	1	12/22/2015 14:25	WG837018

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Methane	ND		10.0	1	12/20/2015 15:05	WG837119
Ethane	ND		13.0	1	12/20/2015 15:05	WG837119
Ethene	ND		13.0	1	12/20/2015 15:05	WG837119

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Acetone	ND		25.0	1	12/29/2015 13:41	WG838847
Acrylonitrile	ND		2.50	1	12/29/2015 13:41	WG838847
Benzene	ND		0.500	1	12/29/2015 13:41	WG838847
Bromobenzene	ND		0.500	1	12/29/2015 13:41	WG838847
Bromodichloromethane	ND		0.500	1	12/29/2015 13:41	WG838847
Bromochloromethane	ND		0.500	1	12/29/2015 13:41	WG838847
Bromoform	ND		0.500	1	12/29/2015 13:41	WG838847
Bromomethane	ND		0.500	1	12/29/2015 13:41	WG838847
n-Butylbenzene	ND		0.500	1	12/29/2015 13:41	WG838847
sec-Butylbenzene	ND		0.500	1	12/29/2015 13:41	WG838847
tert-Butylbenzene	ND		0.500	1	12/29/2015 13:41	WG838847
Carbon disulfide	ND		0.500	1	12/29/2015 13:41	WG838847
Carbon tetrachloride	ND		0.500	1	12/29/2015 13:41	WG838847
Chlorobenzene	ND		0.500	1	12/29/2015 13:41	WG838847
Chlorodibromomethane	ND		0.500	1	12/29/2015 13:41	WG838847
Chloroethane	ND		0.500	1	12/29/2015 13:41	WG838847
2-Chloroethyl vinyl ether	ND		25.0	1	12/29/2015 13:41	WG838847
Chloroform	ND		0.500	1	12/29/2015 13:41	WG838847
Chloromethane	ND		0.500	1	12/29/2015 13:41	WG838847
2-Chlorotoluene	ND		0.500	1	12/29/2015 13:41	WG838847
4-Chlorotoluene	ND		0.500	1	12/29/2015 13:41	WG838847
1,2-Dibromo-3-Chloropropane	ND		1.00	1	12/29/2015 13:41	WG838847
1,2-Dibromoethane	ND		0.500	1	12/29/2015 13:41	WG838847
Dibromomethane	ND		0.500	1	12/29/2015 13:41	WG838847

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
1,2-Dichlorobenzene	ND		0.500	1	12/29/2015 13:41	WG838847
1,3-Dichlorobenzene	ND		0.500	1	12/29/2015 13:41	WG838847
1,4-Dichlorobenzene	ND		0.500	1	12/29/2015 13:41	WG838847
Dichlorodifluoromethane	ND		0.500	1	12/29/2015 13:41	WG838847
1,1-Dichloroethane	ND		0.500	1	12/29/2015 13:41	WG838847
1,2-Dichloroethane	ND		0.500	1	12/29/2015 13:41	WG838847
1,1-Dichloroethene	ND		0.500	1	12/29/2015 13:41	WG838847
cis-1,2-Dichloroethene	5.39		0.500	1	12/29/2015 13:41	WG838847
trans-1,2-Dichloroethene	ND		0.500	1	12/29/2015 13:41	WG838847
1,2-Dichloropropane	ND		0.500	1	12/29/2015 13:41	WG838847
1,1-Dichloropropene	ND		0.500	1	12/29/2015 13:41	WG838847
1,3-Dichloropropane	ND		0.500	1	12/29/2015 13:41	WG838847
cis-1,3-Dichloropropene	ND		0.500	1	12/29/2015 13:41	WG838847
trans-1,3-Dichloropropene	ND		0.500	1	12/29/2015 13:41	WG838847
trans-1,4-Dichloro-2-butene	ND		5.00	1	12/29/2015 13:41	WG838847
2,2-Dichloropropane	ND		0.500	1	12/29/2015 13:41	WG838847
Di-isopropyl ether	ND		0.500	1	12/29/2015 13:41	WG838847
Ethylbenzene	ND		0.500	1	12/29/2015 13:41	WG838847
Hexachloro-1,3-butadiene	ND		1.00	1	12/29/2015 13:41	WG838847
2-Hexanone	ND		2.50	1	12/29/2015 13:41	WG838847
n-Hexane	ND		1.00	1	12/29/2015 13:41	WG838847
Iodomethane	ND		10.0	1	12/29/2015 13:41	WG838847
Isopropylbenzene	ND		0.500	1	12/29/2015 13:41	WG838847
p-Isopropyltoluene	ND		0.500	1	12/29/2015 13:41	WG838847
2-Butanone (MEK)	ND		2.50	1	12/29/2015 13:41	WG838847
Methylene Chloride	ND		2.50	1	12/29/2015 13:41	WG838847
4-Methyl-2-pentanone (MIBK)	ND		2.50	1	12/29/2015 13:41	WG838847
Methyl tert-butyl ether	ND		0.500	1	12/29/2015 13:41	WG838847
Naphthalene	ND		0.500	1	12/29/2015 13:41	WG838847
n-Propylbenzene	ND		0.500	1	12/29/2015 13:41	WG838847
Styrene	ND		0.500	1	12/29/2015 13:41	WG838847
1,1,1,2-Tetrachloroethane	ND		0.500	1	12/29/2015 13:41	WG838847
1,1,2,2-Tetrachloroethane	ND		0.500	1	12/29/2015 13:41	WG838847
1,1,2-Trichlorotrifluoroethane	ND		0.500	1	12/29/2015 13:41	WG838847
Tetrachloroethene	ND		0.500	1	12/29/2015 13:41	WG838847
Toluene	ND		0.500	1	12/29/2015 13:41	WG838847
1,2,3-Trichlorobenzene	ND		0.500	1	12/29/2015 13:41	WG838847
1,2,4-Trichlorobenzene	ND		0.500	1	12/29/2015 13:41	WG838847
1,1,1-Trichloroethane	ND		0.500	1	12/29/2015 13:41	WG838847
1,1,2-Trichloroethane	ND		0.500	1	12/29/2015 13:41	WG838847
Trichloroethene	21.2		0.500	1	12/29/2015 13:41	WG838847
Trichlorofluoromethane	ND		0.500	1	12/29/2015 13:41	WG838847
1,2,3-Trichloropropane	ND		2.50	1	12/29/2015 13:41	WG838847
1,2,4-Trimethylbenzene	ND		0.500	1	12/29/2015 13:41	WG838847
1,2,3-Trimethylbenzene	ND		0.500	1	12/29/2015 13:41	WG838847
1,3,5-Trimethylbenzene	ND		0.500	1	12/29/2015 13:41	WG838847
Vinyl acetate	ND		2.50	1	12/29/2015 13:41	WG838847
Vinyl chloride	ND		0.500	1	12/29/2015 13:41	WG838847
Xylenes, Total	ND		1.50	1	12/29/2015 13:41	WG838847
(S) Toluene-d8	*104*		*90.0-115*		*12/29/2015 13:41*	WG838847
(S) Dibromofluoromethane	*102*		*79.0-121*		*12/29/2015 13:41*	WG838847
(S) 4-Bromofluorobenzene	*101*		*80.1-120*		*12/29/2015 13:41*	WG838847

Wet Chemistry by Method 350.1

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Ammonia Nitrogen	ND		250	1	12/28/2015 11:32	WG837955

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Nitrate	ND		100	1	12/17/2015 18:09	WG836377
Sulfate	14300		5000	1	12/17/2015 18:09	WG836377

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
TOC (Total Organic Carbon)	ND		1000	1	12/18/2015 22:48	WG836613

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Iron,Dissolved	ND		100	1	12/22/2015 14:28	WG837018
Manganese,Dissolved	626		10.0	1	12/22/2015 14:28	WG837018

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Methane	ND		10.0	1	12/20/2015 15:07	WG837119
Ethane	ND		13.0	1	12/20/2015 15:07	WG837119
Ethene	ND		13.0	1	12/20/2015 15:07	WG837119

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Acetone	ND		25.0	1	12/29/2015 14:02	WG838847
Acrylonitrile	ND		2.50	1	12/29/2015 14:02	WG838847
Benzene	ND		0.500	1	12/29/2015 14:02	WG838847
Bromobenzene	ND		0.500	1	12/29/2015 14:02	WG838847
Bromodichloromethane	ND		0.500	1	12/29/2015 14:02	WG838847
Bromochloromethane	ND		0.500	1	12/29/2015 14:02	WG838847
Bromoform	ND		0.500	1	12/29/2015 14:02	WG838847
Bromomethane	ND		0.500	1	12/29/2015 14:02	WG838847
n-Butylbenzene	ND		0.500	1	12/29/2015 14:02	WG838847
sec-Butylbenzene	ND		0.500	1	12/29/2015 14:02	WG838847
tert-Butylbenzene	ND		0.500	1	12/29/2015 14:02	WG838847
Carbon disulfide	ND		0.500	1	12/29/2015 14:02	WG838847
Carbon tetrachloride	ND		0.500	1	12/29/2015 14:02	WG838847
Chlorobenzene	ND		0.500	1	12/29/2015 14:02	WG838847
Chlorodibromomethane	ND		0.500	1	12/29/2015 14:02	WG838847
Chloroethane	ND		0.500	1	12/29/2015 14:02	WG838847
2-Chloroethyl vinyl ether	ND		25.0	1	12/29/2015 14:02	WG838847
Chloroform	ND		0.500	1	12/29/2015 14:02	WG838847
Chloromethane	ND		0.500	1	12/29/2015 14:02	WG838847
2-Chlorotoluene	ND		0.500	1	12/29/2015 14:02	WG838847
4-Chlorotoluene	ND		0.500	1	12/29/2015 14:02	WG838847
1,2-Dibromo-3-Chloropropane	ND		1.00	1	12/29/2015 14:02	WG838847
1,2-Dibromoethane	ND		0.500	1	12/29/2015 14:02	WG838847
Dibromomethane	ND		0.500	1	12/29/2015 14:02	WG838847

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
1,2-Dichlorobenzene	ND		0.500	1	12/29/2015 14:02	WG838847
1,3-Dichlorobenzene	ND		0.500	1	12/29/2015 14:02	WG838847
1,4-Dichlorobenzene	ND		0.500	1	12/29/2015 14:02	WG838847
Dichlorodifluoromethane	ND		0.500	1	12/29/2015 14:02	WG838847
1,1-Dichloroethane	ND		0.500	1	12/29/2015 14:02	WG838847
1,2-Dichloroethane	ND		0.500	1	12/29/2015 14:02	WG838847
1,1-Dichloroethene	ND		0.500	1	12/29/2015 14:02	WG838847
cis-1,2-Dichloroethene	1.17		0.500	1	12/29/2015 14:02	WG838847
trans-1,2-Dichloroethene	ND		0.500	1	12/29/2015 14:02	WG838847
1,2-Dichloropropane	ND		0.500	1	12/29/2015 14:02	WG838847
1,1-Dichloropropene	ND		0.500	1	12/29/2015 14:02	WG838847
1,3-Dichloropropane	ND		0.500	1	12/29/2015 14:02	WG838847
cis-1,3-Dichloropropene	ND		0.500	1	12/29/2015 14:02	WG838847
trans-1,3-Dichloropropene	ND		0.500	1	12/29/2015 14:02	WG838847
trans-1,4-Dichloro-2-butene	ND		5.00	1	12/29/2015 14:02	WG838847
2,2-Dichloropropane	ND		0.500	1	12/29/2015 14:02	WG838847
Di-isopropyl ether	ND		0.500	1	12/29/2015 14:02	WG838847
Ethylbenzene	ND		0.500	1	12/29/2015 14:02	WG838847
Hexachloro-1,3-butadiene	ND		1.00	1	12/29/2015 14:02	WG838847
2-Hexanone	ND		2.50	1	12/29/2015 14:02	WG838847
n-Hexane	ND		1.00	1	12/29/2015 14:02	WG838847
Iodomethane	ND		10.0	1	12/29/2015 14:02	WG838847
Isopropylbenzene	ND		0.500	1	12/29/2015 14:02	WG838847
p-Isopropyltoluene	ND		0.500	1	12/29/2015 14:02	WG838847
2-Butanone (MEK)	ND		2.50	1	12/29/2015 14:02	WG838847
Methylene Chloride	ND		2.50	1	12/29/2015 14:02	WG838847
4-Methyl-2-pentanone (MIBK)	ND		2.50	1	12/29/2015 14:02	WG838847
Methyl tert-butyl ether	ND		0.500	1	12/29/2015 14:02	WG838847
Naphthalene	ND		0.500	1	12/29/2015 14:02	WG838847
n-Propylbenzene	ND		0.500	1	12/29/2015 14:02	WG838847
Styrene	ND		0.500	1	12/29/2015 14:02	WG838847
1,1,1,2-Tetrachloroethane	ND		0.500	1	12/29/2015 14:02	WG838847
1,1,2,2-Tetrachloroethane	ND		0.500	1	12/29/2015 14:02	WG838847
1,1,2-Trichlorotrifluoroethane	ND		0.500	1	12/29/2015 14:02	WG838847
Tetrachloroethene	ND		0.500	1	12/29/2015 14:02	WG838847
Toluene	ND		0.500	1	12/29/2015 14:02	WG838847
1,2,3-Trichlorobenzene	ND		0.500	1	12/29/2015 14:02	WG838847
1,2,4-Trichlorobenzene	ND		0.500	1	12/29/2015 14:02	WG838847
1,1,1-Trichloroethane	ND		0.500	1	12/29/2015 14:02	WG838847
1,1,2-Trichloroethane	ND		0.500	1	12/29/2015 14:02	WG838847
Trichloroethene	14.9		0.500	1	12/29/2015 14:02	WG838847
Trichlorofluoromethane	ND		0.500	1	12/29/2015 14:02	WG838847
1,2,3-Trichloropropane	ND		2.50	1	12/29/2015 14:02	WG838847
1,2,4-Trimethylbenzene	ND		0.500	1	12/29/2015 14:02	WG838847
1,2,3-Trimethylbenzene	ND		0.500	1	12/29/2015 14:02	WG838847
1,3,5-Trimethylbenzene	ND		0.500	1	12/29/2015 14:02	WG838847
Vinyl acetate	ND		2.50	1	12/29/2015 14:02	WG838847
Vinyl chloride	ND		0.500	1	12/29/2015 14:02	WG838847
Xylenes, Total	ND		1.50	1	12/29/2015 14:02	WG838847
(S) Toluene-d8	*104*		*90.0-115*		*12/29/2015 14:02*	WG838847
(S) Dibromofluoromethane	*102*		*79.0-121*		*12/29/2015 14:02*	WG838847
(S) 4-Bromofluorobenzene	*102*		*80.1-120*		*12/29/2015 14:02*	WG838847

Wet Chemistry by Method 350.1

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Ammonia Nitrogen	ND		250	1	12/28/2015 11:42	WG837955

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Nitrate	891		100	1	12/17/2015 19:42	WG836377
Sulfate	5500		5000	1	12/17/2015 19:42	WG836377

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
TOC (Total Organic Carbon)	2160		1000	1	12/18/2015 23:12	WG836613

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Iron,Dissolved	ND		100	1	12/22/2015 14:41	WG837018
Manganese,Dissolved	2390		10.0	1	12/22/2015 14:41	WG837018

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Methane	24.5		10.0	1	12/20/2015 15:09	WG837119
Ethane	ND		13.0	1	12/20/2015 15:09	WG837119
Ethene	ND		13.0	1	12/20/2015 15:09	WG837119

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Acetone	ND		25.0	1	12/29/2015 14:22	WG838847
Acrylonitrile	ND		2.50	1	12/29/2015 14:22	WG838847
Benzene	ND		0.500	1	12/29/2015 14:22	WG838847
Bromobenzene	ND		0.500	1	12/29/2015 14:22	WG838847
Bromodichloromethane	ND		0.500	1	12/29/2015 14:22	WG838847
Bromochloromethane	ND		0.500	1	12/29/2015 14:22	WG838847
Bromoform	ND		0.500	1	12/29/2015 14:22	WG838847
Bromomethane	ND		0.500	1	12/29/2015 14:22	WG838847
n-Butylbenzene	ND		0.500	1	12/29/2015 14:22	WG838847
sec-Butylbenzene	ND		0.500	1	12/29/2015 14:22	WG838847
tert-Butylbenzene	ND		0.500	1	12/29/2015 14:22	WG838847
Carbon disulfide	ND		0.500	1	12/29/2015 14:22	WG838847
Carbon tetrachloride	ND		0.500	1	12/29/2015 14:22	WG838847
Chlorobenzene	ND		0.500	1	12/29/2015 14:22	WG838847
Chlorodibromomethane	ND		0.500	1	12/29/2015 14:22	WG838847
Chloroethane	ND		0.500	1	12/29/2015 14:22	WG838847
2-Chloroethyl vinyl ether	ND		25.0	1	12/29/2015 14:22	WG838847
Chloroform	ND		0.500	1	12/29/2015 14:22	WG838847
Chloromethane	ND		0.500	1	12/29/2015 14:22	WG838847
2-Chlorotoluene	ND		0.500	1	12/29/2015 14:22	WG838847
4-Chlorotoluene	ND		0.500	1	12/29/2015 14:22	WG838847
1,2-Dibromo-3-Chloropropane	ND		1.00	1	12/29/2015 14:22	WG838847
1,2-Dibromoethane	ND		0.500	1	12/29/2015 14:22	WG838847
Dibromomethane	ND		0.500	1	12/29/2015 14:22	WG838847

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
1,2-Dichlorobenzene	ND		0.500	1	12/29/2015 14:22	WG838847
1,3-Dichlorobenzene	ND		0.500	1	12/29/2015 14:22	WG838847
1,4-Dichlorobenzene	ND		0.500	1	12/29/2015 14:22	WG838847
Dichlorodifluoromethane	ND		0.500	1	12/29/2015 14:22	WG838847
1,1-Dichloroethane	ND		0.500	1	12/29/2015 14:22	WG838847
1,2-Dichloroethane	ND		0.500	1	12/29/2015 14:22	WG838847
1,1-Dichloroethene	ND		0.500	1	12/29/2015 14:22	WG838847
cis-1,2-Dichloroethene	47.2		0.500	1	12/29/2015 14:22	WG838847
trans-1,2-Dichloroethene	ND		0.500	1	12/29/2015 14:22	WG838847
1,2-Dichloropropane	ND		0.500	1	12/29/2015 14:22	WG838847
1,1-Dichloropropene	ND		0.500	1	12/29/2015 14:22	WG838847
1,3-Dichloropropane	ND		0.500	1	12/29/2015 14:22	WG838847
cis-1,3-Dichloropropene	ND		0.500	1	12/29/2015 14:22	WG838847
trans-1,3-Dichloropropene	ND		0.500	1	12/29/2015 14:22	WG838847
trans-1,4-Dichloro-2-butene	ND		5.00	1	12/29/2015 14:22	WG838847
2,2-Dichloropropane	ND		0.500	1	12/29/2015 14:22	WG838847
Di-isopropyl ether	ND		0.500	1	12/29/2015 14:22	WG838847
Ethylbenzene	ND		0.500	1	12/29/2015 14:22	WG838847
Hexachloro-1,3-butadiene	ND		1.00	1	12/29/2015 14:22	WG838847
2-Hexanone	ND		2.50	1	12/29/2015 14:22	WG838847
n-Hexane	ND		1.00	1	12/29/2015 14:22	WG838847
Iodomethane	ND		10.0	1	12/29/2015 14:22	WG838847
Isopropylbenzene	ND		0.500	1	12/29/2015 14:22	WG838847
p-Isopropyltoluene	ND		0.500	1	12/29/2015 14:22	WG838847
2-Butanone (MEK)	ND		2.50	1	12/29/2015 14:22	WG838847
Methylene Chloride	ND		2.50	1	12/29/2015 14:22	WG838847
4-Methyl-2-pentanone (MIBK)	ND		2.50	1	12/29/2015 14:22	WG838847
Methyl tert-butyl ether	ND		0.500	1	12/29/2015 14:22	WG838847
Naphthalene	ND		0.500	1	12/29/2015 14:22	WG838847
n-Propylbenzene	ND		0.500	1	12/29/2015 14:22	WG838847
Styrene	ND		0.500	1	12/29/2015 14:22	WG838847
1,1,1,2-Tetrachloroethane	ND		0.500	1	12/29/2015 14:22	WG838847
1,1,2,2-Tetrachloroethane	ND		0.500	1	12/29/2015 14:22	WG838847
1,1,2-Trichlorotrifluoroethane	ND		0.500	1	12/29/2015 14:22	WG838847
Tetrachloroethene	ND		0.500	1	12/29/2015 14:22	WG838847
Toluene	ND		0.500	1	12/29/2015 14:22	WG838847
1,2,3-Trichlorobenzene	ND		0.500	1	12/29/2015 14:22	WG838847
1,2,4-Trichlorobenzene	ND		0.500	1	12/29/2015 14:22	WG838847
1,1,1-Trichloroethane	ND		0.500	1	12/29/2015 14:22	WG838847
1,1,2-Trichloroethane	ND		0.500	1	12/29/2015 14:22	WG838847
Trichloroethene	143		0.500	1	12/29/2015 14:22	WG838847
Trichlorofluoromethane	ND		0.500	1	12/29/2015 14:22	WG838847
1,2,3-Trichloropropane	ND		2.50	1	12/29/2015 14:22	WG838847
1,2,4-Trimethylbenzene	ND		0.500	1	12/29/2015 14:22	WG838847
1,2,3-Trimethylbenzene	ND		0.500	1	12/29/2015 14:22	WG838847
1,3,5-Trimethylbenzene	ND		0.500	1	12/29/2015 14:22	WG838847
Vinyl acetate	ND		2.50	1	12/29/2015 14:22	WG838847
Vinyl chloride	3.64		0.500	1	12/29/2015 14:22	WG838847
Xylenes, Total	ND		1.50	1	12/29/2015 14:22	WG838847
(S) Toluene-d8	*97.2*		*90.0-115*		*12/29/2015 14:22*	WG838847
(S) Dibromofluoromethane	*103*		*79.0-121*		*12/29/2015 14:22*	WG838847
(S) 4-Bromofluorobenzene	*103*		*80.1-120*		*12/29/2015 14:22*	WG838847

Wet Chemistry by Method 350.1

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Ammonia Nitrogen	ND		250	1	12/28/2015 11:44	WG837955

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Nitrate	ND		100	1	12/17/2015 19:57	WG836377
Sulfate	7360		5000	1	12/17/2015 19:57	WG836377

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
TOC (Total Organic Carbon)	2720		1000	1	12/18/2015 23:25	WG836613

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Iron,Dissolved	142		100	1	12/22/2015 14:44	WG837018
Manganese,Dissolved	2730		10.0	1	12/22/2015 14:44	WG837018

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Methane	26.9		10.0	1	12/20/2015 15:11	WG837119
Ethane	ND		13.0	1	12/20/2015 15:11	WG837119
Ethene	ND		13.0	1	12/20/2015 15:11	WG837119

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Acetone	ND		25.0	1	12/29/2015 14:43	WG838847
Acrylonitrile	ND		2.50	1	12/29/2015 14:43	WG838847
Benzene	ND		0.500	1	12/29/2015 14:43	WG838847
Bromobenzene	ND		0.500	1	12/29/2015 14:43	WG838847
Bromodichloromethane	ND		0.500	1	12/29/2015 14:43	WG838847
Bromochloromethane	ND		0.500	1	12/29/2015 14:43	WG838847
Bromoform	ND		0.500	1	12/29/2015 14:43	WG838847
Bromomethane	ND		0.500	1	12/29/2015 14:43	WG838847
n-Butylbenzene	ND		0.500	1	12/29/2015 14:43	WG838847
sec-Butylbenzene	ND		0.500	1	12/29/2015 14:43	WG838847
tert-Butylbenzene	ND		0.500	1	12/29/2015 14:43	WG838847
Carbon disulfide	ND		0.500	1	12/29/2015 14:43	WG838847
Carbon tetrachloride	ND		0.500	1	12/29/2015 14:43	WG838847
Chlorobenzene	ND		0.500	1	12/29/2015 14:43	WG838847
Chlorodibromomethane	ND		0.500	1	12/29/2015 14:43	WG838847
Chloroethane	ND		0.500	1	12/29/2015 14:43	WG838847
2-Chloroethyl vinyl ether	ND		25.0	1	12/29/2015 14:43	WG838847
Chloroform	ND		0.500	1	12/29/2015 14:43	WG838847
Chloromethane	ND		0.500	1	12/29/2015 14:43	WG838847
2-Chlorotoluene	ND		0.500	1	12/29/2015 14:43	WG838847
4-Chlorotoluene	ND		0.500	1	12/29/2015 14:43	WG838847
1,2-Dibromo-3-Chloropropane	ND		1.00	1	12/29/2015 14:43	WG838847
1,2-Dibromoethane	ND		0.500	1	12/29/2015 14:43	WG838847
Dibromomethane	ND		0.500	1	12/29/2015 14:43	WG838847

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
1,2-Dichlorobenzene	ND		0.500	1	12/29/2015 14:43	WG838847
1,3-Dichlorobenzene	ND		0.500	1	12/29/2015 14:43	WG838847
1,4-Dichlorobenzene	ND		0.500	1	12/29/2015 14:43	WG838847
Dichlorodifluoromethane	ND		0.500	1	12/29/2015 14:43	WG838847
1,1-Dichloroethane	ND		0.500	1	12/29/2015 14:43	WG838847
1,2-Dichloroethane	ND		0.500	1	12/29/2015 14:43	WG838847
1,1-Dichloroethene	ND		0.500	1	12/29/2015 14:43	WG838847
cis-1,2-Dichloroethene	3.97		0.500	1	12/29/2015 14:43	WG838847
trans-1,2-Dichloroethene	ND		0.500	1	12/29/2015 14:43	WG838847
1,2-Dichloropropane	ND		0.500	1	12/29/2015 14:43	WG838847
1,1-Dichloropropene	ND		0.500	1	12/29/2015 14:43	WG838847
1,3-Dichloropropane	ND		0.500	1	12/29/2015 14:43	WG838847
cis-1,3-Dichloropropene	ND		0.500	1	12/29/2015 14:43	WG838847
trans-1,3-Dichloropropene	ND		0.500	1	12/29/2015 14:43	WG838847
trans-1,4-Dichloro-2-butene	ND		5.00	1	12/29/2015 14:43	WG838847
2,2-Dichloropropane	ND		0.500	1	12/29/2015 14:43	WG838847
Di-isopropyl ether	ND		0.500	1	12/29/2015 14:43	WG838847
Ethylbenzene	ND		0.500	1	12/29/2015 14:43	WG838847
Hexachloro-1,3-butadiene	ND		1.00	1	12/29/2015 14:43	WG838847
2-Hexanone	ND		2.50	1	12/29/2015 14:43	WG838847
n-Hexane	ND		1.00	1	12/29/2015 14:43	WG838847
Iodomethane	ND		10.0	1	12/29/2015 14:43	WG838847
Isopropylbenzene	ND		0.500	1	12/29/2015 14:43	WG838847
p-Isopropyltoluene	ND		0.500	1	12/29/2015 14:43	WG838847
2-Butanone (MEK)	ND		2.50	1	12/29/2015 14:43	WG838847
Methylene Chloride	ND		2.50	1	12/29/2015 14:43	WG838847
4-Methyl-2-pentanone (MIBK)	ND		2.50	1	12/29/2015 14:43	WG838847
Methyl tert-butyl ether	5.51		0.500	1	12/29/2015 14:43	WG838847
Naphthalene	ND		0.500	1	12/29/2015 14:43	WG838847
n-Propylbenzene	ND		0.500	1	12/29/2015 14:43	WG838847
Styrene	ND		0.500	1	12/29/2015 14:43	WG838847
1,1,1,2-Tetrachloroethane	ND		0.500	1	12/29/2015 14:43	WG838847
1,1,2,2-Tetrachloroethane	ND		0.500	1	12/29/2015 14:43	WG838847
1,1,2-Trichlorotrifluoroethane	ND		0.500	1	12/29/2015 14:43	WG838847
Tetrachloroethene	ND		0.500	1	12/29/2015 14:43	WG838847
Toluene	ND		0.500	1	12/29/2015 14:43	WG838847
1,2,3-Trichlorobenzene	ND		0.500	1	12/29/2015 14:43	WG838847
1,2,4-Trichlorobenzene	ND		0.500	1	12/29/2015 14:43	WG838847
1,1,1-Trichloroethane	ND		0.500	1	12/29/2015 14:43	WG838847
1,1,2-Trichloroethane	ND		0.500	1	12/29/2015 14:43	WG838847
Trichloroethene	366		2.50	5	12/30/2015 10:44	WG837451
Trichlorofluoromethane	ND		0.500	1	12/29/2015 14:43	WG838847
1,2,3-Trichloropropane	ND		2.50	1	12/29/2015 14:43	WG838847
1,2,4-Trimethylbenzene	ND		0.500	1	12/29/2015 14:43	WG838847
1,2,3-Trimethylbenzene	ND		0.500	1	12/29/2015 14:43	WG838847
1,3,5-Trimethylbenzene	ND		0.500	1	12/29/2015 14:43	WG838847
Vinyl acetate	ND		2.50	1	12/29/2015 14:43	WG838847
Vinyl chloride	ND		0.500	1	12/29/2015 14:43	WG838847
Xylenes, Total	ND		1.50	1	12/29/2015 14:43	WG838847
(S) Toluene-d8	*101*		*90.0-115*		*12/30/2015 10:44*	WG837451
(S) Dibromofluoromethane	*97.7*		*79.0-121*		*12/30/2015 10:44*	WG837451
(S) 4-Bromofluorobenzene	*105*		*80.1-120*		*12/30/2015 10:44*	WG837451

Wet Chemistry by Method 350.1

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Ammonia Nitrogen	ND		250	1	12/28/2015 11:47	WG837955

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Nitrate	ND		100	1	12/17/2015 20:13	WG836377
Sulfate	15400		5000	1	12/17/2015 20:13	WG836377

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
TOC (Total Organic Carbon)	1110		1000	1	12/18/2015 23:37	WG836613

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Iron,Dissolved	ND		100	1	12/22/2015 14:47	WG837018
Manganese,Dissolved	740		10.0	1	12/22/2015 14:47	WG837018

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Methane	ND		10.0	1	12/20/2015 15:13	WG837119
Ethane	ND		13.0	1	12/20/2015 15:13	WG837119
Ethene	ND		13.0	1	12/20/2015 15:13	WG837119

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Acetone	ND		25.0	1	12/28/2015 22:35	WG836765
Acrylonitrile	ND		2.50	1	12/28/2015 22:35	WG836765
Benzene	ND		0.500	1	12/28/2015 22:35	WG836765
Bromobenzene	ND		0.500	1	12/28/2015 22:35	WG836765
Bromodichloromethane	ND		0.500	1	12/28/2015 22:35	WG836765
Bromochloromethane	ND		0.500	1	12/28/2015 22:35	WG836765
Bromoform	ND		0.500	1	12/28/2015 22:35	WG836765
Bromomethane	ND		0.500	1	12/28/2015 22:35	WG836765
n-Butylbenzene	ND		0.500	1	12/28/2015 22:35	WG836765
sec-Butylbenzene	ND		0.500	1	12/28/2015 22:35	WG836765
tert-Butylbenzene	ND		0.500	1	12/28/2015 22:35	WG836765
Carbon disulfide	ND		0.500	1	12/28/2015 22:35	WG836765
Carbon tetrachloride	ND		0.500	1	12/28/2015 22:35	WG836765
Chlorobenzene	ND		0.500	1	12/28/2015 22:35	WG836765
Chlorodibromomethane	ND		0.500	1	12/28/2015 22:35	WG836765
Chloroethane	ND		0.500	1	12/28/2015 22:35	WG836765
2-Chloroethyl vinyl ether	ND		25.0	1	12/28/2015 22:35	WG836765
Chloroform	ND		0.500	1	12/28/2015 22:35	WG836765
Chloromethane	ND		0.500	1	12/28/2015 22:35	WG836765
2-Chlorotoluene	ND		0.500	1	12/28/2015 22:35	WG836765
4-Chlorotoluene	ND		0.500	1	12/28/2015 22:35	WG836765
1,2-Dibromo-3-Chloropropane	ND		1.00	1	12/28/2015 22:35	WG836765
1,2-Dibromoethane	ND		0.500	1	12/28/2015 22:35	WG836765
Dibromomethane	ND		0.500	1	12/28/2015 22:35	WG836765

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
1,2-Dichlorobenzene	ND		0.500	1	12/28/2015 22:35	WG836765
1,3-Dichlorobenzene	ND		0.500	1	12/28/2015 22:35	WG836765
1,4-Dichlorobenzene	ND		0.500	1	12/28/2015 22:35	WG836765
Dichlorodifluoromethane	ND		0.500	1	12/28/2015 22:35	WG836765
1,1-Dichloroethane	ND		0.500	1	12/28/2015 22:35	WG836765
1,2-Dichloroethane	ND		0.500	1	12/28/2015 22:35	WG836765
1,1-Dichloroethene	ND		0.500	1	12/28/2015 22:35	WG836765
cis-1,2-Dichloroethene	7.00		0.500	1	12/28/2015 22:35	WG836765
trans-1,2-Dichloroethene	ND		0.500	1	12/28/2015 22:35	WG836765
1,2-Dichloropropane	ND		0.500	1	12/28/2015 22:35	WG836765
1,1-Dichloropropene	ND		0.500	1	12/28/2015 22:35	WG836765
1,3-Dichloropropane	ND		0.500	1	12/28/2015 22:35	WG836765
cis-1,3-Dichloropropene	ND		0.500	1	12/28/2015 22:35	WG836765
trans-1,3-Dichloropropene	ND		0.500	1	12/28/2015 22:35	WG836765
trans-1,4-Dichloro-2-butene	ND		5.00	1	12/28/2015 22:35	WG836765
2,2-Dichloropropane	ND		0.500	1	12/28/2015 22:35	WG836765
Di-isopropyl ether	ND		0.500	1	12/28/2015 22:35	WG836765
Ethylbenzene	ND		0.500	1	12/28/2015 22:35	WG836765
Hexachloro-1,3-butadiene	ND		1.00	1	12/28/2015 22:35	WG836765
2-Hexanone	ND		2.50	1	12/28/2015 22:35	WG836765
n-Hexane	ND		1.00	1	12/28/2015 22:35	WG836765
Iodomethane	ND		10.0	1	12/28/2015 22:35	WG836765
Isopropylbenzene	ND		0.500	1	12/28/2015 22:35	WG836765
p-Isopropyltoluene	ND		0.500	1	12/28/2015 22:35	WG836765
2-Butanone (MEK)	ND		2.50	1	12/28/2015 22:35	WG836765
Methylene Chloride	ND		2.50	1	12/28/2015 22:35	WG836765
4-Methyl-2-pentanone (MIBK)	ND		2.50	1	12/28/2015 22:35	WG836765
Methyl tert-butyl ether	ND		0.500	1	12/28/2015 22:35	WG836765
Naphthalene	ND		0.500	1	12/28/2015 22:35	WG836765
n-Propylbenzene	ND		0.500	1	12/28/2015 22:35	WG836765
Styrene	ND		0.500	1	12/28/2015 22:35	WG836765
1,1,1,2-Tetrachloroethane	ND		0.500	1	12/28/2015 22:35	WG836765
1,1,2,2-Tetrachloroethane	ND		0.500	1	12/28/2015 22:35	WG836765
1,1,2-Trichlorotrifluoroethane	ND		0.500	1	12/28/2015 22:35	WG836765
Tetrachloroethene	ND		0.500	1	12/28/2015 22:35	WG836765
Toluene	ND		0.500	1	12/28/2015 22:35	WG836765
1,2,3-Trichlorobenzene	ND		0.500	1	12/28/2015 22:35	WG836765
1,2,4-Trichlorobenzene	ND		0.500	1	12/28/2015 22:35	WG836765
1,1,1-Trichloroethane	ND		0.500	1	12/28/2015 22:35	WG836765
1,1,2-Trichloroethane	ND		0.500	1	12/28/2015 22:35	WG836765
Trichloroethene	4.54		0.500	1	12/28/2015 22:35	WG836765
Trichlorofluoromethane	ND		0.500	1	12/28/2015 22:35	WG836765
1,2,3-Trichloropropane	ND		2.50	1	12/28/2015 22:35	WG836765
1,2,4-Trimethylbenzene	ND		0.500	1	12/28/2015 22:35	WG836765
1,2,3-Trimethylbenzene	ND		0.500	1	12/28/2015 22:35	WG836765
1,3,5-Trimethylbenzene	ND		0.500	1	12/28/2015 22:35	WG836765
Vinyl acetate	ND		2.50	1	12/28/2015 22:35	WG836765
Vinyl chloride	ND		0.500	1	12/28/2015 22:35	WG836765
Xylenes, Total	ND		1.50	1	12/28/2015 22:35	WG836765
(S) Toluene-d8	*105*		*90.0-115*		*12/28/2015 22:35*	WG836765
(S) Dibromofluoromethane	*101*		*79.0-121*		*12/28/2015 22:35*	WG836765
(S) 4-Bromofluorobenzene	*103*		*80.1-120*		*12/28/2015 22:35*	WG836765

Wet Chemistry by Method 350.1

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Ammonia Nitrogen	ND		250	1	12/28/2015 11:49	WG837955

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Nitrate	ND		100	1	12/17/2015 23:18	WG836377
Sulfate	11300		5000	1	12/17/2015 23:18	WG836377

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
TOC (Total Organic Carbon)	1410		1000	1	12/18/2015 15:30	WG836368

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Iron,Dissolved	392		100	1	12/22/2015 14:50	WG837018
Manganese,Dissolved	5130		20.0	2	12/22/2015 23:49	WG837018

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Methane	24.5		10.0	1	12/20/2015 15:16	WG837119
Ethane	ND		13.0	1	12/20/2015 15:16	WG837119
Ethene	ND		13.0	1	12/20/2015 15:16	WG837119

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Acetone	ND		25.0	1	12/28/2015 22:56	WG836765
Acrylonitrile	ND		2.50	1	12/28/2015 22:56	WG836765
Benzene	ND		0.500	1	12/28/2015 22:56	WG836765
Bromobenzene	ND		0.500	1	12/28/2015 22:56	WG836765
Bromodichloromethane	ND		0.500	1	12/28/2015 22:56	WG836765
Bromochloromethane	ND		0.500	1	12/28/2015 22:56	WG836765
Bromoform	ND		0.500	1	12/28/2015 22:56	WG836765
Bromomethane	ND		0.500	1	12/28/2015 22:56	WG836765
n-Butylbenzene	ND		0.500	1	12/28/2015 22:56	WG836765
sec-Butylbenzene	ND		0.500	1	12/28/2015 22:56	WG836765
tert-Butylbenzene	ND		0.500	1	12/28/2015 22:56	WG836765
Carbon disulfide	ND		0.500	1	12/28/2015 22:56	WG836765
Carbon tetrachloride	ND		0.500	1	12/28/2015 22:56	WG836765
Chlorobenzene	ND		0.500	1	12/28/2015 22:56	WG836765
Chlorodibromomethane	ND		0.500	1	12/28/2015 22:56	WG836765
Chloroethane	ND		0.500	1	12/28/2015 22:56	WG836765
2-Chloroethyl vinyl ether	ND		25.0	1	12/28/2015 22:56	WG836765
Chloroform	ND		0.500	1	12/28/2015 22:56	WG836765
Chloromethane	ND		0.500	1	12/28/2015 22:56	WG836765
2-Chlorotoluene	ND		0.500	1	12/28/2015 22:56	WG836765
4-Chlorotoluene	ND		0.500	1	12/28/2015 22:56	WG836765
1,2-Dibromo-3-Chloropropane	ND		1.00	1	12/28/2015 22:56	WG836765
1,2-Dibromoethane	ND		0.500	1	12/28/2015 22:56	WG836765
Dibromomethane	ND		0.500	1	12/28/2015 22:56	WG836765

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
1,2-Dichlorobenzene	ND		0.500	1	12/28/2015 22:56	WG836765
1,3-Dichlorobenzene	ND		0.500	1	12/28/2015 22:56	WG836765
1,4-Dichlorobenzene	ND		0.500	1	12/28/2015 22:56	WG836765
Dichlorodifluoromethane	ND		0.500	1	12/28/2015 22:56	WG836765
1,1-Dichloroethane	ND		0.500	1	12/28/2015 22:56	WG836765
1,2-Dichloroethane	ND		0.500	1	12/28/2015 22:56	WG836765
1,1-Dichloroethene	ND		0.500	1	12/28/2015 22:56	WG836765
cis-1,2-Dichloroethene	7.41		0.500	1	12/28/2015 22:56	WG836765
trans-1,2-Dichloroethene	ND		0.500	1	12/28/2015 22:56	WG836765
1,2-Dichloropropane	ND		0.500	1	12/28/2015 22:56	WG836765
1,1-Dichloropropene	ND		0.500	1	12/28/2015 22:56	WG836765
1,3-Dichloropropane	ND		0.500	1	12/28/2015 22:56	WG836765
cis-1,3-Dichloropropene	ND		0.500	1	12/28/2015 22:56	WG836765
trans-1,3-Dichloropropene	ND		0.500	1	12/28/2015 22:56	WG836765
trans-1,4-Dichloro-2-butene	ND		5.00	1	12/28/2015 22:56	WG836765
2,2-Dichloropropane	ND		0.500	1	12/28/2015 22:56	WG836765
Di-isopropyl ether	ND		0.500	1	12/28/2015 22:56	WG836765
Ethylbenzene	ND		0.500	1	12/28/2015 22:56	WG836765
Hexachloro-1,3-butadiene	ND		1.00	1	12/28/2015 22:56	WG836765
2-Hexanone	ND		2.50	1	12/28/2015 22:56	WG836765
n-Hexane	ND		1.00	1	12/28/2015 22:56	WG836765
Iodomethane	ND		10.0	1	12/28/2015 22:56	WG836765
Isopropylbenzene	ND		0.500	1	12/28/2015 22:56	WG836765
p-Isopropyltoluene	ND		0.500	1	12/28/2015 22:56	WG836765
2-Butanone (MEK)	ND		2.50	1	12/28/2015 22:56	WG836765
Methylene Chloride	ND		2.50	1	12/28/2015 22:56	WG836765
4-Methyl-2-pentanone (MIBK)	ND		2.50	1	12/28/2015 22:56	WG836765
Methyl tert-butyl ether	ND		0.500	1	12/28/2015 22:56	WG836765
Naphthalene	0.535		0.500	1	12/28/2015 22:56	WG836765
n-Propylbenzene	ND		0.500	1	12/28/2015 22:56	WG836765
Styrene	ND		0.500	1	12/28/2015 22:56	WG836765
1,1,1,2-Tetrachloroethane	ND		0.500	1	12/28/2015 22:56	WG836765
1,1,2,2-Tetrachloroethane	ND		0.500	1	12/28/2015 22:56	WG836765
1,1,2-Trichlorotrifluoroethane	ND		0.500	1	12/28/2015 22:56	WG836765
Tetrachloroethene	ND		0.500	1	12/28/2015 22:56	WG836765
Toluene	ND		0.500	1	12/28/2015 22:56	WG836765
1,2,3-Trichlorobenzene	ND		0.500	1	12/28/2015 22:56	WG836765
1,2,4-Trichlorobenzene	ND		0.500	1	12/28/2015 22:56	WG836765
1,1,1-Trichloroethane	ND		0.500	1	12/28/2015 22:56	WG836765
1,1,2-Trichloroethane	ND		0.500	1	12/28/2015 22:56	WG836765
Trichloroethene	12.7		0.500	1	12/28/2015 22:56	WG836765
Trichlorofluoromethane	ND		0.500	1	12/28/2015 22:56	WG836765
1,2,3-Trichloropropane	ND		2.50	1	12/28/2015 22:56	WG836765
1,2,4-Trimethylbenzene	ND		0.500	1	12/28/2015 22:56	WG836765
1,2,3-Trimethylbenzene	ND		0.500	1	12/28/2015 22:56	WG836765
1,3,5-Trimethylbenzene	ND		0.500	1	12/28/2015 22:56	WG836765
Vinyl acetate	ND		2.50	1	12/28/2015 22:56	WG836765
Vinyl chloride	ND		0.500	1	12/28/2015 22:56	WG836765
Xylenes, Total	ND		1.50	1	12/28/2015 22:56	WG836765
(S) Toluene-d8	*103*		*90.0-115*		*12/28/2015 22:56*	WG836765
(S) Dibromofluoromethane	*106*		*79.0-121*		*12/28/2015 22:56*	WG836765
(S) 4-Bromofluorobenzene	*102*		*80.1-120*		*12/28/2015 22:56*	WG836765

Wet Chemistry by Method 350.1

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Ammonia Nitrogen	ND		250	1	12/28/2015 11:52	WG837955

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Nitrate	ND		100	1	12/18/2015 00:04	WG836377
Sulfate	12400		5000	1	12/18/2015 00:04	WG836377

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
TOC (Total Organic Carbon)	1210		1000	1	12/18/2015 15:46	WG836368

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Iron,Dissolved	ND		100	1	12/22/2015 14:53	WG837018
Manganese,Dissolved	1760		10.0	1	12/22/2015 14:53	WG837018

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Methane	39.8		10.0	1	12/20/2015 15:19	WG837119
Ethane	ND		13.0	1	12/20/2015 15:19	WG837119
Ethene	ND		13.0	1	12/20/2015 15:19	WG837119

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Acetone	ND		25.0	1	12/28/2015 23:17	WG836765
Acrylonitrile	ND		2.50	1	12/28/2015 23:17	WG836765
Benzene	ND		0.500	1	12/28/2015 23:17	WG836765
Bromobenzene	ND		0.500	1	12/28/2015 23:17	WG836765
Bromodichloromethane	ND		0.500	1	12/28/2015 23:17	WG836765
Bromochloromethane	ND		0.500	1	12/28/2015 23:17	WG836765
Bromoform	ND		0.500	1	12/28/2015 23:17	WG836765
Bromomethane	ND		0.500	1	12/28/2015 23:17	WG836765
n-Butylbenzene	ND		0.500	1	12/28/2015 23:17	WG836765
sec-Butylbenzene	ND		0.500	1	12/28/2015 23:17	WG836765
tert-Butylbenzene	ND		0.500	1	12/28/2015 23:17	WG836765
Carbon disulfide	ND		0.500	1	12/28/2015 23:17	WG836765
Carbon tetrachloride	ND		0.500	1	12/28/2015 23:17	WG836765
Chlorobenzene	ND		0.500	1	12/28/2015 23:17	WG836765
Chlorodibromomethane	ND		0.500	1	12/28/2015 23:17	WG836765
Chloroethane	ND		0.500	1	12/28/2015 23:17	WG836765
2-Chloroethyl vinyl ether	ND		25.0	1	12/28/2015 23:17	WG836765
Chloroform	ND		0.500	1	12/28/2015 23:17	WG836765
Chloromethane	ND		0.500	1	12/28/2015 23:17	WG836765
2-Chlorotoluene	ND		0.500	1	12/28/2015 23:17	WG836765
4-Chlorotoluene	ND		0.500	1	12/28/2015 23:17	WG836765
1,2-Dibromo-3-Chloropropane	ND		1.00	1	12/28/2015 23:17	WG836765
1,2-Dibromoethane	ND		0.500	1	12/28/2015 23:17	WG836765
Dibromomethane	ND		0.500	1	12/28/2015 23:17	WG836765

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
1,2-Dichlorobenzene	ND		0.500	1	12/28/2015 23:17	WG836765
1,3-Dichlorobenzene	ND		0.500	1	12/28/2015 23:17	WG836765
1,4-Dichlorobenzene	ND		0.500	1	12/28/2015 23:17	WG836765
Dichlorodifluoromethane	ND		0.500	1	12/28/2015 23:17	WG836765
1,1-Dichloroethane	ND		0.500	1	12/28/2015 23:17	WG836765
1,2-Dichloroethane	ND		0.500	1	12/28/2015 23:17	WG836765
1,1-Dichloroethene	0.954		0.500	1	12/28/2015 23:17	WG836765
cis-1,2-Dichloroethene	261		12.5	25	12/29/2015 15:03	WG838847
trans-1,2-Dichloroethene	1.27		0.500	1	12/28/2015 23:17	WG836765
1,2-Dichloropropane	ND		0.500	1	12/28/2015 23:17	WG836765
1,1-Dichloropropene	ND		0.500	1	12/28/2015 23:17	WG836765
1,3-Dichloropropane	ND		0.500	1	12/28/2015 23:17	WG836765
cis-1,3-Dichloropropene	ND		0.500	1	12/28/2015 23:17	WG836765
trans-1,3-Dichloropropene	ND		0.500	1	12/28/2015 23:17	WG836765
trans-1,4-Dichloro-2-butene	ND		5.00	1	12/28/2015 23:17	WG836765
2,2-Dichloropropane	ND		0.500	1	12/28/2015 23:17	WG836765
Di-isopropyl ether	ND		0.500	1	12/28/2015 23:17	WG836765
Ethylbenzene	ND		0.500	1	12/28/2015 23:17	WG836765
Hexachloro-1,3-butadiene	ND		1.00	1	12/28/2015 23:17	WG836765
2-Hexanone	ND		2.50	1	12/28/2015 23:17	WG836765
n-Hexane	ND		1.00	1	12/28/2015 23:17	WG836765
Iodomethane	ND		10.0	1	12/28/2015 23:17	WG836765
Isopropylbenzene	ND		0.500	1	12/28/2015 23:17	WG836765
p-Isopropyltoluene	ND		0.500	1	12/28/2015 23:17	WG836765
2-Butanone (MEK)	ND		2.50	1	12/28/2015 23:17	WG836765
Methylene Chloride	ND		2.50	1	12/28/2015 23:17	WG836765
4-Methyl-2-pentanone (MIBK)	ND		2.50	1	12/28/2015 23:17	WG836765
Methyl tert-butyl ether	ND		0.500	1	12/28/2015 23:17	WG836765
Naphthalene	ND		0.500	1	12/28/2015 23:17	WG836765
n-Propylbenzene	ND		0.500	1	12/28/2015 23:17	WG836765
Styrene	ND		0.500	1	12/28/2015 23:17	WG836765
1,1,1,2-Tetrachloroethane	ND		0.500	1	12/28/2015 23:17	WG836765
1,1,2,2-Tetrachloroethane	ND		0.500	1	12/28/2015 23:17	WG836765
1,1,2-Trichlorotrifluoroethane	ND		0.500	1	12/28/2015 23:17	WG836765
Tetrachloroethene	ND		0.500	1	12/28/2015 23:17	WG836765
Toluene	ND		0.500	1	12/28/2015 23:17	WG836765
1,2,3-Trichlorobenzene	ND		0.500	1	12/28/2015 23:17	WG836765
1,2,4-Trichlorobenzene	ND		0.500	1	12/28/2015 23:17	WG836765
1,1,1-Trichloroethane	ND		0.500	1	12/28/2015 23:17	WG836765
1,1,2-Trichloroethane	ND		0.500	1	12/28/2015 23:17	WG836765
Trichloroethene	1650		12.5	25	12/29/2015 15:03	WG838847
Trichlorofluoromethane	ND		0.500	1	12/28/2015 23:17	WG836765
1,2,3-Trichloropropane	ND		2.50	1	12/28/2015 23:17	WG836765
1,2,4-Trimethylbenzene	ND		0.500	1	12/28/2015 23:17	WG836765
1,2,3-Trimethylbenzene	ND		0.500	1	12/28/2015 23:17	WG836765
1,3,5-Trimethylbenzene	ND		0.500	1	12/28/2015 23:17	WG836765
Vinyl acetate	ND		2.50	1	12/28/2015 23:17	WG836765
Vinyl chloride	ND		0.500	1	12/28/2015 23:17	WG836765
Xylenes, Total	ND		1.50	1	12/28/2015 23:17	WG836765
(S) Toluene-d8	*84.3*	J2	*90.0-115*		*12/28/2015 23:17*	WG836765
(S) Dibromofluoromethane	*101*		*79.0-121*		*12/28/2015 23:17*	WG836765
(S) 4-Bromofluorobenzene	*100*		*80.1-120*		*12/28/2015 23:17*	WG836765

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Acetone	ND		25.0	1	12/28/2015 16:24	WG836734
Acrylonitrile	ND		2.50	1	12/28/2015 16:24	WG836734
Benzene	ND		0.500	1	12/28/2015 16:24	WG836734
Bromobenzene	ND		0.500	1	12/28/2015 16:24	WG836734
Bromodichloromethane	ND		0.500	1	12/28/2015 16:24	WG836734
Bromochloromethane	ND		0.500	1	12/28/2015 16:24	WG836734
Bromoform	ND		0.500	1	12/28/2015 16:24	WG836734
Bromomethane	ND		0.500	1	12/28/2015 16:24	WG836734
n-Butylbenzene	ND		0.500	1	12/28/2015 16:24	WG836734
sec-Butylbenzene	ND		0.500	1	12/28/2015 16:24	WG836734
tert-Butylbenzene	ND		0.500	1	12/28/2015 16:24	WG836734
Carbon disulfide	ND		0.500	1	12/28/2015 16:24	WG836734
Carbon tetrachloride	ND		0.500	1	12/28/2015 16:24	WG836734
Chlorobenzene	ND		0.500	1	12/28/2015 16:24	WG836734
Chlorodibromomethane	ND		0.500	1	12/28/2015 16:24	WG836734
Chloroethane	ND		0.500	1	12/28/2015 16:24	WG836734
2-Chloroethyl vinyl ether	ND		25.0	1	12/28/2015 16:24	WG836734
Chloroform	ND		0.500	1	12/28/2015 16:24	WG836734
Chloromethane	ND		0.500	1	12/28/2015 16:24	WG836734
2-Chlorotoluene	ND		0.500	1	12/28/2015 16:24	WG836734
4-Chlorotoluene	ND		0.500	1	12/28/2015 16:24	WG836734
1,2-Dibromo-3-Chloropropane	ND		1.00	1	12/28/2015 16:24	WG836734
1,2-Dibromoethane	ND		0.500	1	12/28/2015 16:24	WG836734
Dibromomethane	ND		0.500	1	12/28/2015 16:24	WG836734
1,2-Dichlorobenzene	ND		0.500	1	12/28/2015 16:24	WG836734
1,3-Dichlorobenzene	ND		0.500	1	12/28/2015 16:24	WG836734
1,4-Dichlorobenzene	ND		0.500	1	12/28/2015 16:24	WG836734
Dichlorodifluoromethane	ND		0.500	1	12/28/2015 16:24	WG836734
1,1-Dichloroethane	ND		0.500	1	12/28/2015 16:24	WG836734
1,2-Dichloroethane	ND		0.500	1	12/28/2015 16:24	WG836734
1,1-Dichloroethene	ND		0.500	1	12/28/2015 16:24	WG836734
cis-1,2-Dichloroethene	ND		0.500	1	12/28/2015 16:24	WG836734
trans-1,2-Dichloroethene	ND		0.500	1	12/28/2015 16:24	WG836734
1,2-Dichloropropane	ND		0.500	1	12/28/2015 16:24	WG836734
1,1-Dichloropropene	ND		0.500	1	12/28/2015 16:24	WG836734
1,3-Dichloropropane	ND		0.500	1	12/28/2015 16:24	WG836734
cis-1,3-Dichloropropene	ND		0.500	1	12/28/2015 16:24	WG836734
trans-1,3-Dichloropropene	ND		0.500	1	12/28/2015 16:24	WG836734
trans-1,4-Dichloro-2-butene	ND		5.00	1	12/28/2015 16:24	WG836734
2,2-Dichloropropane	ND		0.500	1	12/28/2015 16:24	WG836734
Di-isopropyl ether	ND		0.500	1	12/28/2015 16:24	WG836734
Ethylbenzene	ND		0.500	1	12/28/2015 16:24	WG836734
Hexachloro-1,3-butadiene	ND		1.00	1	12/28/2015 16:24	WG836734
2-Hexanone	ND		2.50	1	12/28/2015 16:24	WG836734
n-Hexane	ND		1.00	1	12/28/2015 16:24	WG836734
Iodomethane	ND		10.0	1	12/28/2015 16:24	WG836734
Isopropylbenzene	ND		0.500	1	12/28/2015 16:24	WG836734
p-Isopropyltoluene	ND		0.500	1	12/28/2015 16:24	WG836734
2-Butanone (MEK)	ND		2.50	1	12/28/2015 16:24	WG836734
Methylene Chloride	ND		2.50	1	12/28/2015 16:24	WG836734
4-Methyl-2-pentanone (MIBK)	ND		2.50	1	12/28/2015 16:24	WG836734
Methyl tert-butyl ether	ND		0.500	1	12/28/2015 16:24	WG836734
Naphthalene	ND		0.500	1	12/28/2015 16:24	WG836734
n-Propylbenzene	ND		0.500	1	12/28/2015 16:24	WG836734
Styrene	ND		0.500	1	12/28/2015 16:24	WG836734
1,1,1,2-Tetrachloroethane	ND		0.500	1	12/28/2015 16:24	WG836734

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
1,1,2,2-Tetrachloroethane	ND		0.500	1	12/28/2015 16:24	WG836734
1,1,2-Trichlorotrifluoroethane	ND		0.500	1	12/28/2015 16:24	WG836734
Tetrachloroethene	ND		0.500	1	12/28/2015 16:24	WG836734
Toluene	ND		0.500	1	12/28/2015 16:24	WG836734
1,2,3-Trichlorobenzene	ND		0.500	1	12/28/2015 16:24	WG836734
1,2,4-Trichlorobenzene	ND		0.500	1	12/28/2015 16:24	WG836734
1,1,1-Trichloroethane	ND		0.500	1	12/28/2015 16:24	WG836734
1,1,2-Trichloroethane	ND		0.500	1	12/28/2015 16:24	WG836734
Trichloroethene	ND		0.500	1	12/28/2015 16:24	WG836734
Trichlorofluoromethane	ND		0.500	1	12/28/2015 16:24	WG836734
1,2,3-Trichloropropane	ND		2.50	1	12/28/2015 16:24	WG836734
1,2,4-Trimethylbenzene	ND		0.500	1	12/28/2015 16:24	WG836734
1,2,3-Trimethylbenzene	ND		0.500	1	12/28/2015 16:24	WG836734
1,3,5-Trimethylbenzene	ND		0.500	1	12/28/2015 16:24	WG836734
Vinyl acetate	ND		2.50	1	12/28/2015 16:24	WG836734
Vinyl chloride	ND		0.500	1	12/28/2015 16:24	WG836734
Xylenes, Total	ND		1.50	1	12/28/2015 16:24	WG836734
(S) Toluene-d8	*106*		*90.0-115*		*12/28/2015 16:24*	WG836734
(S) Dibromofluoromethane	*105*		*79.0-121*		*12/28/2015 16:24*	WG836734
(S) 4-Bromofluorobenzene	*100*		*80.1-120*		*12/28/2015 16:24*	WG836734

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	ND		125	5	12/28/2015 15:22	WG836734
Acrylonitrile	ND		12.5	5	12/28/2015 15:22	WG836734
Benzene	ND		2.50	5	12/28/2015 15:22	WG836734
Bromobenzene	ND		2.50	5	12/28/2015 15:22	WG836734
Bromodichloromethane	ND		2.50	5	12/28/2015 15:22	WG836734
Bromochloromethane	ND		2.50	5	12/28/2015 15:22	WG836734
Bromoform	ND		2.50	5	12/28/2015 15:22	WG836734
Bromomethane	ND		2.50	5	12/28/2015 15:22	WG836734
n-Butylbenzene	ND		2.50	5	12/28/2015 15:22	WG836734
sec-Butylbenzene	ND		2.50	5	12/28/2015 15:22	WG836734
tert-Butylbenzene	ND		2.50	5	12/28/2015 15:22	WG836734
Carbon disulfide	ND		2.50	5	12/28/2015 15:22	WG836734
Carbon tetrachloride	ND		2.50	5	12/28/2015 15:22	WG836734
Chlorobenzene	ND		2.50	5	12/28/2015 15:22	WG836734
Chlorodibromomethane	ND		2.50	5	12/28/2015 15:22	WG836734
Chloroethane	ND		2.50	5	12/28/2015 15:22	WG836734
2-Chloroethyl vinyl ether	ND		125	5	12/28/2015 15:22	WG836734
Chloroform	ND		2.50	5	12/28/2015 15:22	WG836734
Chloromethane	ND		2.50	5	12/28/2015 15:22	WG836734
2-Chlorotoluene	ND		2.50	5	12/28/2015 15:22	WG836734
4-Chlorotoluene	ND		2.50	5	12/28/2015 15:22	WG836734
1,2-Dibromo-3-Chloropropane	ND		5.00	5	12/28/2015 15:22	WG836734
1,2-Dibromoethane	ND		2.50	5	12/28/2015 15:22	WG836734
Dibromomethane	ND		2.50	5	12/28/2015 15:22	WG836734
1,2-Dichlorobenzene	ND		2.50	5	12/28/2015 15:22	WG836734
1,3-Dichlorobenzene	ND		2.50	5	12/28/2015 15:22	WG836734
1,4-Dichlorobenzene	ND		2.50	5	12/28/2015 15:22	WG836734
Dichlorodifluoromethane	ND		2.50	5	12/28/2015 15:22	WG836734
1,1-Dichloroethane	ND		2.50	5	12/28/2015 15:22	WG836734
1,2-Dichloroethane	ND		2.50	5	12/28/2015 15:22	WG836734
1,1-Dichloroethene	ND		2.50	5	12/28/2015 15:22	WG836734
cis-1,2-Dichloroethene	254		2.50	5	12/28/2015 15:22	WG836734
trans-1,2-Dichloroethene	ND		2.50	5	12/28/2015 15:22	WG836734
1,2-Dichloropropane	ND		2.50	5	12/28/2015 15:22	WG836734
1,1-Dichloropropene	ND		2.50	5	12/28/2015 15:22	WG836734
1,3-Dichloropropane	ND		2.50	5	12/28/2015 15:22	WG836734
cis-1,3-Dichloropropene	ND		2.50	5	12/28/2015 15:22	WG836734
trans-1,3-Dichloropropene	ND		2.50	5	12/28/2015 15:22	WG836734
trans-1,4-Dichloro-2-butene	ND		25.0	5	12/28/2015 15:22	WG836734
2,2-Dichloropropane	ND		2.50	5	12/28/2015 15:22	WG836734
Di-isopropyl ether	ND		2.50	5	12/28/2015 15:22	WG836734
Ethylbenzene	ND		2.50	5	12/28/2015 15:22	WG836734
Hexachloro-1,3-butadiene	ND		5.00	5	12/28/2015 15:22	WG836734
2-Hexanone	ND		12.5	5	12/28/2015 15:22	WG836734
n-Hexane	ND		5.00	5	12/28/2015 15:22	WG836734
Iodomethane	ND		50.0	5	12/28/2015 15:22	WG836734
Isopropylbenzene	ND		2.50	5	12/28/2015 15:22	WG836734
p-Isopropyltoluene	ND		2.50	5	12/28/2015 15:22	WG836734
2-Butanone (MEK)	ND		12.5	5	12/28/2015 15:22	WG836734
Methylene Chloride	ND		12.5	5	12/28/2015 15:22	WG836734
4-Methyl-2-pentanone (MIBK)	ND		12.5	5	12/28/2015 15:22	WG836734
Methyl tert-butyl ether	ND		2.50	5	12/28/2015 15:22	WG836734
Naphthalene	ND		2.50	5	12/28/2015 15:22	WG836734
n-Propylbenzene	ND		2.50	5	12/28/2015 15:22	WG836734
Styrene	ND		2.50	5	12/28/2015 15:22	WG836734
1,1,1,2-Tetrachloroethane	ND		2.50	5	12/28/2015 15:22	WG836734

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
1,1,2,2-Tetrachloroethane	ND		2.50	5	12/28/2015 15:22	WG836734
1,1,2-Trichlorotrifluoroethane	ND		2.50	5	12/28/2015 15:22	WG836734
Tetrachloroethene	ND		2.50	5	12/28/2015 15:22	WG836734
Toluene	ND		2.50	5	12/28/2015 15:22	WG836734
1,2,3-Trichlorobenzene	ND		2.50	5	12/28/2015 15:22	WG836734
1,2,4-Trichlorobenzene	ND		2.50	5	12/28/2015 15:22	WG836734
1,1,1-Trichloroethane	ND		2.50	5	12/28/2015 15:22	WG836734
1,1,2-Trichloroethane	ND		2.50	5	12/28/2015 15:22	WG836734
Trichloroethene	1190		12.5	25	12/28/2015 16:54	WG836734
Trichlorofluoromethane	ND		2.50	5	12/28/2015 15:22	WG836734
1,2,3-Trichloropropane	ND		12.5	5	12/28/2015 15:22	WG836734
1,2,4-Trimethylbenzene	ND		2.50	5	12/28/2015 15:22	WG836734
1,2,3-Trimethylbenzene	ND		2.50	5	12/28/2015 15:22	WG836734
1,3,5-Trimethylbenzene	ND		2.50	5	12/28/2015 15:22	WG836734
Vinyl acetate	ND		12.5	5	12/28/2015 15:22	WG836734
Vinyl chloride	ND		2.50	5	12/28/2015 15:22	WG836734
Xylenes, Total	ND		7.50	5	12/28/2015 15:22	WG836734
(S) Toluene-d8	*94.3*		*90.0-115*		*12/28/2015 15:22*	WG836734
(S) Dibromofluoromethane	*103*		*79.0-121*		*12/28/2015 15:22*	WG836734
(S) 4-Bromofluorobenzene	*103*		*80.1-120*		*12/28/2015 15:22*	WG836734

Method Blank (MB)

(MB) 12/22/15 18:03

Analyte	MB Result mg/l	MB Qualifier	MB RDL mg/l
Ammonia Nitrogen	ND		0.250

L807399-02 Original Sample (OS) • Duplicate (DUP)

(OS) 12/22/15 18:15 • (DUP) 12/22/15 18:18

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Ammonia Nitrogen	ND	-0.0880	1	0		20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 12/22/15 18:08 • (LCSD) 12/22/15 18:10

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ammonia Nitrogen	7.50	7.10	7.11	95	95	90-110			0	20

L807418-01 Original Sample (OS) • Matrix Spike (MS)

(OS) 12/22/15 18:23 • (MS) 12/22/15 18:25

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Ammonia Nitrogen	10.0	ND	9.60	96	1	90-110	

Method Blank (MB)

(MB) 12/28/15 10:52

Analyte	MB Result mg/l	MB Qualifier	MB RDL mg/l
Ammonia Nitrogen	ND		0.250

L807096-01 Original Sample (OS) • Duplicate (DUP)

(OS) 12/28/15 12:32 • (DUP) 12/28/15 12:34

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Ammonia Nitrogen	35.8	34.3	5	4		20

L807437-01 Original Sample (OS) • Duplicate (DUP)

(OS) 12/28/15 12:37 • (DUP) 12/28/15 12:39

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Ammonia Nitrogen	37.6	40.8	5	8		20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 12/28/15 12:49 • (LCSD) 12/28/15 10:59

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ammonia Nitrogen	7.50	7.98	7.70	106	103	90-110			4	20

L807096-03 Original Sample (OS) • Matrix Spike (MS)

(OS) 12/28/15 11:22 • (MS) 12/28/15 11:24

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Ammonia Nitrogen	10.0	ND	9.01	90	1	90-110	

L807447-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 12/28/15 12:42 • (MS) 12/28/15 12:44 • (MSD) 12/28/15 12:47

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Ammonia Nitrogen	10.0	109	103	106	0	0	10	90-110	V	V	3	20

Method Blank (MB)

(MB) 12/17/15 06:58

Analyte	MB Result mg/l	MB Qualifier	MB RDL mg/l
Nitrate	ND		0.100

L807383-07 Original Sample (OS) • Duplicate (DUP)

(OS) 12/17/15 15:25 • (DUP) 12/17/15 15:39

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Nitrate	0.186	0.183	1	2		15
Sulfate	21.5	21.5	1	0		15

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 12/17/15 07:11 • (LCSD) 12/17/15 07:25

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Nitrate	8.00	8.05	8.06	101	101	80-120			0	15
Sulfate	40.0	39.5	39.5	99	99	80-120			0	15

Method Blank (MB)

(MB) 12/17/15 16:11

Analyte	MB Result mg/l	MB Qualifier	MB RDL mg/l
Nitrate	ND		0.100
Sulfate	ND		5.00

L807433-15 Original Sample (OS) • Duplicate (DUP)

(OS) 12/17/15 17:38 • (DUP) 12/17/15 17:54

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Nitrate	0.277	0.275	1	1		15
Sulfate	10.2	10.3	1	1		15

L807433-21 Original Sample (OS) • Duplicate (DUP)

(OS) 12/18/15 00:04 • (DUP) 12/18/15 00:19

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Nitrate	ND	0.000	1	0		15
Sulfate	12.4	12.4	1	0		15

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 12/17/15 16:25 • (LCSD) 12/17/15 16:40

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Nitrate	8.00	8.11	8.10	101	101	80-120			0	15
Sulfate	40.0	40.2	40.2	101	100	80-120			0	15

L807433-16 Original Sample (OS) • Matrix Spike (MS)

(OS) 12/17/15 18:09 • (MS) 12/17/15 18:25

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Nitrate	5.00	ND	4.99	100	1	80-120	
Sulfate	50.0	14.3	64.3	100	1	80-120	

L807433-20 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 12/17/15 23:18 • (MS) 12/17/15 23:33 • (MSD) 12/17/15 23:48

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Nitrate	5.00	ND	4.96	5.08	99	102	1	80-120			2	15
Sulfate	50.0	11.3	61.6	62.7	101	103	1	80-120			2	15

Method Blank (MB)

(MB) 12/18/15 07:15

Analyte	MB Result mg/l	MB Qualifier	MB RDL mg/l
TOC	ND		1.00

L807377-03 Original Sample (OS) • Duplicate (DUP)

(OS) 12/18/15 12:18 • (DUP) 12/18/15 12:31

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
TOC	6.09	6.15	1	0.980		20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 12/18/15 08:17 • (LCSD) 12/18/15 08:35

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TOC	75.0	71.1	72.1	94.8	96.2	85.0-115			1.41	20

L807377-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 12/18/15 11:07 • (MS) 12/18/15 11:31 • (MSD) 12/18/15 11:52

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TOC	50.0	7.79	55.1	55.8	94.7	96.1	1	80.0-120			1.23	20

Method Blank (MB)

(MB) 12/18/15 19:20

Analyte	MB Result mg/l	MB Qualifier	MB RDL mg/l
TOC	ND		1.00

L807433-15 Original Sample (OS) • Duplicate (DUP)

(OS) 12/18/15 22:24 • (DUP) 12/18/15 22:36

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
TOC	1.88	1.69	1	10.6		20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 12/18/15 20:30 • (LCSD) 12/18/15 20:48

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
TOC	75.0	72.4	72.4	96.6	96.5	85.0-115			0.0691	20

L807433-13 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 12/18/15 21:17 • (MS) 12/18/15 21:35 • (MSD) 12/18/15 21:52

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TOC	50.0	1.44	48.7	48.5	94.4	94.1	1	80.0-120			0.329	20

Method Blank (MB)

(MB) 12/22/15 14:02

Analyte	MB Result	MB Qualifier	MB RDL
	mg/l		mg/l
Iron,Dissolved	ND		0.100
Manganese,Dissolved	ND		0.0100

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 12/22/15 14:04 • (LCSD) 12/22/15 14:07

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/l	mg/l	mg/l	%	%	%			%	%
Iron,Dissolved	1.00	1.05	1.04	105	104	80-120			1	20
Manganese,Dissolved	1.00	1.06	1.04	106	104	80-120			1	20

L807433-13 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 12/22/15 14:10 • (MS) 12/22/15 14:16 • (MSD) 12/22/15 14:19

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Iron,Dissolved	1.00	0.524	1.58	1.54	106	102	1	75-125			3	20
Manganese,Dissolved	1.00	1.23	2.27	2.26	104	103	1	75-125			0	20

Method Blank (MB)

(MB) 12/20/15 13:29

Analyte	MB Result	MB Qualifier	MB RDL
	ppm		ppm
Methane	ND		0.0100
Ethane	ND		0.0130
Ethene	ND		0.0130

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 12/20/15 15:28 • (LCSD) 12/20/15 15:31

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ppm	ppm	ppm	%	%	%			%	%
Methane	0.0678	0.0772	0.0724	114	107	85.0-115			6.43	20
Ethane	0.129	0.132	0.126	102	97.8	85.0-115			4.60	20
Ethene	0.127	0.130	0.124	102	97.4	85.0-115			4.68	20

Method Blank (MB)

(MB) 12/28/15 08:38

Analyte	MB Result mg/l	MB Qualifier	MB RDL mg/l
Acetone	ND		0.0250
Acrylonitrile	ND		0.00250
Benzene	ND		0.000500
Bromobenzene	ND		0.000500
Bromodichloromethane	ND		0.000500
Bromochloromethane	ND		0.000500
Bromoform	ND		0.000500
Bromomethane	ND		0.000500
n-Butylbenzene	ND		0.000500
sec-Butylbenzene	ND		0.000500
tert-Butylbenzene	ND		0.000500
Carbon disulfide	ND		0.000500
Carbon tetrachloride	ND		0.000500
Chlorobenzene	ND		0.000500
Chlorodibromomethane	ND		0.000500
Chloroethane	ND		0.000500
2-Chloroethyl vinyl ether	ND		0.0250
Chloroform	ND		0.000500
Chloromethane	ND		0.000500
2-Chlorotoluene	ND		0.000500
4-Chlorotoluene	ND		0.000500
1,2-Dibromo-3-Chloropropane	ND		0.00100
1,2-Dibromoethane	ND		0.000500
Dibromomethane	ND		0.000500
1,2-Dichlorobenzene	ND		0.000500
1,3-Dichlorobenzene	ND		0.000500
1,4-Dichlorobenzene	ND		0.000500
Dichlorodifluoromethane	ND		0.000500
1,1-Dichloroethane	ND		0.000500
1,2-Dichloroethane	ND		0.000500
1,1-Dichloroethene	ND		0.000500
cis-1,2-Dichloroethene	ND		0.000500
trans-1,2-Dichloroethene	ND		0.000500
1,2-Dichloropropane	ND		0.000500
1,1-Dichloropropene	ND		0.000500
1,3-Dichloropropane	ND		0.000500

Method Blank (MB)

(MB) 12/28/15 08:38

Analyte	MB Result mg/l	MB Qualifier	MB RDL mg/l
cis-1,3-Dichloropropene	ND		0.000500
trans-1,3-Dichloropropene	ND		0.000500
trans-1,4-Dichloro-2-butene	ND		0.00500
2,2-Dichloropropane	ND		0.000500
Di-isopropyl ether	ND		0.000500
Ethylbenzene	ND		0.000500
Hexachloro-1,3-butadiene	ND		0.00100
2-Hexanone	ND		0.00250
n-Hexane	ND		0.00100
Iodomethane	ND		0.0100
Isopropylbenzene	ND		0.000500
p-Isopropyltoluene	ND		0.000500
2-Butanone (MEK)	ND		0.00250
Methylene Chloride	ND		0.00250
4-Methyl-2-pentanone (MIBK)	ND		0.00250
Methyl tert-butyl ether	ND		0.000500
Naphthalene	ND		0.000500
n-Propylbenzene	ND		0.000500
Styrene	ND		0.000500
1,1,1,2-Tetrachloroethane	ND		0.000500
1,1,2,2-Tetrachloroethane	ND		0.000500
1,1,2-Trichlorotrifluoroethane	ND		0.000500
Tetrachloroethene	ND		0.000500
Toluene	ND		0.000500
1,2,3-Trichlorobenzene	ND		0.000500
1,2,4-Trichlorobenzene	ND		0.000500
1,1,1-Trichloroethane	ND		0.000500
1,1,2-Trichloroethane	ND		0.000500
Trichloroethene	ND		0.000500
Trichlorofluoromethane	ND		0.000500
1,2,3-Trichloropropane	ND		0.00250
1,2,4-Trimethylbenzene	ND		0.000500
1,2,3-Trimethylbenzene	ND		0.000500
1,3,5-Trimethylbenzene	ND		0.000500
Vinyl acetate	ND		0.00250
Vinyl chloride	ND		0.000500

Method Blank (MB)

(MB) 12/28/15 08:38

Analyte	MB Result mg/l	MB Qualifier	MB RDL mg/l
Xylenes, Total	ND		0.00150
(S) Toluene-d8	*106*		*90.0-115*
(S) Dibromofluoromethane	*104*		*79.0-121*
(S) 4-Bromofluorobenzene	*104*		*80.1-120*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 12/28/15 10:13 • (LCSD) 12/28/15 10:33

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.126	0.116	101	92.5	28.7-175			8.57	20.9
Acrylonitrile	0.125	0.135	0.132	108	106	58.2-145			2.27	20
Benzene	0.0250	0.0263	0.0253	105	101	73.0-122			3.74	20
Bromobenzene	0.0250	0.0253	0.0259	101	104	81.5-115			2.23	20
Bromodichloromethane	0.0250	0.0257	0.0257	103	103	75.5-121			0.140	20
Bromochloromethane	0.0250	0.0268	0.0256	107	102	78.9-123			4.65	20
Bromoform	0.0250	0.0276	0.0279	110	111	71.5-131			0.910	20
Bromomethane	0.0250	0.0269	0.0260	108	104	22.4-187			3.46	20
n-Butylbenzene	0.0250	0.0286	0.0288	114	115	75.9-134			0.600	20
sec-Butylbenzene	0.0250	0.0256	0.0262	102	105	80.6-126			2.33	20
tert-Butylbenzene	0.0250	0.0255	0.0262	102	105	79.3-127			2.52	20
Carbon disulfide	0.0250	0.0303	0.0291	121	117	53.0-134			3.99	20
Carbon tetrachloride	0.0250	0.0258	0.0248	103	99.2	70.9-129			3.90	20
Chlorobenzene	0.0250	0.0251	0.0255	100	102	79.7-122			1.86	20
Chlorodibromomethane	0.0250	0.0269	0.0272	108	109	78.2-124			0.970	20
Chloroethane	0.0250	0.0265	0.0264	106	106	41.2-153			0.430	20
2-Chloroethyl vinyl ether	0.125	0.128	0.132	103	105	23.4-162			2.57	23.5
Chloroform	0.0250	0.0261	0.0253	104	101	73.2-125			2.85	20
Chloromethane	0.0250	0.0241	0.0235	96.6	93.9	55.8-134			2.84	20
2-Chlorotoluene	0.0250	0.0250	0.0256	100	102	76.4-125			2.25	20
4-Chlorotoluene	0.0250	0.0264	0.0266	105	106	81.5-121			0.790	20
1,2-Dibromo-3-Chloropropane	0.0250	0.0262	0.0292	105	117	64.8-131			10.7	20
1,2-Dibromoethane	0.0250	0.0260	0.0266	104	106	79.8-122			2.13	20
Dibromomethane	0.0250	0.0264	0.0264	106	106	79.5-118			0.0600	20
1,2-Dichlorobenzene	0.0250	0.0262	0.0265	105	106	84.7-118			1.33	20
1,3-Dichlorobenzene	0.0250	0.0260	0.0266	104	106	77.6-127			2.16	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 12/28/15 10:13 • (LCSD) 12/28/15 10:33

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,4-Dichlorobenzene	0.0250	0.0263	0.0265	105	106	82.2-114			0.540	20
Dichlorodifluoromethane	0.0250	0.0225	0.0221	90.1	88.3	56.0-134			1.97	20
1,1-Dichloroethane	0.0250	0.0266	0.0257	107	103	71.7-127			3.56	20
1,2-Dichloroethane	0.0250	0.0272	0.0262	109	105	65.3-126			3.65	20
1,1-Dichloroethene	0.0250	0.0273	0.0267	109	107	59.9-137			2.27	20
cis-1,2-Dichloroethene	0.0250	0.0268	0.0255	107	102	77.3-122			4.72	20
trans-1,2-Dichloroethene	0.0250	0.0277	0.0266	111	107	72.6-125			3.79	20
1,2-Dichloropropane	0.0250	0.0265	0.0259	106	104	77.4-125			2.41	20
1,1-Dichloropropene	0.0250	0.0269	0.0263	108	105	72.5-127			2.39	20
1,3-Dichloropropane	0.0250	0.0256	0.0257	102	103	80.6-115			0.590	20
cis-1,3-Dichloropropene	0.0250	0.0276	0.0269	110	108	77.7-124			2.39	20
trans-1,3-Dichloropropene	0.0250	0.0290	0.0285	116	114	73.5-127			1.54	20
trans-1,4-Dichloro-2-butene	0.0250	0.0272	0.0286	109	114	58.3-129			5.17	20
2,2-Dichloropropane	0.0250	0.0270	0.0260	108	104	61.3-134			3.80	20
Di-isopropyl ether	0.0250	0.0273	0.0259	109	104	65.1-135			4.97	20
Ethylbenzene	0.0250	0.0251	0.0255	100	102	80.9-121			1.45	20
Hexachloro-1,3-butadiene	0.0250	0.0270	0.0286	108	114	73.7-133			5.43	20
2-Hexanone	0.125	0.144	0.145	115	116	59.4-151			0.810	20
n-Hexane	0.0250	0.0282	0.0269	113	108	59.5-132			4.75	20
Iodomethane	0.125	0.141	0.137	113	110	64.6-137			2.70	20
Isopropylbenzene	0.0250	0.0259	0.0261	104	105	81.6-124			0.820	20
p-Isopropyltoluene	0.0250	0.0264	0.0272	106	109	77.6-129			2.80	20
2-Butanone (MEK)	0.125	0.136	0.131	109	105	46.4-155			3.64	20
Methylene Chloride	0.0250	0.0266	0.0256	106	103	69.5-120			3.70	20
4-Methyl-2-pentanone (MIBK)	0.125	0.137	0.139	110	111	63.3-138			0.910	20
Methyl tert-butyl ether	0.0250	0.0228	0.0260	91.3	104	70.1-125			13.1	20
Naphthalene	0.0250	0.0260	0.0271	104	108	69.7-134			4.10	20
n-Propylbenzene	0.0250	0.0261	0.0267	104	107	81.9-122			2.41	20
Styrene	0.0250	0.0267	0.0272	107	109	79.9-124			1.87	20
1,1,1,2-Tetrachloroethane	0.0250	0.0258	0.0266	103	106	78.5-125			3.19	20
1,1,2,2-Tetrachloroethane	0.0250	0.0261	0.0273	104	109	79.3-123			4.48	20
1,1,2-Trichlorotrifluoroethane	0.0250	0.0268	0.0260	107	104	62.0-141			3.16	20
Tetrachloroethene	0.0250	0.0257	0.0262	103	105	73.5-130			1.59	20
Toluene	0.0250	0.0254	0.0251	102	100	77.9-116			1.21	20
1,2,3-Trichlorobenzene	0.0250	0.0255	0.0284	102	113	75.7-134			10.4	20
1,2,4-Trichlorobenzene	0.0250	0.0281	0.0301	113	120	76.1-136			6.82	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 12/28/15 10:13 • (LCSD) 12/28/15 10:33

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,1,1-Trichloroethane	0.0250	0.0276	0.0264	110	106	71.1-129			4.27	20
1,1,2-Trichloroethane	0.0250	0.0263	0.0264	105	106	81.6-120			0.450	20
Trichloroethene	0.0250	0.0256	0.0252	103	101	79.5-121			1.81	20
Trichlorofluoromethane	0.0250	0.0268	0.0257	107	103	49.1-157			4.33	20
1,2,3-Trichloropropane	0.0250	0.0244	0.0258	97.7	103	74.9-124			5.45	20
1,2,4-Trimethylbenzene	0.0250	0.0267	0.0271	107	108	79.0-122			1.25	20
1,2,3-Trimethylbenzene	0.0250	0.0254	0.0256	102	102	79.9-118			0.650	20
1,3,5-Trimethylbenzene	0.0250	0.0265	0.0265	106	106	81.0-123			0.0400	20
Vinyl acetate	0.125	0.166	0.165	133	132	41.7-159			0.940	20
Vinyl chloride	0.0250	0.0252	0.0243	101	97.2	61.5-134			3.51	20
Xylenes, Total	0.0750	0.0780	0.0794	104	106	79.2-122			1.77	20
(S) Toluene-d8				*104*	*104*	*90.0-115*				
(S) Dibromofluoromethane				*103*	*102*	*79.0-121*				
(S) 4-Bromofluorobenzene				*102*	*102*	*80.1-120*				

L807433-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 12/28/15 12:16 • (MS) 12/28/15 10:54 • (MSD) 12/28/15 11:14

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.00121	0.0471	0.0535	36.7	41.8	1	25.0-156			12.8	21.5
Acrylonitrile	0.125	ND	0.118	0.139	94.7	111	1	55.9-161			16.2	20
Benzene	0.0250	ND	0.0225	0.0257	90.1	103	1	58.6-133			13.0	20
Bromobenzene	0.0250	ND	0.0232	0.0266	92.8	106	1	70.6-125			13.5	20
Bromodichloromethane	0.0250	ND	0.0230	0.0260	92.1	104	1	69.2-127			12.0	20
Bromochloromethane	0.0250	ND	0.0234	0.0263	93.6	105	1	74.4-128			11.8	20
Bromoform	0.0250	ND	0.0253	0.0290	101	116	1	66.3-140			13.6	20
Bromomethane	0.0250	ND	0.0220	0.0250	87.9	100	1	16.6-183			13.0	20.5
n-Butylbenzene	0.0250	ND	0.0263	0.0305	105	122	1	64.8-145			14.8	20
sec-Butylbenzene	0.0250	ND	0.0240	0.0275	95.9	110	1	66.8-139			13.6	20
tert-Butylbenzene	0.0250	ND	0.0239	0.0275	95.6	110	1	67.1-138			14.1	20
Carbon disulfide	0.0250	ND	0.0213	0.0244	85.2	97.7	1	34.9-138			13.7	20
Carbon tetrachloride	0.0250	ND	0.0224	0.0251	89.4	100	1	60.6-139			11.5	20
Chlorobenzene	0.0250	ND	0.0233	0.0262	93.0	105	1	70.1-130			12.1	20
Chlorodibromomethane	0.0250	ND	0.0245	0.0276	98.1	111	1	71.6-132			12.0	20
Chloroethane	0.0250	ND	0.0229	0.0257	91.5	103	1	33.3-155			11.6	20

L807433-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 12/28/15 12:16 • (MS) 12/28/15 10:54 • (MSD) 12/28/15 11:14

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
2-Chloroethyl vinyl ether	0.125	ND	0.0837	0.0952	67.0	76.1	1	5.00-149			12.8	40
Chloroform	0.0250	ND	0.0235	0.0264	93.9	106	1	66.1-133			11.7	20
Chloromethane	0.0250	ND	0.0197	0.0223	79.0	89.3	1	40.7-139			12.2	20
2-Chlorotoluene	0.0250	ND	0.0232	0.0269	92.8	108	1	66.9-134			14.9	20
4-Chlorotoluene	0.0250	ND	0.0242	0.0281	96.8	112	1	66.8-134			14.9	20
1,2-Dibromo-3-Chloropropane	0.0250	ND	0.0250	0.0298	100	119	1	63.9-142			17.4	20.2
1,2-Dibromoethane	0.0250	ND	0.0237	0.0267	94.9	107	1	73.8-131			12.0	20
Dibromomethane	0.0250	ND	0.0229	0.0264	91.7	106	1	72.8-127			14.1	20
1,2-Dichlorobenzene	0.0250	ND	0.0240	0.0277	96.1	111	1	77.4-127			14.2	20
1,3-Dichlorobenzene	0.0250	0.000329	0.0245	0.0284	96.5	112	1	67.9-136			14.9	20
1,4-Dichlorobenzene	0.0250	ND	0.0244	0.0270	97.7	108	1	74.4-123			9.97	20
Dichlorodifluoromethane	0.0250	ND	0.0195	0.0227	78.0	91.0	1	42.2-146			15.3	20
1,1-Dichloroethane	0.0250	ND	0.0236	0.0268	94.4	107	1	64.0-134			12.5	20
1,2-Dichloroethane	0.0250	ND	0.0237	0.0269	95.0	108	1	60.7-132			12.6	20
1,1-Dichloroethene	0.0250	ND	0.0232	0.0263	92.8	105	1	48.8-144			12.5	20
cis-1,2-Dichloroethene	0.0250	0.00441	0.0273	0.0311	91.7	107	1	60.6-136			13.0	20
trans-1,2-Dichloroethene	0.0250	ND	0.0225	0.0260	90.1	104	1	61.0-132			14.1	20
1,2-Dichloropropane	0.0250	ND	0.0234	0.0265	93.7	106	1	69.7-130			12.5	20
1,1-Dichloropropene	0.0250	ND	0.0233	0.0259	93.3	104	1	61.5-136			10.4	20
1,3-Dichloropropane	0.0250	ND	0.0230	0.0262	92.0	105	1	74.3-123			13.2	20
cis-1,3-Dichloropropene	0.0250	ND	0.0236	0.0268	94.6	107	1	71.1-129			12.6	20
trans-1,3-Dichloropropene	0.0250	ND	0.0251	0.0290	100	116	1	66.3-136			14.5	20
trans-1,4-Dichloro-2-butene	0.0250	ND	0.0246	0.0281	98.3	112	1	57.6-136			13.2	20
2,2-Dichloropropane	0.0250	ND	0.0234	0.0277	93.8	111	1	54.9-142			16.5	20
Di-isopropyl ether	0.0250	ND	0.0241	0.0270	96.4	108	1	59.9-140			11.2	20
Ethylbenzene	0.0250	ND	0.0229	0.0261	91.7	104	1	62.7-136			12.9	20
Hexachloro-1,3-butadiene	0.0250	ND	0.0264	0.0299	106	120	1	61.1-144			12.5	20.1
2-Hexanone	0.125	ND	0.100	0.115	80.4	92.4	1	59.4-154			13.9	20.1
n-Hexane	0.0250	ND	0.0209	0.0236	83.4	94.2	1	38.7-146			12.2	20
Iodomethane	0.125	ND	0.120	0.133	95.8	106	1	55.2-140			10.6	20
Isopropylbenzene	0.0250	ND	0.0238	0.0272	95.1	109	1	67.4-136			13.4	20
p-Isopropyltoluene	0.0250	ND	0.0248	0.0284	99.1	114	1	62.8-143			13.6	20
2-Butanone (MEK)	0.125	ND	0.0814	0.0901	65.1	72.1	1	45.0-156			10.2	20.8
Methylene Chloride	0.0250	ND	0.0224	0.0264	89.5	106	1	61.5-125			16.4	20
4-Methyl-2-pentanone (MIBK)	0.125	ND	0.117	0.135	93.6	108	1	60.7-150			14.5	20
Methyl tert-butyl ether	0.0250	ND	0.0236	0.0285	94.5	114	1	61.4-136			18.5	20

L807433-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 12/28/15 12:16 • (MS) 12/28/15 10:54 • (MSD) 12/28/15 11:14

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Naphthalene	0.0250	0.000589	0.0248	0.0290	97.0	114	1	61.8-143			15.4	20
n-Propylbenzene	0.0250	ND	0.0241	0.0277	96.2	111	1	63.2-139			14.1	20
Styrene	0.0250	ND	0.0247	0.0282	98.7	113	1	68.2-133			13.3	20
1,1,1,2-Tetrachloroethane	0.0250	ND	0.0238	0.0274	95.0	110	1	70.5-132			14.4	20
1,1,2,2-Tetrachloroethane	0.0250	ND	0.0244	0.0279	97.6	111	1	64.9-145			13.3	20
1,1,2-Trichlorotrifluoroethane	0.0250	ND	0.0233	0.0270	93.4	108	1	53.7-150			14.6	20
Tetrachloroethene	0.0250	ND	0.0226	0.0266	90.5	107	1	57.4-141			16.3	20
Toluene	0.0250	ND	0.0222	0.0250	88.8	99.8	1	67.8-124			11.7	20
1,2,3-Trichlorobenzene	0.0250	0.000191	0.0261	0.0304	104	121	1	65.7-143			15.1	20
1,2,4-Trichlorobenzene	0.0250	ND	0.0269	0.0313	108	125	1	67.0-146			15.2	20
1,1,1-Trichloroethane	0.0250	ND	0.0243	0.0280	97.1	112	1	58.7-134			14.1	20
1,1,2-Trichloroethane	0.0250	ND	0.0239	0.0270	95.4	108	1	74.1-130			12.2	20
Trichloroethene	0.0250	0.0245	0.0427	0.0502	72.6	103	1	48.9-148			16.2	20
Trichlorofluoromethane	0.0250	ND	0.0230	0.0264	91.9	106	1	39.9-165			13.8	20
1,2,3-Trichloropropane	0.0250	ND	0.0235	0.0265	94.0	106	1	71.5-134			12.1	20
1,2,4-Trimethylbenzene	0.0250	ND	0.0246	0.0284	98.3	114	1	60.5-137			14.6	20
1,2,3-Trimethylbenzene	0.0250	ND	0.0232	0.0269	92.9	108	1	62.7-133			14.8	20
1,3,5-Trimethylbenzene	0.0250	ND	0.0240	0.0277	96.0	111	1	67.9-134			14.2	20
Vinyl acetate	0.125	ND	0.151	0.167	120	134	1	42.8-181			10.6	20
Vinyl chloride	0.0250	ND	0.0210	0.0236	84.0	94.5	1	44.3-143			11.8	20
Xylenes, Total	0.0750	ND	0.0705	0.0803	94.0	107	1	65.6-133			13.0	20
(S) Toluene-d8					*103*	*104*		*90.0-115*				
(S) Dibromofluoromethane					*103*	*106*		*79.0-121*				
(S) 4-Bromofluorobenzene					*103*	*103*		*80.1-120*				

Method Blank (MB)

(MB) 12/28/15 21:54

Analyte	MB Result mg/l	MB Qualifier	MB RDL mg/l
Acetone	ND		0.0250
Acrylonitrile	ND		0.00250
Benzene	ND		0.000500
Bromobenzene	ND		0.000500
Bromochloromethane	ND		0.000500
Bromodichloromethane	ND		0.000500
Bromoform	ND		0.000500
Bromomethane	ND		0.000500
n-Butylbenzene	ND		0.000500
sec-Butylbenzene	ND		0.000500
Carbon disulfide	ND		0.000500
tert-Butylbenzene	ND		0.000500
Carbon tetrachloride	ND		0.000500
Chlorobenzene	ND		0.000500
Chlorodibromomethane	ND		0.000500
Chloroethane	ND		0.000500
2-Chloroethyl vinyl ether	ND		0.0250
Chloroform	ND		0.000500
Chloromethane	ND		0.000500
2-Chlorotoluene	ND		0.000500
4-Chlorotoluene	ND		0.000500
1,2-Dibromo-3-Chloropropane	ND		0.00100
1,2-Dibromoethane	ND		0.000500
Dibromomethane	ND		0.000500
1,2-Dichlorobenzene	ND		0.000500
1,3-Dichlorobenzene	ND		0.000500
1,4-Dichlorobenzene	ND		0.000500
Dichlorodifluoromethane	ND		0.000500
1,1-Dichloroethane	ND		0.000500
1,2-Dichloroethane	ND		0.000500
1,1-Dichloroethene	ND		0.000500
cis-1,2-Dichloroethene	ND		0.000500
trans-1,2-Dichloroethene	ND		0.000500
1,2-Dichloropropane	ND		0.000500
1,1-Dichloropropene	ND		0.000500
trans-1,4-Dichloro-2-butene	ND		0.00500

Method Blank (MB)

(MB) 12/28/15 21:54

Analyte	MB Result mg/l	MB Qualifier	MB RDL mg/l
1,3-Dichloropropane	ND		0.000500
cis-1,3-Dichloropropene	ND		0.000500
trans-1,3-Dichloropropene	ND		0.000500
2,2-Dichloropropane	ND		0.000500
Di-isopropyl ether	ND		0.000500
2-Hexanone	ND		0.00250
Ethylbenzene	ND		0.000500
Iodomethane	ND		0.0100
Hexachloro-1,3-butadiene	ND		0.00100
n-Hexane	ND		0.00100
Isopropylbenzene	ND		0.000500
p-Isopropyltoluene	ND		0.000500
2-Butanone (MEK)	ND		0.00250
Methylene Chloride	ND		0.00250
4-Methyl-2-pentanone (MIBK)	ND		0.00250
Methyl tert-butyl ether	ND		0.000500
Naphthalene	ND		0.000500
n-Propylbenzene	ND		0.000500
Styrene	ND		0.000500
1,1,1,2-Tetrachloroethane	ND		0.000500
1,1,2,2-Tetrachloroethane	ND		0.000500
Tetrachloroethene	ND		0.000500
Toluene	ND		0.000500
1,1,2-Trichlorotrifluoroethane	ND		0.000500
Vinyl acetate	ND		0.00250
1,2,3-Trichlorobenzene	ND		0.000500
1,2,4-Trichlorobenzene	ND		0.000500
1,1,1-Trichloroethane	ND		0.000500
1,1,2-Trichloroethane	ND		0.000500
Trichloroethene	ND		0.000500
Trichlorofluoromethane	ND		0.000500
1,2,3-Trichloropropane	ND		0.00250
1,2,3-Trimethylbenzene	ND		0.000500
1,2,4-Trimethylbenzene	ND		0.000500
1,3,5-Trimethylbenzene	ND		0.000500
Vinyl chloride	ND		0.000500

Method Blank (MB)

(MB) 12/28/15 21:54

Analyte	MB Result mg/l	MB Qualifier	MB RDL mg/l
Xylenes, Total	ND		0.00150
(S) Toluene-d8	*105*		*90.0-115*
(S) Dibromofluoromethane	*103*		*79.0-121*
(S) 4-Bromofluorobenzene	*102*		*80.1-120*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 12/28/15 20:31 • (LCSD) 12/28/15 20:52

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Bromochloromethane	0.0250	0.0256	0.0254	102	101	78.9-123			0.950	20
Carbon disulfide	0.0250	0.0312	0.0294	125	118	53.0-134			5.95	20
Acetone	0.125	0.0959	0.113	76.7	90.5	28.7-175			16.5	20.9
Acrylonitrile	0.125	0.121	0.131	97.1	105	58.2-145			7.85	20
Benzene	0.0250	0.0272	0.0263	109	105	73.0-122			3.52	20
Bromobenzene	0.0250	0.0267	0.0252	107	101	81.5-115			5.83	20
Bromodichloromethane	0.0250	0.0266	0.0257	106	103	75.5-121			3.48	20
Bromoform	0.0250	0.0278	0.0267	111	107	71.5-131			3.99	20
Bromomethane	0.0250	0.0288	0.0268	115	107	22.4-187			7.50	20
n-Butylbenzene	0.0250	0.0292	0.0282	117	113	75.9-134			3.63	20
sec-Butylbenzene	0.0250	0.0278	0.0257	111	103	80.6-126			7.82	20
tert-Butylbenzene	0.0250	0.0274	0.0253	110	101	79.3-127			7.80	20
trans-1,4-Dichloro-2-butene	0.0250	0.0263	0.0239	105	95.5	58.3-129			9.63	20
Carbon tetrachloride	0.0250	0.0267	0.0254	107	102	70.9-129			4.91	20
Chlorobenzene	0.0250	0.0266	0.0250	106	99.8	79.7-122			6.34	20
Chlorodibromomethane	0.0250	0.0268	0.0266	107	106	78.2-124			0.770	20
Chloroethane	0.0250	0.0283	0.0261	113	104	41.2-153			8.13	20
2-Hexanone	0.125	0.139	0.135	111	108	59.4-151			3.08	20
2-Chloroethyl vinyl ether	0.125	0.109	0.111	87.0	89.0	23.4-162			2.24	23.5
Chloroform	0.0250	0.0272	0.0258	109	103	73.2-125			5.21	20
Iodomethane	0.125	0.148	0.143	118	114	64.6-137			3.54	20
Chloromethane	0.0250	0.0253	0.0237	101	94.7	55.8-134			6.52	20
2-Chlorotoluene	0.0250	0.0265	0.0247	106	98.9	76.4-125			7.08	20
4-Chlorotoluene	0.0250	0.0281	0.0259	113	104	81.5-121			8.30	20
1,2-Dibromo-3-Chloropropane	0.0250	0.0261	0.0268	104	107	64.8-131			2.88	20
1,2-Dibromoethane	0.0250	0.0264	0.0254	106	102	79.8-122			3.75	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 12/28/15 20:31 • (LCSD) 12/28/15 20:52

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Dibromomethane	0.0250	0.0260	0.0259	104	104	79.5-118			0.250	20
1,2-Dichlorobenzene	0.0250	0.0262	0.0263	105	105	84.7-118			0.340	20
1,3-Dichlorobenzene	0.0250	0.0272	0.0253	109	101	77.6-127			7.15	20
1,4-Dichlorobenzene	0.0250	0.0265	0.0261	106	104	82.2-114			1.39	20
Dichlorodifluoromethane	0.0250	0.0230	0.0208	92.0	83.1	56.0-134			10.2	20
1,1-Dichloroethane	0.0250	0.0279	0.0265	112	106	71.7-127			5.06	20
1,2-Dichloroethane	0.0250	0.0271	0.0265	108	106	65.3-126			1.94	20
1,1-Dichloroethene	0.0250	0.0292	0.0273	117	109	59.9-137			6.61	20
cis-1,2-Dichloroethene	0.0250	0.0275	0.0260	110	104	77.3-122			5.62	20
trans-1,2-Dichloroethene	0.0250	0.0284	0.0266	114	106	72.6-125			6.65	20
1,2-Dichloropropane	0.0250	0.0271	0.0265	108	106	77.4-125			1.99	20
1,1-Dichloropropene	0.0250	0.0283	0.0265	113	106	72.5-127			6.52	20
1,3-Dichloropropane	0.0250	0.0266	0.0251	106	101	80.6-115			5.57	20
cis-1,3-Dichloropropene	0.0250	0.0277	0.0267	111	107	77.7-124			3.72	20
trans-1,3-Dichloropropene	0.0250	0.0287	0.0278	115	111	73.5-127			3.12	20
2,2-Dichloropropane	0.0250	0.0273	0.0261	109	104	61.3-134			4.36	20
Vinyl acetate	0.125	0.143	0.142	115	114	41.7-159			0.770	20
Di-isopropyl ether	0.0250	0.0273	0.0269	109	108	65.1-135			1.18	20
Ethylbenzene	0.0250	0.0268	0.0245	107	97.9	80.9-121			9.17	20
Hexachloro-1,3-butadiene	0.0250	0.0285	0.0274	114	110	73.7-133			3.85	20
n-Hexane	0.0250	0.0286	0.0270	114	108	59.5-132			5.68	20
Isopropylbenzene	0.0250	0.0277	0.0256	111	102	81.6-124			8.03	20
p-Isopropyltoluene	0.0250	0.0284	0.0263	114	105	77.6-129			7.78	20
2-Butanone (MEK)	0.125	0.115	0.124	92.1	99.2	46.4-155			7.42	20
Methylene Chloride	0.0250	0.0266	0.0263	106	105	69.5-120			1.37	20
4-Methyl-2-pentanone (MIBK)	0.125	0.133	0.129	107	103	63.3-138			3.29	20
Methyl tert-butyl ether	0.0250	0.0238	0.0265	95.3	106	70.1-125			10.7	20
Naphthalene	0.0250	0.0251	0.0255	100	102	69.7-134			1.81	20
n-Propylbenzene	0.0250	0.0278	0.0258	111	103	81.9-122			7.79	20
Styrene	0.0250	0.0280	0.0263	112	105	79.9-124			6.15	20
1,1,1,2-Tetrachloroethane	0.0250	0.0269	0.0255	108	102	78.5-125			5.51	20
1,1,2,2-Tetrachloroethane	0.0250	0.0260	0.0249	104	99.5	79.3-123			4.54	20
Tetrachloroethene	0.0250	0.0274	0.0256	110	102	73.5-130			7.00	20
Toluene	0.0250	0.0272	0.0254	109	102	77.9-116			6.92	20
1,1,2-Trichlorotrifluoroethane	0.0250	0.0287	0.0268	115	107	62.0-141			6.70	20
1,2,3-Trichlorobenzene	0.0250	0.0261	0.0266	104	106	75.7-134			1.86	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 12/28/15 20:31 • (LCSD) 12/28/15 20:52

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,2,4-Trichlorobenzene	0.0250	0.0280	0.0275	112	110	76.1-136			1.85	20
1,1,1-Trichloroethane	0.0250	0.0289	0.0272	116	109	71.1-129			5.86	20
1,1,2-Trichloroethane	0.0250	0.0268	0.0254	107	102	81.6-120			5.26	20
Trichloroethene	0.0250	0.0277	0.0256	111	102	79.5-121			7.81	20
Trichlorofluoromethane	0.0250	0.0283	0.0264	113	106	49.1-157			6.98	20
1,2,3-Trichloropropane	0.0250	0.0256	0.0236	102	94.2	74.9-124			8.17	20
1,2,3-Trimethylbenzene	0.0250	0.0256	0.0256	102	103	79.9-118			0.170	20
1,2,4-Trimethylbenzene	0.0250	0.0281	0.0257	112	103	79.0-122			8.64	20
1,3,5-Trimethylbenzene	0.0250	0.0276	0.0258	110	103	81.0-123			6.67	20
Vinyl chloride	0.0250	0.0263	0.0247	105	98.9	61.5-134			6.16	20
Xylenes, Total	0.0750	0.0825	0.0769	110	102	79.2-122			7.05	20
(S) Toluene-d8				*106*	*103*	*90.0-115*				
(S) Dibromofluoromethane				*102*	*103*	*79.0-121*				
(S) 4-Bromofluorobenzene				*102*	*100*	*80.1-120*				

L807465-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 12/29/15 00:40 • (MS) 12/28/15 23:38 • (MSD) 12/28/15 23:59

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Bromochloromethane	0.0250	ND	0.0268	0.0258	107	103	1	74.4-128			3.77	20
Carbon disulfide	0.0250	ND	0.0292	0.0282	117	113	1	34.9-138			3.53	20
Acetone	0.125	0.00116	0.0519	0.0527	40.6	41.2	1	25.0-156			1.52	21.5
trans-1,4-Dichloro-2-butene	0.0250	ND	0.0267	0.0262	107	105	1	57.6-136			1.94	20
Acrylonitrile	0.125	ND	0.141	0.136	113	109	1	55.9-161			3.62	20
Benzene	0.0250	ND	0.0267	0.0256	107	103	1	58.6-133			4.08	20
Bromobenzene	0.0250	ND	0.0262	0.0256	105	102	1	70.6-125			2.35	20
Bromodichloromethane	0.0250	ND	0.0263	0.0256	105	102	1	69.2-127			2.84	20
2-Hexanone	0.125	ND	0.122	0.116	97.7	92.5	1	59.4-154			5.46	20.1
Bromoform	0.0250	ND	0.0280	0.0270	112	108	1	66.3-140			3.65	20
Iodomethane	0.125	ND	0.145	0.139	116	112	1	55.2-140			4.03	20
Bromomethane	0.0250	ND	0.0269	0.0259	108	104	1	16.6-183			3.87	20.5
n-Butylbenzene	0.0250	ND	0.0290	0.0286	116	114	1	64.8-145			1.51	20
sec-Butylbenzene	0.0250	ND	0.0269	0.0255	108	102	1	66.8-139			5.47	20
tert-Butylbenzene	0.0250	ND	0.0266	0.0255	107	102	1	67.1-138			4.32	20
Carbon tetrachloride	0.0250	ND	0.0263	0.0251	105	100	1	60.6-139			4.72	20

L807465-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 12/29/15 00:40 • (MS) 12/28/15 23:38 • (MSD) 12/28/15 23:59

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chlorobenzene	0.0250	ND	0.0262	0.0251	105	101	1	70.1-130			4.27	20
Chlorodibromomethane	0.0250	ND	0.0267	0.0266	107	106	1	71.6-132			0.290	20
Chloroethane	0.0250	ND	0.0273	0.0262	109	105	1	33.3-155			4.13	20
2-Chloroethyl vinyl ether	0.125	ND	0.113	0.0988	90.0	79.1	1	5.00-149			13.0	40
Chloroform	0.0250	ND	0.0266	0.0256	106	102	1	66.1-133			3.81	20
Chloromethane	0.0250	ND	0.0237	0.0230	95.0	92.0	1	40.7-139			3.21	20
2-Chlorotoluene	0.0250	ND	0.0260	0.0246	104	98.5	1	66.9-134			5.50	20
4-Chlorotoluene	0.0250	ND	0.0274	0.0265	110	106	1	66.8-134			3.29	20
1,2-Dibromo-3-Chloropropane	0.0250	ND	0.0261	0.0268	105	107	1	63.9-142			2.44	20.2
1,2-Dibromoethane	0.0250	ND	0.0271	0.0268	108	107	1	73.8-131			1.03	20
Dibromomethane	0.0250	ND	0.0269	0.0258	107	103	1	72.8-127			3.94	20
1,2-Dichlorobenzene	0.0250	ND	0.0261	0.0258	104	103	1	77.4-127			1.17	20
1,3-Dichlorobenzene	0.0250	ND	0.0271	0.0263	108	105	1	67.9-136			3.09	20
1,4-Dichlorobenzene	0.0250	ND	0.0263	0.0260	105	104	1	74.4-123			1.08	20
Dichlorodifluoromethane	0.0250	ND	0.0225	0.0216	89.8	86.3	1	42.2-146			4.01	20
1,1-Dichloroethane	0.0250	ND	0.0269	0.0263	108	105	1	64.0-134			2.41	20
1,2-Dichloroethane	0.0250	ND	0.0279	0.0261	111	104	1	60.7-132			6.61	20
Vinyl acetate	0.125	ND	0.174	0.167	139	134	1	42.8-181			4.01	20
1,1-Dichloroethene	0.0250	ND	0.0277	0.0271	111	109	1	48.8-144			2.10	20
cis-1,2-Dichloroethene	0.0250	ND	0.0266	0.0258	107	103	1	60.6-136			3.26	20
trans-1,2-Dichloroethene	0.0250	ND	0.0271	0.0259	109	104	1	61.0-132			4.72	20
1,2-Dichloropropane	0.0250	ND	0.0269	0.0255	108	102	1	69.7-130			5.39	20
1,1-Dichloropropene	0.0250	ND	0.0269	0.0261	108	104	1	61.5-136			3.07	20
1,3-Dichloropropane	0.0250	ND	0.0271	0.0255	108	102	1	74.3-123			5.87	20
cis-1,3-Dichloropropene	0.0250	ND	0.0273	0.0264	109	105	1	71.1-129			3.45	20
trans-1,3-Dichloropropene	0.0250	ND	0.0293	0.0285	117	114	1	66.3-136			2.68	20
2,2-Dichloropropane	0.0250	ND	0.0269	0.0251	107	100	1	54.9-142			6.67	20
Di-isopropyl ether	0.0250	ND	0.0272	0.0261	109	105	1	59.9-140			4.07	20
Ethylbenzene	0.0250	ND	0.0264	0.0252	106	101	1	62.7-136			4.63	20
Hexachloro-1,3-butadiene	0.0250	ND	0.0263	0.0275	105	110	1	61.1-144			4.43	20.1
n-Hexane	0.0250	ND	0.0280	0.0264	112	105	1	38.7-146			5.97	20
Isopropylbenzene	0.0250	ND	0.0268	0.0253	107	101	1	67.4-136			5.85	20
p-Isopropyltoluene	0.0250	ND	0.0276	0.0263	110	105	1	62.8-143			4.82	20
2-Butanone (MEK)	0.125	ND	0.0933	0.0912	74.7	72.9	1	45.0-156			2.34	20.8
Methylene Chloride	0.0250	ND	0.0272	0.0257	109	103	1	61.5-125			5.66	20
4-Methyl-2-pentanone (MIBK)	0.125	ND	0.142	0.135	113	108	1	60.7-150			4.88	20

L807465-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 12/29/15 00:40 • (MS) 12/28/15 23:38 • (MSD) 12/28/15 23:59

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Methyl tert-butyl ether	0.0250	ND	0.0270	0.0253	108	101	1	61.4-136			6.52	20
Naphthalene	0.0250	0.000372	0.0260	0.0263	102	104	1	61.8-143			1.03	20
n-Propylbenzene	0.0250	ND	0.0273	0.0261	109	104	1	63.2-139			4.56	20
Styrene	0.0250	ND	0.0276	0.0263	110	105	1	68.2-133			4.84	20
1,1,1,2-Tetrachloroethane	0.0250	ND	0.0270	0.0252	108	101	1	70.5-132			6.85	20
1,1,2,2-Tetrachloroethane	0.0250	ND	0.0277	0.0269	111	107	1	64.9-145			3.02	20
Tetrachloroethene	0.0250	ND	0.0266	0.0253	106	101	1	57.4-141			4.97	20
Toluene	0.0250	ND	0.0261	0.0253	105	101	1	67.8-124			3.17	20
1,1,2-Trichlorotrifluoroethane	0.0250	ND	0.0274	0.0262	110	105	1	53.7-150			4.63	20
1,2,3-Trichlorobenzene	0.0250	0.000344	0.0261	0.0279	103	110	1	65.7-143			6.64	20
1,2,4-Trichlorobenzene	0.0250	ND	0.0279	0.0289	112	116	1	67.0-146			3.35	20
1,1,1-Trichloroethane	0.0250	ND	0.0277	0.0265	111	106	1	58.7-134			4.54	20
1,1,2-Trichloroethane	0.0250	ND	0.0271	0.0264	108	106	1	74.1-130			2.51	20
Trichloroethene	0.0250	ND	0.0264	0.0249	105	99.6	1	48.9-148			5.74	20
Trichlorofluoromethane	0.0250	ND	0.0270	0.0260	108	104	1	39.9-165			3.66	20
1,2,3-Trichloropropane	0.0250	ND	0.0266	0.0260	106	104	1	71.5-134			2.45	20
1,2,3-Trimethylbenzene	0.0250	ND	0.0257	0.0248	103	99.1	1	62.7-133			3.78	20
1,2,4-Trimethylbenzene	0.0250	ND	0.0275	0.0260	110	104	1	60.5-137			5.49	20
1,3,5-Trimethylbenzene	0.0250	ND	0.0274	0.0260	110	104	1	67.9-134			5.12	20
Vinyl chloride	0.0250	ND	0.0250	0.0242	100	96.8	1	44.3-143			3.27	20
Xylenes, Total	0.0750	ND	0.0800	0.0770	107	103	1	65.6-133			3.86	20
(S) Toluene-d8					*103*	*104*		*90.0-115*				
(S) Dibromofluoromethane					*105*	*103*		*79.0-121*				
(S) 4-Bromofluorobenzene					*104*	*101*		*80.1-120*				

Method Blank (MB)

(MB) 12/30/15 10:10

Analyte	MB Result mg/l	MB Qualifier	MB RDL mg/l
Trichloroethene	ND		0.000500
(S) Toluene-d8	*103*		*90.0-115*
(S) Dibromofluoromethane	*98.7*		*79.0-121*
(S) 4-Bromofluorobenzene	*103*		*80.1-120*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 12/30/15 08:48 • (LCSD) 12/30/15 09:09

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Trichloroethene	0.0250	0.0250	0.0254	100	102	79.5-121			1.58	20
(S) Toluene-d8				*100*	*103*	*90.0-115*				
(S) Dibromofluoromethane				*98.0*	*97.7*	*79.0-121*				
(S) 4-Bromofluorobenzene				*104*	*105*	*80.1-120*				

L807975-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 12/30/15 14:11 • (MS) 12/30/15 14:32 • (MSD) 12/30/15 14:53

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Trichloroethene	0.0250	ND	0.0231	0.0220	92.3	87.9	1	48.9-148			4.96	20
(S) Toluene-d8					*101*	*101*		*90.0-115*				
(S) Dibromofluoromethane					*94.9*	*94.2*		*79.0-121*				
(S) 4-Bromofluorobenzene					*102*	*106*		*80.1-120*				

Method Blank (MB)

(MB) 12/29/15 09:47

Analyte	MB Result mg/l	MB Qualifier	MB RDL mg/l
Acetone	ND		0.0250
Acrylonitrile	ND		0.00250
Benzene	ND		0.000500
Bromobenzene	ND		0.000500
Bromochloromethane	ND		0.000500
Bromodichloromethane	ND		0.000500
Bromoform	ND		0.000500
Bromomethane	ND		0.000500
n-Butylbenzene	ND		0.000500
Carbon disulfide	ND		0.000500
sec-Butylbenzene	ND		0.000500
tert-Butylbenzene	ND		0.000500
Carbon tetrachloride	ND		0.000500
Chlorobenzene	ND		0.000500
Chlorodibromomethane	ND		0.000500
Chloroethane	ND		0.000500
2-Chloroethyl vinyl ether	ND		0.0250
Chloroform	ND		0.000500
Chloromethane	ND		0.000500
2-Chlorotoluene	ND		0.000500
4-Chlorotoluene	ND		0.000500
1,2-Dibromo-3-Chloropropane	ND		0.00100
1,2-Dibromoethane	ND		0.000500
Dibromomethane	ND		0.000500
1,2-Dichlorobenzene	ND		0.000500
1,3-Dichlorobenzene	ND		0.000500
1,4-Dichlorobenzene	ND		0.000500
Dichlorodifluoromethane	ND		0.000500
1,1-Dichloroethane	ND		0.000500
1,2-Dichloroethane	ND		0.000500
1,1-Dichloroethene	ND		0.000500
cis-1,2-Dichloroethene	ND		0.000500
trans-1,2-Dichloroethene	ND		0.000500
1,2-Dichloropropane	ND		0.000500
1,1-Dichloropropene	ND		0.000500
trans-1,4-Dichloro-2-butene	ND		0.00500

Method Blank (MB)

(MB) 12/29/15 09:47

Analyte	MB Result mg/l	MB Qualifier	MB RDL mg/l
1,3-Dichloropropane	ND		0.000500
cis-1,3-Dichloropropene	ND		0.000500
trans-1,3-Dichloropropene	ND		0.000500
2,2-Dichloropropane	ND		0.000500
2-Hexanone	ND		0.00250
Di-isopropyl ether	ND		0.000500
Ethylbenzene	ND		0.000500
n-Hexane	ND		0.00100
Iodomethane	ND		0.0100
Hexachloro-1,3-butadiene	ND		0.00100
Isopropylbenzene	ND		0.000500
p-Isopropyltoluene	ND		0.000500
2-Butanone (MEK)	ND		0.00250
Methylene Chloride	ND		0.00250
4-Methyl-2-pentanone (MIBK)	ND		0.00250
Methyl tert-butyl ether	ND		0.000500
Naphthalene	ND		0.000500
n-Propylbenzene	ND		0.000500
Styrene	ND		0.000500
1,1,1,2-Tetrachloroethane	ND		0.000500
1,1,2,2-Tetrachloroethane	ND		0.000500
Tetrachloroethene	ND		0.000500
Toluene	ND		0.000500
1,1,2-Trichlorotrifluoroethane	ND		0.000500
Vinyl acetate	ND		0.00250
1,2,3-Trichlorobenzene	ND		0.000500
1,2,4-Trichlorobenzene	ND		0.000500
1,1,1-Trichloroethane	ND		0.000500
1,1,2-Trichloroethane	ND		0.000500
Trichloroethene	ND		0.000500
Trichlorofluoromethane	ND		0.000500
1,2,3-Trichloropropane	ND		0.00250
1,2,3-Trimethylbenzene	ND		0.000500
1,2,4-Trimethylbenzene	ND		0.000500
1,3,5-Trimethylbenzene	ND		0.000500
Vinyl chloride	ND		0.000500

Method Blank (MB)

(MB) 12/29/15 09:47

Analyte	MB Result mg/l	MB Qualifier	MB RDL mg/l
Xylenes, Total	ND		0.00150
(S) Toluene-d8	*105*		*90.0-115*
(S) Dibromofluoromethane	*102*		*79.0-121*
(S) 4-Bromofluorobenzene	*102*		*80.1-120*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 12/29/15 07:43 • (LCSD) 12/29/15 08:03

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Bromochloromethane	0.0250	0.0274	0.0245	110	98.0	78.9-123			11.1	20
Carbon disulfide	0.0250	0.0299	0.0270	120	108	53.0-134			10.1	20
Acetone	0.125	0.116	0.108	92.7	86.7	28.7-175			6.66	20.9
Acrylonitrile	0.125	0.139	0.128	111	102	58.2-145			8.54	20
Benzene	0.0250	0.0276	0.0248	111	99.2	73.0-122			10.9	20
Bromobenzene	0.0250	0.0275	0.0252	110	101	81.5-115			8.94	20
Bromodichloromethane	0.0250	0.0274	0.0257	109	103	75.5-121			6.16	20
Bromoform	0.0250	0.0298	0.0284	119	114	71.5-131			4.85	20
Bromomethane	0.0250	0.0266	0.0246	106	98.6	22.4-187			7.71	20
n-Butylbenzene	0.0250	0.0305	0.0289	122	116	75.9-134			5.36	20
sec-Butylbenzene	0.0250	0.0285	0.0260	114	104	80.6-126			9.31	20
tert-Butylbenzene	0.0250	0.0282	0.0257	113	103	79.3-127			9.26	20
trans-1,4-Dichloro-2-butene	0.0250	0.0258	0.0255	103	102	58.3-129			1.36	20
Carbon tetrachloride	0.0250	0.0290	0.0259	116	104	70.9-129			11.3	20
Chlorobenzene	0.0250	0.0278	0.0251	111	100	79.7-122			10.2	20
Chlorodibromomethane	0.0250	0.0290	0.0268	116	107	78.2-124			8.06	20
2-Hexanone	0.125	0.150	0.136	120	109	59.4-151			10.1	20
Chloroethane	0.0250	0.0275	0.0252	110	101	41.2-153			8.76	20
2-Chloroethyl vinyl ether	0.125	0.161	0.143	128	115	23.4-162			11.4	23.5
n-Hexane	0.0250	0.0277	0.0248	111	99.3	59.5-132			11.1	20
Chloroform	0.0250	0.0274	0.0250	110	100	73.2-125			9.15	20
Iodomethane	0.125	0.142	0.133	114	106	64.6-137			6.82	20
Chloromethane	0.0250	0.0242	0.0216	96.9	86.3	55.8-134			11.6	20
2-Chlorotoluene	0.0250	0.0263	0.0245	105	97.8	76.4-125			7.28	20
4-Chlorotoluene	0.0250	0.0290	0.0264	116	105	81.5-121			9.33	20
1,2-Dibromo-3-Chloropropane	0.0250	0.0281	0.0262	112	105	64.8-131			7.07	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 12/29/15 07:43 • (LCSD) 12/29/15 08:03

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,2-Dibromoethane	0.0250	0.0280	0.0259	112	104	79.8-122			7.74	20
Dibromomethane	0.0250	0.0276	0.0255	110	102	79.5-118			7.72	20
1,2-Dichlorobenzene	0.0250	0.0277	0.0256	111	102	84.7-118			7.76	20
1,3-Dichlorobenzene	0.0250	0.0291	0.0262	116	105	77.6-127			10.3	20
1,4-Dichlorobenzene	0.0250	0.0277	0.0261	111	104	82.2-114			6.03	20
Dichlorodifluoromethane	0.0250	0.0222	0.0200	88.7	79.9	56.0-134			10.4	20
1,1-Dichloroethane	0.0250	0.0280	0.0251	112	101	71.7-127			10.8	20
1,2-Dichloroethane	0.0250	0.0277	0.0248	111	99.1	65.3-126			11.0	20
1,1-Dichloroethene	0.0250	0.0288	0.0259	115	104	59.9-137			10.4	20
cis-1,2-Dichloroethene	0.0250	0.0279	0.0251	111	101	77.3-122			10.3	20
trans-1,2-Dichloroethene	0.0250	0.0284	0.0255	114	102	72.6-125			10.9	20
1,2-Dichloropropane	0.0250	0.0286	0.0261	114	104	77.4-125			9.24	20
1,1-Dichloropropene	0.0250	0.0279	0.0250	112	100	72.5-127			11.1	20
1,3-Dichloropropane	0.0250	0.0273	0.0252	109	101	80.6-115			8.11	20
cis-1,3-Dichloropropene	0.0250	0.0282	0.0261	113	104	77.7-124			7.75	20
trans-1,3-Dichloropropene	0.0250	0.0297	0.0274	119	109	73.5-127			8.25	20
2,2-Dichloropropane	0.0250	0.0282	0.0261	113	104	61.3-134			7.81	20
Di-isopropyl ether	0.0250	0.0282	0.0255	113	102	65.1-135			9.94	20
Vinyl acetate	0.125	0.167	0.153	134	122	41.7-159			8.92	20
Ethylbenzene	0.0250	0.0279	0.0254	112	101	80.9-121			9.43	20
Hexachloro-1,3-butadiene	0.0250	0.0289	0.0272	116	109	73.7-133			5.96	20
Isopropylbenzene	0.0250	0.0281	0.0257	113	103	81.6-124			8.97	20
p-Isopropyltoluene	0.0250	0.0295	0.0269	118	108	77.6-129			9.00	20
2-Butanone (MEK)	0.125	0.128	0.119	102	95.1	46.4-155			6.98	20
Methylene Chloride	0.0250	0.0272	0.0251	109	101	69.5-120			8.02	20
4-Methyl-2-pentanone (MIBK)	0.125	0.141	0.130	113	104	63.3-138			8.37	20
Methyl tert-butyl ether	0.0250	0.0273	0.0247	109	99.0	70.1-125			9.63	20
Naphthalene	0.0250	0.0269	0.0259	108	104	69.7-134			3.54	20
n-Propylbenzene	0.0250	0.0286	0.0264	115	106	81.9-122			8.14	20
Styrene	0.0250	0.0290	0.0268	116	107	79.9-124			7.98	20
1,1,1,2-Tetrachloroethane	0.0250	0.0280	0.0258	112	103	78.5-125			8.20	20
1,1,2,2-Tetrachloroethane	0.0250	0.0281	0.0259	112	104	79.3-123			8.08	20
Tetrachloroethene	0.0250	0.0281	0.0262	113	105	73.5-130			6.95	20
Toluene	0.0250	0.0271	0.0249	109	99.6	77.9-116			8.62	20
1,1,2-Trichlorotrifluoroethane	0.0250	0.0283	0.0259	113	103	62.0-141			8.86	20
1,2,3-Trichlorobenzene	0.0250	0.0290	0.0281	116	112	75.7-134			3.09	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 12/29/15 07:43 • (LCSD) 12/29/15 08:03

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,2,4-Trichlorobenzene	0.0250	0.0310	0.0292	124	117	76.1-136			6.03	20
1,1,1-Trichloroethane	0.0250	0.0288	0.0261	115	105	71.1-129			9.86	20
1,1,2-Trichloroethane	0.0250	0.0281	0.0255	112	102	81.6-120			9.64	20
Trichloroethene	0.0250	0.0271	0.0248	108	99.3	79.5-121			8.78	20
Trichlorofluoromethane	0.0250	0.0274	0.0253	110	101	49.1-157			8.08	20
1,2,3-Trichloropropane	0.0250	0.0263	0.0251	105	100	74.9-124			4.98	20
1,2,3-Trimethylbenzene	0.0250	0.0264	0.0251	106	100	79.9-118			4.93	20
1,2,4-Trimethylbenzene	0.0250	0.0288	0.0264	115	106	79.0-122			8.73	20
1,3,5-Trimethylbenzene	0.0250	0.0284	0.0262	114	105	81.0-123			7.97	20
Vinyl chloride	0.0250	0.0255	0.0230	102	91.9	61.5-134			10.3	20
Xylenes, Total	0.0750	0.0847	0.0779	113	104	79.2-122			8.31	20
(S) Toluene-d8				*104*	*104*	*90.0-115*				
(S) Dibromofluoromethane				*103*	*100*	*79.0-121*				
(S) 4-Bromofluorobenzene				*103*	*102*	*80.1-120*				

L807997-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 12/29/15 11:38 • (MS) 12/29/15 08:45 • (MSD) 12/29/15 09:06

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Bromochloromethane	0.0250	ND	0.0270	0.0254	108	102	1	74.4-128			5.97	20
Carbon disulfide	0.0250	ND	0.0282	0.0265	113	106	1	34.9-138			5.94	20
Acetone	0.125	0.000816	0.0517	0.0453	40.7	35.6	1	25.0-156			13.3	21.5
trans-1,4-Dichloro-2-butene	0.0250	ND	0.0253	0.0231	101	92.3	1	57.6-136			9.31	20
Acrylonitrile	0.125	ND	0.137	0.126	110	101	1	55.9-161			8.63	20
Benzene	0.0250	ND	0.0263	0.0254	105	102	1	58.6-133			3.31	20
Bromobenzene	0.0250	ND	0.0253	0.0251	101	100	1	70.6-125			0.880	20
Bromodichloromethane	0.0250	ND	0.0261	0.0248	104	99.0	1	69.2-127			5.31	20
2-Hexanone	0.125	ND	0.114	0.107	91.0	85.4	1	59.4-154			6.32	20.1
Bromoform	0.0250	ND	0.0288	0.0284	115	114	1	66.3-140			1.12	20
n-Hexane	0.0250	ND	0.0265	0.0255	106	102	1	38.7-146			3.85	20
Bromomethane	0.0250	ND	0.0260	0.0241	104	96.3	1	16.6-183			7.53	20.5
Iodomethane	0.125	ND	0.144	0.135	115	108	1	55.2-140			5.95	20
n-Butylbenzene	0.0250	ND	0.0284	0.0282	114	113	1	64.8-145			0.600	20
sec-Butylbenzene	0.0250	ND	0.0258	0.0255	103	102	1	66.8-139			1.21	20
tert-Butylbenzene	0.0250	ND	0.0256	0.0252	102	101	1	67.1-138			1.48	20

L807997-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 12/29/15 11:38 • (MS) 12/29/15 08:45 • (MSD) 12/29/15 09:06

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Carbon tetrachloride	0.0250	ND	0.0267	0.0259	107	104	1	60.6-139			3.20	20
Chlorobenzene	0.0250	ND	0.0257	0.0252	103	101	1	70.1-130			1.95	20
Chlorodibromomethane	0.0250	ND	0.0266	0.0271	106	108	1	71.6-132			1.68	20
Chloroethane	0.0250	ND	0.0262	0.0251	105	100	1	33.3-155			4.13	20
2-Chloroethyl vinyl ether	0.125	ND	0.102	0.0900	81.9	72.0	1	5.00-149			12.9	40
Chloroform	0.0250	ND	0.0265	0.0253	106	101	1	66.1-133			4.63	20
Chloromethane	0.0250	ND	0.0231	0.0218	92.4	87.0	1	40.7-139			5.96	20
2-Chlorotoluene	0.0250	ND	0.0239	0.0235	95.8	93.9	1	66.9-134			2.00	20
4-Chlorotoluene	0.0250	ND	0.0268	0.0261	107	104	1	66.8-134			2.70	20
1,2-Dibromo-3-Chloropropane	0.0250	ND	0.0274	0.0250	110	100	1	63.9-142			9.14	20.2
1,2-Dibromoethane	0.0250	ND	0.0262	0.0258	105	103	1	73.8-131			1.65	20
Dibromomethane	0.0250	ND	0.0268	0.0259	107	104	1	72.8-127			3.39	20
1,2-Dichlorobenzene	0.0250	ND	0.0262	0.0252	105	101	1	77.4-127			3.65	20
1,3-Dichlorobenzene	0.0250	ND	0.0264	0.0261	105	104	1	67.9-136			1.04	20
1,4-Dichlorobenzene	0.0250	ND	0.0264	0.0257	106	103	1	74.4-123			2.64	20
Dichlorodifluoromethane	0.0250	ND	0.0208	0.0199	83.3	79.7	1	42.2-146			4.35	20
1,1-Dichloroethane	0.0250	ND	0.0266	0.0252	107	101	1	64.0-134			5.52	20
1,2-Dichloroethane	0.0250	ND	0.0274	0.0255	109	102	1	60.7-132			7.00	20
Vinyl acetate	0.125	ND	0.168	0.156	135	125	1	42.8-181			7.69	20
1,1-Dichloroethene	0.0250	ND	0.0271	0.0254	108	102	1	48.8-144			6.24	20
cis-1,2-Dichloroethene	0.0250	ND	0.0263	0.0253	105	101	1	60.6-136			3.84	20
trans-1,2-Dichloroethene	0.0250	ND	0.0271	0.0256	109	102	1	61.0-132			5.88	20
1,2-Dichloropropane	0.0250	ND	0.0267	0.0258	107	103	1	69.7-130			3.73	20
1,1-Dichloropropene	0.0250	ND	0.0262	0.0254	105	102	1	61.5-136			3.16	20
1,3-Dichloropropane	0.0250	ND	0.0266	0.0255	106	102	1	74.3-123			4.21	20
cis-1,3-Dichloropropene	0.0250	ND	0.0269	0.0261	108	104	1	71.1-129			3.32	20
trans-1,3-Dichloropropene	0.0250	ND	0.0284	0.0276	114	110	1	66.3-136			2.73	20
2,2-Dichloropropane	0.0250	ND	0.0263	0.0246	105	98.6	1	54.9-142			6.39	20
Di-isopropyl ether	0.0250	ND	0.0274	0.0260	109	104	1	59.9-140			5.16	20
Ethylbenzene	0.0250	ND	0.0254	0.0252	102	101	1	62.7-136			0.950	20
Hexachloro-1,3-butadiene	0.0250	ND	0.0265	0.0269	106	108	1	61.1-144			1.56	20.1
Isopropylbenzene	0.0250	ND	0.0258	0.0252	103	101	1	67.4-136			2.36	20
p-Isopropyltoluene	0.0250	ND	0.0266	0.0259	106	104	1	62.8-143			2.34	20
2-Butanone (MEK)	0.125	ND	0.0898	0.0807	71.9	64.6	1	45.0-156			10.7	20.8
Methylene Chloride	0.0250	ND	0.0262	0.0251	105	100	1	61.5-125			4.32	20
4-Methyl-2-pentanone (MIBK)	0.125	ND	0.133	0.124	107	99.0	1	60.7-150			7.29	20

L807997-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 12/29/15 11:38 • (MS) 12/29/15 08:45 • (MSD) 12/29/15 09:06

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Methyl tert-butyl ether	0.0250	ND	0.0264	0.0242	106	96.7	1	61.4-136			8.86	20
Naphthalene	0.0250	ND	0.0260	0.0254	104	101	1	61.8-143			2.67	20
n-Propylbenzene	0.0250	ND	0.0259	0.0259	104	103	1	63.2-139			0.200	20
Styrene	0.0250	ND	0.0270	0.0266	108	106	1	68.2-133			1.35	20
1,1,1,2-Tetrachloroethane	0.0250	ND	0.0262	0.0254	105	102	1	70.5-132			2.80	20
1,1,2,2-Tetrachloroethane	0.0250	ND	0.0272	0.0259	109	104	1	64.9-145			4.90	20
Tetrachloroethene	0.0250	ND	0.0262	0.0256	105	103	1	57.4-141			2.06	20
Toluene	0.0250	ND	0.0255	0.0249	102	99.7	1	67.8-124			2.17	20
1,1,2-Trichlorotrifluoroethane	0.0250	ND	0.0266	0.0258	106	103	1	53.7-150			3.01	20
1,2,3-Trichlorobenzene	0.0250	ND	0.0273	0.0275	109	110	1	65.7-143			0.430	20
1,2,4-Trichlorobenzene	0.0250	ND	0.0287	0.0284	115	114	1	67.0-146			1.12	20
1,1,1-Trichloroethane	0.0250	ND	0.0274	0.0257	110	103	1	58.7-134			6.41	20
1,1,2-Trichloroethane	0.0250	ND	0.0266	0.0257	106	103	1	74.1-130			3.55	20
Trichloroethene	0.0250	ND	0.0256	0.0246	102	98.6	1	48.9-148			3.78	20
Trichlorofluoromethane	0.0250	ND	0.0262	0.0249	105	99.6	1	39.9-165			5.09	20
1,2,3-Trichloropropane	0.0250	ND	0.0246	0.0248	98.6	99.4	1	71.5-134			0.830	20
1,2,3-Trimethylbenzene	0.0250	ND	0.0255	0.0243	102	97.4	1	62.7-133			4.46	20
1,2,4-Trimethylbenzene	0.0250	ND	0.0262	0.0260	105	104	1	60.5-137			1.07	20
1,3,5-Trimethylbenzene	0.0250	ND	0.0258	0.0253	103	101	1	67.9-134			1.90	20
Vinyl chloride	0.0250	ND	0.0241	0.0229	96.5	91.7	1	44.3-143			5.12	20
Xylenes, Total	0.0750	ND	0.0782	0.0761	104	102	1	65.6-133			2.72	20
(S) Toluene-d8					*104*	*105*		*90.0-115*				
(S) Dibromofluoromethane					*104*	*101*		*79.0-121*				
(S) 4-Bromofluorobenzene					*103*	*104*		*80.1-120*				

Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
ND,U	Not detected at the Reporting Limit (or MDL where applicable).
RPD	Relative Percent Difference.
(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
Rec.	Recovery.
SDL	Sample Detection Limit.
MQL	Method Quantitation Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.

Qualifier	Description
J2	Surrogate recovery limits have been exceeded; values are outside lower control limits.
V	The sample concentration is too high to evaluate accurate spike recoveries.

ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our "one location" design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be **YOUR LAB OF CHOICE.**
***** Not all certifications held by the laboratory are applicable to the results reported in the attached report.

State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey–NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Conneticut	PH-0197	North Carolina [1]	DW21704
Florida	E87487	North Carolina [2]	41
Georgia	NELAP	North Dakota	R-140
Georgia [1]	923	Ohio–VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky [1]	90010	South Dakota	n/a
Kentucky [2]	16	Tennessee [1 4]	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

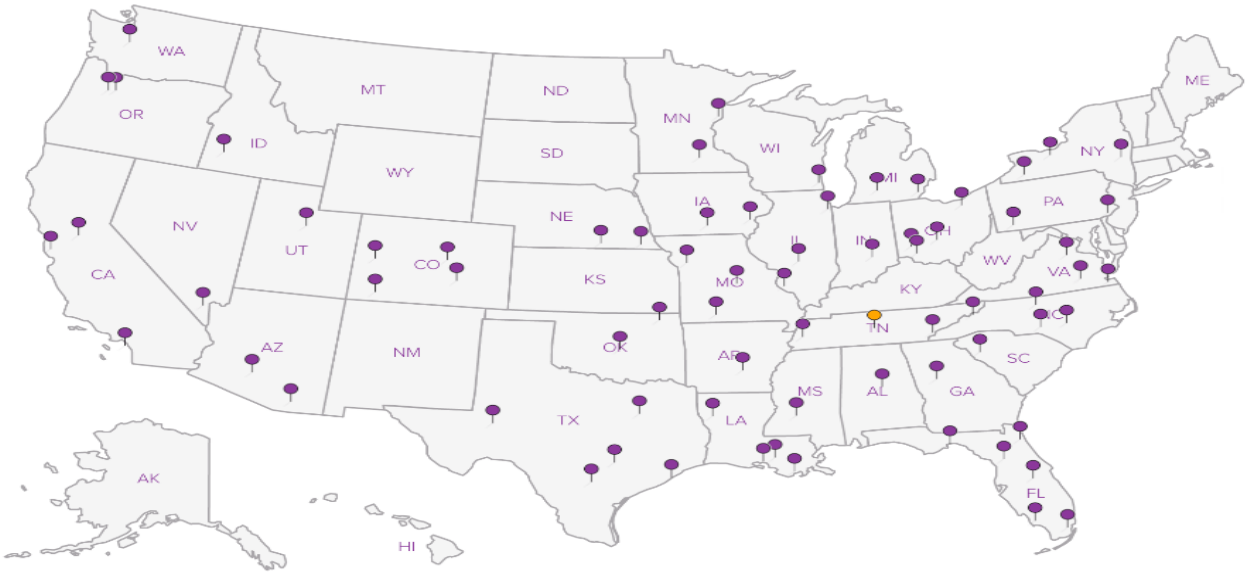
Third Party & Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [n/a] Accreditation not applicable

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. **ESC Lab Sciences performs all testing at our central laboratory.**



PNG Environmental
6665 SW Hampton St.
Suite 101
Tigard, OR. 97223

Billing Information:
Accounts Payable- Betsy Brandner
6665 SW Hampton St. Suite 101
Tigard, OR. 97223

Report to: Paul McBeth
Email to: pmcbeth@pngenv.com

Project Description: Evanite
City/State Collected: Corvallis, OR

Phone: 503-620-2387
FAX:
Client Project #: 1122
ESC Key: PNGENVTOR-EVANITE

Collected by: S. Biles
Site/Facility ID#:
P.O.#:

Collected by (signature):
Immediately Packed on Ice N (Y)

Rush? (Lab MUST Be Notified)
____ Same Day.....200%
____ Next Day.....100%
____ Two Day.....50%
____ Three Day.....25%

Date Results Needed:
Email? __No __Yes
FAX? __No __Yes

Analysis/Container/Preservative

Chain of Custody Page 1 of 2

ESC LABORATORY SCIENCES
12065 Lebanon Road
Mt. Juliet, TN 37122
Phone: (800) 767-5859
Phone: (615) 758-5858
Fax: (615) 758-5859

B023

CoCode PNGENVTOR (lab use only)
Template/Prelogin
Shipped Via:

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	VOC's	Remarks/Contaminant	Sample # (lab only)
DMW-40	Grab	GW		12/14/15	1414	3	X		L807433-01
IMW-40					1445	3	X		02
IMW-32					1518	3	X		03
DMW-24					1532	3	X		04
DMW-3					1542	3	X		05
DMW-26					1645	3	X		06
DMW-30					1729	3	X		07
DMW-29					1742	3	X		08
DMW-17				12/15/15	0920	3	X		09

*Matrix: SS - Soil/Solid GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other

L6503718 9816
L6503718 9805

pH _____ Temp _____
Flow _____ Other _____

Remarks:

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
	12/16/15	1545	ESC
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)

Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ _____
Temp: 3.4
Bottles Received: 12 1
Date: 12/17/15
Time: 0900

Condition: (lab use only) JW
CoC Seals Intact: ___ Y ___ N ___ NA
pH Checked: K2
NCF:

PNG Environmental
6665 SW Hampton St.
Suite 101
Tigard, OR. 97223

Billing Information:
Accounts Payable- Betsy Brandner
6665 SW Hampton St. Suite 101
Tigard, OR. 97223

Report to: Paul McBeth
Email to: pmcbeth@pngenv.com

Project Description: Evanite
City/State Collected: Corvallis, OR
Phone: 503-620-2387
FAX:
Client Project #: 1122
ESC Key: PNGENVTOR-EVANITE
Collected by: S. Biles
Site/Facility ID#:
P.O.#:
Collected by (signature):
Immediately Packed on Ice N (Y)

Rush? (Lab MUST Be Notified)
____ Same Day.....200%
____ Next Day.....100%
____ Two Day.....50%
____ Three Day.....25%

Date Results Needed:
Email? __No__Yes
FAX? __No__Yes

Analysis/Container/Preservative

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	Nitrate (48 hour hold time) / Sulfate	RSK175	Dissolved Iron and Manganese (6010) F F (2)	Ammonia (2)	TOC (2)	VOC Method 8260			Remarks/Contaminant	Sample # (lab only)
DMW-27	Grab	GW		12/15/15	1010	3						X				L807433-10
DMW-28					1106	3						X				11
DMW-25					1202	3						X				12
DMW-16					1305	9	X	X	X	X	X	X				13
DMW-23					1335	9	X	X	X	X	X	X				14
DMW-39				12/16/15	0905	9	X	X	X	X	X	X				15
DMW-37					0945	9	X	X	X	X	X	X				16
DMW-38					1036	9	X	X	X	X	X	X				17
DMW-32					1120	9	X	X	X	X	X	X				18

*Matrix: SS - Soil/Solid GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other

pH ____ Temp ____

Remarks:

Flow ____ Other ____

	Date:	Time:		
Relinquished by: (Signature)	12/16/15	1545	Received by: (Signature)	ESC
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 12/17/15 Time: 0900

Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ ____
Temp: 3.4
Bottles Received: 12
Condition: (lab use only)
CoC Seals Intact: ____ Y ____ N ____ NA
pH Checked: (2)
NCF:

Chain of Custody Page 2 of 3

ESC LAB SCIENCES
12065 Lebanon Road
Mt. Juliet, TN 37122
Phone: (800) 767-5859
Phone: (615) 758-5858
Fax: (615) 758-5859

CoCode PNGENVTOR (lab use only)
Template/Prelogin
Shipped Via:

PNG Environmental
6665 SW Hampton St.
Suite 101
Tigard, OR. 97223

Billing Information:
Accounts Payable- Betsy Brandner
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FAX:
Client Project #: 1122
ESC Key: PNGENVTOR-EVANITE
Collected by: S. Biles
Site/Facility ID#:
P.O.#:
Collected by (signature):
Immediately Packed on Ice N Y

Rush? (Lab MUST Be Notified)
____ Same Day.....200%
____ Next Day.....100%
____ Two Day.....50%
____ Three Day.....25%

Date Results Needed:
Email? __No __Yes
FAX? __No __Yes

Analysis/Container/Preservative

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	Nitrate (48 hour hold time) / Sulfate	RSK175	Dissolved Iron and Manganese (6010) Field Filtered <2	Ammonia <2	TOC <2	VOC Method 8260	Remarks/Contaminant	Sample # (lab only)
DMW-36	Grab	GW		12/16/15	1218	9	X	X	X	X	X	X		L807433-19
DMW-42					1307	9	X	X	X	X	X	X		20
DMW-41					1354	9	X	X	X	X	X	X		21
TB-121615					1400	1						X		22
MW-99					1356	3						X		23

Chain of Custody Page 3 of 3

ESC LABORATORY SCIENCES
12065 Lebanon Road
Mt. Juliet, TN 37122
Phone: (800) 767-5859
Phone: (615) 758-5858
Fax: (615) 758-5859

CoCode PNGENVTOR (lab use only)
Template/Prelogin
Shipped Via:

*Matrix: SS - Soil/Solid GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other_____

pH _____ Temp _____
Flow _____ Other _____

Remarks:

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
	12/18/15	1545	ESC
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)

Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ _____
Temp: 3.4
Bottles Received: 12
Date: 12/17/15
Time: 0920

Condition: (lab use only) OK
CoC Seals Intact: ___ Y ___ N ___ NA
pH Checked: <2
NCF:

POREWATER DATA

ANALYTICAL REPORT

September 24, 2015

PNG Environmental

Sample Delivery Group:	L789249
Samples Received:	09/17/2015
Project Number:	1122
Description:	Evanite
Site:	1122
Report To:	Paul McBeth 6665 SW Hampton St., Suite 101 Tigard, OR 97223

Entire Report Reviewed By:

Jarred Willis
Technical Service Representative

TB-091515 L789249-01 GW

Collected by: Jay Greifer | Collected date/time: 09/15/15 09:00 | Received date/time: 09/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG816703	1	09/22/15 10:28	09/22/15 10:28	KLO

RB0-24 L789249-02 GW

Collected by: Jay Greifer | Collected date/time: 09/15/15 10:32 | Received date/time: 09/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG817274	1	09/24/15 03:40	09/24/15 03:40	KLO

RB0-42 L789249-03 GW

Collected by: Jay Greifer | Collected date/time: 09/15/15 10:44 | Received date/time: 09/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG816421	1	09/21/15 10:22	09/21/15 10:22	KLO

RB1-48 L789249-04 GW

Collected by: Jay Greifer | Collected date/time: 09/15/15 11:15 | Received date/time: 09/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG816421	1	09/21/15 10:43	09/21/15 10:43	KLO

RB1-24 L789249-05 GW

Collected by: Jay Greifer | Collected date/time: 09/15/15 11:28 | Received date/time: 09/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG816421	1	09/21/15 11:04	09/21/15 11:04	KLO

RB2-SW L789249-06 GW

Collected by: Jay Greifer | Collected date/time: 09/15/15 11:38 | Received date/time: 09/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG816421	1	09/21/15 11:25	09/21/15 11:25	KLO

RB2-48 L789249-07 GW

Collected by: Jay Greifer | Collected date/time: 09/15/15 11:51 | Received date/time: 09/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG816421	1	09/21/15 11:46	09/21/15 11:46	KLO

RB3-12 L789249-08 GW

Collected by: Jay Greifer | Collected date/time: 09/15/15 12:23 | Received date/time: 09/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG816421	1	09/21/15 12:07	09/21/15 12:07	KLO

RB4-48 L789249-09 GW

Collected by: Jay Greifer
Collected date/time: 09/15/15 12:46
Received date/time: 09/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG816421	1	09/21/15 12:28	09/21/15 12:28	KLO

RB4-24 L789249-10 GW

Collected by: Jay Greifer
Collected date/time: 09/15/15 13:01
Received date/time: 09/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG816421	1	09/21/15 12:49	09/21/15 12:49	KLO

RB5-48 L789249-11 GW

Collected by: Jay Greifer
Collected date/time: 09/15/15 13:34
Received date/time: 09/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG816421	1	09/21/15 13:10	09/21/15 13:10	KLO

RB5-24 L789249-12 GW

Collected by: Jay Greifer
Collected date/time: 09/15/15 13:50
Received date/time: 09/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG816421	1	09/21/15 13:31	09/21/15 13:31	KLO

RB6-SW L789249-13 GW

Collected by: Jay Greifer
Collected date/time: 09/15/15 14:00
Received date/time: 09/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG816421	1	09/21/15 13:53	09/21/15 13:53	KLO

RB6-48 L789249-14 GW

Collected by: Jay Greifer
Collected date/time: 09/15/15 14:15
Received date/time: 09/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG816421	1	09/21/15 14:14	09/21/15 14:14	KLO

RB6-24 L789249-15 GW

Collected by: Jay Greifer
Collected date/time: 09/15/15 14:32
Received date/time: 09/17/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analysis Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG816421	1	09/21/15 14:35	09/21/15 14:35	KLO

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Jarred Willis
Technical Service Representative

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.0	50.0	1	09/22/2015 10:28	WG816703
Acrolein	U		8.87	50.0	1	09/22/2015 10:28	WG816703
Acrylonitrile	U		1.87	10.0	1	09/22/2015 10:28	WG816703
Benzene	U		0.331	1.00	1	09/22/2015 10:28	WG816703
Bromobenzene	U		0.352	1.00	1	09/22/2015 10:28	WG816703
Bromodichloromethane	U		0.380	1.00	1	09/22/2015 10:28	WG816703
Bromoform	U		0.469	1.00	1	09/22/2015 10:28	WG816703
Bromomethane	U		0.866	5.00	1	09/22/2015 10:28	WG816703
n-Butylbenzene	U		0.361	1.00	1	09/22/2015 10:28	WG816703
sec-Butylbenzene	U		0.365	1.00	1	09/22/2015 10:28	WG816703
tert-Butylbenzene	U		0.399	1.00	1	09/22/2015 10:28	WG816703
Carbon tetrachloride	U		0.379	1.00	1	09/22/2015 10:28	WG816703
Chlorobenzene	U		0.348	1.00	1	09/22/2015 10:28	WG816703
Chlorodibromomethane	U		0.327	1.00	1	09/22/2015 10:28	WG816703
Chloroethane	U		0.453	5.00	1	09/22/2015 10:28	WG816703
2-Chloroethyl vinyl ether	U		3.01	50.0	1	09/22/2015 10:28	WG816703
Chloroform	U		0.324	5.00	1	09/22/2015 10:28	WG816703
Chloromethane	U		0.276	2.50	1	09/22/2015 10:28	WG816703
2-Chlorotoluene	U		0.375	1.00	1	09/22/2015 10:28	WG816703
4-Chlorotoluene	U		0.351	1.00	1	09/22/2015 10:28	WG816703
1,2-Dibromo-3-Chloropropane	U		1.33	5.00	1	09/22/2015 10:28	WG816703
1,2-Dibromoethane	U		0.381	1.00	1	09/22/2015 10:28	WG816703
Dibromomethane	U		0.346	1.00	1	09/22/2015 10:28	WG816703
1,2-Dichlorobenzene	U		0.349	1.00	1	09/22/2015 10:28	WG816703
1,3-Dichlorobenzene	U		0.220	1.00	1	09/22/2015 10:28	WG816703
1,4-Dichlorobenzene	U		0.274	1.00	1	09/22/2015 10:28	WG816703
Dichlorodifluoromethane	U		0.551	5.00	1	09/22/2015 10:28	WG816703
1,1-Dichloroethane	U		0.259	1.00	1	09/22/2015 10:28	WG816703
1,2-Dichloroethane	U		0.361	1.00	1	09/22/2015 10:28	WG816703
1,1-Dichloroethene	U		0.398	1.00	1	09/22/2015 10:28	WG816703
cis-1,2-Dichloroethene	U		0.260	1.00	1	09/22/2015 10:28	WG816703
trans-1,2-Dichloroethene	U		0.396	1.00	1	09/22/2015 10:28	WG816703
1,2-Dichloropropane	U		0.306	1.00	1	09/22/2015 10:28	WG816703
1,1-Dichloropropene	U		0.352	1.00	1	09/22/2015 10:28	WG816703
1,3-Dichloropropane	U		0.366	1.00	1	09/22/2015 10:28	WG816703
cis-1,3-Dichloropropene	U		0.418	1.00	1	09/22/2015 10:28	WG816703
trans-1,3-Dichloropropene	U		0.419	1.00	1	09/22/2015 10:28	WG816703
2,2-Dichloropropane	U		0.321	1.00	1	09/22/2015 10:28	WG816703
Di-isopropyl ether	U		0.320	1.00	1	09/22/2015 10:28	WG816703
Ethylbenzene	U		0.384	1.00	1	09/22/2015 10:28	WG816703
Hexachloro-1,3-butadiene	U		0.256	1.00	1	09/22/2015 10:28	WG816703
Isopropylbenzene	U		0.326	1.00	1	09/22/2015 10:28	WG816703
p-Isopropyltoluene	U		0.350	1.00	1	09/22/2015 10:28	WG816703
2-Butanone (MEK)	U		3.93	10.0	1	09/22/2015 10:28	WG816703
Methylene Chloride	U		1.00	5.00	1	09/22/2015 10:28	WG816703
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	09/22/2015 10:28	WG816703
Methyl tert-butyl ether	U		0.367	1.00	1	09/22/2015 10:28	WG816703
Naphthalene	U		1.00	5.00	1	09/22/2015 10:28	WG816703
n-Propylbenzene	U		0.349	1.00	1	09/22/2015 10:28	WG816703
Styrene	U		0.307	1.00	1	09/22/2015 10:28	WG816703
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	09/22/2015 10:28	WG816703
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	09/22/2015 10:28	WG816703
1,1,2-Trichlorotrifluoroethane	U		0.303	1.00	1	09/22/2015 10:28	WG816703
Tetrachloroethene	U		0.372	1.00	1	09/22/2015 10:28	WG816703
Toluene	U		0.780	5.00	1	09/22/2015 10:28	WG816703
1,2,3-Trichlorobenzene	U		0.230	1.00	1	09/22/2015 10:28	WG816703

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,2,4-Trichlorobenzene	U		0.355	1.00	1	09/22/2015 10:28	WG816703
1,1,1-Trichloroethane	U		0.319	1.00	1	09/22/2015 10:28	WG816703
1,1,2-Trichloroethane	U		0.383	1.00	1	09/22/2015 10:28	WG816703
Trichloroethene	U		0.398	1.00	1	09/22/2015 10:28	WG816703
Trichlorofluoromethane	U		1.20	5.00	1	09/22/2015 10:28	WG816703
1,2,3-Trichloropropane	U		0.807	2.50	1	09/22/2015 10:28	WG816703
1,2,4-Trimethylbenzene	U		0.373	1.00	1	09/22/2015 10:28	WG816703
1,2,3-Trimethylbenzene	U		0.321	1.00	1	09/22/2015 10:28	WG816703
1,3,5-Trimethylbenzene	U		0.387	1.00	1	09/22/2015 10:28	WG816703
Vinyl chloride	U		0.259	1.00	1	09/22/2015 10:28	WG816703
Xylenes, Total	U		1.06	3.00	1	09/22/2015 10:28	WG816703
(S) Toluene-d8	*99.7*			*90.0-115*		*09/22/2015 10:28*	WG816703
(S) Dibromofluoromethane	*93.4*			*79.0-121*		*09/22/2015 10:28*	WG816703
(S) 4-Bromofluorobenzene	*95.8*			*80.1-120*		*09/22/2015 10:28*	WG816703

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.0	50.0	1	09/24/2015 03:40	WG817274
Acrolein	U	J3	8.87	50.0	1	09/24/2015 03:40	WG817274
Acrylonitrile	U		1.87	10.0	1	09/24/2015 03:40	WG817274
Benzene	U		0.331	1.00	1	09/24/2015 03:40	WG817274
Bromobenzene	U		0.352	1.00	1	09/24/2015 03:40	WG817274
Bromodichloromethane	U		0.380	1.00	1	09/24/2015 03:40	WG817274
Bromoform	U		0.469	1.00	1	09/24/2015 03:40	WG817274
Bromomethane	U		0.866	5.00	1	09/24/2015 03:40	WG817274
n-Butylbenzene	U		0.361	1.00	1	09/24/2015 03:40	WG817274
sec-Butylbenzene	U		0.365	1.00	1	09/24/2015 03:40	WG817274
tert-Butylbenzene	U		0.399	1.00	1	09/24/2015 03:40	WG817274
Carbon tetrachloride	U		0.379	1.00	1	09/24/2015 03:40	WG817274
Chlorobenzene	U		0.348	1.00	1	09/24/2015 03:40	WG817274
Chlorodibromomethane	U		0.327	1.00	1	09/24/2015 03:40	WG817274
Chloroethane	U		0.453	5.00	1	09/24/2015 03:40	WG817274
2-Chloroethyl vinyl ether	U		3.01	50.0	1	09/24/2015 03:40	WG817274
Chloroform	U		0.324	5.00	1	09/24/2015 03:40	WG817274
Chloromethane	U		0.276	2.50	1	09/24/2015 03:40	WG817274
2-Chlorotoluene	U		0.375	1.00	1	09/24/2015 03:40	WG817274
4-Chlorotoluene	U		0.351	1.00	1	09/24/2015 03:40	WG817274
1,2-Dibromo-3-Chloropropane	U		1.33	5.00	1	09/24/2015 03:40	WG817274
1,2-Dibromoethane	U		0.381	1.00	1	09/24/2015 03:40	WG817274
Dibromomethane	U		0.346	1.00	1	09/24/2015 03:40	WG817274
1,2-Dichlorobenzene	U		0.349	1.00	1	09/24/2015 03:40	WG817274
1,3-Dichlorobenzene	U		0.220	1.00	1	09/24/2015 03:40	WG817274
1,4-Dichlorobenzene	U		0.274	1.00	1	09/24/2015 03:40	WG817274
Dichlorodifluoromethane	U		0.551	5.00	1	09/24/2015 03:40	WG817274
1,1-Dichloroethane	U		0.259	1.00	1	09/24/2015 03:40	WG817274
1,2-Dichloroethane	U		0.361	1.00	1	09/24/2015 03:40	WG817274
1,1-Dichloroethene	U		0.398	1.00	1	09/24/2015 03:40	WG817274
cis-1,2-Dichloroethene	U		0.260	1.00	1	09/24/2015 03:40	WG817274
trans-1,2-Dichloroethene	U		0.396	1.00	1	09/24/2015 03:40	WG817274
1,2-Dichloropropane	U		0.306	1.00	1	09/24/2015 03:40	WG817274
1,1-Dichloropropene	U		0.352	1.00	1	09/24/2015 03:40	WG817274
1,3-Dichloropropane	U		0.366	1.00	1	09/24/2015 03:40	WG817274
cis-1,3-Dichloropropene	U		0.418	1.00	1	09/24/2015 03:40	WG817274
trans-1,3-Dichloropropene	U		0.419	1.00	1	09/24/2015 03:40	WG817274
2,2-Dichloropropane	U		0.321	1.00	1	09/24/2015 03:40	WG817274
Di-isopropyl ether	U		0.320	1.00	1	09/24/2015 03:40	WG817274
Ethylbenzene	U		0.384	1.00	1	09/24/2015 03:40	WG817274
Hexachloro-1,3-butadiene	U		0.256	1.00	1	09/24/2015 03:40	WG817274
Isopropylbenzene	U		0.326	1.00	1	09/24/2015 03:40	WG817274
p-Isopropyltoluene	U		0.350	1.00	1	09/24/2015 03:40	WG817274
2-Butanone (MEK)	U		3.93	10.0	1	09/24/2015 03:40	WG817274
Methylene Chloride	1.29	J	1.00	5.00	1	09/24/2015 03:40	WG817274
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	09/24/2015 03:40	WG817274
Methyl tert-butyl ether	U		0.367	1.00	1	09/24/2015 03:40	WG817274
Naphthalene	U		1.00	5.00	1	09/24/2015 03:40	WG817274
n-Propylbenzene	U		0.349	1.00	1	09/24/2015 03:40	WG817274
Styrene	U		0.307	1.00	1	09/24/2015 03:40	WG817274
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	09/24/2015 03:40	WG817274
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	09/24/2015 03:40	WG817274
1,1,2-Trichlorotrifluoroethane	U		0.303	1.00	1	09/24/2015 03:40	WG817274
Tetrachloroethene	U		0.372	1.00	1	09/24/2015 03:40	WG817274
Toluene	U		0.780	5.00	1	09/24/2015 03:40	WG817274
1,2,3-Trichlorobenzene	U		0.230	1.00	1	09/24/2015 03:40	WG817274

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,2,4-Trichlorobenzene	U		0.355	1.00	1	09/24/2015 03:40	WG817274
1,1,1-Trichloroethane	U		0.319	1.00	1	09/24/2015 03:40	WG817274
1,1,2-Trichloroethane	U		0.383	1.00	1	09/24/2015 03:40	WG817274
Trichloroethene	U		0.398	1.00	1	09/24/2015 03:40	WG817274
Trichlorofluoromethane	U		1.20	5.00	1	09/24/2015 03:40	WG817274
1,2,3-Trichloropropane	U		0.807	2.50	1	09/24/2015 03:40	WG817274
1,2,4-Trimethylbenzene	U		0.373	1.00	1	09/24/2015 03:40	WG817274
1,2,3-Trimethylbenzene	U		0.321	1.00	1	09/24/2015 03:40	WG817274
1,3,5-Trimethylbenzene	U		0.387	1.00	1	09/24/2015 03:40	WG817274
Vinyl chloride	U		0.259	1.00	1	09/24/2015 03:40	WG817274
Xylenes, Total	U		1.06	3.00	1	09/24/2015 03:40	WG817274
(S) Toluene-d8	*97.3*			*90.0-115*		*09/24/2015 03:40*	WG817274
(S) Dibromofluoromethane	*95.6*			*79.0-121*		*09/24/2015 03:40*	WG817274
(S) 4-Bromofluorobenzene	*109*			*80.1-120*		*09/24/2015 03:40*	WG817274

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.0	50.0	1	09/21/2015 10:22	WG816421
Acrolein	U	J3	8.87	50.0	1	09/21/2015 10:22	WG816421
Acrylonitrile	U		1.87	10.0	1	09/21/2015 10:22	WG816421
Benzene	U		0.331	1.00	1	09/21/2015 10:22	WG816421
Bromobenzene	U		0.352	1.00	1	09/21/2015 10:22	WG816421
Bromodichloromethane	U		0.380	1.00	1	09/21/2015 10:22	WG816421
Bromoform	U		0.469	1.00	1	09/21/2015 10:22	WG816421
Bromomethane	U		0.866	5.00	1	09/21/2015 10:22	WG816421
n-Butylbenzene	U		0.361	1.00	1	09/21/2015 10:22	WG816421
sec-Butylbenzene	U		0.365	1.00	1	09/21/2015 10:22	WG816421
tert-Butylbenzene	U		0.399	1.00	1	09/21/2015 10:22	WG816421
Carbon tetrachloride	U		0.379	1.00	1	09/21/2015 10:22	WG816421
Chlorobenzene	U		0.348	1.00	1	09/21/2015 10:22	WG816421
Chlorodibromomethane	U		0.327	1.00	1	09/21/2015 10:22	WG816421
Chloroethane	U		0.453	5.00	1	09/21/2015 10:22	WG816421
2-Chloroethyl vinyl ether	U		3.01	50.0	1	09/21/2015 10:22	WG816421
Chloroform	U		0.324	5.00	1	09/21/2015 10:22	WG816421
Chloromethane	U		0.276	2.50	1	09/21/2015 10:22	WG816421
2-Chlorotoluene	U		0.375	1.00	1	09/21/2015 10:22	WG816421
4-Chlorotoluene	U		0.351	1.00	1	09/21/2015 10:22	WG816421
1,2-Dibromo-3-Chloropropane	U		1.33	5.00	1	09/21/2015 10:22	WG816421
1,2-Dibromoethane	U		0.381	1.00	1	09/21/2015 10:22	WG816421
Dibromomethane	U		0.346	1.00	1	09/21/2015 10:22	WG816421
1,2-Dichlorobenzene	U		0.349	1.00	1	09/21/2015 10:22	WG816421
1,3-Dichlorobenzene	U		0.220	1.00	1	09/21/2015 10:22	WG816421
1,4-Dichlorobenzene	U	J4	0.274	1.00	1	09/21/2015 10:22	WG816421
Dichlorodifluoromethane	U		0.551	5.00	1	09/21/2015 10:22	WG816421
1,1-Dichloroethane	U		0.259	1.00	1	09/21/2015 10:22	WG816421
1,2-Dichloroethane	U		0.361	1.00	1	09/21/2015 10:22	WG816421
1,1-Dichloroethene	U		0.398	1.00	1	09/21/2015 10:22	WG816421
cis-1,2-Dichloroethene	U		0.260	1.00	1	09/21/2015 10:22	WG816421
trans-1,2-Dichloroethene	U		0.396	1.00	1	09/21/2015 10:22	WG816421
1,2-Dichloropropane	U	J4	0.306	1.00	1	09/21/2015 10:22	WG816421
1,1-Dichloropropene	U		0.352	1.00	1	09/21/2015 10:22	WG816421
1,3-Dichloropropane	U		0.366	1.00	1	09/21/2015 10:22	WG816421
cis-1,3-Dichloropropene	U		0.418	1.00	1	09/21/2015 10:22	WG816421
trans-1,3-Dichloropropene	U		0.419	1.00	1	09/21/2015 10:22	WG816421
2,2-Dichloropropane	U		0.321	1.00	1	09/21/2015 10:22	WG816421
Di-isopropyl ether	U		0.320	1.00	1	09/21/2015 10:22	WG816421
Ethylbenzene	U		0.384	1.00	1	09/21/2015 10:22	WG816421
Hexachloro-1,3-butadiene	U		0.256	1.00	1	09/21/2015 10:22	WG816421
Isopropylbenzene	U		0.326	1.00	1	09/21/2015 10:22	WG816421
p-Isopropyltoluene	U		0.350	1.00	1	09/21/2015 10:22	WG816421
2-Butanone (MEK)	U		3.93	10.0	1	09/21/2015 10:22	WG816421
Methylene Chloride	7.14		1.00	5.00	1	09/21/2015 10:22	WG816421
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	09/21/2015 10:22	WG816421
Methyl tert-butyl ether	U		0.367	1.00	1	09/21/2015 10:22	WG816421
Naphthalene	U		1.00	5.00	1	09/21/2015 10:22	WG816421
n-Propylbenzene	U		0.349	1.00	1	09/21/2015 10:22	WG816421
Styrene	U		0.307	1.00	1	09/21/2015 10:22	WG816421
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	09/21/2015 10:22	WG816421
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	09/21/2015 10:22	WG816421
1,1,2-Trichlorotrifluoroethane	U	J3	0.303	1.00	1	09/21/2015 10:22	WG816421
Tetrachloroethene	U		0.372	1.00	1	09/21/2015 10:22	WG816421
Toluene	U		0.780	5.00	1	09/21/2015 10:22	WG816421
1,2,3-Trichlorobenzene	U		0.230	1.00	1	09/21/2015 10:22	WG816421

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,2,4-Trichlorobenzene	U		0.355	1.00	1	09/21/2015 10:22	WG816421
1,1,1-Trichloroethane	U		0.319	1.00	1	09/21/2015 10:22	WG816421
1,1,2-Trichloroethane	U		0.383	1.00	1	09/21/2015 10:22	WG816421
Trichloroethene	U		0.398	1.00	1	09/21/2015 10:22	WG816421
Trichlorofluoromethane	U		1.20	5.00	1	09/21/2015 10:22	WG816421
1,2,3-Trichloropropane	U		0.807	2.50	1	09/21/2015 10:22	WG816421
1,2,4-Trimethylbenzene	U		0.373	1.00	1	09/21/2015 10:22	WG816421
1,2,3-Trimethylbenzene	U		0.321	1.00	1	09/21/2015 10:22	WG816421
1,3,5-Trimethylbenzene	U		0.387	1.00	1	09/21/2015 10:22	WG816421
Vinyl chloride	U		0.259	1.00	1	09/21/2015 10:22	WG816421
Xylenes, Total	U		1.06	3.00	1	09/21/2015 10:22	WG816421
(S) Toluene-d8	*103*			*90.0-115*		*09/21/2015 10:22*	WG816421
(S) Dibromofluoromethane	*109*			*79.0-121*		*09/21/2015 10:22*	WG816421
(S) 4-Bromofluorobenzene	*108*			*80.1-120*		*09/21/2015 10:22*	WG816421

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.0	50.0	1	09/21/2015 10:43	WG816421
Acrolein	U	J3	8.87	50.0	1	09/21/2015 10:43	WG816421
Acrylonitrile	U		1.87	10.0	1	09/21/2015 10:43	WG816421
Benzene	U		0.331	1.00	1	09/21/2015 10:43	WG816421
Bromobenzene	U		0.352	1.00	1	09/21/2015 10:43	WG816421
Bromodichloromethane	U		0.380	1.00	1	09/21/2015 10:43	WG816421
Bromoform	U		0.469	1.00	1	09/21/2015 10:43	WG816421
Bromomethane	U		0.866	5.00	1	09/21/2015 10:43	WG816421
n-Butylbenzene	U		0.361	1.00	1	09/21/2015 10:43	WG816421
sec-Butylbenzene	U		0.365	1.00	1	09/21/2015 10:43	WG816421
tert-Butylbenzene	U		0.399	1.00	1	09/21/2015 10:43	WG816421
Carbon tetrachloride	U		0.379	1.00	1	09/21/2015 10:43	WG816421
Chlorobenzene	U		0.348	1.00	1	09/21/2015 10:43	WG816421
Chlorodibromomethane	U		0.327	1.00	1	09/21/2015 10:43	WG816421
Chloroethane	U		0.453	5.00	1	09/21/2015 10:43	WG816421
2-Chloroethyl vinyl ether	U		3.01	50.0	1	09/21/2015 10:43	WG816421
Chloroform	U		0.324	5.00	1	09/21/2015 10:43	WG816421
Chloromethane	U		0.276	2.50	1	09/21/2015 10:43	WG816421
2-Chlorotoluene	U		0.375	1.00	1	09/21/2015 10:43	WG816421
4-Chlorotoluene	U		0.351	1.00	1	09/21/2015 10:43	WG816421
1,2-Dibromo-3-Chloropropane	U		1.33	5.00	1	09/21/2015 10:43	WG816421
1,2-Dibromoethane	U		0.381	1.00	1	09/21/2015 10:43	WG816421
Dibromomethane	U		0.346	1.00	1	09/21/2015 10:43	WG816421
1,2-Dichlorobenzene	U		0.349	1.00	1	09/21/2015 10:43	WG816421
1,3-Dichlorobenzene	U		0.220	1.00	1	09/21/2015 10:43	WG816421
1,4-Dichlorobenzene	U	J4	0.274	1.00	1	09/21/2015 10:43	WG816421
Dichlorodifluoromethane	U		0.551	5.00	1	09/21/2015 10:43	WG816421
1,1-Dichloroethane	U		0.259	1.00	1	09/21/2015 10:43	WG816421
1,2-Dichloroethane	U		0.361	1.00	1	09/21/2015 10:43	WG816421
1,1-Dichloroethene	U		0.398	1.00	1	09/21/2015 10:43	WG816421
cis-1,2-Dichloroethene	U		0.260	1.00	1	09/21/2015 10:43	WG816421
trans-1,2-Dichloroethene	U		0.396	1.00	1	09/21/2015 10:43	WG816421
1,2-Dichloropropane	U	J4	0.306	1.00	1	09/21/2015 10:43	WG816421
1,1-Dichloropropene	U		0.352	1.00	1	09/21/2015 10:43	WG816421
1,3-Dichloropropane	U		0.366	1.00	1	09/21/2015 10:43	WG816421
cis-1,3-Dichloropropene	U		0.418	1.00	1	09/21/2015 10:43	WG816421
trans-1,3-Dichloropropene	U		0.419	1.00	1	09/21/2015 10:43	WG816421
2,2-Dichloropropane	U		0.321	1.00	1	09/21/2015 10:43	WG816421
Di-isopropyl ether	U		0.320	1.00	1	09/21/2015 10:43	WG816421
Ethylbenzene	U		0.384	1.00	1	09/21/2015 10:43	WG816421
Hexachloro-1,3-butadiene	U		0.256	1.00	1	09/21/2015 10:43	WG816421
Isopropylbenzene	U		0.326	1.00	1	09/21/2015 10:43	WG816421
p-Isopropyltoluene	U		0.350	1.00	1	09/21/2015 10:43	WG816421
2-Butanone (MEK)	U		3.93	10.0	1	09/21/2015 10:43	WG816421
Methylene Chloride	7.14		1.00	5.00	1	09/21/2015 10:43	WG816421
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	09/21/2015 10:43	WG816421
Methyl tert-butyl ether	U		0.367	1.00	1	09/21/2015 10:43	WG816421
Naphthalene	U		1.00	5.00	1	09/21/2015 10:43	WG816421
n-Propylbenzene	U		0.349	1.00	1	09/21/2015 10:43	WG816421
Styrene	U		0.307	1.00	1	09/21/2015 10:43	WG816421
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	09/21/2015 10:43	WG816421
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	09/21/2015 10:43	WG816421
1,1,2-Trichlorotrifluoroethane	U	J3	0.303	1.00	1	09/21/2015 10:43	WG816421
Tetrachloroethene	U		0.372	1.00	1	09/21/2015 10:43	WG816421
Toluene	U		0.780	5.00	1	09/21/2015 10:43	WG816421
1,2,3-Trichlorobenzene	U		0.230	1.00	1	09/21/2015 10:43	WG816421

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,2,4-Trichlorobenzene	U		0.355	1.00	1	09/21/2015 10:43	WG816421
1,1,1-Trichloroethane	U		0.319	1.00	1	09/21/2015 10:43	WG816421
1,1,2-Trichloroethane	U		0.383	1.00	1	09/21/2015 10:43	WG816421
Trichloroethene	U		0.398	1.00	1	09/21/2015 10:43	WG816421
Trichlorofluoromethane	U		1.20	5.00	1	09/21/2015 10:43	WG816421
1,2,3-Trichloropropane	U		0.807	2.50	1	09/21/2015 10:43	WG816421
1,2,4-Trimethylbenzene	U		0.373	1.00	1	09/21/2015 10:43	WG816421
1,2,3-Trimethylbenzene	U		0.321	1.00	1	09/21/2015 10:43	WG816421
1,3,5-Trimethylbenzene	U		0.387	1.00	1	09/21/2015 10:43	WG816421
Vinyl chloride	U		0.259	1.00	1	09/21/2015 10:43	WG816421
Xylenes, Total	U		1.06	3.00	1	09/21/2015 10:43	WG816421
(S) Toluene-d8	*103*			*90.0-115*		*09/21/2015 10:43*	WG816421
(S) Dibromofluoromethane	*112*			*79.0-121*		*09/21/2015 10:43*	WG816421
(S) 4-Bromofluorobenzene	*107*			*80.1-120*		*09/21/2015 10:43*	WG816421

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.0	50.0	1	09/21/2015 11:04	WG816421
Acrolein	U	J3	8.87	50.0	1	09/21/2015 11:04	WG816421
Acrylonitrile	U		1.87	10.0	1	09/21/2015 11:04	WG816421
Benzene	U		0.331	1.00	1	09/21/2015 11:04	WG816421
Bromobenzene	U		0.352	1.00	1	09/21/2015 11:04	WG816421
Bromodichloromethane	U		0.380	1.00	1	09/21/2015 11:04	WG816421
Bromoform	U		0.469	1.00	1	09/21/2015 11:04	WG816421
Bromomethane	U		0.866	5.00	1	09/21/2015 11:04	WG816421
n-Butylbenzene	U		0.361	1.00	1	09/21/2015 11:04	WG816421
sec-Butylbenzene	U		0.365	1.00	1	09/21/2015 11:04	WG816421
tert-Butylbenzene	U		0.399	1.00	1	09/21/2015 11:04	WG816421
Carbon tetrachloride	U		0.379	1.00	1	09/21/2015 11:04	WG816421
Chlorobenzene	U		0.348	1.00	1	09/21/2015 11:04	WG816421
Chlorodibromomethane	U		0.327	1.00	1	09/21/2015 11:04	WG816421
Chloroethane	U		0.453	5.00	1	09/21/2015 11:04	WG816421
2-Chloroethyl vinyl ether	U		3.01	50.0	1	09/21/2015 11:04	WG816421
Chloroform	U		0.324	5.00	1	09/21/2015 11:04	WG816421
Chloromethane	U		0.276	2.50	1	09/21/2015 11:04	WG816421
2-Chlorotoluene	U		0.375	1.00	1	09/21/2015 11:04	WG816421
4-Chlorotoluene	U		0.351	1.00	1	09/21/2015 11:04	WG816421
1,2-Dibromo-3-Chloropropane	U		1.33	5.00	1	09/21/2015 11:04	WG816421
1,2-Dibromoethane	U		0.381	1.00	1	09/21/2015 11:04	WG816421
Dibromomethane	U		0.346	1.00	1	09/21/2015 11:04	WG816421
1,2-Dichlorobenzene	U		0.349	1.00	1	09/21/2015 11:04	WG816421
1,3-Dichlorobenzene	U		0.220	1.00	1	09/21/2015 11:04	WG816421
1,4-Dichlorobenzene	U	J4	0.274	1.00	1	09/21/2015 11:04	WG816421
Dichlorodifluoromethane	U		0.551	5.00	1	09/21/2015 11:04	WG816421
1,1-Dichloroethane	U		0.259	1.00	1	09/21/2015 11:04	WG816421
1,2-Dichloroethane	U		0.361	1.00	1	09/21/2015 11:04	WG816421
1,1-Dichloroethene	U		0.398	1.00	1	09/21/2015 11:04	WG816421
cis-1,2-Dichloroethene	U		0.260	1.00	1	09/21/2015 11:04	WG816421
trans-1,2-Dichloroethene	U		0.396	1.00	1	09/21/2015 11:04	WG816421
1,2-Dichloropropane	U	J4	0.306	1.00	1	09/21/2015 11:04	WG816421
1,1-Dichloropropene	U		0.352	1.00	1	09/21/2015 11:04	WG816421
1,3-Dichloropropane	U		0.366	1.00	1	09/21/2015 11:04	WG816421
cis-1,3-Dichloropropene	U		0.418	1.00	1	09/21/2015 11:04	WG816421
trans-1,3-Dichloropropene	U		0.419	1.00	1	09/21/2015 11:04	WG816421
2,2-Dichloropropane	U		0.321	1.00	1	09/21/2015 11:04	WG816421
Di-isopropyl ether	U		0.320	1.00	1	09/21/2015 11:04	WG816421
Ethylbenzene	U		0.384	1.00	1	09/21/2015 11:04	WG816421
Hexachloro-1,3-butadiene	U		0.256	1.00	1	09/21/2015 11:04	WG816421
Isopropylbenzene	U		0.326	1.00	1	09/21/2015 11:04	WG816421
p-Isopropyltoluene	U		0.350	1.00	1	09/21/2015 11:04	WG816421
2-Butanone (MEK)	U		3.93	10.0	1	09/21/2015 11:04	WG816421
Methylene Chloride	6.90		1.00	5.00	1	09/21/2015 11:04	WG816421
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	09/21/2015 11:04	WG816421
Methyl tert-butyl ether	U		0.367	1.00	1	09/21/2015 11:04	WG816421
Naphthalene	U		1.00	5.00	1	09/21/2015 11:04	WG816421
n-Propylbenzene	U		0.349	1.00	1	09/21/2015 11:04	WG816421
Styrene	U		0.307	1.00	1	09/21/2015 11:04	WG816421
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	09/21/2015 11:04	WG816421
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	09/21/2015 11:04	WG816421
1,1,2-Trichlorotrifluoroethane	U	J3	0.303	1.00	1	09/21/2015 11:04	WG816421
Tetrachloroethene	U		0.372	1.00	1	09/21/2015 11:04	WG816421
Toluene	U		0.780	5.00	1	09/21/2015 11:04	WG816421
1,2,3-Trichlorobenzene	U		0.230	1.00	1	09/21/2015 11:04	WG816421

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,2,4-Trichlorobenzene	U		0.355	1.00	1	09/21/2015 11:04	WG816421
1,1,1-Trichloroethane	U		0.319	1.00	1	09/21/2015 11:04	WG816421
1,1,2-Trichloroethane	U		0.383	1.00	1	09/21/2015 11:04	WG816421
Trichloroethene	U		0.398	1.00	1	09/21/2015 11:04	WG816421
Trichlorofluoromethane	U		1.20	5.00	1	09/21/2015 11:04	WG816421
1,2,3-Trichloropropane	U		0.807	2.50	1	09/21/2015 11:04	WG816421
1,2,4-Trimethylbenzene	U		0.373	1.00	1	09/21/2015 11:04	WG816421
1,2,3-Trimethylbenzene	U		0.321	1.00	1	09/21/2015 11:04	WG816421
1,3,5-Trimethylbenzene	U		0.387	1.00	1	09/21/2015 11:04	WG816421
Vinyl chloride	U		0.259	1.00	1	09/21/2015 11:04	WG816421
Xylenes, Total	U		1.06	3.00	1	09/21/2015 11:04	WG816421
(S) Toluene-d8	*103*			*90.0-115*		*09/21/2015 11:04*	WG816421
(S) Dibromofluoromethane	*112*			*79.0-121*		*09/21/2015 11:04*	WG816421
(S) 4-Bromofluorobenzene	*109*			*80.1-120*		*09/21/2015 11:04*	WG816421

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.0	50.0	1	09/21/2015 11:25	WG816421
Acrolein	U	J3	8.87	50.0	1	09/21/2015 11:25	WG816421
Acrylonitrile	U		1.87	10.0	1	09/21/2015 11:25	WG816421
Benzene	U		0.331	1.00	1	09/21/2015 11:25	WG816421
Bromobenzene	U		0.352	1.00	1	09/21/2015 11:25	WG816421
Bromodichloromethane	U		0.380	1.00	1	09/21/2015 11:25	WG816421
Bromoform	U		0.469	1.00	1	09/21/2015 11:25	WG816421
Bromomethane	U		0.866	5.00	1	09/21/2015 11:25	WG816421
n-Butylbenzene	U		0.361	1.00	1	09/21/2015 11:25	WG816421
sec-Butylbenzene	U		0.365	1.00	1	09/21/2015 11:25	WG816421
tert-Butylbenzene	U		0.399	1.00	1	09/21/2015 11:25	WG816421
Carbon tetrachloride	U		0.379	1.00	1	09/21/2015 11:25	WG816421
Chlorobenzene	U		0.348	1.00	1	09/21/2015 11:25	WG816421
Chlorodibromomethane	U		0.327	1.00	1	09/21/2015 11:25	WG816421
Chloroethane	U		0.453	5.00	1	09/21/2015 11:25	WG816421
2-Chloroethyl vinyl ether	U		3.01	50.0	1	09/21/2015 11:25	WG816421
Chloroform	U		0.324	5.00	1	09/21/2015 11:25	WG816421
Chloromethane	U		0.276	2.50	1	09/21/2015 11:25	WG816421
2-Chlorotoluene	U		0.375	1.00	1	09/21/2015 11:25	WG816421
4-Chlorotoluene	U		0.351	1.00	1	09/21/2015 11:25	WG816421
1,2-Dibromo-3-Chloropropane	U		1.33	5.00	1	09/21/2015 11:25	WG816421
1,2-Dibromoethane	U		0.381	1.00	1	09/21/2015 11:25	WG816421
Dibromomethane	U		0.346	1.00	1	09/21/2015 11:25	WG816421
1,2-Dichlorobenzene	U		0.349	1.00	1	09/21/2015 11:25	WG816421
1,3-Dichlorobenzene	U		0.220	1.00	1	09/21/2015 11:25	WG816421
1,4-Dichlorobenzene	U	J4	0.274	1.00	1	09/21/2015 11:25	WG816421
Dichlorodifluoromethane	U		0.551	5.00	1	09/21/2015 11:25	WG816421
1,1-Dichloroethane	U		0.259	1.00	1	09/21/2015 11:25	WG816421
1,2-Dichloroethane	U		0.361	1.00	1	09/21/2015 11:25	WG816421
1,1-Dichloroethene	U		0.398	1.00	1	09/21/2015 11:25	WG816421
cis-1,2-Dichloroethene	U		0.260	1.00	1	09/21/2015 11:25	WG816421
trans-1,2-Dichloroethene	U		0.396	1.00	1	09/21/2015 11:25	WG816421
1,2-Dichloropropane	U	J4	0.306	1.00	1	09/21/2015 11:25	WG816421
1,1-Dichloropropene	U		0.352	1.00	1	09/21/2015 11:25	WG816421
1,3-Dichloropropane	U		0.366	1.00	1	09/21/2015 11:25	WG816421
cis-1,3-Dichloropropene	U		0.418	1.00	1	09/21/2015 11:25	WG816421
trans-1,3-Dichloropropene	U		0.419	1.00	1	09/21/2015 11:25	WG816421
2,2-Dichloropropane	U		0.321	1.00	1	09/21/2015 11:25	WG816421
Di-isopropyl ether	U		0.320	1.00	1	09/21/2015 11:25	WG816421
Ethylbenzene	U		0.384	1.00	1	09/21/2015 11:25	WG816421
Hexachloro-1,3-butadiene	U		0.256	1.00	1	09/21/2015 11:25	WG816421
Isopropylbenzene	U		0.326	1.00	1	09/21/2015 11:25	WG816421
p-Isopropyltoluene	U		0.350	1.00	1	09/21/2015 11:25	WG816421
2-Butanone (MEK)	U		3.93	10.0	1	09/21/2015 11:25	WG816421
Methylene Chloride	6.87		1.00	5.00	1	09/21/2015 11:25	WG816421
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	09/21/2015 11:25	WG816421
Methyl tert-butyl ether	U		0.367	1.00	1	09/21/2015 11:25	WG816421
Naphthalene	U		1.00	5.00	1	09/21/2015 11:25	WG816421
n-Propylbenzene	U		0.349	1.00	1	09/21/2015 11:25	WG816421
Styrene	U		0.307	1.00	1	09/21/2015 11:25	WG816421
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	09/21/2015 11:25	WG816421
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	09/21/2015 11:25	WG816421
1,1,2-Trichlorotrifluoroethane	U	J3	0.303	1.00	1	09/21/2015 11:25	WG816421
Tetrachloroethene	U		0.372	1.00	1	09/21/2015 11:25	WG816421
Toluene	U		0.780	5.00	1	09/21/2015 11:25	WG816421
1,2,3-Trichlorobenzene	U		0.230	1.00	1	09/21/2015 11:25	WG816421

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,2,4-Trichlorobenzene	U		0.355	1.00	1	09/21/2015 11:25	WG816421
1,1,1-Trichloroethane	U		0.319	1.00	1	09/21/2015 11:25	WG816421
1,1,2-Trichloroethane	U		0.383	1.00	1	09/21/2015 11:25	WG816421
Trichloroethene	U		0.398	1.00	1	09/21/2015 11:25	WG816421
Trichlorofluoromethane	U		1.20	5.00	1	09/21/2015 11:25	WG816421
1,2,3-Trichloropropane	U		0.807	2.50	1	09/21/2015 11:25	WG816421
1,2,4-Trimethylbenzene	U		0.373	1.00	1	09/21/2015 11:25	WG816421
1,2,3-Trimethylbenzene	U		0.321	1.00	1	09/21/2015 11:25	WG816421
1,3,5-Trimethylbenzene	U		0.387	1.00	1	09/21/2015 11:25	WG816421
Vinyl chloride	U		0.259	1.00	1	09/21/2015 11:25	WG816421
Xylenes, Total	U		1.06	3.00	1	09/21/2015 11:25	WG816421
(S) Toluene-d8	*104*			*90.0-115*		*09/21/2015 11:25*	WG816421
(S) Dibromofluoromethane	*115*			*79.0-121*		*09/21/2015 11:25*	WG816421
(S) 4-Bromofluorobenzene	*108*			*80.1-120*		*09/21/2015 11:25*	WG816421

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.0	50.0	1	09/21/2015 11:46	WG816421
Acrolein	U	J3	8.87	50.0	1	09/21/2015 11:46	WG816421
Acrylonitrile	U		1.87	10.0	1	09/21/2015 11:46	WG816421
Benzene	U		0.331	1.00	1	09/21/2015 11:46	WG816421
Bromobenzene	U		0.352	1.00	1	09/21/2015 11:46	WG816421
Bromodichloromethane	U		0.380	1.00	1	09/21/2015 11:46	WG816421
Bromoform	U		0.469	1.00	1	09/21/2015 11:46	WG816421
Bromomethane	U		0.866	5.00	1	09/21/2015 11:46	WG816421
n-Butylbenzene	U		0.361	1.00	1	09/21/2015 11:46	WG816421
sec-Butylbenzene	U		0.365	1.00	1	09/21/2015 11:46	WG816421
tert-Butylbenzene	U		0.399	1.00	1	09/21/2015 11:46	WG816421
Carbon tetrachloride	U		0.379	1.00	1	09/21/2015 11:46	WG816421
Chlorobenzene	U		0.348	1.00	1	09/21/2015 11:46	WG816421
Chlorodibromomethane	U		0.327	1.00	1	09/21/2015 11:46	WG816421
Chloroethane	U		0.453	5.00	1	09/21/2015 11:46	WG816421
2-Chloroethyl vinyl ether	U		3.01	50.0	1	09/21/2015 11:46	WG816421
Chloroform	U		0.324	5.00	1	09/21/2015 11:46	WG816421
Chloromethane	U		0.276	2.50	1	09/21/2015 11:46	WG816421
2-Chlorotoluene	U		0.375	1.00	1	09/21/2015 11:46	WG816421
4-Chlorotoluene	U		0.351	1.00	1	09/21/2015 11:46	WG816421
1,2-Dibromo-3-Chloropropane	U		1.33	5.00	1	09/21/2015 11:46	WG816421
1,2-Dibromoethane	U		0.381	1.00	1	09/21/2015 11:46	WG816421
Dibromomethane	U		0.346	1.00	1	09/21/2015 11:46	WG816421
1,2-Dichlorobenzene	U		0.349	1.00	1	09/21/2015 11:46	WG816421
1,3-Dichlorobenzene	U		0.220	1.00	1	09/21/2015 11:46	WG816421
1,4-Dichlorobenzene	U	J4	0.274	1.00	1	09/21/2015 11:46	WG816421
Dichlorodifluoromethane	U		0.551	5.00	1	09/21/2015 11:46	WG816421
1,1-Dichloroethane	U		0.259	1.00	1	09/21/2015 11:46	WG816421
1,2-Dichloroethane	U		0.361	1.00	1	09/21/2015 11:46	WG816421
1,1-Dichloroethene	0.703	J	0.398	1.00	1	09/21/2015 11:46	WG816421
cis-1,2-Dichloroethene	109		0.260	1.00	1	09/21/2015 11:46	WG816421
trans-1,2-Dichloroethene	0.493	J	0.396	1.00	1	09/21/2015 11:46	WG816421
1,2-Dichloropropane	U	J4	0.306	1.00	1	09/21/2015 11:46	WG816421
1,1-Dichloropropene	U		0.352	1.00	1	09/21/2015 11:46	WG816421
1,3-Dichloropropane	U		0.366	1.00	1	09/21/2015 11:46	WG816421
cis-1,3-Dichloropropene	U		0.418	1.00	1	09/21/2015 11:46	WG816421
trans-1,3-Dichloropropene	U		0.419	1.00	1	09/21/2015 11:46	WG816421
2,2-Dichloropropane	U		0.321	1.00	1	09/21/2015 11:46	WG816421
Di-isopropyl ether	U		0.320	1.00	1	09/21/2015 11:46	WG816421
Ethylbenzene	U		0.384	1.00	1	09/21/2015 11:46	WG816421
Hexachloro-1,3-butadiene	U		0.256	1.00	1	09/21/2015 11:46	WG816421
Isopropylbenzene	U		0.326	1.00	1	09/21/2015 11:46	WG816421
p-Isopropyltoluene	U		0.350	1.00	1	09/21/2015 11:46	WG816421
2-Butanone (MEK)	U		3.93	10.0	1	09/21/2015 11:46	WG816421
Methylene Chloride	7.30		1.00	5.00	1	09/21/2015 11:46	WG816421
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	09/21/2015 11:46	WG816421
Methyl tert-butyl ether	U		0.367	1.00	1	09/21/2015 11:46	WG816421
Naphthalene	U		1.00	5.00	1	09/21/2015 11:46	WG816421
n-Propylbenzene	U		0.349	1.00	1	09/21/2015 11:46	WG816421
Styrene	U		0.307	1.00	1	09/21/2015 11:46	WG816421
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	09/21/2015 11:46	WG816421
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	09/21/2015 11:46	WG816421
1,1,2-Trichlorotrifluoroethane	U	J3	0.303	1.00	1	09/21/2015 11:46	WG816421
Tetrachloroethene	U		0.372	1.00	1	09/21/2015 11:46	WG816421
Toluene	U		0.780	5.00	1	09/21/2015 11:46	WG816421
1,2,3-Trichlorobenzene	U		0.230	1.00	1	09/21/2015 11:46	WG816421

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,2,4-Trichlorobenzene	U		0.355	1.00	1	09/21/2015 11:46	WG816421
1,1,1-Trichloroethane	U		0.319	1.00	1	09/21/2015 11:46	WG816421
1,1,2-Trichloroethane	U		0.383	1.00	1	09/21/2015 11:46	WG816421
Trichloroethene	152		0.398	1.00	1	09/21/2015 11:46	WG816421
Trichlorofluoromethane	U		1.20	5.00	1	09/21/2015 11:46	WG816421
1,2,3-Trichloropropane	U		0.807	2.50	1	09/21/2015 11:46	WG816421
1,2,4-Trimethylbenzene	U		0.373	1.00	1	09/21/2015 11:46	WG816421
1,2,3-Trimethylbenzene	U		0.321	1.00	1	09/21/2015 11:46	WG816421
1,3,5-Trimethylbenzene	U		0.387	1.00	1	09/21/2015 11:46	WG816421
Vinyl chloride	11.9		0.259	1.00	1	09/21/2015 11:46	WG816421
Xylenes, Total	U		1.06	3.00	1	09/21/2015 11:46	WG816421
(S) Toluene-d8	*102*			*90.0-115*		*09/21/2015 11:46*	WG816421
(S) Dibromofluoromethane	*116*			*79.0-121*		*09/21/2015 11:46*	WG816421
(S) 4-Bromofluorobenzene	*110*			*80.1-120*		*09/21/2015 11:46*	WG816421

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.0	50.0	1	09/21/2015 12:07	WG816421
Acrolein	U	J3	8.87	50.0	1	09/21/2015 12:07	WG816421
Acrylonitrile	U		1.87	10.0	1	09/21/2015 12:07	WG816421
Benzene	U		0.331	1.00	1	09/21/2015 12:07	WG816421
Bromobenzene	U		0.352	1.00	1	09/21/2015 12:07	WG816421
Bromodichloromethane	U		0.380	1.00	1	09/21/2015 12:07	WG816421
Bromoform	U		0.469	1.00	1	09/21/2015 12:07	WG816421
Bromomethane	U		0.866	5.00	1	09/21/2015 12:07	WG816421
n-Butylbenzene	U		0.361	1.00	1	09/21/2015 12:07	WG816421
sec-Butylbenzene	U		0.365	1.00	1	09/21/2015 12:07	WG816421
tert-Butylbenzene	U		0.399	1.00	1	09/21/2015 12:07	WG816421
Carbon tetrachloride	U		0.379	1.00	1	09/21/2015 12:07	WG816421
Chlorobenzene	U		0.348	1.00	1	09/21/2015 12:07	WG816421
Chlorodibromomethane	U		0.327	1.00	1	09/21/2015 12:07	WG816421
Chloroethane	U		0.453	5.00	1	09/21/2015 12:07	WG816421
2-Chloroethyl vinyl ether	U		3.01	50.0	1	09/21/2015 12:07	WG816421
Chloroform	U		0.324	5.00	1	09/21/2015 12:07	WG816421
Chloromethane	U		0.276	2.50	1	09/21/2015 12:07	WG816421
2-Chlorotoluene	U		0.375	1.00	1	09/21/2015 12:07	WG816421
4-Chlorotoluene	U		0.351	1.00	1	09/21/2015 12:07	WG816421
1,2-Dibromo-3-Chloropropane	U		1.33	5.00	1	09/21/2015 12:07	WG816421
1,2-Dibromoethane	U		0.381	1.00	1	09/21/2015 12:07	WG816421
Dibromomethane	U		0.346	1.00	1	09/21/2015 12:07	WG816421
1,2-Dichlorobenzene	U		0.349	1.00	1	09/21/2015 12:07	WG816421
1,3-Dichlorobenzene	U		0.220	1.00	1	09/21/2015 12:07	WG816421
1,4-Dichlorobenzene	U	J4	0.274	1.00	1	09/21/2015 12:07	WG816421
Dichlorodifluoromethane	U		0.551	5.00	1	09/21/2015 12:07	WG816421
1,1-Dichloroethane	U		0.259	1.00	1	09/21/2015 12:07	WG816421
1,2-Dichloroethane	U		0.361	1.00	1	09/21/2015 12:07	WG816421
1,1-Dichloroethene	U		0.398	1.00	1	09/21/2015 12:07	WG816421
cis-1,2-Dichloroethene	11.3		0.260	1.00	1	09/21/2015 12:07	WG816421
trans-1,2-Dichloroethene	U		0.396	1.00	1	09/21/2015 12:07	WG816421
1,2-Dichloropropane	U	J4	0.306	1.00	1	09/21/2015 12:07	WG816421
1,1-Dichloropropene	U		0.352	1.00	1	09/21/2015 12:07	WG816421
1,3-Dichloropropane	U		0.366	1.00	1	09/21/2015 12:07	WG816421
cis-1,3-Dichloropropene	U		0.418	1.00	1	09/21/2015 12:07	WG816421
trans-1,3-Dichloropropene	U		0.419	1.00	1	09/21/2015 12:07	WG816421
2,2-Dichloropropane	U		0.321	1.00	1	09/21/2015 12:07	WG816421
Di-isopropyl ether	U		0.320	1.00	1	09/21/2015 12:07	WG816421
Ethylbenzene	U		0.384	1.00	1	09/21/2015 12:07	WG816421
Hexachloro-1,3-butadiene	U		0.256	1.00	1	09/21/2015 12:07	WG816421
Isopropylbenzene	U		0.326	1.00	1	09/21/2015 12:07	WG816421
p-Isopropyltoluene	U		0.350	1.00	1	09/21/2015 12:07	WG816421
2-Butanone (MEK)	U		3.93	10.0	1	09/21/2015 12:07	WG816421
Methylene Chloride	7.12		1.00	5.00	1	09/21/2015 12:07	WG816421
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	09/21/2015 12:07	WG816421
Methyl tert-butyl ether	U		0.367	1.00	1	09/21/2015 12:07	WG816421
Naphthalene	U		1.00	5.00	1	09/21/2015 12:07	WG816421
n-Propylbenzene	U		0.349	1.00	1	09/21/2015 12:07	WG816421
Styrene	U		0.307	1.00	1	09/21/2015 12:07	WG816421
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	09/21/2015 12:07	WG816421
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	09/21/2015 12:07	WG816421
1,1,2-Trichlorotrifluoroethane	U	J3	0.303	1.00	1	09/21/2015 12:07	WG816421
Tetrachloroethene	U		0.372	1.00	1	09/21/2015 12:07	WG816421
Toluene	U		0.780	5.00	1	09/21/2015 12:07	WG816421
1,2,3-Trichlorobenzene	U		0.230	1.00	1	09/21/2015 12:07	WG816421

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,2,4-Trichlorobenzene	U		0.355	1.00	1	09/21/2015 12:07	WG816421
1,1,1-Trichloroethane	U		0.319	1.00	1	09/21/2015 12:07	WG816421
1,1,2-Trichloroethane	U		0.383	1.00	1	09/21/2015 12:07	WG816421
Trichloroethene	1.75		0.398	1.00	1	09/21/2015 12:07	WG816421
Trichlorofluoromethane	U		1.20	5.00	1	09/21/2015 12:07	WG816421
1,2,3-Trichloropropane	U		0.807	2.50	1	09/21/2015 12:07	WG816421
1,2,4-Trimethylbenzene	U		0.373	1.00	1	09/21/2015 12:07	WG816421
1,2,3-Trimethylbenzene	U		0.321	1.00	1	09/21/2015 12:07	WG816421
1,3,5-Trimethylbenzene	U		0.387	1.00	1	09/21/2015 12:07	WG816421
Vinyl chloride	0.957	J	0.259	1.00	1	09/21/2015 12:07	WG816421
Xylenes, Total	U		1.06	3.00	1	09/21/2015 12:07	WG816421
(S) Toluene-d8	*103*			*90.0-115*		*09/21/2015 12:07*	WG816421
(S) Dibromofluoromethane	*114*			*79.0-121*		*09/21/2015 12:07*	WG816421
(S) 4-Bromofluorobenzene	*107*			*80.1-120*		*09/21/2015 12:07*	WG816421

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.0	50.0	1	09/21/2015 12:28	WG816421
Acrolein	U	J3	8.87	50.0	1	09/21/2015 12:28	WG816421
Acrylonitrile	U		1.87	10.0	1	09/21/2015 12:28	WG816421
Benzene	U		0.331	1.00	1	09/21/2015 12:28	WG816421
Bromobenzene	U		0.352	1.00	1	09/21/2015 12:28	WG816421
Bromodichloromethane	U		0.380	1.00	1	09/21/2015 12:28	WG816421
Bromoform	U		0.469	1.00	1	09/21/2015 12:28	WG816421
Bromomethane	U		0.866	5.00	1	09/21/2015 12:28	WG816421
n-Butylbenzene	U		0.361	1.00	1	09/21/2015 12:28	WG816421
sec-Butylbenzene	U		0.365	1.00	1	09/21/2015 12:28	WG816421
tert-Butylbenzene	U		0.399	1.00	1	09/21/2015 12:28	WG816421
Carbon tetrachloride	U		0.379	1.00	1	09/21/2015 12:28	WG816421
Chlorobenzene	U		0.348	1.00	1	09/21/2015 12:28	WG816421
Chlorodibromomethane	U		0.327	1.00	1	09/21/2015 12:28	WG816421
Chloroethane	U		0.453	5.00	1	09/21/2015 12:28	WG816421
2-Chloroethyl vinyl ether	U		3.01	50.0	1	09/21/2015 12:28	WG816421
Chloroform	U		0.324	5.00	1	09/21/2015 12:28	WG816421
Chloromethane	U		0.276	2.50	1	09/21/2015 12:28	WG816421
2-Chlorotoluene	U		0.375	1.00	1	09/21/2015 12:28	WG816421
4-Chlorotoluene	U		0.351	1.00	1	09/21/2015 12:28	WG816421
1,2-Dibromo-3-Chloropropane	U		1.33	5.00	1	09/21/2015 12:28	WG816421
1,2-Dibromoethane	U		0.381	1.00	1	09/21/2015 12:28	WG816421
Dibromomethane	U		0.346	1.00	1	09/21/2015 12:28	WG816421
1,2-Dichlorobenzene	U		0.349	1.00	1	09/21/2015 12:28	WG816421
1,3-Dichlorobenzene	U		0.220	1.00	1	09/21/2015 12:28	WG816421
1,4-Dichlorobenzene	U	J4	0.274	1.00	1	09/21/2015 12:28	WG816421
Dichlorodifluoromethane	U		0.551	5.00	1	09/21/2015 12:28	WG816421
1,1-Dichloroethane	U		0.259	1.00	1	09/21/2015 12:28	WG816421
1,2-Dichloroethane	U		0.361	1.00	1	09/21/2015 12:28	WG816421
1,1-Dichloroethene	U		0.398	1.00	1	09/21/2015 12:28	WG816421
cis-1,2-Dichloroethene	U		0.260	1.00	1	09/21/2015 12:28	WG816421
trans-1,2-Dichloroethene	U		0.396	1.00	1	09/21/2015 12:28	WG816421
1,2-Dichloropropane	U	J4	0.306	1.00	1	09/21/2015 12:28	WG816421
1,1-Dichloropropene	U		0.352	1.00	1	09/21/2015 12:28	WG816421
1,3-Dichloropropane	U		0.366	1.00	1	09/21/2015 12:28	WG816421
cis-1,3-Dichloropropene	U		0.418	1.00	1	09/21/2015 12:28	WG816421
trans-1,3-Dichloropropene	U		0.419	1.00	1	09/21/2015 12:28	WG816421
2,2-Dichloropropane	U		0.321	1.00	1	09/21/2015 12:28	WG816421
Di-isopropyl ether	U		0.320	1.00	1	09/21/2015 12:28	WG816421
Ethylbenzene	U		0.384	1.00	1	09/21/2015 12:28	WG816421
Hexachloro-1,3-butadiene	U		0.256	1.00	1	09/21/2015 12:28	WG816421
Isopropylbenzene	U		0.326	1.00	1	09/21/2015 12:28	WG816421
p-Isopropyltoluene	U		0.350	1.00	1	09/21/2015 12:28	WG816421
2-Butanone (MEK)	U		3.93	10.0	1	09/21/2015 12:28	WG816421
Methylene Chloride	6.53		1.00	5.00	1	09/21/2015 12:28	WG816421
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	09/21/2015 12:28	WG816421
Methyl tert-butyl ether	U		0.367	1.00	1	09/21/2015 12:28	WG816421
Naphthalene	U		1.00	5.00	1	09/21/2015 12:28	WG816421
n-Propylbenzene	U		0.349	1.00	1	09/21/2015 12:28	WG816421
Styrene	U		0.307	1.00	1	09/21/2015 12:28	WG816421
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	09/21/2015 12:28	WG816421
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	09/21/2015 12:28	WG816421
1,1,2-Trichlorotrifluoroethane	U	J3	0.303	1.00	1	09/21/2015 12:28	WG816421
Tetrachloroethene	U		0.372	1.00	1	09/21/2015 12:28	WG816421
Toluene	U		0.780	5.00	1	09/21/2015 12:28	WG816421
1,2,3-Trichlorobenzene	U		0.230	1.00	1	09/21/2015 12:28	WG816421

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,2,4-Trichlorobenzene	U		0.355	1.00	1	09/21/2015 12:28	WG816421
1,1,1-Trichloroethane	U		0.319	1.00	1	09/21/2015 12:28	WG816421
1,1,2-Trichloroethane	U		0.383	1.00	1	09/21/2015 12:28	WG816421
Trichloroethene	U		0.398	1.00	1	09/21/2015 12:28	WG816421
Trichlorofluoromethane	U		1.20	5.00	1	09/21/2015 12:28	WG816421
1,2,3-Trichloropropane	U		0.807	2.50	1	09/21/2015 12:28	WG816421
1,2,4-Trimethylbenzene	U		0.373	1.00	1	09/21/2015 12:28	WG816421
1,2,3-Trimethylbenzene	U		0.321	1.00	1	09/21/2015 12:28	WG816421
1,3,5-Trimethylbenzene	U		0.387	1.00	1	09/21/2015 12:28	WG816421
Vinyl chloride	U		0.259	1.00	1	09/21/2015 12:28	WG816421
Xylenes, Total	U		1.06	3.00	1	09/21/2015 12:28	WG816421
(S) Toluene-d8	*105*			*90.0-115*		*09/21/2015 12:28*	WG816421
(S) Dibromofluoromethane	*114*			*79.0-121*		*09/21/2015 12:28*	WG816421
(S) 4-Bromofluorobenzene	*108*			*80.1-120*		*09/21/2015 12:28*	WG816421

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.0	50.0	1	09/21/2015 12:49	WG816421
Acrolein	U	J3	8.87	50.0	1	09/21/2015 12:49	WG816421
Acrylonitrile	U		1.87	10.0	1	09/21/2015 12:49	WG816421
Benzene	U		0.331	1.00	1	09/21/2015 12:49	WG816421
Bromobenzene	U		0.352	1.00	1	09/21/2015 12:49	WG816421
Bromodichloromethane	U		0.380	1.00	1	09/21/2015 12:49	WG816421
Bromoform	U		0.469	1.00	1	09/21/2015 12:49	WG816421
Bromomethane	U		0.866	5.00	1	09/21/2015 12:49	WG816421
n-Butylbenzene	U		0.361	1.00	1	09/21/2015 12:49	WG816421
sec-Butylbenzene	U		0.365	1.00	1	09/21/2015 12:49	WG816421
tert-Butylbenzene	U		0.399	1.00	1	09/21/2015 12:49	WG816421
Carbon tetrachloride	U		0.379	1.00	1	09/21/2015 12:49	WG816421
Chlorobenzene	U		0.348	1.00	1	09/21/2015 12:49	WG816421
Chlorodibromomethane	U		0.327	1.00	1	09/21/2015 12:49	WG816421
Chloroethane	U		0.453	5.00	1	09/21/2015 12:49	WG816421
2-Chloroethyl vinyl ether	U		3.01	50.0	1	09/21/2015 12:49	WG816421
Chloroform	U		0.324	5.00	1	09/21/2015 12:49	WG816421
Chloromethane	U		0.276	2.50	1	09/21/2015 12:49	WG816421
2-Chlorotoluene	U		0.375	1.00	1	09/21/2015 12:49	WG816421
4-Chlorotoluene	U		0.351	1.00	1	09/21/2015 12:49	WG816421
1,2-Dibromo-3-Chloropropane	U		1.33	5.00	1	09/21/2015 12:49	WG816421
1,2-Dibromoethane	U		0.381	1.00	1	09/21/2015 12:49	WG816421
Dibromomethane	U		0.346	1.00	1	09/21/2015 12:49	WG816421
1,2-Dichlorobenzene	U		0.349	1.00	1	09/21/2015 12:49	WG816421
1,3-Dichlorobenzene	U		0.220	1.00	1	09/21/2015 12:49	WG816421
1,4-Dichlorobenzene	U	J4	0.274	1.00	1	09/21/2015 12:49	WG816421
Dichlorodifluoromethane	U		0.551	5.00	1	09/21/2015 12:49	WG816421
1,1-Dichloroethane	U		0.259	1.00	1	09/21/2015 12:49	WG816421
1,2-Dichloroethane	U		0.361	1.00	1	09/21/2015 12:49	WG816421
1,1-Dichloroethene	U		0.398	1.00	1	09/21/2015 12:49	WG816421
cis-1,2-Dichloroethene	U		0.260	1.00	1	09/21/2015 12:49	WG816421
trans-1,2-Dichloroethene	U		0.396	1.00	1	09/21/2015 12:49	WG816421
1,2-Dichloropropane	U	J4	0.306	1.00	1	09/21/2015 12:49	WG816421
1,1-Dichloropropene	U		0.352	1.00	1	09/21/2015 12:49	WG816421
1,3-Dichloropropane	U		0.366	1.00	1	09/21/2015 12:49	WG816421
cis-1,3-Dichloropropene	U		0.418	1.00	1	09/21/2015 12:49	WG816421
trans-1,3-Dichloropropene	U		0.419	1.00	1	09/21/2015 12:49	WG816421
2,2-Dichloropropane	U		0.321	1.00	1	09/21/2015 12:49	WG816421
Di-isopropyl ether	U		0.320	1.00	1	09/21/2015 12:49	WG816421
Ethylbenzene	U		0.384	1.00	1	09/21/2015 12:49	WG816421
Hexachloro-1,3-butadiene	U		0.256	1.00	1	09/21/2015 12:49	WG816421
Isopropylbenzene	U		0.326	1.00	1	09/21/2015 12:49	WG816421
p-Isopropyltoluene	U		0.350	1.00	1	09/21/2015 12:49	WG816421
2-Butanone (MEK)	U		3.93	10.0	1	09/21/2015 12:49	WG816421
Methylene Chloride	6.49		1.00	5.00	1	09/21/2015 12:49	WG816421
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	09/21/2015 12:49	WG816421
Methyl tert-butyl ether	U		0.367	1.00	1	09/21/2015 12:49	WG816421
Naphthalene	U		1.00	5.00	1	09/21/2015 12:49	WG816421
n-Propylbenzene	U		0.349	1.00	1	09/21/2015 12:49	WG816421
Styrene	U		0.307	1.00	1	09/21/2015 12:49	WG816421
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	09/21/2015 12:49	WG816421
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	09/21/2015 12:49	WG816421
1,1,2-Trichlorotrifluoroethane	U	J3	0.303	1.00	1	09/21/2015 12:49	WG816421
Tetrachloroethene	U		0.372	1.00	1	09/21/2015 12:49	WG816421
Toluene	U		0.780	5.00	1	09/21/2015 12:49	WG816421
1,2,3-Trichlorobenzene	U		0.230	1.00	1	09/21/2015 12:49	WG816421

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,2,4-Trichlorobenzene	U		0.355	1.00	1	09/21/2015 12:49	WG816421
1,1,1-Trichloroethane	U		0.319	1.00	1	09/21/2015 12:49	WG816421
1,1,2-Trichloroethane	U		0.383	1.00	1	09/21/2015 12:49	WG816421
Trichloroethene	U		0.398	1.00	1	09/21/2015 12:49	WG816421
Trichlorofluoromethane	U		1.20	5.00	1	09/21/2015 12:49	WG816421
1,2,3-Trichloropropane	U		0.807	2.50	1	09/21/2015 12:49	WG816421
1,2,4-Trimethylbenzene	U		0.373	1.00	1	09/21/2015 12:49	WG816421
1,2,3-Trimethylbenzene	U		0.321	1.00	1	09/21/2015 12:49	WG816421
1,3,5-Trimethylbenzene	U		0.387	1.00	1	09/21/2015 12:49	WG816421
Vinyl chloride	U		0.259	1.00	1	09/21/2015 12:49	WG816421
Xylenes, Total	U		1.06	3.00	1	09/21/2015 12:49	WG816421
(S) Toluene-d8	*104*			*90.0-115*		*09/21/2015 12:49*	WG816421
(S) Dibromofluoromethane	*116*			*79.0-121*		*09/21/2015 12:49*	WG816421
(S) 4-Bromofluorobenzene	*107*			*80.1-120*		*09/21/2015 12:49*	WG816421

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.0	50.0	1	09/21/2015 13:10	WG816421
Acrolein	U	J3	8.87	50.0	1	09/21/2015 13:10	WG816421
Acrylonitrile	U		1.87	10.0	1	09/21/2015 13:10	WG816421
Benzene	U		0.331	1.00	1	09/21/2015 13:10	WG816421
Bromobenzene	U		0.352	1.00	1	09/21/2015 13:10	WG816421
Bromodichloromethane	U		0.380	1.00	1	09/21/2015 13:10	WG816421
Bromoform	U		0.469	1.00	1	09/21/2015 13:10	WG816421
Bromomethane	U		0.866	5.00	1	09/21/2015 13:10	WG816421
n-Butylbenzene	U		0.361	1.00	1	09/21/2015 13:10	WG816421
sec-Butylbenzene	U		0.365	1.00	1	09/21/2015 13:10	WG816421
tert-Butylbenzene	U		0.399	1.00	1	09/21/2015 13:10	WG816421
Carbon tetrachloride	U		0.379	1.00	1	09/21/2015 13:10	WG816421
Chlorobenzene	U		0.348	1.00	1	09/21/2015 13:10	WG816421
Chlorodibromomethane	U		0.327	1.00	1	09/21/2015 13:10	WG816421
Chloroethane	U		0.453	5.00	1	09/21/2015 13:10	WG816421
2-Chloroethyl vinyl ether	U		3.01	50.0	1	09/21/2015 13:10	WG816421
Chloroform	U		0.324	5.00	1	09/21/2015 13:10	WG816421
Chloromethane	U		0.276	2.50	1	09/21/2015 13:10	WG816421
2-Chlorotoluene	U		0.375	1.00	1	09/21/2015 13:10	WG816421
4-Chlorotoluene	U		0.351	1.00	1	09/21/2015 13:10	WG816421
1,2-Dibromo-3-Chloropropane	U		1.33	5.00	1	09/21/2015 13:10	WG816421
1,2-Dibromoethane	U		0.381	1.00	1	09/21/2015 13:10	WG816421
Dibromomethane	U		0.346	1.00	1	09/21/2015 13:10	WG816421
1,2-Dichlorobenzene	U		0.349	1.00	1	09/21/2015 13:10	WG816421
1,3-Dichlorobenzene	U		0.220	1.00	1	09/21/2015 13:10	WG816421
1,4-Dichlorobenzene	U	J4	0.274	1.00	1	09/21/2015 13:10	WG816421
Dichlorodifluoromethane	U		0.551	5.00	1	09/21/2015 13:10	WG816421
1,1-Dichloroethane	U		0.259	1.00	1	09/21/2015 13:10	WG816421
1,2-Dichloroethane	U		0.361	1.00	1	09/21/2015 13:10	WG816421
1,1-Dichloroethene	U		0.398	1.00	1	09/21/2015 13:10	WG816421
cis-1,2-Dichloroethene	U		0.260	1.00	1	09/21/2015 13:10	WG816421
trans-1,2-Dichloroethene	U		0.396	1.00	1	09/21/2015 13:10	WG816421
1,2-Dichloropropane	U	J4	0.306	1.00	1	09/21/2015 13:10	WG816421
1,1-Dichloropropene	U		0.352	1.00	1	09/21/2015 13:10	WG816421
1,3-Dichloropropane	U		0.366	1.00	1	09/21/2015 13:10	WG816421
cis-1,3-Dichloropropene	U		0.418	1.00	1	09/21/2015 13:10	WG816421
trans-1,3-Dichloropropene	U		0.419	1.00	1	09/21/2015 13:10	WG816421
2,2-Dichloropropane	U		0.321	1.00	1	09/21/2015 13:10	WG816421
Di-isopropyl ether	U		0.320	1.00	1	09/21/2015 13:10	WG816421
Ethylbenzene	U		0.384	1.00	1	09/21/2015 13:10	WG816421
Hexachloro-1,3-butadiene	U		0.256	1.00	1	09/21/2015 13:10	WG816421
Isopropylbenzene	U		0.326	1.00	1	09/21/2015 13:10	WG816421
p-Isopropyltoluene	U		0.350	1.00	1	09/21/2015 13:10	WG816421
2-Butanone (MEK)	U		3.93	10.0	1	09/21/2015 13:10	WG816421
Methylene Chloride	7.01		1.00	5.00	1	09/21/2015 13:10	WG816421
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	09/21/2015 13:10	WG816421
Methyl tert-butyl ether	U		0.367	1.00	1	09/21/2015 13:10	WG816421
Naphthalene	U		1.00	5.00	1	09/21/2015 13:10	WG816421
n-Propylbenzene	U		0.349	1.00	1	09/21/2015 13:10	WG816421
Styrene	U		0.307	1.00	1	09/21/2015 13:10	WG816421
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	09/21/2015 13:10	WG816421
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	09/21/2015 13:10	WG816421
1,1,2-Trichlorotrifluoroethane	U	J3	0.303	1.00	1	09/21/2015 13:10	WG816421
Tetrachloroethene	U		0.372	1.00	1	09/21/2015 13:10	WG816421
Toluene	U		0.780	5.00	1	09/21/2015 13:10	WG816421
1,2,3-Trichlorobenzene	U		0.230	1.00	1	09/21/2015 13:10	WG816421

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,2,4-Trichlorobenzene	U		0.355	1.00	1	09/21/2015 13:10	WG816421
1,1,1-Trichloroethane	U		0.319	1.00	1	09/21/2015 13:10	WG816421
1,1,2-Trichloroethane	U		0.383	1.00	1	09/21/2015 13:10	WG816421
Trichloroethene	U		0.398	1.00	1	09/21/2015 13:10	WG816421
Trichlorofluoromethane	U		1.20	5.00	1	09/21/2015 13:10	WG816421
1,2,3-Trichloropropane	U		0.807	2.50	1	09/21/2015 13:10	WG816421
1,2,4-Trimethylbenzene	U		0.373	1.00	1	09/21/2015 13:10	WG816421
1,2,3-Trimethylbenzene	U		0.321	1.00	1	09/21/2015 13:10	WG816421
1,3,5-Trimethylbenzene	U		0.387	1.00	1	09/21/2015 13:10	WG816421
Vinyl chloride	U		0.259	1.00	1	09/21/2015 13:10	WG816421
Xylenes, Total	U		1.06	3.00	1	09/21/2015 13:10	WG816421
(S) Toluene-d8	*104*			*90.0-115*		*09/21/2015 13:10*	WG816421
(S) Dibromofluoromethane	*115*			*79.0-121*		*09/21/2015 13:10*	WG816421
(S) 4-Bromofluorobenzene	*109*			*80.1-120*		*09/21/2015 13:10*	WG816421

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.0	50.0	1	09/21/2015 13:31	WG816421
Acrolein	U	J3	8.87	50.0	1	09/21/2015 13:31	WG816421
Acrylonitrile	U		1.87	10.0	1	09/21/2015 13:31	WG816421
Benzene	U		0.331	1.00	1	09/21/2015 13:31	WG816421
Bromobenzene	U		0.352	1.00	1	09/21/2015 13:31	WG816421
Bromodichloromethane	U		0.380	1.00	1	09/21/2015 13:31	WG816421
Bromoform	U		0.469	1.00	1	09/21/2015 13:31	WG816421
Bromomethane	U		0.866	5.00	1	09/21/2015 13:31	WG816421
n-Butylbenzene	U		0.361	1.00	1	09/21/2015 13:31	WG816421
sec-Butylbenzene	U		0.365	1.00	1	09/21/2015 13:31	WG816421
tert-Butylbenzene	U		0.399	1.00	1	09/21/2015 13:31	WG816421
Carbon tetrachloride	U		0.379	1.00	1	09/21/2015 13:31	WG816421
Chlorobenzene	U		0.348	1.00	1	09/21/2015 13:31	WG816421
Chlorodibromomethane	U		0.327	1.00	1	09/21/2015 13:31	WG816421
Chloroethane	U		0.453	5.00	1	09/21/2015 13:31	WG816421
2-Chloroethyl vinyl ether	U		3.01	50.0	1	09/21/2015 13:31	WG816421
Chloroform	U		0.324	5.00	1	09/21/2015 13:31	WG816421
Chloromethane	U		0.276	2.50	1	09/21/2015 13:31	WG816421
2-Chlorotoluene	U		0.375	1.00	1	09/21/2015 13:31	WG816421
4-Chlorotoluene	U		0.351	1.00	1	09/21/2015 13:31	WG816421
1,2-Dibromo-3-Chloropropane	U		1.33	5.00	1	09/21/2015 13:31	WG816421
1,2-Dibromoethane	U		0.381	1.00	1	09/21/2015 13:31	WG816421
Dibromomethane	U		0.346	1.00	1	09/21/2015 13:31	WG816421
1,2-Dichlorobenzene	U		0.349	1.00	1	09/21/2015 13:31	WG816421
1,3-Dichlorobenzene	U		0.220	1.00	1	09/21/2015 13:31	WG816421
1,4-Dichlorobenzene	U	J4	0.274	1.00	1	09/21/2015 13:31	WG816421
Dichlorodifluoromethane	U		0.551	5.00	1	09/21/2015 13:31	WG816421
1,1-Dichloroethane	U		0.259	1.00	1	09/21/2015 13:31	WG816421
1,2-Dichloroethane	U		0.361	1.00	1	09/21/2015 13:31	WG816421
1,1-Dichloroethene	U		0.398	1.00	1	09/21/2015 13:31	WG816421
cis-1,2-Dichloroethene	U		0.260	1.00	1	09/21/2015 13:31	WG816421
trans-1,2-Dichloroethene	U		0.396	1.00	1	09/21/2015 13:31	WG816421
1,2-Dichloropropane	U	J4	0.306	1.00	1	09/21/2015 13:31	WG816421
1,1-Dichloropropene	U		0.352	1.00	1	09/21/2015 13:31	WG816421
1,3-Dichloropropane	U		0.366	1.00	1	09/21/2015 13:31	WG816421
cis-1,3-Dichloropropene	U		0.418	1.00	1	09/21/2015 13:31	WG816421
trans-1,3-Dichloropropene	U		0.419	1.00	1	09/21/2015 13:31	WG816421
2,2-Dichloropropane	U		0.321	1.00	1	09/21/2015 13:31	WG816421
Di-isopropyl ether	U		0.320	1.00	1	09/21/2015 13:31	WG816421
Ethylbenzene	U		0.384	1.00	1	09/21/2015 13:31	WG816421
Hexachloro-1,3-butadiene	U		0.256	1.00	1	09/21/2015 13:31	WG816421
Isopropylbenzene	U		0.326	1.00	1	09/21/2015 13:31	WG816421
p-Isopropyltoluene	U		0.350	1.00	1	09/21/2015 13:31	WG816421
2-Butanone (MEK)	U		3.93	10.0	1	09/21/2015 13:31	WG816421
Methylene Chloride	6.62		1.00	5.00	1	09/21/2015 13:31	WG816421
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	09/21/2015 13:31	WG816421
Methyl tert-butyl ether	U		0.367	1.00	1	09/21/2015 13:31	WG816421
Naphthalene	U		1.00	5.00	1	09/21/2015 13:31	WG816421
n-Propylbenzene	U		0.349	1.00	1	09/21/2015 13:31	WG816421
Styrene	U		0.307	1.00	1	09/21/2015 13:31	WG816421
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	09/21/2015 13:31	WG816421
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	09/21/2015 13:31	WG816421
1,1,2-Trichlorotrifluoroethane	U	J3	0.303	1.00	1	09/21/2015 13:31	WG816421
Tetrachloroethene	U		0.372	1.00	1	09/21/2015 13:31	WG816421
Toluene	U		0.780	5.00	1	09/21/2015 13:31	WG816421
1,2,3-Trichlorobenzene	U		0.230	1.00	1	09/21/2015 13:31	WG816421

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,2,4-Trichlorobenzene	U		0.355	1.00	1	09/21/2015 13:31	WG816421
1,1,1-Trichloroethane	U		0.319	1.00	1	09/21/2015 13:31	WG816421
1,1,2-Trichloroethane	U		0.383	1.00	1	09/21/2015 13:31	WG816421
Trichloroethene	U		0.398	1.00	1	09/21/2015 13:31	WG816421
Trichlorofluoromethane	U		1.20	5.00	1	09/21/2015 13:31	WG816421
1,2,3-Trichloropropane	U		0.807	2.50	1	09/21/2015 13:31	WG816421
1,2,4-Trimethylbenzene	U		0.373	1.00	1	09/21/2015 13:31	WG816421
1,2,3-Trimethylbenzene	U		0.321	1.00	1	09/21/2015 13:31	WG816421
1,3,5-Trimethylbenzene	U		0.387	1.00	1	09/21/2015 13:31	WG816421
Vinyl chloride	0.326	J	0.259	1.00	1	09/21/2015 13:31	WG816421
Xylenes, Total	U		1.06	3.00	1	09/21/2015 13:31	WG816421
(S) Toluene-d8	*105*			*90.0-115*		*09/21/2015 13:31*	WG816421
(S) Dibromofluoromethane	*115*			*79.0-121*		*09/21/2015 13:31*	WG816421
(S) 4-Bromofluorobenzene	*106*			*80.1-120*		*09/21/2015 13:31*	WG816421

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.0	50.0	1	09/21/2015 13:53	WG816421
Acrolein	U	J3	8.87	50.0	1	09/21/2015 13:53	WG816421
Acrylonitrile	U		1.87	10.0	1	09/21/2015 13:53	WG816421
Benzene	U		0.331	1.00	1	09/21/2015 13:53	WG816421
Bromobenzene	U		0.352	1.00	1	09/21/2015 13:53	WG816421
Bromodichloromethane	U		0.380	1.00	1	09/21/2015 13:53	WG816421
Bromoform	U		0.469	1.00	1	09/21/2015 13:53	WG816421
Bromomethane	U		0.866	5.00	1	09/21/2015 13:53	WG816421
n-Butylbenzene	U		0.361	1.00	1	09/21/2015 13:53	WG816421
sec-Butylbenzene	U		0.365	1.00	1	09/21/2015 13:53	WG816421
tert-Butylbenzene	U		0.399	1.00	1	09/21/2015 13:53	WG816421
Carbon tetrachloride	U		0.379	1.00	1	09/21/2015 13:53	WG816421
Chlorobenzene	U		0.348	1.00	1	09/21/2015 13:53	WG816421
Chlorodibromomethane	U		0.327	1.00	1	09/21/2015 13:53	WG816421
Chloroethane	U		0.453	5.00	1	09/21/2015 13:53	WG816421
2-Chloroethyl vinyl ether	U		3.01	50.0	1	09/21/2015 13:53	WG816421
Chloroform	U		0.324	5.00	1	09/21/2015 13:53	WG816421
Chloromethane	U		0.276	2.50	1	09/21/2015 13:53	WG816421
2-Chlorotoluene	U		0.375	1.00	1	09/21/2015 13:53	WG816421
4-Chlorotoluene	U		0.351	1.00	1	09/21/2015 13:53	WG816421
1,2-Dibromo-3-Chloropropane	U		1.33	5.00	1	09/21/2015 13:53	WG816421
1,2-Dibromoethane	U		0.381	1.00	1	09/21/2015 13:53	WG816421
Dibromomethane	U		0.346	1.00	1	09/21/2015 13:53	WG816421
1,2-Dichlorobenzene	U		0.349	1.00	1	09/21/2015 13:53	WG816421
1,3-Dichlorobenzene	U		0.220	1.00	1	09/21/2015 13:53	WG816421
1,4-Dichlorobenzene	U	J4	0.274	1.00	1	09/21/2015 13:53	WG816421
Dichlorodifluoromethane	U		0.551	5.00	1	09/21/2015 13:53	WG816421
1,1-Dichloroethane	U		0.259	1.00	1	09/21/2015 13:53	WG816421
1,2-Dichloroethane	U		0.361	1.00	1	09/21/2015 13:53	WG816421
1,1-Dichloroethene	U		0.398	1.00	1	09/21/2015 13:53	WG816421
cis-1,2-Dichloroethene	U		0.260	1.00	1	09/21/2015 13:53	WG816421
trans-1,2-Dichloroethene	U		0.396	1.00	1	09/21/2015 13:53	WG816421
1,2-Dichloropropane	U	J4	0.306	1.00	1	09/21/2015 13:53	WG816421
1,1-Dichloropropene	U		0.352	1.00	1	09/21/2015 13:53	WG816421
1,3-Dichloropropane	U		0.366	1.00	1	09/21/2015 13:53	WG816421
cis-1,3-Dichloropropene	U		0.418	1.00	1	09/21/2015 13:53	WG816421
trans-1,3-Dichloropropene	U		0.419	1.00	1	09/21/2015 13:53	WG816421
2,2-Dichloropropane	U		0.321	1.00	1	09/21/2015 13:53	WG816421
Di-isopropyl ether	U		0.320	1.00	1	09/21/2015 13:53	WG816421
Ethylbenzene	U		0.384	1.00	1	09/21/2015 13:53	WG816421
Hexachloro-1,3-butadiene	U		0.256	1.00	1	09/21/2015 13:53	WG816421
Isopropylbenzene	U		0.326	1.00	1	09/21/2015 13:53	WG816421
p-Isopropyltoluene	U		0.350	1.00	1	09/21/2015 13:53	WG816421
2-Butanone (MEK)	U		3.93	10.0	1	09/21/2015 13:53	WG816421
Methylene Chloride	6.46		1.00	5.00	1	09/21/2015 13:53	WG816421
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	09/21/2015 13:53	WG816421
Methyl tert-butyl ether	U		0.367	1.00	1	09/21/2015 13:53	WG816421
Naphthalene	U		1.00	5.00	1	09/21/2015 13:53	WG816421
n-Propylbenzene	U		0.349	1.00	1	09/21/2015 13:53	WG816421
Styrene	U		0.307	1.00	1	09/21/2015 13:53	WG816421
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	09/21/2015 13:53	WG816421
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	09/21/2015 13:53	WG816421
1,1,2-Trichlorotrifluoroethane	U	J3	0.303	1.00	1	09/21/2015 13:53	WG816421
Tetrachloroethene	U		0.372	1.00	1	09/21/2015 13:53	WG816421
Toluene	U		0.780	5.00	1	09/21/2015 13:53	WG816421
1,2,3-Trichlorobenzene	U		0.230	1.00	1	09/21/2015 13:53	WG816421

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,2,4-Trichlorobenzene	U		0.355	1.00	1	09/21/2015 13:53	WG816421
1,1,1-Trichloroethane	U		0.319	1.00	1	09/21/2015 13:53	WG816421
1,1,2-Trichloroethane	U		0.383	1.00	1	09/21/2015 13:53	WG816421
Trichloroethene	U		0.398	1.00	1	09/21/2015 13:53	WG816421
Trichlorofluoromethane	U		1.20	5.00	1	09/21/2015 13:53	WG816421
1,2,3-Trichloropropane	U		0.807	2.50	1	09/21/2015 13:53	WG816421
1,2,4-Trimethylbenzene	U		0.373	1.00	1	09/21/2015 13:53	WG816421
1,2,3-Trimethylbenzene	U		0.321	1.00	1	09/21/2015 13:53	WG816421
1,3,5-Trimethylbenzene	U		0.387	1.00	1	09/21/2015 13:53	WG816421
Vinyl chloride	U		0.259	1.00	1	09/21/2015 13:53	WG816421
Xylenes, Total	U		1.06	3.00	1	09/21/2015 13:53	WG816421
(S) Toluene-d8	*105*			*90.0-115*		*09/21/2015 13:53*	WG816421
(S) Dibromofluoromethane	*115*			*79.0-121*		*09/21/2015 13:53*	WG816421
(S) 4-Bromofluorobenzene	*107*			*80.1-120*		*09/21/2015 13:53*	WG816421

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.0	50.0	1	09/21/2015 14:14	WG816421
Acrolein	U	J3	8.87	50.0	1	09/21/2015 14:14	WG816421
Acrylonitrile	U		1.87	10.0	1	09/21/2015 14:14	WG816421
Benzene	U		0.331	1.00	1	09/21/2015 14:14	WG816421
Bromobenzene	U		0.352	1.00	1	09/21/2015 14:14	WG816421
Bromodichloromethane	U		0.380	1.00	1	09/21/2015 14:14	WG816421
Bromoform	U		0.469	1.00	1	09/21/2015 14:14	WG816421
Bromomethane	U		0.866	5.00	1	09/21/2015 14:14	WG816421
n-Butylbenzene	U		0.361	1.00	1	09/21/2015 14:14	WG816421
sec-Butylbenzene	U		0.365	1.00	1	09/21/2015 14:14	WG816421
tert-Butylbenzene	U		0.399	1.00	1	09/21/2015 14:14	WG816421
Carbon tetrachloride	U		0.379	1.00	1	09/21/2015 14:14	WG816421
Chlorobenzene	U		0.348	1.00	1	09/21/2015 14:14	WG816421
Chlorodibromomethane	U		0.327	1.00	1	09/21/2015 14:14	WG816421
Chloroethane	U		0.453	5.00	1	09/21/2015 14:14	WG816421
2-Chloroethyl vinyl ether	U		3.01	50.0	1	09/21/2015 14:14	WG816421
Chloroform	U		0.324	5.00	1	09/21/2015 14:14	WG816421
Chloromethane	U		0.276	2.50	1	09/21/2015 14:14	WG816421
2-Chlorotoluene	U		0.375	1.00	1	09/21/2015 14:14	WG816421
4-Chlorotoluene	U		0.351	1.00	1	09/21/2015 14:14	WG816421
1,2-Dibromo-3-Chloropropane	U		1.33	5.00	1	09/21/2015 14:14	WG816421
1,2-Dibromoethane	U		0.381	1.00	1	09/21/2015 14:14	WG816421
Dibromomethane	U		0.346	1.00	1	09/21/2015 14:14	WG816421
1,2-Dichlorobenzene	U		0.349	1.00	1	09/21/2015 14:14	WG816421
1,3-Dichlorobenzene	U		0.220	1.00	1	09/21/2015 14:14	WG816421
1,4-Dichlorobenzene	U	J4	0.274	1.00	1	09/21/2015 14:14	WG816421
Dichlorodifluoromethane	U		0.551	5.00	1	09/21/2015 14:14	WG816421
1,1-Dichloroethane	U		0.259	1.00	1	09/21/2015 14:14	WG816421
1,2-Dichloroethane	U		0.361	1.00	1	09/21/2015 14:14	WG816421
1,1-Dichloroethene	U		0.398	1.00	1	09/21/2015 14:14	WG816421
cis-1,2-Dichloroethene	4.84		0.260	1.00	1	09/21/2015 14:14	WG816421
trans-1,2-Dichloroethene	U		0.396	1.00	1	09/21/2015 14:14	WG816421
1,2-Dichloropropane	U	J4	0.306	1.00	1	09/21/2015 14:14	WG816421
1,1-Dichloropropene	U		0.352	1.00	1	09/21/2015 14:14	WG816421
1,3-Dichloropropane	U		0.366	1.00	1	09/21/2015 14:14	WG816421
cis-1,3-Dichloropropene	U		0.418	1.00	1	09/21/2015 14:14	WG816421
trans-1,3-Dichloropropene	U		0.419	1.00	1	09/21/2015 14:14	WG816421
2,2-Dichloropropane	U		0.321	1.00	1	09/21/2015 14:14	WG816421
Di-isopropyl ether	U		0.320	1.00	1	09/21/2015 14:14	WG816421
Ethylbenzene	U		0.384	1.00	1	09/21/2015 14:14	WG816421
Hexachloro-1,3-butadiene	U		0.256	1.00	1	09/21/2015 14:14	WG816421
Isopropylbenzene	U		0.326	1.00	1	09/21/2015 14:14	WG816421
p-Isopropyltoluene	U		0.350	1.00	1	09/21/2015 14:14	WG816421
2-Butanone (MEK)	U		3.93	10.0	1	09/21/2015 14:14	WG816421
Methylene Chloride	6.26		1.00	5.00	1	09/21/2015 14:14	WG816421
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	09/21/2015 14:14	WG816421
Methyl tert-butyl ether	U		0.367	1.00	1	09/21/2015 14:14	WG816421
Naphthalene	U		1.00	5.00	1	09/21/2015 14:14	WG816421
n-Propylbenzene	U		0.349	1.00	1	09/21/2015 14:14	WG816421
Styrene	U		0.307	1.00	1	09/21/2015 14:14	WG816421
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	09/21/2015 14:14	WG816421
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	09/21/2015 14:14	WG816421
1,1,2-Trichlorotrifluoroethane	U	J3	0.303	1.00	1	09/21/2015 14:14	WG816421
Tetrachloroethene	U		0.372	1.00	1	09/21/2015 14:14	WG816421
Toluene	U		0.780	5.00	1	09/21/2015 14:14	WG816421
1,2,3-Trichlorobenzene	U		0.230	1.00	1	09/21/2015 14:14	WG816421

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,2,4-Trichlorobenzene	U		0.355	1.00	1	09/21/2015 14:14	WG816421
1,1,1-Trichloroethane	U		0.319	1.00	1	09/21/2015 14:14	WG816421
1,1,2-Trichloroethane	U		0.383	1.00	1	09/21/2015 14:14	WG816421
Trichloroethene	U		0.398	1.00	1	09/21/2015 14:14	WG816421
Trichlorofluoromethane	U		1.20	5.00	1	09/21/2015 14:14	WG816421
1,2,3-Trichloropropane	U		0.807	2.50	1	09/21/2015 14:14	WG816421
1,2,4-Trimethylbenzene	U		0.373	1.00	1	09/21/2015 14:14	WG816421
1,2,3-Trimethylbenzene	U		0.321	1.00	1	09/21/2015 14:14	WG816421
1,3,5-Trimethylbenzene	U		0.387	1.00	1	09/21/2015 14:14	WG816421
Vinyl chloride	33.1		0.259	1.00	1	09/21/2015 14:14	WG816421
Xylenes, Total	U		1.06	3.00	1	09/21/2015 14:14	WG816421
(S) Toluene-d8	*104*			*90.0-115*		*09/21/2015 14:14*	WG816421
(S) Dibromofluoromethane	*117*			*79.0-121*		*09/21/2015 14:14*	WG816421
(S) 4-Bromofluorobenzene	*108*			*80.1-120*		*09/21/2015 14:14*	WG816421

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.0	50.0	1	09/21/2015 14:35	WG816421
Acrolein	U	J3	8.87	50.0	1	09/21/2015 14:35	WG816421
Acrylonitrile	U		1.87	10.0	1	09/21/2015 14:35	WG816421
Benzene	U		0.331	1.00	1	09/21/2015 14:35	WG816421
Bromobenzene	U		0.352	1.00	1	09/21/2015 14:35	WG816421
Bromodichloromethane	U		0.380	1.00	1	09/21/2015 14:35	WG816421
Bromoform	U		0.469	1.00	1	09/21/2015 14:35	WG816421
Bromomethane	U		0.866	5.00	1	09/21/2015 14:35	WG816421
n-Butylbenzene	U		0.361	1.00	1	09/21/2015 14:35	WG816421
sec-Butylbenzene	U		0.365	1.00	1	09/21/2015 14:35	WG816421
tert-Butylbenzene	U		0.399	1.00	1	09/21/2015 14:35	WG816421
Carbon tetrachloride	U		0.379	1.00	1	09/21/2015 14:35	WG816421
Chlorobenzene	U		0.348	1.00	1	09/21/2015 14:35	WG816421
Chlorodibromomethane	U		0.327	1.00	1	09/21/2015 14:35	WG816421
Chloroethane	U		0.453	5.00	1	09/21/2015 14:35	WG816421
2-Chloroethyl vinyl ether	U		3.01	50.0	1	09/21/2015 14:35	WG816421
Chloroform	U		0.324	5.00	1	09/21/2015 14:35	WG816421
Chloromethane	U		0.276	2.50	1	09/21/2015 14:35	WG816421
2-Chlorotoluene	U		0.375	1.00	1	09/21/2015 14:35	WG816421
4-Chlorotoluene	U		0.351	1.00	1	09/21/2015 14:35	WG816421
1,2-Dibromo-3-Chloropropane	U		1.33	5.00	1	09/21/2015 14:35	WG816421
1,2-Dibromoethane	U		0.381	1.00	1	09/21/2015 14:35	WG816421
Dibromomethane	U		0.346	1.00	1	09/21/2015 14:35	WG816421
1,2-Dichlorobenzene	U		0.349	1.00	1	09/21/2015 14:35	WG816421
1,3-Dichlorobenzene	U		0.220	1.00	1	09/21/2015 14:35	WG816421
1,4-Dichlorobenzene	U	J4	0.274	1.00	1	09/21/2015 14:35	WG816421
Dichlorodifluoromethane	U		0.551	5.00	1	09/21/2015 14:35	WG816421
1,1-Dichloroethane	U		0.259	1.00	1	09/21/2015 14:35	WG816421
1,2-Dichloroethane	U		0.361	1.00	1	09/21/2015 14:35	WG816421
1,1-Dichloroethene	U		0.398	1.00	1	09/21/2015 14:35	WG816421
cis-1,2-Dichloroethene	U		0.260	1.00	1	09/21/2015 14:35	WG816421
trans-1,2-Dichloroethene	U		0.396	1.00	1	09/21/2015 14:35	WG816421
1,2-Dichloropropane	U	J4	0.306	1.00	1	09/21/2015 14:35	WG816421
1,1-Dichloropropene	U		0.352	1.00	1	09/21/2015 14:35	WG816421
1,3-Dichloropropane	U		0.366	1.00	1	09/21/2015 14:35	WG816421
cis-1,3-Dichloropropene	U		0.418	1.00	1	09/21/2015 14:35	WG816421
trans-1,3-Dichloropropene	U		0.419	1.00	1	09/21/2015 14:35	WG816421
2,2-Dichloropropane	U		0.321	1.00	1	09/21/2015 14:35	WG816421
Di-isopropyl ether	U		0.320	1.00	1	09/21/2015 14:35	WG816421
Ethylbenzene	U		0.384	1.00	1	09/21/2015 14:35	WG816421
Hexachloro-1,3-butadiene	U		0.256	1.00	1	09/21/2015 14:35	WG816421
Isopropylbenzene	U		0.326	1.00	1	09/21/2015 14:35	WG816421
p-Isopropyltoluene	U		0.350	1.00	1	09/21/2015 14:35	WG816421
2-Butanone (MEK)	U		3.93	10.0	1	09/21/2015 14:35	WG816421
Methylene Chloride	6.41		1.00	5.00	1	09/21/2015 14:35	WG816421
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0	1	09/21/2015 14:35	WG816421
Methyl tert-butyl ether	U		0.367	1.00	1	09/21/2015 14:35	WG816421
Naphthalene	U		1.00	5.00	1	09/21/2015 14:35	WG816421
n-Propylbenzene	U		0.349	1.00	1	09/21/2015 14:35	WG816421
Styrene	U		0.307	1.00	1	09/21/2015 14:35	WG816421
1,1,1,2-Tetrachloroethane	U		0.385	1.00	1	09/21/2015 14:35	WG816421
1,1,2,2-Tetrachloroethane	U		0.130	1.00	1	09/21/2015 14:35	WG816421
1,1,2-Trichlorotrifluoroethane	U	J3	0.303	1.00	1	09/21/2015 14:35	WG816421
Tetrachloroethene	U		0.372	1.00	1	09/21/2015 14:35	WG816421
Toluene	U		0.780	5.00	1	09/21/2015 14:35	WG816421
1,2,3-Trichlorobenzene	U		0.230	1.00	1	09/21/2015 14:35	WG816421

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,2,4-Trichlorobenzene	U		0.355	1.00	1	09/21/2015 14:35	WG816421
1,1,1-Trichloroethane	U		0.319	1.00	1	09/21/2015 14:35	WG816421
1,1,2-Trichloroethane	U		0.383	1.00	1	09/21/2015 14:35	WG816421
Trichloroethene	U		0.398	1.00	1	09/21/2015 14:35	WG816421
Trichlorofluoromethane	U		1.20	5.00	1	09/21/2015 14:35	WG816421
1,2,3-Trichloropropane	U		0.807	2.50	1	09/21/2015 14:35	WG816421
1,2,4-Trimethylbenzene	U		0.373	1.00	1	09/21/2015 14:35	WG816421
1,2,3-Trimethylbenzene	U		0.321	1.00	1	09/21/2015 14:35	WG816421
1,3,5-Trimethylbenzene	U		0.387	1.00	1	09/21/2015 14:35	WG816421
Vinyl chloride	U		0.259	1.00	1	09/21/2015 14:35	WG816421
Xylenes, Total	U		1.06	3.00	1	09/21/2015 14:35	WG816421
(S) Toluene-d8	*105*			*90.0-115*		*09/21/2015 14:35*	WG816421
(S) Dibromofluoromethane	*117*			*79.0-121*		*09/21/2015 14:35*	WG816421
(S) 4-Bromofluorobenzene	*107*			*80.1-120*		*09/21/2015 14:35*	WG816421

Method Blank (MB)

(MB) 09/21/15 06:33

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Acetone	U		0.0100	0.0500
Acrolein	U		0.00887	0.0500
Acrylonitrile	U		0.00187	0.0100
Benzene	U		0.000331	0.00100
Bromobenzene	U		0.000352	0.00100
Bromodichloromethane	U		0.000380	0.00100
Bromoform	U		0.000469	0.00100
Bromomethane	U		0.000866	0.00500
n-Butylbenzene	U		0.000361	0.00100
sec-Butylbenzene	U		0.000365	0.00100
tert-Butylbenzene	U		0.000399	0.00100
Carbon tetrachloride	U		0.000379	0.00100
Chlorobenzene	U		0.000348	0.00100
Chlorodibromomethane	U		0.000327	0.00100
Chloroethane	U		0.000453	0.00500
2-Chloroethyl vinyl ether	U		0.00301	0.0500
Chloroform	U		0.000324	0.00500
Chloromethane	U		0.000276	0.00250
2-Chlorotoluene	U		0.000375	0.00100
4-Chlorotoluene	U		0.000351	0.00100
1,2-Dibromo-3-Chloropropane	U		0.00133	0.00500
1,2-Dibromoethane	U		0.000381	0.00100
Dibromomethane	U		0.000346	0.00100
1,2-Dichlorobenzene	U		0.000349	0.00100
1,3-Dichlorobenzene	U		0.000220	0.00100
1,4-Dichlorobenzene	U		0.000274	0.00100
Dichlorodifluoromethane	U		0.000551	0.00500
1,1-Dichloroethane	U		0.000259	0.00100
1,2-Dichloroethane	U		0.000361	0.00100
1,1-Dichloroethene	U		0.000398	0.00100
cis-1,2-Dichloroethene	U		0.000260	0.00100
trans-1,2-Dichloroethene	U		0.000396	0.00100
1,2-Dichloropropane	U		0.000306	0.00100
1,1-Dichloropropene	U		0.000352	0.00100
1,3-Dichloropropane	U		0.000366	0.00100
cis-1,3-Dichloropropene	U		0.000418	0.00100

Method Blank (MB)

(MB) 09/21/15 06:33

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
trans-1,3-Dichloropropene	U		0.000419	0.00100
2,2-Dichloropropane	U		0.000321	0.00100
Di-isopropyl ether	U		0.000320	0.00100
Ethylbenzene	U		0.000384	0.00100
Hexachloro-1,3-butadiene	U		0.000256	0.00100
Isopropylbenzene	U		0.000326	0.00100
p-Isopropyltoluene	U		0.000350	0.00100
2-Butanone (MEK)	U		0.00393	0.0100
Methylene Chloride	U		0.00100	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100
Methyl tert-butyl ether	U		0.000367	0.00100
Naphthalene	U		0.00100	0.00500
n-Propylbenzene	U		0.000349	0.00100
Styrene	U		0.000307	0.00100
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100
Tetrachloroethene	U		0.000372	0.00100
Toluene	U		0.000780	0.00500
1,1,2-Trichlorotrifluoroethane	U		0.000303	0.00100
1,2,3-Trichlorobenzene	U		0.000230	0.00100
1,2,4-Trichlorobenzene	U		0.000355	0.00100
1,1,1-Trichloroethane	U		0.000319	0.00100
1,1,2-Trichloroethane	U		0.000383	0.00100
Trichloroethene	U		0.000398	0.00100
Trichlorofluoromethane	U		0.00120	0.00500
1,2,3-Trichloropropane	U		0.000807	0.00250
1,2,3-Trimethylbenzene	U		0.000321	0.00100
1,2,4-Trimethylbenzene	U		0.000373	0.00100
1,3,5-Trimethylbenzene	U		0.000387	0.00100
Vinyl chloride	U		0.000259	0.00100
Xylenes, Total	U		0.00106	0.00300
(S) Toluene-d8	*103*			*90.0-115*
(S) Dibromofluoromethane	*109*			*79.0-121*
(S) 4-Bromofluorobenzene	*109*			*80.1-120*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 09/21/15 04:28 • (LCSD) 09/21/15 04:49

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.0891	0.100	71.2	80.1	28.7-175			11.7	20.9
Acrolein	0.125	0.0847	0.110	67.8	88.1	40.4-172		J3	26.1	20
Acrylonitrile	0.125	0.0926	0.103	74.1	82.3	58.2-145			10.5	20
Benzene	0.0250	0.0205	0.0232	82.2	92.9	73.0-122			12.3	20
Bromobenzene	0.0250	0.0208	0.0240	83.2	96.1	81.5-115			14.4	20
Bromodichloromethane	0.0250	0.0226	0.0257	90.3	103	75.5-121			13.0	20
Bromoform	0.0250	0.0258	0.0301	103	120	71.5-131			15.3	20
Bromomethane	0.0250	0.0247	0.0275	98.7	110	22.4-187			11.0	20
n-Butylbenzene	0.0250	0.0215	0.0244	86.1	97.6	75.9-134			12.5	20
sec-Butylbenzene	0.0250	0.0240	0.0276	95.8	110	80.6-126			14.2	20
tert-Butylbenzene	0.0250	0.0240	0.0279	96.1	112	79.3-127			14.9	20
Carbon tetrachloride	0.0250	0.0243	0.0278	97.3	111	70.9-129			13.5	20
Chlorobenzene	0.0250	0.0218	0.0254	87.1	102	79.7-122			15.3	20
Chlorodibromomethane	0.0250	0.0249	0.0291	99.6	117	78.2-124			15.7	20
Chloroethane	0.0250	0.0190	0.0200	75.9	80.2	41.2-153			5.51	20
2-Chloroethyl vinyl ether	0.125	0.0933	0.108	74.6	86.5	23.4-162			14.7	23.5
Chloroform	0.0250	0.0220	0.0248	87.9	99.2	73.2-125			12.1	20
Chloromethane	0.0250	0.0162	0.0177	64.6	71.0	55.8-134			9.36	20
2-Chlorotoluene	0.0250	0.0227	0.0259	91.0	104	76.4-125			12.9	20
4-Chlorotoluene	0.0250	0.0223	0.0258	89.2	103	81.5-121			14.6	20
1,2-Dibromo-3-Chloropropane	0.0250	0.0245	0.0271	98.2	108	64.8-131			9.87	20
1,2-Dibromoethane	0.0250	0.0230	0.0268	91.9	107	79.8-122			15.5	20
Dibromomethane	0.0250	0.0234	0.0267	93.5	107	79.5-118			13.4	20
1,2-Dichlorobenzene	0.0250	0.0215	0.0241	86.0	96.5	84.7-118			11.5	20
1,3-Dichlorobenzene	0.0250	0.0225	0.0261	90.0	104	77.6-127			14.7	20
1,4-Dichlorobenzene	0.0250	0.0202	0.0232	80.7	92.6	82.2-114	J4		13.7	20
Dichlorodifluoromethane	0.0250	0.0223	0.0247	89.0	98.7	56.0-134			10.4	20
1,1-Dichloroethane	0.0250	0.0190	0.0214	76.0	85.5	71.7-127			11.8	20
1,2-Dichloroethane	0.0250	0.0211	0.0233	84.6	93.3	65.3-126			9.83	20
1,1-Dichloroethene	0.0250	0.0182	0.0204	72.7	81.7	59.9-137			11.6	20
cis-1,2-Dichloroethene	0.0250	0.0221	0.0245	88.5	98.2	77.3-122			10.3	20
trans-1,2-Dichloroethene	0.0250	0.0222	0.0248	88.9	99.2	72.6-125			10.9	20
1,2-Dichloropropane	0.0250	0.0184	0.0212	73.8	84.6	77.4-125	J4		13.7	20
1,1-Dichloropropene	0.0250	0.0209	0.0236	83.7	94.3	72.5-127			12.0	20
1,3-Dichloropropane	0.0250	0.0206	0.0239	82.5	95.8	80.6-115			14.9	20
cis-1,3-Dichloropropene	0.0250	0.0219	0.0251	87.8	100	77.7-124			13.4	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 09/21/15 04:28 • (LCSD) 09/21/15 04:49

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
trans-1,3-Dichloropropene	0.0250	0.0224	0.0265	89.7	106	73.5-127			16.6	20
2,2-Dichloropropane	0.0250	0.0217	0.0246	86.8	98.6	61.3-134			12.8	20
Di-isopropyl ether	0.0250	0.0164	0.0184	65.4	73.4	65.1-135			11.6	20
Ethylbenzene	0.0250	0.0225	0.0263	90.1	105	80.9-121			15.6	20
Hexachloro-1,3-butadiene	0.0250	0.0252	0.0281	101	112	73.7-133			10.6	20
Isopropylbenzene	0.0250	0.0232	0.0269	93.0	107	81.6-124			14.5	20
p-Isopropyltoluene	0.0250	0.0245	0.0282	98.0	113	77.6-129			14.0	20
2-Butanone (MEK)	0.125	0.0711	0.0809	56.9	64.7	46.4-155			12.9	20
Methylene Chloride	0.0250	0.0200	0.0225	80.1	90.0	69.5-120			11.7	20
4-Methyl-2-pentanone (MIBK)	0.125	0.0856	0.0970	68.5	77.6	63.3-138			12.5	20
Methyl tert-butyl ether	0.0250	0.0218	0.0242	87.0	96.8	70.1-125			10.7	20
Naphthalene	0.0250	0.0221	0.0250	88.4	100	69.7-134			12.4	20
n-Propylbenzene	0.0250	0.0223	0.0260	89.4	104	81.9-122			15.2	20
Styrene	0.0250	0.0234	0.0273	93.8	109	79.9-124			15.3	20
1,1,1,2-Tetrachloroethane	0.0250	0.0242	0.0279	96.9	111	78.5-125			14.0	20
1,1,2,2-Tetrachloroethane	0.0250	0.0231	0.0266	92.4	106	79.3-123			14.0	20
Tetrachloroethene	0.0250	0.0239	0.0284	95.7	114	73.5-130			17.2	20
Toluene	0.0250	0.0209	0.0238	83.4	95.4	77.9-116			13.4	20
1,1,2-Trichlorotrifluoroethane	0.0250	0.0218	0.0270	87.1	108	62.0-141		J3	21.4	20
1,2,3-Trichlorobenzene	0.0250	0.0232	0.0263	92.9	105	75.7-134			12.5	20
1,2,4-Trichlorobenzene	0.0250	0.0221	0.0251	88.5	100	76.1-136			12.5	20
1,1,1-Trichloroethane	0.0250	0.0236	0.0267	94.5	107	71.1-129			12.4	20
1,1,2-Trichloroethane	0.0250	0.0227	0.0263	90.9	105	81.6-120			14.7	20
Trichloroethene	0.0250	0.0220	0.0256	87.9	102	79.5-121			15.2	20
Trichlorofluoromethane	0.0250	0.0247	0.0273	98.8	109	49.1-157			9.84	20
1,2,3-Trichloropropane	0.0250	0.0258	0.0297	103	119	74.9-124			13.9	20
1,2,3-Trimethylbenzene	0.0250	0.0214	0.0242	85.7	96.9	79.9-118			12.2	20
1,2,4-Trimethylbenzene	0.0250	0.0238	0.0272	95.1	109	79.0-122			13.5	20
1,3,5-Trimethylbenzene	0.0250	0.0239	0.0275	95.4	110	81.0-123			14.3	20
Vinyl chloride	0.0250	0.0188	0.0210	75.1	83.8	61.5-134			11.0	20
Xylenes, Total	0.0750	0.0680	0.0791	90.7	105	79.2-122			15.1	20
(S) Toluene-d8				*102*	*103*	*90.0-115*				
(S) Dibromofluoromethane				*105*	*103*	*79.0-121*				
(S) 4-Bromofluorobenzene				*105*	*107*	*80.1-120*				

L789270-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 09/21/15 09:40 • (MS) 09/21/15 08:16 • (MSD) 09/21/15 08:37

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.00196	0.0884	0.0933	69.2	73.1	1	25.0-156			5.39	21.5
Acrolein	0.125	ND	1.39	1.53	1110	1220	1	34.0-194	J5	J5	9.25	21.5
Acrylonitrile	0.125	ND	0.102	0.111	81.3	89.1	1	55.9-161			9.21	20
Benzene	0.0250	ND	0.0225	0.0243	90.0	97.2	1	58.6-133			7.69	20
Bromobenzene	0.0250	ND	0.0228	0.0250	91.2	100	1	70.6-125			9.44	20
Bromodichloromethane	0.0250	ND	0.0241	0.0265	96.2	106	1	69.2-127			9.79	20
Bromoform	0.0250	ND	0.0284	0.0319	114	128	1	66.3-140			11.7	20
Bromomethane	0.0250	ND	0.0265	0.0271	106	109	1	16.6-183			2.28	20.5
n-Butylbenzene	0.0250	ND	0.0255	0.0275	102	110	1	64.8-145			7.73	20
sec-Butylbenzene	0.0250	ND	0.0281	0.0307	112	123	1	66.8-139			8.81	20
tert-Butylbenzene	0.0250	ND	0.0279	0.0308	112	123	1	67.1-138			9.95	20
Carbon tetrachloride	0.0250	ND	0.0288	0.0308	115	123	1	60.6-139			6.64	20
Chlorobenzene	0.0250	ND	0.0242	0.0267	96.9	107	1	70.1-130			9.89	20
Chlorodibromomethane	0.0250	ND	0.0267	0.0303	107	121	1	71.6-132			12.9	20
Chloroethane	0.0250	ND	0.0197	0.0211	78.9	84.6	1	33.3-155			6.99	20
2-Chloroethyl vinyl ether	0.125	ND	0.00639	0.00333	5.11	2.67	1	5.00-149		J3 J6	62.8	40
Chloroform	0.0250	ND	0.0238	0.0260	95.2	104	1	66.1-133			8.86	20
Chloromethane	0.0250	ND	0.0174	0.0186	69.5	74.2	1	40.7-139			6.67	20
2-Chlorotoluene	0.0250	ND	0.0256	0.0279	103	112	1	66.9-134			8.61	20
4-Chlorotoluene	0.0250	ND	0.0253	0.0274	101	110	1	66.8-134			8.18	20
1,2-Dibromo-3-Chloropropane	0.0250	ND	0.0270	0.0292	108	117	1	63.9-142			7.82	20.2
1,2-Dibromoethane	0.0250	ND	0.0254	0.0283	102	113	1	73.8-131			10.6	20
Dibromomethane	0.0250	ND	0.0256	0.0278	102	111	1	72.8-127			8.18	20
1,2-Dichlorobenzene	0.0250	ND	0.0234	0.0256	93.6	102	1	77.4-127			9.03	20
1,3-Dichlorobenzene	0.0250	ND	0.0253	0.0277	101	111	1	67.9-136			8.87	20
1,4-Dichlorobenzene	0.0250	ND	0.0224	0.0247	89.7	98.7	1	74.4-123			9.58	20
Dichlorodifluoromethane	0.0250	ND	0.0265	0.0273	106	109	1	42.2-146			2.97	20
1,1-Dichloroethane	0.0250	ND	0.0208	0.0224	83.3	89.5	1	64.0-134			7.18	20
1,2-Dichloroethane	0.0250	ND	0.0222	0.0239	88.9	95.8	1	60.7-132			7.39	20
1,1-Dichloroethene	0.0250	ND	0.0207	0.0237	82.6	94.9	1	48.8-144			13.9	20
cis-1,2-Dichloroethene	0.0250	ND	0.0240	0.0259	95.8	104	1	60.6-136			7.78	20
trans-1,2-Dichloroethene	0.0250	ND	0.0245	0.0266	98.2	106	1	61.0-132			7.93	20
1,2-Dichloropropane	0.0250	ND	0.0197	0.0219	78.8	87.8	1	69.7-130			10.8	20
1,1-Dichloropropene	0.0250	ND	0.0240	0.0256	96.0	102	1	61.5-136			6.32	20
1,3-Dichloropropane	0.0250	ND	0.0229	0.0249	91.8	99.4	1	74.3-123			7.99	20
cis-1,3-Dichloropropene	0.0250	ND	0.0231	0.0254	92.5	102	1	71.1-129			9.53	20

L789270-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 09/21/15 09:40 • (MS) 09/21/15 08:16 • (MSD) 09/21/15 08:37

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
trans-1,3-Dichloropropene	0.0250	ND	0.0246	0.0268	98.4	107	1	66.3-136			8.38	20
2,2-Dichloropropane	0.0250	ND	0.0253	0.0274	101	109	1	54.9-142			7.69	20
Di-isopropyl ether	0.0250	ND	0.0175	0.0189	69.9	75.6	1	59.9-140			7.91	20
Ethylbenzene	0.0250	ND	0.0258	0.0280	103	112	1	62.7-136			7.94	20
Hexachloro-1,3-butadiene	0.0250	ND	0.0295	0.0312	118	125	1	61.1-144			5.68	20.1
Isopropylbenzene	0.0250	ND	0.0268	0.0292	107	117	1	67.4-136			8.53	20
p-Isopropyltoluene	0.0250	ND	0.0288	0.0309	115	124	1	62.8-143			7.23	20
2-Butanone (MEK)	0.125	ND	0.0791	0.0835	63.3	66.8	1	45.0-156			5.46	20.8
Methylene Chloride	0.0250	0.00492	0.0253	0.0265	81.4	86.3	1	61.5-125			4.68	20
4-Methyl-2-pentanone (MIBK)	0.125	ND	0.0943	0.101	75.4	80.6	1	60.7-150			6.64	20
Methyl tert-butyl ether	0.0250	ND	0.0231	0.0249	92.4	99.7	1	61.4-136			7.52	20
Naphthalene	0.0250	ND	0.0242	0.0263	96.9	105	1	61.8-143			8.30	20
n-Propylbenzene	0.0250	ND	0.0262	0.0284	105	114	1	63.2-139			8.24	20
Styrene	0.0250	ND	0.0261	0.0288	104	115	1	68.2-133			9.91	20
1,1,1,2-Tetrachloroethane	0.0250	ND	0.0262	0.0294	105	117	1	70.5-132			11.2	20
1,1,2,2-Tetrachloroethane	0.0250	ND	0.0259	0.0282	104	113	1	64.9-145			8.27	20
Tetrachloroethene	0.0250	ND	0.0276	0.0303	111	121	1	57.4-141			9.28	20
Toluene	0.0250	ND	0.0233	0.0252	93.4	101	1	67.8-124			7.76	20
1,1,2-Trichlorotrifluoroethane	0.0250	ND	0.0278	0.0316	111	126	1	53.7-150			12.7	20
1,2,3-Trichlorobenzene	0.0250	ND	0.0259	0.0280	104	112	1	65.7-143			7.59	20
1,2,4-Trichlorobenzene	0.0250	ND	0.0246	0.0265	98.4	106	1	67.0-146			7.57	20
1,1,1-Trichloroethane	0.0250	ND	0.0273	0.0293	109	117	1	58.7-134			7.07	20
1,1,2-Trichloroethane	0.0250	ND	0.0246	0.0272	98.5	109	1	74.1-130			10.0	20
Trichloroethene	0.0250	ND	0.0245	0.0267	98.1	107	1	48.9-148			8.30	20
Trichlorofluoromethane	0.0250	ND	0.0286	0.0302	115	121	1	39.9-165			5.46	20
1,2,3-Trichloropropane	0.0250	ND	0.0285	0.0309	114	124	1	71.5-134			7.90	20
1,2,3-Trimethylbenzene	0.0250	ND	0.0236	0.0256	94.2	102	1	62.7-133			8.34	20
1,2,4-Trimethylbenzene	0.0250	ND	0.0271	0.0294	108	118	1	60.5-137			8.19	20
1,3,5-Trimethylbenzene	0.0250	ND	0.0272	0.0298	109	119	1	67.9-134			9.38	20
Vinyl chloride	0.0250	ND	0.0213	0.0225	85.3	90.0	1	44.3-143			5.46	20
Xylenes, Total	0.0750	ND	0.0770	0.0845	103	113	1	65.6-133			9.30	20
(S) Toluene-d8					*102*	*102*		*90.0-115*				
(S) Dibromofluoromethane					*104*	*103*		*79.0-121*				
(S) 4-Bromofluorobenzene					*108*	*107*		*80.1-120*				

Method Blank (MB)

(MB) 09/22/15 07:08

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Acetone	U		0.0100	0.0500
Acrolein	U		0.00887	0.0500
Acrylonitrile	U		0.00187	0.0100
Benzene	U		0.000331	0.00100
Bromobenzene	U		0.000352	0.00100
Bromodichloromethane	U		0.000380	0.00100
Bromoform	U		0.000469	0.00100
Bromomethane	U		0.000866	0.00500
n-Butylbenzene	U		0.000361	0.00100
sec-Butylbenzene	U		0.000365	0.00100
tert-Butylbenzene	U		0.000399	0.00100
Carbon tetrachloride	U		0.000379	0.00100
Chlorobenzene	U		0.000348	0.00100
Chlorodibromomethane	U		0.000327	0.00100
Chloroethane	U		0.000453	0.00500
2-Chloroethyl vinyl ether	U		0.00301	0.0500
Chloroform	U		0.000324	0.00500
Chloromethane	U		0.000276	0.00250
2-Chlorotoluene	U		0.000375	0.00100
4-Chlorotoluene	U		0.000351	0.00100
1,2-Dibromo-3-Chloropropane	U		0.00133	0.00500
1,2-Dibromoethane	U		0.000381	0.00100
Dibromomethane	U		0.000346	0.00100
1,2-Dichlorobenzene	U		0.000349	0.00100
1,3-Dichlorobenzene	U		0.000220	0.00100
1,4-Dichlorobenzene	U		0.000274	0.00100
Dichlorodifluoromethane	U		0.000551	0.00500
1,1-Dichloroethane	U		0.000259	0.00100
1,2-Dichloroethane	U		0.000361	0.00100
1,1-Dichloroethene	U		0.000398	0.00100
cis-1,2-Dichloroethene	U		0.000260	0.00100
trans-1,2-Dichloroethene	U		0.000396	0.00100
1,2-Dichloropropane	U		0.000306	0.00100
1,1-Dichloropropene	U		0.000352	0.00100
1,3-Dichloropropane	U		0.000366	0.00100
cis-1,3-Dichloropropene	U		0.000418	0.00100

Method Blank (MB)

(MB) 09/22/15 07:08

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
trans-1,3-Dichloropropene	U		0.000419	0.00100
2,2-Dichloropropane	U		0.000321	0.00100
Di-isopropyl ether	U		0.000320	0.00100
Ethylbenzene	U		0.000384	0.00100
Hexachloro-1,3-butadiene	U		0.000256	0.00100
Isopropylbenzene	U		0.000326	0.00100
p-Isopropyltoluene	U		0.000350	0.00100
2-Butanone (MEK)	U		0.00393	0.0100
Methylene Chloride	0.00104		0.00100	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100
Methyl tert-butyl ether	U		0.000367	0.00100
Naphthalene	U		0.00100	0.00500
n-Propylbenzene	U		0.000349	0.00100
Styrene	U		0.000307	0.00100
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100
Tetrachloroethene	U		0.000372	0.00100
Toluene	U		0.000780	0.00500
1,1,2-Trichlorotrifluoroethane	U		0.000303	0.00100
1,2,3-Trichlorobenzene	U		0.000230	0.00100
1,2,4-Trichlorobenzene	U		0.000355	0.00100
1,1,1-Trichloroethane	U		0.000319	0.00100
1,1,2-Trichloroethane	U		0.000383	0.00100
Trichloroethene	U		0.000398	0.00100
Trichlorofluoromethane	U		0.00120	0.00500
1,2,3-Trichloropropane	U		0.000807	0.00250
1,2,3-Trimethylbenzene	U		0.000321	0.00100
1,2,4-Trimethylbenzene	U		0.000373	0.00100
1,3,5-Trimethylbenzene	U		0.000387	0.00100
Vinyl chloride	U		0.000259	0.00100
Xylenes, Total	U		0.00106	0.00300
(S) Toluene-d8	*99.6*			*90.0-115*
(S) Dibromofluoromethane	*94.0*			*79.0-121*
(S) 4-Bromofluorobenzene	*94.4*			*80.1-120*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 09/22/15 04:36 • (LCSD) 09/22/15 04:59

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.115	0.115	91.6	91.8	28.7-175			0.260	20.9
Acrolein	0.125	0.128	0.127	102	102	40.4-172			0.260	20
Acrylonitrile	0.125	0.123	0.123	98.4	98.7	58.2-145			0.310	20
Benzene	0.0250	0.0231	0.0225	92.2	89.9	73.0-122			2.57	20
Bromobenzene	0.0250	0.0256	0.0250	102	99.8	81.5-115			2.47	20
Bromodichloromethane	0.0250	0.0228	0.0228	91.1	91.1	75.5-121			0.000	20
Bromoform	0.0250	0.0245	0.0244	97.9	97.5	71.5-131			0.380	20
Bromomethane	0.0250	0.0340	0.0326	136	130	22.4-187			4.05	20
n-Butylbenzene	0.0250	0.0255	0.0245	102	98.0	75.9-134			3.89	20
sec-Butylbenzene	0.0250	0.0259	0.0253	104	101	80.6-126			2.30	20
tert-Butylbenzene	0.0250	0.0256	0.0248	102	99.3	79.3-127			3.00	20
Carbon tetrachloride	0.0250	0.0230	0.0224	92.1	89.6	70.9-129			2.75	20
Chlorobenzene	0.0250	0.0267	0.0259	107	104	79.7-122			3.00	20
Chlorodibromomethane	0.0250	0.0244	0.0238	97.7	95.2	78.2-124			2.62	20
Chloroethane	0.0250	0.0242	0.0235	96.8	94.0	41.2-153			2.96	20
2-Chloroethyl vinyl ether	0.125	0.127	0.121	102	96.9	23.4-162			5.01	23.5
Chloroform	0.0250	0.0236	0.0231	94.3	92.4	73.2-125			2.03	20
Chloromethane	0.0250	0.0192	0.0186	76.7	74.4	55.8-134			3.10	20
2-Chlorotoluene	0.0250	0.0256	0.0252	102	101	76.4-125			1.55	20
4-Chlorotoluene	0.0250	0.0258	0.0250	103	99.9	81.5-121			3.24	20
1,2-Dibromo-3-Chloropropane	0.0250	0.0239	0.0244	95.8	97.5	64.8-131			1.77	20
1,2-Dibromoethane	0.0250	0.0272	0.0264	109	105	79.8-122			3.31	20
Dibromomethane	0.0250	0.0234	0.0234	93.5	93.6	79.5-118			0.100	20
1,2-Dichlorobenzene	0.0250	0.0264	0.0256	106	103	84.7-118			2.91	20
1,3-Dichlorobenzene	0.0250	0.0274	0.0264	110	106	77.6-127			3.64	20
1,4-Dichlorobenzene	0.0250	0.0258	0.0251	103	100	82.2-114			2.58	20
Dichlorodifluoromethane	0.0250	0.0236	0.0227	94.3	90.6	56.0-134			3.96	20
1,1-Dichloroethane	0.0250	0.0222	0.0220	88.9	87.8	71.7-127			1.22	20
1,2-Dichloroethane	0.0250	0.0241	0.0238	96.6	95.0	65.3-126			1.63	20
1,1-Dichloroethene	0.0250	0.0233	0.0224	93.2	89.5	59.9-137			4.04	20
cis-1,2-Dichloroethene	0.0250	0.0231	0.0226	92.4	90.6	77.3-122			2.02	20
trans-1,2-Dichloroethene	0.0250	0.0218	0.0215	87.3	85.9	72.6-125			1.63	20
1,2-Dichloropropane	0.0250	0.0230	0.0228	92.1	91.3	77.4-125			0.920	20
1,1-Dichloropropene	0.0250	0.0231	0.0221	92.2	88.4	72.5-127			4.17	20
1,3-Dichloropropane	0.0250	0.0247	0.0243	98.7	97.0	80.6-115			1.69	20
cis-1,3-Dichloropropene	0.0250	0.0235	0.0234	93.9	93.6	77.7-124			0.310	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 09/22/15 04:36 • (LCSD) 09/22/15 04:59

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
trans-1,3-Dichloropropene	0.0250	0.0243	0.0239	97.3	95.6	73.5-127			1.72	20
2,2-Dichloropropane	0.0250	0.0234	0.0231	93.7	92.5	61.3-134			1.29	20
Di-isopropyl ether	0.0250	0.0221	0.0216	88.3	86.3	65.1-135			2.25	20
Ethylbenzene	0.0250	0.0252	0.0246	101	98.4	80.9-121			2.42	20
Hexachloro-1,3-butadiene	0.0250	0.0258	0.0253	103	101	73.7-133			1.94	20
Isopropylbenzene	0.0250	0.0261	0.0252	104	101	81.6-124			3.34	20
p-Isopropyltoluene	0.0250	0.0262	0.0253	105	101	77.6-129			3.33	20
2-Butanone (MEK)	0.125	0.120	0.119	95.7	95.5	46.4-155			0.190	20
Methylene Chloride	0.0250	0.0226	0.0223	90.2	89.2	69.5-120			1.17	20
4-Methyl-2-pentanone (MIBK)	0.125	0.118	0.120	94.4	95.9	63.3-138			1.51	20
Methyl tert-butyl ether	0.0250	0.0238	0.0236	95.2	94.5	70.1-125			0.730	20
Naphthalene	0.0250	0.0272	0.0269	109	107	69.7-134			1.29	20
n-Propylbenzene	0.0250	0.0260	0.0252	104	101	81.9-122			3.15	20
Styrene	0.0250	0.0269	0.0260	108	104	79.9-124			3.45	20
1,1,1,2-Tetrachloroethane	0.0250	0.0250	0.0249	100	99.5	78.5-125			0.550	20
1,1,2,2-Tetrachloroethane	0.0250	0.0262	0.0267	105	107	79.3-123			2.03	20
Tetrachloroethene	0.0250	0.0267	0.0261	107	105	73.5-130			2.00	20
Toluene	0.0250	0.0237	0.0234	94.6	93.6	77.9-116			1.10	20
1,1,2-Trichlorotrifluoroethane	0.0250	0.0242	0.0234	96.8	93.5	62.0-141			3.54	20
1,2,3-Trichlorobenzene	0.0250	0.0273	0.0266	109	106	75.7-134			2.82	20
1,2,4-Trichlorobenzene	0.0250	0.0269	0.0255	108	102	76.1-136			5.45	20
1,1,1-Trichloroethane	0.0250	0.0227	0.0224	90.7	89.5	71.1-129			1.29	20
1,1,2-Trichloroethane	0.0250	0.0250	0.0248	99.8	99.1	81.6-120			0.730	20
Trichloroethene	0.0250	0.0240	0.0238	95.8	95.2	79.5-121			0.720	20
Trichlorofluoromethane	0.0250	0.0258	0.0248	103	99.0	49.1-157			4.15	20
1,2,3-Trichloropropane	0.0250	0.0254	0.0249	102	99.5	74.9-124			2.10	20
1,2,3-Trimethylbenzene	0.0250	0.0252	0.0246	101	98.6	79.9-118			2.20	20
1,2,4-Trimethylbenzene	0.0250	0.0259	0.0251	104	100	79.0-122			3.38	20
1,3,5-Trimethylbenzene	0.0250	0.0263	0.0256	105	102	81.0-123			2.53	20
Vinyl chloride	0.0250	0.0225	0.0219	90.0	87.8	61.5-134			2.50	20
Xylenes, Total	0.0750	0.0772	0.0757	103	101	79.2-122			2.01	20
(S) Toluene-d8				*98.8*	*98.6*	*90.0-115*				
(S) Dibromofluoromethane				*100*	*98.5*	*79.0-121*				
(S) 4-Bromofluorobenzene				*98.0*	*97.6*	*80.1-120*				

L789243-13 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 09/22/15 10:51 • (MS) 09/22/15 08:56 • (MSD) 09/22/15 09:19

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.000981	0.0432	0.0532	33.8	41.8	1	25.0-156			20.8	21.5
Acrolein	0.125	ND	0.0861	0.109	68.9	87.4	1	34.0-194		J3	23.7	21.5
Acrylonitrile	0.125	ND	0.0996	0.122	79.7	97.8	1	55.9-161		J3	20.4	20
Benzene	0.0250	ND	0.0190	0.0223	75.8	89.1	1	58.6-133			16.0	20
Bromobenzene	0.0250	ND	0.0210	0.0243	84.1	97.0	1	70.6-125			14.3	20
Bromodichloromethane	0.0250	ND	0.0189	0.0228	75.7	91.1	1	69.2-127			18.5	20
Bromoform	0.0250	ND	0.0191	0.0225	76.2	90.0	1	66.3-140			16.6	20
Bromomethane	0.0250	ND	0.0262	0.0309	105	124	1	16.6-183			16.3	20.5
n-Butylbenzene	0.0250	ND	0.0212	0.0248	84.8	99.4	1	64.8-145			15.9	20
sec-Butylbenzene	0.0250	ND	0.0213	0.0247	85.2	98.8	1	66.8-139			14.8	20
tert-Butylbenzene	0.0250	ND	0.0209	0.0243	83.7	97.2	1	67.1-138			15.0	20
Carbon tetrachloride	0.0250	ND	0.0182	0.0219	72.9	87.8	1	60.6-139			18.5	20
Chlorobenzene	0.0250	ND	0.0221	0.0257	88.4	103	1	70.1-130			15.2	20
Chlorodibromomethane	0.0250	ND	0.0193	0.0235	77.3	94.1	1	71.6-132			19.6	20
Chloroethane	0.0250	ND	0.0202	0.0236	80.7	94.3	1	33.3-155			15.6	20
2-Chloroethyl vinyl ether	0.125	ND	0.00275	0.00185	2.20	1.48	1	5.00-149	J6	J6	39.4	40
Chloroform	0.0250	ND	0.0197	0.0229	78.8	91.5	1	66.1-133			14.9	20
Chloromethane	0.0250	ND	0.0153	0.0181	61.3	72.5	1	40.7-139			16.7	20
2-Chlorotoluene	0.0250	ND	0.0208	0.0246	83.4	98.5	1	66.9-134			16.6	20
4-Chlorotoluene	0.0250	ND	0.0213	0.0245	85.0	98.0	1	66.8-134			14.2	20
1,2-Dibromo-3-Chloropropane	0.0250	ND	0.0187	0.0236	74.8	94.4	1	63.9-142		J3	23.1	20.2
1,2-Dibromoethane	0.0250	ND	0.0220	0.0259	88.1	104	1	73.8-131			16.3	20
Dibromomethane	0.0250	ND	0.0197	0.0239	78.8	95.4	1	72.8-127			19.1	20
1,2-Dichlorobenzene	0.0250	ND	0.0220	0.0257	87.9	103	1	77.4-127			15.6	20
1,3-Dichlorobenzene	0.0250	ND	0.0221	0.0257	88.2	103	1	67.9-136			15.1	20
1,4-Dichlorobenzene	0.0250	ND	0.0212	0.0254	84.9	101	1	74.4-123			17.8	20
Dichlorodifluoromethane	0.0250	ND	0.0188	0.0221	75.1	88.5	1	42.2-146			16.4	20
1,1-Dichloroethane	0.0250	ND	0.0188	0.0221	75.3	88.6	1	64.0-134			16.2	20
1,2-Dichloroethane	0.0250	ND	0.0197	0.0235	78.9	94.1	1	60.7-132			17.5	20
1,1-Dichloroethene	0.0250	0.000362	0.0193	0.0224	75.6	88.1	1	48.8-144			15.0	20
cis-1,2-Dichloroethene	0.0250	0.144	0.158	0.159	58.4	59.4	1	60.6-136	V	V	0.170	20
trans-1,2-Dichloroethene	0.0250	0.00983	0.0273	0.0303	70.0	81.9	1	61.0-132			10.4	20
1,2-Dichloropropane	0.0250	ND	0.0189	0.0226	75.7	90.4	1	69.7-130			17.7	20
1,1-Dichloropropene	0.0250	ND	0.0187	0.0220	74.8	87.9	1	61.5-136			16.0	20
1,3-Dichloropropane	0.0250	ND	0.0206	0.0239	82.6	95.6	1	74.3-123			14.7	20
cis-1,3-Dichloropropene	0.0250	ND	0.0189	0.0227	75.7	90.7	1	71.1-129			18.0	20

L789243-13 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 09/22/15 10:51 • (MS) 09/22/15 08:56 • (MSD) 09/22/15 09:19

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
trans-1,3-Dichloropropene	0.0250	ND	0.0197	0.0238	78.7	95.3	1	66.3-136			19.1	20
2,2-Dichloropropane	0.0250	ND	0.0186	0.0225	74.5	90.2	1	54.9-142			19.1	20
Di-isopropyl ether	0.0250	ND	0.0179	0.0214	71.6	85.7	1	59.9-140			17.9	20
Ethylbenzene	0.0250	ND	0.0209	0.0241	83.6	96.3	1	62.7-136			14.0	20
Hexachloro-1,3-butadiene	0.0250	ND	0.0211	0.0254	84.6	102	1	61.1-144			18.2	20.1
Isopropylbenzene	0.0250	ND	0.0214	0.0248	85.6	99.2	1	67.4-136			14.8	20
p-Isopropyltoluene	0.0250	ND	0.0216	0.0250	86.3	100	1	62.8-143			14.7	20
2-Butanone (MEK)	0.125	ND	0.0681	0.0840	54.5	67.2	1	45.0-156		J3	21.0	20.8
Methylene Chloride	0.0250	0.000334	0.0186	0.0220	72.9	86.5	1	61.5-125			16.8	20
4-Methyl-2-pentanone (MIBK)	0.125	ND	0.0972	0.119	77.8	95.4	1	60.7-150		J3	20.4	20
Methyl tert-butyl ether	0.0250	ND	0.0197	0.0233	78.9	93.4	1	61.4-136			16.8	20
Naphthalene	0.0250	ND	0.0215	0.0262	85.9	105	1	61.8-143			19.7	20
n-Propylbenzene	0.0250	ND	0.0216	0.0249	86.4	99.8	1	63.2-139			14.4	20
Styrene	0.0250	ND	0.0221	0.0259	88.2	104	1	68.2-133			16.2	20
1,1,1,2-Tetrachloroethane	0.0250	ND	0.0206	0.0242	82.3	97.0	1	70.5-132			16.4	20
1,1,2,2-Tetrachloroethane	0.0250	ND	0.0220	0.0263	88.0	105	1	64.9-145			17.9	20
Tetrachloroethene	0.0250	ND	0.0220	0.0253	88.0	101	1	57.4-141			13.9	20
Toluene	0.0250	ND	0.0200	0.0237	80.0	95.0	1	67.8-124			17.1	20
1,1,2-Trichlorotrifluoroethane	0.0250	ND	0.0201	0.0231	80.4	92.6	1	53.7-150			14.1	20
1,2,3-Trichlorobenzene	0.0250	ND	0.0221	0.0262	88.3	105	1	65.7-143			17.0	20
1,2,4-Trichlorobenzene	0.0250	ND	0.0215	0.0263	86.1	105	1	67.0-146			20.0	20
1,1,1-Trichloroethane	0.0250	ND	0.0187	0.0215	74.9	86.0	1	58.7-134			13.8	20
1,1,2-Trichloroethane	0.0250	ND	0.0207	0.0237	82.6	94.9	1	74.1-130			13.8	20
Trichloroethene	0.0250	ND	0.0206	0.0240	82.3	96.1	1	48.9-148			15.5	20
Trichlorofluoromethane	0.0250	ND	0.0213	0.0243	85.1	97.3	1	39.9-165			13.4	20
1,2,3-Trichloropropane	0.0250	ND	0.0213	0.0245	85.1	98.1	1	71.5-134			14.1	20
1,2,3-Trimethylbenzene	0.0250	ND	0.0210	0.0251	84.0	100	1	62.7-133			17.6	20
1,2,4-Trimethylbenzene	0.0250	ND	0.0214	0.0247	85.5	98.8	1	60.5-137			14.5	20
1,3,5-Trimethylbenzene	0.0250	ND	0.0213	0.0248	85.1	99.3	1	67.9-134			15.4	20
Vinyl chloride	0.0250	0.0416	0.0584	0.0607	67.1	76.2	1	44.3-143			3.78	20
Xylenes, Total	0.0750	ND	0.0637	0.0734	84.9	97.9	1	65.6-133			14.2	20
(S) Toluene-d8					*99.9*	*99.1*		*90.0-115*				
(S) Dibromofluoromethane					*96.1*	*96.2*		*79.0-121*				
(S) 4-Bromofluorobenzene					*96.8*	*93.9*		*80.1-120*				

Method Blank (MB)

(MB) 09/23/15 20:23

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Acetone	U		0.0100	0.0500
Acrolein	U		0.00887	0.0500
Acrylonitrile	U		0.00187	0.0100
Benzene	U		0.000331	0.00100
Bromobenzene	U		0.000352	0.00100
Bromodichloromethane	U		0.000380	0.00100
Bromoform	U		0.000469	0.00100
Bromomethane	U		0.000866	0.00500
n-Butylbenzene	U		0.000361	0.00100
sec-Butylbenzene	U		0.000365	0.00100
tert-Butylbenzene	U		0.000399	0.00100
Carbon tetrachloride	U		0.000379	0.00100
Chlorobenzene	U		0.000348	0.00100
Chlorodibromomethane	U		0.000327	0.00100
Chloroethane	U		0.000453	0.00500
2-Chloroethyl vinyl ether	U		0.00301	0.0500
Chloroform	U		0.000324	0.00500
Chloromethane	U		0.000276	0.00250
2-Chlorotoluene	U		0.000375	0.00100
4-Chlorotoluene	U		0.000351	0.00100
1,2-Dibromo-3-Chloropropane	U		0.00133	0.00500
1,2-Dibromoethane	U		0.000381	0.00100
Dibromomethane	U		0.000346	0.00100
1,2-Dichlorobenzene	U		0.000349	0.00100
1,3-Dichlorobenzene	U		0.000220	0.00100
1,4-Dichlorobenzene	U		0.000274	0.00100
Dichlorodifluoromethane	U		0.000551	0.00500
1,1-Dichloroethane	U		0.000259	0.00100
1,2-Dichloroethane	U		0.000361	0.00100
1,1-Dichloroethene	U		0.000398	0.00100
cis-1,2-Dichloroethene	U		0.000260	0.00100
trans-1,2-Dichloroethene	U		0.000396	0.00100
1,2-Dichloropropane	U		0.000306	0.00100
1,1-Dichloropropene	U		0.000352	0.00100
1,3-Dichloropropane	U		0.000366	0.00100
cis-1,3-Dichloropropene	U		0.000418	0.00100

Method Blank (MB)

(MB) 09/23/15 20:23

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
trans-1,3-Dichloropropene	U		0.000419	0.00100
2,2-Dichloropropane	U		0.000321	0.00100
Di-isopropyl ether	U		0.000320	0.00100
Ethylbenzene	U		0.000384	0.00100
Hexachloro-1,3-butadiene	U		0.000256	0.00100
Isopropylbenzene	U		0.000326	0.00100
p-Isopropyltoluene	U		0.000350	0.00100
2-Butanone (MEK)	U		0.00393	0.0100
Methylene Chloride	U		0.00100	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100
Methyl tert-butyl ether	U		0.000367	0.00100
Naphthalene	U		0.00100	0.00500
n-Propylbenzene	U		0.000349	0.00100
Styrene	U		0.000307	0.00100
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100
Tetrachloroethene	U		0.000372	0.00100
Toluene	U		0.000780	0.00500
1,1,2-Trichlorotrifluoroethane	U		0.000303	0.00100
1,2,3-Trichlorobenzene	U		0.000230	0.00100
1,2,4-Trichlorobenzene	U		0.000355	0.00100
1,1,1-Trichloroethane	U		0.000319	0.00100
1,1,2-Trichloroethane	U		0.000383	0.00100
Trichloroethene	U		0.000398	0.00100
Trichlorofluoromethane	U		0.00120	0.00500
1,2,3-Trichloropropane	U		0.000807	0.00250
1,2,3-Trimethylbenzene	U		0.000321	0.00100
1,2,4-Trimethylbenzene	U		0.000373	0.00100
1,3,5-Trimethylbenzene	U		0.000387	0.00100
Vinyl chloride	U		0.000259	0.00100
Xylenes, Total	U		0.00106	0.00300
(S) Toluene-d8	*97.3*			*90.0-115*
(S) Dibromofluoromethane	*92.0*			*79.0-121*
(S) 4-Bromofluorobenzene	*103*			*80.1-120*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 09/23/15 21:39 • (LCSD) 09/23/15 23:10

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.183	0.188	146	150	28.7-175			2.84	20.9
Acrolein	0.125	0.150	0.0843	120	67.4	40.4-172		J3	56.3	20
Acrylonitrile	0.125	0.123	0.133	98.7	106	58.2-145			7.26	20
Benzene	0.0250	0.0214	0.0227	85.6	90.7	73.0-122			5.75	20
Bromobenzene	0.0250	0.0257	0.0256	103	102	81.5-115			0.410	20
Bromodichloromethane	0.0250	0.0259	0.0266	104	106	75.5-121			2.56	20
Bromoform	0.0250	0.0271	0.0271	109	108	71.5-131			0.190	20
Bromomethane	0.0250	0.0250	0.0264	99.9	106	22.4-187			5.41	20
n-Butylbenzene	0.0250	0.0278	0.0291	111	116	75.9-134			4.35	20
sec-Butylbenzene	0.0250	0.0280	0.0284	112	114	80.6-126			1.37	20
tert-Butylbenzene	0.0250	0.0277	0.0278	111	111	79.3-127			0.650	20
Carbon tetrachloride	0.0250	0.0240	0.0254	95.8	102	70.9-129			5.77	20
Chlorobenzene	0.0250	0.0255	0.0256	102	102	79.7-122			0.590	20
Chlorodibromomethane	0.0250	0.0270	0.0265	108	106	78.2-124			1.65	20
Chloroethane	0.0250	0.0208	0.0228	83.0	91.2	41.2-153			9.40	20
2-Chloroethyl vinyl ether	0.125	0.103	0.120	82.1	96.2	23.4-162			15.8	23.5
Chloroform	0.0250	0.0244	0.0255	97.7	102	73.2-125			4.38	20
Chloromethane	0.0250	0.0190	0.0209	76.0	83.6	55.8-134			9.53	20
2-Chlorotoluene	0.0250	0.0270	0.0270	108	108	76.4-125			0.200	20
4-Chlorotoluene	0.0250	0.0276	0.0278	111	111	81.5-121			0.430	20
1,2-Dibromo-3-Chloropropane	0.0250	0.0222	0.0231	88.8	92.4	64.8-131			3.93	20
1,2-Dibromoethane	0.0250	0.0257	0.0254	103	102	79.8-122			1.29	20
Dibromomethane	0.0250	0.0251	0.0254	100	101	79.5-118			1.05	20
1,2-Dichlorobenzene	0.0250	0.0252	0.0256	101	102	84.7-118			1.55	20
1,3-Dichlorobenzene	0.0250	0.0279	0.0276	112	110	77.6-127			1.17	20
1,4-Dichlorobenzene	0.0250	0.0260	0.0263	104	105	82.2-114			1.15	20
Dichlorodifluoromethane	0.0250	0.0205	0.0226	82.1	90.4	56.0-134			9.59	20
1,1-Dichloroethane	0.0250	0.0228	0.0240	91.4	96.1	71.7-127			5.11	20
1,2-Dichloroethane	0.0250	0.0266	0.0272	106	109	65.3-126			2.45	20
1,1-Dichloroethene	0.0250	0.0210	0.0230	83.9	92.1	59.9-137			9.31	20
cis-1,2-Dichloroethene	0.0250	0.0223	0.0234	89.1	93.7	77.3-122			5.09	20
trans-1,2-Dichloroethene	0.0250	0.0205	0.0223	82.1	89.1	72.6-125			8.17	20
1,2-Dichloropropane	0.0250	0.0236	0.0242	94.4	96.8	77.4-125			2.50	20
1,1-Dichloropropene	0.0250	0.0224	0.0240	89.8	96.1	72.5-127			6.78	20
1,3-Dichloropropane	0.0250	0.0245	0.0244	98.1	97.5	80.6-115			0.630	20
cis-1,3-Dichloropropene	0.0250	0.0259	0.0266	104	106	77.7-124			2.70	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 09/23/15 21:39 • (LCSD) 09/23/15 23:10

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
trans-1,3-Dichloropropene	0.0250	0.0278	0.0281	111	113	73.5-127			1.28	20
2,2-Dichloropropane	0.0250	0.0255	0.0261	102	104	61.3-134			2.09	20
Di-isopropyl ether	0.0250	0.0237	0.0244	94.8	97.7	65.1-135			2.99	20
Ethylbenzene	0.0250	0.0251	0.0257	100	103	80.9-121			2.27	20
Hexachloro-1,3-butadiene	0.0250	0.0264	0.0261	106	104	73.7-133			1.18	20
Isopropylbenzene	0.0250	0.0271	0.0278	109	111	81.6-124			2.35	20
p-Isopropyltoluene	0.0250	0.0296	0.0299	118	119	77.6-129			0.880	20
2-Butanone (MEK)	0.125	0.141	0.146	113	117	46.4-155			3.86	20
Methylene Chloride	0.0250	0.0204	0.0213	81.5	85.3	69.5-120			4.45	20
4-Methyl-2-pentanone (MIBK)	0.125	0.142	0.151	114	121	63.3-138			6.12	20
Methyl tert-butyl ether	0.0250	0.0239	0.0248	95.7	99.2	70.1-125			3.61	20
Naphthalene	0.0250	0.0217	0.0217	86.6	87.0	69.7-134			0.360	20
n-Propylbenzene	0.0250	0.0269	0.0274	107	110	81.9-122			2.00	20
Styrene	0.0250	0.0281	0.0281	112	112	79.9-124			0.110	20
1,1,1,2-Tetrachloroethane	0.0250	0.0268	0.0271	107	108	78.5-125			0.840	20
1,1,2,2-Tetrachloroethane	0.0250	0.0258	0.0262	103	105	79.3-123			1.46	20
Tetrachloroethene	0.0250	0.0249	0.0260	99.7	104	73.5-130			4.21	20
Toluene	0.0250	0.0236	0.0248	94.3	99.2	77.9-116			5.07	20
1,1,2-Trichlorotrifluoroethane	0.0250	0.0202	0.0225	80.8	90.0	62.0-141			10.7	20
1,2,3-Trichlorobenzene	0.0250	0.0226	0.0222	90.3	88.7	75.7-134			1.80	20
1,2,4-Trichlorobenzene	0.0250	0.0259	0.0260	104	104	76.1-136			0.340	20
1,1,1-Trichloroethane	0.0250	0.0242	0.0257	96.7	103	71.1-129			6.01	20
1,1,2-Trichloroethane	0.0250	0.0255	0.0255	102	102	81.6-120			0.180	20
Trichloroethene	0.0250	0.0236	0.0249	94.5	99.7	79.5-121			5.38	20
Trichlorofluoromethane	0.0250	0.0243	0.0276	97.0	110	49.1-157			12.8	20
1,2,3-Trichloropropane	0.0250	0.0282	0.0277	113	111	74.9-124			1.82	20
1,2,3-Trimethylbenzene	0.0250	0.0249	0.0255	99.4	102	79.9-118			2.53	20
1,2,4-Trimethylbenzene	0.0250	0.0281	0.0283	112	113	79.0-122			0.610	20
1,3,5-Trimethylbenzene	0.0250	0.0279	0.0281	111	112	81.0-123			0.840	20
Vinyl chloride	0.0250	0.0198	0.0222	79.1	88.6	61.5-134			11.3	20
Xylenes, Total	0.0750	0.0776	0.0791	104	105	79.2-122			1.82	20
(S) Toluene-d8				*99.1*	*99.3*	*90.0-115*				
(S) Dibromofluoromethane				*94.8*	*95.7*	*79.0-121*				
(S) 4-Bromofluorobenzene				*103*	*99.9*	*80.1-120*				

L789226-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 09/24/15 00:31 • (MS) 09/23/15 20:40 • (MSD) 09/23/15 20:57

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.0426	0.139	0.145	76.8	81.8	1	25.0-156			4.40	21.5
Acrolein	0.125	ND	0.185	0.192	148	154	1	34.0-194			3.94	21.5
Acrylonitrile	0.125	ND	0.133	0.138	106	110	1	55.9-161			3.68	20
Benzene	0.0250	ND	0.0225	0.0231	90.1	92.5	1	58.6-133			2.64	20
Bromobenzene	0.0250	ND	0.0281	0.0283	112	113	1	70.6-125			0.810	20
Bromodichloromethane	0.0250	ND	0.0289	0.0285	115	114	1	69.2-127			1.28	20
Bromoform	0.0250	ND	0.0310	0.0310	124	124	1	66.3-140			0.0400	20
Bromomethane	0.0250	ND	0.0239	0.0251	95.5	100	1	16.6-183			4.98	20.5
n-Butylbenzene	0.0250	ND	0.0292	0.0297	117	119	1	64.8-145			1.73	20
sec-Butylbenzene	0.0250	ND	0.0299	0.0310	120	124	1	66.8-139			3.40	20
tert-Butylbenzene	0.0250	ND	0.0299	0.0306	120	123	1	67.1-138			2.29	20
Carbon tetrachloride	0.0250	ND	0.0255	0.0269	102	108	1	60.6-139			5.30	20
Chlorobenzene	0.0250	ND	0.0282	0.0278	113	111	1	70.1-130			1.32	20
Chlorodibromomethane	0.0250	ND	0.0304	0.0297	122	119	1	71.6-132			2.30	20
Chloroethane	0.0250	ND	0.0198	0.0218	79.3	87.3	1	33.3-155			9.55	20
2-Chloroethyl vinyl ether	0.125	ND	0.000451	0.000397	0.361	0.318	1	5.00-149	J6	J6	12.7	40
Chloroform	0.0250	ND	0.0257	0.0265	103	106	1	66.1-133			2.80	20
Chloromethane	0.0250	ND	0.0182	0.0195	72.6	78.0	1	40.7-139			7.18	20
2-Chlorotoluene	0.0250	ND	0.0293	0.0299	117	119	1	66.9-134			1.90	20
4-Chlorotoluene	0.0250	ND	0.0299	0.0301	120	120	1	66.8-134			0.540	20
1,2-Dibromo-3-Chloropropane	0.0250	ND	0.0240	0.0252	95.8	101	1	63.9-142			5.24	20.2
1,2-Dibromoethane	0.0250	ND	0.0292	0.0283	117	113	1	73.8-131			3.32	20
Dibromomethane	0.0250	ND	0.0274	0.0272	110	109	1	72.8-127			0.700	20
1,2-Dichlorobenzene	0.0250	ND	0.0271	0.0272	108	109	1	77.4-127			0.280	20
1,3-Dichlorobenzene	0.0250	ND	0.0301	0.0306	120	122	1	67.9-136			1.57	20
1,4-Dichlorobenzene	0.0250	ND	0.0279	0.0274	112	110	1	74.4-123			1.65	20
Dichlorodifluoromethane	0.0250	ND	0.0191	0.0211	76.6	84.3	1	42.2-146			9.67	20
1,1-Dichloroethane	0.0250	ND	0.0239	0.0247	95.6	99.0	1	64.0-134			3.41	20
1,2-Dichloroethane	0.0250	ND	0.0287	0.0288	115	115	1	60.7-132			0.220	20
1,1-Dichloroethene	0.0250	ND	0.0218	0.0231	87.3	92.3	1	48.8-144			5.50	20
cis-1,2-Dichloroethene	0.0250	ND	0.0232	0.0241	92.9	96.4	1	60.6-136			3.71	20
trans-1,2-Dichloroethene	0.0250	ND	0.0214	0.0222	85.7	88.9	1	61.0-132			3.66	20
1,2-Dichloropropane	0.0250	ND	0.0257	0.0257	103	103	1	69.7-130			0.0900	20
1,1-Dichloropropene	0.0250	ND	0.0235	0.0241	94.2	96.5	1	61.5-136			2.46	20
1,3-Dichloropropane	0.0250	ND	0.0278	0.0270	111	108	1	74.3-123			2.93	20
cis-1,3-Dichloropropene	0.0250	ND	0.0276	0.0272	110	109	1	71.1-129			1.32	20

L789226-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 09/24/15 00:31 • (MS) 09/23/15 20:40 • (MSD) 09/23/15 20:57

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
trans-1,3-Dichloropropene	0.0250	ND	0.0313	0.0304	125	121	1	66.3-136			2.92	20
2,2-Dichloropropane	0.0250	ND	0.0263	0.0264	105	105	1	54.9-142			0.410	20
Di-isopropyl ether	0.0250	ND	0.0245	0.0254	98.2	102	1	59.9-140			3.31	20
Ethylbenzene	0.0250	ND	0.0277	0.0275	111	110	1	62.7-136			0.810	20
Hexachloro-1,3-butadiene	0.0250	ND	0.0275	0.0286	110	114	1	61.1-144			3.77	20.1
Isopropylbenzene	0.0250	ND	0.0296	0.0301	118	121	1	67.4-136			1.82	20
p-Isopropyltoluene	0.0250	ND	0.0315	0.0325	126	130	1	62.8-143			3.16	20
2-Butanone (MEK)	0.125	0.00435	0.119	0.122	91.9	94.1	1	45.0-156			2.23	20.8
Methylene Chloride	0.0250	0.000932	0.0211	0.0219	80.8	83.9	1	61.5-125			3.60	20
4-Methyl-2-pentanone (MIBK)	0.125	ND	0.156	0.159	125	127	1	60.7-150			1.57	20
Methyl tert-butyl ether	0.0250	ND	0.0246	0.0255	98.3	102	1	61.4-136			3.77	20
Naphthalene	0.0250	ND	0.0220	0.0242	88.0	96.7	1	61.8-143			9.42	20
n-Propylbenzene	0.0250	ND	0.0290	0.0295	116	118	1	63.2-139			1.73	20
Styrene	0.0250	ND	0.0299	0.0296	119	118	1	68.2-133			0.920	20
1,1,1,2-Tetrachloroethane	0.0250	ND	0.0296	0.0298	119	119	1	70.5-132			0.440	20
1,1,2,2-Tetrachloroethane	0.0250	ND	0.0286	0.0294	114	117	1	64.9-145			2.61	20
Tetrachloroethene	0.0250	ND	0.0280	0.0277	112	111	1	57.4-141			1.15	20
Toluene	0.0250	ND	0.0259	0.0256	104	102	1	67.8-124			1.21	20
1,1,2-Trichlorotrifluoroethane	0.0250	ND	0.0218	0.0230	87.1	92.1	1	53.7-150			5.56	20
1,2,3-Trichlorobenzene	0.0250	ND	0.0225	0.0245	90.1	98.0	1	65.7-143			8.36	20
1,2,4-Trichlorobenzene	0.0250	ND	0.0261	0.0272	105	109	1	67.0-146			4.11	20
1,1,1-Trichloroethane	0.0250	ND	0.0257	0.0266	103	106	1	58.7-134			3.56	20
1,1,2-Trichloroethane	0.0250	ND	0.0289	0.0279	115	112	1	74.1-130			3.29	20
Trichloroethene	0.0250	ND	0.0260	0.0261	104	104	1	48.9-148			0.130	20
Trichlorofluoromethane	0.0250	ND	0.0260	0.0264	104	106	1	39.9-165			1.61	20
1,2,3-Trichloropropane	0.0250	ND	0.0310	0.0314	124	125	1	71.5-134			1.24	20
1,2,3-Trimethylbenzene	0.0250	ND	0.0265	0.0264	106	106	1	62.7-133			0.220	20
1,2,4-Trimethylbenzene	0.0250	ND	0.0300	0.0305	120	122	1	60.5-137			1.82	20
1,3,5-Trimethylbenzene	0.0250	ND	0.0297	0.0304	119	121	1	67.9-134			2.22	20
Vinyl chloride	0.0250	ND	0.0186	0.0203	74.3	81.3	1	44.3-143			9.03	20
Xylenes, Total	0.0750	ND	0.0844	0.0848	113	113	1	65.6-133			0.480	20
(S) Toluene-d8					*99.8*	*99.3*		*90.0-115*				
(S) Dibromofluoromethane					*92.0*	*94.8*		*79.0-121*				
(S) 4-Bromofluorobenzene					*103*	*103*		*80.1-120*				

Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
ND,U	Not detected at the Reporting Limit (or MDL where applicable).
RPD	Relative Percent Difference.
(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
Rec.	Recovery.
SDL	Sample Detection Limit.
MQL	Method Quantitation Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
V	The sample concentration is too high to evaluate accurate spike recoveries.

ACCREDITATIONS & LOCATIONS

ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our "one location" design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be **YOUR LAB OF CHOICE.**

State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey–NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Conneticut	PH-0197	North Carolina [1]	DW21704
Florida	E87487	North Carolina [2]	41
Georgia	NELAP	North Dakota	R-140
Georgia [1]	923	Ohio–VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky [1]	90010	South Dakota	n/a
Kentucky [2]	16	Tennessee [1 4]	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

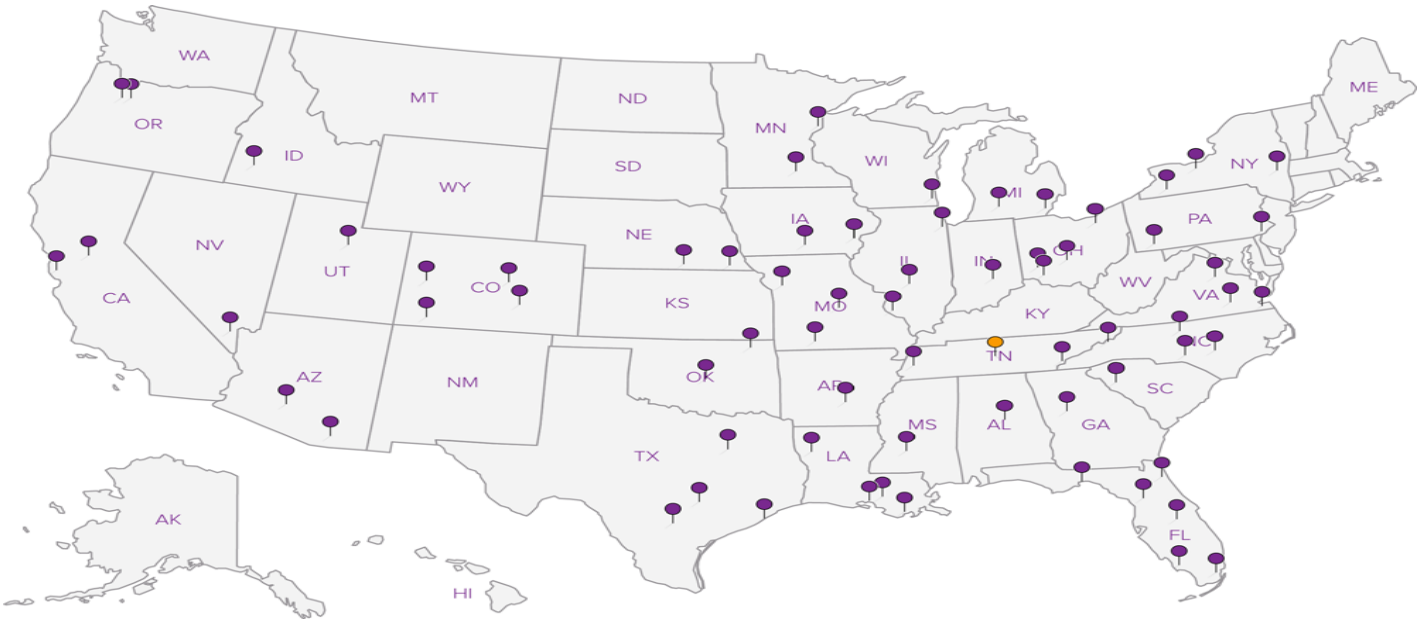
[1.] Drinking Water [2.] Underground Storage Tanks [3.] Aquatic Toxicity [4.] Chemical/Microbiological [5.] Mold [n/a] Accreditation not applicable

Third Party & Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA	100789
Canada	1461.01	DOD	1461.01
EPA–Crypto	TN00003	USDA	S-67674

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. **ESC Lab Sciences performs all testing at our central laboratory.**



PNG Environmental
6665 SW Hampton St.
Suite 101
Tigard, OR. 97223

Billing Information:
Accounts Payable- Betsy Brandner
6665 SW Hampton St. Suite 101
Tigard, OR. 97223

Report to: Paul McBeth
Email to: pmcbeth@pngenv.com

Project Description: EVANITE
City/State Collected:

Phone: 503-620-2387
FAX:

Client Project #: 1122
ESC Key: PNGENVTOR

Collected by: Jay Griffith
Site/Facility ID#: 1122
P.O.#: 1122

Collected by (signature):
Immediately Packed on Ice N (Y)

Rush? (Lab MUST Be Notified)
____ Same Day.....200%
____ Next Day.....100%
____ Two Day.....50%
____ Three Day.....25%

Date Results Needed:
Email? __No __Yes
FAX? __No __Yes

Analysis/Container/Preservative: VOCs EDB 8260

Chain of Custody Page 1 of 2

ESC LABORATORIES
12065 Lebanon Road
Mt. Juliet, TN 37122
Phone: (800) 767-5859
Phone: (615) 758-5858
Fax: (615) 758-5859

J041

CoCode PNGENVTOR (lab use only)
Template/Prelogin
Shipped Via:

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	Remarks/Contaminant	Sample # (lab only)
TB-091515	G	W		091515	0900	1		L789249-01
RB0-24					1032	3		02
RB0-42					1044	3		03
RB1-48					1115	3		04
RB1-24					1128	3		05
RB2-SW					1138	3		06
RB2-48					1151	3		07
RB3-12					1223	3		08
RB4-48					1246	3		09

*Matrix: SS - Soil/Solid GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other_____

pH _____ Temp _____

Remarks:

6436 7133 9382

Flow _____ Other _____

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
Jay Griffith	9-16-15	1130	R. Ath
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)

Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ _____

Temp: 3.8 Bottles Received: 48

Date: 9-17-15 Time: 0910

Condition: NF (lab use only)

CoC Seals Intact: ___ Y ___ N ___ NA

pH Checked: NCF:

PNG Environmental
6665 SW Hampton St.
Suite 101
Tigard, OR. 97223

Billing Information:
Accounts Payable- Betsy Brandner
6665 SW Hampton St. Suite 101
Tigard, OR. 97223

Report to:

Email to:

Project Description:

City/Sate Collected

Phone: 503-620-2387
FAX:

Client Project #:

ESC Key: PNGENVTOR

Collected by:

Site/Facility ID#:

P.O.#:

Collected by (signature):

Immediately Packed on Ice N Y

Rush? (Lab MUST Be Notified)
____ Same Day. 200%
____ Next Day. 100%
____ Two Day 50%
____ Three Day 25%

Date Results Needed:

Email? __No __Yes

FAX? __No __Yes

Analysis/Container/Preservative

VOCs EPA 8260

Chain of Custody
Page 2 of 2

ESC LABORATORY SCIENCES
12065 Lebanon Road
Mt. Juliet, TN 37122
Phone: (800) 767-5859
Phone: (615) 758-5858
Fax: (615) 758-5859

CoCode PNGENVTOR(lab use only)

Template/Prelogin

Shipped Via:

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	Remarks/Contaminant	Sample # (lab only)
RB4-24	G	W		091515	1301	3 x		L789249-10
RB5-48					1334	3 x		11
RB5-24					1350	3 x		12
RBG-SW					1400	3 x		13
RBG-48					1445	3 x		14
RBG-24					1432	3 x		15
								SWLB

*Matrix: SS - Soil/Solid GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other_____

pH _____ Temp _____

Remarks:

Flow _____ Other _____

Relinquished by: (Signature)	Date: 9-16-15	Time: 1130	Received by: (Signature)	Samples returned via: ☐ UPS ☑ FedEx ☐ Courier ☐ _____	Condition: 75 (lab use only)
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: 3.8 Bottles Received: 48	CoC Seals Intact: ___ Y ___ N ___ NA
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 9-17-15 Time: 04W	pH Checked: NCF:

SOIL DATA

ANALYTICAL REPORT

December 21, 2015

PNG Environmental

Sample Delivery Group:	L805690
Samples Received:	12/09/2015
Project Number:	1122
Description:	Evanite

Report To: Paul McBeth
6665 SW Hampton St., Suite 101
Tigard, OR 97223

Entire Report Reviewed By:

Jarred Willis
Technical Service Representative

TABLE OF CONTENTS

DMW-40 15FT L805690-01 Solid

Collected by: S. Biles | Collected date/time: 11/30/15 15:43 | Received date/time: 12/09/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG834599	1	12/10/15 14:33	12/11/15 07:21	KDW
Volatile Organic Compounds (GC/MS) by Method 8260B	WG834880	1	12/11/15 06:22	12/14/15 13:38	DWR

DMW-40 17.5FT L805690-02 Solid

Collected by: S. Biles | Collected date/time: 11/30/15 16:19 | Received date/time: 12/09/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG834599	1	12/10/15 14:33	12/11/15 07:21	KDW
Volatile Organic Compounds (GC/MS) by Method 8260B	WG834880	1	12/11/15 06:22	12/14/15 13:56	DWR

DMW-40 37FT L805690-03 Solid

Collected by: S. Biles | Collected date/time: 12/01/15 08:30 | Received date/time: 12/09/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG834599	1	12/10/15 14:33	12/11/15 07:21	KDW
Volatile Organic Compounds (GC/MS) by Method 8260B	WG834880	1.02	12/11/15 06:22	12/14/15 18:43	ACG

DMW-40 38.5FT L805690-04 Solid

Collected by: S. Biles | Collected date/time: 12/01/15 08:35 | Received date/time: 12/09/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG834599	1	12/10/15 14:33	12/11/15 07:22	KDW
Volatile Organic Compounds (GC/MS) by Method 8260B	WG834880	1	12/11/15 06:22	12/14/15 19:01	ACG

DMW-30 6FT L805690-05 Solid

Collected by: S. Biles | Collected date/time: 12/02/15 12:38 | Received date/time: 12/09/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG834599	1	12/10/15 14:33	12/11/15 07:22	KDW
Volatile Organic Compounds (GC/MS) by Method 8260B	WG834880	1	12/11/15 06:22	12/14/15 19:19	ACG

DMW-30 14FT L805690-06 Solid

Collected by: S. Biles | Collected date/time: 12/02/15 12:56 | Received date/time: 12/09/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG834657	1	12/10/15 15:09	12/11/15 07:24	KDW
Volatile Organic Compounds (GC/MS) by Method 8260B	WG834880	1	12/11/15 06:22	12/14/15 19:36	ACG

DMW-30 18.5FT L805690-07 Solid

Collected by: S. Biles | Collected date/time: 12/02/15 13:09 | Received date/time: 12/09/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG834657	1	12/10/15 15:09	12/11/15 07:25	KDW
Volatile Organic Compounds (GC/MS) by Method 8260B	WG834880	1	12/11/15 06:22	12/14/15 19:54	ACG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG835688	84	12/16/15 00:58	12/16/15 22:41	BMB

DMW-30 42FT L805690-08 Solid

Collected by: S. Biles | Collected date/time: 12/02/15 16:04 | Received date/time: 12/09/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG834657	1	12/10/15 15:09	12/11/15 07:25	KDW
Volatile Organic Compounds (GC/MS) by Method 8260B	WG834880	1	12/11/15 06:22	12/14/15 20:12	ACG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG835688	22.5	12/16/15 00:58	12/16/15 23:05	BMB

DMW-30 44FT L805690-09 Solid

Collected by: S. Biles | Collected date/time: 12/02/15 16:06 | Received date/time: 12/09/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG834657	1	12/10/15 15:09	12/11/15 07:25	KDW
Volatile Organic Compounds (GC/MS) by Method 8260B	WG834880	1	12/11/15 06:22	12/14/15 20:29	ACG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG835688	55	12/16/15 00:58	12/16/15 21:53	BMB

DMW-30 46FT L805690-10 Solid

Collected by: S. Biles | Collected date/time: 12/02/15 16:08 | Received date/time: 12/09/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG834755	1	12/10/15 16:57	12/11/15 07:36	KDW
Volatile Organic Compounds (GC/MS) by Method 8260B	WG834983	1	12/11/15 14:49	12/11/15 18:51	ACG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG835688	43	12/16/15 00:58	12/16/15 22:17	BMB

DMW-41 8FT L805690-11 Solid

Collected by: S. Biles | Collected date/time: 12/03/15 11:20 | Received date/time: 12/09/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG834755	1	12/10/15 16:57	12/11/15 07:38	KDW
Volatile Organic Compounds (GC/MS) by Method 8260B	WG834983	1	12/11/15 14:49	12/11/15 19:11	ACG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG835371	1	12/17/15 04:12	12/17/15 09:35	JHH

DMW-41 19.5FT L805690-12 Solid

Collected by: S. Biles | Collected date/time: 12/03/15 11:35 | Received date/time: 12/09/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG834755	1	12/10/15 16:57	12/11/15 07:38	KDW
Volatile Organic Compounds (GC/MS) by Method 8260B	WG834983	1	12/11/15 14:49	12/11/15 19:30	ACG

DMW-41 42.5FT L805690-13 Solid

Collected by: S. Biles | Collected date/time: 12/03/15 14:35 | Received date/time: 12/09/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG834755	1	12/10/15 16:57	12/11/15 07:38	KDW
Volatile Organic Compounds (GC/MS) by Method 8260B	WG834983	1	12/11/15 14:49	12/11/15 19:50	ACG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG835989	880	12/16/15 10:06	12/16/15 18:25	BMB

DMW-41 45FT L805690-14 Solid

Collected by: S. Biles | Collected date/time: 12/03/15 14:38 | Received date/time: 12/09/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG834755	1	12/10/15 16:57	12/11/15 07:39	KDW
Volatile Organic Compounds (GC/MS) by Method 8260B	WG834983	1	12/11/15 14:49	12/11/15 20:09	ACG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG835989	445	12/16/15 10:06	12/16/15 18:44	BMB

DMW-42 17FT L805690-15 Solid

Collected by: S. Biles | Collected date/time: 12/04/15 10:28 | Received date/time: 12/09/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG834755	1	12/10/15 16:57	12/11/15 07:39	KDW
Volatile Organic Compounds (GC/MS) by Method 8260B	WG834983	1	12/11/15 14:49	12/11/15 17:33	ACG

DMW-42 35.5FT L805690-16 Solid

Collected by: S. Biles | Collected date/time: 12/04/15 11:40 | Received date/time: 12/09/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG834755	1	12/10/15 16:57	12/11/15 07:39	KDW
Volatile Organic Compounds (GC/MS) by Method 8260B	WG834983	1	12/11/15 14:49	12/11/15 20:29	ACG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG835989	196	12/16/15 10:06	12/16/15 19:04	BMB

DMW-42 37FT L805690-17 Solid

Collected by: S. Biles | Collected date/time: 12/04/15 11:42 | Received date/time: 12/09/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG834755	1	12/10/15 16:57	12/11/15 07:39	KDW
Volatile Organic Compounds (GC/MS) by Method 8260B	WG834983	1	12/11/15 14:49	12/11/15 20:48	ACG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG835989	176	12/16/15 10:06	12/16/15 19:23	BMB

DMW-42 40FT L805690-18 Solid

Collected by: S. Biles | Collected date/time: 12/04/15 11:44 | Received date/time: 12/09/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG834755	1	12/10/15 16:57	12/11/15 07:39	KDW
Volatile Organic Compounds (GC/MS) by Method 8260B	WG834983	1	12/11/15 14:49	12/11/15 21:08	ACG
Volatile Organic Compounds (GC/MS) by Method 8260B	WG835989	96.25	12/16/15 10:06	12/16/15 19:42	BMB

DMW-41-GW L805690-19 GW

Collected by: S. Biles | Collected date/time: 12/03/15 13:30 | Received date/time: 12/09/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG835314	1	12/17/15 06:06	12/17/15 06:06	LRL

DMW-42-GW L805690-20 GW

Collected by: S. Biles | Collected date/time: 12/04/15 11:00 | Received date/time: 12/09/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG834841	1	12/17/15 21:21	12/17/15 21:21	DAH
Volatile Organic Compounds (GC/MS) by Method 8260B	WG836587	1	12/18/15 18:55	12/18/15 18:55	DAH

DMW-41 49.5FT L805690-21 Solid

Collected by: S. Biles | Collected date/time: 12/04/15 00:00 | Received date/time: 12/09/15 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG835149	1	12/12/15 13:30	12/12/15 13:46	KDW
Volatile Organic Compounds (GC/MS) by Method 8260B	WG835371	1	12/17/15 04:12	12/17/15 09:54	JHH

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Jarred Willis
Technical Service Representative

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	72.2		1	12/11/2015 07:21	WG834599

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		0.0692	1	12/14/2015 13:38	WG834880
Acrylonitrile	ND		0.0138	1	12/14/2015 13:38	WG834880
Benzene	0.00338		0.00138	1	12/14/2015 13:38	WG834880
Bromobenzene	ND		0.00138	1	12/14/2015 13:38	WG834880
Bromodichloromethane	ND		0.00138	1	12/14/2015 13:38	WG834880
Bromoform	ND		0.00138	1	12/14/2015 13:38	WG834880
Bromomethane	ND		0.00692	1	12/14/2015 13:38	WG834880
n-Butylbenzene	ND		0.00138	1	12/14/2015 13:38	WG834880
sec-Butylbenzene	ND		0.00138	1	12/14/2015 13:38	WG834880
tert-Butylbenzene	ND		0.00138	1	12/14/2015 13:38	WG834880
Carbon tetrachloride	ND		0.00138	1	12/14/2015 13:38	WG834880
Chlorobenzene	ND		0.00138	1	12/14/2015 13:38	WG834880
Chlorodibromomethane	ND		0.00138	1	12/14/2015 13:38	WG834880
Chloroethane	ND		0.00692	1	12/14/2015 13:38	WG834880
2-Chloroethyl vinyl ether	ND	J4	0.0692	1	12/14/2015 13:38	WG834880
Chloroform	ND		0.00692	1	12/14/2015 13:38	WG834880
Chloromethane	ND		0.00346	1	12/14/2015 13:38	WG834880
2-Chlorotoluene	ND		0.00138	1	12/14/2015 13:38	WG834880
4-Chlorotoluene	ND		0.00138	1	12/14/2015 13:38	WG834880
1,2-Dibromo-3-Chloropropane	ND		0.00692	1	12/14/2015 13:38	WG834880
1,2-Dibromoethane	ND		0.00138	1	12/14/2015 13:38	WG834880
Dibromomethane	ND		0.00138	1	12/14/2015 13:38	WG834880
1,2-Dichlorobenzene	ND		0.00138	1	12/14/2015 13:38	WG834880
1,3-Dichlorobenzene	ND		0.00138	1	12/14/2015 13:38	WG834880
1,4-Dichlorobenzene	ND		0.00138	1	12/14/2015 13:38	WG834880
Dichlorodifluoromethane	ND		0.00692	1	12/14/2015 13:38	WG834880
1,1-Dichloroethane	ND		0.00138	1	12/14/2015 13:38	WG834880
1,2-Dichloroethane	ND		0.00138	1	12/14/2015 13:38	WG834880
1,1-Dichloroethene	ND		0.00138	1	12/14/2015 13:38	WG834880
cis-1,2-Dichloroethene	ND		0.00138	1	12/14/2015 13:38	WG834880
trans-1,2-Dichloroethene	ND		0.00138	1	12/14/2015 13:38	WG834880
1,2-Dichloropropane	ND		0.00138	1	12/14/2015 13:38	WG834880
1,1-Dichloropropene	ND		0.00138	1	12/14/2015 13:38	WG834880
1,3-Dichloropropane	ND		0.00138	1	12/14/2015 13:38	WG834880
cis-1,3-Dichloropropene	ND		0.00138	1	12/14/2015 13:38	WG834880
trans-1,3-Dichloropropene	ND		0.00138	1	12/14/2015 13:38	WG834880
2,2-Dichloropropane	ND		0.00138	1	12/14/2015 13:38	WG834880
Di-isopropyl ether	ND		0.00138	1	12/14/2015 13:38	WG834880
Ethylbenzene	ND		0.00138	1	12/14/2015 13:38	WG834880
Hexachloro-1,3-butadiene	ND		0.00138	1	12/14/2015 13:38	WG834880
Isopropylbenzene	ND		0.00138	1	12/14/2015 13:38	WG834880
p-Isopropyltoluene	ND		0.00138	1	12/14/2015 13:38	WG834880
2-Butanone (MEK)	ND		0.0138	1	12/14/2015 13:38	WG834880
Methylene Chloride	ND		0.00692	1	12/14/2015 13:38	WG834880
4-Methyl-2-pentanone (MIBK)	ND		0.0138	1	12/14/2015 13:38	WG834880
Methyl tert-butyl ether	ND		0.00138	1	12/14/2015 13:38	WG834880
Naphthalene	ND		0.00692	1	12/14/2015 13:38	WG834880
n-Propylbenzene	ND		0.00138	1	12/14/2015 13:38	WG834880
Styrene	ND		0.00138	1	12/14/2015 13:38	WG834880
1,1,1,2-Tetrachloroethane	ND		0.00138	1	12/14/2015 13:38	WG834880

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1,2,2-Tetrachloroethane	ND		0.00138	1	12/14/2015 13:38	WG834880
1,1,2-Trichlorotrifluoroethane	ND		0.00138	1	12/14/2015 13:38	WG834880
Tetrachloroethene	ND		0.00138	1	12/14/2015 13:38	WG834880
Toluene	ND		0.00692	1	12/14/2015 13:38	WG834880
1,2,3-Trichlorobenzene	ND		0.00138	1	12/14/2015 13:38	WG834880
1,2,4-Trichlorobenzene	ND		0.00138	1	12/14/2015 13:38	WG834880
1,1,1-Trichloroethane	ND		0.00138	1	12/14/2015 13:38	WG834880
1,1,2-Trichloroethane	ND		0.00138	1	12/14/2015 13:38	WG834880
Trichloroethene	0.00503		0.00138	1	12/14/2015 13:38	WG834880
Trichlorofluoromethane	ND		0.00692	1	12/14/2015 13:38	WG834880
1,2,3-Trichloropropane	ND		0.00346	1	12/14/2015 13:38	WG834880
1,2,4-Trimethylbenzene	ND		0.00138	1	12/14/2015 13:38	WG834880
1,2,3-Trimethylbenzene	ND		0.00138	1	12/14/2015 13:38	WG834880
1,3,5-Trimethylbenzene	ND		0.00138	1	12/14/2015 13:38	WG834880
Vinyl chloride	ND		0.00138	1	12/14/2015 13:38	WG834880
Xylenes, Total	ND		0.00415	1	12/14/2015 13:38	WG834880
(S) Toluene-d8	*102*		*88.7-115*		*12/14/2015 13:38*	WG834880
(S) Dibromofluoromethane	*106*		*76.3-123*		*12/14/2015 13:38*	WG834880
(S) a,a,a-Trifluorotoluene	*104*		*87.2-117*		*12/14/2015 13:38*	WG834880
(S) 4-Bromofluorobenzene	*86.9*		*69.7-129*		*12/14/2015 13:38*	WG834880

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	78.5		1	12/11/2015 07:21	WG834599

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		0.0637	1	12/14/2015 13:56	WG834880
Acrylonitrile	ND		0.0127	1	12/14/2015 13:56	WG834880
Benzene	0.00300		0.00127	1	12/14/2015 13:56	WG834880
Bromobenzene	ND		0.00127	1	12/14/2015 13:56	WG834880
Bromodichloromethane	ND		0.00127	1	12/14/2015 13:56	WG834880
Bromoform	ND		0.00127	1	12/14/2015 13:56	WG834880
Bromomethane	ND		0.00637	1	12/14/2015 13:56	WG834880
n-Butylbenzene	ND		0.00127	1	12/14/2015 13:56	WG834880
sec-Butylbenzene	ND		0.00127	1	12/14/2015 13:56	WG834880
tert-Butylbenzene	ND		0.00127	1	12/14/2015 13:56	WG834880
Carbon tetrachloride	ND		0.00127	1	12/14/2015 13:56	WG834880
Chlorobenzene	ND		0.00127	1	12/14/2015 13:56	WG834880
Chlorodibromomethane	ND		0.00127	1	12/14/2015 13:56	WG834880
Chloroethane	ND		0.00637	1	12/14/2015 13:56	WG834880
2-Chloroethyl vinyl ether	ND	J4	0.0637	1	12/14/2015 13:56	WG834880
Chloroform	ND		0.00637	1	12/14/2015 13:56	WG834880
Chloromethane	ND		0.00318	1	12/14/2015 13:56	WG834880
2-Chlorotoluene	ND		0.00127	1	12/14/2015 13:56	WG834880
4-Chlorotoluene	ND		0.00127	1	12/14/2015 13:56	WG834880
1,2-Dibromo-3-Chloropropane	ND		0.00637	1	12/14/2015 13:56	WG834880
1,2-Dibromoethane	ND		0.00127	1	12/14/2015 13:56	WG834880
Dibromomethane	ND		0.00127	1	12/14/2015 13:56	WG834880
1,2-Dichlorobenzene	ND		0.00127	1	12/14/2015 13:56	WG834880
1,3-Dichlorobenzene	ND		0.00127	1	12/14/2015 13:56	WG834880
1,4-Dichlorobenzene	ND		0.00127	1	12/14/2015 13:56	WG834880
Dichlorodifluoromethane	ND		0.00637	1	12/14/2015 13:56	WG834880
1,1-Dichloroethane	ND		0.00127	1	12/14/2015 13:56	WG834880
1,2-Dichloroethane	ND		0.00127	1	12/14/2015 13:56	WG834880
1,1-Dichloroethene	ND		0.00127	1	12/14/2015 13:56	WG834880
cis-1,2-Dichloroethene	ND		0.00127	1	12/14/2015 13:56	WG834880
trans-1,2-Dichloroethene	ND		0.00127	1	12/14/2015 13:56	WG834880
1,2-Dichloropropane	ND		0.00127	1	12/14/2015 13:56	WG834880
1,1-Dichloropropene	ND		0.00127	1	12/14/2015 13:56	WG834880
1,3-Dichloropropane	ND		0.00127	1	12/14/2015 13:56	WG834880
cis-1,3-Dichloropropene	ND		0.00127	1	12/14/2015 13:56	WG834880
trans-1,3-Dichloropropene	ND		0.00127	1	12/14/2015 13:56	WG834880
2,2-Dichloropropane	ND		0.00127	1	12/14/2015 13:56	WG834880
Di-isopropyl ether	ND		0.00127	1	12/14/2015 13:56	WG834880
Ethylbenzene	ND		0.00127	1	12/14/2015 13:56	WG834880
Hexachloro-1,3-butadiene	ND		0.00127	1	12/14/2015 13:56	WG834880
Isopropylbenzene	ND		0.00127	1	12/14/2015 13:56	WG834880
p-Isopropyltoluene	ND		0.00127	1	12/14/2015 13:56	WG834880
2-Butanone (MEK)	ND		0.0127	1	12/14/2015 13:56	WG834880
Methylene Chloride	ND		0.00637	1	12/14/2015 13:56	WG834880
4-Methyl-2-pentanone (MIBK)	ND		0.0127	1	12/14/2015 13:56	WG834880
Methyl tert-butyl ether	ND		0.00127	1	12/14/2015 13:56	WG834880
Naphthalene	ND		0.00637	1	12/14/2015 13:56	WG834880
n-Propylbenzene	ND		0.00127	1	12/14/2015 13:56	WG834880
Styrene	ND		0.00127	1	12/14/2015 13:56	WG834880
1,1,1,2-Tetrachloroethane	ND		0.00127	1	12/14/2015 13:56	WG834880

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1,2,2-Tetrachloroethane	ND		0.00127	1	12/14/2015 13:56	WG834880
1,1,2-Trichlorotrifluoroethane	ND		0.00127	1	12/14/2015 13:56	WG834880
Tetrachloroethene	ND		0.00127	1	12/14/2015 13:56	WG834880
Toluene	ND		0.00637	1	12/14/2015 13:56	WG834880
1,2,3-Trichlorobenzene	ND		0.00127	1	12/14/2015 13:56	WG834880
1,2,4-Trichlorobenzene	ND		0.00127	1	12/14/2015 13:56	WG834880
1,1,1-Trichloroethane	ND		0.00127	1	12/14/2015 13:56	WG834880
1,1,2-Trichloroethane	ND		0.00127	1	12/14/2015 13:56	WG834880
Trichloroethene	0.00502		0.00127	1	12/14/2015 13:56	WG834880
Trichlorofluoromethane	ND		0.00637	1	12/14/2015 13:56	WG834880
1,2,3-Trichloropropane	ND		0.00318	1	12/14/2015 13:56	WG834880
1,2,4-Trimethylbenzene	ND		0.00127	1	12/14/2015 13:56	WG834880
1,2,3-Trimethylbenzene	ND		0.00127	1	12/14/2015 13:56	WG834880
1,3,5-Trimethylbenzene	ND		0.00127	1	12/14/2015 13:56	WG834880
Vinyl chloride	ND		0.00127	1	12/14/2015 13:56	WG834880
Xylenes, Total	ND		0.00382	1	12/14/2015 13:56	WG834880
(S) Toluene-d8	*103*		*88.7-115*		*12/14/2015 13:56*	WG834880
(S) Dibromofluoromethane	*103*		*76.3-123*		*12/14/2015 13:56*	WG834880
(S) a,a,a-Trifluorotoluene	*103*		*87.2-117*		*12/14/2015 13:56*	WG834880
(S) 4-Bromofluorobenzene	*85.3*		*69.7-129*		*12/14/2015 13:56*	WG834880

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	60.5		1	12/11/2015 07:21	WG834599

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		0.0843	1.02	12/14/2015 18:43	WG834880
Acrylonitrile	ND		0.0169	1.02	12/14/2015 18:43	WG834880
Benzene	ND		0.00169	1.02	12/14/2015 18:43	WG834880
Bromobenzene	ND		0.00169	1.02	12/14/2015 18:43	WG834880
Bromodichloromethane	ND		0.00169	1.02	12/14/2015 18:43	WG834880
Bromoform	ND		0.00169	1.02	12/14/2015 18:43	WG834880
Bromomethane	ND		0.00843	1.02	12/14/2015 18:43	WG834880
n-Butylbenzene	ND		0.00169	1.02	12/14/2015 18:43	WG834880
sec-Butylbenzene	ND		0.00169	1.02	12/14/2015 18:43	WG834880
tert-Butylbenzene	ND		0.00169	1.02	12/14/2015 18:43	WG834880
Carbon tetrachloride	ND		0.00169	1.02	12/14/2015 18:43	WG834880
Chlorobenzene	ND		0.00169	1.02	12/14/2015 18:43	WG834880
Chlorodibromomethane	ND		0.00169	1.02	12/14/2015 18:43	WG834880
Chloroethane	ND		0.00843	1.02	12/14/2015 18:43	WG834880
2-Chloroethyl vinyl ether	ND	J4	0.0843	1.02	12/14/2015 18:43	WG834880
Chloroform	ND		0.00843	1.02	12/14/2015 18:43	WG834880
Chloromethane	ND		0.00422	1.02	12/14/2015 18:43	WG834880
2-Chlorotoluene	ND		0.00169	1.02	12/14/2015 18:43	WG834880
4-Chlorotoluene	ND		0.00169	1.02	12/14/2015 18:43	WG834880
1,2-Dibromo-3-Chloropropane	ND		0.00843	1.02	12/14/2015 18:43	WG834880
1,2-Dibromoethane	ND		0.00169	1.02	12/14/2015 18:43	WG834880
Dibromomethane	ND		0.00169	1.02	12/14/2015 18:43	WG834880
1,2-Dichlorobenzene	ND		0.00169	1.02	12/14/2015 18:43	WG834880
1,3-Dichlorobenzene	ND		0.00169	1.02	12/14/2015 18:43	WG834880
1,4-Dichlorobenzene	ND		0.00169	1.02	12/14/2015 18:43	WG834880
Dichlorodifluoromethane	ND		0.00843	1.02	12/14/2015 18:43	WG834880
1,1-Dichloroethane	ND		0.00169	1.02	12/14/2015 18:43	WG834880
1,2-Dichloroethane	ND		0.00169	1.02	12/14/2015 18:43	WG834880
1,1-Dichloroethene	ND		0.00169	1.02	12/14/2015 18:43	WG834880
cis-1,2-Dichloroethene	ND		0.00169	1.02	12/14/2015 18:43	WG834880
trans-1,2-Dichloroethene	ND		0.00169	1.02	12/14/2015 18:43	WG834880
1,2-Dichloropropane	ND		0.00169	1.02	12/14/2015 18:43	WG834880
1,1-Dichloropropene	ND		0.00169	1.02	12/14/2015 18:43	WG834880
1,3-Dichloropropane	ND		0.00169	1.02	12/14/2015 18:43	WG834880
cis-1,3-Dichloropropene	ND		0.00169	1.02	12/14/2015 18:43	WG834880
trans-1,3-Dichloropropene	ND		0.00169	1.02	12/14/2015 18:43	WG834880
2,2-Dichloropropane	ND		0.00169	1.02	12/14/2015 18:43	WG834880
Di-isopropyl ether	ND		0.00169	1.02	12/14/2015 18:43	WG834880
Ethylbenzene	ND		0.00169	1.02	12/14/2015 18:43	WG834880
Hexachloro-1,3-butadiene	ND		0.00169	1.02	12/14/2015 18:43	WG834880
Isopropylbenzene	ND		0.00169	1.02	12/14/2015 18:43	WG834880
p-Isopropyltoluene	ND		0.00169	1.02	12/14/2015 18:43	WG834880
2-Butanone (MEK)	ND		0.0169	1.02	12/14/2015 18:43	WG834880
Methylene Chloride	ND		0.00843	1.02	12/14/2015 18:43	WG834880
4-Methyl-2-pentanone (MIBK)	ND		0.0169	1.02	12/14/2015 18:43	WG834880
Methyl tert-butyl ether	ND		0.00169	1.02	12/14/2015 18:43	WG834880
Naphthalene	ND		0.00843	1.02	12/14/2015 18:43	WG834880
n-Propylbenzene	ND		0.00169	1.02	12/14/2015 18:43	WG834880
Styrene	ND		0.00169	1.02	12/14/2015 18:43	WG834880
1,1,1,2-Tetrachloroethane	ND		0.00169	1.02	12/14/2015 18:43	WG834880

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1,2,2-Tetrachloroethane	ND		0.00169	1.02	12/14/2015 18:43	WG834880
1,1,2-Trichlorotrifluoroethane	ND		0.00169	1.02	12/14/2015 18:43	WG834880
Tetrachloroethene	ND		0.00169	1.02	12/14/2015 18:43	WG834880
Toluene	ND		0.00843	1.02	12/14/2015 18:43	WG834880
1,2,3-Trichlorobenzene	ND		0.00169	1.02	12/14/2015 18:43	WG834880
1,2,4-Trichlorobenzene	ND		0.00169	1.02	12/14/2015 18:43	WG834880
1,1,1-Trichloroethane	ND		0.00169	1.02	12/14/2015 18:43	WG834880
1,1,2-Trichloroethane	ND		0.00169	1.02	12/14/2015 18:43	WG834880
Trichloroethene	0.00234		0.00169	1.02	12/14/2015 18:43	WG834880
Trichlorofluoromethane	ND		0.00843	1.02	12/14/2015 18:43	WG834880
1,2,3-Trichloropropane	ND		0.00422	1.02	12/14/2015 18:43	WG834880
1,2,4-Trimethylbenzene	ND		0.00169	1.02	12/14/2015 18:43	WG834880
1,2,3-Trimethylbenzene	ND		0.00169	1.02	12/14/2015 18:43	WG834880
1,3,5-Trimethylbenzene	ND		0.00169	1.02	12/14/2015 18:43	WG834880
Vinyl chloride	ND		0.00169	1.02	12/14/2015 18:43	WG834880
Xylenes, Total	ND		0.00506	1.02	12/14/2015 18:43	WG834880
(S) Toluene-d8	*102*		*88.7-115*		*12/14/2015 18:43*	WG834880
(S) Dibromofluoromethane	*104*		*76.3-123*		*12/14/2015 18:43*	WG834880
(S) a,a,a-Trifluorotoluene	*106*		*87.2-117*		*12/14/2015 18:43*	WG834880
(S) 4-Bromofluorobenzene	*86.7*		*69.7-129*		*12/14/2015 18:43*	WG834880

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	70.8		1	12/11/2015 07:22	WG834599

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		0.0707	1	12/14/2015 19:01	WG834880
Acrylonitrile	ND		0.0141	1	12/14/2015 19:01	WG834880
Benzene	ND		0.00141	1	12/14/2015 19:01	WG834880
Bromobenzene	ND		0.00141	1	12/14/2015 19:01	WG834880
Bromodichloromethane	ND		0.00141	1	12/14/2015 19:01	WG834880
Bromoform	ND		0.00141	1	12/14/2015 19:01	WG834880
Bromomethane	ND		0.00707	1	12/14/2015 19:01	WG834880
n-Butylbenzene	ND		0.00141	1	12/14/2015 19:01	WG834880
sec-Butylbenzene	ND		0.00141	1	12/14/2015 19:01	WG834880
tert-Butylbenzene	ND		0.00141	1	12/14/2015 19:01	WG834880
Carbon tetrachloride	ND		0.00141	1	12/14/2015 19:01	WG834880
Chlorobenzene	ND		0.00141	1	12/14/2015 19:01	WG834880
Chlorodibromomethane	ND		0.00141	1	12/14/2015 19:01	WG834880
Chloroethane	ND		0.00707	1	12/14/2015 19:01	WG834880
2-Chloroethyl vinyl ether	ND	J4	0.0707	1	12/14/2015 19:01	WG834880
Chloroform	ND		0.00707	1	12/14/2015 19:01	WG834880
Chloromethane	ND		0.00353	1	12/14/2015 19:01	WG834880
2-Chlorotoluene	ND		0.00141	1	12/14/2015 19:01	WG834880
4-Chlorotoluene	ND		0.00141	1	12/14/2015 19:01	WG834880
1,2-Dibromo-3-Chloropropane	ND		0.00707	1	12/14/2015 19:01	WG834880
1,2-Dibromoethane	ND		0.00141	1	12/14/2015 19:01	WG834880
Dibromomethane	ND		0.00141	1	12/14/2015 19:01	WG834880
1,2-Dichlorobenzene	ND		0.00141	1	12/14/2015 19:01	WG834880
1,3-Dichlorobenzene	ND		0.00141	1	12/14/2015 19:01	WG834880
1,4-Dichlorobenzene	ND		0.00141	1	12/14/2015 19:01	WG834880
Dichlorodifluoromethane	ND		0.00707	1	12/14/2015 19:01	WG834880
1,1-Dichloroethane	ND		0.00141	1	12/14/2015 19:01	WG834880
1,2-Dichloroethane	ND		0.00141	1	12/14/2015 19:01	WG834880
1,1-Dichloroethene	ND		0.00141	1	12/14/2015 19:01	WG834880
cis-1,2-Dichloroethene	ND		0.00141	1	12/14/2015 19:01	WG834880
trans-1,2-Dichloroethene	ND		0.00141	1	12/14/2015 19:01	WG834880
1,2-Dichloropropane	ND		0.00141	1	12/14/2015 19:01	WG834880
1,1-Dichloropropene	ND		0.00141	1	12/14/2015 19:01	WG834880
1,3-Dichloropropane	ND		0.00141	1	12/14/2015 19:01	WG834880
cis-1,3-Dichloropropene	ND		0.00141	1	12/14/2015 19:01	WG834880
trans-1,3-Dichloropropene	ND		0.00141	1	12/14/2015 19:01	WG834880
2,2-Dichloropropane	ND		0.00141	1	12/14/2015 19:01	WG834880
Di-isopropyl ether	ND		0.00141	1	12/14/2015 19:01	WG834880
Ethylbenzene	ND		0.00141	1	12/14/2015 19:01	WG834880
Hexachloro-1,3-butadiene	ND		0.00141	1	12/14/2015 19:01	WG834880
Isopropylbenzene	ND		0.00141	1	12/14/2015 19:01	WG834880
p-Isopropyltoluene	ND		0.00141	1	12/14/2015 19:01	WG834880
2-Butanone (MEK)	ND		0.0141	1	12/14/2015 19:01	WG834880
Methylene Chloride	ND		0.00707	1	12/14/2015 19:01	WG834880
4-Methyl-2-pentanone (MIBK)	ND		0.0141	1	12/14/2015 19:01	WG834880
Methyl tert-butyl ether	ND		0.00141	1	12/14/2015 19:01	WG834880
Naphthalene	ND		0.00707	1	12/14/2015 19:01	WG834880
n-Propylbenzene	ND		0.00141	1	12/14/2015 19:01	WG834880
Styrene	ND		0.00141	1	12/14/2015 19:01	WG834880
1,1,1,2-Tetrachloroethane	ND		0.00141	1	12/14/2015 19:01	WG834880

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1,2,2-Tetrachloroethane	ND		0.00141	1	12/14/2015 19:01	WG834880
1,1,2-Trichlorotrifluoroethane	ND		0.00141	1	12/14/2015 19:01	WG834880
Tetrachloroethene	ND		0.00141	1	12/14/2015 19:01	WG834880
Toluene	ND		0.00707	1	12/14/2015 19:01	WG834880
1,2,3-Trichlorobenzene	ND		0.00141	1	12/14/2015 19:01	WG834880
1,2,4-Trichlorobenzene	ND		0.00141	1	12/14/2015 19:01	WG834880
1,1,1-Trichloroethane	ND		0.00141	1	12/14/2015 19:01	WG834880
1,1,2-Trichloroethane	ND		0.00141	1	12/14/2015 19:01	WG834880
Trichloroethene	0.00719		0.00141	1	12/14/2015 19:01	WG834880
Trichlorofluoromethane	ND		0.00707	1	12/14/2015 19:01	WG834880
1,2,3-Trichloropropane	ND		0.00353	1	12/14/2015 19:01	WG834880
1,2,4-Trimethylbenzene	ND		0.00141	1	12/14/2015 19:01	WG834880
1,2,3-Trimethylbenzene	ND		0.00141	1	12/14/2015 19:01	WG834880
1,3,5-Trimethylbenzene	ND		0.00141	1	12/14/2015 19:01	WG834880
Vinyl chloride	ND		0.00141	1	12/14/2015 19:01	WG834880
Xylenes, Total	ND		0.00424	1	12/14/2015 19:01	WG834880
(S) Toluene-d8	*104*		*88.7-115*		*12/14/2015 19:01*	WG834880
(S) Dibromofluoromethane	*119*		*76.3-123*		*12/14/2015 19:01*	WG834880
(S) a,a,a-Trifluorotoluene	*105*		*87.2-117*		*12/14/2015 19:01*	WG834880
(S) 4-Bromofluorobenzene	*84.8*		*69.7-129*		*12/14/2015 19:01*	WG834880

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	78.2		1	12/11/2015 07:22	WG834599

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	0.0761		0.0639	1	12/14/2015 19:19	WG834880
Acrylonitrile	ND		0.0128	1	12/14/2015 19:19	WG834880
Benzene	0.00153		0.00128	1	12/14/2015 19:19	WG834880
Bromobenzene	ND		0.00128	1	12/14/2015 19:19	WG834880
Bromodichloromethane	ND		0.00128	1	12/14/2015 19:19	WG834880
Bromoform	ND		0.00128	1	12/14/2015 19:19	WG834880
Bromomethane	ND		0.00639	1	12/14/2015 19:19	WG834880
n-Butylbenzene	ND		0.00128	1	12/14/2015 19:19	WG834880
sec-Butylbenzene	ND		0.00128	1	12/14/2015 19:19	WG834880
tert-Butylbenzene	ND		0.00128	1	12/14/2015 19:19	WG834880
Carbon tetrachloride	ND		0.00128	1	12/14/2015 19:19	WG834880
Chlorobenzene	ND		0.00128	1	12/14/2015 19:19	WG834880
Chlorodibromomethane	ND		0.00128	1	12/14/2015 19:19	WG834880
Chloroethane	ND		0.00639	1	12/14/2015 19:19	WG834880
2-Chloroethyl vinyl ether	ND	J4	0.0639	1	12/14/2015 19:19	WG834880
Chloroform	ND		0.00639	1	12/14/2015 19:19	WG834880
Chloromethane	ND		0.00320	1	12/14/2015 19:19	WG834880
2-Chlorotoluene	ND		0.00128	1	12/14/2015 19:19	WG834880
4-Chlorotoluene	ND		0.00128	1	12/14/2015 19:19	WG834880
1,2-Dibromo-3-Chloropropane	ND		0.00639	1	12/14/2015 19:19	WG834880
1,2-Dibromoethane	ND		0.00128	1	12/14/2015 19:19	WG834880
Dibromomethane	ND		0.00128	1	12/14/2015 19:19	WG834880
1,2-Dichlorobenzene	ND		0.00128	1	12/14/2015 19:19	WG834880
1,3-Dichlorobenzene	ND		0.00128	1	12/14/2015 19:19	WG834880
1,4-Dichlorobenzene	ND		0.00128	1	12/14/2015 19:19	WG834880
Dichlorodifluoromethane	ND		0.00639	1	12/14/2015 19:19	WG834880
1,1-Dichloroethane	ND		0.00128	1	12/14/2015 19:19	WG834880
1,2-Dichloroethane	ND		0.00128	1	12/14/2015 19:19	WG834880
1,1-Dichloroethene	ND		0.00128	1	12/14/2015 19:19	WG834880
cis-1,2-Dichloroethene	0.193		0.00128	1	12/14/2015 19:19	WG834880
trans-1,2-Dichloroethene	0.00166		0.00128	1	12/14/2015 19:19	WG834880
1,2-Dichloropropane	ND		0.00128	1	12/14/2015 19:19	WG834880
1,1-Dichloropropene	ND		0.00128	1	12/14/2015 19:19	WG834880
1,3-Dichloropropane	ND		0.00128	1	12/14/2015 19:19	WG834880
cis-1,3-Dichloropropene	ND		0.00128	1	12/14/2015 19:19	WG834880
trans-1,3-Dichloropropene	ND		0.00128	1	12/14/2015 19:19	WG834880
2,2-Dichloropropane	ND		0.00128	1	12/14/2015 19:19	WG834880
Di-isopropyl ether	ND		0.00128	1	12/14/2015 19:19	WG834880
Ethylbenzene	ND		0.00128	1	12/14/2015 19:19	WG834880
Hexachloro-1,3-butadiene	ND		0.00128	1	12/14/2015 19:19	WG834880
Isopropylbenzene	ND		0.00128	1	12/14/2015 19:19	WG834880
p-Isopropyltoluene	ND		0.00128	1	12/14/2015 19:19	WG834880
2-Butanone (MEK)	ND		0.0128	1	12/14/2015 19:19	WG834880
Methylene Chloride	ND		0.00639	1	12/14/2015 19:19	WG834880
4-Methyl-2-pentanone (MIBK)	ND		0.0128	1	12/14/2015 19:19	WG834880
Methyl tert-butyl ether	ND		0.00128	1	12/14/2015 19:19	WG834880
Naphthalene	ND		0.00639	1	12/14/2015 19:19	WG834880
n-Propylbenzene	ND		0.00128	1	12/14/2015 19:19	WG834880
Styrene	ND		0.00128	1	12/14/2015 19:19	WG834880
1,1,1,2-Tetrachloroethane	ND		0.00128	1	12/14/2015 19:19	WG834880

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1,2,2-Tetrachloroethane	ND		0.00128	1	12/14/2015 19:19	WG834880
1,1,2-Trichlorotrifluoroethane	ND		0.00128	1	12/14/2015 19:19	WG834880
Tetrachloroethene	ND		0.00128	1	12/14/2015 19:19	WG834880
Toluene	ND		0.00639	1	12/14/2015 19:19	WG834880
1,2,3-Trichlorobenzene	ND		0.00128	1	12/14/2015 19:19	WG834880
1,2,4-Trichlorobenzene	ND		0.00128	1	12/14/2015 19:19	WG834880
1,1,1-Trichloroethane	ND		0.00128	1	12/14/2015 19:19	WG834880
1,1,2-Trichloroethane	ND		0.00128	1	12/14/2015 19:19	WG834880
Trichloroethene	0.202		0.00128	1	12/14/2015 19:19	WG834880
Trichlorofluoromethane	ND		0.00639	1	12/14/2015 19:19	WG834880
1,2,3-Trichloropropane	ND		0.00320	1	12/14/2015 19:19	WG834880
1,2,4-Trimethylbenzene	ND		0.00128	1	12/14/2015 19:19	WG834880
1,2,3-Trimethylbenzene	ND		0.00128	1	12/14/2015 19:19	WG834880
1,3,5-Trimethylbenzene	ND		0.00128	1	12/14/2015 19:19	WG834880
Vinyl chloride	0.00136		0.00128	1	12/14/2015 19:19	WG834880
Xylenes, Total	ND		0.00384	1	12/14/2015 19:19	WG834880
(S) Toluene-d8	*98.3*		*88.7-115*		*12/14/2015 19:19*	WG834880
(S) Dibromofluoromethane	*102*		*76.3-123*		*12/14/2015 19:19*	WG834880
(S) a,a,a-Trifluorotoluene	*102*		*87.2-117*		*12/14/2015 19:19*	WG834880
(S) 4-Bromofluorobenzene	*89.9*		*69.7-129*		*12/14/2015 19:19*	WG834880

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	75.1		1	12/11/2015 07:24	WG834657

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		0.0666	1	12/14/2015 19:36	WG834880
Acrylonitrile	ND		0.0133	1	12/14/2015 19:36	WG834880
Benzene	0.00159		0.00133	1	12/14/2015 19:36	WG834880
Bromobenzene	ND		0.00133	1	12/14/2015 19:36	WG834880
Bromodichloromethane	ND		0.00133	1	12/14/2015 19:36	WG834880
Bromoform	ND		0.00133	1	12/14/2015 19:36	WG834880
Bromomethane	ND		0.00666	1	12/14/2015 19:36	WG834880
n-Butylbenzene	ND		0.00133	1	12/14/2015 19:36	WG834880
sec-Butylbenzene	ND		0.00133	1	12/14/2015 19:36	WG834880
tert-Butylbenzene	ND		0.00133	1	12/14/2015 19:36	WG834880
Carbon tetrachloride	ND		0.00133	1	12/14/2015 19:36	WG834880
Chlorobenzene	ND		0.00133	1	12/14/2015 19:36	WG834880
Chlorodibromomethane	ND		0.00133	1	12/14/2015 19:36	WG834880
Chloroethane	ND		0.00666	1	12/14/2015 19:36	WG834880
2-Chloroethyl vinyl ether	ND	J4	0.0666	1	12/14/2015 19:36	WG834880
Chloroform	ND		0.00666	1	12/14/2015 19:36	WG834880
Chloromethane	ND		0.00333	1	12/14/2015 19:36	WG834880
2-Chlorotoluene	ND		0.00133	1	12/14/2015 19:36	WG834880
4-Chlorotoluene	ND		0.00133	1	12/14/2015 19:36	WG834880
1,2-Dibromo-3-Chloropropane	ND		0.00666	1	12/14/2015 19:36	WG834880
1,2-Dibromoethane	ND		0.00133	1	12/14/2015 19:36	WG834880
Dibromomethane	ND		0.00133	1	12/14/2015 19:36	WG834880
1,2-Dichlorobenzene	ND		0.00133	1	12/14/2015 19:36	WG834880
1,3-Dichlorobenzene	ND		0.00133	1	12/14/2015 19:36	WG834880
1,4-Dichlorobenzene	ND		0.00133	1	12/14/2015 19:36	WG834880
Dichlorodifluoromethane	ND		0.00666	1	12/14/2015 19:36	WG834880
1,1-Dichloroethane	ND		0.00133	1	12/14/2015 19:36	WG834880
1,2-Dichloroethane	ND		0.00133	1	12/14/2015 19:36	WG834880
1,1-Dichloroethene	ND		0.00133	1	12/14/2015 19:36	WG834880
cis-1,2-Dichloroethene	0.0845		0.00133	1	12/14/2015 19:36	WG834880
trans-1,2-Dichloroethene	ND		0.00133	1	12/14/2015 19:36	WG834880
1,2-Dichloropropane	ND		0.00133	1	12/14/2015 19:36	WG834880
1,1-Dichloropropene	ND		0.00133	1	12/14/2015 19:36	WG834880
1,3-Dichloropropane	ND		0.00133	1	12/14/2015 19:36	WG834880
cis-1,3-Dichloropropene	ND		0.00133	1	12/14/2015 19:36	WG834880
trans-1,3-Dichloropropene	ND		0.00133	1	12/14/2015 19:36	WG834880
2,2-Dichloropropane	ND		0.00133	1	12/14/2015 19:36	WG834880
Di-isopropyl ether	ND		0.00133	1	12/14/2015 19:36	WG834880
Ethylbenzene	ND		0.00133	1	12/14/2015 19:36	WG834880
Hexachloro-1,3-butadiene	ND		0.00133	1	12/14/2015 19:36	WG834880
Isopropylbenzene	ND		0.00133	1	12/14/2015 19:36	WG834880
p-Isopropyltoluene	ND		0.00133	1	12/14/2015 19:36	WG834880
2-Butanone (MEK)	ND		0.0133	1	12/14/2015 19:36	WG834880
Methylene Chloride	ND		0.00666	1	12/14/2015 19:36	WG834880
4-Methyl-2-pentanone (MIBK)	ND		0.0133	1	12/14/2015 19:36	WG834880
Methyl tert-butyl ether	ND		0.00133	1	12/14/2015 19:36	WG834880
Naphthalene	ND		0.00666	1	12/14/2015 19:36	WG834880
n-Propylbenzene	ND		0.00133	1	12/14/2015 19:36	WG834880
Styrene	ND		0.00133	1	12/14/2015 19:36	WG834880
1,1,1,2-Tetrachloroethane	ND		0.00133	1	12/14/2015 19:36	WG834880

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1,2,2-Tetrachloroethane	ND		0.00133	1	12/14/2015 19:36	WG834880
1,1,2-Trichlorotrifluoroethane	ND		0.00133	1	12/14/2015 19:36	WG834880
Tetrachloroethene	ND		0.00133	1	12/14/2015 19:36	WG834880
Toluene	ND		0.00666	1	12/14/2015 19:36	WG834880
1,2,3-Trichlorobenzene	ND		0.00133	1	12/14/2015 19:36	WG834880
1,2,4-Trichlorobenzene	ND		0.00133	1	12/14/2015 19:36	WG834880
1,1,1-Trichloroethane	ND		0.00133	1	12/14/2015 19:36	WG834880
1,1,2-Trichloroethane	ND		0.00133	1	12/14/2015 19:36	WG834880
Trichloroethene	0.135		0.00133	1	12/14/2015 19:36	WG834880
Trichlorofluoromethane	ND		0.00666	1	12/14/2015 19:36	WG834880
1,2,3-Trichloropropane	ND		0.00333	1	12/14/2015 19:36	WG834880
1,2,4-Trimethylbenzene	ND		0.00133	1	12/14/2015 19:36	WG834880
1,2,3-Trimethylbenzene	ND		0.00133	1	12/14/2015 19:36	WG834880
1,3,5-Trimethylbenzene	ND		0.00133	1	12/14/2015 19:36	WG834880
Vinyl chloride	ND		0.00133	1	12/14/2015 19:36	WG834880
Xylenes, Total	ND		0.00400	1	12/14/2015 19:36	WG834880
(S) Toluene-d8	*101*		*88.7-115*		*12/14/2015 19:36*	WG834880
(S) Dibromofluoromethane	*102*		*76.3-123*		*12/14/2015 19:36*	WG834880
(S) a,a,a-Trifluorotoluene	*102*		*87.2-117*		*12/14/2015 19:36*	WG834880
(S) 4-Bromofluorobenzene	*87.3*		*69.7-129*		*12/14/2015 19:36*	WG834880

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	73.9		1	12/11/2015 07:25	WG834657

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		0.0677	1	12/14/2015 19:54	WG834880
Acrylonitrile	ND		0.0135	1	12/14/2015 19:54	WG834880
Benzene	0.00181		0.00135	1	12/14/2015 19:54	WG834880
Bromobenzene	ND		0.00135	1	12/14/2015 19:54	WG834880
Bromodichloromethane	ND		0.00135	1	12/14/2015 19:54	WG834880
Bromoform	ND		0.00135	1	12/14/2015 19:54	WG834880
Bromomethane	ND		0.00677	1	12/14/2015 19:54	WG834880
n-Butylbenzene	ND		0.00135	1	12/14/2015 19:54	WG834880
sec-Butylbenzene	ND		0.00135	1	12/14/2015 19:54	WG834880
tert-Butylbenzene	ND		0.00135	1	12/14/2015 19:54	WG834880
Carbon tetrachloride	ND		0.00135	1	12/14/2015 19:54	WG834880
Chlorobenzene	ND		0.00135	1	12/14/2015 19:54	WG834880
Chlorodibromomethane	ND		0.00135	1	12/14/2015 19:54	WG834880
Chloroethane	ND		0.00677	1	12/14/2015 19:54	WG834880
2-Chloroethyl vinyl ether	ND	J4	0.0677	1	12/14/2015 19:54	WG834880
Chloroform	ND		0.00677	1	12/14/2015 19:54	WG834880
Chloromethane	ND		0.00338	1	12/14/2015 19:54	WG834880
2-Chlorotoluene	ND		0.00135	1	12/14/2015 19:54	WG834880
4-Chlorotoluene	ND		0.00135	1	12/14/2015 19:54	WG834880
1,2-Dibromo-3-Chloropropane	ND		0.00677	1	12/14/2015 19:54	WG834880
1,2-Dibromoethane	ND		0.00135	1	12/14/2015 19:54	WG834880
Dibromomethane	ND		0.00135	1	12/14/2015 19:54	WG834880
1,2-Dichlorobenzene	ND		0.00135	1	12/14/2015 19:54	WG834880
1,3-Dichlorobenzene	ND		0.00135	1	12/14/2015 19:54	WG834880
1,4-Dichlorobenzene	ND		0.00135	1	12/14/2015 19:54	WG834880
Dichlorodifluoromethane	ND		0.00677	1	12/14/2015 19:54	WG834880
1,1-Dichloroethane	ND		0.00135	1	12/14/2015 19:54	WG834880
1,2-Dichloroethane	ND		0.00135	1	12/14/2015 19:54	WG834880
1,1-Dichloroethene	0.00187		0.00135	1	12/14/2015 19:54	WG834880
cis-1,2-Dichloroethene	4.02		0.114	84	12/16/2015 22:41	WG835688
trans-1,2-Dichloroethene	0.0275		0.00135	1	12/14/2015 19:54	WG834880
1,2-Dichloropropane	ND		0.00135	1	12/14/2015 19:54	WG834880
1,1-Dichloropropene	ND		0.00135	1	12/14/2015 19:54	WG834880
1,3-Dichloropropane	ND		0.00135	1	12/14/2015 19:54	WG834880
cis-1,3-Dichloropropene	ND		0.00135	1	12/14/2015 19:54	WG834880
trans-1,3-Dichloropropene	ND		0.00135	1	12/14/2015 19:54	WG834880
2,2-Dichloropropane	ND		0.00135	1	12/14/2015 19:54	WG834880
Di-isopropyl ether	ND		0.00135	1	12/14/2015 19:54	WG834880
Ethylbenzene	ND		0.00135	1	12/14/2015 19:54	WG834880
Hexachloro-1,3-butadiene	ND		0.00135	1	12/14/2015 19:54	WG834880
Isopropylbenzene	ND		0.00135	1	12/14/2015 19:54	WG834880
p-Isopropyltoluene	ND		0.00135	1	12/14/2015 19:54	WG834880
2-Butanone (MEK)	ND		0.0135	1	12/14/2015 19:54	WG834880
Methylene Chloride	ND		0.00677	1	12/14/2015 19:54	WG834880
4-Methyl-2-pentanone (MIBK)	ND		0.0135	1	12/14/2015 19:54	WG834880
Methyl tert-butyl ether	ND		0.00135	1	12/14/2015 19:54	WG834880
Naphthalene	ND		0.00677	1	12/14/2015 19:54	WG834880
n-Propylbenzene	ND		0.00135	1	12/14/2015 19:54	WG834880
Styrene	ND		0.00135	1	12/14/2015 19:54	WG834880
1,1,1,2-Tetrachloroethane	ND		0.00135	1	12/14/2015 19:54	WG834880

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1,2,2-Tetrachloroethane	ND		0.00135	1	12/14/2015 19:54	WG834880
1,1,2-Trichlorotrifluoroethane	ND		0.00135	1	12/14/2015 19:54	WG834880
Tetrachloroethene	ND		0.00135	1	12/14/2015 19:54	WG834880
Toluene	ND		0.00677	1	12/14/2015 19:54	WG834880
1,2,3-Trichlorobenzene	ND		0.00135	1	12/14/2015 19:54	WG834880
1,2,4-Trichlorobenzene	ND		0.00135	1	12/14/2015 19:54	WG834880
1,1,1-Trichloroethane	ND		0.00135	1	12/14/2015 19:54	WG834880
1,1,2-Trichloroethane	ND		0.00135	1	12/14/2015 19:54	WG834880
Trichloroethene	2.68		0.114	84	12/16/2015 22:41	WG835688
Trichlorofluoromethane	ND		0.00677	1	12/14/2015 19:54	WG834880
1,2,3-Trichloropropane	ND		0.00338	1	12/14/2015 19:54	WG834880
1,2,4-Trimethylbenzene	ND		0.00135	1	12/14/2015 19:54	WG834880
1,2,3-Trimethylbenzene	ND		0.00135	1	12/14/2015 19:54	WG834880
1,3,5-Trimethylbenzene	ND		0.00135	1	12/14/2015 19:54	WG834880
Vinyl chloride	0.00141		0.00135	1	12/14/2015 19:54	WG834880
Xylenes, Total	ND		0.00406	1	12/14/2015 19:54	WG834880
(S) Toluene-d8	*83.1*	J2	*88.7-115*		*12/14/2015 19:54*	WG834880
(S) Dibromofluoromethane	*102*		*76.3-123*		*12/14/2015 19:54*	WG834880
(S) a,a,a-Trifluorotoluene	*86.4*	J2	*87.2-117*		*12/14/2015 19:54*	WG834880
(S) 4-Bromofluorobenzene	*83.4*		*69.7-129*		*12/14/2015 19:54*	WG834880

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	65.3		1	12/11/2015 07:25	WG834657

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		0.0765	1	12/14/2015 20:12	WG834880
Acrylonitrile	ND		0.0153	1	12/14/2015 20:12	WG834880
Benzene	ND		0.00153	1	12/14/2015 20:12	WG834880
Bromobenzene	ND		0.00153	1	12/14/2015 20:12	WG834880
Bromodichloromethane	ND		0.00153	1	12/14/2015 20:12	WG834880
Bromoform	ND		0.00153	1	12/14/2015 20:12	WG834880
Bromomethane	ND		0.00765	1	12/14/2015 20:12	WG834880
n-Butylbenzene	ND		0.00153	1	12/14/2015 20:12	WG834880
sec-Butylbenzene	ND		0.00153	1	12/14/2015 20:12	WG834880
tert-Butylbenzene	ND		0.00153	1	12/14/2015 20:12	WG834880
Carbon tetrachloride	ND		0.00153	1	12/14/2015 20:12	WG834880
Chlorobenzene	ND		0.00153	1	12/14/2015 20:12	WG834880
Chlorodibromomethane	ND		0.00153	1	12/14/2015 20:12	WG834880
Chloroethane	ND		0.00765	1	12/14/2015 20:12	WG834880
2-Chloroethyl vinyl ether	ND	J4	0.0765	1	12/14/2015 20:12	WG834880
Chloroform	ND		0.00765	1	12/14/2015 20:12	WG834880
Chloromethane	ND		0.00383	1	12/14/2015 20:12	WG834880
2-Chlorotoluene	ND		0.00153	1	12/14/2015 20:12	WG834880
4-Chlorotoluene	ND		0.00153	1	12/14/2015 20:12	WG834880
1,2-Dibromo-3-Chloropropane	ND		0.00765	1	12/14/2015 20:12	WG834880
1,2-Dibromoethane	ND		0.00153	1	12/14/2015 20:12	WG834880
Dibromomethane	ND		0.00153	1	12/14/2015 20:12	WG834880
1,2-Dichlorobenzene	ND		0.00153	1	12/14/2015 20:12	WG834880
1,3-Dichlorobenzene	ND		0.00153	1	12/14/2015 20:12	WG834880
1,4-Dichlorobenzene	ND		0.00153	1	12/14/2015 20:12	WG834880
Dichlorodifluoromethane	ND		0.00765	1	12/14/2015 20:12	WG834880
1,1-Dichloroethane	ND		0.00153	1	12/14/2015 20:12	WG834880
1,2-Dichloroethane	ND		0.00153	1	12/14/2015 20:12	WG834880
1,1-Dichloroethene	ND		0.00153	1	12/14/2015 20:12	WG834880
cis-1,2-Dichloroethene	ND		0.0344	22.5	12/16/2015 23:05	WG835688
trans-1,2-Dichloroethene	ND		0.00153	1	12/14/2015 20:12	WG834880
1,2-Dichloropropane	ND		0.00153	1	12/14/2015 20:12	WG834880
1,1-Dichloropropene	ND		0.00153	1	12/14/2015 20:12	WG834880
1,3-Dichloropropane	ND		0.00153	1	12/14/2015 20:12	WG834880
cis-1,3-Dichloropropene	ND		0.00153	1	12/14/2015 20:12	WG834880
trans-1,3-Dichloropropene	ND		0.00153	1	12/14/2015 20:12	WG834880
2,2-Dichloropropane	ND		0.00153	1	12/14/2015 20:12	WG834880
Di-isopropyl ether	ND		0.00153	1	12/14/2015 20:12	WG834880
Ethylbenzene	ND		0.00153	1	12/14/2015 20:12	WG834880
Hexachloro-1,3-butadiene	ND		0.00153	1	12/14/2015 20:12	WG834880
Isopropylbenzene	ND		0.00153	1	12/14/2015 20:12	WG834880
p-Isopropyltoluene	ND		0.00153	1	12/14/2015 20:12	WG834880
2-Butanone (MEK)	ND		0.0153	1	12/14/2015 20:12	WG834880
Methylene Chloride	ND		0.00765	1	12/14/2015 20:12	WG834880
4-Methyl-2-pentanone (MIBK)	ND		0.0153	1	12/14/2015 20:12	WG834880
Methyl tert-butyl ether	ND		0.00153	1	12/14/2015 20:12	WG834880
Naphthalene	ND		0.00765	1	12/14/2015 20:12	WG834880
n-Propylbenzene	ND		0.00153	1	12/14/2015 20:12	WG834880
Styrene	ND		0.00153	1	12/14/2015 20:12	WG834880
1,1,1,2-Tetrachloroethane	ND		0.00153	1	12/14/2015 20:12	WG834880

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1,2,2-Tetrachloroethane	ND		0.00153	1	12/14/2015 20:12	WG834880
1,1,2-Trichlorotrifluoroethane	ND		0.00153	1	12/14/2015 20:12	WG834880
Tetrachloroethene	ND		0.00153	1	12/14/2015 20:12	WG834880
Toluene	ND		0.00765	1	12/14/2015 20:12	WG834880
1,2,3-Trichlorobenzene	ND		0.00153	1	12/14/2015 20:12	WG834880
1,2,4-Trichlorobenzene	ND		0.00153	1	12/14/2015 20:12	WG834880
1,1,1-Trichloroethane	ND		0.00153	1	12/14/2015 20:12	WG834880
1,1,2-Trichloroethane	ND		0.00153	1	12/14/2015 20:12	WG834880
Trichloroethene	0.873		0.0344	22.5	12/16/2015 23:05	WG835688
Trichlorofluoromethane	ND		0.00765	1	12/14/2015 20:12	WG834880
1,2,3-Trichloropropane	ND		0.00383	1	12/14/2015 20:12	WG834880
1,2,4-Trimethylbenzene	ND		0.00153	1	12/14/2015 20:12	WG834880
1,2,3-Trimethylbenzene	ND		0.00153	1	12/14/2015 20:12	WG834880
1,3,5-Trimethylbenzene	ND		0.00153	1	12/14/2015 20:12	WG834880
Vinyl chloride	ND		0.00153	1	12/14/2015 20:12	WG834880
Xylenes, Total	ND		0.00459	1	12/14/2015 20:12	WG834880
(S) Toluene-d8	*91.8*		*88.7-115*		*12/14/2015 20:12*	WG834880
(S) Dibromofluoromethane	*105*		*76.3-123*		*12/14/2015 20:12*	WG834880
(S) a,a,a-Trifluorotoluene	*95.5*		*87.2-117*		*12/14/2015 20:12*	WG834880
(S) 4-Bromofluorobenzene	*87.5*		*69.7-129*		*12/14/2015 20:12*	WG834880

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	73.0		1	12/11/2015 07:25	WG834657

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		0.0685	1	12/14/2015 20:29	WG834880
Acrylonitrile	ND		0.0137	1	12/14/2015 20:29	WG834880
Benzene	ND		0.00137	1	12/14/2015 20:29	WG834880
Bromobenzene	ND		0.00137	1	12/14/2015 20:29	WG834880
Bromodichloromethane	ND		0.00137	1	12/14/2015 20:29	WG834880
Bromoform	ND		0.00137	1	12/14/2015 20:29	WG834880
Bromomethane	ND		0.00685	1	12/14/2015 20:29	WG834880
n-Butylbenzene	ND		0.00137	1	12/14/2015 20:29	WG834880
sec-Butylbenzene	ND		0.00137	1	12/14/2015 20:29	WG834880
tert-Butylbenzene	ND		0.00137	1	12/14/2015 20:29	WG834880
Carbon tetrachloride	ND		0.00137	1	12/14/2015 20:29	WG834880
Chlorobenzene	ND		0.00137	1	12/14/2015 20:29	WG834880
Chlorodibromomethane	ND		0.00137	1	12/14/2015 20:29	WG834880
Chloroethane	ND		0.00685	1	12/14/2015 20:29	WG834880
2-Chloroethyl vinyl ether	ND	J4	0.0685	1	12/14/2015 20:29	WG834880
Chloroform	ND		0.00685	1	12/14/2015 20:29	WG834880
Chloromethane	ND		0.00342	1	12/14/2015 20:29	WG834880
2-Chlorotoluene	ND		0.00137	1	12/14/2015 20:29	WG834880
4-Chlorotoluene	ND		0.00137	1	12/14/2015 20:29	WG834880
1,2-Dibromo-3-Chloropropane	ND		0.00685	1	12/14/2015 20:29	WG834880
1,2-Dibromoethane	ND		0.00137	1	12/14/2015 20:29	WG834880
Dibromomethane	ND		0.00137	1	12/14/2015 20:29	WG834880
1,2-Dichlorobenzene	ND		0.00137	1	12/14/2015 20:29	WG834880
1,3-Dichlorobenzene	ND		0.00137	1	12/14/2015 20:29	WG834880
1,4-Dichlorobenzene	ND		0.00137	1	12/14/2015 20:29	WG834880
Dichlorodifluoromethane	ND		0.00685	1	12/14/2015 20:29	WG834880
1,1-Dichloroethane	ND		0.00137	1	12/14/2015 20:29	WG834880
1,2-Dichloroethane	ND		0.00137	1	12/14/2015 20:29	WG834880
1,1-Dichloroethene	ND		0.00137	1	12/14/2015 20:29	WG834880
cis-1,2-Dichloroethene	ND		0.0753	55	12/16/2015 21:53	WG835688
trans-1,2-Dichloroethene	ND		0.00137	1	12/14/2015 20:29	WG834880
1,2-Dichloropropane	ND		0.00137	1	12/14/2015 20:29	WG834880
1,1-Dichloropropene	ND		0.00137	1	12/14/2015 20:29	WG834880
1,3-Dichloropropane	ND		0.00137	1	12/14/2015 20:29	WG834880
cis-1,3-Dichloropropene	ND		0.00137	1	12/14/2015 20:29	WG834880
trans-1,3-Dichloropropene	ND		0.00137	1	12/14/2015 20:29	WG834880
2,2-Dichloropropane	ND		0.00137	1	12/14/2015 20:29	WG834880
Di-isopropyl ether	ND		0.00137	1	12/14/2015 20:29	WG834880
Ethylbenzene	ND		0.00137	1	12/14/2015 20:29	WG834880
Hexachloro-1,3-butadiene	ND		0.00137	1	12/14/2015 20:29	WG834880
Isopropylbenzene	ND		0.00137	1	12/14/2015 20:29	WG834880
p-Isopropyltoluene	ND		0.00137	1	12/14/2015 20:29	WG834880
2-Butanone (MEK)	ND		0.0137	1	12/14/2015 20:29	WG834880
Methylene Chloride	ND		0.00685	1	12/14/2015 20:29	WG834880
4-Methyl-2-pentanone (MIBK)	ND		0.0137	1	12/14/2015 20:29	WG834880
Methyl tert-butyl ether	ND		0.00137	1	12/14/2015 20:29	WG834880
Naphthalene	ND		0.00685	1	12/14/2015 20:29	WG834880
n-Propylbenzene	ND		0.00137	1	12/14/2015 20:29	WG834880
Styrene	ND		0.00137	1	12/14/2015 20:29	WG834880
1,1,1,2-Tetrachloroethane	ND		0.00137	1	12/14/2015 20:29	WG834880

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1,2,2-Tetrachloroethane	ND		0.00137	1	12/14/2015 20:29	WG834880
1,1,2-Trichlorotrifluoroethane	ND		0.00137	1	12/14/2015 20:29	WG834880
Tetrachloroethene	ND		0.00137	1	12/14/2015 20:29	WG834880
Toluene	ND		0.00685	1	12/14/2015 20:29	WG834880
1,2,3-Trichlorobenzene	ND		0.00137	1	12/14/2015 20:29	WG834880
1,2,4-Trichlorobenzene	ND		0.00137	1	12/14/2015 20:29	WG834880
1,1,1-Trichloroethane	ND		0.00137	1	12/14/2015 20:29	WG834880
1,1,2-Trichloroethane	ND		0.00137	1	12/14/2015 20:29	WG834880
Trichloroethene	1.52		0.0753	55	12/16/2015 21:53	WG835688
Trichlorofluoromethane	ND		0.00685	1	12/14/2015 20:29	WG834880
1,2,3-Trichloropropane	ND		0.00342	1	12/14/2015 20:29	WG834880
1,2,4-Trimethylbenzene	ND		0.00137	1	12/14/2015 20:29	WG834880
1,2,3-Trimethylbenzene	ND		0.00137	1	12/14/2015 20:29	WG834880
1,3,5-Trimethylbenzene	ND		0.00137	1	12/14/2015 20:29	WG834880
Vinyl chloride	ND		0.00137	1	12/14/2015 20:29	WG834880
Xylenes, Total	ND		0.00411	1	12/14/2015 20:29	WG834880
(S) Toluene-d8	*93.6*		*88.7-115*		*12/14/2015 20:29*	WG834880
(S) Dibromofluoromethane	*105*		*76.3-123*		*12/14/2015 20:29*	WG834880
(S) a,a,a-Trifluorotoluene	*95.7*		*87.2-117*		*12/14/2015 20:29*	WG834880
(S) 4-Bromofluorobenzene	*87.5*		*69.7-129*		*12/14/2015 20:29*	WG834880

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	71.5		1	12/11/2015 07:36	WG834755

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		0.0699	1	12/11/2015 18:51	WG834983
Acrylonitrile	ND		0.0140	1	12/11/2015 18:51	WG834983
Benzene	ND		0.00140	1	12/11/2015 18:51	WG834983
Bromobenzene	ND		0.00140	1	12/11/2015 18:51	WG834983
Bromodichloromethane	ND		0.00140	1	12/11/2015 18:51	WG834983
Bromoform	ND		0.00140	1	12/11/2015 18:51	WG834983
Bromomethane	ND		0.00699	1	12/11/2015 18:51	WG834983
n-Butylbenzene	ND		0.00140	1	12/11/2015 18:51	WG834983
sec-Butylbenzene	ND		0.00140	1	12/11/2015 18:51	WG834983
tert-Butylbenzene	ND		0.00140	1	12/11/2015 18:51	WG834983
Carbon tetrachloride	ND		0.00140	1	12/11/2015 18:51	WG834983
Chlorobenzene	ND		0.00140	1	12/11/2015 18:51	WG834983
Chlorodibromomethane	ND		0.00140	1	12/11/2015 18:51	WG834983
Chloroethane	ND		0.00699	1	12/11/2015 18:51	WG834983
2-Chloroethyl vinyl ether	ND		0.0699	1	12/11/2015 18:51	WG834983
Chloroform	ND		0.00699	1	12/11/2015 18:51	WG834983
Chloromethane	ND		0.00350	1	12/11/2015 18:51	WG834983
2-Chlorotoluene	ND		0.00140	1	12/11/2015 18:51	WG834983
4-Chlorotoluene	ND		0.00140	1	12/11/2015 18:51	WG834983
1,2-Dibromo-3-Chloropropane	ND		0.00699	1	12/11/2015 18:51	WG834983
1,2-Dibromoethane	ND		0.00140	1	12/11/2015 18:51	WG834983
Dibromomethane	ND		0.00140	1	12/11/2015 18:51	WG834983
1,2-Dichlorobenzene	ND		0.00140	1	12/11/2015 18:51	WG834983
1,3-Dichlorobenzene	ND		0.00140	1	12/11/2015 18:51	WG834983
1,4-Dichlorobenzene	ND		0.00140	1	12/11/2015 18:51	WG834983
Dichlorodifluoromethane	ND		0.00699	1	12/11/2015 18:51	WG834983
1,1-Dichloroethane	ND		0.00140	1	12/11/2015 18:51	WG834983
1,2-Dichloroethane	ND		0.00140	1	12/11/2015 18:51	WG834983
1,1-Dichloroethene	ND		0.00140	1	12/11/2015 18:51	WG834983
cis-1,2-Dichloroethene	ND		0.00140	1	12/11/2015 18:51	WG834983
trans-1,2-Dichloroethene	ND		0.00140	1	12/11/2015 18:51	WG834983
1,2-Dichloropropane	ND		0.00140	1	12/11/2015 18:51	WG834983
1,1-Dichloropropene	ND		0.00140	1	12/11/2015 18:51	WG834983
1,3-Dichloropropane	ND		0.00140	1	12/11/2015 18:51	WG834983
cis-1,3-Dichloropropene	ND		0.00140	1	12/11/2015 18:51	WG834983
trans-1,3-Dichloropropene	ND		0.00140	1	12/11/2015 18:51	WG834983
2,2-Dichloropropane	ND		0.00140	1	12/11/2015 18:51	WG834983
Di-isopropyl ether	ND		0.00140	1	12/11/2015 18:51	WG834983
Ethylbenzene	ND		0.00140	1	12/11/2015 18:51	WG834983
Hexachloro-1,3-butadiene	ND		0.00140	1	12/11/2015 18:51	WG834983
Isopropylbenzene	ND		0.00140	1	12/11/2015 18:51	WG834983
p-Isopropyltoluene	ND		0.00140	1	12/11/2015 18:51	WG834983
2-Butanone (MEK)	ND		0.0140	1	12/11/2015 18:51	WG834983
Methylene Chloride	ND		0.00699	1	12/11/2015 18:51	WG834983
4-Methyl-2-pentanone (MIBK)	ND		0.0140	1	12/11/2015 18:51	WG834983
Methyl tert-butyl ether	ND		0.00140	1	12/11/2015 18:51	WG834983
Naphthalene	ND		0.00699	1	12/11/2015 18:51	WG834983
n-Propylbenzene	ND		0.00140	1	12/11/2015 18:51	WG834983
Styrene	ND		0.00140	1	12/11/2015 18:51	WG834983
1,1,1,2-Tetrachloroethane	ND		0.00140	1	12/11/2015 18:51	WG834983

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1,2,2-Tetrachloroethane	ND		0.00140	1	12/11/2015 18:51	WG834983
1,1,2-Trichlorotrifluoroethane	ND		0.00140	1	12/11/2015 18:51	WG834983
Tetrachloroethene	ND		0.00140	1	12/11/2015 18:51	WG834983
Toluene	ND		0.00699	1	12/11/2015 18:51	WG834983
1,2,3-Trichlorobenzene	ND		0.00140	1	12/11/2015 18:51	WG834983
1,2,4-Trichlorobenzene	ND		0.00140	1	12/11/2015 18:51	WG834983
1,1,1-Trichloroethane	ND		0.00140	1	12/11/2015 18:51	WG834983
1,1,2-Trichloroethane	ND		0.00140	1	12/11/2015 18:51	WG834983
Trichloroethene	0.629		0.0601	43	12/16/2015 22:17	WG835688
Trichlorofluoromethane	ND		0.00699	1	12/11/2015 18:51	WG834983
1,2,3-Trichloropropane	ND		0.00350	1	12/11/2015 18:51	WG834983
1,2,4-Trimethylbenzene	ND		0.00140	1	12/11/2015 18:51	WG834983
1,2,3-Trimethylbenzene	ND		0.00140	1	12/11/2015 18:51	WG834983
1,3,5-Trimethylbenzene	ND		0.00140	1	12/11/2015 18:51	WG834983
Vinyl chloride	ND		0.00140	1	12/11/2015 18:51	WG834983
Xylenes, Total	ND		0.00420	1	12/11/2015 18:51	WG834983
(S) Toluene-d8	*95.6*		*88.7-115*		*12/11/2015 18:51*	WG834983
(S) Dibromofluoromethane	*110*		*76.3-123*		*12/11/2015 18:51*	WG834983
(S) a,a,a-Trifluorotoluene	*86.2*	J2	*87.2-117*		*12/11/2015 18:51*	WG834983
(S) 4-Bromofluorobenzene	*94.1*		*69.7-129*		*12/11/2015 18:51*	WG834983

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	73.7		1	12/11/2015 07:38	WG834755

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		0.0679	1	12/11/2015 19:11	WG834983
Acrylonitrile	ND		0.0136	1	12/11/2015 19:11	WG834983
Benzene	0.00175		0.00136	1	12/11/2015 19:11	WG834983
Bromobenzene	ND		0.00136	1	12/11/2015 19:11	WG834983
Bromodichloromethane	ND		0.00136	1	12/11/2015 19:11	WG834983
Bromoform	ND		0.00136	1	12/11/2015 19:11	WG834983
Bromomethane	ND		0.00679	1	12/11/2015 19:11	WG834983
n-Butylbenzene	ND		0.00136	1	12/11/2015 19:11	WG834983
sec-Butylbenzene	ND		0.00136	1	12/11/2015 19:11	WG834983
tert-Butylbenzene	ND		0.00136	1	12/11/2015 19:11	WG834983
Carbon tetrachloride	ND		0.00136	1	12/11/2015 19:11	WG834983
Chlorobenzene	ND		0.00136	1	12/11/2015 19:11	WG834983
Chlorodibromomethane	ND		0.00136	1	12/11/2015 19:11	WG834983
Chloroethane	ND		0.00679	1	12/11/2015 19:11	WG834983
2-Chloroethyl vinyl ether	ND		0.0679	1	12/11/2015 19:11	WG834983
Chloroform	ND		0.00679	1	12/11/2015 19:11	WG834983
Chloromethane	ND		0.00339	1	12/11/2015 19:11	WG834983
2-Chlorotoluene	ND		0.00136	1	12/11/2015 19:11	WG834983
4-Chlorotoluene	ND		0.00136	1	12/11/2015 19:11	WG834983
1,2-Dibromo-3-Chloropropane	ND		0.00679	1	12/11/2015 19:11	WG834983
1,2-Dibromoethane	ND		0.00136	1	12/11/2015 19:11	WG834983
Dibromomethane	ND		0.00136	1	12/11/2015 19:11	WG834983
1,2-Dichlorobenzene	ND		0.00136	1	12/11/2015 19:11	WG834983
1,3-Dichlorobenzene	ND		0.00136	1	12/11/2015 19:11	WG834983
1,4-Dichlorobenzene	ND		0.00136	1	12/11/2015 19:11	WG834983
Dichlorodifluoromethane	ND		0.00679	1	12/11/2015 19:11	WG834983
1,1-Dichloroethane	ND		0.00136	1	12/11/2015 19:11	WG834983
1,2-Dichloroethane	ND		0.00136	1	12/11/2015 19:11	WG834983
1,1-Dichloroethene	ND		0.00136	1	12/11/2015 19:11	WG834983
cis-1,2-Dichloroethene	ND		0.00136	1	12/11/2015 19:11	WG834983
trans-1,2-Dichloroethene	ND		0.00136	1	12/11/2015 19:11	WG834983
1,2-Dichloropropane	ND		0.00136	1	12/11/2015 19:11	WG834983
1,1-Dichloropropene	ND		0.00136	1	12/11/2015 19:11	WG834983
1,3-Dichloropropane	ND		0.00136	1	12/11/2015 19:11	WG834983
cis-1,3-Dichloropropene	ND		0.00136	1	12/11/2015 19:11	WG834983
trans-1,3-Dichloropropene	ND		0.00136	1	12/11/2015 19:11	WG834983
2,2-Dichloropropane	ND		0.00136	1	12/11/2015 19:11	WG834983
Di-isopropyl ether	ND		0.00136	1	12/11/2015 19:11	WG834983
Ethylbenzene	ND		0.00136	1	12/11/2015 19:11	WG834983
Hexachloro-1,3-butadiene	ND		0.00136	1	12/11/2015 19:11	WG834983
Isopropylbenzene	ND		0.00136	1	12/11/2015 19:11	WG834983
p-Isopropyltoluene	ND		0.00136	1	12/11/2015 19:11	WG834983
2-Butanone (MEK)	ND		0.0136	1	12/11/2015 19:11	WG834983
Methylene Chloride	ND		0.00679	1	12/11/2015 19:11	WG834983
4-Methyl-2-pentanone (MIBK)	ND		0.0136	1	12/11/2015 19:11	WG834983
Methyl tert-butyl ether	ND		0.00136	1	12/11/2015 19:11	WG834983
Naphthalene	ND		0.00679	1	12/11/2015 19:11	WG834983
n-Propylbenzene	ND		0.00136	1	12/11/2015 19:11	WG834983
Styrene	ND		0.00136	1	12/11/2015 19:11	WG834983
1,1,1,2-Tetrachloroethane	ND		0.00136	1	12/11/2015 19:11	WG834983

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1,2,2-Tetrachloroethane	ND		0.00136	1	12/11/2015 19:11	WG834983
1,1,2-Trichlorotrifluoroethane	ND		0.00136	1	12/11/2015 19:11	WG834983
Tetrachloroethene	ND		0.00136	1	12/11/2015 19:11	WG834983
Toluene	ND		0.00679	1	12/11/2015 19:11	WG834983
1,2,3-Trichlorobenzene	ND		0.00136	1	12/11/2015 19:11	WG834983
1,2,4-Trichlorobenzene	ND		0.00136	1	12/11/2015 19:11	WG834983
1,1,1-Trichloroethane	ND		0.00136	1	12/11/2015 19:11	WG834983
1,1,2-Trichloroethane	ND		0.00136	1	12/11/2015 19:11	WG834983
Trichloroethene	0.00385		0.00136	1	12/17/2015 09:35	WG835371
Trichlorofluoromethane	ND		0.00679	1	12/11/2015 19:11	WG834983
1,2,3-Trichloropropane	ND		0.00339	1	12/11/2015 19:11	WG834983
1,2,4-Trimethylbenzene	ND		0.00136	1	12/11/2015 19:11	WG834983
1,2,3-Trimethylbenzene	ND		0.00136	1	12/11/2015 19:11	WG834983
1,3,5-Trimethylbenzene	ND		0.00136	1	12/11/2015 19:11	WG834983
Vinyl chloride	ND		0.00136	1	12/11/2015 19:11	WG834983
Xylenes, Total	ND		0.00407	1	12/11/2015 19:11	WG834983
(S) Toluene-d8	*101*		*88.7-115*		*12/11/2015 19:11*	WG834983
(S) Dibromofluoromethane	*99.2*		*76.3-123*		*12/11/2015 19:11*	WG834983
(S) a,a,a-Trifluorotoluene	*90.8*		*87.2-117*		*12/11/2015 19:11*	WG834983
(S) 4-Bromofluorobenzene	*97.1*		*69.7-129*		*12/11/2015 19:11*	WG834983

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	78.6		1	12/11/2015 07:38	WG834755

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		0.0636	1	12/11/2015 19:30	WG834983
Acrylonitrile	ND		0.0127	1	12/11/2015 19:30	WG834983
Benzene	ND		0.00127	1	12/11/2015 19:30	WG834983
Bromobenzene	ND		0.00127	1	12/11/2015 19:30	WG834983
Bromodichloromethane	ND		0.00127	1	12/11/2015 19:30	WG834983
Bromoform	ND		0.00127	1	12/11/2015 19:30	WG834983
Bromomethane	ND		0.00636	1	12/11/2015 19:30	WG834983
n-Butylbenzene	ND		0.00127	1	12/11/2015 19:30	WG834983
sec-Butylbenzene	ND		0.00127	1	12/11/2015 19:30	WG834983
tert-Butylbenzene	ND		0.00127	1	12/11/2015 19:30	WG834983
Carbon tetrachloride	ND		0.00127	1	12/11/2015 19:30	WG834983
Chlorobenzene	ND		0.00127	1	12/11/2015 19:30	WG834983
Chlorodibromomethane	ND		0.00127	1	12/11/2015 19:30	WG834983
Chloroethane	ND		0.00636	1	12/11/2015 19:30	WG834983
2-Chloroethyl vinyl ether	ND		0.0636	1	12/11/2015 19:30	WG834983
Chloroform	ND		0.00636	1	12/11/2015 19:30	WG834983
Chloromethane	ND		0.00318	1	12/11/2015 19:30	WG834983
2-Chlorotoluene	ND		0.00127	1	12/11/2015 19:30	WG834983
4-Chlorotoluene	ND		0.00127	1	12/11/2015 19:30	WG834983
1,2-Dibromo-3-Chloropropane	ND		0.00636	1	12/11/2015 19:30	WG834983
1,2-Dibromoethane	ND		0.00127	1	12/11/2015 19:30	WG834983
Dibromomethane	ND		0.00127	1	12/11/2015 19:30	WG834983
1,2-Dichlorobenzene	ND		0.00127	1	12/11/2015 19:30	WG834983
1,3-Dichlorobenzene	ND		0.00127	1	12/11/2015 19:30	WG834983
1,4-Dichlorobenzene	ND		0.00127	1	12/11/2015 19:30	WG834983
Dichlorodifluoromethane	ND		0.00636	1	12/11/2015 19:30	WG834983
1,1-Dichloroethane	ND		0.00127	1	12/11/2015 19:30	WG834983
1,2-Dichloroethane	ND		0.00127	1	12/11/2015 19:30	WG834983
1,1-Dichloroethene	ND		0.00127	1	12/11/2015 19:30	WG834983
cis-1,2-Dichloroethene	0.00173		0.00127	1	12/11/2015 19:30	WG834983
trans-1,2-Dichloroethene	ND		0.00127	1	12/11/2015 19:30	WG834983
1,2-Dichloropropane	ND		0.00127	1	12/11/2015 19:30	WG834983
1,1-Dichloropropene	ND		0.00127	1	12/11/2015 19:30	WG834983
1,3-Dichloropropane	ND		0.00127	1	12/11/2015 19:30	WG834983
cis-1,3-Dichloropropene	ND		0.00127	1	12/11/2015 19:30	WG834983
trans-1,3-Dichloropropene	ND		0.00127	1	12/11/2015 19:30	WG834983
2,2-Dichloropropane	ND		0.00127	1	12/11/2015 19:30	WG834983
Di-isopropyl ether	ND		0.00127	1	12/11/2015 19:30	WG834983
Ethylbenzene	ND		0.00127	1	12/11/2015 19:30	WG834983
Hexachloro-1,3-butadiene	ND		0.00127	1	12/11/2015 19:30	WG834983
Isopropylbenzene	ND		0.00127	1	12/11/2015 19:30	WG834983
p-Isopropyltoluene	ND		0.00127	1	12/11/2015 19:30	WG834983
2-Butanone (MEK)	ND		0.0127	1	12/11/2015 19:30	WG834983
Methylene Chloride	ND		0.00636	1	12/11/2015 19:30	WG834983
4-Methyl-2-pentanone (MIBK)	ND		0.0127	1	12/11/2015 19:30	WG834983
Methyl tert-butyl ether	ND		0.00127	1	12/11/2015 19:30	WG834983
Naphthalene	ND		0.00636	1	12/11/2015 19:30	WG834983
n-Propylbenzene	ND		0.00127	1	12/11/2015 19:30	WG834983
Styrene	ND		0.00127	1	12/11/2015 19:30	WG834983
1,1,1,2-Tetrachloroethane	ND		0.00127	1	12/11/2015 19:30	WG834983

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1,2,2-Tetrachloroethane	ND		0.00127	1	12/11/2015 19:30	WG834983
1,1,2-Trichlorotrifluoroethane	ND		0.00127	1	12/11/2015 19:30	WG834983
Tetrachloroethene	ND		0.00127	1	12/11/2015 19:30	WG834983
Toluene	ND		0.00636	1	12/11/2015 19:30	WG834983
1,2,3-Trichlorobenzene	ND		0.00127	1	12/11/2015 19:30	WG834983
1,2,4-Trichlorobenzene	ND		0.00127	1	12/11/2015 19:30	WG834983
1,1,1-Trichloroethane	ND		0.00127	1	12/11/2015 19:30	WG834983
1,1,2-Trichloroethane	ND		0.00127	1	12/11/2015 19:30	WG834983
Trichloroethene	0.0222		0.00127	1	12/11/2015 19:30	WG834983
Trichlorofluoromethane	ND		0.00636	1	12/11/2015 19:30	WG834983
1,2,3-Trichloropropane	ND		0.00318	1	12/11/2015 19:30	WG834983
1,2,4-Trimethylbenzene	ND		0.00127	1	12/11/2015 19:30	WG834983
1,2,3-Trimethylbenzene	ND		0.00127	1	12/11/2015 19:30	WG834983
1,3,5-Trimethylbenzene	ND		0.00127	1	12/11/2015 19:30	WG834983
Vinyl chloride	ND		0.00127	1	12/11/2015 19:30	WG834983
Xylenes, Total	ND		0.00382	1	12/11/2015 19:30	WG834983
(S) Toluene-d8	*101*		*88.7-115*		*12/11/2015 19:30*	WG834983
(S) Dibromofluoromethane	*97.0*		*76.3-123*		*12/11/2015 19:30*	WG834983
(S) a,a,a-Trifluorotoluene	*91.2*		*87.2-117*		*12/11/2015 19:30*	WG834983
(S) 4-Bromofluorobenzene	*98.4*		*69.7-129*		*12/11/2015 19:30*	WG834983

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	64.2		1	12/11/2015 07:38	WG834755

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		0.0779	1	12/11/2015 19:50	WG834983
Acrylonitrile	ND		0.0156	1	12/11/2015 19:50	WG834983
Benzene	ND		0.00156	1	12/11/2015 19:50	WG834983
Bromobenzene	ND		0.00156	1	12/11/2015 19:50	WG834983
Bromodichloromethane	ND		0.00156	1	12/11/2015 19:50	WG834983
Bromoform	ND		0.00156	1	12/11/2015 19:50	WG834983
Bromomethane	ND		0.00779	1	12/11/2015 19:50	WG834983
n-Butylbenzene	ND		0.00156	1	12/11/2015 19:50	WG834983
sec-Butylbenzene	ND		0.00156	1	12/11/2015 19:50	WG834983
tert-Butylbenzene	ND		0.00156	1	12/11/2015 19:50	WG834983
Carbon tetrachloride	ND		0.00156	1	12/11/2015 19:50	WG834983
Chlorobenzene	ND		0.00156	1	12/11/2015 19:50	WG834983
Chlorodibromomethane	ND		0.00156	1	12/11/2015 19:50	WG834983
Chloroethane	ND		0.00779	1	12/11/2015 19:50	WG834983
2-Chloroethyl vinyl ether	ND		0.0779	1	12/11/2015 19:50	WG834983
Chloroform	ND		0.00779	1	12/11/2015 19:50	WG834983
Chloromethane	ND		0.00389	1	12/11/2015 19:50	WG834983
2-Chlorotoluene	ND		0.00156	1	12/11/2015 19:50	WG834983
4-Chlorotoluene	ND		0.00156	1	12/11/2015 19:50	WG834983
1,2-Dibromo-3-Chloropropane	ND		0.00779	1	12/11/2015 19:50	WG834983
1,2-Dibromoethane	ND		0.00156	1	12/11/2015 19:50	WG834983
Dibromomethane	ND		0.00156	1	12/11/2015 19:50	WG834983
1,2-Dichlorobenzene	ND		0.00156	1	12/11/2015 19:50	WG834983
1,3-Dichlorobenzene	ND		0.00156	1	12/11/2015 19:50	WG834983
1,4-Dichlorobenzene	ND		0.00156	1	12/11/2015 19:50	WG834983
Dichlorodifluoromethane	ND		0.00779	1	12/11/2015 19:50	WG834983
1,1-Dichloroethane	ND		0.00156	1	12/11/2015 19:50	WG834983
1,2-Dichloroethane	ND		0.00156	1	12/11/2015 19:50	WG834983
1,1-Dichloroethene	0.00522		0.00156	1	12/11/2015 19:50	WG834983
cis-1,2-Dichloroethene	ND		1.37	880	12/16/2015 18:25	WG835989
trans-1,2-Dichloroethene	0.00591		0.00156	1	12/11/2015 19:50	WG834983
1,2-Dichloropropane	ND		0.00156	1	12/11/2015 19:50	WG834983
1,1-Dichloropropene	ND		0.00156	1	12/11/2015 19:50	WG834983
1,3-Dichloropropane	ND		0.00156	1	12/11/2015 19:50	WG834983
cis-1,3-Dichloropropene	ND		0.00156	1	12/11/2015 19:50	WG834983
trans-1,3-Dichloropropene	ND		0.00156	1	12/11/2015 19:50	WG834983
2,2-Dichloropropane	ND		0.00156	1	12/11/2015 19:50	WG834983
Di-isopropyl ether	ND		0.00156	1	12/11/2015 19:50	WG834983
Ethylbenzene	ND		0.00156	1	12/11/2015 19:50	WG834983
Hexachloro-1,3-butadiene	ND		0.00156	1	12/11/2015 19:50	WG834983
Isopropylbenzene	ND		0.00156	1	12/11/2015 19:50	WG834983
p-Isopropyltoluene	ND		0.00156	1	12/11/2015 19:50	WG834983
2-Butanone (MEK)	ND		0.0156	1	12/11/2015 19:50	WG834983
Methylene Chloride	ND		0.00779	1	12/11/2015 19:50	WG834983
4-Methyl-2-pentanone (MIBK)	ND		0.0156	1	12/11/2015 19:50	WG834983
Methyl tert-butyl ether	ND		0.00156	1	12/11/2015 19:50	WG834983
Naphthalene	ND		0.00779	1	12/11/2015 19:50	WG834983
n-Propylbenzene	ND		0.00156	1	12/11/2015 19:50	WG834983
Styrene	ND		0.00156	1	12/11/2015 19:50	WG834983
1,1,1,2-Tetrachloroethane	ND		0.00156	1	12/11/2015 19:50	WG834983

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1,2,2-Tetrachloroethane	ND		0.00156	1	12/11/2015 19:50	WG834983
1,1,2-Trichlorotrifluoroethane	0.00188		0.00156	1	12/11/2015 19:50	WG834983
Tetrachloroethene	0.0264		0.00156	1	12/11/2015 19:50	WG834983
Toluene	0.00899	V3	0.00779	1	12/11/2015 19:50	WG834983
1,2,3-Trichlorobenzene	ND		0.00156	1	12/11/2015 19:50	WG834983
1,2,4-Trichlorobenzene	ND		0.00156	1	12/11/2015 19:50	WG834983
1,1,1-Trichloroethane	ND		0.00156	1	12/11/2015 19:50	WG834983
1,1,2-Trichloroethane	0.00466		0.00156	1	12/11/2015 19:50	WG834983
Trichloroethene	61.1		1.37	880	12/16/2015 18:25	WG835989
Trichlorofluoromethane	ND		0.00779	1	12/11/2015 19:50	WG834983
1,2,3-Trichloropropane	ND		0.00389	1	12/11/2015 19:50	WG834983
1,2,4-Trimethylbenzene	ND		0.00156	1	12/11/2015 19:50	WG834983
1,2,3-Trimethylbenzene	ND		0.00156	1	12/11/2015 19:50	WG834983
1,3,5-Trimethylbenzene	ND		0.00156	1	12/11/2015 19:50	WG834983
Vinyl chloride	0.00946		0.00156	1	12/11/2015 19:50	WG834983
Xylenes, Total	ND		0.00467	1	12/11/2015 19:50	WG834983
(S) Toluene-d8	*817*	J1	*88.7-115*		*12/11/2015 19:50*	WG834983
(S) Dibromofluoromethane	*98.7*		*76.3-123*		*12/11/2015 19:50*	WG834983
(S) a,a,a-Trifluorotoluene	*703*	J1	*87.2-117*		*12/11/2015 19:50*	WG834983
(S) 4-Bromofluorobenzene	*102*		*69.7-129*		*12/11/2015 19:50*	WG834983

Sample Narrative:

8260B L805690-13 WG834983: IS/Surrogate failure due to matrix interference.

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	72.1		1	12/11/2015 07:39	WG834755

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		0.0694	1	12/11/2015 20:09	WG834983
Acrylonitrile	ND		0.0139	1	12/11/2015 20:09	WG834983
Benzene	ND		0.00139	1	12/11/2015 20:09	WG834983
Bromobenzene	ND		0.00139	1	12/11/2015 20:09	WG834983
Bromodichloromethane	ND		0.00139	1	12/11/2015 20:09	WG834983
Bromoform	ND		0.00139	1	12/11/2015 20:09	WG834983
Bromomethane	ND		0.00694	1	12/11/2015 20:09	WG834983
n-Butylbenzene	ND		0.00139	1	12/11/2015 20:09	WG834983
sec-Butylbenzene	ND		0.00139	1	12/11/2015 20:09	WG834983
tert-Butylbenzene	ND		0.00139	1	12/11/2015 20:09	WG834983
Carbon tetrachloride	ND		0.00139	1	12/11/2015 20:09	WG834983
Chlorobenzene	ND		0.00139	1	12/11/2015 20:09	WG834983
Chlorodibromomethane	ND		0.00139	1	12/11/2015 20:09	WG834983
Chloroethane	ND		0.00694	1	12/11/2015 20:09	WG834983
2-Chloroethyl vinyl ether	ND		0.0694	1	12/11/2015 20:09	WG834983
Chloroform	ND		0.00694	1	12/11/2015 20:09	WG834983
Chloromethane	ND		0.00347	1	12/11/2015 20:09	WG834983
2-Chlorotoluene	ND		0.00139	1	12/11/2015 20:09	WG834983
4-Chlorotoluene	ND		0.00139	1	12/11/2015 20:09	WG834983
1,2-Dibromo-3-Chloropropane	ND		0.00694	1	12/11/2015 20:09	WG834983
1,2-Dibromoethane	ND		0.00139	1	12/11/2015 20:09	WG834983
Dibromomethane	ND		0.00139	1	12/11/2015 20:09	WG834983
1,2-Dichlorobenzene	ND		0.00139	1	12/11/2015 20:09	WG834983
1,3-Dichlorobenzene	ND		0.00139	1	12/11/2015 20:09	WG834983
1,4-Dichlorobenzene	ND		0.00139	1	12/11/2015 20:09	WG834983
Dichlorodifluoromethane	ND		0.00694	1	12/11/2015 20:09	WG834983
1,1-Dichloroethane	ND		0.00139	1	12/11/2015 20:09	WG834983
1,2-Dichloroethane	ND		0.00139	1	12/11/2015 20:09	WG834983
1,1-Dichloroethene	0.00282		0.00139	1	12/11/2015 20:09	WG834983
cis-1,2-Dichloroethene	0.847		0.618	445	12/16/2015 18:44	WG835989
trans-1,2-Dichloroethene	ND		0.00139	1	12/11/2015 20:09	WG834983
1,2-Dichloropropane	ND		0.00139	1	12/11/2015 20:09	WG834983
1,1-Dichloropropene	ND		0.00139	1	12/11/2015 20:09	WG834983
1,3-Dichloropropane	ND		0.00139	1	12/11/2015 20:09	WG834983
cis-1,3-Dichloropropene	ND		0.00139	1	12/11/2015 20:09	WG834983
trans-1,3-Dichloropropene	ND		0.00139	1	12/11/2015 20:09	WG834983
2,2-Dichloropropane	ND		0.00139	1	12/11/2015 20:09	WG834983
Di-isopropyl ether	ND		0.00139	1	12/11/2015 20:09	WG834983
Ethylbenzene	ND		0.00139	1	12/11/2015 20:09	WG834983
Hexachloro-1,3-butadiene	ND		0.00139	1	12/11/2015 20:09	WG834983
Isopropylbenzene	ND		0.00139	1	12/11/2015 20:09	WG834983
p-Isopropyltoluene	ND		0.00139	1	12/11/2015 20:09	WG834983
2-Butanone (MEK)	ND		0.0139	1	12/11/2015 20:09	WG834983
Methylene Chloride	ND		0.00694	1	12/11/2015 20:09	WG834983
4-Methyl-2-pentanone (MIBK)	ND		0.0139	1	12/11/2015 20:09	WG834983
Methyl tert-butyl ether	ND		0.00139	1	12/11/2015 20:09	WG834983
Naphthalene	ND		0.00694	1	12/11/2015 20:09	WG834983
n-Propylbenzene	ND		0.00139	1	12/11/2015 20:09	WG834983
Styrene	ND		0.00139	1	12/11/2015 20:09	WG834983
1,1,1,2-Tetrachloroethane	ND		0.00139	1	12/11/2015 20:09	WG834983

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1,2,2-Tetrachloroethane	ND		0.00139	1	12/11/2015 20:09	WG834983
1,1,2-Trichlorotrifluoroethane	ND		0.00139	1	12/11/2015 20:09	WG834983
Tetrachloroethene	ND		0.00139	1	12/11/2015 20:09	WG834983
Toluene	ND	V3	0.00694	1	12/11/2015 20:09	WG834983
1,2,3-Trichlorobenzene	ND		0.00139	1	12/11/2015 20:09	WG834983
1,2,4-Trichlorobenzene	ND		0.00139	1	12/11/2015 20:09	WG834983
1,1,1-Trichloroethane	ND		0.00139	1	12/11/2015 20:09	WG834983
1,1,2-Trichloroethane	0.00276		0.00139	1	12/11/2015 20:09	WG834983
Trichloroethene	51.1		0.618	445	12/16/2015 18:44	WG835989
Trichlorofluoromethane	ND		0.00694	1	12/11/2015 20:09	WG834983
1,2,3-Trichloropropane	ND		0.00347	1	12/11/2015 20:09	WG834983
1,2,4-Trimethylbenzene	ND		0.00139	1	12/11/2015 20:09	WG834983
1,2,3-Trimethylbenzene	ND		0.00139	1	12/11/2015 20:09	WG834983
1,3,5-Trimethylbenzene	ND		0.00139	1	12/11/2015 20:09	WG834983
Vinyl chloride	0.0153		0.00139	1	12/11/2015 20:09	WG834983
Xylenes, Total	ND		0.00416	1	12/11/2015 20:09	WG834983
(S) Toluene-d8	*311*	J1	*88.7-115*		*12/11/2015 20:09*	WG834983
(S) Dibromofluoromethane	*111*		*76.3-123*		*12/11/2015 20:09*	WG834983
(S) a,a,a-Trifluorotoluene	*269*	J1	*87.2-117*		*12/11/2015 20:09*	WG834983
(S) 4-Bromofluorobenzene	*98.8*		*69.7-129*		*12/11/2015 20:09*	WG834983

Sample Narrative:

8260B L805690-14 WG834983: IS/Surrogate failure due to matrix interference.

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	80.0		1	12/11/2015 07:39	WG834755

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		0.0625	1	12/11/2015 17:33	WG834983
Acrylonitrile	ND		0.0125	1	12/11/2015 17:33	WG834983
Benzene	ND		0.00125	1	12/11/2015 17:33	WG834983
Bromobenzene	ND		0.00125	1	12/11/2015 17:33	WG834983
Bromodichloromethane	ND		0.00125	1	12/11/2015 17:33	WG834983
Bromoform	ND		0.00125	1	12/11/2015 17:33	WG834983
Bromomethane	ND		0.00625	1	12/11/2015 17:33	WG834983
n-Butylbenzene	ND		0.00125	1	12/11/2015 17:33	WG834983
sec-Butylbenzene	ND		0.00125	1	12/11/2015 17:33	WG834983
tert-Butylbenzene	ND		0.00125	1	12/11/2015 17:33	WG834983
Carbon tetrachloride	ND		0.00125	1	12/11/2015 17:33	WG834983
Chlorobenzene	ND		0.00125	1	12/11/2015 17:33	WG834983
Chlorodibromomethane	ND		0.00125	1	12/11/2015 17:33	WG834983
Chloroethane	ND		0.00625	1	12/11/2015 17:33	WG834983
2-Chloroethyl vinyl ether	ND		0.0625	1	12/11/2015 17:33	WG834983
Chloroform	ND		0.00625	1	12/11/2015 17:33	WG834983
Chloromethane	ND		0.00313	1	12/11/2015 17:33	WG834983
2-Chlorotoluene	ND		0.00125	1	12/11/2015 17:33	WG834983
4-Chlorotoluene	ND		0.00125	1	12/11/2015 17:33	WG834983
1,2-Dibromo-3-Chloropropane	ND		0.00625	1	12/11/2015 17:33	WG834983
1,2-Dibromoethane	ND		0.00125	1	12/11/2015 17:33	WG834983
Dibromomethane	ND		0.00125	1	12/11/2015 17:33	WG834983
1,2-Dichlorobenzene	ND		0.00125	1	12/11/2015 17:33	WG834983
1,3-Dichlorobenzene	ND		0.00125	1	12/11/2015 17:33	WG834983
1,4-Dichlorobenzene	ND		0.00125	1	12/11/2015 17:33	WG834983
Dichlorodifluoromethane	ND		0.00625	1	12/11/2015 17:33	WG834983
1,1-Dichloroethane	ND		0.00125	1	12/11/2015 17:33	WG834983
1,2-Dichloroethane	ND		0.00125	1	12/11/2015 17:33	WG834983
1,1-Dichloroethene	ND		0.00125	1	12/11/2015 17:33	WG834983
cis-1,2-Dichloroethene	ND		0.00125	1	12/11/2015 17:33	WG834983
trans-1,2-Dichloroethene	ND		0.00125	1	12/11/2015 17:33	WG834983
1,2-Dichloropropane	ND		0.00125	1	12/11/2015 17:33	WG834983
1,1-Dichloropropene	ND		0.00125	1	12/11/2015 17:33	WG834983
1,3-Dichloropropane	ND		0.00125	1	12/11/2015 17:33	WG834983
cis-1,3-Dichloropropene	ND		0.00125	1	12/11/2015 17:33	WG834983
trans-1,3-Dichloropropene	ND		0.00125	1	12/11/2015 17:33	WG834983
2,2-Dichloropropane	ND		0.00125	1	12/11/2015 17:33	WG834983
Di-isopropyl ether	ND		0.00125	1	12/11/2015 17:33	WG834983
Ethylbenzene	ND		0.00125	1	12/11/2015 17:33	WG834983
Hexachloro-1,3-butadiene	ND		0.00125	1	12/11/2015 17:33	WG834983
Isopropylbenzene	ND		0.00125	1	12/11/2015 17:33	WG834983
p-Isopropyltoluene	ND		0.00125	1	12/11/2015 17:33	WG834983
2-Butanone (MEK)	ND		0.0125	1	12/11/2015 17:33	WG834983
Methylene Chloride	ND		0.00625	1	12/11/2015 17:33	WG834983
4-Methyl-2-pentanone (MIBK)	ND		0.0125	1	12/11/2015 17:33	WG834983
Methyl tert-butyl ether	ND		0.00125	1	12/11/2015 17:33	WG834983
Naphthalene	ND		0.00625	1	12/11/2015 17:33	WG834983
n-Propylbenzene	ND		0.00125	1	12/11/2015 17:33	WG834983
Styrene	ND		0.00125	1	12/11/2015 17:33	WG834983
1,1,1,2-Tetrachloroethane	ND		0.00125	1	12/11/2015 17:33	WG834983

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1,2,2-Tetrachloroethane	ND		0.00125	1	12/11/2015 17:33	WG834983
1,1,2-Trichlorotrifluoroethane	ND		0.00125	1	12/11/2015 17:33	WG834983
Tetrachloroethene	ND		0.00125	1	12/11/2015 17:33	WG834983
Toluene	ND		0.00625	1	12/11/2015 17:33	WG834983
1,2,3-Trichlorobenzene	ND		0.00125	1	12/11/2015 17:33	WG834983
1,2,4-Trichlorobenzene	ND		0.00125	1	12/11/2015 17:33	WG834983
1,1,1-Trichloroethane	ND		0.00125	1	12/11/2015 17:33	WG834983
1,1,2-Trichloroethane	ND		0.00125	1	12/11/2015 17:33	WG834983
Trichloroethene	0.00317		0.00125	1	12/11/2015 17:33	WG834983
Trichlorofluoromethane	ND		0.00625	1	12/11/2015 17:33	WG834983
1,2,3-Trichloropropane	ND		0.00313	1	12/11/2015 17:33	WG834983
1,2,4-Trimethylbenzene	ND		0.00125	1	12/11/2015 17:33	WG834983
1,2,3-Trimethylbenzene	ND		0.00125	1	12/11/2015 17:33	WG834983
1,3,5-Trimethylbenzene	ND		0.00125	1	12/11/2015 17:33	WG834983
Vinyl chloride	ND		0.00125	1	12/11/2015 17:33	WG834983
Xylenes, Total	ND		0.00375	1	12/11/2015 17:33	WG834983
(S) Toluene-d8	*102*		*88.7-115*		*12/11/2015 17:33*	WG834983
(S) Dibromofluoromethane	*97.7*		*76.3-123*		*12/11/2015 17:33*	WG834983
(S) a,a,a-Trifluorotoluene	*91.8*		*87.2-117*		*12/11/2015 17:33*	WG834983
(S) 4-Bromofluorobenzene	*97.1*		*69.7-129*		*12/11/2015 17:33*	WG834983

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	61.4		1	12/11/2015 07:39	WG834755

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		0.0815	1	12/11/2015 20:29	WG834983
Acrylonitrile	ND		0.0163	1	12/11/2015 20:29	WG834983
Benzene	ND		0.00163	1	12/11/2015 20:29	WG834983
Bromobenzene	ND		0.00163	1	12/11/2015 20:29	WG834983
Bromodichloromethane	ND		0.00163	1	12/11/2015 20:29	WG834983
Bromoform	ND		0.00163	1	12/11/2015 20:29	WG834983
Bromomethane	ND		0.00815	1	12/11/2015 20:29	WG834983
n-Butylbenzene	ND		0.00163	1	12/11/2015 20:29	WG834983
sec-Butylbenzene	ND		0.00163	1	12/11/2015 20:29	WG834983
tert-Butylbenzene	ND		0.00163	1	12/11/2015 20:29	WG834983
Carbon tetrachloride	ND		0.00163	1	12/11/2015 20:29	WG834983
Chlorobenzene	ND		0.00163	1	12/11/2015 20:29	WG834983
Chlorodibromomethane	ND		0.00163	1	12/11/2015 20:29	WG834983
Chloroethane	ND		0.00815	1	12/11/2015 20:29	WG834983
2-Chloroethyl vinyl ether	ND		0.0815	1	12/11/2015 20:29	WG834983
Chloroform	ND		0.00815	1	12/11/2015 20:29	WG834983
Chloromethane	ND		0.00407	1	12/11/2015 20:29	WG834983
2-Chlorotoluene	ND		0.00163	1	12/11/2015 20:29	WG834983
4-Chlorotoluene	ND		0.00163	1	12/11/2015 20:29	WG834983
1,2-Dibromo-3-Chloropropane	ND		0.00815	1	12/11/2015 20:29	WG834983
1,2-Dibromoethane	ND		0.00163	1	12/11/2015 20:29	WG834983
Dibromomethane	ND		0.00163	1	12/11/2015 20:29	WG834983
1,2-Dichlorobenzene	ND		0.00163	1	12/11/2015 20:29	WG834983
1,3-Dichlorobenzene	ND		0.00163	1	12/11/2015 20:29	WG834983
1,4-Dichlorobenzene	ND		0.00163	1	12/11/2015 20:29	WG834983
Dichlorodifluoromethane	ND		0.00815	1	12/11/2015 20:29	WG834983
1,1-Dichloroethane	ND		0.00163	1	12/11/2015 20:29	WG834983
1,2-Dichloroethane	ND		0.00163	1	12/11/2015 20:29	WG834983
1,1-Dichloroethene	0.00245		0.00163	1	12/11/2015 20:29	WG834983
cis-1,2-Dichloroethene	0.240		0.00163	1	12/11/2015 20:29	WG834983
trans-1,2-Dichloroethene	0.00180		0.00163	1	12/11/2015 20:29	WG834983
1,2-Dichloropropane	ND		0.00163	1	12/11/2015 20:29	WG834983
1,1-Dichloropropene	ND		0.00163	1	12/11/2015 20:29	WG834983
1,3-Dichloropropane	ND		0.00163	1	12/11/2015 20:29	WG834983
cis-1,3-Dichloropropene	ND		0.00163	1	12/11/2015 20:29	WG834983
trans-1,3-Dichloropropene	ND		0.00163	1	12/11/2015 20:29	WG834983
2,2-Dichloropropane	ND		0.00163	1	12/11/2015 20:29	WG834983
Di-isopropyl ether	ND		0.00163	1	12/11/2015 20:29	WG834983
Ethylbenzene	ND		0.00163	1	12/11/2015 20:29	WG834983
Hexachloro-1,3-butadiene	ND		0.00163	1	12/11/2015 20:29	WG834983
Isopropylbenzene	ND		0.00163	1	12/11/2015 20:29	WG834983
p-Isopropyltoluene	ND		0.00163	1	12/11/2015 20:29	WG834983
2-Butanone (MEK)	ND		0.0163	1	12/11/2015 20:29	WG834983
Methylene Chloride	ND		0.00815	1	12/11/2015 20:29	WG834983
4-Methyl-2-pentanone (MIBK)	ND		0.0163	1	12/11/2015 20:29	WG834983
Methyl tert-butyl ether	ND		0.00163	1	12/11/2015 20:29	WG834983
Naphthalene	ND		0.00815	1	12/11/2015 20:29	WG834983
n-Propylbenzene	ND		0.00163	1	12/11/2015 20:29	WG834983
Styrene	ND		0.00163	1	12/11/2015 20:29	WG834983
1,1,1,2-Tetrachloroethane	ND		0.00163	1	12/11/2015 20:29	WG834983

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1,2,2-Tetrachloroethane	ND		0.00163	1	12/11/2015 20:29	WG834983
1,1,2-Trichlorotrifluoroethane	ND		0.00163	1	12/11/2015 20:29	WG834983
Tetrachloroethene	ND		0.00163	1	12/11/2015 20:29	WG834983
Toluene	ND		0.00815	1	12/11/2015 20:29	WG834983
1,2,3-Trichlorobenzene	ND		0.00163	1	12/11/2015 20:29	WG834983
1,2,4-Trichlorobenzene	ND		0.00163	1	12/11/2015 20:29	WG834983
1,1,1-Trichloroethane	ND		0.00163	1	12/11/2015 20:29	WG834983
1,1,2-Trichloroethane	ND		0.00163	1	12/11/2015 20:29	WG834983
Trichloroethene	24.5		0.319	196	12/16/2015 19:04	WG835989
Trichlorofluoromethane	ND		0.00815	1	12/11/2015 20:29	WG834983
1,2,3-Trichloropropane	ND		0.00407	1	12/11/2015 20:29	WG834983
1,2,4-Trimethylbenzene	ND		0.00163	1	12/11/2015 20:29	WG834983
1,2,3-Trimethylbenzene	ND		0.00163	1	12/11/2015 20:29	WG834983
1,3,5-Trimethylbenzene	ND		0.00163	1	12/11/2015 20:29	WG834983
Vinyl chloride	0.0175		0.00163	1	12/11/2015 20:29	WG834983
Xylenes, Total	ND		0.00489	1	12/11/2015 20:29	WG834983
(S) Toluene-d8	*131*	J1	*88.7-115*		*12/11/2015 20:29*	WG834983
(S) Dibromofluoromethane	*112*		*76.3-123*		*12/11/2015 20:29*	WG834983
(S) a,a,a-Trifluorotoluene	*115*		*87.2-117*		*12/11/2015 20:29*	WG834983
(S) 4-Bromofluorobenzene	*97.2*		*69.7-129*		*12/11/2015 20:29*	WG834983

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	67.4		1	12/11/2015 07:39	WG834755

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		0.0742	1	12/11/2015 20:48	WG834983
Acrylonitrile	ND		0.0148	1	12/11/2015 20:48	WG834983
Benzene	ND		0.00148	1	12/11/2015 20:48	WG834983
Bromobenzene	ND		0.00148	1	12/11/2015 20:48	WG834983
Bromodichloromethane	ND		0.00148	1	12/11/2015 20:48	WG834983
Bromoform	ND		0.00148	1	12/11/2015 20:48	WG834983
Bromomethane	ND		0.00742	1	12/11/2015 20:48	WG834983
n-Butylbenzene	ND		0.00148	1	12/11/2015 20:48	WG834983
sec-Butylbenzene	ND		0.00148	1	12/11/2015 20:48	WG834983
tert-Butylbenzene	ND		0.00148	1	12/11/2015 20:48	WG834983
Carbon tetrachloride	ND		0.00148	1	12/11/2015 20:48	WG834983
Chlorobenzene	ND		0.00148	1	12/11/2015 20:48	WG834983
Chlorodibromomethane	ND		0.00148	1	12/11/2015 20:48	WG834983
Chloroethane	ND		0.00742	1	12/11/2015 20:48	WG834983
2-Chloroethyl vinyl ether	ND		0.0742	1	12/11/2015 20:48	WG834983
Chloroform	ND		0.00742	1	12/11/2015 20:48	WG834983
Chloromethane	ND		0.00371	1	12/11/2015 20:48	WG834983
2-Chlorotoluene	ND		0.00148	1	12/11/2015 20:48	WG834983
4-Chlorotoluene	ND		0.00148	1	12/11/2015 20:48	WG834983
1,2-Dibromo-3-Chloropropane	ND		0.00742	1	12/11/2015 20:48	WG834983
1,2-Dibromoethane	ND		0.00148	1	12/11/2015 20:48	WG834983
Dibromomethane	ND		0.00148	1	12/11/2015 20:48	WG834983
1,2-Dichlorobenzene	ND		0.00148	1	12/11/2015 20:48	WG834983
1,3-Dichlorobenzene	ND		0.00148	1	12/11/2015 20:48	WG834983
1,4-Dichlorobenzene	ND		0.00148	1	12/11/2015 20:48	WG834983
Dichlorodifluoromethane	ND		0.00742	1	12/11/2015 20:48	WG834983
1,1-Dichloroethane	ND		0.00148	1	12/11/2015 20:48	WG834983
1,2-Dichloroethane	ND		0.00148	1	12/11/2015 20:48	WG834983
1,1-Dichloroethene	ND		0.00148	1	12/11/2015 20:48	WG834983
cis-1,2-Dichloroethene	0.155		0.00148	1	12/11/2015 20:48	WG834983
trans-1,2-Dichloroethene	ND		0.00148	1	12/11/2015 20:48	WG834983
1,2-Dichloropropane	ND		0.00148	1	12/11/2015 20:48	WG834983
1,1-Dichloropropene	ND		0.00148	1	12/11/2015 20:48	WG834983
1,3-Dichloropropane	ND		0.00148	1	12/11/2015 20:48	WG834983
cis-1,3-Dichloropropene	ND		0.00148	1	12/11/2015 20:48	WG834983
trans-1,3-Dichloropropene	ND		0.00148	1	12/11/2015 20:48	WG834983
2,2-Dichloropropane	ND		0.00148	1	12/11/2015 20:48	WG834983
Di-isopropyl ether	ND		0.00148	1	12/11/2015 20:48	WG834983
Ethylbenzene	ND		0.00148	1	12/11/2015 20:48	WG834983
Hexachloro-1,3-butadiene	ND		0.00148	1	12/11/2015 20:48	WG834983
Isopropylbenzene	ND		0.00148	1	12/11/2015 20:48	WG834983
p-Isopropyltoluene	ND		0.00148	1	12/11/2015 20:48	WG834983
2-Butanone (MEK)	ND		0.0148	1	12/11/2015 20:48	WG834983
Methylene Chloride	ND		0.00742	1	12/11/2015 20:48	WG834983
4-Methyl-2-pentanone (MIBK)	ND		0.0148	1	12/11/2015 20:48	WG834983
Methyl tert-butyl ether	ND		0.00148	1	12/11/2015 20:48	WG834983
Naphthalene	ND		0.00742	1	12/11/2015 20:48	WG834983
n-Propylbenzene	ND		0.00148	1	12/11/2015 20:48	WG834983
Styrene	ND		0.00148	1	12/11/2015 20:48	WG834983
1,1,1,2-Tetrachloroethane	ND		0.00148	1	12/11/2015 20:48	WG834983

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1,2,2-Tetrachloroethane	ND		0.00148	1	12/11/2015 20:48	WG834983
1,1,2-Trichlorotrifluoroethane	ND		0.00148	1	12/11/2015 20:48	WG834983
Tetrachloroethene	ND		0.00148	1	12/11/2015 20:48	WG834983
Toluene	ND		0.00742	1	12/11/2015 20:48	WG834983
1,2,3-Trichlorobenzene	ND		0.00148	1	12/11/2015 20:48	WG834983
1,2,4-Trichlorobenzene	ND		0.00148	1	12/11/2015 20:48	WG834983
1,1,1-Trichloroethane	ND		0.00148	1	12/11/2015 20:48	WG834983
1,1,2-Trichloroethane	ND		0.00148	1	12/11/2015 20:48	WG834983
Trichloroethene	16.5		0.261	176	12/16/2015 19:23	WG835989
Trichlorofluoromethane	ND		0.00742	1	12/11/2015 20:48	WG834983
1,2,3-Trichloropropane	ND		0.00371	1	12/11/2015 20:48	WG834983
1,2,4-Trimethylbenzene	ND		0.00148	1	12/11/2015 20:48	WG834983
1,2,3-Trimethylbenzene	ND		0.00148	1	12/11/2015 20:48	WG834983
1,3,5-Trimethylbenzene	ND		0.00148	1	12/11/2015 20:48	WG834983
Vinyl chloride	0.0137		0.00148	1	12/11/2015 20:48	WG834983
Xylenes, Total	ND		0.00445	1	12/11/2015 20:48	WG834983
(S) Toluene-d8	*111*		*88.7-115*		*12/11/2015 20:48*	WG834983
(S) Dibromofluoromethane	*106*		*76.3-123*		*12/11/2015 20:48*	WG834983
(S) a,a,a-Trifluorotoluene	*99.2*		*87.2-117*		*12/11/2015 20:48*	WG834983
(S) 4-Bromofluorobenzene	*98.1*		*69.7-129*		*12/11/2015 20:48*	WG834983

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	65.7		1	12/11/2015 07:39	WG834755

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		0.0761	1	12/11/2015 21:08	WG834983
Acrylonitrile	ND		0.0152	1	12/11/2015 21:08	WG834983
Benzene	ND		0.00152	1	12/11/2015 21:08	WG834983
Bromobenzene	ND		0.00152	1	12/11/2015 21:08	WG834983
Bromodichloromethane	ND		0.00152	1	12/11/2015 21:08	WG834983
Bromoform	ND		0.00152	1	12/11/2015 21:08	WG834983
Bromomethane	ND		0.00761	1	12/11/2015 21:08	WG834983
n-Butylbenzene	ND		0.00152	1	12/11/2015 21:08	WG834983
sec-Butylbenzene	ND		0.00152	1	12/11/2015 21:08	WG834983
tert-Butylbenzene	ND		0.00152	1	12/11/2015 21:08	WG834983
Carbon tetrachloride	ND		0.00152	1	12/11/2015 21:08	WG834983
Chlorobenzene	ND		0.00152	1	12/11/2015 21:08	WG834983
Chlorodibromomethane	ND		0.00152	1	12/11/2015 21:08	WG834983
Chloroethane	ND		0.00761	1	12/11/2015 21:08	WG834983
2-Chloroethyl vinyl ether	ND		0.0761	1	12/11/2015 21:08	WG834983
Chloroform	ND		0.00761	1	12/11/2015 21:08	WG834983
Chloromethane	ND		0.00380	1	12/11/2015 21:08	WG834983
2-Chlorotoluene	ND		0.00152	1	12/11/2015 21:08	WG834983
4-Chlorotoluene	ND		0.00152	1	12/11/2015 21:08	WG834983
1,2-Dibromo-3-Chloropropane	ND		0.00761	1	12/11/2015 21:08	WG834983
1,2-Dibromoethane	ND		0.00152	1	12/11/2015 21:08	WG834983
Dibromomethane	ND		0.00152	1	12/11/2015 21:08	WG834983
1,2-Dichlorobenzene	ND		0.00152	1	12/11/2015 21:08	WG834983
1,3-Dichlorobenzene	ND		0.00152	1	12/11/2015 21:08	WG834983
1,4-Dichlorobenzene	ND		0.00152	1	12/11/2015 21:08	WG834983
Dichlorodifluoromethane	ND		0.00761	1	12/11/2015 21:08	WG834983
1,1-Dichloroethane	ND		0.00152	1	12/11/2015 21:08	WG834983
1,2-Dichloroethane	ND		0.00152	1	12/11/2015 21:08	WG834983
1,1-Dichloroethene	ND		0.00152	1	12/11/2015 21:08	WG834983
cis-1,2-Dichloroethene	0.0198		0.00152	1	12/11/2015 21:08	WG834983
trans-1,2-Dichloroethene	ND		0.00152	1	12/11/2015 21:08	WG834983
1,2-Dichloropropane	ND		0.00152	1	12/11/2015 21:08	WG834983
1,1-Dichloropropene	ND		0.00152	1	12/11/2015 21:08	WG834983
1,3-Dichloropropane	ND		0.00152	1	12/11/2015 21:08	WG834983
cis-1,3-Dichloropropene	ND		0.00152	1	12/11/2015 21:08	WG834983
trans-1,3-Dichloropropene	ND		0.00152	1	12/11/2015 21:08	WG834983
2,2-Dichloropropane	ND		0.00152	1	12/11/2015 21:08	WG834983
Di-isopropyl ether	ND		0.00152	1	12/11/2015 21:08	WG834983
Ethylbenzene	ND		0.00152	1	12/11/2015 21:08	WG834983
Hexachloro-1,3-butadiene	ND		0.00152	1	12/11/2015 21:08	WG834983
Isopropylbenzene	ND		0.00152	1	12/11/2015 21:08	WG834983
p-Isopropyltoluene	ND		0.00152	1	12/11/2015 21:08	WG834983
2-Butanone (MEK)	ND		0.0152	1	12/11/2015 21:08	WG834983
Methylene Chloride	ND		0.00761	1	12/11/2015 21:08	WG834983
4-Methyl-2-pentanone (MIBK)	ND		0.0152	1	12/11/2015 21:08	WG834983
Methyl tert-butyl ether	ND		0.00152	1	12/11/2015 21:08	WG834983
Naphthalene	ND		0.00761	1	12/11/2015 21:08	WG834983
n-Propylbenzene	ND		0.00152	1	12/11/2015 21:08	WG834983
Styrene	ND		0.00152	1	12/11/2015 21:08	WG834983
1,1,1,2-Tetrachloroethane	ND		0.00152	1	12/11/2015 21:08	WG834983

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1,2,2-Tetrachloroethane	ND		0.00152	1	12/11/2015 21:08	WG834983
1,1,2-Trichlorotrifluoroethane	ND		0.00152	1	12/11/2015 21:08	WG834983
Tetrachloroethene	ND		0.00152	1	12/11/2015 21:08	WG834983
Toluene	ND		0.00761	1	12/11/2015 21:08	WG834983
1,2,3-Trichlorobenzene	ND		0.00152	1	12/11/2015 21:08	WG834983
1,2,4-Trichlorobenzene	ND		0.00152	1	12/11/2015 21:08	WG834983
1,1,1-Trichloroethane	ND		0.00152	1	12/11/2015 21:08	WG834983
1,1,2-Trichloroethane	ND		0.00152	1	12/11/2015 21:08	WG834983
Trichloroethene	4.56		0.146	96.25	12/16/2015 19:42	WG835989
Trichlorofluoromethane	ND		0.00761	1	12/11/2015 21:08	WG834983
1,2,3-Trichloropropane	ND		0.00380	1	12/11/2015 21:08	WG834983
1,2,4-Trimethylbenzene	ND		0.00152	1	12/11/2015 21:08	WG834983
1,2,3-Trimethylbenzene	ND		0.00152	1	12/11/2015 21:08	WG834983
1,3,5-Trimethylbenzene	ND		0.00152	1	12/11/2015 21:08	WG834983
Vinyl chloride	0.00678		0.00152	1	12/11/2015 21:08	WG834983
Xylenes, Total	ND		0.00456	1	12/11/2015 21:08	WG834983
(S) Toluene-d8	*93.7*		*88.7-115*		*12/11/2015 21:08*	WG834983
(S) Dibromofluoromethane	*108*		*76.3-123*		*12/11/2015 21:08*	WG834983
(S) a,a,a-Trifluorotoluene	*84.0*	J2	*87.2-117*		*12/11/2015 21:08*	WG834983
(S) 4-Bromofluorobenzene	*95.7*		*69.7-129*		*12/11/2015 21:08*	WG834983

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Acetone	ND		25.0	1	12/17/2015 06:06	WG835314
Acrylonitrile	ND		2.50	1	12/17/2015 06:06	WG835314
Benzene	ND		0.500	1	12/17/2015 06:06	WG835314
Bromobenzene	ND		0.500	1	12/17/2015 06:06	WG835314
Bromodichloromethane	ND		0.500	1	12/17/2015 06:06	WG835314
Bromochloromethane	ND		0.500	1	12/17/2015 06:06	WG835314
Bromoform	ND		0.500	1	12/17/2015 06:06	WG835314
Bromomethane	ND		0.500	1	12/17/2015 06:06	WG835314
n-Butylbenzene	ND		0.500	1	12/17/2015 06:06	WG835314
sec-Butylbenzene	ND		0.500	1	12/17/2015 06:06	WG835314
tert-Butylbenzene	ND		0.500	1	12/17/2015 06:06	WG835314
Carbon disulfide	ND		0.500	1	12/17/2015 06:06	WG835314
Carbon tetrachloride	ND		0.500	1	12/17/2015 06:06	WG835314
Chlorobenzene	ND		0.500	1	12/17/2015 06:06	WG835314
Chlorodibromomethane	ND		0.500	1	12/17/2015 06:06	WG835314
Chloroethane	ND		0.500	1	12/17/2015 06:06	WG835314
2-Chloroethyl vinyl ether	ND	J4	2.50	1	12/17/2015 06:06	WG835314
Chloroform	ND		0.500	1	12/17/2015 06:06	WG835314
Chloromethane	ND		0.500	1	12/17/2015 06:06	WG835314
2-Chlorotoluene	ND		0.500	1	12/17/2015 06:06	WG835314
4-Chlorotoluene	ND		0.500	1	12/17/2015 06:06	WG835314
1,2-Dibromo-3-Chloropropane	ND		1.00	1	12/17/2015 06:06	WG835314
1,2-Dibromoethane	ND		0.500	1	12/17/2015 06:06	WG835314
Dibromomethane	ND	J4	0.500	1	12/17/2015 06:06	WG835314
1,2-Dichlorobenzene	ND		0.500	1	12/17/2015 06:06	WG835314
1,3-Dichlorobenzene	ND		0.500	1	12/17/2015 06:06	WG835314
1,4-Dichlorobenzene	ND		0.500	1	12/17/2015 06:06	WG835314
Dichlorodifluoromethane	ND		0.500	1	12/17/2015 06:06	WG835314
1,1-Dichloroethane	ND		0.500	1	12/17/2015 06:06	WG835314
1,2-Dichloroethane	ND		0.500	1	12/17/2015 06:06	WG835314
1,1-Dichloroethene	ND		0.500	1	12/17/2015 06:06	WG835314
cis-1,2-Dichloroethene	1.52		0.500	1	12/17/2015 06:06	WG835314
trans-1,2-Dichloroethene	ND		0.500	1	12/17/2015 06:06	WG835314
1,2-Dichloropropane	ND		0.500	1	12/17/2015 06:06	WG835314
1,1-Dichloropropene	ND		0.500	1	12/17/2015 06:06	WG835314
1,3-Dichloropropane	ND		0.500	1	12/17/2015 06:06	WG835314
cis-1,3-Dichloropropene	ND		0.500	1	12/17/2015 06:06	WG835314
trans-1,3-Dichloropropene	ND		0.500	1	12/17/2015 06:06	WG835314
trans-1,4-Dichloro-2-butene	ND		5.00	1	12/17/2015 06:06	WG835314
2,2-Dichloropropane	ND		0.500	1	12/17/2015 06:06	WG835314
Di-isopropyl ether	ND		0.500	1	12/17/2015 06:06	WG835314
Ethylbenzene	ND		0.500	1	12/17/2015 06:06	WG835314
Hexachloro-1,3-butadiene	ND		1.00	1	12/17/2015 06:06	WG835314
2-Hexanone	ND		2.50	1	12/17/2015 06:06	WG835314
n-Hexane	ND		1.00	1	12/17/2015 06:06	WG835314
Iodomethane	ND		10.0	1	12/17/2015 06:06	WG835314
Isopropylbenzene	ND		0.500	1	12/17/2015 06:06	WG835314
p-Isopropyltoluene	ND		0.500	1	12/17/2015 06:06	WG835314
2-Butanone (MEK)	ND		2.50	1	12/17/2015 06:06	WG835314
Methylene Chloride	ND		2.50	1	12/17/2015 06:06	WG835314
4-Methyl-2-pentanone (MIBK)	ND		2.50	1	12/17/2015 06:06	WG835314
Methyl tert-butyl ether	ND		0.500	1	12/17/2015 06:06	WG835314
Naphthalene	ND		0.500	1	12/17/2015 06:06	WG835314
n-Propylbenzene	ND		0.500	1	12/17/2015 06:06	WG835314
Styrene	ND		0.500	1	12/17/2015 06:06	WG835314
1,1,1,2-Tetrachloroethane	ND		0.500	1	12/17/2015 06:06	WG835314

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
1,1,2,2-Tetrachloroethane	ND		0.500	1	12/17/2015 06:06	WG835314
1,1,2-Trichlorotrifluoroethane	ND		0.500	1	12/17/2015 06:06	WG835314
Tetrachloroethene	ND		0.500	1	12/17/2015 06:06	WG835314
Toluene	ND		0.500	1	12/17/2015 06:06	WG835314
1,2,3-Trichlorobenzene	ND		0.500	1	12/17/2015 06:06	WG835314
1,2,4-Trichlorobenzene	ND		0.500	1	12/17/2015 06:06	WG835314
1,1,1-Trichloroethane	ND		0.500	1	12/17/2015 06:06	WG835314
1,1,2-Trichloroethane	ND		0.500	1	12/17/2015 06:06	WG835314
Trichloroethene	4.87		0.500	1	12/17/2015 06:06	WG835314
Trichlorofluoromethane	ND		0.500	1	12/17/2015 06:06	WG835314
1,2,3-Trichloropropane	ND		2.50	1	12/17/2015 06:06	WG835314
1,2,4-Trimethylbenzene	ND		0.500	1	12/17/2015 06:06	WG835314
1,2,3-Trimethylbenzene	ND		0.500	1	12/17/2015 06:06	WG835314
1,3,5-Trimethylbenzene	ND		0.500	1	12/17/2015 06:06	WG835314
Vinyl acetate	ND		2.50	1	12/17/2015 06:06	WG835314
Vinyl chloride	ND		0.500	1	12/17/2015 06:06	WG835314
Xylenes, Total	ND		1.50	1	12/17/2015 06:06	WG835314
(S) Toluene-d8	*101*		*90.0-115*		*12/17/2015 06:06*	WG835314
(S) Dibromofluoromethane	*102*		*79.0-121*		*12/17/2015 06:06*	WG835314
(S) 4-Bromofluorobenzene	*93.6*		*80.1-120*		*12/17/2015 06:06*	WG835314

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Acetone	ND		25.0	1	12/17/2015 21:21	WG834841
Acrylonitrile	ND		2.50	1	12/17/2015 21:21	WG834841
Benzene	ND		0.500	1	12/17/2015 21:21	WG834841
Bromobenzene	ND		0.500	1	12/17/2015 21:21	WG834841
Bromodichloromethane	ND		0.500	1	12/17/2015 21:21	WG834841
Bromochloromethane	ND		0.500	1	12/17/2015 21:21	WG834841
Bromoform	ND		0.500	1	12/17/2015 21:21	WG834841
Bromomethane	ND		0.500	1	12/17/2015 21:21	WG834841
n-Butylbenzene	ND		0.500	1	12/17/2015 21:21	WG834841
sec-Butylbenzene	ND		0.500	1	12/17/2015 21:21	WG834841
tert-Butylbenzene	ND		0.500	1	12/17/2015 21:21	WG834841
Carbon disulfide	ND		0.500	1	12/17/2015 21:21	WG834841
Carbon tetrachloride	ND		0.500	1	12/17/2015 21:21	WG834841
Chlorobenzene	ND		0.500	1	12/17/2015 21:21	WG834841
Chlorodibromomethane	ND		0.500	1	12/17/2015 21:21	WG834841
Chloroethane	ND		0.500	1	12/17/2015 21:21	WG834841
2-Chloroethyl vinyl ether	ND	J4	2.50	1	12/18/2015 18:55	WG836587
Chloroform	ND		0.500	1	12/17/2015 21:21	WG834841
Chloromethane	ND		0.500	1	12/17/2015 21:21	WG834841
2-Chlorotoluene	ND		0.500	1	12/17/2015 21:21	WG834841
4-Chlorotoluene	ND		0.500	1	12/17/2015 21:21	WG834841
1,2-Dibromo-3-Chloropropane	ND		1.00	1	12/17/2015 21:21	WG834841
1,2-Dibromoethane	ND		0.500	1	12/17/2015 21:21	WG834841
Dibromomethane	ND		0.500	1	12/17/2015 21:21	WG834841
1,2-Dichlorobenzene	ND		0.500	1	12/17/2015 21:21	WG834841
1,3-Dichlorobenzene	ND		0.500	1	12/17/2015 21:21	WG834841
1,4-Dichlorobenzene	ND		0.500	1	12/17/2015 21:21	WG834841
Dichlorodifluoromethane	ND		0.500	1	12/17/2015 21:21	WG834841
1,1-Dichloroethane	ND		0.500	1	12/17/2015 21:21	WG834841
1,2-Dichloroethane	ND		0.500	1	12/17/2015 21:21	WG834841
1,1-Dichloroethene	ND		0.500	1	12/17/2015 21:21	WG834841
cis-1,2-Dichloroethene	10.4		0.500	1	12/17/2015 21:21	WG834841
trans-1,2-Dichloroethene	ND		0.500	1	12/17/2015 21:21	WG834841
1,2-Dichloropropane	ND		0.500	1	12/17/2015 21:21	WG834841
1,1-Dichloropropene	ND		0.500	1	12/17/2015 21:21	WG834841
1,3-Dichloropropane	ND		0.500	1	12/17/2015 21:21	WG834841
cis-1,3-Dichloropropene	ND		0.500	1	12/17/2015 21:21	WG834841
trans-1,3-Dichloropropene	ND		0.500	1	12/17/2015 21:21	WG834841
trans-1,4-Dichloro-2-butene	ND		5.00	1	12/17/2015 21:21	WG834841
2,2-Dichloropropane	ND		0.500	1	12/17/2015 21:21	WG834841
Di-isopropyl ether	ND		0.500	1	12/17/2015 21:21	WG834841
Ethylbenzene	ND		0.500	1	12/17/2015 21:21	WG834841
Hexachloro-1,3-butadiene	ND		1.00	1	12/17/2015 21:21	WG834841
2-Hexanone	ND		2.50	1	12/18/2015 18:55	WG836587
n-Hexane	1.38		1.00	1	12/17/2015 21:21	WG834841
Iodomethane	ND		10.0	1	12/17/2015 21:21	WG834841
Isopropylbenzene	ND		0.500	1	12/17/2015 21:21	WG834841
p-Isopropyltoluene	ND		0.500	1	12/17/2015 21:21	WG834841
2-Butanone (MEK)	ND		2.50	1	12/17/2015 21:21	WG834841
Methylene Chloride	ND		2.50	1	12/18/2015 18:55	WG836587
4-Methyl-2-pentanone (MIBK)	ND		2.50	1	12/17/2015 21:21	WG834841
Methyl tert-butyl ether	ND		0.500	1	12/17/2015 21:21	WG834841
Naphthalene	ND		0.500	1	12/17/2015 21:21	WG834841
n-Propylbenzene	ND		0.500	1	12/17/2015 21:21	WG834841
Styrene	ND		0.500	1	12/17/2015 21:21	WG834841
1,1,1,2-Tetrachloroethane	ND		0.500	1	12/17/2015 21:21	WG834841

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
1,1,2,2-Tetrachloroethane	ND		0.500	1	12/17/2015 21:21	WG834841
1,1,2-Trichlorotrifluoroethane	ND		0.500	1	12/17/2015 21:21	WG834841
Tetrachloroethene	ND		0.500	1	12/17/2015 21:21	WG834841
Toluene	ND		0.500	1	12/17/2015 21:21	WG834841
1,2,3-Trichlorobenzene	ND		0.500	1	12/17/2015 21:21	WG834841
1,2,4-Trichlorobenzene	ND		0.500	1	12/17/2015 21:21	WG834841
1,1,1-Trichloroethane	ND		0.500	1	12/17/2015 21:21	WG834841
1,1,2-Trichloroethane	ND		0.500	1	12/17/2015 21:21	WG834841
Trichloroethene	53.5		0.500	1	12/17/2015 21:21	WG834841
Trichlorofluoromethane	ND		0.500	1	12/17/2015 21:21	WG834841
1,2,3-Trichloropropane	ND		2.50	1	12/17/2015 21:21	WG834841
1,2,4-Trimethylbenzene	ND		0.500	1	12/17/2015 21:21	WG834841
1,2,3-Trimethylbenzene	ND		0.500	1	12/17/2015 21:21	WG834841
1,3,5-Trimethylbenzene	ND		0.500	1	12/17/2015 21:21	WG834841
Vinyl acetate	ND		2.50	1	12/17/2015 21:21	WG834841
Vinyl chloride	ND		0.500	1	12/17/2015 21:21	WG834841
Xylenes, Total	ND		1.50	1	12/17/2015 21:21	WG834841
(S) Toluene-d8	*103*		*90.0-115*		*12/17/2015 21:21*	WG834841
(S) Dibromofluoromethane	*103*		*79.0-121*		*12/17/2015 21:21*	WG834841
(S) 4-Bromofluorobenzene	*83.3*		*80.1-120*		*12/17/2015 21:21*	WG834841

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	74.3		1	12/12/2015 13:46	WG835149

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		0.0673	1	12/17/2015 09:54	WG835371
Acrylonitrile	ND		0.0135	1	12/17/2015 09:54	WG835371
Benzene	ND		0.00135	1	12/17/2015 09:54	WG835371
Bromobenzene	ND		0.00135	1	12/17/2015 09:54	WG835371
Bromodichloromethane	ND		0.00135	1	12/17/2015 09:54	WG835371
Bromoform	ND		0.00135	1	12/17/2015 09:54	WG835371
Bromomethane	ND		0.00673	1	12/17/2015 09:54	WG835371
n-Butylbenzene	ND		0.00135	1	12/17/2015 09:54	WG835371
sec-Butylbenzene	ND		0.00135	1	12/17/2015 09:54	WG835371
tert-Butylbenzene	ND		0.00135	1	12/17/2015 09:54	WG835371
Carbon tetrachloride	ND		0.00135	1	12/17/2015 09:54	WG835371
Chlorobenzene	ND		0.00135	1	12/17/2015 09:54	WG835371
Chlorodibromomethane	ND		0.00135	1	12/17/2015 09:54	WG835371
Chloroethane	ND		0.00673	1	12/17/2015 09:54	WG835371
2-Chloroethyl vinyl ether	ND		0.0673	1	12/17/2015 09:54	WG835371
Chloroform	ND		0.00673	1	12/17/2015 09:54	WG835371
Chloromethane	ND		0.00337	1	12/17/2015 09:54	WG835371
2-Chlorotoluene	ND		0.00135	1	12/17/2015 09:54	WG835371
4-Chlorotoluene	ND		0.00135	1	12/17/2015 09:54	WG835371
1,2-Dibromo-3-Chloropropane	ND		0.00673	1	12/17/2015 09:54	WG835371
1,2-Dibromoethane	ND		0.00135	1	12/17/2015 09:54	WG835371
Dibromomethane	ND		0.00135	1	12/17/2015 09:54	WG835371
1,2-Dichlorobenzene	ND		0.00135	1	12/17/2015 09:54	WG835371
1,3-Dichlorobenzene	ND		0.00135	1	12/17/2015 09:54	WG835371
1,4-Dichlorobenzene	ND		0.00135	1	12/17/2015 09:54	WG835371
Dichlorodifluoromethane	ND		0.00673	1	12/17/2015 09:54	WG835371
1,1-Dichloroethane	ND		0.00135	1	12/17/2015 09:54	WG835371
1,2-Dichloroethane	ND		0.00135	1	12/17/2015 09:54	WG835371
1,1-Dichloroethene	ND	J4	0.00135	1	12/17/2015 09:54	WG835371
cis-1,2-Dichloroethene	ND		0.00135	1	12/17/2015 09:54	WG835371
trans-1,2-Dichloroethene	ND		0.00135	1	12/17/2015 09:54	WG835371
1,2-Dichloropropane	ND		0.00135	1	12/17/2015 09:54	WG835371
1,1-Dichloropropene	ND		0.00135	1	12/17/2015 09:54	WG835371
1,3-Dichloropropane	ND		0.00135	1	12/17/2015 09:54	WG835371
cis-1,3-Dichloropropene	ND		0.00135	1	12/17/2015 09:54	WG835371
trans-1,3-Dichloropropene	ND		0.00135	1	12/17/2015 09:54	WG835371
2,2-Dichloropropane	ND		0.00135	1	12/17/2015 09:54	WG835371
Di-isopropyl ether	ND		0.00135	1	12/17/2015 09:54	WG835371
Ethylbenzene	ND		0.00135	1	12/17/2015 09:54	WG835371
Hexachloro-1,3-butadiene	ND		0.00135	1	12/17/2015 09:54	WG835371
Isopropylbenzene	ND		0.00135	1	12/17/2015 09:54	WG835371
p-Isopropyltoluene	ND		0.00135	1	12/17/2015 09:54	WG835371
2-Butanone (MEK)	ND		0.0135	1	12/17/2015 09:54	WG835371
Methylene Chloride	ND		0.00673	1	12/17/2015 09:54	WG835371
4-Methyl-2-pentanone (MIBK)	ND		0.0135	1	12/17/2015 09:54	WG835371
Methyl tert-butyl ether	ND		0.00135	1	12/17/2015 09:54	WG835371
Naphthalene	ND		0.00673	1	12/17/2015 09:54	WG835371
n-Propylbenzene	ND		0.00135	1	12/17/2015 09:54	WG835371
Styrene	ND		0.00135	1	12/17/2015 09:54	WG835371
1,1,1,2-Tetrachloroethane	ND		0.00135	1	12/17/2015 09:54	WG835371

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1,2,2-Tetrachloroethane	ND		0.00135	1	12/17/2015 09:54	WG835371
1,1,2-Trichlorotrifluoroethane	ND		0.00135	1	12/17/2015 09:54	WG835371
Tetrachloroethene	ND		0.00135	1	12/17/2015 09:54	WG835371
Toluene	ND		0.00673	1	12/17/2015 09:54	WG835371
1,2,3-Trichlorobenzene	ND		0.00135	1	12/17/2015 09:54	WG835371
1,2,4-Trichlorobenzene	ND		0.00135	1	12/17/2015 09:54	WG835371
1,1,1-Trichloroethane	ND		0.00135	1	12/17/2015 09:54	WG835371
1,1,2-Trichloroethane	ND		0.00135	1	12/17/2015 09:54	WG835371
Trichloroethene	0.00385		0.00135	1	12/17/2015 09:54	WG835371
Trichlorofluoromethane	ND		0.00673	1	12/17/2015 09:54	WG835371
1,2,3-Trichloropropane	ND		0.00337	1	12/17/2015 09:54	WG835371
1,2,4-Trimethylbenzene	ND		0.00135	1	12/17/2015 09:54	WG835371
1,2,3-Trimethylbenzene	ND		0.00135	1	12/17/2015 09:54	WG835371
1,3,5-Trimethylbenzene	ND		0.00135	1	12/17/2015 09:54	WG835371
Vinyl chloride	ND		0.00135	1	12/17/2015 09:54	WG835371
Xylenes, Total	ND		0.00404	1	12/17/2015 09:54	WG835371
(S) Toluene-d8	*96.4*		*88.7-115*		*12/17/2015 09:54*	WG835371
(S) Dibromofluoromethane	*106*		*76.3-123*		*12/17/2015 09:54*	WG835371
(S) a,a,a-Trifluorotoluene	*105*		*87.2-117*		*12/17/2015 09:54*	WG835371
(S) 4-Bromofluorobenzene	*96.0*		*69.7-129*		*12/17/2015 09:54*	WG835371

Method Blank (MB)

(MB) 12/11/15 07:19

Analyte	MB Result %	MB Qualifier	MB RDL %
Total Solids	0.000900		

L805690-05 Original Sample (OS) • Duplicate (DUP)

(OS) 12/11/15 07:22 • (DUP) 12/11/15 07:22

Analyte	Original Result %	DUP Result %	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Total Solids	78.2	78.5	1	0.437		5

Laboratory Control Sample (LCS)

(LCS) 12/11/15 07:19

Analyte	Spike Amount %	LCS Result %	LCS Rec. %	Rec. Limits %	LCS Qualifier
Total Solids	50.0	49.7	99.5	85.0-115	

Method Blank (MB)

(MB) 12/11/15 07:24

Analyte	MB Result	MB Qualifier	MB RDL
	%		%
Total Solids	0.000900		

L805690-06 Original Sample (OS) • Duplicate (DUP)

(OS) 12/11/15 07:24 • (DUP) 12/11/15 07:24

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	%	%		%		%
Total Solids	75.1	74.9	1	0.184		5

Laboratory Control Sample (LCS)

(LCS) 12/11/15 07:24

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	%	%	%	%	
Total Solids	50.0	49.9	99.9	85.0-115	

Method Blank (MB)

(MB) 12/11/15 07:36

Analyte	MB Result	MB Qualifier	MB RDL
	%		%
Total Solids	0.00120		

L805690-10 Original Sample (OS) • Duplicate (DUP)

(OS) 12/11/15 07:36 • (DUP) 12/11/15 07:37

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	%	%		%		%
Total Solids	71.5	71.4	1	0.168		5

Laboratory Control Sample (LCS)

(LCS) 12/11/15 07:36

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	%	%	%	%	
Total Solids	50.0	50.0	99.9	85.0-115	

Method Blank (MB)

(MB) 12/12/15 13:46

Analyte	MB Result	MB Qualifier	MB RDL
	%		%
Total Solids	0.000400		

L805690-21 Original Sample (OS) • Duplicate (DUP)

(OS) 12/12/15 13:46 • (DUP) 12/12/15 13:46

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	%	%		%		%
Total Solids	74.3	74.4	1	0.137		5

Laboratory Control Sample (LCS)

(LCS) 12/12/15 13:46

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	%	%	%	%	
Total Solids	50.0	50.0	100	85.0-115	

Method Blank (MB)

(MB) 12/17/15 19:08

Analyte	MB Result mg/l	MB Qualifier	MB RDL mg/l
Acetone	ND		0.0250
Acrylonitrile	ND		0.00250
Benzene	ND		0.000500
Bromobenzene	ND		0.000500
Bromochloromethane	ND		0.000500
Bromodichloromethane	ND		0.000500
Bromoform	ND		0.000500
Bromomethane	ND		0.000500
n-Butylbenzene	ND		0.000500
Carbon disulfide	ND		0.000500
sec-Butylbenzene	ND		0.000500
tert-Butylbenzene	ND		0.000500
Carbon tetrachloride	ND		0.000500
Chlorobenzene	ND		0.000500
Chlorodibromomethane	ND		0.000500
Chloroethane	ND		0.000500
Chloroform	ND		0.000500
Chloromethane	ND		0.000500
2-Chlorotoluene	ND		0.000500
4-Chlorotoluene	ND		0.000500
1,2-Dibromo-3-Chloropropane	ND		0.00100
1,2-Dibromoethane	ND		0.000500
Dibromomethane	ND		0.000500
1,2-Dichlorobenzene	ND		0.000500
1,3-Dichlorobenzene	ND		0.000500
1,4-Dichlorobenzene	ND		0.000500
Dichlorodifluoromethane	ND		0.000500
1,1-Dichloroethane	ND		0.000500
1,2-Dichloroethane	ND		0.000500
1,1-Dichloroethene	ND		0.000500
cis-1,2-Dichloroethene	ND		0.000500
trans-1,2-Dichloroethene	ND		0.000500
1,2-Dichloropropane	ND		0.000500
trans-1,4-Dichloro-2-butene	ND		0.00500
1,1-Dichloropropene	ND		0.000500
1,3-Dichloropropane	ND		0.000500

Method Blank (MB)

(MB) 12/17/15 19:08

Analyte	MB Result mg/l	MB Qualifier	MB RDL mg/l
cis-1,3-Dichloropropene	ND		0.000500
trans-1,3-Dichloropropene	ND		0.000500
2,2-Dichloropropane	ND		0.000500
Di-isopropyl ether	ND		0.000500
Ethylbenzene	ND		0.000500
n-Hexane	ND		0.00100
Iodomethane	ND		0.0100
Hexachloro-1,3-butadiene	ND		0.00100
Isopropylbenzene	ND		0.000500
p-Isopropyltoluene	ND		0.000500
2-Butanone (MEK)	ND		0.00250
4-Methyl-2-pentanone (MIBK)	ND		0.00250
Methyl tert-butyl ether	ND		0.000500
Naphthalene	ND		0.000500
n-Propylbenzene	ND		0.000500
Styrene	ND		0.000500
1,1,1,2-Tetrachloroethane	ND		0.000500
1,1,2,2-Tetrachloroethane	ND		0.000500
Tetrachloroethene	ND		0.000500
Toluene	ND		0.000500
Vinyl acetate	ND		0.00250
1,1,2-Trichlorotrifluoroethane	ND		0.000500
1,2,3-Trichlorobenzene	ND		0.000500
1,2,4-Trichlorobenzene	ND		0.000500
1,1,1-Trichloroethane	ND		0.000500
1,1,2-Trichloroethane	ND		0.000500
Trichloroethene	ND		0.000500
Trichlorofluoromethane	ND		0.000500
1,2,3-Trichloropropane	ND		0.00250
1,2,3-Trimethylbenzene	ND		0.000500
1,2,4-Trimethylbenzene	ND		0.000500
1,3,5-Trimethylbenzene	ND		0.000500
Vinyl chloride	ND		0.000500
Xylenes, Total	ND		0.00150
(S) Toluene-d8	*102*		*90.0-115*
(S) Dibromofluoromethane	*100*		*79.0-121*

Method Blank (MB)

(MB) 12/17/15 19:08

Analyte	MB Result mg/l	MB Qualifier	MB RDL mg/l
(S) 4-Bromofluorobenzene	*84.6*		*80.1-120*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 12/17/15 17:57 • (LCSD) 12/17/15 18:14

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Bromochloromethane	0.0250	0.0265	0.0247	106	98.7	78.9-123			7.21	20
Carbon disulfide	0.0250	0.0271	0.0266	108	106	53.0-134			1.80	20
Acetone	0.125	0.116	0.119	93.1	94.9	28.7-175			1.91	20.9
Acrylonitrile	0.125	0.149	0.153	120	122	58.2-145			2.25	20
Benzene	0.0250	0.0265	0.0263	106	105	73.0-122			0.840	20
Bromobenzene	0.0250	0.0241	0.0248	96.4	99.1	81.5-115			2.75	20
Bromodichloromethane	0.0250	0.0270	0.0259	108	103	75.5-121			4.41	20
Bromoform	0.0250	0.0268	0.0278	107	111	71.5-131			3.38	20
Bromomethane	0.0250	0.0279	0.0274	112	110	22.4-187			1.87	20
n-Butylbenzene	0.0250	0.0262	0.0277	105	111	75.9-134			5.54	20
sec-Butylbenzene	0.0250	0.0243	0.0261	97.0	104	80.6-126			7.19	20
trans-1,4-Dichloro-2-butene	0.0250	0.0240	0.0265	96.1	106	58.3-129			9.99	20
tert-Butylbenzene	0.0250	0.0245	0.0265	98.1	106	79.3-127			7.79	20
Carbon tetrachloride	0.0250	0.0284	0.0283	114	113	70.9-129			0.610	20
Chlorobenzene	0.0250	0.0246	0.0257	98.4	103	79.7-122			4.21	20
Chlorodibromomethane	0.0250	0.0256	0.0262	102	105	78.2-124			2.45	20
Chloroethane	0.0250	0.0242	0.0232	96.8	92.7	41.2-153			4.24	20
n-Hexane	0.0250	0.0290	0.0283	116	113	59.5-132			2.67	20
Chloroform	0.0250	0.0259	0.0258	104	103	73.2-125			0.520	20
Iodomethane	0.125	0.157	0.156	126	124	64.6-137			1.18	20
Chloromethane	0.0250	0.0305	0.0301	122	120	55.8-134			1.44	20
2-Chlorotoluene	0.0250	0.0246	0.0261	98.3	104	76.4-125			5.95	20
4-Chlorotoluene	0.0250	0.0243	0.0257	97.0	103	81.5-121			5.64	20
1,2-Dibromo-3-Chloropropane	0.0250	0.0238	0.0256	95.2	102	64.8-131			7.33	20
1,2-Dibromoethane	0.0250	0.0249	0.0253	99.5	101	79.8-122			1.53	20
Dibromomethane	0.0250	0.0272	0.0266	109	107	79.5-118			2.03	20
1,2-Dichlorobenzene	0.0250	0.0260	0.0263	104	105	84.7-118			1.33	20
1,3-Dichlorobenzene	0.0250	0.0240	0.0246	96.1	98.6	77.6-127			2.59	20
1,4-Dichlorobenzene	0.0250	0.0249	0.0254	99.6	102	82.2-114			1.94	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 12/17/15 17:57 • (LCSD) 12/17/15 18:14

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Dichlorodifluoromethane	0.0250	0.0256	0.0242	103	96.8	56.0-134			5.79	20
1,1-Dichloroethane	0.0250	0.0275	0.0273	110	109	71.7-127			0.850	20
1,2-Dichloroethane	0.0250	0.0233	0.0234	93.2	93.6	65.3-126			0.360	20
1,1-Dichloroethene	0.0250	0.0242	0.0238	96.7	95.1	59.9-137			1.67	20
cis-1,2-Dichloroethene	0.0250	0.0263	0.0259	105	103	77.3-122			1.59	20
trans-1,2-Dichloroethene	0.0250	0.0263	0.0259	105	104	72.6-125			1.66	20
1,2-Dichloropropane	0.0250	0.0298	0.0296	119	118	77.4-125			0.870	20
1,1-Dichloropropene	0.0250	0.0268	0.0264	107	106	72.5-127			1.20	20
1,3-Dichloropropane	0.0250	0.0243	0.0254	97.2	102	80.6-115			4.37	20
cis-1,3-Dichloropropene	0.0250	0.0293	0.0284	117	114	77.7-124			3.35	20
trans-1,3-Dichloropropene	0.0250	0.0279	0.0271	111	109	73.5-127			2.65	20
2,2-Dichloropropane	0.0250	0.0286	0.0289	115	116	61.3-134			0.830	20
Di-isopropyl ether	0.0250	0.0304	0.0299	122	120	65.1-135			1.70	20
Vinyl acetate	0.125	0.173	0.170	138	136	41.7-159			1.58	20
Ethylbenzene	0.0250	0.0252	0.0263	101	105	80.9-121			3.99	20
Hexachloro-1,3-butadiene	0.0250	0.0238	0.0257	95.0	103	73.7-133			7.86	20
Isopropylbenzene	0.0250	0.0245	0.0260	97.9	104	81.6-124			6.19	20
p-Isopropyltoluene	0.0250	0.0241	0.0262	96.3	105	77.6-129			8.39	20
2-Butanone (MEK)	0.125	0.156	0.161	125	129	46.4-155			3.53	20
4-Methyl-2-pentanone (MIBK)	0.125	0.135	0.137	108	109	63.3-138			1.32	20
Methyl tert-butyl ether	0.0250	0.0244	0.0240	97.4	96.0	70.1-125			1.42	20
Naphthalene	0.0250	0.0215	0.0229	85.8	91.5	69.7-134			6.48	20
n-Propylbenzene	0.0250	0.0246	0.0260	98.4	104	81.9-122			5.56	20
Styrene	0.0250	0.0230	0.0237	92.0	94.6	79.9-124			2.77	20
1,1,1,2-Tetrachloroethane	0.0250	0.0254	0.0266	101	106	78.5-125			4.68	20
1,1,2,2-Tetrachloroethane	0.0250	0.0247	0.0261	98.8	104	79.3-123			5.48	20
Tetrachloroethene	0.0250	0.0252	0.0253	101	101	73.5-130			0.540	20
Toluene	0.0250	0.0266	0.0258	106	103	77.9-116			2.99	20
1,1,2-Trichlorotrifluoroethane	0.0250	0.0267	0.0273	107	109	62.0-141			2.47	20
1,2,3-Trichlorobenzene	0.0250	0.0223	0.0239	89.2	95.5	75.7-134			6.81	20
1,2,4-Trichlorobenzene	0.0250	0.0239	0.0240	95.8	96.0	76.1-136			0.200	20
1,1,1-Trichloroethane	0.0250	0.0261	0.0264	104	105	71.1-129			0.960	20
1,1,2-Trichloroethane	0.0250	0.0241	0.0249	96.5	99.7	81.6-120			3.26	20
Trichloroethene	0.0250	0.0266	0.0271	106	108	79.5-121			1.79	20
Trichlorofluoromethane	0.0250	0.0258	0.0258	103	103	49.1-157			0.0600	20
1,2,3-Trichloropropane	0.0250	0.0231	0.0248	92.3	99.2	74.9-124			7.14	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 12/17/15 17:57 • (LCSD) 12/17/15 18:14

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,2,3-Trimethylbenzene	0.0250	0.0260	0.0270	104	108	79.9-118			3.88	20
1,2,4-Trimethylbenzene	0.0250	0.0242	0.0254	96.8	101	79.0-122			4.62	20
1,3,5-Trimethylbenzene	0.0250	0.0247	0.0262	98.7	105	81.0-123			6.12	20
Vinyl chloride	0.0250	0.0250	0.0237	100	94.9	61.5-134			5.20	20
Xylenes, Total	0.0750	0.0745	0.0784	99.3	105	79.2-122			5.14	20
(S) Toluene-d8				*105*	*104*	*90.0-115*				
(S) Dibromofluoromethane				*97.4*	*97.0*	*79.0-121*				
(S) 4-Bromofluorobenzene				*86.6*	*90.9*	*80.1-120*				

L805747-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 12/17/15 21:39 • (MS) 12/17/15 19:52 • (MSD) 12/17/15 20:11

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Bromochloromethane	0.0250	ND	0.0219	0.0228	87.8	91.4	1	74.4-128			4.02	20
Carbon disulfide	0.0250	ND	0.0112	0.0112	44.9	44.8	1	34.9-138			0.280	20
Acetone	0.125	0.000939	0.0462	0.0534	36.2	42.0	1	25.0-156			14.4	21.5
trans-1,4-Dichloro-2-butene	0.0250	ND	0.0242	0.0235	96.7	94.0	1	57.6-136			2.81	20
Acrylonitrile	0.125	ND	0.133	0.141	107	113	1	55.9-161			5.54	20
Benzene	0.0250	ND	0.0219	0.0226	87.7	90.6	1	58.6-133			3.24	20
Bromobenzene	0.0250	ND	0.0224	0.0229	89.8	91.6	1	70.6-125			1.99	20
Bromodichloromethane	0.0250	ND	0.0248	0.0248	99.3	99.1	1	69.2-127			0.180	20
Bromoform	0.0250	ND	0.0258	0.0262	103	105	1	66.3-140			1.66	20
n-Hexane	0.0250	ND	0.0145	0.0162	58.0	64.8	1	38.7-146			11.2	20
Bromomethane	0.0250	ND	0.0196	0.0201	78.3	80.5	1	16.6-183			2.80	20.5
Iodomethane	0.125	ND	0.109	0.109	87.0	87.2	1	55.2-140			0.250	20
n-Butylbenzene	0.0250	ND	0.0255	0.0261	102	104	1	64.8-145			2.40	20
sec-Butylbenzene	0.0250	ND	0.0238	0.0238	95.3	95.2	1	66.8-139			0.100	20
tert-Butylbenzene	0.0250	ND	0.0237	0.0239	95.0	95.5	1	67.1-138			0.500	20
Carbon tetrachloride	0.0250	ND	0.0256	0.0249	103	99.6	1	60.6-139			2.93	20
Chlorobenzene	0.0250	ND	0.0230	0.0229	91.9	91.5	1	70.1-130			0.420	20
Chlorodibromomethane	0.0250	ND	0.0246	0.0248	98.2	99.2	1	71.6-132			0.990	20
Chloroethane	0.0250	ND	0.0187	0.0189	74.6	75.8	1	33.3-155			1.51	20
Chloroform	0.0250	ND	0.0238	0.0242	95.0	96.9	1	66.1-133			1.92	20
Chloromethane	0.0250	ND	0.0200	0.0197	79.9	78.8	1	40.7-139			1.42	20
2-Chlorotoluene	0.0250	ND	0.0238	0.0244	95.0	97.4	1	66.9-134			2.48	20

L805747-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 12/17/15 21:39 • (MS) 12/17/15 19:52 • (MSD) 12/17/15 20:11

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
4-Chlorotoluene	0.0250	ND	0.0236	0.0237	94.2	95.0	1	66.8-134			0.790	20
1,2-Dibromo-3-Chloropropane	0.0250	ND	0.0220	0.0232	88.1	92.8	1	63.9-142			5.18	20.2
1,2-Dibromoethane	0.0250	ND	0.0220	0.0226	88.1	90.2	1	73.8-131			2.36	20
Dibromomethane	0.0250	ND	0.0234	0.0243	93.8	97.3	1	72.8-127			3.65	20
1,2-Dichlorobenzene	0.0250	ND	0.0244	0.0249	97.6	99.6	1	77.4-127			2.09	20
1,3-Dichlorobenzene	0.0250	ND	0.0234	0.0236	93.5	94.4	1	67.9-136			0.900	20
1,4-Dichlorobenzene	0.0250	ND	0.0227	0.0239	91.0	95.5	1	74.4-123			4.84	20
Dichlorodifluoromethane	0.0250	ND	0.0188	0.0184	75.1	73.6	1	42.2-146			2.05	20
1,1-Dichloroethane	0.0250	ND	0.0236	0.0241	94.4	96.3	1	64.0-134			1.98	20
1,2-Dichloroethane	0.0250	ND	0.0209	0.0212	83.5	84.6	1	60.7-132			1.30	20
Vinyl acetate	0.125	ND	0.152	0.158	122	126	1	42.8-181			3.59	20
1,1-Dichloroethene	0.0250	ND	0.0172	0.0174	68.9	69.8	1	48.8-144			1.23	20
cis-1,2-Dichloroethene	0.0250	ND	0.0229	0.0228	91.5	91.2	1	60.6-136			0.370	20
trans-1,2-Dichloroethene	0.0250	ND	0.0198	0.0199	79.1	79.5	1	61.0-132			0.450	20
1,2-Dichloropropane	0.0250	ND	0.0270	0.0265	108	106	1	69.7-130			1.69	20
1,1-Dichloropropene	0.0250	ND	0.0210	0.0213	83.8	85.0	1	61.5-136			1.40	20
1,3-Dichloropropane	0.0250	ND	0.0228	0.0228	91.1	91.0	1	74.3-123			0.0600	20
cis-1,3-Dichloropropene	0.0250	ND	0.0259	0.0256	104	103	1	71.1-129			1.11	20
trans-1,3-Dichloropropene	0.0250	ND	0.0254	0.0256	102	103	1	66.3-136			0.910	20
2,2-Dichloropropane	0.0250	ND	0.0277	0.0263	111	105	1	54.9-142			5.18	20
Di-isopropyl ether	0.0250	ND	0.0275	0.0282	110	113	1	59.9-140			2.66	20
Ethylbenzene	0.0250	ND	0.0227	0.0230	90.7	91.8	1	62.7-136			1.25	20
Hexachloro-1,3-butadiene	0.0250	ND	0.0227	0.0236	90.9	94.5	1	61.1-144			3.85	20.1
Isopropylbenzene	0.0250	ND	0.0237	0.0235	94.7	94.1	1	67.4-136			0.610	20
p-Isopropyltoluene	0.0250	ND	0.0241	0.0239	96.5	95.8	1	62.8-143			0.800	20
2-Butanone (MEK)	0.125	ND	0.0971	0.104	77.7	83.2	1	45.0-156			6.91	20.8
4-Methyl-2-pentanone (MIBK)	0.125	ND	0.124	0.134	99.4	107	1	60.7-150			7.53	20
Methyl tert-butyl ether	0.0250	ND	0.0210	0.0222	84.0	88.7	1	61.4-136			5.42	20
Naphthalene	0.0250	ND	0.0193	0.0216	77.1	86.5	1	61.8-143			11.5	20
n-Propylbenzene	0.0250	ND	0.0238	0.0239	95.3	95.8	1	63.2-139			0.520	20
Styrene	0.0250	ND	0.0211	0.0211	84.4	84.3	1	68.2-133			0.150	20
1,1,1,2-Tetrachloroethane	0.0250	ND	0.0247	0.0251	98.6	101	1	70.5-132			1.88	20
1,1,2,2-Tetrachloroethane	0.0250	ND	0.0239	0.0248	95.6	99.2	1	64.9-145			3.66	20
Tetrachloroethene	0.0250	ND	0.0210	0.0216	83.8	86.5	1	57.4-141			3.12	20
Toluene	0.0250	ND	0.0223	0.0227	89.3	90.8	1	67.8-124			1.63	20
1,1,2-Trichlorotrifluoroethane	0.0250	ND	0.0218	0.0225	87.1	90.0	1	53.7-150			3.24	20

L805747-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 12/17/15 21:39 • (MS) 12/17/15 19:52 • (MSD) 12/17/15 20:11

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
1,2,3-Trichlorobenzene	0.0250	ND	0.0201	0.0217	80.5	86.8	1	65.7-143			7.47	20
1,2,4-Trichlorobenzene	0.0250	ND	0.0223	0.0231	89.3	92.4	1	67.0-146			3.40	20
1,1,1-Trichloroethane	0.0250	ND	0.0231	0.0235	92.4	94.2	1	58.7-134			1.93	20
1,1,2-Trichloroethane	0.0250	ND	0.0231	0.0232	92.4	92.7	1	74.1-130			0.350	20
Trichloroethene	0.0250	ND	0.0231	0.0228	92.6	91.3	1	48.9-148			1.37	20
Trichlorofluoromethane	0.0250	ND	0.0224	0.0218	89.6	87.3	1	39.9-165			2.59	20
1,2,3-Trichloropropane	0.0250	ND	0.0232	0.0227	92.9	90.8	1	71.5-134			2.23	20
1,2,3-Trimethylbenzene	0.0250	ND	0.0237	0.0246	94.6	98.5	1	62.7-133			4.05	20
1,2,4-Trimethylbenzene	0.0250	ND	0.0236	0.0234	94.2	93.5	1	60.5-137			0.730	20
1,3,5-Trimethylbenzene	0.0250	ND	0.0237	0.0236	94.6	94.5	1	67.9-134			0.130	20
Vinyl chloride	0.0250	ND	0.0176	0.0180	70.4	72.0	1	44.3-143			2.15	20
Xylenes, Total	0.0750	ND	0.0692	0.0689	92.2	91.8	1	65.6-133			0.430	20
(S) Toluene-d8					*106*	*104*		*90.0-115*				
(S) Dibromofluoromethane					*98.9*	*101*		*79.0-121*				
(S) 4-Bromofluorobenzene					*89.1*	*86.1*		*80.1-120*				

Method Blank (MB)

(MB) 12/14/15 11:16

Analyte	MB Result mg/kg	MB Qualifier	MB RDL mg/kg
Acetone	ND		0.0500
Acrylonitrile	ND		0.0100
Benzene	ND		0.00100
Bromobenzene	ND		0.00100
Bromodichloromethane	ND		0.00100
Bromoform	ND		0.00100
Bromomethane	ND		0.00500
n-Butylbenzene	ND		0.00100
sec-Butylbenzene	ND		0.00100
tert-Butylbenzene	ND		0.00100
Carbon tetrachloride	ND		0.00100
Chlorobenzene	ND		0.00100
Chlorodibromomethane	ND		0.00100
Chloroethane	ND		0.00500
2-Chloroethyl vinyl ether	ND		0.0500
Chloroform	ND		0.00500
Chloromethane	ND		0.00250
2-Chlorotoluene	ND		0.00100
4-Chlorotoluene	ND		0.00100
1,2-Dibromo-3-Chloropropane	ND		0.00500
1,2-Dibromoethane	ND		0.00100
Dibromomethane	ND		0.00100
1,2-Dichlorobenzene	ND		0.00100
1,3-Dichlorobenzene	ND		0.00100
1,4-Dichlorobenzene	ND		0.00100
Dichlorodifluoromethane	ND		0.00500
1,1-Dichloroethane	ND		0.00100
1,2-Dichloroethane	ND		0.00100
1,1-Dichloroethene	ND		0.00100
cis-1,2-Dichloroethene	ND		0.00100
trans-1,2-Dichloroethene	ND		0.00100
1,2-Dichloropropane	ND		0.00100
1,1-Dichloropropene	ND		0.00100
1,3-Dichloropropane	ND		0.00100
cis-1,3-Dichloropropene	ND		0.00100
trans-1,3-Dichloropropene	ND		0.00100

Method Blank (MB)

(MB) 12/14/15 11:16

Analyte	MB Result mg/kg	MB Qualifier	MB RDL mg/kg
2,2-Dichloropropane	ND		0.00100
Di-isopropyl ether	ND		0.00100
Ethylbenzene	ND		0.00100
Hexachloro-1,3-butadiene	ND		0.00100
Isopropylbenzene	ND		0.00100
p-Isopropyltoluene	ND		0.00100
2-Butanone (MEK)	ND		0.0100
Methylene Chloride	ND		0.00500
4-Methyl-2-pentanone (MIBK)	ND		0.0100
Methyl tert-butyl ether	ND		0.00100
Naphthalene	ND		0.00500
n-Propylbenzene	ND		0.00100
Styrene	ND		0.00100
1,1,1,2-Tetrachloroethane	ND		0.00100
1,1,2,2-Tetrachloroethane	ND		0.00100
Tetrachloroethene	ND		0.00100
Toluene	ND		0.00500
1,1,2-Trichlorotrifluoroethane	ND		0.00100
1,2,3-Trichlorobenzene	ND		0.00100
1,2,4-Trichlorobenzene	ND		0.00100
1,1,1-Trichloroethane	ND		0.00100
1,1,2-Trichloroethane	ND		0.00100
Trichloroethene	ND		0.00100
Trichlorofluoromethane	ND		0.00500
1,2,3-Trichloropropane	ND		0.00250
1,2,3-Trimethylbenzene	ND		0.00100
1,2,4-Trimethylbenzene	ND		0.00100
1,3,5-Trimethylbenzene	ND		0.00100
Vinyl chloride	ND		0.00100
Xylenes, Total	ND		0.00300
(S) Toluene-d8	*104*		*88.7-115*
(S) Dibromofluoromethane	*99.1*		*76.3-123*
(S) a,a,a-Trifluorotoluene	*106*		*87.2-117*
(S) 4-Bromofluorobenzene	*85.9*		*69.7-129*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 12/14/15 10:04 • (LCSD) 12/14/15 10:22

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.119	0.116	95.2	93.1	25.3-178			2.19	22.9
Acrylonitrile	0.125	0.167	0.159	133	127	57.8-143			4.59	20
Benzene	0.0250	0.0272	0.0275	109	110	72.6-120			0.950	20
Bromobenzene	0.0250	0.0245	0.0258	98.1	103	80.3-115			5.01	20
Bromodichloromethane	0.0250	0.0264	0.0267	105	107	75.3-119			1.36	20
Bromoform	0.0250	0.0293	0.0302	117	121	69.1-135			3.31	20
Bromomethane	0.0250	0.0288	0.0292	115	117	23.0-191			1.53	20
n-Butylbenzene	0.0250	0.0271	0.0290	108	116	74.2-134			6.62	20
sec-Butylbenzene	0.0250	0.0253	0.0267	101	107	77.8-129			5.60	20
tert-Butylbenzene	0.0250	0.0258	0.0268	103	107	77.2-129			3.47	20
Carbon tetrachloride	0.0250	0.0282	0.0290	113	116	69.4-129			2.98	20
Chlorobenzene	0.0250	0.0258	0.0260	103	104	78.9-122			0.640	20
Chlorodibromomethane	0.0250	0.0261	0.0274	104	110	76.4-126			4.88	20
Chloroethane	0.0250	0.0251	0.0250	101	100	47.2-147			0.600	20
2-Chloroethyl vinyl ether	0.125	0.837	0.705	670	564	16.7-162	J4	J4	17.1	23.7
Chloroform	0.0250	0.0260	0.0261	104	105	73.3-122			0.720	20
Chloromethane	0.0250	0.0324	0.0319	129	127	53.1-135			1.54	20
2-Chlorotoluene	0.0250	0.0257	0.0267	103	107	74.6-127			4.00	20
4-Chlorotoluene	0.0250	0.0252	0.0262	101	105	79.5-123			3.69	20
1,2-Dibromo-3-Chloropropane	0.0250	0.0256	0.0307	102	123	64.9-131			18.1	20
1,2-Dibromoethane	0.0250	0.0266	0.0267	107	107	78.7-123			0.150	20
Dibromomethane	0.0250	0.0277	0.0274	111	110	78.5-117			1.23	20
1,2-Dichlorobenzene	0.0250	0.0254	0.0290	102	116	83.6-119			13.2	20
1,3-Dichlorobenzene	0.0250	0.0254	0.0265	102	106	75.9-129			3.99	20
1,4-Dichlorobenzene	0.0250	0.0246	0.0268	98.4	107	81.0-115			8.35	20
Dichlorodifluoromethane	0.0250	0.0256	0.0255	103	102	50.9-139			0.450	20
1,1-Dichloroethane	0.0250	0.0280	0.0278	112	111	71.7-125			0.650	20
1,2-Dichloroethane	0.0250	0.0233	0.0232	93.3	92.8	67.2-121			0.580	20
1,1-Dichloroethene	0.0250	0.0236	0.0236	94.5	94.6	60.6-133			0.0800	20
cis-1,2-Dichloroethene	0.0250	0.0272	0.0271	109	108	76.1-121			0.460	20
trans-1,2-Dichloroethene	0.0250	0.0265	0.0265	106	106	70.7-124			0.290	20
1,2-Dichloropropane	0.0250	0.0306	0.0304	122	122	76.9-123			0.790	20
1,1-Dichloropropene	0.0250	0.0276	0.0282	110	113	71.2-126			2.42	20
1,3-Dichloropropane	0.0250	0.0250	0.0264	100	106	80.3-114			5.56	20
cis-1,3-Dichloropropene	0.0250	0.0298	0.0298	119	119	77.3-123			0.000	20
trans-1,3-Dichloropropene	0.0250	0.0278	0.0284	111	114	73.0-127			2.13	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 12/14/15 10:04 • (LCSD) 12/14/15 10:22

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
2,2-Dichloropropane	0.0250	0.0311	0.0311	124	124	61.9-132			0.0600	20
Di-isopropyl ether	0.0250	0.0318	0.0311	127	124	67.2-131			2.29	20
Ethylbenzene	0.0250	0.0261	0.0266	104	107	78.6-124			2.24	20
Hexachloro-1,3-butadiene	0.0250	0.0257	0.0287	103	115	69.2-136			11.0	20
Isopropylbenzene	0.0250	0.0255	0.0265	102	106	79.4-126			3.68	20
p-Isopropyltoluene	0.0250	0.0260	0.0269	104	108	75.4-132			3.53	20
2-Butanone (MEK)	0.125	0.170	0.169	136	135	44.5-154			0.780	21.3
Methylene Chloride	0.0250	0.0219	0.0222	87.5	88.9	68.2-119			1.61	20
4-Methyl-2-pentanone (MIBK)	0.125	0.143	0.147	115	118	61.1-138			2.97	20
Methyl tert-butyl ether	0.0250	0.0251	0.0233	101	93.2	70.2-122			7.54	20
Naphthalene	0.0250	0.0237	0.0284	94.9	114	69.9-132			17.9	20
n-Propylbenzene	0.0250	0.0257	0.0267	103	107	80.2-124			4.17	20
Styrene	0.0250	0.0236	0.0238	94.3	95.2	79.4-124			0.910	20
1,1,1,2-Tetrachloroethane	0.0250	0.0260	0.0270	104	108	76.7-127			3.49	20
1,1,2,2-Tetrachloroethane	0.0250	0.0262	0.0290	105	116	78.8-124			9.97	20
Tetrachloroethene	0.0250	0.0268	0.0267	107	107	71.1-133			0.0700	20
Toluene	0.0250	0.0265	0.0269	106	108	76.7-116			1.71	20
1,1,2-Trichlorotrifluoroethane	0.0250	0.0274	0.0271	109	109	62.6-138			0.820	20
1,2,3-Trichlorobenzene	0.0250	0.0239	0.0279	95.4	112	72.5-137			15.7	20
1,2,4-Trichlorobenzene	0.0250	0.0257	0.0300	103	120	74.0-137			15.6	20
1,1,1-Trichloroethane	0.0250	0.0267	0.0265	107	106	69.9-127			0.740	20
1,1,2-Trichloroethane	0.0250	0.0249	0.0252	99.6	101	81.9-119			1.15	20
Trichloroethene	0.0250	0.0280	0.0280	112	112	77.2-122			0.210	20
Trichlorofluoromethane	0.0250	0.0257	0.0258	103	103	51.5-151			0.400	20
1,2,3-Trichloropropane	0.0250	0.0246	0.0263	98.3	105	74.0-124			6.86	20
1,2,3-Trimethylbenzene	0.0250	0.0255	0.0276	102	110	79.4-118			7.65	20
1,2,4-Trimethylbenzene	0.0250	0.0251	0.0268	101	107	77.1-124			6.26	20
1,3,5-Trimethylbenzene	0.0250	0.0256	0.0267	103	107	79.0-125			4.15	20
Vinyl chloride	0.0250	0.0261	0.0254	104	101	58.4-134			2.75	20
Xylenes, Total	0.0750	0.0776	0.0798	104	106	78.1-123			2.73	20
(S) Toluene-d8				*104*	*104*	*88.7-115*				
(S) Dibromofluoromethane				*97.5*	*95.3*	*76.3-123*				
(S) a,a,a-Trifluorotoluene				*104*	*106*	*87.2-117*				
(S) 4-Bromofluorobenzene				*91.0*	*91.8*	*69.7-129*				

L805680-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 12/14/15 17:11 • (MS) 12/14/15 17:50 • (MSD) 12/14/15 18:08

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	ND	0.351	0.361	56.1	57.7	5	10.0-130			2.77	31.5
Acrylonitrile	0.125	ND	0.480	0.545	76.8	87.2	5	39.3-152			12.6	27.2
Benzene	0.0250	ND	0.106	0.109	85.0	87.5	5	47.8-131			2.97	22.8
Bromobenzene	0.0250	ND	0.0944	0.103	75.5	82.8	5	40.0-130			9.14	27.4
Bromodichloromethane	0.0250	ND	0.111	0.114	88.7	91.0	5	50.6-128			2.57	22.8
Bromoform	0.0250	ND	0.117	0.123	93.8	98.6	5	43.3-139			4.96	25.9
Bromomethane	0.0250	ND	0.107	0.109	85.4	86.9	5	5.00-189			1.68	26.7
n-Butylbenzene	0.0250	ND	0.0899	0.0973	71.9	77.9	5	23.6-146			7.98	39.2
sec-Butylbenzene	0.0250	ND	0.0960	0.108	76.8	86.3	5	31.0-142			11.6	34.7
tert-Butylbenzene	0.0250	ND	0.104	0.113	83.4	90.7	5	36.9-142			8.36	31.7
Carbon tetrachloride	0.0250	ND	0.115	0.121	91.8	97.0	5	46.0-140			5.49	27.2
Chlorobenzene	0.0250	ND	0.102	0.110	81.7	87.7	5	44.1-134			7.17	25.7
Chlorodibromomethane	0.0250	ND	0.110	0.118	88.2	94.1	5	49.7-134			6.52	24
Chloroethane	0.0250	ND	0.0917	0.0967	73.3	77.3	5	5.00-164			5.29	28.4
2-Chloroethyl vinyl ether	0.125	ND	3.03	2.82	485	451	5	5.00-159	J5	J5	7.41	40
Chloroform	0.0250	ND	0.110	0.112	87.8	89.8	5	51.2-133			2.30	22.8
Chloromethane	0.0250	ND	0.109	0.115	87.1	92.3	5	31.4-141			5.72	24.6
2-Chlorotoluene	0.0250	ND	0.100	0.113	80.2	90.2	5	36.1-137			11.8	28.9
4-Chlorotoluene	0.0250	ND	0.0949	0.102	75.9	81.5	5	35.4-137			7.10	29.8
1,2-Dibromo-3-Chloropropane	0.0250	ND	0.0973	0.111	77.9	88.8	5	40.4-138			13.1	30.8
1,2-Dibromoethane	0.0250	ND	0.0987	0.108	78.9	86.1	5	50.2-133			8.66	23.6
Dibromomethane	0.0250	ND	0.109	0.116	87.3	92.5	5	52.4-128			5.84	23
1,2-Dichlorobenzene	0.0250	ND	0.102	0.104	81.9	83.3	5	34.6-139			1.71	29.9
1,3-Dichlorobenzene	0.0250	ND	0.0954	0.103	76.3	82.5	5	28.4-142			7.81	31.2
1,4-Dichlorobenzene	0.0250	ND	0.0900	0.0954	72.0	76.3	5	35.0-133			5.74	31.1
Dichlorodifluoromethane	0.0250	ND	0.0883	0.0939	70.6	75.2	5	31.2-144			6.19	30.2
1,1-Dichloroethane	0.0250	ND	0.113	0.116	90.1	92.9	5	49.1-136			3.01	22.9
1,2-Dichloroethane	0.0250	ND	0.0937	0.0949	74.9	75.9	5	47.1-129			1.28	22.7
1,1-Dichloroethene	0.0250	ND	0.0858	0.0889	68.6	71.1	5	36.1-142			3.58	25.6
cis-1,2-Dichloroethene	0.0250	ND	0.103	0.109	82.5	87.4	5	50.6-133			5.70	23
trans-1,2-Dichloroethene	0.0250	ND	0.0971	0.103	77.7	82.8	5	43.8-135			6.31	24.8
1,2-Dichloropropane	0.0250	ND	0.123	0.129	98.1	103	5	50.3-134			4.98	22.7
1,1-Dichloropropene	0.0250	ND	0.103	0.107	82.0	85.3	5	43.0-137			3.92	26.4
1,3-Dichloropropane	0.0250	ND	0.0999	0.108	79.9	86.5	5	51.4-127			7.91	23.1
cis-1,3-Dichloropropene	0.0250	ND	0.117	0.122	93.9	97.9	5	48.4-134			4.16	23.6
trans-1,3-Dichloropropene	0.0250	ND	0.117	0.114	93.6	91.5	5	46.6-135			2.24	25.3

L805680-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 12/14/15 17:11 • (MS) 12/14/15 17:50 • (MSD) 12/14/15 18:08

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
2,2-Dichloropropane	0.0250	ND	0.127	0.132	102	105	5	45.2-141			3.34	26.6
Di-isopropyl ether	0.0250	ND	0.124	0.127	99.0	102	5	46.7-140			2.80	23.5
Ethylbenzene	0.0250	ND	0.103	0.111	82.1	89.1	5	44.8-135			8.21	26.9
Hexachloro-1,3-butadiene	0.0250	ND	0.0784	0.0922	62.7	73.8	5	10.0-149			16.2	40
Isopropylbenzene	0.0250	ND	0.102	0.112	81.2	89.2	5	41.9-139			9.39	29.3
p-Isopropyltoluene	0.0250	ND	0.0937	0.107	74.9	85.8	5	27.3-146			13.5	35.1
2-Butanone (MEK)	0.125	ND	0.521	0.548	83.3	87.7	5	23.9-170			5.09	28.3
Methylene Chloride	0.0250	ND	0.0860	0.0901	68.8	72.1	5	46.7-125			4.65	22.2
4-Methyl-2-pentanone (MIBK)	0.125	ND	0.510	0.541	81.6	86.6	5	42.4-146			5.99	26.7
Methyl tert-butyl ether	0.0250	ND	0.0942	0.101	75.4	81.1	5	50.4-131			7.33	24.8
Naphthalene	0.0250	ND	0.0781	0.0897	62.5	71.8	5	18.4-145			13.8	34
n-Propylbenzene	0.0250	ND	0.0950	0.104	76.0	83.2	5	35.2-139			8.98	31.9
Styrene	0.0250	ND	0.0901	0.0961	72.1	76.9	5	39.7-137			6.42	28.2
1,1,1,2-Tetrachloroethane	0.0250	ND	0.111	0.119	88.9	95.6	5	48.8-136			7.26	25.5
1,1,2,2-Tetrachloroethane	0.0250	ND	0.101	0.110	80.8	88.3	5	45.7-140			8.90	26.4
Tetrachloroethene	0.0250	ND	0.0975	0.108	78.0	86.3	5	37.7-140			10.1	29.2
Toluene	0.0250	ND	0.106	0.112	84.6	89.2	5	47.8-127			5.28	24.3
1,1,2-Trichlorotrifluoroethane	0.0250	ND	0.0955	0.104	76.4	83.3	5	35.7-146			8.56	28.8
1,2,3-Trichlorobenzene	0.0250	ND	0.0783	0.0887	62.6	71.0	5	10.0-150			12.5	38.5
1,2,4-Trichlorobenzene	0.0250	ND	0.0770	0.0844	61.6	67.5	5	10.0-153			9.15	39.3
1,1,1-Trichloroethane	0.0250	ND	0.110	0.113	87.6	90.6	5	49.0-138			3.33	25.3
1,1,2-Trichloroethane	0.0250	ND	0.105	0.109	83.6	87.4	5	52.3-132			4.40	23.4
Trichloroethene	0.0250	ND	0.112	0.117	89.8	93.4	5	48.0-132			3.97	24.8
Trichlorofluoromethane	0.0250	ND	0.102	0.105	81.4	84.1	5	12.8-169			3.31	29.7
1,2,3-Trichloropropane	0.0250	ND	0.0960	0.106	76.8	84.9	5	44.4-138			10.0	26.3
1,2,3-Trimethylbenzene	0.0250	ND	0.101	0.105	81.2	83.8	5	41.0-133			3.22	27.6
1,2,4-Trimethylbenzene	0.0250	ND	0.0951	0.105	76.1	83.9	5	32.9-139			9.72	30.6
1,3,5-Trimethylbenzene	0.0250	ND	0.100	0.107	80.3	85.5	5	37.1-138			6.30	30.6
Vinyl chloride	0.0250	ND	0.0894	0.0954	71.5	76.3	5	32.0-146			6.51	26.3
Xylenes, Total	0.0750	ND	0.304	0.331	81.0	88.4	5	42.7-135			8.63	26.6
(S) Toluene-d8					*103*	*104*		*88.7-115*				
(S) Dibromofluoromethane					*96.7*	*95.7*		*76.3-123*				
(S) a,a,a-Trifluorotoluene					*104*	*106*		*87.2-117*				
(S) 4-Bromofluorobenzene					*88.4*	*92.8*		*69.7-129*				

Method Blank (MB)

(MB) 12/11/15 12:39

Analyte	MB Result mg/kg	MB Qualifier	MB RDL mg/kg
Acetone	ND		0.0500
Acrylonitrile	ND		0.0100
Benzene	ND		0.00100
Bromobenzene	ND		0.00100
Bromodichloromethane	ND		0.00100
Bromoform	ND		0.00100
Bromomethane	ND		0.00500
n-Butylbenzene	ND		0.00100
sec-Butylbenzene	ND		0.00100
tert-Butylbenzene	ND		0.00100
Carbon tetrachloride	ND		0.00100
Chlorobenzene	ND		0.00100
Chlorodibromomethane	ND		0.00100
Chloroethane	ND		0.00500
2-Chloroethyl vinyl ether	ND		0.0500
Chloroform	ND		0.00500
Chloromethane	ND		0.00250
2-Chlorotoluene	ND		0.00100
4-Chlorotoluene	ND		0.00100
1,2-Dibromo-3-Chloropropane	ND		0.00500
1,2-Dibromoethane	ND		0.00100
Dibromomethane	ND		0.00100
1,2-Dichlorobenzene	ND		0.00100
1,3-Dichlorobenzene	ND		0.00100
1,4-Dichlorobenzene	ND		0.00100
Dichlorodifluoromethane	ND		0.00500
1,1-Dichloroethane	ND		0.00100
1,2-Dichloroethane	ND		0.00100
1,1-Dichloroethene	ND		0.00100
cis-1,2-Dichloroethene	ND		0.00100
trans-1,2-Dichloroethene	ND		0.00100
1,2-Dichloropropane	ND		0.00100
1,1-Dichloropropene	ND		0.00100
1,3-Dichloropropane	ND		0.00100
cis-1,3-Dichloropropene	ND		0.00100
trans-1,3-Dichloropropene	ND		0.00100

Method Blank (MB)

(MB) 12/11/15 12:39

Analyte	MB Result mg/kg	MB Qualifier	MB RDL mg/kg
2,2-Dichloropropane	ND		0.00100
Di-isopropyl ether	ND		0.00100
Ethylbenzene	ND		0.00100
Hexachloro-1,3-butadiene	ND		0.00100
Isopropylbenzene	ND		0.00100
p-Isopropyltoluene	ND		0.00100
2-Butanone (MEK)	ND		0.0100
Methylene Chloride	ND		0.00500
4-Methyl-2-pentanone (MIBK)	ND		0.0100
Methyl tert-butyl ether	ND		0.00100
Naphthalene	ND		0.00500
n-Propylbenzene	ND		0.00100
Styrene	ND		0.00100
1,1,1,2-Tetrachloroethane	ND		0.00100
1,1,2,2-Tetrachloroethane	ND		0.00100
Tetrachloroethene	ND		0.00100
Toluene	ND		0.00500
1,1,2-Trichlorotrifluoroethane	ND		0.00100
1,2,3-Trichlorobenzene	ND		0.00100
1,2,4-Trichlorobenzene	ND		0.00100
1,1,1-Trichloroethane	ND		0.00100
1,1,2-Trichloroethane	ND		0.00100
Trichloroethene	ND		0.00100
Trichlorofluoromethane	ND		0.00500
1,2,3-Trichloropropane	ND		0.00250
1,2,3-Trimethylbenzene	ND		0.00100
1,2,4-Trimethylbenzene	ND		0.00100
1,3,5-Trimethylbenzene	ND		0.00100
Vinyl chloride	ND		0.00100
Xylenes, Total	ND		0.00300
(S) Toluene-d8	*101*		*88.7-115*
(S) Dibromofluoromethane	*92.8*		*76.3-123*
(S) a,a,a-Trifluorotoluene	*92.6*		*87.2-117*
(S) 4-Bromofluorobenzene	*100*		*69.7-129*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 12/11/15 11:01 • (LCSD) 12/11/15 11:21

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.114	0.114	91.5	91.5	25.3-178			0.0100	22.9
Acrylonitrile	0.125	0.126	0.126	101	101	57.8-143			0.120	20
Benzene	0.0250	0.0232	0.0232	92.6	92.6	72.6-120			0.0400	20
Bromobenzene	0.0250	0.0267	0.0269	107	108	80.3-115			0.750	20
Bromodichloromethane	0.0250	0.0281	0.0277	112	111	75.3-119			1.42	20
Bromoform	0.0250	0.0294	0.0300	118	120	69.1-135			2.05	20
Bromomethane	0.0250	0.0449	0.0434	180	173	23.0-191			3.45	20
n-Butylbenzene	0.0250	0.0262	0.0269	105	108	74.2-134			2.38	20
sec-Butylbenzene	0.0250	0.0256	0.0264	102	106	77.8-129			3.24	20
tert-Butylbenzene	0.0250	0.0259	0.0265	104	106	77.2-129			2.31	20
Carbon tetrachloride	0.0250	0.0262	0.0264	105	106	69.4-129			0.820	20
Chlorobenzene	0.0250	0.0267	0.0265	107	106	78.9-122			0.610	20
Chlorodibromomethane	0.0250	0.0294	0.0297	118	119	76.4-126			1.10	20
Chloroethane	0.0250	0.0296	0.0288	118	115	47.2-147			2.73	20
2-Chloroethyl vinyl ether	0.125	0.140	0.143	112	114	16.7-162			2.13	23.7
Chloroform	0.0250	0.0255	0.0253	102	101	73.3-122			0.680	20
Chloromethane	0.0250	0.0161	0.0163	64.5	65.4	53.1-135			1.26	20
2-Chlorotoluene	0.0250	0.0259	0.0259	104	104	74.6-127			0.120	20
4-Chlorotoluene	0.0250	0.0267	0.0271	107	108	79.5-123			1.53	20
1,2-Dibromo-3-Chloropropane	0.0250	0.0252	0.0269	101	108	64.9-131			6.62	20
1,2-Dibromoethane	0.0250	0.0268	0.0278	107	111	78.7-123			3.49	20
Dibromomethane	0.0250	0.0283	0.0285	113	114	78.5-117			0.890	20
1,2-Dichlorobenzene	0.0250	0.0255	0.0257	102	103	83.6-119			0.750	20
1,3-Dichlorobenzene	0.0250	0.0264	0.0269	105	108	75.9-129			2.24	20
1,4-Dichlorobenzene	0.0250	0.0254	0.0263	102	105	81.0-115			3.57	20
Dichlorodifluoromethane	0.0250	0.0250	0.0253	99.9	101	50.9-139			1.47	20
1,1-Dichloroethane	0.0250	0.0244	0.0244	97.5	97.7	71.7-125			0.120	20
1,2-Dichloroethane	0.0250	0.0270	0.0264	108	106	67.2-121			2.29	20
1,1-Dichloroethene	0.0250	0.0250	0.0251	100	100	60.6-133			0.320	20
cis-1,2-Dichloroethene	0.0250	0.0230	0.0232	92.0	92.9	76.1-121			0.980	20
trans-1,2-Dichloroethene	0.0250	0.0244	0.0239	97.5	95.4	70.7-124			2.14	20
1,2-Dichloropropane	0.0250	0.0268	0.0267	107	107	76.9-123			0.290	20
1,1-Dichloropropene	0.0250	0.0245	0.0245	98.1	98.0	71.2-126			0.0600	20
1,3-Dichloropropane	0.0250	0.0274	0.0274	110	110	80.3-114			0.0500	20
cis-1,3-Dichloropropene	0.0250	0.0279	0.0278	112	111	77.3-123			0.490	20
trans-1,3-Dichloropropene	0.0250	0.0299	0.0288	120	115	73.0-127			3.55	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 12/11/15 11:01 • (LCSD) 12/11/15 11:21

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
2,2-Dichloropropane	0.0250	0.0261	0.0259	104	104	61.9-132			0.830	20
Di-isopropyl ether	0.0250	0.0253	0.0252	101	101	67.2-131			0.280	20
Ethylbenzene	0.0250	0.0264	0.0271	106	109	78.6-124			2.58	20
Hexachloro-1,3-butadiene	0.0250	0.0255	0.0262	102	105	69.2-136			2.64	20
Isopropylbenzene	0.0250	0.0261	0.0269	104	107	79.4-126			2.83	20
p-Isopropyltoluene	0.0250	0.0261	0.0270	104	108	75.4-132			3.54	20
2-Butanone (MEK)	0.125	0.118	0.120	94.6	95.7	44.5-154			1.16	21.3
Methylene Chloride	0.0250	0.0211	0.0209	84.2	83.5	68.2-119			0.840	20
4-Methyl-2-pentanone (MIBK)	0.125	0.147	0.150	118	120	61.1-138			1.96	20
Methyl tert-butyl ether	0.0250	0.0251	0.0249	101	99.5	70.2-122			1.04	20
Naphthalene	0.0250	0.0237	0.0249	94.7	99.6	69.9-132			5.02	20
n-Propylbenzene	0.0250	0.0269	0.0272	107	109	80.2-124			1.11	20
Styrene	0.0250	0.0267	0.0278	107	111	79.4-124			4.18	20
1,1,1,2-Tetrachloroethane	0.0250	0.0290	0.0298	116	119	76.7-127			2.96	20
1,1,2,2-Tetrachloroethane	0.0250	0.0278	0.0282	111	113	78.8-124			1.30	20
Tetrachloroethene	0.0250	0.0282	0.0281	113	112	71.1-133			0.440	20
Toluene	0.0250	0.0263	0.0265	105	106	76.7-116			0.530	20
1,1,2-Trichlorotrifluoroethane	0.0250	0.0240	0.0240	96.2	95.8	62.6-138			0.350	20
1,2,3-Trichlorobenzene	0.0250	0.0239	0.0248	95.4	99.4	72.5-137			4.03	20
1,2,4-Trichlorobenzene	0.0250	0.0246	0.0260	98.6	104	74.0-137			5.54	20
1,1,1-Trichloroethane	0.0250	0.0262	0.0262	105	105	69.9-127			0.110	20
1,1,2-Trichloroethane	0.0250	0.0267	0.0267	107	107	81.9-119			0.130	20
Trichloroethene	0.0250	0.0270	0.0271	108	108	77.2-122			0.190	20
Trichlorofluoromethane	0.0250	0.0275	0.0270	110	108	51.5-151			1.74	20
1,2,3-Trichloropropane	0.0250	0.0287	0.0287	115	115	74.0-124			0.130	20
1,2,3-Trimethylbenzene	0.0250	0.0257	0.0262	103	105	79.4-118			1.86	20
1,2,4-Trimethylbenzene	0.0250	0.0264	0.0268	105	107	77.1-124			1.49	20
1,3,5-Trimethylbenzene	0.0250	0.0262	0.0264	105	106	79.0-125			0.950	20
Vinyl chloride	0.0250	0.0245	0.0243	97.9	97.3	58.4-134			0.590	20
Xylenes, Total	0.0750	0.0783	0.0789	104	105	78.1-123			0.730	20
(S) Toluene-d8				*101*	*102*	*88.7-115*				
(S) Dibromofluoromethane				*92.7*	*91.2*	*76.3-123*				
(S) a,a,a-Trifluorotoluene				*93.1*	*92.7*	*87.2-117*				
(S) 4-Bromofluorobenzene				*98.8*	*100*	*69.7-129*				

L805690-15 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 12/11/15 17:33 • (MS) 12/11/15 17:52 • (MSD) 12/11/15 18:12

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.00278	0.0476	0.0466	35.8	35.1	1	10.0-130			2.00	31.5
Acrylonitrile	0.125	ND	0.104	0.100	83.3	80.4	1	39.3-152			3.58	27.2
Benzene	0.0250	0.000914	0.0179	0.0194	67.9	73.9	1	47.8-131			7.96	22.8
Bromobenzene	0.0250	ND	0.0202	0.0222	80.7	88.6	1	40.0-130			9.35	27.4
Bromodichloromethane	0.0250	ND	0.0227	0.0239	90.8	95.5	1	50.6-128			5.10	22.8
Bromoform	0.0250	ND	0.0234	0.0243	93.4	97.2	1	43.3-139			3.97	25.9
Bromomethane	0.0250	ND	0.0294	0.0306	117	123	1	5.00-189			4.17	26.7
n-Butylbenzene	0.0250	ND	0.0196	0.0216	78.6	86.5	1	23.6-146			9.58	39.2
sec-Butylbenzene	0.0250	ND	0.0196	0.0221	78.3	88.4	1	31.0-142			12.2	34.7
tert-Butylbenzene	0.0250	ND	0.0201	0.0225	80.5	90.2	1	36.9-142			11.3	31.7
Carbon tetrachloride	0.0250	ND	0.0203	0.0226	81.3	90.3	1	46.0-140			10.5	27.2
Chlorobenzene	0.0250	ND	0.0202	0.0224	80.8	89.6	1	44.1-134			10.3	25.7
Chlorodibromomethane	0.0250	ND	0.0235	0.0253	94.1	101	1	49.7-134			7.10	24
Chloroethane	0.0250	ND	0.0205	0.0224	82.0	89.7	1	5.00-164			8.98	28.4
2-Chloroethyl vinyl ether	0.125	ND	0.109	0.110	86.9	88.3	1	5.00-159			1.61	40
Chloroform	0.0250	ND	0.0205	0.0220	81.9	88.0	1	51.2-133			7.21	22.8
Chloromethane	0.0250	ND	0.00943	0.0106	37.7	42.6	1	31.4-141			12.1	24.6
2-Chlorotoluene	0.0250	ND	0.0201	0.0227	80.3	90.9	1	36.1-137			12.3	28.9
4-Chlorotoluene	0.0250	ND	0.0196	0.0216	78.4	86.3	1	35.4-137			9.60	29.8
1,2-Dibromo-3-Chloropropane	0.0250	ND	0.0209	0.0210	83.7	83.9	1	40.4-138			0.250	30.8
1,2-Dibromoethane	0.0250	ND	0.0216	0.0227	86.5	90.7	1	50.2-133			4.69	23.6
Dibromomethane	0.0250	ND	0.0225	0.0235	90.2	94.1	1	52.4-128			4.23	23
1,2-Dichlorobenzene	0.0250	ND	0.0196	0.0210	78.5	84.1	1	34.6-139			6.88	29.9
1,3-Dichlorobenzene	0.0250	ND	0.0199	0.0213	79.6	85.2	1	28.4-142			6.82	31.2
1,4-Dichlorobenzene	0.0250	ND	0.0194	0.0215	77.4	86.1	1	35.0-133			10.6	31.1
Dichlorodifluoromethane	0.0250	ND	0.0149	0.0163	59.6	65.3	1	31.2-144			9.04	30.2
1,1-Dichloroethane	0.0250	ND	0.0196	0.0214	78.4	85.5	1	49.1-136			8.75	22.9
1,2-Dichloroethane	0.0250	ND	0.0213	0.0224	85.2	89.6	1	47.1-129			5.04	22.7
1,1-Dichloroethene	0.0250	ND	0.0179	0.0202	71.8	80.7	1	36.1-142			11.7	25.6
cis-1,2-Dichloroethene	0.0250	ND	0.0191	0.0198	76.5	79.4	1	50.6-133			3.69	23
trans-1,2-Dichloroethene	0.0250	ND	0.0180	0.0193	71.9	77.3	1	43.8-135			7.21	24.8
1,2-Dichloropropane	0.0250	ND	0.0217	0.0225	86.9	90.2	1	50.3-134			3.74	22.7
1,1-Dichloropropene	0.0250	ND	0.0182	0.0200	73.0	79.8	1	43.0-137			9.02	26.4
1,3-Dichloropropane	0.0250	ND	0.0216	0.0225	86.2	89.9	1	51.4-127			4.24	23.1
cis-1,3-Dichloropropene	0.0250	ND	0.0219	0.0231	87.5	92.5	1	48.4-134			5.51	23.6
trans-1,3-Dichloropropene	0.0250	ND	0.0234	0.0239	93.4	95.5	1	46.6-135			2.22	25.3

L805690-15 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 12/11/15 17:33 • (MS) 12/11/15 17:52 • (MSD) 12/11/15 18:12

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
2,2-Dichloropropane	0.0250	ND	0.0203	0.0224	81.2	89.8	1	45.2-141			10.1	26.6
Di-isopropyl ether	0.0250	ND	0.0203	0.0218	81.2	87.1	1	46.7-140			7.05	23.5
Ethylbenzene	0.0250	ND	0.0207	0.0227	82.7	90.7	1	44.8-135			9.26	26.9
Hexachloro-1,3-butadiene	0.0250	ND	0.0184	0.0202	73.6	80.8	1	10.0-149			9.44	40
Isopropylbenzene	0.0250	ND	0.0203	0.0225	81.1	90.0	1	41.9-139			10.5	29.3
p-Isopropyltoluene	0.0250	ND	0.0195	0.0219	78.1	87.5	1	27.3-146			11.3	35.1
2-Butanone (MEK)	0.125	ND	0.0689	0.0678	55.1	54.3	1	23.9-170			1.59	28.3
Methylene Chloride	0.0250	ND	0.0161	0.0172	64.3	68.8	1	46.7-125			6.77	22.2
4-Methyl-2-pentanone (MIBK)	0.125	ND	0.121	0.118	96.9	94.5	1	42.4-146			2.53	26.7
Methyl tert-butyl ether	0.0250	ND	0.0202	0.0212	80.7	84.7	1	50.4-131			4.82	24.8
Naphthalene	0.0250	ND	0.0178	0.0181	71.2	72.3	1	18.4-145			1.61	34
n-Propylbenzene	0.0250	ND	0.0201	0.0226	80.4	90.3	1	35.2-139			11.6	31.9
Styrene	0.0250	ND	0.0206	0.0224	82.3	89.5	1	39.7-137			8.37	28.2
1,1,1,2-Tetrachloroethane	0.0250	ND	0.0231	0.0255	92.5	102	1	48.8-136			9.96	25.5
1,1,2,2-Tetrachloroethane	0.0250	ND	0.0233	0.0244	93.0	97.7	1	45.7-140			4.94	26.4
Tetrachloroethene	0.0250	ND	0.0205	0.0232	82.2	92.9	1	37.7-140			12.3	29.2
Toluene	0.0250	0.000329	0.0204	0.0220	80.4	86.7	1	47.8-127			7.32	24.3
1,1,2-Trichlorotrifluoroethane	0.0250	ND	0.0180	0.0200	72.1	80.1	1	35.7-146			10.6	28.8
1,2,3-Trichlorobenzene	0.0250	ND	0.0172	0.0179	68.8	71.5	1	10.0-150			3.92	38.5
1,2,4-Trichlorobenzene	0.0250	ND	0.0176	0.0187	70.6	74.7	1	10.0-153			5.64	39.3
1,1,1-Trichloroethane	0.0250	ND	0.0201	0.0229	80.4	91.6	1	49.0-138			12.9	25.3
1,1,2-Trichloroethane	0.0250	ND	0.0217	0.0222	86.7	88.9	1	52.3-132			2.46	23.4
Trichloroethene	0.0250	0.00253	0.0214	0.0246	75.6	88.2	1	48.0-132			13.7	24.8
Trichlorofluoromethane	0.0250	ND	0.0197	0.0221	78.9	88.4	1	12.8-169			11.4	29.7
1,2,3-Trichloropropane	0.0250	ND	0.0236	0.0240	94.2	96.1	1	44.4-138			1.96	26.3
1,2,3-Trimethylbenzene	0.0250	ND	0.0202	0.0220	80.7	88.2	1	41.0-133			8.91	27.6
1,2,4-Trimethylbenzene	0.0250	ND	0.0199	0.0219	79.5	87.7	1	32.9-139			9.74	30.6
1,3,5-Trimethylbenzene	0.0250	ND	0.0196	0.0220	78.2	88.1	1	37.1-138			11.9	30.6
Vinyl chloride	0.0250	ND	0.0161	0.0179	64.6	71.4	1	32.0-146			10.0	26.3
Xylenes, Total	0.0750	ND	0.0591	0.0653	78.7	87.0	1	42.7-135			10.0	26.6
(S) Toluene-d8					*102*	*101*		*88.7-115*				
(S) Dibromofluoromethane					*93.5*	*93.4*		*76.3-123*				
(S) a,a,a-Trifluorotoluene					*92.5*	*92.3*		*87.2-117*				
(S) 4-Bromofluorobenzene					*98.7*	*98.6*		*69.7-129*				

Method Blank (MB)

(MB) 12/17/15 03:06

Analyte	MB Result mg/l	MB Qualifier	MB RDL mg/l
Acetone	ND		0.0250
Acrylonitrile	ND		0.00250
Benzene	ND		0.000500
Bromobenzene	ND		0.000500
Bromodichloromethane	ND		0.000500
Bromochloromethane	ND		0.000500
Bromoform	ND		0.000500
Bromomethane	ND		0.000500
n-Butylbenzene	ND		0.000500
sec-Butylbenzene	ND		0.000500
tert-Butylbenzene	ND		0.000500
Carbon disulfide	ND		0.000500
Carbon tetrachloride	ND		0.000500
Chlorobenzene	ND		0.000500
Chlorodibromomethane	ND		0.000500
Chloroethane	ND		0.000500
2-Chloroethyl vinyl ether	ND		0.00250
Chloroform	ND		0.000500
Chloromethane	ND		0.000500
2-Chlorotoluene	ND		0.000500
4-Chlorotoluene	ND		0.000500
1,2-Dibromo-3-Chloropropane	ND		0.00100
1,2-Dibromoethane	ND		0.000500
Dibromomethane	ND		0.000500
1,2-Dichlorobenzene	ND		0.000500
1,3-Dichlorobenzene	ND		0.000500
1,4-Dichlorobenzene	ND		0.000500
Dichlorodifluoromethane	ND		0.000500
1,2-Dichloroethane	ND		0.000500
trans-1,2-Dichloroethene	ND		0.000500
1,1-Dichloroethane	ND		0.000500
1,2-Dichloropropane	ND		0.000500
1,1-Dichloropropene	ND		0.000500
1,1-Dichloroethene	ND		0.000500
1,3-Dichloropropane	ND		0.000500
cis-1,2-Dichloroethene	ND		0.000500

Method Blank (MB)

(MB) 12/17/15 03:06

Analyte	MB Result mg/l	MB Qualifier	MB RDL mg/l
cis-1,3-Dichloropropene	ND		0.000500
trans-1,3-Dichloropropene	ND		0.000500
trans-1,4-Dichloro-2-butene	ND		0.00500
2,2-Dichloropropane	ND		0.000500
Di-isopropyl ether	ND		0.000500
Hexachloro-1,3-butadiene	ND		0.00100
2-Hexanone	ND		0.00250
Ethylbenzene	ND		0.000500
n-Hexane	ND		0.00100
Iodomethane	ND		0.0100
Isopropylbenzene	ND		0.000500
p-Isopropyltoluene	ND		0.000500
2-Butanone (MEK)	ND		0.00250
Methylene Chloride	ND		0.00250
4-Methyl-2-pentanone (MIBK)	ND		0.00250
n-Propylbenzene	ND		0.000500
Styrene	ND		0.000500
1,1,1,2-Tetrachloroethane	ND		0.000500
Methyl tert-butyl ether	ND		0.000500
1,1,2,2-Tetrachloroethane	ND		0.000500
1,1,2-Trichlorotrifluoroethane	ND		0.000500
Naphthalene	ND		0.000500
1,2,3-Trichlorobenzene	ND		0.000500
1,2,4-Trichlorobenzene	ND		0.000500
1,1,2-Trichloroethane	ND		0.000500
Trichlorofluoromethane	ND		0.000500
1,2,3-Trichloropropane	ND		0.00250
Tetrachloroethene	ND		0.000500
1,2,4-Trimethylbenzene	ND		0.000500
Toluene	ND		0.000500
1,2,3-Trimethylbenzene	ND		0.000500
1,3,5-Trimethylbenzene	ND		0.000500
Vinyl acetate	ND		0.00250
1,1,1-Trichloroethane	ND		0.000500
Trichloroethene	ND		0.000500
Xylenes, Total	ND		0.00150

Method Blank (MB)

(MB) 12/17/15 03:06

Analyte	MB Result mg/l	MB Qualifier	MB RDL mg/l
Vinyl chloride	ND		0.000500
(S) Toluene-d8	*101*		*90.0-115*
(S) Dibromofluoromethane	*102*		*79.0-121*
(S) 4-Bromofluorobenzene	*95.8*		*80.1-120*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 12/17/15 01:26 • (LCSD) 12/17/15 01:46

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.137	0.146	110	116	28.7-175			6.08	20.9
Acrylonitrile	0.125	0.139	0.149	112	120	58.2-145			6.93	20
Bromobenzene	0.0250	0.0237	0.0245	94.8	98.1	81.5-115			3.42	20
Bromodichloromethane	0.0250	0.0264	0.0283	106	113	75.5-121			6.88	20
Bromochloromethane	0.0250	0.0255	0.0273	102	109	78.9-123			6.78	20
Bromoform	0.0250	0.0310	0.0317	124	127	71.5-131			1.99	20
Bromomethane	0.0250	0.0276	0.0285	110	114	22.4-187			3.45	20
n-Butylbenzene	0.0250	0.0258	0.0267	103	107	75.9-134			3.69	20
sec-Butylbenzene	0.0250	0.0252	0.0259	101	104	80.6-126			3.10	20
tert-Butylbenzene	0.0250	0.0253	0.0264	101	105	79.3-127			4.12	20
Carbon disulfide	0.0250	0.0269	0.0285	108	114	53.0-134			5.76	20
Carbon tetrachloride	0.0250	0.0281	0.0289	112	116	70.9-129			2.91	20
Chlorobenzene	0.0250	0.0240	0.0252	96.2	101	79.7-122			4.64	20
Chlorodibromomethane	0.0250	0.0273	0.0282	109	113	78.2-124			3.37	20
Chloroethane	0.0250	0.0248	0.0260	99.2	104	41.2-153			4.61	20
2-Chloroethyl vinyl ether	0.125	0.211	0.226	169	181	23.4-162	J4	J4	6.93	23.5
Chloroform	0.0250	0.0248	0.0265	99.1	106	73.2-125			6.77	20
Chloromethane	0.0250	0.0263	0.0276	105	110	55.8-134			4.74	20
2-Chlorotoluene	0.0250	0.0254	0.0269	102	108	76.4-125			5.79	20
4-Chlorotoluene	0.0250	0.0246	0.0257	98.5	103	81.5-121			4.38	20
1,2-Dibromo-3-Chloropropane	0.0250	0.0288	0.0302	115	121	64.8-131			4.71	20
1,2-Dibromoethane	0.0250	0.0265	0.0274	106	110	79.8-122			3.49	20
Dibromomethane	0.0250	0.0285	0.0299	114	120	79.5-118		J4	4.68	20
1,2-Dichlorobenzene	0.0250	0.0245	0.0260	98.0	104	84.7-118			5.75	20
1,3-Dichlorobenzene	0.0250	0.0265	0.0272	106	109	77.6-127			2.69	20
1,4-Dichlorobenzene	0.0250	0.0241	0.0256	96.2	103	82.2-114			6.36	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 12/17/15 01:26 • (LCSD) 12/17/15 01:46

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Dichlorodifluoromethane	0.0250	0.0298	0.0325	119	130	56.0-134			8.63	20
Benzene	0.0250	0.0233	0.0245	93.3	98.0	73.0-122			4.87	20
trans-1,2-Dichloroethene	0.0250	0.0240	0.0251	96.0	100	72.6-125			4.60	20
1,2-Dichloropropane	0.0250	0.0258	0.0272	103	109	77.4-125			5.19	20
1,1-Dichloropropene	0.0250	0.0242	0.0251	97.0	101	72.5-127			3.64	20
1,3-Dichloropropane	0.0250	0.0247	0.0262	98.8	105	80.6-115			5.78	20
cis-1,3-Dichloropropene	0.0250	0.0269	0.0285	108	114	77.7-124			5.77	20
trans-1,3-Dichloropropene	0.0250	0.0286	0.0286	114	115	73.5-127			0.0300	20
trans-1,4-Dichloro-2-butene	0.0250	0.0285	0.0284	114	114	58.3-129			0.190	20
2,2-Dichloropropane	0.0250	0.0234	0.0251	93.5	100	61.3-134			7.18	20
Hexachloro-1,3-butadiene	0.0250	0.0271	0.0278	108	111	73.7-133			2.63	20
2-Hexanone	0.125	0.137	0.150	109	120	59.4-151			9.35	20
n-Hexane	0.0250	0.0237	0.0252	94.6	101	59.5-132			6.20	20
Iodomethane	0.125	0.125	0.134	100	107	64.6-137			6.66	20
Isopropylbenzene	0.0250	0.0243	0.0252	97.3	101	81.6-124			3.44	20
p-Isopropyltoluene	0.0250	0.0255	0.0269	102	108	77.6-129			5.23	20
2-Butanone (MEK)	0.125	0.155	0.166	124	133	46.4-155			6.69	20
Methylene Chloride	0.0250	0.0234	0.0249	93.6	99.7	69.5-120			6.37	20
4-Methyl-2-pentanone (MIBK)	0.125	0.151	0.162	120	130	63.3-138			7.64	20
n-Propylbenzene	0.0250	0.0242	0.0251	96.9	100	81.9-122			3.56	20
Styrene	0.0250	0.0247	0.0266	98.9	106	79.9-124			7.31	20
1,1,1,2-Tetrachloroethane	0.0250	0.0258	0.0269	103	108	78.5-125			4.17	20
1,1,2,2-Tetrachloroethane	0.0250	0.0273	0.0291	109	116	79.3-123			6.55	20
1,2-Dichloroethane	0.0250	0.0257	0.0274	103	109	65.3-126			6.39	20
1,1,2-Trichlorotrifluoroethane	0.0250	0.0274	0.0284	109	114	62.0-141			3.73	20
1,1-Dichloroethane	0.0250	0.0246	0.0266	98.6	106	71.7-127			7.52	20
1,1-Dichloroethene	0.0250	0.0271	0.0288	108	115	59.9-137			6.11	20
1,2,3-Trichlorobenzene	0.0250	0.0274	0.0287	110	115	75.7-134			4.45	20
cis-1,2-Dichloroethene	0.0250	0.0239	0.0256	95.7	102	77.3-122			6.64	20
1,2,4-Trichlorobenzene	0.0250	0.0282	0.0303	113	121	76.1-136			6.96	20
1,1,2-Trichloroethane	0.0250	0.0255	0.0266	102	106	81.6-120			4.17	20
Trichlorofluoromethane	0.0250	0.0285	0.0307	114	123	49.1-157			7.42	20
1,2,3-Trichloropropane	0.0250	0.0268	0.0294	107	117	74.9-124			9.30	20
1,2,4-Trimethylbenzene	0.0250	0.0244	0.0257	97.7	103	79.0-122			5.00	20
Di-isopropyl ether	0.0250	0.0243	0.0262	97.2	105	65.1-135			7.72	20
1,2,3-Trimethylbenzene	0.0250	0.0235	0.0242	94.1	96.6	79.9-118			2.60	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 12/17/15 01:26 • (LCSD) 12/17/15 01:46

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethylbenzene	0.0250	0.0249	0.0254	99.7	101	80.9-121			1.74	20
1,3,5-Trimethylbenzene	0.0250	0.0244	0.0254	97.6	102	81.0-123			4.15	20
Vinyl acetate	0.125	0.148	0.162	118	129	41.7-159			8.88	20
Methyl tert-butyl ether	0.0250	0.0241	0.0255	96.5	102	70.1-125			5.48	20
Naphthalene	0.0250	0.0280	0.0294	112	118	69.7-134			5.04	20
Toluene	0.0250	0.0239	0.0249	95.6	99.6	77.9-116			4.10	20
Tetrachloroethene	0.0250	0.0255	0.0262	102	105	73.5-130			2.64	20
1,1,1-Trichloroethane	0.0250	0.0253	0.0265	101	106	71.1-129			4.85	20
Trichloroethene	0.0250	0.0257	0.0275	103	110	79.5-121			6.72	20
Xylenes, Total	0.0750	0.0718	0.0750	95.7	100	79.2-122			4.32	20
Vinyl chloride	0.0250	0.0261	0.0283	104	113	61.5-134			7.95	20
(S) Toluene-d8				*102*	*102*	*90.0-115*				
(S) Dibromofluoromethane				*99.8*	*103*	*79.0-121*				
(S) 4-Bromofluorobenzene				*96.2*	*96.6*	*80.1-120*				

L806497-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 12/17/15 05:26 • (MS) 12/17/15 03:26 • (MSD) 12/17/15 03:46

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.000983	0.135	0.114	107	90.7	1	25.0-156			16.4	21.5
Acrylonitrile	0.125	ND	0.142	0.123	113	98.8	1	55.9-161			13.7	20
Bromobenzene	0.0250	ND	0.0241	0.0226	96.5	90.4	1	70.6-125			6.52	20
Bromodichloromethane	0.0250	ND	0.0271	0.0251	108	101	1	69.2-127			7.37	20
Bromochloromethane	0.0250	ND	0.0236	0.0223	94.2	89.2	1	74.4-128			5.41	20
Bromoform	0.0250	ND	0.0318	0.0285	127	114	1	66.3-140			11.1	20
Bromomethane	0.0250	ND	0.0199	0.0196	79.7	78.3	1	16.6-183			1.83	20.5
n-Butylbenzene	0.0250	ND	0.0256	0.0246	102	98.2	1	64.8-145			4.07	20
sec-Butylbenzene	0.0250	ND	0.0256	0.0243	102	97.3	1	66.8-139			5.05	20
tert-Butylbenzene	0.0250	ND	0.0259	0.0245	103	97.8	1	67.1-138			5.55	20
Carbon disulfide	0.0250	ND	0.0135	0.0132	54.1	52.8	1	34.9-138			2.45	20
Carbon tetrachloride	0.0250	ND	0.0251	0.0244	101	97.4	1	60.6-139			3.12	20
Chlorobenzene	0.0250	ND	0.0244	0.0227	97.7	90.7	1	70.1-130			7.45	20
Chlorodibromomethane	0.0250	ND	0.0296	0.0260	118	104	1	71.6-132			13.0	20
Chloroethane	0.0250	ND	0.0199	0.0189	79.6	75.7	1	33.3-155			5.01	20
2-Chloroethyl vinyl ether	0.125	ND	0.210	0.192	168	154	1	5.00-149	J5	J5	9.02	40

L806497-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 12/17/15 05:26 • (MS) 12/17/15 03:26 • (MSD) 12/17/15 03:46

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloroform	0.0250	ND	0.0246	0.0241	98.3	96.3	1	66.1-133			2.03	20
Chloromethane	0.0250	0.000130	0.0186	0.0176	73.9	69.7	1	40.7-139			5.84	20
2-Chlorotoluene	0.0250	ND	0.0256	0.0235	102	94.1	1	66.9-134			8.48	20
4-Chlorotoluene	0.0250	ND	0.0254	0.0236	102	94.4	1	66.8-134			7.41	20
1,2-Dibromo-3-Chloropropane	0.0250	ND	0.0291	0.0264	117	105	1	63.9-142			9.98	20.2
1,2-Dibromoethane	0.0250	ND	0.0268	0.0245	107	98.1	1	73.8-131			8.89	20
Dibromomethane	0.0250	ND	0.0263	0.0251	105	100	1	72.8-127			5.00	20
1,2-Dichlorobenzene	0.0250	ND	0.0255	0.0241	102	96.3	1	77.4-127			5.88	20
1,3-Dichlorobenzene	0.0250	ND	0.0270	0.0259	108	103	1	67.9-136			4.42	20
1,4-Dichlorobenzene	0.0250	ND	0.0240	0.0228	96.0	91.2	1	74.4-123			5.15	20
Dichlorodifluoromethane	0.0250	ND	0.0231	0.0225	92.6	89.8	1	42.2-146			3.00	20
trans-1,2-Dichloroethene	0.0250	ND	0.0197	0.0189	79.0	75.6	1	61.0-132			4.37	20
1,2-Dichloropropane	0.0250	0.00172	0.0253	0.0244	94.2	90.6	1	69.7-130			3.69	20
1,1-Dichloropropene	0.0250	ND	0.0207	0.0201	82.6	80.3	1	61.5-136			2.88	20
1,3-Dichloropropane	0.0250	ND	0.0258	0.0240	103	96.0	1	74.3-123			7.21	20
cis-1,3-Dichloropropene	0.0250	ND	0.0262	0.0248	105	99.1	1	71.1-129			5.61	20
trans-1,3-Dichloropropene	0.0250	0.000730	0.0278	0.0270	108	105	1	66.3-136			2.98	20
Benzene	0.0250	ND	0.0210	0.0202	84.2	80.6	1	58.6-133			4.30	20
trans-1,4-Dichloro-2-butene	0.0250	ND	0.0291	0.0266	116	106	1	57.6-136			8.96	20
2,2-Dichloropropane	0.0250	ND	0.0231	0.0226	92.3	90.6	1	54.9-142			1.87	20
Hexachloro-1,3-butadiene	0.0250	ND	0.0277	0.0269	111	108	1	61.1-144			3.01	20.1
2-Hexanone	0.125	ND	0.145	0.128	116	102	1	59.4-154			12.8	20.1
n-Hexane	0.0250	ND	0.0149	0.0138	59.7	55.1	1	38.7-146			8.03	20
Iodomethane	0.125	ND	0.0999	0.0993	80.0	79.4	1	55.2-140			0.690	20
Isopropylbenzene	0.0250	ND	0.0244	0.0230	97.6	92.1	1	67.4-136			5.85	20
p-Isopropyltoluene	0.0250	ND	0.0264	0.0248	105	99.1	1	62.8-143			6.19	20
2-Butanone (MEK)	0.125	ND	0.154	0.134	123	107	1	45.0-156			13.6	20.8
Methylene Chloride	0.0250	ND	0.0208	0.0203	83.3	81.3	1	61.5-125			2.47	20
4-Methyl-2-pentanone (MIBK)	0.125	ND	0.153	0.143	122	114	1	60.7-150			7.06	20
n-Propylbenzene	0.0250	ND	0.0244	0.0231	97.7	92.3	1	63.2-139			5.70	20
Styrene	0.0250	ND	0.0257	0.0238	103	95.0	1	68.2-133			7.85	20
1,1,1,2-Tetrachloroethane	0.0250	ND	0.0272	0.0255	109	102	1	70.5-132			6.49	20
1,1,2,2-Tetrachloroethane	0.0250	ND	0.0303	0.0271	121	109	1	64.9-145			11.0	20
1,1,2-Trichlorotrifluoroethane	0.0250	ND	0.0247	0.0231	98.7	92.3	1	53.7-150			6.60	20
1,2,3-Trichlorobenzene	0.0250	ND	0.0271	0.0264	108	106	1	65.7-143			2.40	20
1,2,4-Trichlorobenzene	0.0250	ND	0.0280	0.0273	112	109	1	67.0-146			2.54	20

L806497-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 12/17/15 05:26 • (MS) 12/17/15 03:26 • (MSD) 12/17/15 03:46

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
1,1,2-Trichloroethane	0.0250	ND	0.0268	0.0247	107	98.8	1	74.1-130			8.26	20
Trichlorofluoromethane	0.0250	ND	0.0252	0.0240	101	95.9	1	39.9-165			4.92	20
1,2,3-Trichloropropane	0.0250	ND	0.0289	0.0272	116	109	1	71.5-134			6.04	20
1,2-Dichloroethane	0.0250	ND	0.0245	0.0226	97.9	90.3	1	60.7-132			8.08	20
1,2,4-Trimethylbenzene	0.0250	ND	0.0254	0.0239	101	95.5	1	60.5-137			6.12	20
1,2,3-Trimethylbenzene	0.0250	ND	0.0232	0.0224	92.9	89.5	1	62.7-133			3.77	20
1,1-Dichloroethane	0.0250	ND	0.0234	0.0223	93.5	89.0	1	64.0-134			4.86	20
1,3,5-Trimethylbenzene	0.0250	ND	0.0247	0.0236	98.7	94.6	1	67.9-134			4.28	20
Vinyl acetate	0.125	ND	0.145	0.133	116	106	1	42.8-181			8.58	20
1,1-Dichloroethene	0.0250	ND	0.0222	0.0210	88.9	83.8	1	48.8-144			5.83	20
cis-1,2-Dichloroethene	0.0250	ND	0.0231	0.0220	92.4	88.2	1	60.6-136			4.61	20
Di-isopropyl ether	0.0250	ND	0.0241	0.0232	96.4	92.6	1	59.9-140			3.99	20
Ethylbenzene	0.0250	ND	0.0242	0.0225	97.0	89.9	1	62.7-136			7.55	20
Methyl tert-butyl ether	0.0250	ND	0.0236	0.0227	94.2	90.6	1	61.4-136			3.87	20
Naphthalene	0.0250	ND	0.0284	0.0279	114	112	1	61.8-143			1.99	20
Toluene	0.0250	ND	0.0220	0.0214	87.9	85.5	1	67.8-124			2.76	20
Tetrachloroethene	0.0250	ND	0.0229	0.0212	91.8	84.8	1	57.4-141			7.87	20
1,1,1-Trichloroethane	0.0250	ND	0.0238	0.0232	95.2	93.0	1	58.7-134			2.41	20
Trichloroethene	0.0250	0.00455	0.0282	0.0263	94.6	87.0	1	48.9-148			6.90	20
Xylenes, Total	0.0750	ND	0.0717	0.0655	95.6	87.4	1	65.6-133			8.97	20
Vinyl chloride	0.0250	ND	0.0201	0.0190	80.5	76.0	1	44.3-143			5.65	20
(S) Toluene-d8					*102*	*102*		*90.0-115*				
(S) Dibromofluoromethane					*99.8*	*102*		*79.0-121*				
(S) 4-Bromofluorobenzene					*101*	*96.7*		*80.1-120*				

Method Blank (MB)

(MB) 12/17/15 08:07

Analyte	MB Result mg/kg	MB Qualifier	MB RDL mg/kg
Acetone	ND		0.0500
Acrylonitrile	ND		0.0100
Benzene	ND		0.00100
Bromobenzene	ND		0.00100
Bromodichloromethane	ND		0.00100
Bromoform	ND		0.00100
Bromomethane	ND		0.00500
n-Butylbenzene	ND		0.00100
sec-Butylbenzene	ND		0.00100
tert-Butylbenzene	ND		0.00100
Carbon tetrachloride	ND		0.00100
Chlorobenzene	ND		0.00100
Chlorodibromomethane	ND		0.00100
Chloroethane	ND		0.00500
2-Chloroethyl vinyl ether	ND		0.0500
Chloroform	ND		0.00500
Chloromethane	ND		0.00250
2-Chlorotoluene	ND		0.00100
4-Chlorotoluene	ND		0.00100
1,2-Dibromo-3-Chloropropane	ND		0.00500
1,2-Dibromoethane	ND		0.00100
Dibromomethane	ND		0.00100
1,2-Dichlorobenzene	ND		0.00100
1,3-Dichlorobenzene	ND		0.00100
1,4-Dichlorobenzene	ND		0.00100
Dichlorodifluoromethane	ND		0.00500
1,1-Dichloroethane	ND		0.00100
1,2-Dichloroethane	ND		0.00100
1,1-Dichloroethene	ND		0.00100
cis-1,2-Dichloroethene	ND		0.00100
trans-1,2-Dichloroethene	ND		0.00100
1,2-Dichloropropane	ND		0.00100
1,1-Dichloropropene	ND		0.00100
1,3-Dichloropropane	ND		0.00100
cis-1,3-Dichloropropene	ND		0.00100
trans-1,3-Dichloropropene	ND		0.00100

Method Blank (MB)

(MB) 12/17/15 08:07

Analyte	MB Result mg/kg	MB Qualifier	MB RDL mg/kg
2,2-Dichloropropane	ND		0.00100
Di-isopropyl ether	ND		0.00100
Ethylbenzene	ND		0.00100
Hexachloro-1,3-butadiene	ND		0.00100
Isopropylbenzene	ND		0.00100
p-Isopropyltoluene	ND		0.00100
2-Butanone (MEK)	ND		0.0100
Methylene Chloride	ND		0.00500
4-Methyl-2-pentanone (MIBK)	ND		0.0100
Methyl tert-butyl ether	ND		0.00100
Naphthalene	ND		0.00500
n-Propylbenzene	ND		0.00100
Styrene	ND		0.00100
1,1,1,2-Tetrachloroethane	ND		0.00100
1,1,2,2-Tetrachloroethane	ND		0.00100
Tetrachloroethene	ND		0.00100
Toluene	ND		0.00500
1,1,2-Trichlorotrifluoroethane	ND		0.00100
1,2,3-Trichlorobenzene	ND		0.00100
1,2,4-Trichlorobenzene	ND		0.00100
1,1,1-Trichloroethane	ND		0.00100
1,1,2-Trichloroethane	ND		0.00100
Trichloroethene	ND		0.00100
Trichlorofluoromethane	ND		0.00500
1,2,3-Trichloropropane	ND		0.00250
1,2,3-Trimethylbenzene	ND		0.00100
1,2,4-Trimethylbenzene	ND		0.00100
1,3,5-Trimethylbenzene	ND		0.00100
Vinyl chloride	ND		0.00100
Xylenes, Total	ND		0.00300
(S) Toluene-d8	*97.8*		*88.7-115*
(S) Dibromofluoromethane	*90.9*		*76.3-123*
(S) a,a,a-Trifluorotoluene	*111*		*87.2-117*
(S) 4-Bromofluorobenzene	*96.9*		*69.7-129*

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 12/17/15 06:31 • (LCSD) 12/17/15 06:50

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.0964	0.103	77.1	82.4	25.3-178			6.62	22.9
Acrylonitrile	0.125	0.0943	0.0983	75.4	78.7	57.8-143			4.19	20
Benzene	0.0250	0.0217	0.0233	86.9	93.3	72.6-120			7.13	20
Bromobenzene	0.0250	0.0246	0.0249	98.4	99.4	80.3-115			1.02	20
Bromodichloromethane	0.0250	0.0240	0.0253	95.9	101	75.3-119			5.45	20
Bromoform	0.0250	0.0293	0.0292	117	117	69.1-135			0.430	20
Bromomethane	0.0250	0.0301	0.0316	121	126	23.0-191			4.60	20
n-Butylbenzene	0.0250	0.0243	0.0257	97.0	103	74.2-134			5.71	20
sec-Butylbenzene	0.0250	0.0289	0.0286	115	114	77.8-129			1.06	20
tert-Butylbenzene	0.0250	0.0290	0.0288	116	115	77.2-129			0.870	20
Carbon tetrachloride	0.0250	0.0275	0.0294	110	118	69.4-129			6.73	20
Chlorobenzene	0.0250	0.0284	0.0286	114	114	78.9-122			0.390	20
Chlorodibromomethane	0.0250	0.0303	0.0294	121	118	76.4-126			2.86	20
Chloroethane	0.0250	0.0263	0.0281	105	112	47.2-147			6.56	20
2-Chloroethyl vinyl ether	0.125	0.0441	0.0440	35.3	35.2	16.7-162			0.360	23.7
Chloroform	0.0250	0.0233	0.0247	93.2	98.8	73.3-122			5.87	20
Chloromethane	0.0250	0.0177	0.0184	70.9	73.5	53.1-135			3.58	20
2-Chlorotoluene	0.0250	0.0287	0.0285	115	114	74.6-127			0.780	20
4-Chlorotoluene	0.0250	0.0263	0.0261	105	104	79.5-123			0.790	20
1,2-Dibromo-3-Chloropropane	0.0250	0.0232	0.0225	93.0	90.0	64.9-131			3.29	20
1,2-Dibromoethane	0.0250	0.0278	0.0282	111	113	78.7-123			1.15	20
Dibromomethane	0.0250	0.0237	0.0256	94.6	102	78.5-117			7.93	20
1,2-Dichlorobenzene	0.0250	0.0248	0.0256	99.2	102	83.6-119			3.22	20
1,3-Dichlorobenzene	0.0250	0.0290	0.0291	116	117	75.9-129			0.480	20
1,4-Dichlorobenzene	0.0250	0.0242	0.0252	97.0	101	81.0-115			3.93	20
Dichlorodifluoromethane	0.0250	0.0227	0.0242	90.7	96.9	50.9-139			6.53	20
1,1-Dichloroethane	0.0250	0.0213	0.0229	85.2	91.5	71.7-125			7.15	20
1,2-Dichloroethane	0.0250	0.0217	0.0229	86.8	91.5	67.2-121			5.22	20
1,1-Dichloroethene	0.0250	0.0303	0.0335	121	134	60.6-133		J4	9.85	20
cis-1,2-Dichloroethene	0.0250	0.0233	0.0244	93.1	97.7	76.1-121			4.81	20
trans-1,2-Dichloroethene	0.0250	0.0238	0.0250	95.3	100	70.7-124			4.83	20
1,2-Dichloropropane	0.0250	0.0212	0.0226	85.0	90.2	76.9-123			6.00	20
1,1-Dichloropropene	0.0250	0.0216	0.0238	86.5	95.1	71.2-126			9.41	20
1,3-Dichloropropane	0.0250	0.0242	0.0244	96.8	97.6	80.3-114			0.820	20
cis-1,3-Dichloropropene	0.0250	0.0227	0.0239	90.9	95.4	77.3-123			4.86	20
trans-1,3-Dichloropropene	0.0250	0.0224	0.0237	89.7	94.9	73.0-127			5.63	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 12/17/15 06:31 • (LCSD) 12/17/15 06:50

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
2,2-Dichloropropane	0.0250	0.0215	0.0214	86.2	85.6	61.9-132			0.740	20
Di-isopropyl ether	0.0250	0.0186	0.0197	74.6	78.9	67.2-131			5.62	20
Ethylbenzene	0.0250	0.0281	0.0287	113	115	78.6-124			1.85	20
Hexachloro-1,3-butadiene	0.0250	0.0233	0.0231	93.0	92.4	69.2-136			0.630	20
Isopropylbenzene	0.0250	0.0280	0.0282	112	113	79.4-126			0.620	20
p-Isopropyltoluene	0.0250	0.0296	0.0295	118	118	75.4-132			0.370	20
2-Butanone (MEK)	0.125	0.0888	0.0969	71.0	77.5	44.5-154			8.75	21.3
Methylene Chloride	0.0250	0.0215	0.0232	86.0	92.6	68.2-119			7.38	20
4-Methyl-2-pentanone (MIBK)	0.125	0.0964	0.103	77.1	82.4	61.1-138			6.61	20
Methyl tert-butyl ether	0.0250	0.0205	0.0216	81.8	86.5	70.2-122			5.57	20
Naphthalene	0.0250	0.0238	0.0251	95.2	100	69.9-132			5.32	20
n-Propylbenzene	0.0250	0.0267	0.0266	107	106	80.2-124			0.370	20
Styrene	0.0250	0.0277	0.0266	111	106	79.4-124			4.21	20
1,1,1,2-Tetrachloroethane	0.0250	0.0298	0.0295	119	118	76.7-127			1.18	20
1,1,2,2-Tetrachloroethane	0.0250	0.0251	0.0257	100	103	78.8-124			2.44	20
Tetrachloroethene	0.0250	0.0298	0.0298	119	119	71.1-133			0.0700	20
Toluene	0.0250	0.0235	0.0250	94.0	99.9	76.7-116			6.09	20
1,1,2-Trichlorotrifluoroethane	0.0250	0.0314	0.0315	125	126	62.6-138			0.410	20
1,2,3-Trichlorobenzene	0.0250	0.0242	0.0247	96.8	99.0	72.5-137			2.22	20
1,2,4-Trichlorobenzene	0.0250	0.0243	0.0251	97.2	101	74.0-137			3.41	20
1,1,1-Trichloroethane	0.0250	0.0250	0.0269	100	108	69.9-127			7.45	20
1,1,2-Trichloroethane	0.0250	0.0265	0.0268	106	107	81.9-119			1.17	20
Trichloroethene	0.0250	0.0266	0.0281	106	112	77.2-122			5.57	20
Trichlorofluoromethane	0.0250	0.0299	0.0329	119	132	51.5-151			9.81	20
1,2,3-Trichloropropane	0.0250	0.0266	0.0267	107	107	74.0-124			0.230	20
1,2,3-Trimethylbenzene	0.0250	0.0226	0.0243	90.4	97.3	79.4-118			7.33	20
1,2,4-Trimethylbenzene	0.0250	0.0284	0.0284	114	114	77.1-124			0.190	20
1,3,5-Trimethylbenzene	0.0250	0.0289	0.0287	116	115	79.0-125			0.690	20
Vinyl chloride	0.0250	0.0219	0.0234	87.5	93.6	58.4-134			6.73	20
Xylenes, Total	0.0750	0.0839	0.0847	112	113	78.1-123			0.880	20
(S) Toluene-d8				*95.9*	*95.6*	*88.7-115*				
(S) Dibromofluoromethane				*92.5*	*92.3*	*76.3-123*				
(S) a,a,a-Trifluorotoluene				*105*	*105*	*87.2-117*				
(S) 4-Bromofluorobenzene				*102*	*98.4*	*69.7-129*				

L806591-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 12/17/15 13:03 • (MS) 12/17/15 13:22 • (MSD) 12/17/15 13:41

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.000734	0.0786	0.0841	62.3	66.7	1	10.0-130			6.74	31.5
Acrylonitrile	0.125	ND	0.0747	0.0782	59.7	62.6	1	39.3-152			4.62	27.2
Benzene	0.0250	ND	0.0109	0.0117	43.7	46.9	1	47.8-131	J6	J6	7.19	22.8
Bromobenzene	0.0250	ND	0.00582	0.00654	23.3	26.2	1	40.0-130	J6	J6	11.7	27.4
Bromodichloromethane	0.0250	ND	0.0121	0.0134	48.4	53.8	1	50.6-128	J6		10.6	22.8
Bromoform	0.0250	ND	0.0125	0.0140	50.0	56.1	1	43.3-139			11.6	25.9
Bromomethane	0.0250	ND	0.0189	0.0202	75.4	80.7	1	5.00-189			6.78	26.7
n-Butylbenzene	0.0250	ND	0.00193	0.00203	7.70	8.11	1	23.6-146	J6	J6	5.23	39.2
sec-Butylbenzene	0.0250	ND	0.00267	0.00301	10.7	12.1	1	31.0-142	J6	J6	12.0	34.7
tert-Butylbenzene	0.0250	ND	0.00331	0.00369	13.3	14.7	1	36.9-142	J6	J6	10.7	31.7
Carbon tetrachloride	0.0250	ND	0.00990	0.0112	39.6	44.8	1	46.0-140	J6	J6	12.3	27.2
Chlorobenzene	0.0250	ND	0.00886	0.00947	35.4	37.9	1	44.1-134	J6	J6	6.74	25.7
Chlorodibromomethane	0.0250	ND	0.0140	0.0145	56.2	57.9	1	49.7-134			3.01	24
Chloroethane	0.0250	ND	0.0164	0.0181	65.5	72.5	1	5.00-164			10.3	28.4
2-Chloroethyl vinyl ether	0.125	ND	0.0205	0.0239	16.4	19.1	1	5.00-159			15.3	40
Chloroform	0.0250	ND	0.0125	0.0134	50.0	53.4	1	51.2-133	J6		6.63	22.8
Chloromethane	0.0250	ND	0.0110	0.0121	44.0	48.2	1	31.4-141			9.16	24.6
2-Chlorotoluene	0.0250	ND	0.00470	0.00514	18.8	20.6	1	36.1-137	J6	J6	9.05	28.9
4-Chlorotoluene	0.0250	ND	0.00422	0.00476	16.9	19.1	1	35.4-137	J6	J6	12.1	29.8
1,2-Dibromo-3-Chloropropane	0.0250	ND	0.0101	0.0122	40.6	48.9	1	40.4-138			18.6	30.8
1,2-Dibromoethane	0.0250	ND	0.0143	0.0154	57.4	61.7	1	50.2-133			7.19	23.6
Dibromomethane	0.0250	ND	0.0148	0.0153	59.2	61.4	1	52.4-128			3.66	23
1,2-Dichlorobenzene	0.0250	ND	0.00388	0.00447	15.5	17.9	1	34.6-139	J6	J6	14.3	29.9
1,3-Dichlorobenzene	0.0250	ND	0.00402	0.00441	16.1	17.6	1	28.4-142	J6	J6	9.24	31.2
1,4-Dichlorobenzene	0.0250	ND	0.00393	0.00423	15.7	16.9	1	35.0-133	J6	J6	7.29	31.1
Dichlorodifluoromethane	0.0250	ND	0.0119	0.0137	47.6	54.8	1	31.2-144			14.1	30.2
1,1-Dichloroethane	0.0250	ND	0.0118	0.0126	47.0	50.3	1	49.1-136	J6		6.70	22.9
1,2-Dichloroethane	0.0250	ND	0.0137	0.0136	54.7	54.2	1	47.1-129			0.800	22.7
1,1-Dichloroethene	0.0250	ND	0.0170	0.0197	67.9	78.8	1	36.1-142			14.8	25.6
cis-1,2-Dichloroethene	0.0250	ND	0.0126	0.0134	50.6	53.6	1	50.6-133			5.87	23
trans-1,2-Dichloroethene	0.0250	0.000622	0.0120	0.0134	45.5	51.0	1	43.8-135			10.9	24.8
1,2-Dichloropropane	0.0250	ND	0.0116	0.0123	46.5	49.2	1	50.3-134	J6	J6	5.54	22.7
1,1-Dichloropropene	0.0250	ND	0.00874	0.00950	35.0	38.0	1	43.0-137	J6	J6	8.36	26.4
1,3-Dichloropropane	0.0250	ND	0.0132	0.0142	53.0	56.8	1	51.4-127			6.86	23.1
cis-1,3-Dichloropropene	0.0250	ND	0.0117	0.0124	47.0	49.8	1	48.4-134	J6		5.83	23.6
trans-1,3-Dichloropropene	0.0250	ND	0.0121	0.0129	48.4	51.4	1	46.6-135			6.05	25.3

L806591-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 12/17/15 13:03 • (MS) 12/17/15 13:22 • (MSD) 12/17/15 13:41

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
2,2-Dichloropropane	0.0250	ND	0.00953	0.0112	38.1	44.6	1	45.2-141	J6	J6	15.7	26.6
Di-isopropyl ether	0.0250	ND	0.0115	0.0118	45.9	47.2	1	46.7-140	J6		2.77	23.5
Ethylbenzene	0.0250	0.000263	0.00715	0.00771	27.5	29.8	1	44.8-135	J6	J6	7.56	26.9
Hexachloro-1,3-butadiene	0.0250	ND	0.00107	0.00134	4.27	5.37	1	10.0-149	J6	J6	22.9	40
Isopropylbenzene	0.0250	ND	0.00468	0.00518	18.7	20.7	1	41.9-139	J6	J6	10.1	29.3
p-Isopropyltoluene	0.0250	ND	0.00254	0.00282	10.1	11.3	1	27.3-146	J6	J6	10.5	35.1
2-Butanone (MEK)	0.125	0.000234	0.0734	0.0791	58.5	63.1	1	23.9-170			7.56	28.3
Methylene Chloride	0.0250	ND	0.0133	0.0134	53.3	53.7	1	46.7-125			0.670	22.2
4-Methyl-2-pentanone (MIBK)	0.125	ND	0.0743	0.0804	59.4	64.3	1	42.4-146			7.93	26.7
Methyl tert-butyl ether	0.0250	ND	0.0139	0.0147	55.7	58.7	1	50.4-131			5.23	24.8
Naphthalene	0.0250	0.00116	0.00406	0.00436	11.6	12.8	1	18.4-145	J6	J6	7.07	34
n-Propylbenzene	0.0250	ND	0.00366	0.00401	14.7	16.0	1	35.2-139	J6	J6	8.91	31.9
Styrene	0.0250	ND	0.00680	0.00746	27.2	29.8	1	39.7-137	J6	J6	9.21	28.2
1,1,1,2-Tetrachloroethane	0.0250	ND	0.0105	0.0110	42.1	44.2	1	48.8-136	J6	J6	4.80	25.5
1,1,2,2-Tetrachloroethane	0.0250	ND	0.0115	0.0128	46.1	51.0	1	45.7-140			10.2	26.4
Tetrachloroethene	0.0250	ND	0.00718	0.00756	28.7	30.2	1	37.7-140	J6	J6	5.20	29.2
Toluene	0.0250	0.000478	0.00957	0.0104	36.4	39.8	1	47.8-127	J6	J6	8.58	24.3
1,1,2-Trichlorotrifluoroethane	0.0250	ND	0.00928	0.0127	37.1	50.8	1	35.7-146		J3	31.1	28.8
1,2,3-Trichlorobenzene	0.0250	ND	0.00153	0.00168	6.13	6.73	1	10.0-150	J6	J6	9.39	38.5
1,2,4-Trichlorobenzene	0.0250	ND	0.00165	0.00177	6.60	7.09	1	10.0-153	J6	J6	7.15	39.3
1,1,1-Trichloroethane	0.0250	ND	0.0115	0.0128	45.9	51.3	1	49.0-138	J6		11.0	25.3
1,1,2-Trichloroethane	0.0250	ND	0.0144	0.0154	57.6	61.4	1	52.3-132			6.48	23.4
Trichloroethene	0.0250	ND	0.0116	0.0124	46.2	49.5	1	48.0-132	J6		6.82	24.8
Trichlorofluoromethane	0.0250	ND	0.0153	0.0178	61.2	71.4	1	12.8-169			15.3	29.7
1,2,3-Trichloropropane	0.0250	ND	0.0147	0.0158	58.6	63.2	1	44.4-138			7.53	26.3
1,2,3-Trimethylbenzene	0.0250	ND	0.00363	0.00401	14.5	16.1	1	41.0-133	J6	J6	10.1	27.6
1,2,4-Trimethylbenzene	0.0250	ND	0.00374	0.00409	15.0	16.4	1	32.9-139	J6	J6	9.02	30.6
1,3,5-Trimethylbenzene	0.0250	ND	0.00369	0.00407	14.8	16.3	1	37.1-138	J6	J6	9.83	30.6
Vinyl chloride	0.0250	ND	0.0138	0.0148	55.1	59.0	1	32.0-146			6.82	26.3
Xylenes, Total	0.0750	ND	0.0199	0.0218	26.6	29.1	1	42.7-135	J6	J6	9.12	26.6
(S) Toluene-d8					*97.2*	*95.3*		*88.7-115*				
(S) Dibromofluoromethane					*94.2*	*94.0*		*76.3-123*				
(S) a,a,a-Trifluorotoluene					*105*	*105*		*87.2-117*				
(S) 4-Bromofluorobenzene					*93.8*	*95.1*		*69.7-129*				

Method Blank (MB)

(MB) 12/16/15 10:13

Analyte	MB Result	MB Qualifier	MB RDL
	mg/kg		mg/kg
cis-1,2-Dichloroethene	ND		0.00100
Trichloroethene	ND		0.00100

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 12/16/15 07:17 • (LCSD) 12/16/15 07:48

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	%	%	%			%	%
cis-1,2-Dichloroethene	0.0250	0.0242	0.0268	96.7	107	76.1-121			10.3	20
Trichloroethene	0.0250	0.0238	0.0251	95.1	100	77.2-122			5.52	20

Method Blank (MB)

(MB) 12/16/15 10:55

Analyte	MB Result	MB Qualifier	MB RDL
	mg/kg		mg/kg
cis-1,2-Dichloroethene	ND		0.00100
Trichloroethene	ND		0.00100

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 12/16/15 09:18 • (LCSD) 12/16/15 09:37

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	%	%	%			%	%
cis-1,2-Dichloroethene	0.0250	0.0227	0.0244	90.9	97.8	76.1-121			7.26	20
Trichloroethene	0.0250	0.0230	0.0248	91.9	99.2	77.2-122			7.55	20

L805676-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 12/16/15 16:17 • (MS) 12/16/15 16:48 • (MSD) 12/16/15 17:08

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
cis-1,2-Dichloroethene	0.0250	ND	1.12	1.19	89.3	94.9	50	50.6-133			6.14	23
Trichloroethene	0.0250	ND	1.46	1.55	117	124	50	48.0-132			5.86	24.8

Method Blank (MB)

(MB) 12/18/15 12:46

Analyte	MB Result mg/l	MB Qualifier	MB RDL mg/l
2-Chloroethyl vinyl ether	ND		0.00250
2-Hexanone	ND		0.00250
Methylene Chloride	ND		0.00250

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) 12/18/15 11:05 • (LCSD) 12/18/15 11:25

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
2-Chloroethyl vinyl ether	0.125	0.205	0.173	164	138	23.4-162	J4		17.1	23.5
2-Hexanone	0.125	0.161	0.165	128	132	59.4-151			2.44	20
Methylene Chloride	0.0250	0.0244	0.0240	97.4	95.9	69.5-120			1.51	20

L806551-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) 12/18/15 14:09 • (MS) 12/18/15 13:08 • (MSD) 12/18/15 13:29

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
2-Chloroethyl vinyl ether	0.125	ND	0.0161	0.00300	12.9	2.40	1	5.00-149		J3 J6	137	40
2-Hexanone	0.125	ND	0.101	0.102	81.0	81.7	1	59.4-154			0.930	20.1
Methylene Chloride	0.0250	0.000325	0.0190	0.0187	74.7	73.3	1	61.5-125			1.83	20

Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
ND,U	Not detected at the Reporting Limit (or MDL where applicable).
RPD	Relative Percent Difference.
(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
Rec.	Recovery.
SDL	Sample Detection Limit.
MQL	Method Quantitation Limit.
Unadj. MQL	Unadjusted Method Quantitation Limit.

Qualifier	Description
J1	Surrogate recovery limits have been exceeded; values are outside upper control limits.
J2	Surrogate recovery limits have been exceeded; values are outside lower control limits.
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
V3	The internal standard exhibited poor recovery due to sample matrix interference. The analytical results will be biased high. BDL results will be unaffected.

ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our "one location" design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be **YOUR LAB OF CHOICE.**
***** Not all certifications held by the laboratory are applicable to the results reported in the attached report.

State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey–NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Conneticut	PH-0197	North Carolina [1]	DW21704
Florida	E87487	North Carolina [2]	41
Georgia	NELAP	North Dakota	R-140
Georgia [1]	923	Ohio–VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky [1]	90010	South Dakota	n/a
Kentucky [2]	16	Tennessee [1 4]	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas [5]	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

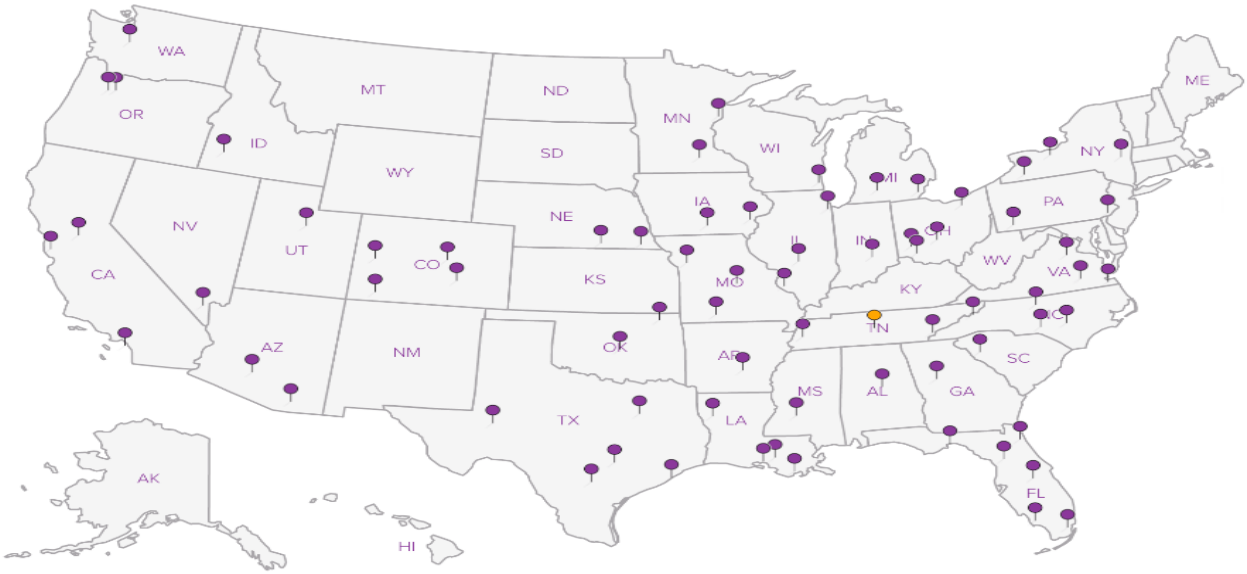
Third Party & Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA–Crypto	TN00003		

[1.] Drinking Water [2.] Underground Storage Tanks [3.] Aquatic Toxicity [4.] Chemical/Microbiological [5.] Mold [n/a] Accreditation not applicable

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. **ESC Lab Sciences performs all testing at our central laboratory.**



PNG Environmental
6665 SW Hampton St.
Suite 101
Tigard, OR. 97223

Billing Information:
Accounts Payable- Betsy Brandner
6665 SW Hampton St. Suite 101

Tigard, OR. 97223

Report to: Paul McBeth

Email to: pmcbeth@pngenv.com

Project Description: Evanite

City/State Collected: Corvallis, OR

Phone: 503-620-2387
FAX:

Client Project #: 1122

ESC Key: PNGENVTOR-EVANITE

Collected by: S. Biles

Site/Facility ID#:

P.O.#:

Collected by (signature):

Immediately Packed on Ice N (Y)

Rush? (Lab MUST Be Notified)
____ Same Day.....200%
____ Next Day.....100%
____ Two Day.....50%
____ Three Day.....25%

Date Results Needed:

Email? __No__Yes

FAX? __No__Yes

Analysis/Container/Preservative

Chain of Custody
Page 1 of 2

ESC
L-A-B S-C-I-E-N-C-E-S
12065 Lebanon Road
Mt. Juliet, TN 37122

Phone: (800) 767-5859
Phone: (615) 758-5858
Fax: (615) 758-5859

CoCode PNGENVTOR(lab use only)

Template/Prelogin

Shipped Via:

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	VOC's	Remarks/Contaminant	Sample # (lab only)
DMW-40/15	Grab	SS		11/30/15	1543	4	X		L805690-01
DMW-40/17.5	↓	↓		↓	1619	4	X		02
DMW-40/37				12/1/15	0830	4	X		03
DMW-40/38.5				↓	0835	4	X		04
DMW-30/6				12/2/15	1238	4	X		05
DMW-30/14					1256	4	X		06
DMW-30/18.5					1309	4	X		07
DMW-30/42					1604	4	X		08
DMW-30/44	↓	↓		↓	1606	4	X		09

*Matrix: SS - Soil/Solid GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other_____

pH _____ Temp _____

Remarks: 6503 7150 9621

Flow _____ Other _____

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ _____	Condition: (lab use only)
	12/8/15	1240	ESC		GOOD
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: 3.2°	Bottles Received: 8
					CoC Seals Intact: ____Y ____N ✓ NA
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 12-9-15	Time: 900
				pH Checked:	NCF: ✓

PNG Environmental
6665 SW Hampton St.
Suite 101
Tigard, OR. 97223

Billing Information:
Accounts Payable- Betsy Brandner
6665 SW Hampton St. Suite 101

Tigard, OR. 97223

Report to: Paul McBeth

Email to: pmcbeth@pngenv.com

Project Description: Evanite

City/Sate Collected: Corvallis OR

Phone: 503-620-2387
FAX:

Client Project #: 1122

ESC Key: PNGENVTOR-EVANITE

Collected by: S. Biles

Site/Facility ID#:

P.O.#:

Collected by (signature):

Immediately Packed on Ice N (Y)

Rush? (Lab MUST Be Notified)
____ Same Day. 200%
____ Next Day. 100%
____ Two Day 50%
____ Three Day 25%

Date Results Needed:

Email? __No __Yes

FAX? __No __Yes

Analysis/Container/Preservative

Chain of Custody
Page 2 of 2

ESC
L-A-B S-C-I-E-N-C-E-S

12065 Lebanon Road
Mt. Juliet, TN 37122

Phone: (800) 767-5859
Phone: (615) 758-5858
Fax: (615) 758-5859

CoCode PNGENVTOR(lab use only)

Template/Prelogin

Shipped Via:

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	VOC's	Remarks/Contaminant	Sample # (lab only)
DMW-30/46	Grab	SS		12/2/15	1608	4	X		L865610-10
DMW-41/8				12/3/15	1120	4	X		11
DMW-41/19.5					1135	4	X		12
DMW-41/42.5					1435	4	X		13
DMW-41/45					1438	4	X		14
DMW-42/17				12/4/15	1028	4	X		15
DMW-42/35.5					1140	4	X		16
DMW-42/37					1142	4	X		17
DMW-42/40					1144	4	X		18

*Matrix: **SS** - Soil/Solid **GW** - Groundwater **WW** - WasteWater **DW** - Drinking Water **OT** - Other_____

pH _____ Temp _____

Remarks:

Flow _____ Other _____

	Date:	Time:		
Relinquished by: (Signature)	12/8/15	1240	Received by: (Signature) ES	Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ _____
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: 3.2° Bottles Received: 18482
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 12-9-15 Time: 900

Condition: (lab use only) Good

CoC Seals Intact: ____ Y ____ N ____ NA

pH Checked: NCF: V

PNG Environmental
6665 SW Hampton St.
Suite 101
Tigard, OR. 97223

Billing Information:
Accounts Payable- Betsy Brandner
6665 SW Hampton St. Suite 101

Tigard, OR. 97223

Report to: Paul McBeth

Email to: pmcbeth@pngenv.com

Project Description: Evanite

City/State Collected: Corvallis, OR

Phone: 503-620-2387
FAX:

Client Project #: 1122

ESC Key: PNGENVTOR-EVANITE

Collected by: S. Biles

Site/Facility ID#:

P.O.#:

Collected by (signature):

Immediately Packed on Ice N (Y)

Rush? (Lab MUST Be Notified)
____ Same Day. 200%
____ Next Day. 100%
____ Two Day 50%
____ Three Day 25%

Date Results Needed:

Email? __No__Yes

FAX? __No__Yes

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	VOC's	Remarks/Contaminant	Sample # (lab only)
DMW-41-GW	Grab	GW		12/3/15	1330	3	x		L805690-19
DMW-42-GW	↓	↓		12/4/15	1100	3	x		20
DMW-41/49.5						4	x		21

Analysis/Container/Preservative

Chain of Custody
Page 1 of 1

ESC LABORATORY SCIENCES
12065 Lebanon Road
Mt. Juliet, TN 37122

Phone: (800) 767-5859
Phone: (615) 758-5858
Fax: (615) 758-5859

CoCode PNGENVTOR (lab use only)
Template/Prelogin
Shipped Via:

*Matrix: SS - Soil/Solid GW - Groundwater WW - WasteWater DW - Drinking Water OT - Other_____

pH _____ Temp _____

Remarks:

Flow _____ Other _____

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Samples returned via: ☐ UPS ☐ FedEx ☐ Courier ☐ _____	Condition: (lab use only)
	12/8/15	1240	ESC		
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: 3.2	Bottles Received: 08482
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 12-9-15	Time: 900

CoC Seals Intact: ___ Y ___ N U NA

pH Checked: NCF: /

Jeremy W. Watkins

ESC Lab Sciences
Non-Conformance Form

Login #: L805690	Client: PNGENVTOR	Date: 12/09/15	Evaluated by: Daniel W

Non-Conformance (check applicable items)

	Sample Integrity		Chain of Custody Clarification		
	Parameter(s) past holding time		Login Clarification Needed		**If Broken Container:**
	Improper temperature		Chain of custody is incomplete		Insufficient packing material around container
	Improper container type		Please specify Metals requested.		Insufficient packing material inside cooler
	Improper preservation		Please specify TCLP requested.		Improper handling by carrier (FedEx / UPS / Courie
	Insufficient sample volume.	x	Received additional samples not listed on coc.		Sample was frozen
	Sample is biphasic.		Sample ids on containers do not match ids on coc		Container lid not intact
	Vials received with headspace.		Trip Blank not received.		**If no Chain of Custody:**
	Broken container		Client did not "X" analysis.		Received by:
	Broken container:		Chain of Custody is missing		Date/Time:
	Sufficient sample remains				Temp./Cont. Rec./pH:
					Carrier:
					Tracking#

Login Comments: Received DMW-41/49.5 not on COC (1-4oz and 3-Stir Bars)

Client informed by:		Call		Email	X	Voice Mail		Date: 12/10/15	Time: 1300
TSR Initials: JCR	Client Contact: Sam Vant								

Login Instructions:

Add to COC and analyze this sample.

AIR DATA

ANALYTICAL REPORT

For:

Hollingsworth & Vose - PNG/Evanite
112 Washington St
East Walpole, MA 02032

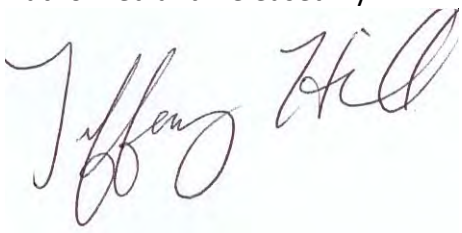
ASL Report #: P2167

Project ID: 920019.OTC

Attn: Paul McBeth

cc:
svant@pngenv.com

Authorized and Released By:



Laboratory Project Manager
Tiffany Hill
(541) 758-0235 ext.23109
June 05, 2015

All analyses performed by CH2M HILL are clearly indicated. Any subcontracted analyses are included as appended reports as received from the subcontracted laboratory. The results included in this report only relate to the samples listed on the following Sample Cross-Reference page. This report shall not be reproduced except in full, without the written approval of the laboratory.

Any unusual difficulties encountered during the analysis of your samples are discussed in the attached case narratives.

Accredited in accordance with NELAP:
Oregon (100022)
Louisiana (05031)

Sample Receipt Comments

We certify that the test results meet all NELAP requirements.

Sample Cross-Reference

ASL Sample ID	Client Sample ID	Date/Time Collected	Date Received
P216701	Treatment Shed	05/22/15 15:47	05/22/15
P216702	Submicro South	05/22/15 15:36	05/22/15
P216703	Submicro North	05/22/15 15:34	05/22/15
P216704	North Landfill	05/22/15 15:55	05/22/15
P216705	South Landfill	05/22/15 15:57	05/22/15
P216706	South Property Line	05/22/15 16:00	05/22/15
P216707	South Cooling Pond	05/22/15 16:12	05/22/15

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CH2M HILL
Applied Sciences Laboratory (ASL)
1100 NE Circle Blvd
Suite 300
Corvallis, OR 97330
Tel 541.768.3120
Fax 541.752.0276

Organic CLP-Like Data Qualifiers

U The analyte was analyzed for, but 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.

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 concentration.

P The primary and confirmation analyte result recoveries do not match.

E The analyte was positively identified; the associated numerical value exceeded the instrument calibration range.

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

Inorganic CLP-Like Data Qualifiers

U The analyte was analyzed for, but 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.

E The analyte was positively identified; the associated numerical value exceeded the instrument calibration range.

N The matrix spike/matrix spike duplicate recovery for the analyte is outside of acceptance criteria—qualifier is applied to the native sample only.

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

ANALYSIS METHOD

TO15 SIM

CH2MHILL
Applied Sciences Laboratory (ASL)

1100 NE Circle Blvd., Suite 300
Corvallis, OR 97330
Tel 541-768-3120 Fax 541-752-0276

CASE NARRATIVE
GC/MS VOLATILES ANALYSIS

Lab Name: CH2M HILL ASL **ASL SDG#:** P2167

Project: Hollingsworth & Vose **Project #:** 920019.OTC

With the exceptions noted as flags, footnotes, or detailed in the section below; standard operating procedures were followed in the analysis of the samples and no problems were encountered or anomalies observed.

All laboratory quality control samples were within established control limits, with any exceptions noted below, or in the associated QC summary forms.

Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. For diluted samples, the reporting limits are adjusted for the dilution required.

Calculations are performed before rounding to minimize errors in calculated values.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the section below, or in the sample receipt documentation.

Method(s):
TO15 SIM

Sample ID	Client ID	Date Collected	Time Collected	Canister ID	Certification Date	Incoming pressure inHG	Incoming pressure torr	Primary Dilution Factor
P216701	Treatment Shed	5/22/2015	15:47	6L2646A	4/16/2015	3.8	663	1.88
P216702	Submicro South	5/22/2015	15:36	6L2549A	4/16/2015	-0.4	769	1.62
P216703	Submicro North	5/22/2015	15:34	6L2720A	4/16/2015	2.9	687	1.82
P216704	North Landfill	5/22/2015	15:55	6L2793S	4/16/2015	6.0	608	2.03
P216705	South Landfill	5/22/2015	15:57	6L2507S	4/16/2015	3.7	666	1.86
P216706	South Property Line	5/22/2015	16:00	6L2567S	4/16/2015	6.9	584	2.11
P216707	South Cooling Pond	5/22/2015	16:12	6L2556S	4/16/2015	7.2	576	2.16

SAMPLE DATA SUMMARY

VOLATILE ORGANICS ANALYSIS DATA SHEET

Field Sample ID:

Treatment Shed

SDG No.: P2167

Analysis Method: TO15 SIM

Matrix: AIR

Lab Name: CH2M HILL ASL

Lab Sample ID: P216701

Lab File ID: P216701DL.D

Level: (LOW/MED) LOW

Date Received: 05/22/2015

Date Analyzed: 06/02/2015

Dilution Factor: 94

Instrument: MSG

GC Column: ZB-624 ID: 0.25 (mm) Concentration Units: UG/M3

CAS No.	Analyte	DL	PQL	Result	Q
75-01-4	Vinyl Chloride	0.489	2.44	1.06	J
156-60-5	trans-1,2-Dichloroethene	0.758	3.79	3.79	U
156-59-2	cis-1,2-Dichloroethene	1.52	3.79	15.4	
75-35-4	1,1-Dichloroethene	0.758	3.79	3.79	U
79-01-6	Trichloroethene (TCE)	1.03	5.13	601	
127-18-4	Tetrachloroethene (PCE)	1.30	6.48	6.48	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

Field Sample ID:

Submicro South

SDG No.: P2167

Analysis Method: TO15 SIM

Matrix: AIR

Lab Name: CH2M HILL ASL

Lab Sample ID: P216702

Lab File ID: P216702.D

Level: (LOW/MED) LOW

Date Received: 05/22/2015

Date Analyzed: 06/03/2015

Dilution Factor: 1.62

Instrument: MSG

GC Column: ZB-624 ID: 0.25 (mm) Concentration Units: UG/M3

CAS No.	Analyte	DL	PQL	Result	Q
75-01-4	Vinyl Chloride	0.00842	0.0421	0.0421	U
156-60-5	trans-1,2-Dichloroethene	0.0131	0.0653	0.247	
156-59-2	cis-1,2-Dichloroethene	0.0261	0.0653	0.0653	U
75-35-4	1,1-Dichloroethene	0.0131	0.0653	0.0653	U
79-01-6	Trichloroethene (TCE)	0.0177	0.0885	1.82	
127-18-4	Tetrachloroethene (PCE)	0.0224	0.112	0.973	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

Field Sample ID:

Submicro North

SDG No.: P2167

Analysis Method: TO15 SIM

Matrix: AIR

Lab Name: CH2M HILL ASL

Lab Sample ID: P216703

Lab File ID: P216703.D

Level: (LOW/MED) LOW

Date Received: 05/22/2015

Date Analyzed: 06/03/2015

Dilution Factor: 1.82

Instrument: MSG

GC Column: ZB-624 ID: 0.25 (mm) Concentration Units: UG/M3

CAS No.	Analyte	DL	PQL	Result	Q
75-01-4	Vinyl Chloride	0.00946	0.0473	0.0473	U
156-60-5	trans-1,2-Dichloroethene	0.0147	0.0734	0.0734	U
156-59-2	cis-1,2-Dichloroethene	0.0294	0.0734	0.0883	
75-35-4	1,1-Dichloroethene	0.0147	0.0734	0.0734	U
79-01-6	Trichloroethene (TCE)	0.0199	0.0994	4.10	
127-18-4	Tetrachloroethene (PCE)	0.0251	0.126	0.0261	J

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

Field Sample ID: **North Landfill**

SDG No.: P2167

Analysis Method: TO15 SIM

Matrix: AIR

Lab Name: CH2M HILL ASL

Lab Sample ID: P216704

Lab File ID: P216704.D

Level: (LOW/MED) LOW

Date Received: 05/22/2015

Date Analyzed: 06/03/2015

Dilution Factor: 2.03

Instrument: MSG

GC Column: ZB-624 ID: 0.25 (mm) Concentration Units: UG/M3

CAS No.	Analyte	DL	PQL	Result	Q
75-01-4	Vinyl Chloride	0.0106	0.0528	0.0528	U
156-60-5	trans-1,2-Dichloroethene	0.0164	0.0819	0.0819	U
156-59-2	cis-1,2-Dichloroethene	0.0327	0.0819	0.0819	U
75-35-4	1,1-Dichloroethene	0.0164	0.0819	0.0819	U
79-01-6	Trichloroethene (TCE)	0.0222	0.111	0.159	
127-18-4	Tetrachloroethene (PCE)	0.0280	0.140	0.140	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

Field Sample ID: **South Landfill**

SDG No.: P2167

Analysis Method: TO15 SIM

Matrix: AIR

Lab Name: CH2M HILL ASL

Lab Sample ID: P216705

Lab File ID: P216705.D

Level: (LOW/MED) LOW

Date Received: 05/22/2015

Date Analyzed: 06/03/2015

Dilution Factor: 1.86

Instrument: MSG

GC Column: ZB-624 ID: 0.25 (mm) Concentration Units: UG/M3

CAS No.	Analyte	DL	PQL	Result	Q
75-01-4	Vinyl Chloride	0.00967	0.0484	0.0484	U
156-60-5	trans-1,2-Dichloroethene	0.0150	0.0750	0.0750	U
156-59-2	cis-1,2-Dichloroethene	0.0300	0.0750	0.0835	
75-35-4	1,1-Dichloroethene	0.0150	0.0750	0.0750	U
79-01-6	Trichloroethene (TCE)	0.0203	0.102	1.43	
127-18-4	Tetrachloroethene (PCE)	0.0257	0.128	0.128	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

Field Sample ID: **South Property Line**

SDG No.: P2167

Analysis Method: TO15 SIM

Matrix: AIR

Lab Name: CH2M HILL ASL

Lab Sample ID: P216706

Lab File ID: P216706.D

Level: (LOW/MED) LOW

Date Received: 05/22/2015

Date Analyzed: 06/02/2015

Dilution Factor: 2.11

Instrument: MSG

GC Column: ZB-624 ID: 0.25 (mm) Concentration Units: UG/M3

CAS No.	Analyte	DL	PQL	Result	Q
75-01-4	Vinyl Chloride	0.0110	0.0549	0.0549	U
156-60-5	trans-1,2-Dichloroethene	0.0170	0.0851	0.0851	U
156-59-2	cis-1,2-Dichloroethene	0.0340	0.0851	0.0851	U
75-35-4	1,1-Dichloroethene	0.0170	0.0851	0.0851	U
79-01-6	Trichloroethene (TCE)	0.0230	0.115	0.149	
127-18-4	Tetrachloroethene (PCE)	0.0291	0.146	0.146	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

Field Sample ID:

South Cooling Pond

SDG No.: P2167

Analysis Method: TO15 SIM

Matrix: AIR

Lab Name: CH2M HILL ASL

Lab Sample ID: P216707

Lab File ID: P216707.D

Level: (LOW/MED) LOW

Date Received: 05/22/2015

Date Analyzed: 06/02/2015

Dilution Factor: 2.16

Instrument: MSG

GC Column: ZB-624 ID: 0.25 (mm) Concentration Units: UG/M3

CAS No.	Analyte	DL	PQL	Result	Q
75-01-4	Vinyl Chloride	0.0112	0.0562	0.0562	U
156-60-5	trans-1,2-Dichloroethene	0.0174	0.0871	0.238	
156-59-2	cis-1,2-Dichloroethene	0.0348	0.0871	0.440	
75-35-4	1,1-Dichloroethene	0.0174	0.0871	0.0633	J
79-01-6	Trichloroethene (TCE)	0.0236	0.118	1.03	
127-18-4	Tetrachloroethene (PCE)	0.0298	0.149	0.883	

VOLATILE ORGANICS ANALYSIS DATA SHEET

Field Sample ID: **XB1-0602**

SDG No.: P2167

Analysis Method: TO15 SIM

Matrix: AIR

Lab Name: CH2M HILL ASL

Lab Sample ID: XB1-0602

Lab File ID: XB1-0602.D

Level: (LOW/MED) LOW

Date Received: / /

Date Analyzed: 06/02/2015

Dilution Factor: 1

Instrument: MSG

GC Column: ZB-624 ID: 0.25 (mm) Concentration Units: UG/M3

CAS No.	Analyte	DL	PQL	Result	Q
75-01-4	Vinyl Chloride	0.00520	0.0260	0.0260	U
156-60-5	trans-1,2-Dichloroethene	0.00810	0.0403	0.0403	U
156-59-2	cis-1,2-Dichloroethene	0.0161	0.0403	0.0403	U
75-35-4	1,1-Dichloroethene	0.00810	0.0403	0.0403	U
79-01-6	Trichloroethene (TCE)	0.0109	0.0546	0.0546	U
127-18-4	Tetrachloroethene (PCE)	0.0138	0.0690	0.0690	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

Field Sample ID:

XB2-0603

SDG No.: P2167

Analysis Method: TO15 SIM

Matrix: AIR

Lab Name: CH2M HILL ASL

Lab Sample ID: XB2-0603

Lab File ID: XB2-0603.D

Level: (LOW/MED) LOW

Date Received: / /

Date Analyzed: 06/03/2015

Dilution Factor: 1

Instrument: MSG

GC Column: ZB-624 ID: 0.25 (mm) Concentration Units: UG/M3

CAS No.	Analyte	DL	PQL	Result	Q
75-01-4	Vinyl Chloride	0.00520	0.0260	0.0260	U
156-60-5	trans-1,2-Dichloroethene	0.00810	0.0403	0.0403	U
156-59-2	cis-1,2-Dichloroethene	0.0161	0.0403	0.0403	U
75-35-4	1,1-Dichloroethene	0.00810	0.0403	0.0403	U
79-01-6	Trichloroethene (TCE)	0.0109	0.0546	0.0546	U
127-18-4	Tetrachloroethene (PCE)	0.0138	0.0690	0.0690	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

Field Sample ID:

Treatment Shed

SDG No.: P2167

Analysis Method: TO15 SIM

Matrix: AIR

Lab Name: CH2M HILL ASL

Lab Sample ID: P216701

Lab File ID: P216701DL.D

Level: (LOW/MED) LOW

Date Received: 05/22/2015

Date Analyzed: 06/02/2015

Dilution Factor: 94

Instrument: MSG

GC Column: ZB-624 ID: 0.25 (mm) Concentration Units: PPBV

CAS No.	Analyte	DL	PQL	Result	Q
75-01-4	Vinyl Chloride	0.188	0.940	0.407	J
156-60-5	trans-1,2-Dichloroethene	0.188	0.940	0.940	U
156-59-2	cis-1,2-Dichloroethene	0.376	0.940	3.810	
75-35-4	1,1-Dichloroethene	0.188	0.940	0.940	U
79-01-6	Trichloroethene (TCE)	0.188	0.940	110.000	
127-18-4	Tetrachloroethene (PCE)	0.188	0.940	0.940	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

Field Sample ID:

Submicro South

SDG No.: P2167

Analysis Method: TO15 SIM

Matrix: AIR

Lab Name: CH2M HILL ASL

Lab Sample ID: P216702

Lab File ID: P216702.D

Level: (LOW/MED) LOW

Date Received: 05/22/2015

Date Analyzed: 06/03/2015

Dilution Factor: 1.62

Instrument: MSG

GC Column: ZB-624 ID: 0.25 (mm) Concentration Units: PPBV

CAS No.	Analyte	DL	PQL	Result	Q
75-01-4	Vinyl Chloride	0.00324	0.0162	0.0162	U
156-60-5	trans-1,2-Dichloroethene	0.00324	0.0162	0.0613	
156-59-2	cis-1,2-Dichloroethene	0.00648	0.0162	0.0162	U
75-35-4	1,1-Dichloroethene	0.00324	0.0162	0.0162	U
79-01-6	Trichloroethene (TCE)	0.00324	0.0162	0.334	
127-18-4	Tetrachloroethene (PCE)	0.00324	0.0162	0.141	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

Field Sample ID:

Submicro North

SDG No.: P2167

Analysis Method: TO15 SIM

Matrix: AIR

Lab Name: CH2M HILL ASL

Lab Sample ID: P216703

Lab File ID: P216703.D

Level: (LOW/MED) LOW

Date Received: 05/22/2015

Date Analyzed: 06/03/2015

Dilution Factor: 1.82

Instrument: MSG

GC Column: ZB-624 ID: 0.25 (mm) Concentration Units: PPBV

CAS No.	Analyte	DL	PQL	Result	Q
75-01-4	Vinyl Chloride	0.00364	0.0182	0.0182	U
156-60-5	trans-1,2-Dichloroethene	0.00364	0.0182	0.0182	U
156-59-2	cis-1,2-Dichloroethene	0.00728	0.0182	0.0219	
75-35-4	1,1-Dichloroethene	0.00364	0.0182	0.0182	U
79-01-6	Trichloroethene (TCE)	0.00364	0.0182	0.750	
127-18-4	Tetrachloroethene (PCE)	0.00364	0.0182	0.00379	J

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

Field Sample ID: **North Landfill**

SDG No.: P2167

Analysis Method: TO15 SIM

Matrix: AIR

Lab Name: CH2M HILL ASL

Lab Sample ID: P216704

Lab File ID: P216704.D

Level: (LOW/MED) LOW

Date Received: 05/22/2015

Date Analyzed: 06/03/2015

Dilution Factor: 2.03

Instrument: MSG

GC Column: ZB-624 ID: 0.25 (mm) Concentration Units: PPBV

CAS No.	Analyte	DL	PQL	Result	Q
75-01-4	Vinyl Chloride	0.00406	0.0203	0.0203	U
156-60-5	trans-1,2-Dichloroethene	0.00406	0.0203	0.0203	U
156-59-2	cis-1,2-Dichloroethene	0.00812	0.0203	0.0203	U
75-35-4	1,1-Dichloroethene	0.00406	0.0203	0.0203	U
79-01-6	Trichloroethene (TCE)	0.00406	0.0203	0.0291	
127-18-4	Tetrachloroethene (PCE)	0.00406	0.0203	0.0203	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

Field Sample ID: **South Landfill**

SDG No.: P2167

Analysis Method: TO15 SIM

Matrix: AIR

Lab Name: CH2M HILL ASL

Lab Sample ID: P216705

Lab File ID: P216705.D

Level: (LOW/MED) LOW

Date Received: 05/22/2015

Date Analyzed: 06/03/2015

Dilution Factor: 1.86

Instrument: MSG

GC Column: ZB-624 ID: 0.25 (mm) Concentration Units: PPBV

CAS No.	Analyte	DL	PQL	Result	Q
75-01-4	Vinyl Chloride	0.00372	0.0186	0.0186	U
156-60-5	trans-1,2-Dichloroethene	0.00372	0.0186	0.0186	U
156-59-2	cis-1,2-Dichloroethene	0.00744	0.0186	0.0207	
75-35-4	1,1-Dichloroethene	0.00372	0.0186	0.0186	U
79-01-6	Trichloroethene (TCE)	0.00372	0.0186	0.261	
127-18-4	Tetrachloroethene (PCE)	0.00372	0.0186	0.0186	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

Field Sample ID: **South Property Line**

SDG No.: P2167

Analysis Method: TO15 SIM

Matrix: AIR

Lab Name: CH2M HILL ASL

Lab Sample ID: P216706

Lab File ID: P216706.D

Level: (LOW/MED) LOW

Date Received: 05/22/2015

Date Analyzed: 06/02/2015

Dilution Factor: 2.11

Instrument: MSG

GC Column: ZB-624 ID: 0.25 (mm) Concentration Units: PPBV

CAS No.	Analyte	DL	PQL	Result	Q
75-01-4	Vinyl Chloride	0.00422	0.0211	0.0211	U
156-60-5	trans-1,2-Dichloroethene	0.00422	0.0211	0.0211	U
156-59-2	cis-1,2-Dichloroethene	0.00844	0.0211	0.0211	U
75-35-4	1,1-Dichloroethene	0.00422	0.0211	0.0211	U
79-01-6	Trichloroethene (TCE)	0.00422	0.0211	0.0273	
127-18-4	Tetrachloroethene (PCE)	0.00422	0.0211	0.0211	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

Field Sample ID:

South Cooling Pond

SDG No.: P2167

Analysis Method: TO15 SIM

Matrix: AIR

Lab Name: CH2M HILL ASL

Lab Sample ID: P216707

Lab File ID: P216707.D

Level: (LOW/MED) LOW

Date Received: 05/22/2015

Date Analyzed: 06/02/2015

Dilution Factor: 2.16

Instrument: MSG

GC Column: ZB-624 ID: 0.25 (mm) Concentration Units: PPBV

CAS No.	Analyte	DL	PQL	Result	Q
75-01-4	Vinyl Chloride	0.00432	0.0216	0.0216	U
156-60-5	trans-1,2-Dichloroethene	0.00432	0.0216	0.0591	
156-59-2	cis-1,2-Dichloroethene	0.00864	0.0216	0.109	
75-35-4	1,1-Dichloroethene	0.00432	0.0216	0.0157	J
79-01-6	Trichloroethene (TCE)	0.00432	0.0216	0.189	
127-18-4	Tetrachloroethene (PCE)	0.00432	0.0216	0.128	

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

Field Sample ID: **XB1-0602**

SDG No.: P2167

Analysis Method: TO15 SIM

Matrix: AIR

Lab Name: CH2M HILL ASL

Lab Sample ID: XB1-0602

Lab File ID: XB1-0602.D

Level: (LOW/MED) LOW

Date Received: / /

Date Analyzed: 06/02/2015

Dilution Factor: 1

Instrument: MSG

GC Column: ZB-624 ID: 0.25 (mm) Concentration Units: PPBV

CAS No.	Analyte	DL	PQL	Result	Q
75-01-4	Vinyl Chloride	0.002	0.010	0.010	U
156-60-5	trans-1,2-Dichloroethene	0.002	0.010	0.010	U
156-59-2	cis-1,2-Dichloroethene	0.004	0.010	0.010	U
75-35-4	1,1-Dichloroethene	0.002	0.010	0.010	U
79-01-6	Trichloroethene (TCE)	0.002	0.010	0.010	U
127-18-4	Tetrachloroethene (PCE)	0.002	0.010	0.010	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

Field Sample ID: **XB2-0603**

SDG No.: P2167

Analysis Method: TO15 SIM

Matrix: AIR

Lab Name: CH2M HILL ASL

Lab Sample ID: XB2-0603

Lab File ID: XB2-0603.D

Level: (LOW/MED) LOW

Date Received: / /

Date Analyzed: 06/03/2015

Dilution Factor: 1

Instrument: MSG

GC Column: ZB-624 ID: 0.25 (mm) Concentration Units: PPBV

CAS No.	Analyte	DL	PQL	Result	Q
75-01-4	Vinyl Chloride	0.002	0.010	0.010	U
156-60-5	trans-1,2-Dichloroethene	0.002	0.010	0.010	U
156-59-2	cis-1,2-Dichloroethene	0.004	0.010	0.010	U
75-35-4	1,1-Dichloroethene	0.002	0.010	0.010	U
79-01-6	Trichloroethene (TCE)	0.002	0.010	0.010	U
127-18-4	Tetrachloroethene (PCE)	0.002	0.010	0.010	U

QC SUMMARY

AIR VOLATILE SURROGATE RECOVERY

SDG No.: P2167 Lab Name: CH2M HILL ASL

Analysis Method: TO15 SIM

GC Column: ZB-624 ID: 0.25 (mm) Instrument Name: MSG

	Field/QC Sample ID	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	S11	S12	# Out
1	BS1X0602	121	110											
2	XB1-0602	102	116											
3	South Property Line	98	99											
4	South Cooling Pond	107	114											
5	Treatment Shed	92	117											
6	BS1X0603	106	112											
7	XB2-0603	102	100											
8	Submicro South	110	116											
9	Submicro North	104	97											
10	North Landfill	103	101											
11	South Landfill	109	94											

* Values outside of QC limits

D Surrogate diluted out

	QC Limits
S1: Toluene-d8	(70-130)
S2: 4-Bromofluorobenzene	(70-130)

AIR VOLATILE BLANK SPIKE RECOVERY

SDG No.: P2167 Lab Name: CH2M HILL ASL

Analysis Method: TO15 SIM Blank Spike ID: BS1X0602

GC Column: ZB-624 ID: 0.25 (mm) Instrument Name: MSG

Analyte	Spike Added (UG/M3)	BS Result (UG/M3)	%R	QC Limits %R	Q
Vinyl Chloride	1.30	1.14	88	70-130	
trans-1,2-Dichloroethene	2.02	1.45	72	70-130	
cis-1,2-Dichloroethene	2.02	1.47	73	70-130	
Trichloroethene (TCE)	2.73	2.28	84	70-130	
Tetrachloroethene (PCE)	3.45	3.24	94	70-130	
1,1-Dichloroethene	2.02	1.50	75	70-130	

* Values outside of QC limits

Comments:

AIR VOLATILE BLANK SPIKE RECOVERY

SDG No.: P2167 Lab Name: CH2M HILL ASL

Analysis Method: TO15 SIM Blank Spike ID: BS1X0603

GC Column: ZB-624 ID: 0.25 (mm) Instrument Name: MSG

Analyte	Spike Added (UG/M3)	BS Result (UG/M3)	%R	QC Limits %R	Q
Vinyl Chloride	1.30	1.18	91	70-130	
trans-1,2-Dichloroethene	2.02	1.66	82	70-130	
cis-1,2-Dichloroethene	2.02	1.47	73	70-130	
Trichloroethene (TCE)	2.73	2.34	86	70-130	
Tetrachloroethene (PCE)	3.45	3.26	95	70-130	
1,1-Dichloroethene	2.02	1.81	90	70-130	

* Values outside of QC limits

Comments:

AIR VOLATILE BLANK SPIKE RECOVERY

SDG No.: P2167 Lab Name: CH2M HILL ASL

Analysis Method: TO15 SIM Blank Spike ID: BS1X0602

GC Column: ZB-624 ID: 0.25 (mm) Instrument Name: MSG

Analyte	Spike Added (PPBV)	BS Result (PPBV)	%R	QC Limits %R	Q
Vinyl Chloride	0.500	0.438	88	70-130	
trans-1,2-Dichloroethene	0.500	0.359	72	70-130	
cis-1,2-Dichloroethene	0.500	0.365	73	70-130	
Trichloroethene (TCE)	0.500	0.418	84	70-130	
Tetrachloroethene (PCE)	0.500	0.469	94	70-130	
1,1-Dichloroethene	0.500	0.373	75	70-130	

* Values outside of QC limits

Comments:

AIR VOLATILE BLANK SPIKE RECOVERY

SDG No.: P2167 Lab Name: CH2M HILL ASL

Analysis Method: TO15 SIM Blank Spike ID: BS1X0603

GC Column: ZB-624 ID: 0.25 (mm) Instrument Name: MSG

Analyte	Spike Added (PPBV)	BS Result (PPBV)	%R	QC Limits %R	Q
Vinyl Chloride	0.500	0.453	91	70-130	
trans-1,2-Dichloroethene	0.500	0.411	82	70-130	
cis-1,2-Dichloroethene	0.500	0.365	73	70-130	
Trichloroethene (TCE)	0.500	0.429	86	70-130	
Tetrachloroethene (PCE)	0.500	0.473	95	70-130	
1,1-Dichloroethene	0.500	0.450	90	70-130	

* Values outside of QC limits

Comments:

AIR VOLATILE METHOD BLANK SUMMARY

Field Sample ID: XB1-0602

SDG No.: P2167

Lab Name: CH2M HILL ASL

Analysis Method: TO15 SIM

Lab Sample ID: XB1-0602

Lab File ID: XB1-0602.D

Date Analyzed: 06/02/2015

GC Column: ZB-624 ID: 0.25 (mm)

Time Analyzed: 1404

Instrument Name: MSG

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS, AND MSD:

	Field Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
1	BS1X0602	BS1X0602	BS1X0602.D	06/02/2015	1320
2	South Property Line	P216706	P216706.D	06/02/2015	1957
3	South Cooling Pond	P216707	P216707.D	06/02/2015	2041
4	Treatment Shed	P216701	P216701DL.D	06/02/2015	2126

Comments:

AIR VOLATILE METHOD BLANK SUMMARY

Field Sample ID: XB2-0603

SDG No.: P2167

Lab Name: CH2M HILL ASL

Analysis Method: TO15 SIM

Lab Sample ID: XB2-0603

Lab File ID: XB2-0603.D

Date Analyzed: 06/03/2015

GC Column: ZB-624 ID: 0.25 (mm)

Time Analyzed: 1436

Instrument Name: MSG

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS, AND MSD:

	Field Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
1	BS1X0603	BS1X0603	BS1X0603.D	06/03/2015	1309
2	Submicro South	P216702	P216702.D	06/03/2015	1651
3	Submicro North	P216703	P216703.D	06/03/2015	1735
4	North Landfill	P216704	P216704.D	06/03/2015	1904
5	South Landfill	P216705	P216705.D	06/03/2015	1949

Comments:

5B

VOLATILE ORGANIC RUN LOG

SDG No.: P2167

Lab Name: CH2M HILL ASL

Analysis Method: TO15 SIM

Lab File ID: T1-1201.D

Instrument ID: MSG

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	Field Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
1	LEVEL1	LEVEL1	LEVEL1.D	12/01/2014	1355
2	LEVEL2	LEVEL2	LEVEL2.D	12/01/2014	1522
3	LEVEL3	LEVEL3	LEVEL3.D	12/01/2014	1606
4	LEVEL4	LEVEL4	LEVEL4.D	12/01/2014	1648
5	LEVEL5	LEVEL5	LEVEL5.D	12/01/2014	1732
6	LEVEL6	LEVEL6	LEVEL6.D	12/01/2014	1816
7	LEVEL7	LEVEL7	LEVEL7.D	12/01/2014	1859
8	LEVEL8	LEVEL8	LEVEL8.D	12/01/2014	1942

5B

VOLATILE ORGANIC RUN LOG

SDG No.: P2167

Lab Name: CH2M HILL ASL

Analysis Method: TO15 SIM

Lab File ID: T1-1202.D

Instrument ID: MSG

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	Field Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
1	ICV21202	ICV21202	ICV21202.D	12/02/2014	1335

5B

VOLATILE ORGANIC RUN LOG

SDG No.: P2167

Lab Name: CH2M HILL ASL

Analysis Method: TO15 SIM

Lab File ID: T1-0602.D

Instrument ID: MSG

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	Field Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
1	CV1-0602	CV1-0602	CV1-0602.D	06/02/2015	1236
2	BS1X0602	BS1X0602	BS1X0602.D	06/02/2015	1320
3	XB1-0602	XB1-0602	XB1-0602.D	06/02/2015	1404
4	South Property Line	P216706	P216706.D	06/02/2015	1957
5	South Cooling Pond	P216707	P216707.D	06/02/2015	2041
6	Treatment Shed	P216701	P216701DL.D	06/02/2015	2126

5B

VOLATILE ORGANIC RUN LOG

SDG No.: P2167

Lab Name: CH2M HILL ASL

Analysis Method: TO15 SIM

Lab File ID: T1-0603.D

Instrument ID: MSG

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	Field Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
1	CV1-0603	CV1-0603	CV1-0603.D	06/03/2015	1226
2	BS1X0603	BS1X0603	BS1X0603.D	06/03/2015	1309
3	XB2-0603	XB2-0603	XB2-0603.D	06/03/2015	1436
4	Submicro South	P216702	P216702.D	06/03/2015	1651
5	Submicro North	P216703	P216703.D	06/03/2015	1735
6	North Landfill	P216704	P216704.D	06/03/2015	1904
7	South Landfill	P216705	P216705.D	06/03/2015	1949

6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

SDG No.: P2167 Lab Name: CH2M HILL ASL

Analysis Method: TO15 SIM Calibration Date(s): 12/01/201 12/01/201

Instrument Name: MSG Calibration Times: 1355 1942

Heat Purge: (Y/N) N Concentration Units: ppbv

ICAL Sample IDs:	LEVEL1	LEVEL2	LEVEL3	LEVEL4	LEVEL5	LEVEL6
ICAL File IDs:	LEVEL1.D	LEVEL2.D	LEVEL3.D	LEVEL4.D	LEVEL5.D	LEVEL6.D

Analyte	Std 1	RF 1	Std 2	RF 2	Std 3	RF 3	Std 4	RF 4	Std 5	RF 5	Std 6	RF 6
Bromochloromethane	0.100	1.000	0.100	1.000	0.100	1.000	0.100	1.000	0.100	1.000	0.100	1.000
Vinyl Chloride	0.004	2.250	0.010	2.089	0.020	2.014	0.050	1.802	0.250	1.891	0.500	1.955
trans-1,2-Dichloroethene	0.004	2.609	0.010	2.493	0.020	2.519	0.050	2.336	0.250	2.331	0.500	2.504
cis-1,2-Dichloroethene	0.004	2.393	0.010	2.064	0.020	1.894	0.050	1.818	0.250	1.832	0.500	2.002
1,1-Dichloroethene	0.004	3.210	0.010	3.039	0.020	3.127	0.050	2.927	0.250	3.096	0.500	3.225
1,4-difluorobenzene	0.100	1.000	0.100	1.000	0.100	1.000	0.100	1.000	0.100	1.000	0.100	1.000
Trichloroethene (TCE)	0.004	0.565	0.010	0.527	0.020	0.545	0.050	0.504	0.250	0.484	0.500	0.505
Toluene-d8	0.100	0.990	0.100	1.000	0.100	1.006	0.100	1.003	0.100	1.014	0.100	1.012
Tetrachloroethene (PCE)	0.004	0.862	0.010	0.822	0.020	0.844	0.050	0.783	0.250	0.739	0.500	0.754
Chlorobenzene-d5	0.100	1.000	0.100	1.000	0.100	1.000	0.100	1.000	0.100	1.000	0.100	1.000
4-Bromofluorobenzene	0.100	0.461	0.100	0.457	0.100	0.467	0.100	0.524	0.100	0.595	0.100	0.607

* SPCC # CCC

6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

SDG No.: P2167 Lab Name: CH2M HILL ASL

Analysis Method: TO15 SIM Calibration Date(s): 12/01/201 12/01/201

Instrument Name: MSG Calibration Times: 1355 1942

Heat Purge: (Y/N) N Concentration Units: ppbv

ICAL Sample IDs: LEVEL7 LEVEL8

ICAL File IDs: LEVEL7.D LEVEL8.D

Analyte	Std 7	RF 7	Std 8	RF 8	Std 9	RF 9						
Bromochloromethane	0.100	1.000	0.100	1.000								
Vinyl Chloride	2.000	1.535	5.000	1.421								
trans-1,2-Dichloroethene	2.000	1.978	5.000	1.923								
cis-1,2-Dichloroethene	2.000	1.887	5.000	1.907								
1,1-Dichloroethene	2.000	2.558	5.000	2.576								
1,4-difluorobenzene	0.100	1.000	0.100	1.000								
Trichloroethene (TCE)	2.000	0.509	5.000	0.528								
Toluene-d8	0.100	1.005	0.100	1.044								
Tetrachloroethene (PCE)	2.000	0.765	5.000	0.822								
Chlorobenzene-d5	0.100	1.000	0.100	1.000								
4-Bromofluorobenzene	0.100	0.636	0.100	0.646								

* SPCC # CCC

6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

SDG No.: P2167 Lab Name: CH2M HILL ASL

Analysis Method: TO15 SIM Calibration Date(s): 12/01/201 12/01/201

Instrument Name: MSG Calibration Times: 1355 1942

Heat Purge: (Y/N)N Concentration Units: ppbv

Analyte	Curve Type	Avg. RF	%RSD	r	COD	Q
Bromochloromethane	AVG	1.000	0.00			
Vinyl Chloride	AVG	1.870	14.9			
trans-1,2-Dichloroethene	AVG	2.337	11.0			
cis-1,2-Dichloroethene	AVG	1.975	9.53			
1,1-Dichloroethene	AVG	2.970	8.95			
1,4-difluorobenzene	AVG	1.000	0.00			
Trichloroethene (TCE)	AVG	0.521	4.93			
Toluene-d8	AVG	1.009	1.56			
Tetrachloroethene (PCE)	AVG	0.799	5.58			
Chlorobenzene-d5	AVG	1.000	0.00			
4-Bromofluorobenzene	AVG	0.549	14.7			

* SPCC # CCC

VOLATILE INITIAL CALIBRATION CHECK

SDG No.: P2167 Lab Name: CH2M HILL ASL

Analysis Method: TO15 SIM Calibration Date/Time: 12/02/2014

Instrument ID: MSG Init. Calib. Date(s): 12/01/2014 12/01/2014

2nd Source ICV21202 Init. Calib. Time(s): 1355 1942

Lab File ID: ICV21202.D GC Column: ZB-624 ID: 0.25 (mm)

Heat Purge:(Y/N) N Concentration Units: ppbv

Analyte	Expected	Found	RRF	Min. RRF	%D	Max. %D	Q
Vinyl Chloride	0.500	0.460	1.720	0.000	-8	30	
trans-1,2-Dichloroethene	0.500	0.513	2.398	0.000	3	30	
cis-1,2-Dichloroethene	0.500	0.503	1.987	0.000	0.6	30	
1,1-Dichloroethene	0.500	0.607	3.606	0.000	21	30	
Trichloroethene (TCE)	0.500	0.614	0.639	0.000	23	30	
Tetrachloroethene (PCE)	0.500	0.514	0.821	0.000	3	30	

* SPCC # CCC

VOLATILE CONTINUING CALIBRATION CHECK

SDG No.: P2167 Lab Name: CH2M HILL ASL

Analysis Method: TO15 SIM Calibration Date/Time: 06/02/2015

Instrument ID: MSG Init. Calib. Date(s): 12/01/2014 12/01/2014

Cal Check ID: CV1-0602 Init. Calib. Time(s): 1355 1942

Lab File ID: CV1-0602.D GC Column: ZB-624 ID: 0.25 (mm)

Heat Purge:(Y/N) N Concentration Units: ppbv

Analyte	Expected	Found	RRF	Min. RRF	%D	Max. %D	Q
Vinyl Chloride	0.500	0.489	1.827	0.000	-2	30	
trans-1,2-Dichloroethene	0.500	0.431	2.014	0.000	-14	30	
cis-1,2-Dichloroethene	0.500	0.376	1.486	0.000	-25	30	
1,1-Dichloroethene	0.500	0.437	2.594	0.000	-13	30	
Trichloroethene (TCE)	0.500	0.425	0.443	0.000	-15	30	
Toluene-d8	0.100	0.122	1.231	0.000	22	30	
Tetrachloroethene (PCE)	0.500	0.483	0.772	0.000	-3	30	
4-Bromofluorobenzene	0.100	0.108	0.592	0.000	8	30	

* SPCC # CCC

VOLATILE CONTINUING CALIBRATION CHECK

SDG No.: P2167 Lab Name: CH2M HILL ASL

Analysis Method: TO15 SIM Calibration Date/Time: 06/03/2015

Instrument ID: MSG Init. Calib. Date(s): 12/01/2014 12/01/2014

Cal Check ID: CV1-0603 Init. Calib. Time(s): 1355 1942

Lab File ID: CV1-0603.D GC Column: ZB-624 ID: 0.25 (mm)

Heat Purge:(Y/N) N Concentration Units: ppbv

Analyte	Expected	Found	RRF	Min. RRF	%D	Max. %D	Q
Vinyl Chloride	0.500	0.459	1.717	0.000	-8	30	
trans-1,2-Dichloroethene	0.500	0.415	1.938	0.000	-17	30	
cis-1,2-Dichloroethene	0.500	0.373	1.473	0.000	-25	30	
1,1-Dichloroethene	0.500	0.409	2.428	0.000	-18	30	
Trichloroethene (TCE)	0.500	0.431	0.449	0.000	-14	30	
Toluene-d8	0.100	0.107	1.075	0.000	7	30	
Tetrachloroethene (PCE)	0.500	0.387	0.619	0.000	-23	30	
4-Bromofluorobenzene	0.100	0.129	0.707	0.000	29	30	

* SPCC # CCC

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

SDG No.: P2167

Analysis Method: TO15 SIM

Lab Name: CH2M HILL ASL

Lab Sample ID: LEVEL6

Date Analyzed: 12/01/2014

Lab File ID: LEVEL6.D

Time Analyzed: 1816

Instrument Name: MSG

Heat Purge: (Y/N) N

GC Column: ZB-624 ID: 0.25 (mm)

		IS1		IS2		IS3	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
Reference Cal		10012	15.06	58079	16.68	50009	20.95
Upper Limit		14017	15.56	81311	17.18	70013	21.45
Lower Limit		6007	14.56	34847	16.18	30005	20.45
Field Sample ID	Lab Sample ID						
ICV21202	ICV21202	12163	15.07	61313	16.69	53001	20.95

IS1: Bromochloromethane

IS2: 1,4-Difluorobenzene

IS3: Chlorobenzene-d5

AREA UPPER LIMIT = + 40% of Internal Standard Area
AREA LOWER LIMIT = - 40% of Internal Standard Area
RT UPPER LIMIT = + 0.50 of Internal Standard RT
RT LOWER LIMIT = - 0.50 of Internal Standard RT

Column used to flag values outside of QC limits with an asterisk

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

SDG No.: P2167

Analysis Method: TO15 SIM

Lab Name: CH2M HILL ASL

Lab Sample ID: CV1-0602

Date Analyzed: 06/02/2015

Lab File ID: CV1-0602.D

Time Analyzed: 1236

Instrument Name: MSG

Heat Purge: (Y/N) N

GC Column: ZB-624 ID: 0.25 (mm)

		IS1		IS2		IS3	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
	Reference Cal	6579	15.05	26755	16.67	27051	20.95
	Upper Limit	9211	15.55	37457	17.17	37871	21.45
	Lower Limit	3947	14.55	16053	16.17	16231	20.45
Field Sample ID	Lab Sample ID						
BS1X0602	BS1X0602	7799	15.06	28202	16.68	28541	20.95
XB1-0602	XB1-0602	6834	15.11	20258	16.72	17506	20.97
South Property Line	P216706	8878	15.08	35366	16.70	28945	20.96
South Cooling Pond	P216707	8092	15.05	35321	16.68	34867	20.95
Treatment Shed	P216701	8150	15.10	30819	16.70	20167	20.97

IS1: Bromochloromethane

IS2: 1,4-Difluorobenzene

IS3: Chlorobenzene-d5

AREA UPPER LIMIT = + 40% of Internal Standard Area
AREA LOWER LIMIT = - 40% of Internal Standard Area
RT UPPER LIMIT = + 0.50 of Internal Standard RT
RT LOWER LIMIT = - 0.50 of Internal Standard RT

Column used to flag values outside of QC limits with an asterisk

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

SDG No.: P2167

Analysis Method: TO15 SIM

Lab Name: CH2M HILL ASL

Lab Sample ID: CV1-0603

Date Analyzed: 06/03/2015

Lab File ID: CV1-0603.D

Time Analyzed: 1226

Instrument Name: MSG

Heat Purge: (Y/N) N

GC Column: ZB-624 ID: 0.25 (mm)

		IS1		IS2		IS3	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
	Reference Cal	9243	15.07	40183	16.69	29968	20.95
	Upper Limit	12940	15.57	56256	17.19	41955	21.45
	Lower Limit	5546	14.57	24110	16.19	17981	20.45
Field Sample ID	Lab Sample ID						
BS1X0603	BS1X0603	8917	15.06	39021	16.68	36606	20.95
XB2-0603	XB2-0603	7038	15.12	24230	16.72	20787	20.98
Submicro South	P216702	7307	15.06	31363	16.68	33122	20.95
Submicro North	P216703	9543	15.07	39209	16.69	34746	20.96
North Landfill	P216704	7822	15.09	30909	16.70	27751	20.96
South Landfill	P216705	6163	15.08	29605	16.69	28057	20.96

IS1: Bromochloromethane

IS2: 1,4-Difluorobenzene

IS3: Chlorobenzene-d5

AREA UPPER LIMIT = + 40% of Internal Standard Area
AREA LOWER LIMIT = - 40% of Internal Standard Area
RT UPPER LIMIT = + 0.50 of Internal Standard RT
RT LOWER LIMIT = - 0.50 of Internal Standard RT

Column used to flag values outside of QC limits with an asterisk

CH2MHILL
Applied Sciences Laboratory (ASL)

1100 NE Circle Blvd., Suite 300
Corvallis, OR 97330
Tel 541-768-3120 Fax 541-752-0276

DL Study Report

Analytical Method: TO15 SIM
Matrix: Air

Instrument ID: MSG
Concentration Units: PPTV

Analyte	Analysis Date	Amt. Spiked	Replicates								Std. Dev.	DL
			1	2	3	4	5	6	7	8		
Vinyl Chloride	12/02/2011	2.00	2.50	2.51	2.51	2.60	2.66	2.68	2.51		0.0783	2.00
trans-1,2-Dichloroethene	12/02/2011	2.00	1.96	1.90	2.16	1.84	1.70	1.98	1.88		0.141	2.00
cis-1,2-Dichloroethene	12/02/2011	10.0	11.3	11.5	11.4	11.3	11.5	11.6	8.79	11.3	0.930	4.00
1,1-Dichloroethene	12/02/2011	1.00	1.29	1.17	1.46	1.07	1.19	1.27	1.15		0.126	2.00
Trichloroethene (TCE)	12/02/2011	1.00	1.32	1.21	1.22	1.40	1.43	1.29	1.55		0.122	2.00
Tetrachloroethene (PCE)	12/02/2011	1.00	1.30	1.26	1.42	1.28	1.23	1.23	1.20		0.0725	2.00

MDL FORM

EQUIPMENT CERTIFICATIONS

VOLATILE ORGANICS ANALYSIS DATA SHEET

Field Sample ID: **6L2507S**

SDG No.: P2167

Analysis Method: TO15 SIM

Matrix: AIR

Lab Name: CH2M HILL ASL

Lab Sample ID: 6L2507S

Lab File ID: 6L2507S.D

Level: (LOW/MED) LOW

Date Received: / /

Date Analyzed: 04/16/15

Dilution Factor: 1

Instrument: MSG

GC Column: ZB-624 ID: 0.25 (mm) Concentration Units: UG/M3

CAS No.	Analyte	DL	PQL	Result	Q
75-01-4	Vinyl Chloride	0.00520	0.0260	0.0260	U
156-60-5	trans-1,2-Dichloroethene	0.00810	0.0403	0.0403	U
156-59-2	cis-1,2-Dichloroethene	0.0161	0.0403	0.0403	U
75-35-4	1,1-Dichloroethene	0.00810	0.0403	0.0403	U
79-01-6	Trichloroethene (TCE)	0.0109	0.0546	0.0546	U
127-18-4	Tetrachloroethene (PCE)	0.0138	0.0690	0.0690	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

Field Sample ID: **6L2549A**

SDG No.: P2167

Analysis Method: TO15 SIM

Matrix: AIR

Lab Name: CH2M HILL ASL

Lab Sample ID: 6L2549A

Lab File ID: 6L2549A.D

Level: (LOW/MED) LOW

Date Received: / /

Date Analyzed: 04/17/15

Dilution Factor: 1

Instrument: MSG

GC Column: ZB-624 ID: 0.25 (mm) Concentration Units: UG/M3

CAS No.	Analyte	DL	PQL	Result	Q
75-01-4	Vinyl Chloride	0.00520	0.0260	0.0260	U
156-60-5	trans-1,2-Dichloroethene	0.00810	0.0403	0.0403	U
156-59-2	cis-1,2-Dichloroethene	0.0161	0.0403	0.0403	U
75-35-4	1,1-Dichloroethene	0.00810	0.0403	0.0403	U
79-01-6	Trichloroethene (TCE)	0.0109	0.0546	0.0546	U
127-18-4	Tetrachloroethene (PCE)	0.0138	0.0690	0.0690	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

Field Sample ID: **6L2556S**

SDG No.: P2167

Analysis Method: TO15 SIM

Matrix: AIR

Lab Name: CH2M HILL ASL

Lab Sample ID: 6L2556S

Lab File ID: 6L2556S.D

Level: (LOW/MED) LOW

Date Received: / /

Date Analyzed: 04/16/15

Dilution Factor: 1

Instrument: MSG

GC Column: ZB-624 ID: 0.25 (mm) Concentration Units: UG/M3

CAS No.	Analyte	DL	PQL	Result	Q
75-01-4	Vinyl Chloride	0.00520	0.0260	0.0260	U
156-60-5	trans-1,2-Dichloroethene	0.00810	0.0403	0.0342	J
156-59-2	cis-1,2-Dichloroethene	0.0161	0.0403	0.0255	J
75-35-4	1,1-Dichloroethene	0.00810	0.0403	0.0403	U
79-01-6	Trichloroethene (TCE)	0.0109	0.0546	0.0453	J
127-18-4	Tetrachloroethene (PCE)	0.0138	0.0690	0.0682	J

VOLATILE ORGANICS ANALYSIS DATA SHEET

Field Sample ID: **6L2567S**

SDG No.: P2167

Analysis Method: TO15 SIM

Matrix: AIR

Lab Name: CH2M HILL ASL

Lab Sample ID: 6L2567S

Lab File ID: 6L2567S.D

Level: (LOW/MED) LOW

Date Received: / /

Date Analyzed: 04/16/15

Dilution Factor: 1

Instrument: MSG

GC Column: ZB-624 ID: 0.25 (mm) Concentration Units: UG/M3

CAS No.	Analyte	DL	PQL	Result	Q
75-01-4	Vinyl Chloride	0.00520	0.0260	0.0260	U
156-60-5	trans-1,2-Dichloroethene	0.00810	0.0403	0.0403	U
156-59-2	cis-1,2-Dichloroethene	0.0161	0.0403	0.0403	U
75-35-4	1,1-Dichloroethene	0.00810	0.0403	0.0403	U
79-01-6	Trichloroethene (TCE)	0.0109	0.0546	0.0546	U
127-18-4	Tetrachloroethene (PCE)	0.0138	0.0690	0.0690	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

Field Sample ID: **6L2646A**

SDG No.: P2167

Analysis Method: TO15 SIM

Matrix: AIR

Lab Name: CH2M HILL ASL

Lab Sample ID: 6L2646A

Lab File ID: 6L2646A.D

Level: (LOW/MED) LOW

Date Received: / /

Date Analyzed: 04/16/15

Dilution Factor: 1

Instrument: MSG

GC Column: ZB-624 ID: 0.25 (mm) Concentration Units: UG/M3

CAS No.	Analyte	DL	PQL	Result	Q
75-01-4	Vinyl Chloride	0.00520	0.0260	0.0260	U
156-60-5	trans-1,2-Dichloroethene	0.00810	0.0403	0.0403	U
156-59-2	cis-1,2-Dichloroethene	0.0161	0.0403	0.0403	U
75-35-4	1,1-Dichloroethene	0.00810	0.0403	0.0403	U
79-01-6	Trichloroethene (TCE)	0.0109	0.0546	0.0544	J
127-18-4	Tetrachloroethene (PCE)	0.0138	0.0690	0.0690	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

Field Sample ID: **6L2720A**

SDG No.: P2167

Analysis Method: TO15 SIM

Matrix: AIR

Lab Name: CH2M HILL ASL

Lab Sample ID: 6L2720A

Lab File ID: 6L2720A.D

Level: (LOW/MED) LOW

Date Received: / /

Date Analyzed: 04/16/15

Dilution Factor: 1

Instrument: MSG

GC Column: ZB-624 ID: 0.25 (mm) Concentration Units: UG/M3

CAS No.	Analyte	DL	PQL	Result	Q
75-01-4	Vinyl Chloride	0.00520	0.0260	0.0260	U
156-60-5	trans-1,2-Dichloroethene	0.00810	0.0403	0.0403	U
156-59-2	cis-1,2-Dichloroethene	0.0161	0.0403	0.0403	U
75-35-4	1,1-Dichloroethene	0.00810	0.0403	0.0403	U
79-01-6	Trichloroethene (TCE)	0.0109	0.0546	0.0546	U
127-18-4	Tetrachloroethene (PCE)	0.0138	0.0690	0.0690	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

Field Sample ID: **6L2793S**

SDG No.: P2167

Analysis Method: TO15 SIM

Matrix: AIR

Lab Name: CH2M HILL ASL

Lab Sample ID: 6L2793S

Lab File ID: 6L2793S.D

Level: (LOW/MED) LOW

Date Received: / /

Date Analyzed: 04/17/15

Dilution Factor: 1

Instrument: MSG

GC Column: ZB-624 ID: 0.25 (mm) Concentration Units: UG/M3

CAS No.	Analyte	DL	PQL	Result	Q
75-01-4	Vinyl Chloride	0.00520	0.0260	0.0260	U
156-60-5	trans-1,2-Dichloroethene	0.00810	0.0403	0.0403	U
156-59-2	cis-1,2-Dichloroethene	0.0161	0.0403	0.0403	U
75-35-4	1,1-Dichloroethene	0.00810	0.0403	0.0403	U
79-01-6	Trichloroethene (TCE)	0.0109	0.0546	0.0546	U
127-18-4	Tetrachloroethene (PCE)	0.0138	0.0690	0.0690	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

Field Sample ID: **FC2410A**

SDG No.: P2167

Analysis Method: TO15 SIM

Matrix: AIR

Lab Name: CH2M HILL ASL

Lab Sample ID: FC2410A

Lab File ID: FC2410A.D

Level: (LOW/MED) LOW

Date Received: / /

Date Analyzed: 04/22/15

Dilution Factor: 1

Instrument: MSG

GC Column: ZB-624 ID: 0.25 (mm) Concentration Units: UG/M3

CAS No.	Analyte	DL	PQL	Result	Q
75-01-4	Vinyl Chloride	0.00520	0.0260	0.0260	U
156-60-5	trans-1,2-Dichloroethene	0.00810	0.0403	0.0403	U
156-59-2	cis-1,2-Dichloroethene	0.0161	0.0403	0.0403	U
75-35-4	1,1-Dichloroethene	0.00810	0.0403	0.0403	U
79-01-6	Trichloroethene (TCE)	0.0109	0.0546	0.0546	U
127-18-4	Tetrachloroethene (PCE)	0.0138	0.0690	0.0690	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

Field Sample ID: **FC2417A**

SDG No.: P2167

Analysis Method: TO15 SIM

Matrix: AIR

Lab Name: CH2M HILL ASL

Lab Sample ID: FC2417A

Lab File ID: FC2417A.D

Level: (LOW/MED) LOW

Date Received: / /

Date Analyzed: 04/22/15

Dilution Factor: 1

Instrument: MSG

GC Column: ZB-624 ID: 0.25 (mm) Concentration Units: UG/M3

CAS No.	Analyte	DL	PQL	Result	Q
75-01-4	Vinyl Chloride	0.00520	0.0260	0.0260	U
156-60-5	trans-1,2-Dichloroethene	0.00810	0.0403	0.0403	U
156-59-2	cis-1,2-Dichloroethene	0.0161	0.0403	0.0403	U
75-35-4	1,1-Dichloroethene	0.00810	0.0403	0.0403	U
79-01-6	Trichloroethene (TCE)	0.0109	0.0546	0.0546	U
127-18-4	Tetrachloroethene (PCE)	0.0138	0.0690	0.0690	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

Field Sample ID: **FC2420A**

SDG No.: P2167

Analysis Method: TO15 SIM

Matrix: AIR

Lab Name: CH2M HILL ASL

Lab Sample ID: FC2420A

Lab File ID: FC2420A.D

Level: (LOW/MED) LOW

Date Received: / /

Date Analyzed: 04/22/15

Dilution Factor: 1

Instrument: MSG

GC Column: ZB-624 ID: 0.25 (mm) Concentration Units: UG/M3

CAS No.	Analyte	DL	PQL	Result	Q
75-01-4	Vinyl Chloride	0.00520	0.0260	0.0260	U
156-60-5	trans-1,2-Dichloroethene	0.00810	0.0403	0.0403	U
156-59-2	cis-1,2-Dichloroethene	0.0161	0.0403	0.0403	U
75-35-4	1,1-Dichloroethene	0.00810	0.0403	0.0403	U
79-01-6	Trichloroethene (TCE)	0.0109	0.0546	0.0546	U
127-18-4	Tetrachloroethene (PCE)	0.0138	0.0690	0.0690	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

Field Sample ID: **FC2422A**

SDG No.: P2167

Analysis Method: TO15 SIM

Matrix: AIR

Lab Name: CH2M HILL ASL

Lab Sample ID: FC2422A

Lab File ID: FC2422A.D

Level: (LOW/MED) LOW

Date Received: / /

Date Analyzed: 04/22/15

Dilution Factor: 1

Instrument: MSG

GC Column: ZB-624 ID: 0.25 (mm) Concentration Units: UG/M3

CAS No.	Analyte	DL	PQL	Result	Q
75-01-4	Vinyl Chloride	0.00520	0.0260	0.0260	U
156-60-5	trans-1,2-Dichloroethene	0.00810	0.0403	0.0403	U
156-59-2	cis-1,2-Dichloroethene	0.0161	0.0403	0.0403	U
75-35-4	1,1-Dichloroethene	0.00810	0.0403	0.0403	U
79-01-6	Trichloroethene (TCE)	0.0109	0.0546	0.0546	U
127-18-4	Tetrachloroethene (PCE)	0.0138	0.0690	0.0690	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

Field Sample ID: **FC2428A**

SDG No.: P2167

Analysis Method: TO15 SIM

Matrix: AIR

Lab Name: CH2M HILL ASL

Lab Sample ID: FC2428A

Lab File ID: FC2428A.D

Level: (LOW/MED) LOW

Date Received: / /

Date Analyzed: 04/22/15

Dilution Factor: 1

Instrument: MSG

GC Column: ZB-624 ID: 0.25 (mm) Concentration Units: UG/M3

CAS No.	Analyte	DL	PQL	Result	Q
75-01-4	Vinyl Chloride	0.00520	0.0260	0.0260	U
156-60-5	trans-1,2-Dichloroethene	0.00810	0.0403	0.0403	U
156-59-2	cis-1,2-Dichloroethene	0.0161	0.0403	0.0403	U
75-35-4	1,1-Dichloroethene	0.00810	0.0403	0.0403	U
79-01-6	Trichloroethene (TCE)	0.0109	0.0546	0.0546	U
127-18-4	Tetrachloroethene (PCE)	0.0138	0.0690	0.0690	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

Field Sample ID: **FC2432A**

SDG No.: P2167

Analysis Method: TO15 SIM

Matrix: AIR

Lab Name: CH2M HILL ASL

Lab Sample ID: FC2432A

Lab File ID: FC2432A.D

Level: (LOW/MED) LOW

Date Received: / /

Date Analyzed: 04/22/15

Dilution Factor: 1

Instrument: MSG

GC Column: ZB-624 ID: 0.25 (mm) Concentration Units: UG/M3

CAS No.	Analyte	DL	PQL	Result	Q
75-01-4	Vinyl Chloride	0.00520	0.0260	0.0260	U
156-60-5	trans-1,2-Dichloroethene	0.00810	0.0403	0.0403	U
156-59-2	cis-1,2-Dichloroethene	0.0161	0.0403	0.0403	U
75-35-4	1,1-Dichloroethene	0.00810	0.0403	0.0403	U
79-01-6	Trichloroethene (TCE)	0.0109	0.0546	0.0546	U
127-18-4	Tetrachloroethene (PCE)	0.0138	0.0690	0.0690	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

Field Sample ID: **FC2435A**

SDG No.: P2167

Analysis Method: TO15 SIM

Matrix: AIR

Lab Name: CH2M HILL ASL

Lab Sample ID: FC2435A

Lab File ID: FC2435A.D

Level: (LOW/MED) LOW

Date Received: / /

Date Analyzed: 04/22/15

Dilution Factor: 1

Instrument: MSG

GC Column: ZB-624 ID: 0.25 (mm) Concentration Units: UG/M3

CAS No.	Analyte	DL	PQL	Result	Q
75-01-4	Vinyl Chloride	0.00520	0.0260	0.0260	U
156-60-5	trans-1,2-Dichloroethene	0.00810	0.0403	0.0403	U
156-59-2	cis-1,2-Dichloroethene	0.0161	0.0403	0.0403	U
75-35-4	1,1-Dichloroethene	0.00810	0.0403	0.0403	U
79-01-6	Trichloroethene (TCE)	0.0109	0.0546	0.0546	U
127-18-4	Tetrachloroethene (PCE)	0.0138	0.0690	0.0690	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

Field Sample ID: **XB1-0416**

SDG No.: P2167

Analysis Method: TO15 SIM

Matrix: AIR

Lab Name: CH2M HILL ASL

Lab Sample ID: XB1-0416

Lab File ID: XB1-0416.D

Level: (LOW/MED) LOW

Date Received: / /

Date Analyzed: 04/16/15

Dilution Factor: 1

Instrument: MSG

GC Column: ZB-624 ID: 0.25 (mm) Concentration Units: UG/M3

CAS No.	Analyte	DL	PQL	Result	Q
75-01-4	Vinyl Chloride	0.00520	0.0260	0.0260	U
156-60-5	trans-1,2-Dichloroethene	0.00810	0.0403	0.0403	U
156-59-2	cis-1,2-Dichloroethene	0.0161	0.0403	0.0403	U
75-35-4	1,1-Dichloroethene	0.00810	0.0403	0.0403	U
79-01-6	Trichloroethene (TCE)	0.0109	0.0546	0.0546	U
127-18-4	Tetrachloroethene (PCE)	0.0138	0.0690	0.0690	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

Field Sample ID: **XB1-0422**

SDG No.: P2167

Analysis Method: TO15 SIM

Matrix: AIR

Lab Name: CH2M HILL ASL

Lab Sample ID: XB1-0422

Lab File ID: XB1-0422.D

Level: (LOW/MED) LOW

Date Received: / /

Date Analyzed: 04/22/15

Dilution Factor: 1

Instrument: MSG

GC Column: ZB-624 ID: 0.25 (mm) Concentration Units: UG/M3

CAS No.	Analyte	DL	PQL	Result	Q
75-01-4	Vinyl Chloride	0.00520	0.0260	0.0260	U
156-60-5	trans-1,2-Dichloroethene	0.00810	0.0403	0.0403	U
156-59-2	cis-1,2-Dichloroethene	0.0161	0.0403	0.0403	U
75-35-4	1,1-Dichloroethene	0.00810	0.0403	0.0403	U
79-01-6	Trichloroethene (TCE)	0.0109	0.0546	0.0546	U
127-18-4	Tetrachloroethene (PCE)	0.0138	0.0690	0.0690	U

CHAIN OF CUSTODY/SHIPPING DOCUMENTS

CH2MHILL Applied Sciences Laboratory
CHAIN OF CUSTODY RECORD
AND AGREEMENT TO PERFORM SERVICES

Air Analysis
Chain of Custody Record

1100 NE Circle Blvd. Suite 300
Corvallis, OR 97330
(541) 768-3120

Client Contact	Paul McBeth
Project Name:	Evanite
Project # or PO #:	1122
Company Name:	PVG Environmental, Inc
Address:	6665 SW Hampton St #101
City/State/Zip:	Tigard, OR 97223
Project Manager:	Paul McBeth
Phone #:	503 620 2387
Report to email:	pmcbeth@pvgenv.com

Analysis Turnaround Time

TAT is Calendar days

TAT if different from below _____

☐ 21 days (STD)

☐ 14 days * ☐ 3 day *

☐ 7 days * ☐ 2 days *

☐ 5 days * ☐ 1 day *

* (Surcharges may apply)

Analysis Requested

Lab ID	Sample Identification (20 character limit)	Sample Start Date	Sample Start Time	Sample End Date	Sample End Time	Sample Type (*)	Matrix	Grab/ Comp	TO-15 LL VOC SEE Attached							Canister Start Pressure (inches in Hg/psig)	Canister Final Pressure (inches in Hg/psig)	Canister ID	Flow Controller	
	Treatment Shed	05-22-2015	0915	05-22-2015	1547	A	AIR	G	X							-30	-4	CL26464	FC24174	1
	Submicro South		0920		1536		AIR		X							-28	-0.2	CL25494	FC24224	2
	Submicro North		0921		1534		AIR		X							-30	-3	CL27201	FC24204	3
	North Landfill		0925		1555		AIR		X							-30	-5.7	CL27935	FC24354	4
	South Landfill		0927		1557		AIR		X							-28	-3	CL25075	FC24104	5
	South Property Line		0931		1600		AIR		X							-25	-6.5	CL25675	FC24324	6
	South Cooling Pond		0939		1612		AIR		X							-29	-6.6	CL25565	FC24284	7
							AIR													
							AIR													
							AIR													
							AIR													
							AIR													
							AIR													
							AIR													
							AIR													

For Lab Use Only:

SDG: P2167

Custody Seals intact? ☐ Yes ☐ No N/A

Hand delivered? ☑ Yes ☐ No

Sample Temp 20.3 °C

Therm ID No. 73 Therm Exp. 3/15

Packing Material: Circle Below N/A

Box Bubble Wrap Other

Radiological Screen? ☐ Yes ☑ No

* Sample Type (A) Ambient (SV) Soil Vapor (SS) Subslab (P) Process (O) Other

Sampled By:	Jay Hauser	Date/Time:	05-22-15 @ 0915 →
Received by:		Date/Time:	
Received in Laboratory by:	Alex Kuipers	Date/Time:	5/22/15 1643
Special Instructions/QC Requirements			

Relinquished by:	Jay Hauser	Date/Time:	05-22-15 1643
Relinquished by:		Date/Time:	
Shipped Via: ☐ UPS ☐ Fed-Ex ☐ USPS ☐ Other		Tracking #:	

CH2MHILL
Applied Sciences Laboratory (ASL)

Sample Receipt Record

SDG ID: P2167 Date Received: 5/22/15

Client/Project: PNG Environmental Received By: KF

Were custody seals intact and on the outside of the cooler?		☐ Yes	☐ No	☑ N/A
Shipping Record:	☑ Hand Delivered	☐ On File	☐ COC	
Radiological Screening for DoD		☐ Yes	☐ No	☑ N/A
Packing Material:	☑ Hand Delivered	☐ Ice	☐ Blue Ice	☑ Box
Temp OK? (<6C) Therm ID: TH173 Exp. 8/15	20.3 °C	☑ Yes	☐ No	☐ N/A
Was a Chain of Custody (CoC) Provided?		☑ Yes	☐ No	☐ N/A
Was the CoC correctly filled out (If No, document below)		☑ Yes	☐ No	☐ N/A
Did sample labels agree with COC? (If No, document below)		☑ Yes	☐ No	☐ N/A
Did the CoC list a correct bottle count and the preservative types (No=Correct on CoC)		☑ Yes	☐ No	☐ N/A
Were the sample containers in good condition (broken or leaking)?		☑ Yes	☐ No	☐ N/A
Was enough sample volume provided for analysis? (If No, document below)		☑ Yes	☐ No	☐ N/A
Containers supplied by ASL?		☑ Yes	☐ No	☐ N/A
Any sample with < 1/2 holding time remaining? If so contact LPM		☐ Yes	☑ No	☐ N/A
Samples have multi-phase? If yes, document on SRER		☐ Yes	☐ No	☑ N/A
All water VOCs free of air bubbles? No, document on SRER		☐ Yes	☐ No	☑ N/A
pH of all samples met criteria on receipt? If "No", preserve and document below.		☐ Yes	☐ No	☑ N/A
Dissolved/Soluble metals filtered in the field?		☐ Yes	☐ No	☑ N/A
Dissolved/Soluble metals have sediment in bottom of container? If so document below.		☐ Yes	☐ No	☑ N/A

Preservation Adjustment

Sample ID	Reagent	Reagent Lot Number	Volume Added	Initials/Time	24 hour pH check Initials/Time

Did pH of all metals samples preserved upon receipt meet criteria 24 hours after preservation? ☐ Yes ☐ No

Sample Exception Report (The following exceptions were noted)

Client was notified on: Client contact:

Resolution to Exception:

APPENDIX D
GROUNDWATER SAMPLING FORMS

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no:	DMW-3	Project name:	Evonik
Sample no:	DMW-3	Project no:	1122
Date:	3/9/15	Sample Time: 1425	Collector: SVB

Well Information

Monument condition	Good / Needs repair
Well cap condition	Good / Locked / Replaced / Needs replacement
Headspace reading	Not measured / ppm Odor Y / N
Elevation mark	Yes / Added / Other Well diameter = 2-inch / 4-inch / 6-inch / Other

Purge Data

Total well depth	Pumping ft	Top of screen	ft bgs			
Depth to product	ft	Water above screen	Y / N			
Depth to water	ft	Pump/Tubing Intake Depth	ft bgs			
Casing volume	ft H_2O X	gpf =	X 3 =			
Casing volumes (GPF)	3/4"=0.02	1"=0.04	2"=0.16	4"=0.65	6"=1.47	

Purge Method

Pump type	Peristaltic / Submersible / Bladder / Pneumatic / Other		
Purge tubing	New LDPE / New Teflon / Other		
Purge start time	Purge stop time	Purge rate	
Refill Timer Setting	Discharge Timer Setting	Pressure Setting	

Field Parameters

Meter used: QED / (YSI) / Hanna / Other

Gallons/mL	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
	58.32	0.722	3.08	7.34	0.468	83.4	Clear

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
3	(VOA) / Amber / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y / (N)
1	VOA / (Amber) / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y / (N)
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature: Sam VBy Date: 3/9/15

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no: DMW-29		Project name: Evanite	
Sample no: DMW-29		Project no: 1122	
Date: 3/9/15	Sample Time: 1500	Collector: S. Biles	

Well Information

Monument condition	Good / Needs repair	
Well cap condition	Good / Locked / Replaced / Needs replacement	
Headspace reading	Not measured / ppm	Odor Y / N
Elevation mark	Yes / Added / Other	Well diameter = 2-inch / 4-inch / 6-inch / Other

Purge Data

Total well depth	Pumping ft	Top of screen	ft bgs			
Depth to product	ft	Water above screen	Y / N			
Depth to water	ft	Pump/Tubing Intake Depth	ft bgs			
Casing volume	ft H_2O X	gpf =	X 3 =			
Casing volumes (GPF)	3/4"=0.02	1"=0.04	2"=0.16	4"=0.65	6"=1.47	

Purge Method

Pump type	Peristaltic / Submersible / Bladder / Pneumatic / Other		
Purge tubing	New LDPE / New Teflon / Other		
Purge start time	Purge stop time	Purge rate	
Refill Timer Setting	Discharge Timer Setting	Pressure Setting	

Field Parameters

Meter used: QED (YSI) / Hanna / Other

Gallons/mL	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
	60.53	0.550	2.43	7.49	0.357	31.2	clear

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
3	(VOA) / Amber / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y / (N)
1	VOA / (Amber) / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y / (N)
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature: SB Date: 3/9/15

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no: DMW-2	Project name: Evanite
Sample no: DMW-2	Project no: 1122
Date: 3/9/15 Sample Time: 1512	Collector: SWB

Well Information

Monument condition	Good / Needs repair
Well cap condition	Good / Locked / Replaced / Needs replacement
Headspace reading	Not measured / ppm Odor Y / N
Elevation mark	Yes / Added / Other Well diameter = 2-inch / 4-inch / 6-inch / Other

Purge Data Pumping

Total well depth	ft	Top of screen	ft bgs			
Depth to product	ft	Water above screen	Y / N			
Depth to water	ft	Pump/Tubing Intake Depth	ft bgs			
Casing volume	ft H_2O X	gpf =	X 3 =			
Casing volumes (GPF)	3/4"=0.02	1"=0.04	2"=0.16	4"=0.65	6"=1.47	

Purge Method

Pump type	Peristaltic / Submersible / Bladder / Pneumatic / Other		
Purge tubing	New LDPE / New Teflon / Other		
Purge start time	Purge stop time	Purge rate	
Refill Timer Setting	Discharge Timer Setting	Pressure Setting	

Field Parameters

Meter used: QED / (YSI) / Hanna / Other

Gallons/mL	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
	60.77	0.5332	4.15	7.34	0.346	27.2	clear

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
3	(VOA) / Amber / Poly	~~HCL~~ / None / Nitric / Sulfuric / Other	Y / (N)
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature: AB Date: 3/9/15

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no: DMW-23	Project name: Evanite
Sample no: DMW-23	Project no: 1122
Date: 3/9/15 Sample Time: 1533	Collector: SVB

Well Information

Monument condition	Good / Needs repair
Well cap condition	Good / Locked / Replaced / Needs replacement
Headspace reading	Not measured / ppm Odor Y / N
Elevation mark	Yes / Added / Other Well diameter = 2-inch / 4-inch / 6-inch / Other

Purge Data Pumping

Total well depth	ft	Top of screen	ft bgs		
Depth to product	ft	Water above screen	Y / N		
Depth to water	ft	Pump/Tubing Intake Depth	ft bgs		
Casing volume	ft H_2O X	gpf =	X 3 =		
Casing volumes (GPF)	3/4"=0.02	1"=0.04	2"=0.16	4"=0.65	6"=1.47

Purge Method

Pump type	Peristaltic / Submersible / Bladder / Pneumatic / Other		
Purge tubing	New LDPE / New Teflon / Other		
Purge start time	Purge stop time	Purge rate	
Refill Timer Setting	Discharge Timer Setting	Pressure Setting	

Field Parameters

Meter used QED (YSI) Hanna / Other

Gallons/mL	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
	61.30	0.418	3.89	7.72	0.271	88.3	clear

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
3	(VOA) / Amber / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y / (N)
1	VOA / (Amber) / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y / (N)
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature SVB Date: 3/9/15

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no:	MW-17	Project name:	Evanite
Sample no:	DMW-17	Project no:	1122
Date:	3/10/15	Sample Time: 1025	Collector: SVB

Well Information

Monument condition: (Good) / Needs repair

Well cap condition: (Good) / Locked / Replaced / Needs replacement

Headspace reading: Not measured / ppm Odor Y / N

Elevation mark: (Yes) / Added / Other Well diameter = 2-inch / 4-inch / 6-inch / Other

Purge Data

Total well depth	46.40	ft	Top of screen		ft bgs		
Depth to product	–	ft	Water above screen	Y / N			
Depth to water	23.51	ft	Pump/Tubing Intake Depth		ft bgs		
Casing volume	22.89	ft H_2O X	1.47	gpf =	33.6	X 3 =	100.9 gal
Casing volumes (GPF)		3/4"=0.02	1"=0.04	2"=0.16	4"=0.65	6"=1.47	

Purge Method

Pump type: Peristaltic / Submersible / Bladder / Pneumatic / Other

Purge tubing: New LDPE / New Teflon / Other

Purge start time 0920 Purge stop time 1022 Purge rate

Refill Timer Setting Discharge Timer Setting Pressure Setting

Field Parameters

Meter used: QED / (YSI) / Hanna / Other

Gallons/mL	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
5	59.40	0.756	5.06	7.11	0.491	-41.1	clear
20	59.83	0.747	1.53	7.07	0.486	-76.8	clear
35	59.56	0.735	0.47	7.06	0.477	-84.4	clear
50	59.40	0.728	0.39	7.07	0.474	-85.4	clear
65	59.36	0.728	0.32	7.06	0.473	-90.8	clear
80	59.30	0.727	0.31	7.07	0.473	-92.3	clear
90							
100+	59.22	0.727	0.29	7.08	0.474	-94.4	clear

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
3	(VOA) / Amber / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y / (N)
1	VOA / (Amber) / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y / (N)
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature SB Date: 3/10/15

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no:	IMW-17	Project name:	Evanite
Sample no:	IMW-17	Project no:	1122
Date:	3/10/15	Sample Time: 1155	Collector: S. Bikes

Well Information Soft bottom

Monument condition: (Good) / Needs repair

Well cap condition: (Good) / Locked / Replaced / Needs replacement

Headspace reading: Not measured / ppm Odor Y / N

Elevation mark: (Yes) / Added / Other Well diameter = 2-inch / 4-inch / 6-inch / Other

Purge Data

Total well depth	31.92	ft	Top of screen		ft bgs		
Depth to product	~	ft	Water above screen	Y / N			
Depth to water	22.95	ft	Pump/Tubing Intake Depth		ft bgs		
Casing volume	8.97	ft H_2O X	0.65	gpf =	5.8	X 3 =	17.5
Casing volumes (GPF)		3/4"=0.02	1"=0.04	2"=0.16	4"=0.65	6"=1.47	

Purge Method

Pump type: Peristaltic / (Submersible) / Bladder / Pneumatic / Other

Purge tubing: (New LDPE) / New Teflon / Other

Purge start time 1131 Purge stop time 1150 Purge rate

Refill Timer Setting Discharge Timer Setting Pressure Setting

Field Parameters

Meter used: QED / (YSI) / Hanna / Other

(Gallons)/mL	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
3	61.77	0.525	6.61	7.38	0.340	52.4	Sl. turbid (orange)
6	61.82	0.519	5.19	7.07	0.338	60.5	clearing
9	61.41	0.562	2.86	6.83	0.365	55.0	clearing
12	61.60	0.568	2.47	6.73	0.371	44.2	clearing
15	61.55	0.566	2.35	6.70	0.371	37.0	clear
17.5	61.55	0.568	1.79	6.69	0.369	31.5	clear

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
3	(VOA) / Amber / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y / (N)
1	VOA / (Amber) / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y / (N)
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature SB Date: 3/10/15

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no:	IMW-24	Project name:	Evanite
Sample no:	IMW-24	Project no:	1122
Date:	3/10/15	Sample Time: 1233	Collector: SWB

Well Information

Monument condition: (Good) / Needs repair _____

Well cap condition: (Good) / Locked / Replaced / Needs replacement

Headspace reading: (Not measured) / _____ ppm Odor Y / N

Elevation mark: (Yes) / Added / Other Well diameter = 2-inch / 4-inch / 6-inch / Other

Purge Data

Total well depth: 33.41 ft Top of screen _____ ft bgs

Depth to product: — ft Water above screen Y / N

Depth to water: 24.26 ft Pump/Tubing Intake Depth _____ ft bgs

Casing volume: 9.15 ft H_2O X 0.65 gpf = 5.9 X 3 = 17.8

Casing volumes (GPF) 3/4"=0.02 1"=0.04 2"=0.16 4"=0.65 6"=1.47

Purge Method

Pump type: Peristaltic / (Submersible) / Bladder / Pneumatic / Other

Purge tubing: (New LDPE) / New Teflon / Other _____

Purge start time 1211 Purge stop time 1228 Purge rate _____

Refill Timer Setting _____ Discharge Timer Setting _____ Pressure Setting _____

Field Parameters

Meter used: QED / (YSI) / Hanna / Other

(Gallons)/mL	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
3	60.42	0.419	3.62	7.17	0.273	27.6	clear
6	60.48	0.568	1.01	7.03	0.371	-32.4	clear
9	60.33	0.634	0.76	7.03	0.414	-54.6	clear
12	60.36	0.651	0.63	7.02	0.424	-61.2	clear
15	60.29	0.664	0.53	7.02	0.433	-66.4	clear
18	60.37	0.673	0.47	7.01	0.438	-68.9	clear

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
3	(VOA) / Amber / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y / (N)
1	VOA / (Amber) / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y / (N)
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature SWB Date: 3/10/15

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no:	IMW-3	Project name:	Evanite
Sample no:	IMW-3	Project no:	1122
Date:	3/10/15	Sample Time:	Collector: SVB

Well Information

Monument condition: Good / Needs repair

Well cap condition: Good / Locked / Replaced / Needs replacement

Headspace reading: Not measured / ppm Odor Y / N

Elevation mark: Yes / Added / Other Well diameter = 2-inch / 4-inch / 6-inch / Other

Purge Data

Total well depth	29.12 ft	Top of screen	ft bgs			
Depth to product	— ft	Water above screen	Y / N			
Depth to water	23.92 ft	Pump/Tubing Intake Depth	ft bgs			
Casing volume	5.20 ft H_2O X	0.65 gpf =	3.38	X .3 =	10.14	
Casing volumes (GPF)	3/4"=0.02	1"=0.04	2"=0.16	4"=0.65	6"=1.47	

Purge Method

Pump type: Peristaltic / Submersible / Bladder / Pneumatic / Other

Purge tubing: New LDPE / New Teflon / Other

Purge start time 1318 Purge stop time Purge rate

Refill Timer Setting Discharge Timer Setting Pressure Setting

Field Parameters

Meter used: QED / YSI / Hanna / Other

Gallons/mL	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
2							
4							
6							
8							
10+							

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments: Dry - ~2" muck on bottom, no water

Sampler's Signature Date:

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no:	DMW-25	Project name:	Evanite
Sample no:	DMW-25	Project no:	1122
Date:	3/10/15	Sample Time: 1415	Collector: SWB

Well Information

Monument condition: Good / Needs repair

Well cap condition: Good / Locked / Replaced / Needs replacement

Headspace reading: Not measured / ppm Odor Y / N

Elevation mark: Yes / Added / Other Well diameter = 2-inch / 4-inch / 6-inch / Other

Purge Data

Total well depth	46.94 ft	Top of screen	ft bgs			
Depth to product	– ft	Water above screen	Y / N			
Depth to water	22.43 ft	Pump/Tubing Intake Depth	ft bgs			
Casing volume	24.51 ft H_2O X	0.65 gpf =	15.9	X 3 =	47.8	
Casing volumes (GPF)	3/4"=0.02	1"=0.04	2"=0.16	4"=0.65	6"=1.47	

Purge Method

Pump type: Peristaltic / Submersible / Bladder / Pneumatic / Other

Purge tubing: New LDPE / New Teflon / Other

Purge start time 1332 Purge stop time 1403 Purge rate

Refill Timer Setting Discharge Timer Setting Pressure Setting

Field Parameters

Meter used: QED / YSI / Hanna / Other

Gallons/mL	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
8	55.44	0.535	2.70	7.47	0.231	-0.7	clear
16	56.11	0.411	0.44	7.28	0.267	-26.1	clear
24	56.16	0.411	0.36	7.28	0.266	-27.5	clear
32	56.16	0.415	0.27	7.26	0.271	-28.6	clear
40	56.20	0.416	0.22	7.26	0.270	-31.1	clear
48	56.25	0.420	0.19	7.25	0.274	-32.2	clear

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
3	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature SB Date: 3/10/15

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no:	IMW-25	Project name:	Evanite
Sample no:	IMW-25	Project no:	1122
Date:	3/10/15	Sample Time: 1440	Collector: SVB

Well Information

Monument condition: (Good) / Needs repair

Well cap condition: (Good) / Locked / Replaced / Needs replacement

Headspace reading: (Not measured) / ppm Odor Y / N

Elevation mark: (Yes) / Added / Other Well diameter = 2-inch / (4-inch) / 6-inch / Other

Purge Data

Total well depth	31.40 ft	Top of screen	ft bgs				
Depth to product	— ft	Water above screen	Y / N				
Depth to water	22.22 ft	Pump/Tubing Intake Depth	ft bgs				
Casing volume	9.18 ft H_2O X	0.65	gpf =	6	X 3 =	17.9	
Casing volumes (GPF)		3/4"=0.02	1"=0.04	2"=0.16	4"=0.65	6"=1.47	

Purge Method

Pump type: Peristaltic / (Submersible) / Bladder / Pneumatic / Other

Purge tubing: (New LDPE) / New Teflon / Other

Purge start time 1417 Purge stop time 1434 Purge rate

Refill Timer Setting Discharge Timer Setting Pressure Setting

Field Parameters

Meter used: QED / (YSI) / Hanna / Other

(Gallons)/mL	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
3	51.83	0.321	5.60	7.57	0.214	41.9	clear
6	52.37	0.382	3.39	7.27	0.250	43.6	clear
9	52.52	0.397	2.80	7.19	0.258	40.5	clear
12	52.57	0.393	2.65	7.17	0.255	39.9	clear
15	52.59	0.397	2.47	7.15	0.258	38.9	clear
18	52.60	0.404	2.44	7.15	0.263	38.6	clear

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
3	(VOA) / Amber / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y / (N)
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature SVB Date: 3/10/15

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no:	DMW-28 (DMW-99) DUP	Project name:	Evanite
Sample no:	DMW-28 ↓	Project no:	1122
Date:	3/11/15	Sample Time: 0955 (0957)	Collector: SVB

Well Information

Monument condition	(Good) / Needs repair		
Well cap condition	(Good) / Locked / Replaced / Needs replacement		
Headspace reading	(Not measured) / .	ppm	Odor Y / N
Elevation mark	(Yes) / Added / Other	Well diameter = 2-inch / 4-inch / 6-inch / Other	

Purge Data

Total well depth	48.07 ft	Top of screen	ft bgs				
Depth to product	— ft	Water above screen	Y / N				
Depth to water	20.75 ft	Pump/Tubing Intake Depth	ft bgs				
Casing volume	27.32 ft H_2O X	0.65	gpf =	17.8	X 3 =	53.3	
Casing volumes (GPF)		3/4"=0.02	1"=0.04	2"=0.16	4"=0.65	6"=1.47	

Purge Method

Pump type	Peristaltic / (Submersible) / Bladder / Pneumatic / Other		
Purge tubing	(New LDPE) / New Teflon / Other		
Purge start time	0908	Purge stop time 0950	Purge rate
Refill Timer Setting		Discharge Timer Setting	Pressure Setting

Field Parameters

Meter used: QED / (YSI) / Hanna / Other

Gallons/mL	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
9	59.34	0.806	1.41	7.06	0.524	3.0	clear
18	59.49	0.809	0.35	7.04	0.525	-5.4	clear
27	59.48	0.810	0.21	7.04	0.527	-6.5	clear
36	59.49	0.811	0.16	7.04	0.527	-7.6	clear
45	59.47	0.812	0.12	7.04	0.528	-10.3	clear
54	59.47	0.813	0.10	7.04	~~0.528~~ 0.528	-10.6	clear

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
3	(VOA) / Amber / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y / (N)
1	VOA / (Amber) / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y / (N)
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature: AB Date: 3/11/15

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no:	IMW-28	Project name:	Evanite
Sample no:	IMW-28	Project no:	1122
Date:	3/11/15	Sample Time: 1024	Collector: SVB

Well Information

Monument condition (Good) / Needs repair

Well cap condition (Good) / Locked / Replaced / Needs replacement

Headspace reading Not measured / ppm Odor Y / N

Elevation mark (Yes) / Added / Other Well diameter = 2-inch / (4-inch) / 6-inch / Other

Purge Data

Total well depth	28.82 ft	Top of screen	ft bgs			
Depth to product	— ft	Water above screen	Y / N			
Depth to water	19.92 ft	Pump/Tubing Intake Depth	ft bgs			
Casing volume	8.90 ft H_2O X	0.65 gpf =	5.8	X 3 =	17.4	
Casing volumes (GPF)	3/4"=0.02	1"=0.04	2"=0.16	4"=0.65	6"=1.47	

Purge Method

Pump type Peristaltic / (Submersible) / Bladder / Pneumatic / Other

Purge tubing (New) LDPE / New Teflon / Other

Purge start time 1004 Purge stop time 1021 Purge rate

Refill Timer Setting Discharge Timer Setting Pressure Setting

Field Parameters

Meter used QED / (YSI) / Hanna / Other

(Gallons)/mL	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
3	59.89	0.699	3.00	6.41	0.456	112.6	clear
6	60.41	0.708	2.36	6.20	0.461	116.3	clear
9	60.49	0.715	2.00	6.21	0.466	116.0	clear
12	60.51	0.717	1.94	6.22	0.467	116.6	clear
15	60.52	0.717	1.98	6.22	0.466	118.1	clear
17.5	60.53	0.715	~~2~~ 2.09	6.22	0.466	120.1	clear

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
3	(VOA) / Amber / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y (N)
1	VOA / (Amber) / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y (N)
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature AB Date: 3/11/15

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no:	IMW-30	Project name:	Evanite
Sample no:	IMW-30	Project no:	1123
Date:	3/11/15	Sample Time: 1142	Collector: SVB

Well Information

Monument condition: (Good) / Needs repair

Well cap condition: (Good) / Locked / Replaced / Needs replacement

Headspace reading: Not measured / ppm Odor Y / (N)

Elevation mark: (Yes) / Added / Other Well diameter = 2-inch / (4-inch) / 6-inch / Other

Purge Data

Total well depth	28.96 ft	Top of screen	ft bgs			
Depth to product	— ft	Water above screen	Y / N			
Depth to water	20.25 ft	Pump/Tubing Intake Depth	ft bgs			
Casing volume	8.71 ft H_2O X	0.65 gpf =	5.7	X 3 =	17.0	
Casing volumes (GPF)		3/4"=0.02	1"=0.04	2"=0.16	4"=0.65	6"=1.47

Purge Method

Pump type: Peristaltic / (Submersible) / Bladder / Pneumatic / Other

Purge tubing: (New LDPE) / New Teflon / Other

Purge start time 1123 Purge stop time 1139 Purge rate

Refill Timer Setting Discharge Timer Setting Pressure Setting

Field Parameters

Meter used: QED / (YSI) / Hanna / Other

(Gallons)/mL	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
3	60.07	0.757	3.63	6.89	0.493	70.3	clear
6	60.29	0.766	2.49	6.90	0.497	62.6	clear
9	60.74	0.738	1.31	6.88	0.476	42.8	clear
12	60.61	0.726	0.82	6.87	0.470	25.2	clear
15	60.50	0.717	0.48	6.87	0.466	4.1	clear
17	60.64	0.714	0.41	6.86	0.464	0.6	clear

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
3	(VOA) / Amber / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y / (N)
1	VOA / (Amber) / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y / (N)
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature SVB Date: 3/11/15

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no: IMW-31	Project name: Evanite
Sample no: IMW-31	Project no: 1122
Date: 3/11/15 Sample Time: 1222	Collector: SYB

Well Information

Monument condition: (Good) / Needs repair

Well cap condition: (Good) / Locked / Replaced / Needs replacement

Headspace reading: (Not measured) / ppm Odor Y / N

Elevation mark: (Yes) / Added / Other Well diameter = 2-inch / (4-inch) / 6-inch / Other

Purge Data

Total well depth	29.01	ft	Top of screen		ft bgs		
Depth to product	~~30~~	ft	Water above screen	Y / N			
Depth to water	20.10	ft	Pump/Tubing Intake Depth		ft bgs		
Casing volume	8.91	ft H_2O X	0.65	gpf =	5.8	X 3 =	17.4
Casing volumes (GPF)		3/4"=0.02	1"=0.04	2"=0.16	4"=0.65	6"=1.47	

Purge Method

Pump type: Peristaltic / (Submersible) / Bladder / Pneumatic / Other

Purge tubing: (New) LDPE / New Teflon / Other

Purge start time 1201 Purge stop time 1218 Purge rate

Refill Timer Setting Discharge Timer Setting Pressure Setting

Field Parameters

Meter used: QED / (YSI) / Hanna / Other

Gallons/mL	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
3	59.30	0.559	1.92	7.24	0.363	46.1	clear
6	59.80	0.551	1.06	7.20	0.358	~~6~~ 25.8	clear
9	59.95	0.549	0.83	7.18	0.357	15.6	clear
12	59.98	0.548	0.65	7.17	0.356	10.0	clear
15	60.02	0.547	0.59	7.16	0.356	8.6	clear
17.5	60.05	0.547	0.48	7.14	0.356	6.8	clear

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
3	(VOA) / Amber / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y / (N)
1	VOA / (Amber) / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y / (N)
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature Date: 3/11/15

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no:	IMW-29	Project name:	Evenite
Sample no:	IMW-29	Project no:	1122
Date:	3/11/15	Sample Time: 1255	Collector: SVB

Well Information

Monument condition	Good / Needs repair
Well cap condition	Good / Locked / Replaced / Needs replacement
Headspace reading	Not measured / ppm Odor Y / N
Elevation mark	Yes / Added / Other Well diameter = 2-inch / 4-inch / 6-inch / Other

Purge Data

Total well depth	28.72 ft	Top of screen	ft bgs			
Depth to product	— ft	Water above screen	Y / N			
Depth to water	21.48 ft	Pump/Tubing Intake Depth	ft bgs			
Casing volume	7.24 ft H_2O X	0.65	gpf =	4.7	X 3 =	14.1
Casing volumes (GPF)	3/4"=0.02	1"=0.04	2"=0.16	4"=0.65	6"=1.47	

Purge Method

Pump type	Peristaltic / Submersible / Bladder / Pneumatic / Other		
Purge tubing	New LDPE / New Teflon / Other		
Purge start time	1237	Purge stop time 1251	Purge rate
Refill Timer Setting		Discharge Timer Setting	Pressure Setting

Field Parameters

Meter used: QED / YSI / Hanna / Other

Gallons/mL	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
2	61.44	0.669	2.42	5.54	0.437	154.8	clear
5	61.66	0.667	2.45	5.52	0.446	157.0	clear
7	61.85	0.655	2.15	5.51	0.421	157.6	clear
10	61.82	0.596	1.62	5.51	0.386	155.8	clear
12	61.81	0.566	1.32	5.50	0.367	154.0	clear
14	61.81	0.560	1.25	5.49	0.364	153.3	

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
3	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
1	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature: SVB Date: 3/11/15

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no:	DMW-24	Project name:	Evanite
Sample no:	DMW-24	Project no:	1122
Date:	3/11/15	Sample Time: 1330	Collector: SVB

Well Information

Monument condition	Good / Needs repair
Well cap condition	Good / Locked / Replaced / Needs replacement
Headspace reading	Not measured / ppm Odor Y / N
Elevation mark	Yes / Added / Other Well diameter = 2-inch / 4-inch / 6-inch / Other

Purge Data

Total well depth	Pumping ft	Top of screen	ft bgs
Depth to product	ft	Water above screen	Y / N
Depth to water	ft	Pump/Tubing Intake Depth	ft bgs
Casing volume	ft H_2O X	gpf =	X 3 =
Casing volumes (GPF)	3/4"=0.02	1"=0.04 2"=0.16	4"=0.65 6"=1.47

Purge Method

Pump type	Peristaltic / Submersible / Bladder / Pneumatic / Other		
Purge tubing	New LDPE / New Teflon / Other		
Purge start time		Purge stop time	Purge rate
Refill Timer Setting		Discharge Timer Setting	Pressure Setting

Field Parameters

Meter used: QED / YSI / Hanna / Other

Gallons/mL	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
	58.48	0.791	4.20	6.77	0.514	130.0	clear

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
3	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
1	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature: SB Date: 3/11/15

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no:	DMW-26	Project name:	Evante
Sample no:	DMW-26	Project no:	1122
Date:	3/11/15	Sample Time: 1445	Collector: S. Biles

Well Information

Monument condition	(Good) / Needs repair
Well cap condition	(Good) / Locked / Replaced / Needs replacement
Headspace reading	(Not measured) / ppm Odor Y / N
Elevation mark	(Yes) Added / Other Well diameter = 2-inch / 4-inch / (6-inch) / Other

Purge Data

Total well depth	44.84 ft	Top of screen	ft bgs		
Depth to product	– ft	Water above screen	Y / N		
Depth to water	24.60 ft	Pump/Tubing Intake Depth	ft bgs		
Casing volume	20.24 ft H_2O X	1.47 gpf =	29.8	X 3 =	89.3
Casing volumes (GPF)	3/4"=0.02	1"=0.04	2"=0.16	4"=0.65	6"=1.47

Purge Method

Pump type	Peristaltic / Submersible / Bladder / Pneumatic / Other		
Purge tubing	New LDPE / New Teflon / Other		
Purge start time	1346	Purge stop time 1438	Purge rate
Refill Timer Setting	Discharge Timer Setting		Pressure Setting

Field Parameters

Meter used: QED / (YSI) / Hanna / Other

(Gallons)/mL	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
15	59.68	0.453	0.67	7.00	0.294	51.7	clear
30	59.70	0.452	0.38	6.99	0.293	30.2	clear
45	59.71	0.450	0.23	6.98	0.292	9.0	clear
60	59.74	0.449	0.22	6.97	0.292	6.1	clear
75	59.75	0.450	0.20	6.97	0.292	0.0	clear
90	59.78	0.450	0.18	6.97	0.293	-3.0	clear

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
3	(VOA) / Amber / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y / (N)
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature: AB Date: 3/11/15

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no:	IMW-26	Project name:	Evanite
Sample no:	IMW-26	Project no:	1122
Date:	3/11/15	Sample Time: 1508	Collector: SVB

Well Information

Monument condition: (Good) / Needs repair

Well cap condition: (Good) / Locked / Replaced / Needs replacement

Headspace reading: Not measured / ppm Odor Y / N

Elevation mark: (Yes) / Added / Other Well diameter = 2-inch / 4-(inch) / 6-inch / Other

Purge Data

Total well depth	31.18 ft	Top of screen	ft bgs			
Depth to product	- ft	Water above screen	Y / N			
Depth to water	24.37 ft	Pump/Tubing Intake Depth	ft bgs			
Casing volume	6.81 ft H_2O X	0.65	gpf =	4.4	X 3 =	13.3
Casing volumes (GPF)	3/4"=0.02	1"=0.04	2"=0.16	4"=0.65	6"=1.47	

Purge Method

Pump type: Peristaltic / (Submersible) / Bladder / Pneumatic / Other

Purge tubing: (New) LDPE / New Teflon / Other

Purge start time 1447 1450 Purge stop time 1502 Purge rate

Refill Timer Setting Discharge Timer Setting Pressure Setting

Field Parameters

Meter used: QED / (YSI) / Hanna / Other

(Gallons)/mL	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
3	60.29	0.708	5.97	6.87	0.460	98.8	clear
5	60.77	0.702	5.36	6.73	0.456	104.6	clear
7	60.86	0.690	5.26	6.70	0.450	106.1	clear
9	60.91	0.689	5.19	6.67	0.448	108.2	clear
11	60.90	0.688	5.19	6.67	0.446	109.3	clear
13+	60.88	0.689	5.19	6.66	0.447	110.0	clear

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
3	(VOA) / Amber / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y (N)
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature SVB Date: 3/11/15

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no:	DMW-16	Project name:	Ivanhoe
Sample no:	DMW-16	Project no:	1122
Date:	3/12/15	Sample Time: 1030	Collector: SVB

Well Information

Monument condition: (Good) / Needs repair

Well cap condition: (Good) / Locked / Replaced / Needs replacement

Headspace reading: Not measured / ppm Odor Y / N

Elevation mark: (Yes) / Added / Other Well diameter = 2-inch / 4-inch / (6-inch) / Other

Purge Data

Total well depth	43.08 ft	Top of screen	ft bgs			
Depth to product	-- ft	Water above screen	Y / N			
Depth to water	22.60 ft	Pump/Tubing Intake Depth	ft bgs			
Casing volume	20.48 ft H_2O X	1.47	gpf =	30.1	X 3 =	90.3
Casing volumes (GPF)	3/4"=0.02	1"=0.04	2"=0.16	4"=0.65	6"=1.47	

Purge Method

Pump type: Peristaltic / (Submersible) / Bladder / Pneumatic / Other

Purge tubing: (New LDPE) / New Teflon / Other

Purge start time 0939 Purge stop time 1027 Purge rate

Refill Timer Setting Discharge Timer Setting Pressure Setting

Field Parameters

Meter used: QED (YSI) / Hanna / Other

(Gallons)/mL	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
15	57.59	0.471	0.70	7.27	0.306	-90.5	clear
30	57.65	0.471	0.28	7.28	0.306	-106.6	clear
45	57.66	0.471	0.21	7.28	0.306	-110.1	clear
60	57.66	0.471	0.17	7.28	0.306	-112.4	clear
75	57.68	0.470	0.19	7.30	0.306	-113.2	clear
90	57.68	0.470	0.21	~~7.30~~ 7.28	0.305	-115.0	clear

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
3	(VOA) / Amber / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y / (N)
1	VOA / (Amber) / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y / (N)
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature SVB Date: 3/12/15

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no:	IMW-16	Project name:	Evanite
Sample no:	IMW-16	Project no:	1122
Date:	3/12/15	Sample Time: 1100	Collector: SVB

Well Information

Monument condition	(Good) / Needs repair
Well cap condition	(Good) / Locked / Replaced / Needs replacement
Headspace reading	(Not measured) / ppm Odor Y / N
Elevation mark	(Yes) / Added / Other Well diameter = 2-inch / (4-inch) / 6-inch / Other

Purge Data

Total well depth	30.98 ft	Top of screen	ft bgs			
Depth to product	— ft	Water above screen	Y / N			
Depth to water	23.08 ft	Pump/Tubing Intake Depth	ft bgs			
Casing volume	7.90 ft H_2O X	0.65 gpf =	5.1	X 3 =	15.4	
Casing volumes (GPF)	3/4"=0.02	1"=0.04	2"=0.16	4"=0.65	6"=1.47	

Purge Method

Pump type	Peristaltic / (Submersible) / Bladder / Pneumatic / Other		
Purge tubing	(New) LDPE / New Teflon / Other		
Purge start time	1040	Purge stop time	Purge rate
Refill Timer Setting		Discharge Timer Setting	Pressure Setting

Field Parameters

Meter used: QED / (YSI) / Hanna / Other

(Gallons)/mL	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
3	58.77	0.180	10.19	7.69	0.118	27.3	Sl. turbid
5	59.19	0.191	8.23	7.43	0.125	34.3	clear
7	59.25	0.199	8.00	7.35	0.129	38.6	clear
9	59.28	0.204	7.78	7.27	0.131	41.2	clear
11	59.20	0.213	7.48	7.22	0.136	43.6	clear
13	59.17	0.225	6.98	7.15	0.146	45.1	clear
15+	59.15	0.227	6.90	7.15	0.147	45.0	clear

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
3	(VOA) / Amber / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y / (N)
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature: SVB Date: 3/12/15

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no:	DMW-11	Project name:	Evanite
Sample no:	DMW-11	Project no:	1122
Date:	3/12/15	Sample Time: 1133	Collector: SVB

Well Information

Monument condition: (Good) / Needs repair

Well cap condition: (Good) / Locked / Replaced / Needs replacement

Headspace reading: (Not measured) / ppm Odor Y / N

Elevation mark: (Yes) / Added / Other Well diameter = 2-inch / 4-inch / (6-inch) / Other

Purge Data

Total well depth: Pumping ft Top of screen ft bgs

Depth to product: ft Water above screen Y / N

Depth to water: ft Pump/Tubing Intake Depth ft bgs

Casing volume: ft H_2O X gpf = X 3 =

Casing volumes (GPF): 3/4"=0.02 1"=0.04 2"=0.16 4"=0.65 6"=1.47

Purge Method

Pump type: Peristaltic / Submersible / Bladder / Pneumatic / Other

Purge tubing: New LDPE / New Teflon / Other

Purge start time 1122 Purge stop time 1132 Purge rate

Refill Timer Setting Discharge Timer Setting Pressure Setting

Field Parameters

Meter used: QED (YSI) Hanna / Other

Gallons/mL	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
	61.98	0.428	6.52	7.10	0.278	7.0	clear, slightly orange

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments: Allow pump to run 10 minutes before Sampling

Sampler's Signature SB Date: 3/12/15

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no:	IMW-27	Project name:	Evante
Sample no:	IMW-27	Project no:	122
Date:	3/12/15	Sample Time: 1236	Collector: SVB

Well Information

Monument condition (Good) / Needs repair

Well cap condition (Good) / Locked / Replaced / Needs replacement

Headspace reading Not measured / ppm Odor Y / N

Elevation mark (Yes) / Added / Other Well diameter = 2-inch / (4-inch) / 6-inch / Other

Purge Data

Total well depth	35.59 ft	Top of screen	ft bgs			
Depth to product	~ ft	Water above screen	Y / N			
Depth to water	19.59 ft	Pump/Tubing Intake Depth	ft bgs			
Casing volume	16.00 ft H_2O X	0.65	gpf =	10.4	X 3 =	31.2
Casing volumes (GPF)	3/4"=0.02	1"=0.04	2"=0.16	4"=0.65	6"=1.47	

Purge Method

Pump type Peristaltic / Submersible / Bladder / Pneumatic / Other

Purge tubing New LDPE / New Teflon / Other

Purge start time 1205 Purge stop time 1230 Purge rate

Refill Timer Setting Discharge Timer Setting Pressure Setting

Field Parameters

Meter used QED (YSI) / Hanna / Other

(Gallons)/mL	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
5	59.19	0.633	1.34	6.31	0.412	47.5	clear
10	60.15	0.660	0.89	6.21	0.442	33.7	clear
15	62.36	0.845	0.53	6.51	0.549	5.3	clear
20	63.46	0.791	~~0.42~~ 0.39	6.49	0.510	2.4	clear
25	64.08	0.757	0.36	6.48	0.493	-3.0	clear
30 (M)	64.44	0.737	0.40	6.53	0.477	-6.4	clear
35	64.60	0.715	0.43	6.54	0.463	-7.7	clear

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
3	(VOA) / Amber / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y / (N)
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature SVB Date: 3/12/15

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no:	DMW-27	Project name:	Evanite
Sample no:	DMW-27	Project no:	1122
Date:	3/12/15	Sample Time: 1327	Collector: SVB

Well Information

Monument condition	(Good) / Needs repair
Well cap condition	(Good) / Locked / Replaced / Needs replacement
Headspace reading	(Not measured) / ppm Odor Y / N
Elevation mark	(Yes) / Added / Other Well diameter = 2-inch / (4-inch) / 6-inch / Other

Purge Data

Total well depth	46.55 ft	Top of screen	ft bgs			
Depth to product	— ft	Water above screen	Y / N			
Depth to water	20.20 ft	Pump/Tubing Intake Depth	ft bgs			
Casing volume	26.35 ft H_2O X	0.65	gpf =	17.1	X 3 =	51.4
Casing volumes (GPF)	3/4"=0.02	1"=0.04	2"=0.16	4"=0.65	6"=1.47	

Purge Method

Pump type	Peristaltic / (Submersible) / Bladder / Pneumatic / Other		
Purge tubing	(New LDPE) / New Teflon / Other		
Purge start time	1241	Purge stop time 1324	Purge rate
Refill Timer Setting		Discharge Timer Setting	Pressure Setting

Field Parameters

Meter used: QED / (YSI) / Hanna / Other

Gallons/mL	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
9	58.21	0.877	0.72	6.87	0.574	-13.1	clear
17	59.26	0.877	0.38	6.88	0.569	-64.6	clear
26	59.33	0.822	0.20	6.92	0.533	-90.0	clear
35	59.12	0.779	0.12	6.95	0.506	-103.8	clear
43	58.62	0.784	0.10	6.96	0.509	-108.2	clear
52	58.61	0778	0.10	6.96	0.506	-111.8	clear

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
3	(VOA) / Amber / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y / (N)
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature: SVB Date: 3/12/15

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no: DMW-32	Project name: Evonik
Sample no: DMW-32	Project no: 1122
Date: 3/12/15 Sample Time: 1440	Collector: SVB

Well Information

Monument condition: (Good) / Needs repair

Well cap condition: (Good) / Locked / Replaced / Needs replacement

Headspace reading: (Not measured) / ppm Odor Y / (N)

Elevation mark: (Yes) / Added / Other Well diameter = 2-inch / 4-inch / (6-inch) / Other

Purge Data

Total well depth: 42.32 ft Top of screen ____ ft bgs

Depth to product: — ft Water above screen Y / N

Depth to water: 18.58 ft Pump/Tubing Intake Depth ____ ft bgs

Casing volume: 23.74 ft H_2O X 1.47 gpf = 34.9 X 3 = 104.7

Casing volumes (GPF) 3/4"=0.02 1"=0.04 2"=0.16 4"=0.65 6"=1.47

Purge Method

Pump type: (Peristaltic) / Submersible / Bladder / Pneumatic / Other

Purge tubing: (New LDPE) / New Teflon / Other

Purge start time 1416 Purge stop time 1435 Purge rate

Refill Timer Setting Discharge Timer Setting Pressure Setting

Field Parameters

Meter used: QED (YSI) / Hanna / Other

Gallons/(mL)	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
250	64.96	0.844	3.91	7.12	0.547	35.5	clear
500	63.21	0.861	2.15	7.03	0.559	14.0	clear
750	63.18	0.857	1.31	7.05	0.558	-47.1	clear
1000	63.09	0.882	0.96	7.14	0.574	-72.4	clear
1250	63.73	0.897	0.60	7.14	0.584	-81.3	clear
1500	63.58	0.906	0.66	7.15	0.589	-82.8	clear
1750	63.39	0.907	0.70	7.14	0.589	-83.5	clear
2000	63.37	0.906	0.67	7.16	0.588	-83.7	clear

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
3	(VOA) / Amber / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y / (N)
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature SVB Date: 3/12/15

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no: DMW-36	Project name: Evanite
Sample no: DMW-36	Project no: 1122
Date: 3/12/15 Sample Time: 0907	Collector: SVP

3/13/15

Well Information

Monument condition	Good / Needs repair
Well cap condition	Good / Locked / Replaced / Needs replacement
Headspace reading	Not measured / ppm Odor Y / N
Elevation mark	Yes / Added / Other Well diameter = 2-inch / 4-inch / 6-inch / Other

Purge Data

Total well depth	42.60 ft	Top of screen	ft bgs			
Depth to product	— ft	Water above screen	Y / N			
Depth to water	20.46 ft	Pump/Tubing Intake Depth	ft bgs			
Casing volume	22.14 ft H_2O X	1.47	gpf =	32.5	X 3 =	97.6
Casing volumes (GPF)	3/4"=0.02	1"=0.04	2"=0.16	4"=0.65	6"=1.47	

Purge Method

Pump type	Peristaltic / Submersible / Bladder / Pneumatic / Other		
Purge tubing	New LDPE / New Teflon / Other		
Purge start time 0845	Purge stop time 0905	Purge rate	
Refill Timer Setting	Discharge Timer Setting	Pressure Setting	

Field Parameters

Meter used: QED / YSI / Hanna / Other

Gallons/ml	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
250	56.00	0.702	2.38	6.35	0.456	102.0	clear
500	55.87	0.701	1.98	6.30	0.456	92.5	clear
750	55.69	0.700	1.67	6.28	0.455	74.3	clear
1000	55.84	0.702	1.43	6.38	0.456	47.2	clear
1250	55.93	0.705	1.01	6.62	~~0.552~~	27.4	clear
1500	55.82	0.710	0.76	7.01	0.459 0.462	14.6	clear
1750	55.76	0.712	0.70	7.04	0.463	9.4	clear
2000	55.76	0.714	0.69	7.10	0.465	4.0	clear
2250	55.78	0.714	0.66	7.12	0.464	0.2	clear

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
3	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature: AB Date: 3/13/15

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no:	DMW-38 (DMW-98) DUP	Project name:	Evanite
Sample no:	DMW-38 (DMW-98)	Project no:	1122
Date:	3/13/15	Sample Time: 0950 (0952)	Collector: SVB

Well Information

Monument condition	Good / Needs repair
Well cap condition	Good / Locked / Replaced / Needs replacement
Headspace reading	Not measured / ppm Odor Y / N
Elevation mark	Yes / Added / Other Well diameter = 2-inch / 4-inch / 6-inch / Other

Purge Data

Total well depth	44.92 ft	Top of screen	ft bgs			
Depth to product	— ft	Water above screen	Y / N			
Depth to water	23.53 ft	Pump/Tubing Intake Depth	ft bgs			
Casing volume	21.39 ft H_2O X	1.47	gpf =	31.4	X 3 =	94.3
Casing volumes (GPF)	3/4"=0.02	1"=0.04	2"=0.16	4"=0.65	6"=1.47	

Purge Method

Pump type	Peristaltic / Submersible / Bladder / Pneumatic / Other		
Purge tubing	New LDPE / New Teflon / Other		
Purge start time	0927	Purge stop time 0944	Purge rate
Refill Timer Setting		Discharge Timer Setting	Pressure Setting

Field Parameters

Meter used: QED / YSI / Hanna / Other

Gallons/(mL)	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
250	57.07	0.390	3.34	7.64	0.253	58.1	clear
500	57.83	0.388	1.93	7.50	0.252	49.4	clear
750	57.93	0.388	1.42	7.40	0.252	39.6	clear
1000	57.67	0.387	1.13	7.32	0.251	22.5	clear
1250	57.69	0.388	0.90	7.29	0.251	10.6	clear
1500	57.97	0.385	0.69	7.25	0.250	-0.2	clear
1750	58.01	0.385	0.65	7.27	0.250	-2.5	clear
2000	58.04	0.385	0.61	7.27	0.250	-4.6	clear

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
3	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature: SVB Date: 3/13/15

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no:	DMW-39	Project name:	Evanite
Sample no:	DMW-39	Project no:	1122
Date:	3/13/15	Sample Time: 1031	Collector: SVB

Well Information

Monument condition: (Good) / Needs repair

Well cap condition: (Good) / Locked / Replaced / Needs replacement

Headspace reading: Not measured / ppm Odor Y / N

Elevation mark: (Yes) / Added / Other Well diameter = 2-inch / 4-inch / (6-inch) / Other

Purge Data

Total well depth	45.56 ft	Top of screen	ft bgs			
Depth to product	— ft	Water above screen Y / N				
Depth to water	27.79 ft	Pump/Tubing Intake Depth	ft bgs			
Casing volume	17.77 ft H_2O X	1.47 gpf =	26.1	X 3 =	78.4	
Casing volumes (GPF)	3/4"=0.02	1"=0.04	2"=0.16	4"=0.65	6"=1.47	

Purge Method

Pump type: (Peristaltic) / Submersible / Bladder / Pneumatic / Other

Purge tubing: (New LDPE) / New Teflon / Other

Purge start time 1009 Purge stop time 1027 Purge rate

Refill Timer Setting Discharge Timer Setting Pressure Setting

Field Parameters

Meter used: QED / (YSI) / Hanna / Other

Gallons/mL	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
250	57.65	0.440	3.19	7.44	0.288	29.4	clear
500	57.83	0.451	2.22	7.36	0.294	12.9	clear
750	57.81	0.469	1.31	7.31	0.305	-16.8	clear
1000	57.66	0.475	0.91	7.30	0.309	-32.8	clear
1250	57.74	0.476	0.71	7.29	0.309	-42.3	clear
1500	57.77	0.475	0.62	7.30	0.309	-47.4	clear
1750	57.75	0.475	0.59	7.30	0.308	-49.6	clear
2000	57.77	0.474	0.57	7.29	0.308	-52.2	

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
3	(VOA) / Amber / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y / (N)
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature SVB Date: 3/13/15

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no: DMW-35	Project name: Evanite
Sample no: DMW-35	Project no: 1122
Date: 3/13/15 Sample Time: 1109	Collector: SVB

Well Information

Monument condition (Good) / Needs repair _____

Well cap condition (Good) / Locked / Replaced / Needs replacement

Headspace reading (Not measured) / _____ ppm Odor Y / N

Elevation mark (Yes) / Added / Other Well diameter = 2-inch / 4-inch / 6-inch / Other

Purge Data

Total well depth 41.92 ft Top of screen _____ ft bgs

Depth to product - ft Water above screen Y / N

Depth to water 21.21 ft Pump/Tubing Intake Depth _____ ft bgs

Casing volume 20.71 ft H_2O X 0.16 gpf = 3.3 X 3 = 9.9

Casing volumes (GPF) 3/4"=0.02 1"=0.04 2"=0.16 4"=0.65 6"=1.47

Purge Method

Pump type Peristaltic / Submersible / Bladder / Pneumatic / Other

Purge tubing New LDPE / New Teflon / Other _____

Purge start time 1047 Purge stop time 1103 Purge rate _____

Refill Timer Setting _____ Discharge Timer Setting _____ Pressure Setting _____

Field Parameters

Meter used QED / YSI / Hanna / Other

Gallons/ml	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
250	59.55	0.551	3.30	7.65	0.362	-84.7	clear
500	59.54	0.579	1.91	7.57	0.379	-95.3	clear
750	59.35	0.592	1.00	7.51	0.384	-111.4	clear
1000	59.16	0.568	0.76	7.49	0.368	-111.3	clear
1250	59.18	0.550	0.65	7.47	0.357	-109.3	clear
1500	59.26	0.531	0.59	7.45	0.344	-106.2	clear
1750	59.33	0.520	0.56	7.45	0.336	-104.1	clear
2000	59.36	0.512	0.53	7.46	0.331	-102.9	clear
2200	59.34	0.510	0.52	7.44	0.330	-102.5	clear

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
3	(VOA) / Amber / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y / (N)
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature SB Date: 3/13/15

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no:	IMW-35	Project name:	Evanite
Sample no:	IMW-35	Project no:	1122
Date:	3/13/15	Sample Time: 1136	Collector: SVB

Well Information

Monument condition: Good / Needs repair

Well cap condition: Good / Locked / Replaced / Needs replacement

Headspace reading: Not measured / ppm Odor Y / N

Elevation mark: Yes / Added / Other Well diameter = 2-inch / 4-inch / 6-inch / Other

Purge Data

Total well depth	29.29 ft	Top of screen	ft bgs			
Depth to product	— ft	Water above screen	Y / N			
Depth to water	21.69 ft	Pump/Tubing Intake Depth	ft bgs			
Casing volume	7.60 ft H_2O X	0.16 gpf =	1.2	X 3 =	3.6	
Casing volumes (GPF)	3/4"=0.02	1"=0.04	2"=0.16	4"=0.65	6"=1.47	

Purge Method

Pump type: Peristaltic / Submersible / Bladder / Pneumatic / Other

Purge tubing: New LDPE / New Teflon / Other

Purge start time 1115 Purge stop time 1131 Purge rate

Refill Timer Setting Discharge Timer Setting Pressure Setting

Field Parameters

Meter used: QED / YSI / Hanna / Other

Gallons/mL	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
250	60.49	0.388	5.80	7.32	0.252	-31.2	clear
500	60.55	0.386	1.84	7.21	0.251	-37.5	clear
750	60.52	0.386	1.00	7.11	0.251	-44.7	clear
1000	60.53	0.385	0.80	7.07	0.250	-49.0	clear
1250	60.59	0.385	0.65	7.04	0.250	-53.4	clear
1500	60.44	0.384	0.54	7.03	0.249	-58.1	clear
1750	60.48	0.383	0.47	7.03	0.249	-62.2	clear
2000	60.50	0.383	0.46	7.03	0.249	-63.3	clear

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
3	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature: SVB Date: 3/13/15

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no:	DMW-34	Project name:	Evanite
Sample no:	DMW-34	Project no:	1122
Date:	3/13/15	Sample Time: 1223	Collector: SVB

Well Information

Monument condition: (Good) / Needs repair _____

Well cap condition: (Good) / Locked / Replaced / Needs replacement

Headspace reading: (Not measured) / _____ ppm (Odor) Y / N

Elevation mark: (Yes) / Added / Other Well diameter = 2-inch / 4-inch / 6-inch / Other

Purge Data

Total well depth	38.59 ft	Top of screen	_____ ft bgs			
Depth to product	— ft	Water above screen	Y / N			
Depth to water	20.76 ft	Pump/Tubing Intake Depth	_____ ft bgs			
Casing volume	17.83 ft H_2O X	0.16 gpf =	_____	X 3 =	_____	
Casing volumes (GPF)	3/4"=0.02	1"=0.04	2"=0.16	4"=0.65	6"=1.47	

Purge Method

Pump type: (Peristaltic) / Submersible / Bladder / Pneumatic / Other

Purge tubing: (New) LDPE / New Teflon / Other _____

Purge start time 1202 Purge stop time 1218 Purge rate _____

Refill Timer Setting _____ Discharge Timer Setting _____ Pressure Setting _____

Field Parameters

Meter used: QED / (YSI) / Hanna / Other

Gallons/mL	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
250	60.69	0.464	4.25	7.40	0.302	-5.2	clear
500	59.72	0.464	1.08	7.08	0.302	-13.1	clear
750	59.73	0.466	0.96	7.06	0.303	-15.2	clear
1000	59.71	0.469	0.86	7.03	0.305	-17.5	clear
1250	59.75	0.474	0.74	7.03	0.309	-21.1	clear
1500	59.80	0.479	0.64	7.01	0.312	-24.9	clear
1750	59.81	0.481	0.59	7.02	0.313	-26.9	clear
2000	59.83	0.482	0.58	7.01	0.313	-28.3	Clear

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
3	(VOA) / Amber / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y / (N)
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature AB Date: 3/13/15

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no:	IMW-34	Project name:	Evonik
Sample no:	IMW-34	Project no:	1122
Date:	3/13/15	Sample Time: 1248	Collector: SWB

Well Information

Monument condition: (Good) / Needs repair

Well cap condition: (Good) / Locked / Replaced / Needs replacement

Headspace reading: (Not measured) / ppm Odor Y / N

Elevation mark: (Yes) / Added / Other Well diameter = (2-inch) / 4-inch / 6-inch / Other

Purge Data

Total well depth	29.50	ft	Top of screen		ft bgs	
Depth to product	—	ft	Water above screen	Y / N		
Depth to water	20.71	ft	Pump/Tubing Intake Depth		ft bgs	
Casing volume	8.79	ft H_2O X	0.16	gpf =	1.4	X 3 = 4.2
Casing volumes (GPF)		3/4"=0.02	1"=0.04	2"=0.16	4"=0.65	6"=1.47

Purge Method

Pump type: Peristaltic / Submersible / Bladder / Pneumatic / Other

Purge tubing: New LDPE / New Teflon / Other

Purge start time 1226 Purge stop time 1244 Purge rate

Refill Timer Setting Discharge Timer Setting Pressure Setting

Field Parameters

Meter used: QED / (YSI) / Hanna / Other

Gallons(mL)	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
250	60.16	0.659	2.20	7.00	0.429	-22.3	clear
500	60.09	0.660	1.64	7.00	0.429	-24.5	clear
750	59.87	0.661	0.91	6.93	0.430	-30.8	clear
1000	59.86	0.661	0.74	6.93	0.430	-32.6	clear
1250	59.84	0.660	0.67	6.93	0.430	-33.9	clear
1500	59.92	0.661	0.57	6.90	0.431	-35.7	clear
1750	60.01	0.662	0.55	6.94	0.430	-36.4	clear
2000	60.09	0.661	0.58	6.94	0.429	-37.1	clear

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
3	(VOA) / Amber / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y / (N)
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature Date: 3/13/15

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no:	MW-33	Project name:	WW
Sample no:	MW-33	Project no:	1122
Date:	03-13-15	Sample Time: 1243	Collector:

Well Information

Monument condition: (Good) / Needs repair _____

Well cap condition: (Good) / ~~Locked~~ / Replaced / Needs replacement

Headspace reading: (Not measured) / _____ ppm Odor Y / (N)

Elevation mark: ~~Yes~~ / Added / Other Well diameter = (2-inch) / 4-inch / 6-inch / Other

Purge Data

Total well depth	27.74 ft	Top of screen	ft bgs
Depth to product	ft	Water above screen	Y / N
Depth to water	18.94 ft	Pump/Tubing Intake Depth	ft bgs
Casing volume	8.80 ft H_2O X _____	gpf = _____	X 3 = _____
Casing volumes (GPF)	3/4"=0.02	1"=0.04 2"=0.16	4"=0.65 6"=1.47

Purge Method

Pump type: (Peristaltic) / Submersible / Bladder / Pneumatic / Other

Purge tubing: (New LDPE) / New Teflon / Other _____

Purge start time 1221 Purge stop time 1242 Purge rate 100 mL/m

Refill Timer Setting _____ Discharge Timer Setting _____ Pressure Setting _____

Field Parameters

Meter used: (QED) / YSI / Hanna / Other

Gallons/ml	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
250	60.3	0.272	1.41	7.49	0.2	29	Clear
500	59.9	0.269	1.20	7.35	0.2	35	"
750	59.6	0.277	0.88	7.27	0.2	38	"
1000	59.6	0.278	0.73	7.25	0.2	39	"
1250	59.7	0.263	0.59	7.23	0.2	40	"
1500	59.7	0.250	0.44	7.22	0.2	40	"
1750	59.8	0.248	0.42	7.22	0.2	40	"
2000	59.7	0.244	0.41	7.20	0.2	41	"

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
3	(VOA) / Amber / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature _____ Date: 03/13/15

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no:	DMW-33	Project name:	HIK
Sample no:	DMW-33	Project no:	1122
Date:	03-13-15 Sample Time: 1218	Collector:	

Well Information

Monument condition (Good) / Needs repair

Well cap condition (Good) / Locked / Replaced / Needs replacement

Headspace reading (Not measured) / ppm Odor Y (N)

Elevation mark (Yes) / Added / Other Well diameter = (2-inch) / 4-inch / 6-inch / Other

Purge Data

Total well depth	35.83 ft	Top of screen	ft bgs
Depth to product	ft	Water above screen	Y / N
Depth to water	19.15 ft	Pump/Tubing Intake Depth	ft bgs
Casing volume	16.68 ft H_2O X	gpf =	X 3 =
Casing volumes (GPF)	3/4"=0.02	1"=0.04 2"=0.16	4"=0.65 6"=1.47

Purge Method

Pump type (Peristaltic) / Submersible / Bladder / Pneumatic / Other

Purge tubing (New LDPE) / New Teflon / Other

Purge start time 1156 Purge stop time 1217 Purge rate 100 mL/m

Refill Timer Setting Discharge Timer Setting Pressure Setting

Field Parameters

Meter used (QED) / YSI / Hanna / Other

Gallons/ml	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
250	61.2	0.319	1.21	7.54	0.2	10	Clear
500	60.3	0.333	0.69	7.71	0.2	14	"
750	59.7	0.343	0.55	7.64	0.2	15	"
1000	59.6	0.345	0.45	7.63	0.2	15	"
1250	59.5	0.347	0.30	7.58	0.2	13	"
1500	59.6	0.348	0.28	7.54	0.2	14	"
1750	59.7	0.347	0.28	7.53	0.2	13	"
2000	59.7	0.348	0.26	7.52	0.2	13	"

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
3	(VOA) / Amber / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature Date: 03/13/15

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no:	DMW-13	Project name:	HIV
Sample no:	DMW-12	Project no:	1122
Date: 031315	Sample Time: 1131	Collector:	JM

Well Information

Monument condition: (Good) / Needs repair _____

Well cap condition: Good / Locked / Replaced / (Needs replacement)

Headspace reading: (Not measured) / _____ ppm Odor Y (N)

Elevation mark: (Yes) / Added / Other Well diameter = 2-inch / 4-inch / (6-inch) / Other

Purge Data

Total well depth 41.17 ft Top of screen _____ ft bgs

Depth to product _____ ft Water above screen Y / N

Depth to water 21.92 ft Pump/Tubing Intake Depth _____ ft bgs

Casing volume 19.25 ft H_2O X _____ gpf = _____ X 3 = _____

Casing volumes (GPF) 3/4"=0.02 1"=0.04 2"=0.16 4"=0.65 6"=1.47

Purge Method

Pump type (Peristaltic) / Submersible / Bladder / Pneumatic / Other

Purge tubing (New LDPE) / New Teflon / Other _____

Purge start time 1109 Purge stop time 1130 Purge rate 100mL/m

Refill Timer Setting _____ Discharge Timer Setting _____ Pressure Setting _____

Field Parameters

Meter used (QED) / YSI / Hanna / Other

Gallons/mL	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
250	59.4	0.366	1.52	7.72	0.2	42	Mangane stain → clear
500	59.2	0.367	0.87	7.63	0.2	46	clear
750	60.0	0.366	0.63	7.56	0.2	48	"
1000	60.4	0.369	0.59	7.54 751	0.2	49	"
1250	60.5	0.366	0.56	7.48	0.2	50	"
1500	60.6	0.367	0.54	7.46	0.2	50	"
1750	60.5	0.369	0.54	7.47	0.2	50	"
3000	60.6	0.368	0.51	7.46	0.2	49	"

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
3	(VOA) / Amber / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature Date: 031315

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no:	MW-37	Project name:	HHV
Sample no:	MW-37	Project no:	1122
Date:	03-13-15	Sample Time: 1058	Collector: JW

Well Information

Monument condition: (Good) / Needs repair

Well cap condition: (Good) / Locked / Replaced / Needs replacement

Headspace reading: Not measured / ppm Odor Y / N

Elevation mark: (Yes) / Added / Other Well diameter = 2-inch / 4-inch / (6-inch) / Other

Purge Data

Total well depth	40 ft	Top of screen	ft bgs			
Depth to product	ft	Water above screen	Y / N			
Depth to water	18.64 ft	Pump/Tubing Intake Depth	≈ 35 ft bgs			
Casing volume	21.36 ft H_2O X	gpf =	X 3 =			
Casing volumes (GPF)	3/4"=0.02	1"=0.04	2"=0.16	4"=0.65	6"=1.47	

Purge Method

Pump type: (Peristaltic) / Submersible / Bladder / Pneumatic / Other

Purge tubing: (New LDPE) / New Teflon / Other

Purge start time 1037 Purge stop time 1056 Purge rate 100 ml/m

Refill Timer Setting Discharge Timer Setting Pressure Setting

Field Parameters

Meter used: (QED) / YSI / Hanna / Other

Gallons/ml	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
250	57.3	0.398	1.70	7.02	0.3	50	clear
500	56.9	0.403	1.01	7.67	0.3	50	"
750	56.8	0.402	0.87	7.66	0.3	49	"
1000	56.6	0.404	0.83	7.67	0.3	49	"
1250	56.8	0.405	0.80	7.66	0.3	50	"
1500	56.7	0.404	0.74	7.67	0.3	49	"
1750	56.8	0.404	0.74	7.67	0.3	49	"
2000	56.7	0.404	0.72	7.68	0.3	50	"

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
3	(VOA) / Amber / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature Date: 03/13/15

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no:	MW-8	Project name:	H/V
Sample no:	MW-8	Project no:	1122
Date:	03-13-15	Sample Time: 1028	Collector:

Well Information

Monument condition: (Good) / Needs repair

Well cap condition: (Good) / ~~Locked~~ / Replaced / Needs replacement

Headspace reading: (Not measured) / ppm Odor Y (N)

Elevation mark: (Yes) / Added / Other Well diameter: (2-inch) / 4-inch / 6-inch / Other

Purge Data

Total well depth	40.40 ft	Top of screen		ft bgs	
Depth to product	ft	Water above screen	Y / N		
Depth to water	16.91 ft	Pump/Tubing Intake Depth		ft bgs	
Casing volume	23.59 ft H_2O X		gpf =		X 3 =
Casing volumes (GPF)		3/4"=0.02	1"=0.04	2"=0.16	4"=0.65 6"=1.47

Purge Method

Pump type: (Peristaltic) / Submersible / Bladder / Pneumatic / Other

Purge tubing: (New LDPE) / New Teflon / Other

Purge start time 1027 Purge stop time 1037 Purge rate 100 ml/m

Refill Timer Setting Discharge Timer Setting Pressure Setting

Field Parameters

Meter used: (QED) / YSI / Hanna / Other

Gallons/ml	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
250	57.5	0.207	1.86	7.73	0.1	50	Clear
500	57.8	0.209	0.91	7.70	0.1	55	"
750	57.3	0.208	0.75	7.63	0.1	57	"
1000	57.4	0.209	0.66	7.60	0.1	58	"
1250	57.4	0.209	0.63	7.56	0.1	60	"
1500	57.5	0.209	0.61	7.55	0.1	60	"
1750	57.6	0.209	0.60	7.55	0.1	61	"
2000	57.6	0.209	0.58	7.55	0.1	61	"

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
3	(VOA) / Amber / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature Date: 03/13/15

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no:	MW-7	Project name:	H/V
Sample no:	MW-7	Project no:	1122
Date:	03-13-15	Sample Time: 1001	Collector:

Well Information

Monument condition: (Good) / Needs repair

Well cap condition: (Good) / Locked / Replaced / Needs replacement

Headspace reading: (Not measured) / ppm Odor Y / (N)

Elevation mark: (Yes) / Added / Other Well diameter: (2-inch) / 4-inch / 6-inch / Other

Purge Data

Total well depth: 36.57 ft Top of screen _____ ft bgs

Depth to product: _____ ft Water above screen Y / N

Depth to water: 19.27 ft Pump/Tubing Intake Depth _____ ft bgs

Casing volume: 17.30 ft H_2O X _____ gpf = _____ X 3 = _____

Casing volumes (GPF) 3/4"=0.02 1"=0.04 2"=0.16 4"=0.65 6"=1.47

Purge Method

Pump type: (Peristaltic) / Submersible / Bladder / Pneumatic / Other

Purge tubing: (New LDPE) / New Teflon / Other _____

Purge start time 0939 Purge stop time 1000 Purge rate 100 mL/m

Refill Timer Setting _____ Discharge Timer Setting _____ Pressure Setting _____

Field Parameters

Meter used: (QED) / YSI / Hanna / Other

Gallons/(mL)	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH SI units	Turbidity (NTU)	ORP mV	Comments
250	56.9	0.204	2.76	7.55	0.1	74	Water clear
500	56.8	0.259	1.61	7.77	0.1	75	Clear
750	56.6	0.319	0.62	7.69	0.2	81	"
1000	56.6	0.348	0.44	7.55	0.2	84	"
1250	56.6	0.349	0.37	7.51	0.2	87	"
1500	56.7	0.349	0.32	7.50	0.2	87	"
1750	56.8	0.350	0.31	7.49	0.2	87	"
2000	57.1	0.349	0.30	7.47	0.2	86	"

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
3	(VOA) / Amber / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments: Water sent in Manifest

Sampler's Signature Date: 03-13-15

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no:	MW-20	Project name:	H/V
Sample no:	MW-20	Project no:	1122
Date:	03-13-15	Sample Time: 0931	Collector:

Well Information

Monument condition: (Good) / Needs repair

Well cap condition: (Good) / Locked / Replaced / Needs replacement

Headspace reading: ~~Not measured~~ ppm Odor Y (N)

Elevation mark: (Yes) / Added / Other Well diameter = (2-inch) / 4-inch / 6-inch / Other

Purge Data

Total well depth	43.09 ft	Top of screen	ft bgs			
Depth to product	ft	Water above screen	Y / N			
Depth to water	23.44 ft	Pump/Tubing Intake Depth	ft bgs			
Casing volume	16.15 ft H_2O X	gpf =	X 3 =			
Casing volumes (GPF)		3/4"=0.02	1"=0.04	2"=0.16	4"=0.65	6"=1.47

Purge Method

Pump type: (Peristaltic) / Submersible / Bladder / Pneumatic / Other

Purge tubing: (New LDPE) / New Teflon / Other

Purge start time 0909 Purge stop time 0929 Purge rate 100 mL/m

Refill Timer Setting Discharge Timer Setting Pressure Setting

Field Parameters

Meter used: (QED) / YSI / Hanna / Other

Gallons/mL	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
250	54.3	0.369	1.11	7.90	0.2	97	Clear
500	54.2	0.369	0.69	7.93	0.2	96	"
750	54.1	0.371	0.45	7.92	0.2	96	"
1000	54.0	0.371	0.41	7.94	0.2	95	"
1250	54.1	0.372	0.34	7.94	0.2	94	"
1500	54.1	0.372	0.25	7.91	0.2	94	"
1750	54.1	0.373	0.27	7.89	0.2	92	"
2000	54.2	0.373	0.27	7.89	0.2	92	"

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
3	(VOA) / Amber / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature Date: 03-13-15

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no:	DMW - 3	Project name:	Evanite (HV)
Sample no:	DMW - 3	Project no:	1122
Date: 06-11-15	Sample Time: 1111	Collector:	JG / SB

Well Information

Monument condition: Good / Needs repair _____

Well cap condition: ~~Good / Locked~~ / Replaced / Needs replacement

Headspace reading: Not measured / _____ ppm Odor Y / N

Elevation mark: Yes / Added / Other Well diameter = 2-inch / 4-inch / 6-inch / Other

Purge Data

Total well depth	42.10	ft	Top of screen 32.10 ' BTOC			
Depth to product		ft	Water above screen	Y / N		
Depth to water	37.09	ft	Pump/Tubing Intake Depth	_____	ft bgs	
Casing volume	5.01	ft H_2O X	_____	gpf =	_____	X 3 = _____
Casing volumes (GPF)		3/4"=0.02	1"=0.04	2"=0.16	4"=0.65	6"=1.47

Purge Method

Pump type: Peristaltic / Submersible / Bladder / Pneumatic / Other

Purge tubing: New LDPE / New Teflon / Other _____

Purge start time _____ Purge stop time _____ Purge rate _____

Refill Timer Setting _____ Discharge Timer Setting _____ Pressure Setting _____

Field Parameters

Meter used: QED / YSI / Hanna / Other

Gallons/mL	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
	66.3	0.442	1.71	8.32	0.03	30	Clear

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
3	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
1	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments: 361809.0

Sampler's Signature _____ Date: 06-11-15

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no:	DMW - 16	Project name:	Evanite (HV)
Sample no:	DMW - 16	Project no:	1122
Date: 6/10/15	Sample Time: 1419	Collector:	JG / (SB)

Well Information

Monument condition (Good) / Needs repair

Well cap condition (Good) / Locked / Replaced / Needs replacement

Headspace reading (Not measured) / ppm Odor Y / N

Elevation mark (Yes) Added / Other Well diameter = 2-inch / 4-inch / (6-inch) / Other

Purge Data

Total well depth	43.08	ft	Top of screen 36.48' BTOC				
Depth to product	—	ft	Water above screen Y / N				
Depth to water	28.95	ft	Pump/Tubing Intake Depth				ft bgs
Casing volume	14.13	ft H_2O X	1.47	gpf =	20.8	X 3 =	62.3
Casing volumes (GPF)		3/4"=0.02	1"=0.04	2"=0.16	4"=0.65	6"=1.47	

Purge Method

Pump type Peristaltic / (Submersible) / Bladder / Pneumatic / Other

Purge tubing New LDPE / New Teflon / Other

Purge start time 1335 Purge stop time 1417 Purge rate 1.5 gpm

Refill Timer Setting Discharge Timer Setting Pressure Setting

Field Parameters

Meter used QED / (YSI) / Hanna / Other

Gallons/mL	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
3	57.84	0.464	1.38	7.49	0.301	-21.9	clear
13	57.93	0.463	0.21	7.37	0.301	-37.7	clear
23	57.91	0.463	0.09	7.34	0.301	-52.6	clear
33	57.90	0.463	0.05	7.33	0.301	-62.3	clear
43	57.94	0.463	-0.02	7.33	0.301	-74.6	clear
53	57.97	0.463	-0.02	7.38	0.301	~~-69~~ -80	clear
63	57.97	0.462	-0.03	7.35	0.300	-87.2	clear

44
50
57
04
10
17

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
3	(VOA) / Amber / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y / (N)
1	VOA / (Amber) / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y / (N)
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature JB Date: 6/10/15

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no:	DMW - 17	Project name:	Evanite (HV)
Sample no:	DMW - 17	Project no:	1122
Date:	6/10/15	Sample Time:	1229
		Collector:	JG / (SB)

Well Information

Monument condition	(Good) / Needs repair
Well cap condition	(Good) / Locked / Replaced / Needs replacement
Headspace reading	(Not measured) / ppm Odor Y / N
Elevation mark	(Yes) / Added / Other — Well diameter = 2-inch / 4-inch / (6-inch) / Other

Purge Data

Total well depth	46.40	ft	Top of screen 35.90 ' BTOC			
Depth to product	—	ft	Water above screen Y / N			
Depth to water	31.69	ft	Pump/Tubing Intake Depth 40			ft bgs
Casing volume	14.76	ft H_2O X	1.47	gpf =	21.7	X 3 = 65.1
Casing volumes (GPF)		3/4"=0.02	1"=0.04	2"=0.16	4"=0.65	6"=1.47

Purge Method

Pump type	Peristaltic / (Submersible) / Bladder / Pneumatic / Other
Purge tubing	(New LDPE) / New Teflon / Other
Purge start time	1148 — Purge stop time 1226 — Purge rate
Refill Timer Setting	Discharge Timer Setting — Pressure Setting

Field Parameters

Meter used: QED / (YSI) / Hanna / Other

Gallons/mL	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
5	60.02	0.683	2.03	7.21	0.444	-60.9	clear
15	60.08	0.683	0.32	7.11	0.444	-80.7	clear
25	60.05	0.680	0.22	7.10	0.442	-85.1	clear
35	59.96	0.672	0.12	7.10	0.437	-91.8	clear
45	59.88	0.668	0.10	7.10	0.434	-94.3	clear
55	59.82	0.665	0.08	7.10	0.432	-96.2	clear
65	59.81	0.664	0.08	7.11	0.431	-98.2	clear

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
3	(VOA) / Amber / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y / N
1	VOA / (Amber) / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature — Date: 6/10/15

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no:	DMW - 23	Project name:	Evanite (HV)
Sample no:	DMW - 23	Project no:	1122
Date: 06-11-15	Sample Time: 1116	Collector:	JG / SB

Well Information

Monument condition: ~~Good~~ / Needs repair

Well cap condition: ~~Good~~ / Locked / Replaced / Needs replacement

Headspace reading: ~~Not measured~~ / ppm Odor Y / N

Elevation mark: Yes / Added / Other Well diameter = 2-inch / 4-inch / 6-inch / Other

Purge Data

Total well depth: 46.80 ft Top of screen 34.46 'BTOC

Depth to product: 36.90 ft Water above screen Y / N

Depth to water: 36.90 ft Pump/Tubing Intake Depth _____ ft bgs

Casing volume: _____ ft H_2O X _____ gpf = _____ X 3 = _____

Casing volumes (GPF) 3/4"=0.02 1"=0.04 2"=0.16 4"=0.65 6"=1.47

Purge Method

Pump type: Peristaltic / Submersible / Bladder / Pneumatic / Other

Purge tubing: New LDPE / New Teflon / Other _____

Purge start time _____ Purge stop time _____ Purge rate _____

Refill Timer Setting _____ Discharge Timer Setting _____ Pressure Setting _____

Field Parameters

Meter used: QED / YSI / Hanna / Other

Gallons/mL	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
	59.6	0.352	1.68	8.29	0.2	19	Clear

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
3	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
1	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments: 1359410

Sampler's Signature _____ Date: 06-11-15

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no:	DMW - 24	Project name:	Evanite (HV)
Sample no:	DMW - 24	Project no:	1122
Date:	06-11-15	Sample Time:	1100
		Collector:	(JG) / SB

Well Information

Monument condition: (Good) / Needs repair

Well cap condition: (Good) / ~~Locked~~ / Replaced / Needs replacement

Headspace reading: (Not measured) / ppm Odor Y (N)

Elevation mark: (Yes) / Added / Other Well diameter = 2-inch / (4-inch) / 6-inch / Other

Purge Data

Total well depth	48.22	ft	Top of screen 35.46' BTOC		
Depth to product		ft	Water above screen (Y) / N		
Depth to water	34.26	ft	Pump/Tubing Intake Depth		ft bgs
Casing volume		ft H_2O X		gpf =	X 3 =
Casing volumes (GPF)		3/4"=0.02	1"=0.04	2"=0.16	4"=0.65 6"=1.47

Purge Method

Pump type: Peristaltic / (Submersible) / Bladder / Pneumatic / Other

Purge tubing: (New LDPE) / New Teflon / Other

Purge start time: Purge stop time: Purge rate:

Refill Timer Setting: Discharge Timer Setting: Pressure Setting:

Field Parameters

Meter used: QED / YSI / Hanna / Other

Gallons/mL	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
	59.3	0.631	1.49	3.21	0.4	45	clear

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
3	(VOA) / Amber / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y / N
	VOA / (Amber) / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments: 153083 ©

Sampler's Signature Date: 06-11-15

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no:	DMW - 25	Project name:	Evanite (HV)
Sample no:	DMW - 25	Project no:	1122
Date: 6/10/15	Sample Time: 1318	Collector:	JG / (SB)

Well Information

Monument condition (Good) / Needs repair

Well cap condition (Good) / Locked / Replaced / Needs replacement

Headspace reading (Not measured) / ppm Odor Y / N

Elevation mark (Yes) / Added / Other Well diameter = 2-inch / (4-inch) / 6-inch / Other

Purge Data

Total well depth	46.94	ft	Top of screen 34.60 'BTOC			
Depth to product		ft	Water above screen Y / N			
Depth to water	30.58	ft	Pump/Tubing Intake Depth			ft bgs
Casing volume	16.36	ft H_2O X	0.65	gpf =	10.6	X 3 = 31.9
Casing volumes (GPF)		3/4"=0.02	1"=0.04	2"=0.16	4"=0.65	6"=1.47

Purge Method

Pump type Peristaltic / (Submersible) / Bladder / Pneumatic / Other

Purge tubing (New LDPE) / New Teflon / Other 1.14

Purge start time 1247 Purge stop time 1315 Purge rate ~~1.5~~ gpm

Refill Timer Setting Discharge Timer Setting Pressure Setting

Field Parameters

Meter used QED / (YSI) / Hanna / Other

(Gallons)/mL	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
5	57.08	0.416	1.34	7.51	0.270	9.1	Clear
11	57.30	0.431	0.58	7.28	0.282	-8.1	Clear
17	57.36	0.438	0.39	7.26	0.284	-14.3	Clear
~~23~~ 22	57.35	0.440	0.28	7.25	0.286	-14.2	Clear
27	57.37	0.441	0.19	7.25	0.286	-14.0	Clear
32	57.39	0.442	0.15	7.25	0.287	-13.9	Clear

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
3	(VOA) / Amber / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature Date: 6/10/15

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no:	DMW - 26	Project name:	Evanite (HV)
Sample no:	DMW - 26	Project no:	1122
Date:	06/11/15	Sample Time:	1012
Collector:	JG / SB		

Well Information

Monument condition: Good / Needs repair

Well cap condition: Good / Locked / Replaced / Needs replacement

Headspace reading: Not measured / ppm Odor Y / N

Elevation mark: Yes / Added / Other Well diameter = 2-inch / 4-inch / 6-inch / Other

Purge Data

Total well depth	44.84	ft	Top of screen 37.18' BTOC			
Depth to product		ft	Water above screen Y / N			
Depth to water	32.72	ft	Pump/Tubing Intake Depth	39.5	ft bgs	
Casing volume	12.12	ft H_2O X		gpf =		X 3 =
Casing volumes (GPF)		3/4"=0.02	1"=0.04	2"=0.16	4"=0.65	6"=1.47

Purge Method

Pump type: Peristaltic / Submersible / Bladder / Pneumatic / Other

Purge tubing: New LDPE / New Teflon / Other

Purge start time: 0942 0946 Purge stop time: 1008 Purge rate: 100 mL/m

Refill Timer Setting: Discharge Timer Setting: Pressure Setting:

Field Parameters

Meter used: QED / YSI / Hanna / Other

Gallons/ml	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
250	64.9	0.343	2.93	8.29	0.2	50	Clear
500	63.8	0.367	2.13	8.14	0.2	55	"
750	62.8	0.361	2.02	8.07	0.2	54	"
1000	62.3	0.352	2.08	8.09	0.2	52	"
1250	63.0	0.350	2.18	8.11	0.2	50	"
1500	63.4	0.348	2.20	8.12	0.2	47	"
1750	63.6	0.350	2.23	8.11	0.2	48	"
2000	63.7	0.352	2.22	8.10	0.2	49	"

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
3	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature Date: 06/11/15

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no:	DMW - 27	Project name:	Evanite (HV)
Sample no:	DMW - 27	Project no:	1122
Date: 6/11/15	Sample Time: 0940	Collector:	JG / SB

Well Information

Monument condition: Good / Needs repair

Well cap condition: Good / Locked / Replaced / Needs replacement

Headspace reading: Not measured / ppm Odor Y / N

Elevation mark: Yes / Added / Other Well diameter = 2-inch / 4-inch / 6-inch / Other

Purge Data

Total well depth: 46.55 ft Top of screen 32.05 'BTOC

Depth to product: — ft Water above screen Y / N

Depth to water: 28.09 ft Pump/Tubing Intake Depth _____ ft bgs

Casing volume: 18.46 ft H_2O X 0.65 gpf = 12.0 X 3 = 36

Casing volumes (GPF): 3/4"=0.02 1"=0.04 2"=0.16 4"=0.65 6"=1.47

Purge Method

Pump type: Peristaltic / Submersible / Bladder / Pneumatic / Other

Purge tubing: New LDPE / New Teflon / Other

Purge start time 0909 Purge stop time ~~0903~~ 0938 Purge rate

Refill Timer Setting Discharge Timer Setting Pressure Setting

Field Parameters

Meter used: QED / YSI / Hanna / Other

Gallons/mL	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
6	58.39	0.579	1.19	7.15	0.376	-133.5	clear
12	58.91	0.602	0.51	7.10	0.391	-135.0	clear
18	58.65	0.667	0.25	7.06	0.433	-131.4	clear
24	58.53	0.666	0.16	7.07	0.433	-131.0	clear
30	58.48	0.664	0.15	7.07	0.432	-130.7	clear
36	58.51	0.666	0.13	7.06	0.433	-131.6	clear

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
3	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature SB Date: 6/11/15

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no:	DMW - 28	Project name:	Evanite (HV)
Sample no:	DMW - 28	Project no:	1122
Date: 6/11/15	Sample Time: 1035	Collector:	JG / (SB)

Well Information

Monument condition	Good / Needs repair
Well cap condition	Good / Locked / Replaced / Needs replacement
Headspace reading	Not measured / ppm Odor Y / N
Elevation mark	Yes / Added / Other Well diameter = 2-inch / [4-inch] / 6-inch / Other

Purge Data

Total well depth	48.07	ft	Top of screen 33.44 'BTOC				
Depth to product	–	ft	Water above screen Y / N				
Depth to water	27.52	ft	Pump/Tubing Intake Depth	39	ft bgs		
Casing volume	20.55	ft H_2O X	0.65	gpf =	13.4	X 3 =	40.0
Casing volumes (GPF)		3/4"=0.02	1"=0.04	2"=0.16	4"=0.65	6"=1.47	

Purge Method

Pump type	Peristaltic / [Submersible] / Bladder / Pneumatic / Other		
Purge tubing	[New LDPE] / New Teflon / Other		
Purge start time	1002	Purge stop time 1034	Purge rate 1.3 gpm
Refill Timer Setting		Discharge Timer Setting	Pressure Setting

Field Parameters

Meter used: QED / (YSI) / Hanna / Other

Gallons/mL	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
7	59.86	0.784	0.69	7.12	0.510	-24.0	clear
14	59.90	0.788	0.28	7.08	0.512	-23.3	clear
21	59.96	0.791	0.13	7.07	0.514	-23.0	clear
28	59.91	0.791	0.11	7.06	0.514	-24.3	clear
34	59.95	0.792	0.09	7.06	0.515	-26.3	clear
40	59.92	0.792	0.09	7.06	0.515	-27.9	clear

13
18
24
28
33

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
3	[VOA] / Amber / Poly	[HCL] / None / Nitric / Sulfuric / Other	Y / (N)
1	VOA / (Amber) / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature: SB Date: 6/11/15

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no:	DMW - 29	Project name:	Evanite (HV)
Sample no:	DMW - 29	Project no:	1122
Date: 06-11-15	Sample Time: 1048	Collector:	JG / SB

Well Information

Monument condition: Good / Needs repair

Well cap condition: ~~Good~~ / ~~Locked~~ / Replaced / Needs replacement

Headspace reading: Not measured / ppm Odor Y/N

Elevation mark: Yes / Added / Other Well diameter = 2-inch / 4-inch / 6-inch / Other

Purge Data

Total well depth	42.85	ft	Top of screen 28.22 'BTOC			
Depth to product		ft	Water above screen	Y/N		
Depth to water	36.28	ft	Pump/Tubing Intake Depth			ft bgs
Casing volume		ft H_2O X		gpf =		X 3 =
Casing volumes (GPF)		3/4"=0.02	1"=0.04	2"=0.16	4"=0.65	6"=1.47

Purge Method

Pump type: Peristaltic / Submersible / Bladder / Pneumatic / Other

Purge tubing: New LDPE / New Teflon / Other

Purge start time | Purge stop time | Purge rate

Refill Timer Setting | Discharge Timer Setting | Pressure Setting

Field Parameters

Meter used: QED / YSI / Hanna / Other

Gallons/mL	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH SI units	Turbidity (NTU)	ORP mV	Comments
	61.8	0.412	1.33	8.37	0.3	44	Clear

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
3	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
1	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments: 0964964 e

Sampler's Signature: JG Date: 06-11-15

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no:	DMW - 32	Project name:	Evanite (HV)
Sample no:	DMW - 32	Project no:	1122
Date: 061015	Sample Time: 1424	Collector:	(JC) / SB

Well Information

Monument condition (Good) / Needs repair

Well cap condition (Good) / Locked / Replaced / Needs replacement

Headspace reading (Not measured) ppm Odor Y (N)

Elevation mark (Yes) / Added / Other Well diameter = 2-inch / 4-inch / (6-inch) / Other

Purge Data

Total well depth	42.32	ft	Top of screen 34.72 'BTOC			
Depth to product		ft	Water above screen (Y) / N			
Depth to water	24.61	ft	Pump/Tubing Intake Depth 37' ft bgs			
Casing volume	17.71	ft H_2O X		gpf =		X 3 =
Casing volumes (GPF)		3/4"=0.02	1"=0.04	2"=0.16	4"=0.65	6"=1.47

Purge Method

Pump type (Peristaltic) / Submersible / Bladder / Pneumatic / Other

Purge tubing (New LDPE) / New Teflon / Other

Purge start time 1408 Purge stop time 1421 Purge rate 100 mL/m

Refill Timer Setting Discharge Timer Setting Pressure Setting

Field Parameters

Meter used QED / YSI / Hanna / Other

Gallons/mL	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
250	69.4	0.645	1.11	8.00	0.4	41	Clear
500	69.5	0.641	0.62	7.89	0.4	39	"
750	70.9	0.642	0.38	7.77	0.4	33	"
1000	71.0	0.642	0.34	7.70	0.4	31	"
1250	71.4	0.643	0.28	7.64	0.4	32	"
1500	71.3	0.642	0.26	7.62	0.4	32	"
1750	71.1	0.642	0.25	7.61	0.4	33	"
2000	70.9	0.642	0.24	7.60	0.4	33	"

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
3	(VOA) / Amber / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature Date: 061015

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no:	DMW - 36	Project name:	Evanite (HV)
Sample no:	DMW - 36	Project no:	1122
Date:	06-11-15 Sample Time: 0930	Collector:	DG / SB

Well Information

Monument condition: Good / Needs repair

Well cap condition: Good / Locked / Replaced / Needs replacement

Headspace reading: Not measured / ppm Odor Y (N)

Elevation mark: Yes / Added / Other Well diameter = 2-inch / 4-inch / 6-inch / Other

Purge Data

Total well depth	42.60	ft	Top of screen 35.00 'BTOC			
Depth to product		ft	Water above screen (Y) / N			
Depth to water	28.13	ft	Pump/Tubing Intake Depth 37.5 ft bgs			
Casing volume	14.47	ft H_2O X		gpf =		X 3 =
Casing volumes (GPF)		3/4"=0.02	1"=0.04	2"=0.16	4"=0.65	6"=1.47

Purge Method

Pump type: Peristaltic / Submersible / Bladder / Pneumatic / Other

Purge tubing: New LDPE / New Teflon / Other

Purge start time 0903 Purge stop time 0926 Purge rate 100mL/m

Refill Timer Setting Discharge Timer Setting Pressure Setting

Field Parameters

Meter used: QED / YSI / Hanna / Other

Gallons/mL	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
250	62.7	0.498	3.21	8.31	0.3	102	clear
500	60.2	0.509	1.16	8.24	0.3	101	"
750	59.6	0.514	0.65	8.18	0.3	95	"
1000	59.5	0.514	0.57	8.17	0.3	91	"
1250	59.4	0.515	0.51	8.15	0.3	88	"
1500	59.3	0.514	0.46	8.14	0.3	86	"
1750	59.3	0.515	0.44	8.12	0.3	84	"
2000	59.4	0.515	0.42	8.11	0.3	80	"
2300	59.4	0.515	0.41	8.13	0.3	78	"

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
3	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature Date: 06/11/15

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no:	DMW - 37	Project name:	Evanite (HV)
Sample no:	DMW - 37	Project no:	1122
Date: 06/10/15	Sample Time: 1324	Collector:	JG / SB

Well Information

Monument condition: (Good) / Needs repair

Well cap condition: (Good) / Locked / Replaced / Needs replacement

Headspace reading: ~~Not measured~~ / ppm Odor Y (N)

Elevation mark: (Yes) / Added / Other Well diameter = 2-inch / 4-inch / [6-inch] / Other

Purge Data

Total well depth	40.00	ft	Top of screen 32.24 'BTOC			
Depth to product		ft	Water above screen (Y) / N			
Depth to water	23.80	ft	Pump/Tubing Intake Depth 34.5 ft bgs			
Casing volume	16.20	ft H_2O X		gpf =		X 3 =
Casing volumes (GPF)		3/4"=0.02	1"=0.04	2"=0.16	4"=0.65	6"=1.47

Purge Method

Pump type: [Peristaltic] / Submersible / Bladder / Pneumatic / Other

Purge tubing: [New LDPE] / New Teflon / Other

Purge start time 1301 Purge stop time 1321 Purge rate 100mL/m

Refill Timer Setting Discharge Timer Setting Pressure Setting

Field Parameters

Meter used: QED / YSI / Hanna / Other

Gallons/mL	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
250	63.5	0.409	4.91	8.31	0.3	36	clear
500	65.1	0.408	4.64	8.30	0.3	34	"
750	66.8	0.408	4.49	8.31	0.3	33	"
1000	66.3	0.409	4.50	8.36	0.3	33	"
1250	65.9	0.409	4.55	8.40	0.3	34	"
1500	65.3	0.410	4.56	8.39	0.3	35	"
1750	65.3	0.409	4.55	8.39	0.3	35	"
2000	64.9	0.410	4.57	8.41	0.3	36	"

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
3	[VOA] / Amber / Poly	[HCL] / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature Date: 06/10/15

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no:	DMW - 38	Project name:	Evanite (HV)
Sample no:	DMW - 38	Project no:	1122
Date: 06/10/15	Sample Time: 1243	Collector:	JG / SB

Well Information

Monument condition (Good) / Needs repair

Well cap condition (Good) / Locked / Replaced / Needs replacement

Headspace reading (Not measured) ppm Odor Y (N)

Elevation mark (Yes) / Added / Other Well diameter = 2-inch / 4-inch / [6-inch] / Other

Purge Data

Total well depth	44.92	ft	Top of screen 37.25 'BTOC			
Depth to product		ft	Water above screen (Y) / N			
Depth to water	29.37	ft	Pump/Tubing Intake Depth ~42			ft bgs
Casing volume	15.55	ft H_2O X		gpf =		X 3 =
Casing volumes (GPF)		3/4"=0.02	1"=0.04	2"=0.16	4"=0.65	6"=1.47

Purge Method

Pump type [Peristaltic] / Submersible / Bladder / Pneumatic / Other

Purge tubing [New LDPE] / New Teflon / Other

Purge start time 1230 Purge stop time 1241 Purge rate 100 mL/m

Refill Timer Setting Discharge Timer Setting Pressure Setting

Field Parameters

Meter used QED / YSI / Hanna / Other

Gallons/mL	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
250	71.4	0.317	1.60	7.86	0.2	47	Clear
500	70.5	0.320	0.79	7.87	0.2	45	"
750	71.7	0.319	0.48	7.86	0.2	40	"
1000	72.3	0.320	0.43	7.85	0.2	39	"
1250	71.7	0.321	0.35	7.87	0.2	36	"
1500	71.0	0.321	0.32	7.88	0.2	33	"
1750	71.3	0.320	0.30	7.87	0.2	32	"
2000+	71.6	0.319	0.29	7.86	0.2	30	"

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
3	[VOA] / Amber / Poly	[HCL] / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature Date: 06/10/15

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no:	DMW - 39	Project name:	Evanite (HV)
Sample no:	DMW - 39	Project no:	1122
Date: 061015	Sample Time: 1206	Collector:	(JG) / SB

Well Information

Monument condition (Good) / Needs repair

Well cap condition (Good) / Locked / Replaced / Needs replacement

Headspace reading (Not measured) ppm Odor Y (N)

Elevation mark (Yes) / Added / Other Well diameter = 2-inch / 4-inch / (6-inch) / Other

Purge Data

Total well depth	45.56	ft	Top of screen 32.90 'BTOC			
Depth to product		ft	Water above screen (Y) / N			
Depth to water	29.67	ft	Pump/Tubing Intake Depth ≈ 36			ft bgs
Casing volume	15.87	ft H_2O X		gpf =		X 3 =
Casing volumes (GPF)		3/4"=0.02	1"=0.04	2"=0.16	4"=0.65	6"=1.47

Purge Method

Pump type (Peristaltic) / Submersible / Bladder / Pneumatic / Other

Purge tubing (New LDPE) / New Teflon / Other

Purge start time 1143 Purge stop time 1204 Purge rate ~100 mL/m

Refill Timer Setting Discharge Timer Setting Pressure Setting

Field Parameters

Meter used QED / YSI / Hanna / Other

Gallons/mL	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH SU units	Turbidity (NTU)	ORP mV	Comments
250	67.0	0.312	3.70	7.65	0.2	101	Clear
500	65.6	0.330	2.58	7.73	0.2	77	"
750	66.0	0.331	2.49	7.72	0.2	70	"
1000	66.2	0.332	2.39	7.69	0.2	67	"
1250	65.9	0.332	2.33	7.70	0.2	65	"
1500	65.5	0.332	2.30	7.69	0.2	63	"
1750	65.6	0.332	2.26	7.68	0.2	61	"
2000	66.0	0.331	2.25	7.68	0.2	60	"

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
3	(VOA) / Amber / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature Date: 061015

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no:	MW-1	Project name:	H-V
Sample no:	MW-1	Project no:	1122
Date:	09-01-15	Sample Time: 1200	Collector: JMZ

Well Information

Monument condition: (Good) / Needs repair — Up top OK

Well cap condition: (Good) / Locked / Replaced / Needs replacement

Headspace reading: (Not measured) ppm Odor Y (N)

Elevation mark: (Yes) / Added / Other — Well diameter = 2-inch / 4-inch / (6-inch) / Other

Purge Data

Total well depth	38.88 ft	Top of screen	28.88 ft bgs
Depth to product	ft	Water above screen	(Y) N
Depth to water	23.92 ft	Pump/Tubing Intake Depth	33.5 ft bgs
Casing volume	15.06 ft H_2O X	gpf =	X 3 =
Casing volumes (GPF)	3/4"=0.02	1"=0.04 2"=0.16	4"=0.65 6"=1.47

Purge Method

Pump type: (Peristaltic) / Submersible / Bladder / Pneumatic / Other

Purge tubing: (New LDPE) / New Teflon / Other

Purge start time: 1139 Purge stop time: 1159 Purge rate: 100 mL/m

Refill Timer Setting: Discharge Timer Setting: Pressure Setting:

Field Parameters

Meter used: (QED) / YSI / Hanna / Other

Gallons/ml	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
250	66.0	0.373	0.96	7.57	0.3	45	Clear
500	65.7	0.377	0.43	7.60	0.3	38	"
750	64.9	0.377	0.31	7.64	#0.2	37	"
1000	64.9	0.378	0.26	7.64	0.2	19	"
1250	64.6	0.379	0.23	7.66	0.2	6	"
1500	64.7	0.379	0.18	7.69	0.2	-3	"
1750	64.5	0.379	0.19	7.69	0.2	-9	
2000	64.5	0.379	0.18	7.68	0.2	-13	"

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
3	(VOA) / Amber / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature: JMZ Date: 09/01/15

Form G

GROUNDWATER
SAMPLE COLLECTION FORM

Well ID no. DMW-2 (DMW-98) Project name Evanite
Sample no. DMW-2 Project no. 1123
Date 9/2/15 Collector SVB

Well Information

Monument condition	☐ Good	☐ Needs repair		
Well cap condition	☐ Good	☐ Locked	☐ Replaced	☐ Needs replacement
Headspace reading	☐ Not measured	_____ ppm	☐ Odor	
Elevation mark	☐ Yes	☐ Added	☐ Other	
Well diameter	☐ 2-inch	☐ 4-inch	☒ 6-inch	☐ Other

Purge Data Pumping

Total well depth _____ ft ☐ Clean bottom ☐ Muddy bottom ☐ Not measured
Depth to product _____ ft Top of Screen _____ ft bgs Water above Screen Y / N
Depth to water _____ ft Pump/Tubing Intake Depth _____ ft
Casing volume _____ ft (H_2O) X _____ gpf = _____ X 3 = _____
Casing volumes 3/4"=0.02 gpf 1"=0.04 gpf 2"=0.16 gpf 4"=0.65 gpf 6"= 1.47 gpf
Bladder Pumps: ¼" Tubing purge: 5.3mL/ft + 100mL; ⅜" Tubing purge: 9.5 mL/ft + 500mL

Purge Method

Pump type ☐ Peristaltic ☐ Bladder ☐ Submersible ☐ Other _____
Purge tubing ☐ New LDPE ☐ New HDPE ☐ New Teflon ☐ New Tygon ☐ Other _____
Bailer type ☐ Disposable ☐ Teflon ☐ Stainless ☐ PVC ☐ Other _____
Purge start time _____ Purge stop time _____ Purge rate _____
Refill Timer Setting _____ Discharge Timer Setting _____ Pressure Setting _____ Flow Rate

Field Parameters

Meter used ☐ HYDAC ☐ QED Flow Cell ☐ Hanna ☒ Other YSI

Gallons / mL	Temp(°F)	Conductivity	DO mg/L	pH	Turbidity	ORP	Comments
	60.55	0.518	5.62	7.82	0.337	161.3	clear

Sampling Device

Bailer ☐ Disposable ☐ Stainless ☐ Teflon ☐ Other _____
Filter Type _____ Size _____ (micron) Bailer cord used ☐ Monofillament

Bottles Filled Time 1125 (1127)

Number	Type				Preservative					Filtration	
7	☒ VOA	☐ Amber	☐ Poly	☒ HCL	☐ Nitric	☐ Sulfuric	☐ None	☐ Other		☐ Yes	☒ No
1	☐ VOA	☒ Amber	☐ Poly	☒ HCL	☐ Nitric	☐ Sulfuric	☐ None	☐ Other		☐ Yes	☒ No
	☐ VOA	☐ Amber	☐ Poly	☐ HCL	☐ Nitric	☐ Sulfuric	☐ None	☐ Other		☐ Yes	☐ No
	☐ VOA	☐ Amber	☐ Poly	☐ HCL	☐ Nitric	☐ Sulfuric	☐ None	☐ Other		☐ Yes	☐ No

Comments: _____

Sampler's Signature SVB Date 9/2/15

Form G

GROUNDWATER
SAMPLE COLLECTION FORM

Well ID no DMW-3 | Project name Evanite
Sample no. DMW-3 | Project no. 1122
Date 9/1/15 | Collector SvB

Well Information

Monument condition ☒ Good ☐ Needs repair
Well cap condition ☒ Good ☐ Locked ☐ Replaced ☐ Needs replacement
Headspace reading ☒ Not measured ____ ppm ☐ Odor
Elevation mark ☒ Yes ☐ Added ☐ Other
Well diameter ☐ 2-inch ☐ 4-inch ☒ 6-inch ☐ Other

Purge Data

Pumping

Total well depth ____ ft ☐ Clean bottom ☐ Muddy bottom ☐ Not measured
Depth to product ____ ft Top of Screen ____ ft bgs Water above Screen Y / N
Depth to water ____ ft Pump/Tubing Intake Depth ____ ft
Casing volume ____ ft (H_2O) X ____ gpf = ____ X 3 = ____
Casing volumes 3/4"=0.02 gpf 1"=0.04 gpf 2"=0.16 gpf 4"=0.65 gpf 6"= 1.47 gpf
Bladder Pumps: ¼" Tubing purge: 5.3mL/ft + 100mL; 3/8" Tubing purge: 9.5 mL/ft + 500mL

Purge Method

Pump type ☐ Peristaltic ☐ Bladder ☐ Submersible ☐ Other
Purge tubing ☐ New LDPE ☐ New HDPE ☐ New Teflon ☐ New Tygon ☐ Other
Bailer type ☐ Disposable ☐ Teflon ☐ Stainless ☐ PVC ☐ Other
Purge start time ____ Purge stop time ____ Purge rate ____
Refill Timer Setting ____ Discharge Timer Setting ____ Pressure Setting ____ Flow Rate

Field Parameters

Meter used ☐ HYDAC ☐ QED Flow Cell ☐ Hanna ☒ Other YSI

Gallons / mL	Temp(°F)	Conductivity	DO mg/L	pH	Turbidity	ORP	Comments
~~61.42~~	61.42	0.537	2.01	7.99	0.349	30.9	Clear

Sampling Device

Bailer ☐ Disposable ☐ Stainless ☐ Teflon ☐ Other
Filter Type ____ Size ____ (micron) Bailer cord used ☐ Monofillament

Bottles Filled Time 1450

Number	Type		Preservative					Filtration	
3	☒ VOA	☐ Amber ☐ Poly	☒ HCL	☐ Nitric	☐ Sulfuric	☐ None	☐ Other	☐ Yes	☒ No
1	☐ VOA	☒ Amber ☐ Poly	☒ HCL	☐ Nitric	☐ Sulfuric	☐ None	☐ Other	☐ Yes	☒ No
	☐ VOA	☐ Amber ☐ Poly	☐ HCL	☐ Nitric	☐ Sulfuric	☐ None	☐ Other	☐ Yes	☐ No
	☐ VOA	☐ Amber ☐ Poly	☐ HCL	☐ Nitric	☐ Sulfuric	☐ None	☐ Other	☐ Yes	☐ No

Comments: ____

Sampler's Signature SvB Date 9/1/15

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no:	MW-5	Project name:	HHV
Sample no:	MW-5	Project no:	1122
Date:	090215	Sample Time: 0942	Collector: JKD

Well Information

Monument condition (Good) / Needs repair _____

Well cap condition ~~Good~~ / Locked / Replaced / Needs replacement

Headspace reading (Not measured) / _____ ppm Odor Y (N)

Elevation mark (Yes) / Added / Other Well diameter = 2-inch / 4-inch / (6-inch) / Other

Purge Data

Total well depth 44.60 ft Top of screen 34.60 ft bgs 10

Depth to product _____ ft Water above screen (Y) N

Depth to water 33.93 ft Pump/Tubing Intake Depth ≈37 ft bgs

Casing volume 28.67 ft H_2O X _____ gpf = _____ X 3 = _____

Casing volumes (GPF) 3/4"=0.02 1"=0.04 2"=0.16 4"=0.65 6"=1.47

Purge Method

Pump type (Peristaltic) / Submersible / Bladder / Pneumatic / Other

Purge tubing (New LDPE) / New Teflon / Other _____

Purge start time 0920 Purge stop time 0940 Purge rate 100mL/m

Refill Timer Setting _____ Discharge Timer Setting _____ Pressure Setting _____

Field Parameters

Meter used (YSI) / YSI / Hanna / Other

Gallons/mL	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
250	59.0	0.730	1.29	7.75	0.5	65	Clear
500	59.3	0.743	0.41	7.61	0.5	55	"
750	59.4	0.743	0.34	7.60	0.5	49	"
1000	59.4	0.742	0.30	7.58	0.5	34	"
1250	59.5	0.741	0.24	7.54	0.5	11	"
1500	59.6	0.741	0.21	7.55	0.5	-10	"
1750	59.5	0.740	0.19	7.53	0.5	-24	"
2000	59.5	0.738	0.18	7.51	0.5	-29	"
2100	59.5	0.739	0.17	7.51	0.5	-32	"

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
3	(VOA) / Amber / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature _____ Date: 090215

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no:	MW-6	Project name:	H+V
Sample no:	MW-6	Project no:	1122
Date:	090215	Sample Time:	1249
		Collector:	

Well Information

Monument condition	Good / Needs repair
Well cap condition	Good / Locked / Replaced / Needs replacement
Headspace reading	Not measured / ppm Odor Y / N
Elevation mark	Yes / Added / Other Well diameter = 2-inch / 4-inch / 6-inch / Other

Purge Data

Total well depth	35.98 ft	Top of screen	25.98 ft bgs 10'
Depth to product	ft	Water above screen	Y / N
Depth to water	22.16 ft	Pump/Tubing Intake Depth	31 ft bgs
Casing volume	13.82 ft H_2O X	gpf =	X 3 =
Casing volumes (GPF)	3/4"=0.02	1"=0.04 2"=0.16	4"=0.65 6"=1.47

Purge Method

Pump type	Peristaltic / Submersible / Bladder / Pneumatic / Other		
Purge tubing	New LDPE / New Teflon / Other		
Purge start time	1217	Purge stop time 1238	Purge rate 100 mL/m
Refill Timer Setting		Discharge Timer Setting	Pressure Setting

Field Parameters

Meter used: QED / YSI / Hanna / Other

Gallons/ml	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
250	62.1	0.274	1.73	7.72	0.2	27	dark sediment start - organics
500	61.2	0.275	0.56	7.68	0.2	3	clear
750	61.3	0.275	0.52	7.66	0.2	-13	"
1000	62.6	0.274	0.51	7.61	0.2	-54	"
1250	62.6	0.272	0.49	7.59	0.2	-66	"
1500	62.2	0.274	0.50	7.57	0.2	-76	"
1750	62.2	0.273	0.49	7.57	0.2	-79	"
2000	62.2	0.272	0.48	7.55	0.2	-84	"

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
3	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
1	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
2	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
3	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments: VOC, NH4, TOC

Sampler's Signature: Date: 090215

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no:	MW-7	Project name:	H/V
Sample no:	MW-7	Project no:	1172
Date:	09-01-15	Sample Time: 1535	Collector: MH

Well Information

Monument condition: ~~Good~~ / Needs repair

Well cap condition: ~~Good~~ / Locked / Replaced / Needs replacement

Headspace reading: ~~Not measured~~ / ppm Odor Y / ~~N~~

Elevation mark: ~~Yes~~ / Added / Other Well diameter = ~~2-inch~~ / 4-inch / 6-inch / Other

Purge Data

Total well depth	36.57 ft	Top of screen	23.37 ft bgs	TD	
Depth to product	ft	Water above screen	Y / ~~N~~		
Depth to water	23.81 ft	Pump/Tubing Intake Depth	28.5 ft bgs		
Casing volume	12.76 ft H_2O X	gpf =	X 3 =		
Casing volumes (GPF)	3/4"=0.02	1"=0.04	2"=0.16	4"=0.65	6"=1.47

Purge Method

Pump type: Peristaltic / Submersible / Bladder / Pneumatic / Other

Purge tubing: New LDPE / New Teflon / Other

Purge start time 1503 Purge stop time 1523 Purge rate 100 mL/m

Refill Timer Setting Discharge Timer Setting Pressure Setting

Field Parameters

Meter used: QED / YSI / Hanna / Other

Gallons/ml	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
250	65.5	0.333	1.91	7.65	0.3	-20	trace sed - clear
500	63.7	0.337	1.16	7.58	0.2	-19	clear
750	63.9	0.341	0.91	7.51	0.2	-21	"
1000	63.8	0.351	0.64	7.47	0.2	-23	"
1250	63.9	0.359	0.44	7.42	0.2	-25	"
1500	63.8	0.360	0.37	7.38	0.2	-27	"
1750	63.9	0.364	0.35	7.35	0.2	-30	"
2000	64.0	0.364	0.34	7.36	0.2	-31	"

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
3	~~VOA~~ / Amber / Poly	~~HCL~~ / None / Nitric / Sulfuric / Other	Y / N
1	VOA / ~~Amber~~ / Poly	~~HCL~~ / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature Date: 090115

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no:	MW-8	Project name:	H/V
Sample no:	MW-8	Project no:	1122
Date:	09-01-15	Sample Time: 1451	Collector:

Well Information

Monument condition: Good / Needs repair
Well cap condition: Good / Locked / Replaced / Needs replacement
Headspace reading: Not measured / ppm Odor Y (N)
Elevation mark: Yes / Added / Other Well diameter = 2-inch / 4-inch / 6-inch / Other

Purge Data

Total well depth	40.40 ft	Top of screen	27.20 ft bgs	10'	
Depth to product	ft	Water above screen	(Y) N		
Depth to water	22.38 ft	Pump/Tubing Intake Depth	32' ft bgs		
Casing volume	18.02 ft H_2O X	gpf =	X 3 =		
Casing volumes (GPF)	3/4"=0.02	1"=0.04	2"=0.16	4"=0.65	6"=1.47

Purge Method

Pump type: Peristaltic / Submersible / Bladder / Pneumatic / Other
Purge tubing: New LDPE / New Teflon / Other
Purge start time 1429 Purge stop time 1449 Purge rate 100 ml/min
Refill Timer Setting Discharge Timer Setting Pressure Setting

Field Parameters

Meter used: QED / YSI / Hanna / Other

Gallons/mL	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
250	66.0	0.189	1.78	7.97	0.1	-35	Clear
500	66.6	0.195	0.49	7.82	0.1	-38	"
750	65.6	0.199	0.30	7.58	0.1	-47	"
1000	65.0	0.364	0.24	7.56	0.2	-52	"
1250	65.1	0.390	0.19	7.61	0.2	-61	"
1500	65.1	0.404	0.16	7.63	0.2	-66	"
1750	65.4	0.409	0.17	7.66	0.2	-69	"
2000	66.3	0.409	0.16	7.69	0.3	-74	"

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
3	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
1	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature Date: 09/01/15

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no:	MW-9	Project name:	H/K
Sample no:	MW-9	Project no:	1122
Date:	09-01-15	Sample Time: 1243	Collector:

Well Information

Monument condition: (Good) / Needs repair

Well cap condition: (Good) / Locked / Replaced / Needs replacement

Headspace reading: (Not measured) / ppm Odor Y (N)

Elevation mark: (Yes) / Added / Other Well diameter = (2)-inch / 4-inch / 6-inch / Other

Purge Data

Total well depth: 42.74 ft Top of screen 29.34 ft bgs 10'

Depth to product: ____ ft Water above screen (Y) / N

Depth to water: 22.77 ft Pump/Tubing Intake Depth ≈ 34 ft bgs

Casing volume: 19.47 ft H_2O X ____ gpf = ____ X 3 = ____

Casing volumes (GPF) 3/4"=0.02 1"=0.04 2"=0.16 4"=0.65 6"=1.47

Purge Method

Pump type: (Peristaltic) / Submersible / Bladder / Pneumatic / Other

Purge tubing: (New LDPE) / New Teflon / Other ____

Purge start time 1222 Purge stop time 1242 Purge rate 100 ml/min

Refill Timer Setting ____ Discharge Timer Setting ____ Pressure Setting ____

Field Parameters

Meter used: sun (QED) / YSI / Hanna / Other

Gallons/mL	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
250	70.1	0.416	4.85	7.94	0.3	-20	Clear
500+	72.6	0.416	4.94	8.03	0.3	-27	"
750	72.9	0.415	4.63	8.07	0.3	-31	"
1000	72.7	0.415	4.87	8.12	0.3	-35	"
1250	72.7	0.415	4.82	8.19	0.3	-40	"
1500	73.4	0.414	4.85	8.21	0.3	-44	"
1750	73.1	0.416	4.86	8.23	0.3	-46	"
2000	73.1	0.415	4.89	8.24	0.3	-47	"

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
3	(VOA) / Amber / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature Date: 090115

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no:	MW-10	Project name:	HV
Sample no:	MW-10	Project no:	1122
Date:	09-01-15	Sample Time: 1137	Collector: JMS

Well Information

Monument condition: (Good) / Needs repair _____

Well cap condition: (Good) / Locked / Replaced / Needs replacement

Headspace reading: (Not measured) ppm Odor Y (N)

Elevation mark: (Yes) / Added / Other Well diameter = (2-inch) / 4-inch / 6-inch / Other

Purge Data

Total well depth: 39.21 ft Top of screen 26.01 ft bgs Bottom = 36

Depth to product: _____ ft Water above screen (Y) / N

Depth to water: 25.21 ft Pump/Tubing Intake Depth 31 ft bgs

Casing volume: 14.00 ft H_2O X _____ gpf = _____ X 3 = _____

Casing volumes (GPF) 3/4"=0.02 1"=0.04 2"=0.16 4"=0.65 6"=1.47

Purge Method

Pump type: (Peristaltic) / Submersible / Bladder / Pneumatic / Other

Purge tubing: (New LDPE) / New Teflon / Other _____

Purge start time: 1105 Purge stop time: 1125 Purge rate: 100 mL/m

Refill Timer Setting _____ Discharge Timer Setting _____ Pressure Setting _____

Field Parameters

Meter used: (YSI) / Hanna / Other

Gallons/mL	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
250	65.9	0.407	1.55	6.82	0.3	109	Clear
500	65.4	0.403	0.56	7.13	0.3	91	"
750	67.1	0.401	0.39	7.38	0.3	63	"
1000	67.0	0.402	0.31	7.45	0.3	40	"
1250	67.0	0.400	0.28	7.48	0.3	36	"
1500	66.8	0.403	0.26	7.49	0.3	32	"
1750	66.5	0.402	0.25	7.51	0.3	30	"
2000	66.6	0.402	0.24	7.52	0.3	27	"

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
3	(VOA) / Amber / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature _____ Date: 090115

Form G

GROUNDWATER
SAMPLE COLLECTION FORM

Well ID no DMW-11 | Project name Evonik
Sample no. DMW-11 | Project no. 1122
Date 9/2/15 | Collector SVB

Well Information

Monument condition ☐ Good ☐ Needs repair _____
Well cap condition ☐ Good ☐ Locked ☐ Replaced ☐ Needs replacement
Headspace reading ☐ Not measured _____ ppm ☐ Odor _____
Elevation mark ☐ Yes ☐ Added ☐ Other _____
Well diameter ☐ 2-inch ☐ 4-inch ☐ 6-inch ☐ Other _____

Purge Data Able to turn on pump. Let purge 10min

Total well depth _____ ft ☐ Clean bottom ☐ Muddy bottom ☐ Not measured
Depth to product _____ ft Top of Screen _____ ft bgs Water above Screen Y / N
Depth to water _____ ft Pump/Tubing Intake Depth _____ ft
Casing volume _____ ft (H_2O) X _____ gpf = _____ X 3 = _____
Casing volumes 3/4"=0.02 gpf 1"=0.04 gpf 2"=0.16 gpf 4"=0.65 gpf 6"= 1.47 gpf
Bladder Pumps: ¼" Tubing purge: 5.3mL/ft + 100mL; ⅜" Tubing purge: 9.5 mL/ft + 500mL

Purge Method

Pump type ☐ Peristaltic ☐ Bladder ☐ Submersible ☐ Other _____
Purge tubing ☐ New LDPE ☐ New HDPE ☐ New Teflon ☐ New Tygon ☐ Other _____
Bailer type ☐ Disposable ☐ Teflon ☐ Stainless ☐ PVC ☐ Other _____
Purge start time 1220 Purge stop time 1231 Purge rate _____
Refill Timer Setting _____ Discharge Timer Setting _____ Pressure Setting _____ Flow Rate

Field Parameters

Meter used ☐ HYDAC ☐ QED Flow Cell ☐ Hanna ☒ Other YSI

Gallons / mL	Temp(°F)	Conductivity	DO mg/L	pH	Turbidity	ORP	Comments
	63.24	0.486	7.12	7.87	0.315	88.0	Clear

Sampling Device

Bailer ☐ Disposable ☐ Stainless ☐ Teflon ☐ Other _____
Filter Type _____ Size _____ (micron) Bailer cord used ☐ Monofillament

Bottles Filled Time 1234

Number	Type	Preservative	Filtration
9	☐ VOA ☐ Amber ☐ Poly	☐ HCL ☐ Nitric ☐ Sulfuric ☐ None ☐ Other	☐ Yes ☐ No
	☐ VOA ☐ Amber ☐ Poly	☐ HCL ☐ Nitric ☐ Sulfuric ☐ None ☐ Other	☐ Yes ☐ No
	☐ VOA ☐ Amber ☐ Poly	☐ HCL ☐ Nitric ☐ Sulfuric ☐ None ☐ Other	☐ Yes ☐ No
	☐ VOA ☐ Amber ☐ Poly	☐ HCL ☐ Nitric ☐ Sulfuric ☐ None ☐ Other	☐ Yes ☐ No

Comments: _____

Sampler's Signature SB Date 9/2/15

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no:	DMW-13 + DUP-99 VOCs	Project name:	D+L
Sample no:	MW-13 + MW-99 → 1138	Project no:	1172
Date:	090315 Sample Time: 1146	Collector:	JMZ

Well Information

Monument condition	Good / Needs repair	NA
Well cap condition	Good / Locked / Replaced / Needs replacement	NA
Headspace reading	Not measured / ppm	Odor Y (N)
Elevation mark	Yes / Added / Other	Well diameter = 2-inch / 4-inch / (6-inch) / Other

Purge Data

Total well depth	41.17 ft	Top of screen	25.67 ft bgs 15'
Depth to product	ft	Water above screen	(Y) N
Depth to water	25.61 ft	Pump/Tubing Intake Depth	33 ft bgs
Casing volume	ft H_2O X	gpf =	X 3 =
Casing volumes (GPF)	3/4"=0.02	1"=0.04 2"=0.16	4"=0.65 6"=1.47

Purge Method

Pump type	(Peristaltic) / Submersible / Bladder / Pneumatic / Other		
Purge tubing	(New LDPE) / New Teflon / Other		
Purge start time	1116	Purge stop time 1130	Purge rate 100 mL/m
Refill Timer Setting		Discharge Timer Setting	Pressure Setting

Field Parameters

Meter used: (QED) / YSI / Hanna / Other

Gallons/mL	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
250	65.8	0.349	1.43	7.99	0.3	-15	orange natural Hach Clear
500	66.6	0.351	1.15	7.69	0.2	-21	"
750	63.6	0.354	0.74	7.69	0.2	-25	"
1000	60.4	0.358	0.42	7.66	0.2	-26	"
1250	60.8	0.359	0.39	7.64	0.2	-28	"
1500	61.3	0.356	0.40	7.61	0.2	-31	"
1750	61.4	0.355	0.40	7.60	0.2	-34	"
2000	61.4	0.355	0.39	7.61	0.2	-36	"

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
9	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
1	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
3	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	(Y) / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments: NA, VOC, TOC

Sampler's Signature: JMZ Date: 090215

9 = 12
3 = 99

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no:	MW-13	Project name:	HHV
Sample no:	MW-13	Project no:	1172
Date:	090815	Sample Time: 1418	Collector:

Well Information

Monument condition: Good / Needs repair

Well cap condition: Good / Locked / Replaced / Needs replacement

Headspace reading: Not measured / ppm Odor Y (N)

Elevation mark: Yes / Added / Other Well diameter: 2-inch / 4-inch / 6-inch / Other

Purge Data

Total well depth	38.99 ft	Top of screen	16.80 ft bgs	20'	2' slot
Depth to product	ft	Water above screen	Y (N)		
Depth to water	24.69 ft	Pump/Tubing Intake Depth	≈ 31 ft bgs		
Casing volume	14.11 ft H_2O X	gpf =	X 3 =		
Casing volumes (GPF)	3/4"=0.02	1"=0.04	2"=0.16	4"=0.65	6"=1.47

Purge Method

Pump type: (Peristaltic) / Submersible / Bladder / Pneumatic / Other

Purge tubing: (New LDPE) / New Teflon / Other

Purge start time: 1345 Purge stop time: 1406 Purge rate: 100 mL/min

Refill Timer Setting: Discharge Timer Setting: Pressure Setting:

Field Parameters

Meter used: (YSI) / YSI / Hanna / Other

Gallons/mL	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
250	64.7	0.496	0.77	7.40	0.3	-171	Clear
500	63.4	0.496	0.38	7.38	0.3	-175	"
750	63.6	0.507	0.29	7.35	0.3	-178	"
1000	62.6	0.505	0.18	7.35	0.3	-179	"
1250	62.6	0.511	0.17	7.36	0.3	-182	"
1500	62.2	0.512	0.14	7.33	0.3	-183	"
1750	62.4	0.512	0.15	7.32	0.3	-185	"
2000	62.6	0.515	0.14	7.31	0.3	-187	"

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
5	(VOA) / Amber / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y / N
1	VOA / (Amber) / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y / N
3	VOA / Amber / (Poly)	HCL / None / Nitric / Sulfuric / Other	(Y) / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature: Date: 090815

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no:	MW-14 ~~DUP-99~~	Project name:	HDV
Sample no:	MW-14 ~~DUP-99~~	Project no:	1122
Date: 090215	Sample Time: 1012	Collector:	

Well Information

Monument condition: Good / Needs repair

Well cap condition: Good / Locked / Replaced / Needs replacement

Headspace reading: Not measured / ppm Odor Y/N

Elevation mark: Yes / Added / Other Well diameter = 2-inch / 4-inch / 6-inch / Other

Purge Data

Total well depth: 49.38 ft Top of screen 33.38 ft bgs 15'

Depth to product: ft Water above screen Y/N

Depth to water: 33.30 ft Pump/Tubing Intake Depth ≈ 36+' ft bgs

Casing volume: 16.08 ft H_2O X gpf = X 3 =

Casing volumes (GPF): 3/4"=0.02 1"=0.04 2"=0.16 4"=0.65 6"=1.47

Purge Method

Pump type: Peristaltic w/ CB / Submersible / Bladder / Pneumatic / Other

Purge tubing: New LDPE / New Teflon / Other

Purge start time 0952 Purge stop time 1011 Purge rate 100mL/m

Refill Timer Setting Discharge Timer Setting Pressure Setting

Field Parameters

Meter used: QED / YSI / Hanna / Other

Gallons/mL	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
750	63.2	0.383	1.57	7.75	0.3	-73	Clear - Mangano Rec
500	63.4	0.380	1.43	7.77	0.2	-77	"
750	62.6	0.379	1.15	7.78	0.2	-83	"
1000	62.7	0.381	1.13	7.78	0.2	-85	"
1250	62.6	0.383	1.11	7.78	0.2	-88	"
1500	61.9	0.382	1.13	7.78	0.2	-90	"
1750	61.9	0.382	1.10	7.75	0.2	-92	"
2000							

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
3	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
3	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature Date: 090215

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no:	MW-15	Project name:	HJV
Sample no:	MW-15	Project no:	1122
Date: 090215	Sample Time: 1335	Collector:	JM

Well Information

Monument condition: (Good) / Needs repair

Well cap condition: (Good) / Locked / Replaced / Needs replacement

Headspace reading: (Not measured) ppm Odor Y (N)

Elevation mark: (Yes) / Added / Other Well diameter = 2-inch / 4-inch / (6-inch) / Other

Purge Data

Total well depth: 27.36 ft Top of screen 18.36 ft bgs 9'

Depth to product: ft Water above screen Y (N)

Depth to water: 18.59 ft Pump/Tubing Intake Depth 23 ft bgs

Casing volume: 9.17 ft H_2O X gpf = X 3 =

Casing volumes (GPF) 3/4"=0.02 1"=0.04 2"=0.16 4"=0.65 6"=1.47

Purge Method

Pump type: (Peristaltic) / Submersible / Bladder / Pneumatic / Other

Purge tubing: (New LDPE) / New Teflon / Other

Purge start time 1303 Purge stop time 1324 Purge rate 100 mL/m

Refill Timer Setting Discharge Timer Setting Pressure Setting

Field Parameters

Meter used: (QED) / YSI / Hanna / Other

Gallons/mL	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
750	63.0	0.929	0.93	7.38	0.5	-65	HTP Not Clear
500	64.1	0.931	0.30	7.43	0.5	-121	Clear
750	64.1	0.933	0.23	7.43	0.5	-164	"
1000	64.0	0.935	0.17	7.44	0.5	-181	"
1250	63.4	0.936	0.14	7.45	0.5	-195	"
1500	63.3	0.936	0.09	7.45	0.5	-201	"
1750	63.4	0.935	0.10	7.47	0.5	-206	"
2000	63.3	0.934	0.10	7.46	0.5	-211	"

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
5	(VOA) / Amber / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y / N
1	VOA / (Amber) / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
3	VOA / Amber / (Poly)	HCL / (None) / Nitric / Sulfuric / Other	(Y) / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature JM Date: 090215

Form G

GROUNDWATER
SAMPLE COLLECTION FORM

Well ID no DMW-16 | Project name Evanite
Sample no. DMW-16 | Project no. 1122
Date 9/2/15 | Collector SVB

Well Information

Monument condition	☑ Good	☐ Needs repair		
Well cap condition	☒ Good	☐ Locked	☐ Replaced	☐ Needs replacement
Headspace reading	☑ Not measured	_____ ppm		☐ Odor
Elevation mark	☒ Yes	☐ Added	☐ Other	
Well diameter	☐ 2-inch	☐ 4-inch	☒ 6-inch	☐ Other

Purge Data

Total well depth 43.08 ft ☐ Clean bottom ☐ Muddy bottom ☐ Not measured
Depth to product — ft Top of Screen _____ ft bgs Water above Screen Y / N
Depth to water 28.78 ft Pump/Tubing Intake Depth _____ ft
Casing volume 14.30 ft (H_2O) X 0.147 gpf = 21.0 X 3 = 63.1
Casing volumes 3/4"=0.02 gpf 1"=0.04 gpf 2"=0.16 gpf 4"=0.65 gpf 6"= 1.47 gpf
Bladder Pumps: ¼" Tubing purge: 5.3mL/ft + 100mL; 3/8" Tubing purge: 9.5 mL/ft + 500mL

Purge Method

Pump type	☐ Peristaltic	☐ Bladder	☒ Submersible	☐ Other	
Purge tubing	☒ New LDPE	☐ New HDPE	☐ New Teflon	☐ New Tygon	☐ Other
Bailer type	☐ Disposable	☐ Teflon	☐ Stainless	☐ PVC	☐ Other

Purge start time 0937 Purge stop time 1025 Purge rate _____
Refill Timer Setting _____ Discharge Timer Setting _____ Pressure Setting _____ Flow Rate

Field Parameters

Meter used ☐ HYDAC ☐ QED Flow Cell ☐ Hanna ☒ Other YSI

Gallons / mL	Temp(°F)	Conductivity	DO mg/L	pH	Turbidity	ORP	Comments
11	57.77	0.459	0.50	7.43	0.298	25.0	clear
~~22~~ 22	57.79	0.459	0.26	7.41	0.298	-2.3	clear
33	57.79	0.458	0.19	7.39	0.298	-11.9	clear
43	57.80	0.458	0.15	7.38	0.298	-19.0	clear
53	57.81	0.458	0.12	7.38	0.298	-24.1	clear
63	57.79	0.458	0.10	7.37	0.298	-26.0	clear

Sampling Device

Bailer ☐ Disposable ☐ Stainless ☐ Teflon ☐ Other _____
Filter Type _____ Size _____ (micron) Bailer cord used ☐ Monofillament

Bottles Filled Time 1028

Number	Type			Preservative					Filtration	
3	☒ VOA	☐ Amber	☐ Poly	☒ HCL	☐ Nitric	☐ Sulfuric	☐ None	☐ Other	☐ Yes	☒ No
1	☐ VOA	☒ Amber	☐ Poly	☒ HCL	☐ Nitric	☐ Sulfuric	☐ None	☐ Other	☐ Yes	☒ No
	☐ VOA	☐ Amber	☐ Poly	☐ HCL	☐ Nitric	☐ Sulfuric	☐ None	☐ Other	☐ Yes	☐ No
	☐ VOA	☐ Amber	☐ Poly	☐ HCL	☐ Nitric	☐ Sulfuric	☐ None	☐ Other	☐ Yes	☐ No

Comments: _____

Sampler's Signature SVB Date 9/2/15

Form G

GROUNDWATER
SAMPLE COLLECTION FORM

Well ID no DMW-17 | Project name Evonite
Sample no. DMW-17 | Project no. 1122
Date 9/1/15 | Collector S. Bilos

Well Information

Monument condition [X] Good [ ] Needs repair
Well cap condition [X] Good [ ] Locked [ ] Replaced [ ] Needs replacement
Headspace reading [X] Not measured ____ ppm [ ] Odor
Elevation mark [X] Yes [ ] Added [ ] Other
Well diameter [ ] 2-inch [ ] 4-inch [X] 6-inch [ ] Other

Purge Data

Total well depth 46.40 ft [ ] Clean bottom [ ] Muddy bottom [ ] Not measured
Depth to product — ft Top of Screen ____ ft bgs Water above Screen Y / N
Depth to water 31.71 ft Pump/Tubing Intake Depth ____ ft
Casing volume 14.69 ft (H_2O) X 1.47 gpf = 21.6 X 3 = 64.8 gallons
Casing volumes 3/4"=0.02 gpf 1"=0.04 gpf 2"=0.16 gpf 4"=0.65 gpf 6"= 1.47 gpf
Bladder Pumps: ¼" Tubing purge: 5.3mL/ft + 100mL; 3/8" Tubing purge: 9.5 mL/ft + 500mL

Purge Method

Pump type [ ] Peristaltic [ ] Bladder [X] Submersible [ ] Other
Purge tubing [X] New LDPE [ ] New HDPE [ ] New Teflon [ ] New Tygon [ ] Other
Bailer type [ ] Disposable [ ] Teflon [ ] Stainless [ ] PVC [ ] Other
Purge start time 1245 Purge stop time ~~1255~~ 1335 Purge rate 1.3 gpm
Refill Timer Setting ____ Discharge Timer Setting ____ Pressure Setting ____ Flow Rate

Field Parameters

Meter used [ ] HYDAC [ ] QED Flow Cell [ ] Hanna [X] Other YSI

Gallons / mL	Temp(°F)	Conductivity	DO mg/L	pH	Turbidity	ORP	Comments
11	59.38	0.678	3.29	7.19	0.440	-15.3	clear
22	59.34	0.664	0.62	7.27	0.432	-46.7	clear
33	59.19	0.657	0.25	7.16	0.426	-56.8	clear
44	59.14	0.652	0.20	7.16	0.424	-59.8	clear
55	59.10	0.652	0.17	7.14	0.423	-64.0	clear
65	59.15	0.648	0.15	7.14	0.421	-68.6	clear

Sampling Device

Bailer [ ] Disposable [ ] Stainless [ ] Teflon [ ] Other
Filter Type ____ Size ____ (micron) Bailer cord used [ ] Monofillament

Bottles Filled Time 1338

Number	Type	Preservative	Filtration
3	[X] VOA [ ] Amber [ ] Poly	[X] HCL [ ] Nitric [ ] Sulfuric [ ] None [ ] Other	[ ] Yes [X] No
1	[ ] VOA [X] Amber [ ] Poly	[X] HCL [ ] Nitric [ ] Sulfuric [ ] None [ ] Other	[ ] Yes [X] No
____	[ ] VOA [ ] Amber [ ] Poly	[ ] HCL [ ] Nitric [ ] Sulfuric [ ] None [ ] Other	[ ] Yes [ ] No
____	[ ] VOA [ ] Amber [ ] Poly	[ ] HCL [ ] Nitric [ ] Sulfuric [ ] None [ ] Other	[ ] Yes [ ] No

Comments:

Sampler's Signature JB Date 9/1/15

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no:	MW-18	Project name:	H/V
Sample no:	MW-18	Project no:	1122
Date:	09-01-15	Sample Time: 1350	Collector: MH2

Well Information

Monument condition: (Good) / Needs repair

Well cap condition: (Good) / Locked / Replaced / Needs replacement

Headspace reading: Not measured / ppm Odor Y (N)

Elevation mark: (Yes) / Added / Other Well diameter = (2-inch) / 4-inch / 6-inch / Other

Purge Data

Total well depth	40.29 ft	Top of screen	29.29 ft bgs 10'
Depth to product	ft	Water above screen	(Y) / N
Depth to water	25.54 ft	Pump/Tubing Intake Depth	34 ft bgs
Casing volume	14.75 ft H_2O X	gpf =	X 3 =

Casing volumes (GPF): 3/4"=0.02 1"=0.04 2"=0.16 4"=0.65 6"=1.47

Purge Method

Pump type: (Peristaltic) / Submersible / Bladder / Pneumatic / Other

Purge tubing: (New LDPE) / New Teflon / Other

Purge start time	1323	Purge stop time	1349	Purge rate	200ml/m
Refill Timer Setting		Discharge Timer Setting		Pressure Setting	

Field Parameters

Meter used: (QED) / YSI / Hanna / Other

Gallons/ml	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
250	63.4	0.901	0.64	7.57	0.6	-5	orange chunks
500	63.8	0.935	0.42	7.53	0.6	-13	clear
750	64.6	0.937	0.34	7.56	0.6	-20	"
1000	64.7	0.933	0.26	7.62	0.6	-34	"
1250	64.3	0.932	0.21	7.64	0.6	-40	"
1500	64.0	0.930	0.19	7.65	0.6	-47	"
1750	64.1	0.930	0.19	7.65	0.6	-50	"
2000	64.0	0.926	0.19	7.64	0.6	-52	"

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
3	(VOA) / Amber / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature: Date: 09-01-15

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no:	MW-19	Project name:	H/V
Sample no:	MW-19	Project no:	1122
Date:	09-01-15	Sample Time: 1315	Collector: JH2

Well Information

Monument condition: ~~Good~~ / Needs repair

Well cap condition: ~~Good~~ / ~~Locked~~ / Replaced / Needs replacement

Headspace reading: ~~Not measured~~ / ppm Odor Y / N

Elevation mark: ~~Yes~~ / Added / Other Well diameter = 2-inch / 4-inch / 6-inch / ~~Other~~ 5"

Purge Data

Total well depth	45.34 ft	Top of screen	33.34 ft bgs		
Depth to product	ft	Water above screen	(Y) N		
Depth to water	26.69 ft	Pump/Tubing Intake Depth	38 ft bgs		
Casing volume	18.65 ft H_2O X	gpf =	X 3 =		
Casing volumes (GPF)	3/4"=0.02	1"=0.04	2"=0.16	4"=0.65	6"=1.47

Purge Method

Pump type: ~~Peristaltic~~ / Submersible / Bladder / Pneumatic / Other

Purge tubing: New LDPE / New Teflon / Other

Purge start time	1254	Purge stop time	1314	Purge rate	100 mL/m
Refill Timer Setting		Discharge Timer Setting		Pressure Setting	

Field Parameters

Meter used: (YSI) / YSI / Hanna / Other

Gallons/mL	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
250	67.6	0.553	0.63	7.91	0.4	-28	Clear (some orange material)
500	67.3	0.553	0.49	7.78	0.4	-30	"
750	67.6	0554	0.34	7.67	0.4	-34	"
1000	66.2	0.555	0.29	7.60	0.4	-37	"
1250	66.2	0.556	0.23	7.54	0.4	-42	"
1500	66.3	0.556	0.19	7.49	0.4	-46	"
1750	66.4	0.556	0.17	7.47	0.4	-49	"
2000+	66.6	0.556	0.17	7.45	0.4	-52	"

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
3	(VOA) / Amber / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature: JH2 Date: 09-01-15

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no:	MW-20	Project name:	HDV
Sample no:	MW-20	Project no:	1122
Date:	09-02-15	Sample Time: 0911	Collector: JMS

Well Information

Monument condition: Good / Needs repair

Well cap condition: Good / Locked / Replaced / Needs replacement

Headspace reading: Not measured / ppm Odor Y N

Elevation mark: Yes / Added / Other Well diameter: 2-inch / 4-inch / 6-inch / Other

Purge Data

Total well depth	42.09 ft	Top of screen	32.09 ft bgs		
Depth to product	ft	Water above screen	Y N		
Depth to water	25.46 ft	Pump/Tubing Intake Depth	≈ 35± ft bgs		
Casing volume	13.63 ft H_2O X	gpf =	X 3 =		
Casing volumes (GPF)	3/4"=0.02	1"=0.04	2"=0.16	4"=0.65	6"=1.47

Purge Method

Pump type: Peristaltic / Submersible / Bladder / Pneumatic / Other

Purge tubing: New LDPE / New Teflon / Other

Purge start time: 0548 Purge stop time: 0907 Purge rate: 100 mL/min

Refill Timer Setting: Discharge Timer Setting: Pressure Setting:

Field Parameters

Meter used: QED / YSI / Hanna / Other

Gallons/mL	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
250	59.0	0.387	1.05	8.00	0.3	61	Clear
500	57.3	0.392	0.33	7.99	0.3	57	"
750	57.2	0.390	0.27	7.94	0.3	54	"
1000	57.1	0.391	0.21	7.98	0.3	50	"
1250	57.1	0.391	0.18	7.97	0.3	47	"
1500	57.0	0.392	0.17	7.94	0.3	45	"
1750	57.2	0.391	0.16	7.97	0.3	44	"
2000	57.2	0.391	0.16	7.95	0.3	42	"

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
3	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
1	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature: JMS Date: 09/02/15

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no:	MW-21	Project name:	HHI
Sample no:	MW-21	Project no:	1122
Date:	09-01-15	Sample Time: 1601	Collector:

Well Information

Monument condition ~~Good~~ / Needs repair

Well cap condition ~~Good~~ / Locked / Replaced / Needs replacement

Headspace reading ~~Not measured~~ / ppm Odor Y (N)

Elevation mark (Yes) / Added / Other Well diameter = 2-inch / 4-inch / 6-inch / Other

Purge Data

Total well depth	43.18 ft	Top of screen	33.18 ft bgs	9.5	
Depth to product	ft	Water above screen	(Y) / N		
Depth to water	36.90 ft	Pump/Tubing Intake Depth	≈ 38 ft bgs		
Casing volume	12.28 ft H_2O X	gpf =	X 3 =		
Casing volumes (GPF)	3/4"=0.02	1"=0.04	2"=0.16	4"=0.65	6"=1.47

Purge Method

Pump type ~~Peristaltic~~ / Submersible / Bladder / Pneumatic / Other

Purge tubing ~~New LDPE~~ / New Teflon / Other

Purge start time 1538 Purge stop time 1559 Purge rate 100mL/m

Refill Timer Setting Discharge Timer Setting Pressure Setting

Field Parameters

Meter used QED / YSI / Hanna / Other

Gallons/mL	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
250	70.0	0.421	1.71	7.50	0.3	6	trace HC's - clear
500	65.5	0.427	0.65	7.63	0.3	-1	" " "
750	64.1	0.427	0.37	7.69	0.3	-8	clear
1000	63.6	0.429	0.27	7.76	0.3	-13	"
1250	63.3	0.427	0.23	7.78	0.3	-19	"
1500	63.0	0.428	0.21	7.77	0.3	-22	"
1750	63.1	0.429	0.20	7.79	0.3	-25	"
2000	62.9	0.429	0.19	7.81	0.3	-28	"

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
3	(VOA) / Amber / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature Date: 09015

09-01-15

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no:	MW-22	Project name:	HH
Sample no:	MW-22	Project no:	1122
Date:	09-02-15	Sample Time:	0934
		Collector:	JW

Well Information

Monument condition: Good / Needs repair

Well cap condition: Good / Locked / Replaced / Needs replacement

Headspace reading: ~~Not measured~~ ppm Odor Y / N

Elevation mark: Yes / Added / Other Well diameter: 2-inch / 4-inch / 6-inch / Other

Purge Data

Total well depth	43.13 ft	Top of screen	33.13 ft bgs	9.5	
Depth to product	ft	Water above screen	Y / N		
Depth to water	31.29 ft	Pump/Tubing Intake Depth	≈35 ft bgs		
Casing volume	11.84 ft H_2O X	gpf =	X 3 =		
Casing volumes (GPF)	3/4"=0.02	1"=0.04	2"=0.16	4"=0.65	6"=1.47

Purge Method

Pump type: Peristaltic / Submersible / Bladder / Pneumatic / Other

Purge tubing: New LDPE / New Teflon / Other

Purge start time: 0910 Purge stop time: 0934 Purge rate: ≤100mL/m

Refill Timer Setting: Discharge Timer Setting: Pressure Setting:

Field Parameters

Meter used: QED / YSI / Hanna / Other

Gallons/mL	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH SU units	Turbidity (NTU)	ORP mV	Comments
250	60.8	0.396	1.79	7.82	0.3	91	clear
500	59.5	0.398	0.73	7.90	0.3	82	"
750	59.4	0.400	0.44	7.92	0.3	74	"
1000	59.5	0.399	0.39	7.93	0.3	70	"
1250	59.6	0.399	0.35	7.96	0.3	67	"
1500	59.5	0.399	0.33	7.94	0.3	65	"
1750	59.7	0.399	0.32	7.94	0.3	62	"
2000	59.7	0.400	0.31	7.97	0.3	59	"

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
3	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature: JW Date: 09/02/15

Form G

GROUNDWATER
SAMPLE COLLECTION FORM

Well ID no DMW-23 | Project name Evanite
Sample no. DMW-23 | Project no. 1122
Date 9/2/15 | Collector SWB

Well Information

Monument condition	☐ Good	☐ Needs repair		
Well cap condition	☐ Good	☐ Locked	☐ Replaced	☐ Needs replacement
Headspace reading	☐ Not measured	_____ ppm		☐ Odor_____
Elevation mark	☐ Yes	☐ Added	☐ Other _____	
Well diameter	☐ 2-inch	☒ 4-inch	☐ 6-inch	☐ Other _____

Purge Data Pumping

Total well depth_____ft ☐ Clean bottom ☐ Muddy bottom ☐ Not measured
Depth to product_____ft Top of Screen_____ft bgs Water above Screen Y / N
Depth to water_____ft Pump/Tubing Intake Depth_____ft
Casing volume _____ft (H_2O) X _____gpf = _____ X 3 = _____
Casing volumes 3/4"=0.02 gpf 1"=0.04 gpf 2"=0.16 gpf 4"=0.65 gpf 6"= 1.47 gpf
Bladder Pumps: ¼" Tubing purge: 5.3mL/ft + 100mL; ⅜" Tubing purge: 9.5 mL/ft + 500mL

Purge Method

Pump type	☐ Peristaltic	☐ Bladder	☐ Submersible	☐ Other_____	
Purge tubing	☐ New LDPE	☐ New HDPE	☐ New Teflon	☐ New Tygon	☐ Other _____
Bailer type	☐ Disposable	☐ Teflon	☐ Stainless	☐ PVC	☐ Other _____

Purge start time_____ Purge stop time_____ Purge rate_____
Refill Timer Setting_____ Discharge Timer Setting _____ Pressure Setting_____ Flow Rate

Field Parameters

Meter used ☐ HYDAC ☐ QED Flow Cell ☐ Hanna ☒ Other YSI

Gallons / mL	Temp(°F)	Conductivity	DO mg/L	pH	Turbidity	ORP	Comments
	59.55	0.430	2.55	7.55	0.279	66.9	clear

Sampling Device

Bailer ☐ Disposable ☐ Stainless ☐ Teflon ☐ Other _____
Filter Type_____ Size_____ (micron) Bailer cord used ☐ Monofillament

Bottles Filled Time 1045

Number	Type			Preservative					Filtration	
3	☒ VOA	☐ Amber	☐ Poly	☒ HCL	☐ Nitric	☐ Sulfuric	☐ None	☐ Other___	☐ Yes	☒ No
1	☐ VOA	☒ Amber	☐ Poly	☒ HCL	☐ Nitric	☐ Sulfuric	☐ None	☐ Other___	☐ Yes	☒ No
___	☐ VOA	☐ Amber	☐ Poly	☐ HCL	☐ Nitric	☐ Sulfuric	☐ None	☐ Other___	☐ Yes	☐ No
___	☐ VOA	☐ Amber	☐ Poly	☐ HCL	☐ Nitric	☐ Sulfuric	☐ None	☐ Other___	☐ Yes	☐ No

Comments:_____

Sampler's Signature AB Date 9/2/15

Form G

GROUNDWATER
SAMPLE COLLECTION FORM

Well ID no. DMW-24 | Project name Evanite
Sample no. DMW-24 | Project no. 1122
Date 9/1/15 | Collector SVB

Well Information

Monument condition	☐ Good	☐ Needs repair		
Well cap condition	☐ Good	☐ Locked	☐ Replaced	☐ Needs replacement
Headspace reading	☐ Not measured	_____ ppm		☐ Odor_____
Elevation mark	☐ Yes	☐ Added	☐ Other	
Well diameter	☐ 2-inch	☒ 4-inch	☐ 6-inch	☐ Other

Purge Data Pumping

Total well depth_____ft ☐ Clean bottom ☐ Muddy bottom ☐ Not measured
Depth to product_____ft Top of Screen_____ft bgs Water above Screen Y / N
Depth to water_____ft Pump/Tubing Intake Depth_____ft
Casing volume _____ft (H_2O) X _____gpf = _____ X 3 = _____
Casing volumes 3/4"=0.02 gpf 1"=0.04 gpf 2"=0.16 gpf 4"=0.65 gpf 6"= 1.47 gpf
Bladder Pumps: ¼" Tubing purge: 5.3mL/ft + 100mL; ⅜" Tubing purge: 9.5 mL/ft + 500mL

Purge Method

Pump type	☐ Peristaltic	☐ Bladder	☐ Submersible	☐ Other_____	
Purge tubing	☐ New LDPE	☐ New HDPE	☐ New Teflon	☐ New Tygon	☐ Other _____
Bailer type	☐ Disposable	☐ Teflon	☐ Stainless	☐ PVC	☐ Other _____

Purge start time_____ Purge stop time_____ Purge rate_____
Refill Timer Setting_____ Discharge Timer Setting _____ Pressure Setting_____ Flow Rate

Field Parameters

Meter used ☐ HYDAC ☐ QED Flow Cell ☐ Hanna ☒ Other YSI

Gallons / mL	Temp(°F)	Conductivity	DO mg/L	pH	Turbidity	ORP	Comments
	63.26	0.741	3.40	7.81	0.480	16.3	clear

Sampling Device

Bailer ☐ Disposable ☐ Stainless ☐ Teflon ☐ Other _____
Filter Type_____ Size_____ (micron) Bailer cord used ☐ Monofillament

Bottles Filled Time 1440

Number	Type			Preservative					Filtration
3	☒ VOA	☐ Amber	☐ Poly	☒ HCL	☐ Nitric	☐ Sulfuric	☐ None	☐ Other___	☐Yes ☐No
1	☐ VOA	☒ Amber	☐ Poly	☒ HCL	☐ Nitric	☐ Sulfuric	☐ None	☐ Other___	☐Yes ☐No
___	☐ VOA	☐ Amber	☐ Poly	☐ HCL	☐ Nitric	☐ Sulfuric	☐ None	☐ Other___	☐Yes ☐No
___	☐ VOA	☐ Amber	☐ Poly	☐ HCL	☐ Nitric	☐ Sulfuric	☐ None	☐ Other___	☐Yes ☐No

Comments:_____

Sampler's Signature SVB Date 9/1/15

Form G

GROUNDWATER
SAMPLE COLLECTION FORM

Well ID no DMW-25 | Project name Evanite
Sample no. DMW-25 | Project no. 1122
Date 9/11/15 | Collector SVB

Well Information

Monument condition	☒ Good	☐ Needs repair		
Well cap condition	☒ Good	☐ Locked	☐ Replaced	☐ Needs replacement
Headspace reading	☒ Not measured	____ ppm	☐ Odor	
Elevation mark	☒ Yes	☐ Added	☐ Other	
Well diameter	☐ 2-inch	☒ 4-inch	☐ 6-inch	☐ Other

Purge Data

Total well depth 46.94 ft ☐ Clean bottom ☐ Muddy bottom ☐ Not measured
Depth to product — ft Top of Screen ____ ft bgs Water above Screen Y / N
Depth to water 30.12 ft Pump/Tubing Intake Depth ____ ft
Casing volume 16.82 ft (H_2O) X 0.65 gpf = 10.9 X 3 = 32.8 gal
Casing volumes 3/4"=0.02 gpf 1"=0.04 gpf 2"=0.16 gpf 4"=0.65 gpf 6"= 1.47 gpf
Bladder Pumps: ¼" Tubing purge: 5.3mL/ft + 100mL; 3/8" Tubing purge: 9.5 mL/ft + 500mL

Purge Method

Pump type	☐ Peristaltic	☐ Bladder	☒ Submersible	☐ Other	
Purge tubing	☒ New LDPE	☐ New HDPE	☐ New Teflon	☐ New Tygon	☐ Other
Bailer type	☐ Disposable	☐ Teflon	☐ Stainless	☐ PVC	☐ Other

Purge start time 1511 Purge stop time ~~1554~~ 1531 Purge rate 1.3
Refill Timer Setting ____ Discharge Timer Setting ____ Pressure Setting ____ Flow Rate

Field Parameters

Meter used ☐ HYDAC ☐ QED Flow Cell ☐ Hanna ☒ Other YSI

Gallons / mL	Temp(°F)	Conductivity	DO mg/L	pH	Turbidity	ORP	Comments
6	57.88	0.430	0.60	7.42	0.282	68.1	clear
11	57.87	0.444	0.41	7.31	0.291	55.4	clear
17	57.87	0.448	0.46	7.30	0.292	47.4	clear
22	57.83	0.452	0.51	7.29	0.291	45.6	clear
28	57.83	0.452	0.47	7.28	0.292	42.4	clear
33	57.79	0.497	0.39	7.28	0.289	39.8	clear

Sampling Device

Bailer ☐ Disposable ☐ Stainless ☐ Teflon ☐ Other ____
Filter Type ____ Size ____ (micron) Bailer cord used ☐ Monofillament

Bottles Filled Time 1540

Number	Type			Preservative					Filtration	
3	☒ VOA	☐ Amber	☐ Poly	☒ HCL	☐ Nitric	☐ Sulfuric	☐ None	☐ Other	☐ Yes	☒ No
1	☐ VOA	☒ Amber	☐ Poly	☒ HCL	☐ Nitric	☐ Sulfuric	☐ None	☐ Other	☐ Yes	☒ No
____	☐ VOA	☐ Amber	☐ Poly	☐ HCL	☐ Nitric	☐ Sulfuric	☐ None	☐ Other	☐ Yes	☐ No
____	☐ VOA	☐ Amber	☐ Poly	☐ HCL	☐ Nitric	☐ Sulfuric	☐ None	☐ Other	☐ Yes	☐ No

Comments: ____

Sampler's Signature SB Date 9/11/15

Form G

GROUNDWATER
SAMPLE COLLECTION FORM

Well ID no DMW-26 | Project name Evanite
Sample no. DMW-26 | Project no. 1122
Date 9/2/15 | Collector SVB

Well Information

Monument condition	[X] Good	[ ] Needs repair		
Well cap condition	[X] Good	[ ] Locked	[ ] Replaced	[ ] Needs replacement
Headspace reading	[X] Not measured	_____ ppm		[ ] Odor
Elevation mark	[X] Yes	[ ] Added	[ ] Other	
Well diameter	[ ] 2-inch	[ ] 4-inch	[X] 6-inch	[ ] Other

Purge Data

4.5 3' pump

Total well depth 44.84 ft [ ] Clean bottom [ ] Muddy bottom [ ] Not measured
Depth to product — ft Top of Screen 37.15 ft bgs Water above Screen (Y) N
Depth to water 32.34 ft Pump/Tubing Intake Depth _____ ft
Casing volume 12.5 ft (H_2O) X _____ gpf = _____ X 3 = _____
Casing volumes 3/4"=0.02 gpf 1"=0.04 gpf 2"=0.16 gpf 4"=0.65 gpf 6"= 1.47 gpf
Bladder Pumps: ¼" Tubing purge: 5.3mL/ft + 100mL; 3/8" Tubing purge: 9.5 mL/ft + 500mL

Purge Method

Pump type	[X] Peristaltic	[ ] Bladder	[ ] Submersible	[ ] Other	
Purge tubing	[X] New LDPE	[ ] New HDPE	[ ] New Teflon	[ ] New Tygon	[ ] Other
Bailer type	[ ] Disposable	[ ] Teflon	[ ] Stainless	[ ] PVC	[ ] Other

1429 Purge start time ~~1315~~ ~~1335~~ Purge stop time 1449 Purge rate 100 mL/min
Refill Timer Setting _____ Discharge Timer Setting _____ Pressure Setting _____ Flow Rate

Field Parameters

Meter used [ ] HYDAC [ ] QED Flow Cell [ ] Hanna [X] Other YSI

Gallons / mL	Temp(°F)	Conductivity	DO mg/L	pH	Turbidity	ORP	Comments
250	67.58	0.326	3.62	7.92	0.127	111.8	clear
500	71.64	0.499	2.92	7.33	0.323	94.3	clear
750	66.78	0.484	1.07	7.28	0.313	92.5	clear
1000	65.49	0.478	0.58	7.17	0.311	95.7	clear
1250	67.00	0.475	0.55	7.19	0.309	92.3	clear
1500	67.13	0.478	0.56	7.17	0.311	86.8	clear
1750	66.73	0.480	0.56	7.18	0.312	85.5	clear
2000	66.70	0.481	0.56	7.19	0.311	80.4	clear

Sampling Device

Bailer [ ] Disposable [ ] Stainless [ ] Teflon [ ] Other _____
Filter Type _____ Size _____ (micron) Bailer cord used [ ] Monofillament

Bottles Filled Time 1451

Number	Type		Preservative					Filtration	
3	[X] VOA	[ ] Amber	[ ] Poly	[X] HCL	[ ] Nitric	[ ] Sulfuric	[ ] None	[ ] Yes	[ ] No
1	[ ] VOA	[X] Amber	[ ] Poly	[X] HCL	[ ] Nitric	[ ] Sulfuric	[ ] None	[ ] Yes	[ ] No
	[ ] VOA	[ ] Amber	[ ] Poly	[ ] HCL	[ ] Nitric	[ ] Sulfuric	[ ] None	[ ] Yes	[ ] No
	[ ] VOA	[ ] Amber	[ ] Poly	[ ] HCL	[ ] Nitric	[ ] Sulfuric	[ ] None	[ ] Yes	[ ] No

Comments: had to lower tubing multiple times

Sampler's Signature SB Date 9/2/15

Form G

GROUNDWATER
SAMPLE COLLECTION FORM

Well ID no DMW-27 | Project name Evanite
Sample no. DMW-27 | Project no. 1122
Date 9/1/15 | Collector SVB

Well Information

Monument condition	☒ Good	☐ Needs repair		
Well cap condition	☒ Good	☐ Locked	☐ Replaced	☐ Needs replacement
Headspace reading	☒ Not measured	_____ ppm		☐ Odor
Elevation mark	☒ Yes	☐ Added	☐ Other	
Well diameter	☐ 2-inch	☒ 4-inch	☐ 6-inch	☐ Other

Purge Data

Total well depth 46.55 ft ☐ Clean bottom ☐ Muddy bottom ☐ Not measured
Depth to product — ft Top of Screen _____ ft bgs Water above Screen Y / N
Depth to water 28.23 ft Pump/Tubing Intake Depth _____ ft
Casing volume 18.32 ft (H_2O) X 0.65 gpf = 11.9 X 3 = 35.7
Casing volumes 3/4"=0.02 gpf 1"=0.04 gpf 2"=0.16 gpf 4"=0.65 gpf 6"= 1.47 gpf
Bladder Pumps: ¼" Tubing purge: 5.3mL/ft + 100mL; ⅜" Tubing purge: 9.5 mL/ft + 500mL

Purge Method

Pump type ☐ Peristaltic ☐ Bladder ☒ Submersible ☐ Other _____
Purge tubing ☒ New LDPE ☐ New HDPE ☐ New Teflon ☐ New Tygon ☐ Other _____
Bailer type ☐ Disposable ☐ Teflon ☐ Stainless ☐ PVC ☐ Other _____
Purge start time 1346 Purge stop time 1423 Purge rate 1 gpm
Refill Timer Setting _____ Discharge Timer Setting _____ Pressure Setting _____ Flow Rate

Field Parameters

Meter used ☐ HYDAC ☐ QED Flow Cell ☐ Hanna ☒ Other YSI

Gallons / mL	Temp(°F)	Conductivity	DO mg/L	pH	Turbidity	ORP	Comments
6	61.40	1.028	2.46	7.11	0.663	-57.7	clear
12	62.50	0.911	0.48	7.09	0.591	-90.1	clear
18	63.76	0.819	0.22	7.12	0.531	-106.2	clear
24	59.62	0.792	0.13	7.07	0.515	-105.6	clear
30	59.40	0.735	0.10	7.12	0.477	-108.8	clear
36	59.19	0.701	0.09	7.12	0.456	-109.0	clear

Sampling Device

Bailer ☐ Disposable ☐ Stainless ☐ Teflon ☐ Other _____
Filter Type _____ Size _____ (micron) Bailer cord used ☐ Monofillament

Bottles Filled Time 1425

Number	Type			Preservative					Filtration	
3	☒ VOA	☐ Amber	☐ Poly	☒ HCL	☐ Nitric	☐ Sulfuric	☐ None	☐ Other	☐ Yes	☒ No
1	☐ VOA	☒ Amber	☐ Poly	☒ HCL	☐ Nitric	☐ Sulfuric	☐ None	☐ Other	☐ Yes	☒ No
	☐ VOA	☐ Amber	☐ Poly	☐ HCL	☐ Nitric	☐ Sulfuric	☐ None	☐ Other	☐ Yes	☐ No
	☐ VOA	☐ Amber	☐ Poly	☐ HCL	☐ Nitric	☐ Sulfuric	☐ None	☐ Other	☐ Yes	☐ No

Comments: _____

Sampler's Signature SVB Date 9/1/15

Form G

GROUNDWATER
SAMPLE COLLECTION FORM

Well ID no DMW-28 | Project name Evanite
Sample no. DMW-28 | Project no. 1122
Date 9/2/15 | Collector SVB

Well Information

Monument condition [X] Good [ ] Needs repair ____
Well cap condition [X] Good [ ] Locked [ ] Replaced [ ] Needs replacement
Headspace reading [X] Not measured ____ ppm [ ] Odor ____
Elevation mark [X] Yes [ ] Added [ ] Other ____
Well diameter [ ] 2-inch [X] 4-inch [ ] 6-inch [ ] Other ____

Purge Data

Total well depth 48.07 ft [ ] Clean bottom [ ] Muddy bottom [ ] Not measured
Depth to product — ft Top of Screen ____ ft bgs Water above Screen Y / N
Depth to water 27.82 ft Pump/Tubing Intake Depth ____ ft
Casing volume 20.25 ft (H_2O) X 0.65 gpf = 13.2 X 3 = 39.5
Casing volumes 3/4"=0.02 gpf 1"=0.04 gpf 2"=0.16 gpf 4"=0.65 gpf 6"= 1.47 gpf
Bladder Pumps: ¼" Tubing purge: 5.3mL/ft + 100mL; ⅜" Tubing purge: 9.5 mL/ft + 500mL

Purge Method

Pump type [ ] Peristaltic [ ] Bladder [X] Submersible [ ] Other ____
Purge tubing [X] New LDPE [ ] New HDPE [ ] New Teflon [ ] New Tygon [ ] Other ____
Bailer type [ ] Disposable [ ] Teflon [ ] Stainless [ ] PVC [ ] Other ____
Purge start time 0831 Purge stop time 0902 Purge rate ____
Refill Timer Setting ____ Discharge Timer Setting ____ Pressure Setting ____ Flow Rate ____

Field Parameters

Meter used [ ] HYDAC [ ] QED Flow Cell [ ] Hanna [X] Other YSI

Gallons / mL	Temp(°F)	Conductivity	DO mg/L	pH	Turbidity	ORP	Comments
7	59.60	0.771	0.89	7.47	0.501	69.9	clear
14	59.71	0.769	0.44	7.30	0.500	79.8	clear
~~20~~ 21	59.77	0.771	0.21	7.23	0.501	87.7	clear
~~28~~ 28	59.74	0.773	0.15	7.20	0.502	91.2	clear
34	59.75	0.772	0.11	7.18	0.502	93.0	clear
40	59.76	0.772	0.10	7.18	0.502	94.1	clear

Sampling Device

Bailer [ ] Disposable [ ] Stainless [ ] Teflon [ ] Other ____
Filter Type ____ Size ____ (micron) Bailer cord used [ ] Monofillament

Bottles Filled Time 0904

Number	Type	Preservative	Filtration
3	[X] VOA [ ] Amber [ ] Poly	[X] HCL [ ] Nitric [ ] Sulfuric [ ] None [ ] Other ____	[ ] Yes [ ] No
1	[ ] VOA [X] Amber [ ] Poly	[X] HCL [ ] Nitric [ ] Sulfuric [ ] None [ ] Other ____	[ ] Yes [ ] No
____	[ ] VOA [ ] Amber [ ] Poly	[ ] HCL [ ] Nitric [ ] Sulfuric [ ] None [ ] Other ____	[ ] Yes [ ] No
____	[ ] VOA [ ] Amber [ ] Poly	[ ] HCL [ ] Nitric [ ] Sulfuric [ ] None [ ] Other ____	[ ] Yes [ ] No

Comments: ____

Sampler's Signature SVB Date 9/2/15

Form G

GROUNDWATER
SAMPLE COLLECTION FORM

Well ID no. DMW-29 | Project name Evanite
Sample no. DMW-29 | Project no. 1122
Date 9/2/15 | Collector SVB

Well Information

Monument condition: ☒ Good ☐ Needs repair _____
Well cap condition: ☒ Good ☐ Locked ☐ Replaced ☐ Needs replacement
Headspace reading: ☒ Not measured _____ ppm ☐ Odor _____
Elevation mark: ☒ Yes ☐ Added ☐ Other _____
Well diameter: ☐ 2-inch ☒ 4-inch ☐ 6-inch ☐ Other _____

Purge Data Pumping

Total well depth _____ ft ☐ Clean bottom ☐ Muddy bottom ☐ Not measured
Depth to product _____ ft Top of Screen _____ ft bgs Water above Screen Y / N
Depth to water _____ ft Pump/Tubing Intake Depth _____ ft
Casing volume _____ ft (H_2O) X _____ gpf = _____ X 3 = _____
Casing volumes 3/4"=0.02 gpf 1"=0.04 gpf 2"=0.16 gpf 4"=0.65 gpf 6"= 1.47 gpf
Bladder Pumps: ¼" Tubing purge: 5.3mL/ft + 100mL; ⅜" Tubing purge: 9.5 mL/ft + 500mL

Purge Method

Pump type ☐ Peristaltic ☐ Bladder ☐ Submersible ☐ Other _____
Purge tubing ☐ New LDPE ☐ New HDPE ☐ New Teflon ☐ New Tygon ☐ Other _____
Bailer type ☐ Disposable ☐ Teflon ☐ Stainless ☐ PVC ☐ Other _____
Purge start time _____ Purge stop time _____ Purge rate _____
Refill Timer Setting _____ Discharge Timer Setting _____ Pressure Setting _____ Flow Rate

Field Parameters

Meter used ☐ HYDAC ☐ QED Flow Cell ☐ Hanna ☒ Other YSI

Gallons / mL	Temp(°F)	Conductivity	DO mg/L	pH	Turbidity	ORP	Comments
	61.17	0.491	2.61	7.87	0.319	164.3	clear

Sampling Device

Bailer ☐ Disposable ☐ Stainless ☐ Teflon ☐ Other _____
Filter Type _____ Size _____ (micron) Bailer cord used ☐ Monofillament

Bottles Filled Time 0922

Number	Type		Preservative					Filtration
3	☒ VOA	☐ Amber ☐ Poly	☒ HCL	☐ Nitric	☐ Sulfuric	☐ None	☐ Other ___	☐ Yes ☒ No
1	☐ VOA	☒ Amber ☐ Poly	☒ HCL	☐ Nitric	☐ Sulfuric	☐ None	☐ Other ___	☐ Yes ☒ No
	☐ VOA	☐ Amber ☐ Poly	☐ HCL	☐ Nitric	☐ Sulfuric	☐ None	☐ Other ___	☐ Yes ☐ No
	☐ VOA	☐ Amber ☐ Poly	☐ HCL	☐ Nitric	☐ Sulfuric	☐ None	☐ Other ___	☐ Yes ☐ No

Comments: _____

Sampler's Signature _____ Date 9/2/15

Form G

GROUNDWATER
SAMPLE COLLECTION FORM

Well ID no. DMW-32 | Project name Bianite
Sample no. DMW-32 | Project no. 1122
Date 9/3/15 | Collector SVB

Well Information

Monument condition: [X] Good [ ] Needs repair ____
Well cap condition: [X] Good [ ] Locked [ ] Replaced [ ] Needs replacement
Headspace reading: [X] Not measured ____ ppm [ ] Odor ____
Elevation mark: [X] Yes [ ] Added [ ] Other ____
Well diameter: [ ] 2-inch [ ] 4-inch [X] 6-inch [ ] Other ____

Purge Data

Total well depth 42.32 ft [ ] Clean bottom [ ] Muddy bottom [ ] Not measured
Depth to product — ft Top of Screen ____ ft bgs Water above Screen Y / N
Depth to water 25.30 ft Pump/Tubing Intake Depth ____ ft
Casing volume 17.02 ft (H_2O) X ____ gpf = ____ X 3 = ____
Casing volumes 3/4"=0.02 gpf 1"=0.04 gpf 2"=0.16 gpf 4"=0.65 gpf 6"= 1.47 gpf
Bladder Pumps: ¼" Tubing purge: 5.3mL/ft + 100mL; 3/8" Tubing purge: 9.5 mL/ft + 500mL

Purge Method

Pump type: [X] Peristaltic [ ] Bladder [ ] Submersible [ ] Other ____
Purge tubing: [X] New LDPE [ ] New HDPE [ ] New Teflon [ ] New Tygon [ ] Other ____
Bailer type: [ ] Disposable [ ] Teflon [ ] Stainless [ ] PVC [ ] Other ____
Purge start time 0831 Purge stop time 0850 Purge rate ~100 mL/min
Refill Timer Setting ____ Discharge Timer Setting ____ Pressure Setting ____ Flow Rate ____

Field Parameters

Meter used: [ ] HYDAC [ ] QED Flow Cell [ ] Hanna [X] Other YSI

Gallons / mL	Temp(°F)	Conductivity	DO mg/L	pH	Turbidity	ORP	Comments
250	61.10	0.800	6.73	8.23	0.519	213.7	clear
500	60.14	0.799	2.00	7.84	0.519	194.7	clear
750	60.04	0.798	0.98	7.49	0.519	176.0	clear
1000	59.93	0.799	0.78	7.39	0.519	169.4	clear
1250	60.02	0.799	0.61	7.33	0.519	165.1	clear
1500	60.24	0.799	0.44	7.27	0.520	156.5	clear
1750	60.28	0.799	0.40	7.25	0.520	152.3	clear
2000	60.30	0.800	0.39	7.24	0.520	149.7	clear

Sampling Device

Bailer: [ ] Disposable [ ] Stainless [ ] Teflon [ ] Other ____
Filter Type ____ Size ____ (micron) Bailer cord used [ ] Monofillament

Bottles Filled Time 0853

Number	Type			Preservative					Filtration	
3	[X] VOA	[ ] Amber	[ ] Poly	[X] HCL	[ ] Nitric	[ ] Sulfuric	[ ] None	[ ] Other ____	[ ] Yes	[X] No
1	[ ] VOA	[X] Amber	[ ] Poly	[X] HCL	[ ] Nitric	[ ] Sulfuric	[ ] None	[ ] Other ____	[ ] Yes	[X] No
____	[ ] VOA	[ ] Amber	[ ] Poly	[ ] HCL	[ ] Nitric	[ ] Sulfuric	[ ] None	[ ] Other ____	[ ] Yes	[ ] No
____	[ ] VOA	[ ] Amber	[ ] Poly	[ ] HCL	[ ] Nitric	[ ] Sulfuric	[ ] None	[ ] Other ____	[ ] Yes	[ ] No

Comments: ____

Sampler's Signature AB Date 9/3/15

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no:	IMW-33	Project name:	H&V
Sample no:	IMW-33	Project no:	1122
Date:	09-03-15	Sample Time:	Collector: JMC

Well Information

Monument condition: ~~Good~~ / Needs repair

Well cap condition: ~~Good~~ / ~~Locked~~ / Replaced / Needs replacement

Headspace reading: ~~Not measured~~ / ppm Odor Y ~~N~~

Elevation mark: ~~Yes~~ / Added / Other Well diameter = ~~2-inch~~ / 4-inch / 6-inch / Other

Purge Data

Total well depth	27.74 ft	Top of screen	21.93 ft bgs
Depth to product	ft	Water above screen	Y ~~N~~
Depth to water	26.52 ft	Pump/Tubing Intake Depth	ft bgs
Casing volume	1.22 ft H_2O X	gpf =	X 3 =
Casing volumes (GPF)	3/4"=0.02	1"=0.04 2"=0.16	4"=0.65 6"=1.47

Purge Method

Pump type: ~~Peristaltic~~ / Submersible / Bladder / Pneumatic / Other

Purge tubing: ~~New LDPE~~ / New Teflon / Other

Purge start time	0756	Purge stop time		Purge rate	100 mL/m
Refill Timer Setting		Discharge Timer Setting		Pressure Setting	

Field Parameters

Meter used: ~~QED~~ / YSI / Hanna / Other

Gallons~~mL~~	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
250	59.0	0.394	1.91	7.60	0.3	126	Turbid
500	59.2	0.371	1.14	7.67	0.2	119	Clear
700	59.6	0.368	1.06	7.60	0.2	118	" DRY

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments: Dry-allow RC

Sampler's Signature Date: 090315

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no:	DMW-33	Project name:	HDV
Sample no:	DMW-33	Project no:	1122
Date:	090315	Sample Time: 0942	Collector: JMZ

Well Information

Monument condition: (Good) / Needs repair

Well cap condition: (Good) / Locked / Replaced / Needs replacement

Headspace reading: (Not measured) ppm Odor Y (N)

Elevation mark: (Yes) / Added / Other Well diameter (2-inch) / 4-inch / 6-inch / Other

Purge Data

Total well depth: 35.83 ft Top of screen 24.99 ft bgs 1.14 gallons 4.67 Actual

Depth to product: ft Water above screen (Y) / N

Depth to water: 27.02 ft Pump/Tubing Intake Depth 32.3 ft bgs

Casing volume: 8.81 ft H_2O X gpf = X 3 =

Casing volumes (GPF) 3/4"=0.02 1"=0.04 2"=0.16 4"=0.65 6"=1.47

Purge Method

Pump type: (Peristaltic) / Submersible / Bladder / Pneumatic / Other

Purge tubing: (New LDPE) / New Teflon / Other

Purge start time 0931 Purge stop time 0932 Purge rate 100 mL/m

Refill Timer Setting Discharge Timer Setting Pressure Setting

Field Parameters

Meter used: (QED) / YSI / Hanna / Other

Gallons (mL)	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
750	59.5	0.404	2.10	8.12	0.3	112	Clear
500	59.5	0.395	0.54	7.67	0.3	110	"
750	59.6	0.391	0.45	7.59	0.3	107	"
1000	59.4	0.374	0.37	7.56	0.3	104	"
1250	59.2	0.370	0.30	7.52	0.3	98	"
1500	59.1	0.369	0.29	7.51	0.3	97	"
1750	59.4	0.368	0.28	7.50	0.3	94	"
2000	59.3	0.368	0.27	7.49	0.3	94	"

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
5	(VOA) / Amber / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y / N
1	VOA / (Amber) / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y / N
3	VOA / Amber / (Poly)	HCL / (None) / (Nitric) / (Sulfuric) / Other	(Y) / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments: VOA, MNA, TOC

Sampler's Signature Date: 090315

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no:	IMW-34	Project name:	HDV
Sample no:	IMW-34	Project no:	1122
Date:	090315	Sample Time: 0927	Collector:

Well Information

Monument condition (Good) / Needs repair

Well cap condition (Good) / Locked / Replaced / Needs replacement

Headspace reading (Not measured) ppm Odor Y (N)

Elevation mark (Yes) / Added / Other Well diameter =(2-inch) / 4-inch / 6-inch / Other

Purge Data

Total well depth	29.50 ft	Top of screen	23.66 ft bgs
Depth to product	ft	Water above screen	Y (N)
Depth to water	27.14 ft	Pump/Tubing Intake Depth	27.7 - 28 ft bgs
Casing volume	2.36 ft H_2O X	gpf =	X 3 =

Casing volumes (GPF) 3/4"=0.02 1"=0.04 2"=0.16 4"=0.65 6"=1.47

Purge Method

Pump type (Peristaltic) / Submersible / Bladder / Pneumatic / Other

Purge tubing (New LDPE) / New Teflon / Other

Purge start time 0856 Purge stop time 0907 Purge rate 100 mL/m

Refill Timer Setting Discharge Timer Setting Pressure Setting

Field Parameters

Meter used (YSI) / Hanna / Other

Gallons (mL)	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
250	59.5	0.547	0.94	7.69	0.4	102	Clear
500	59.5	0.517	0.42	7.49	0.3	93	"
750	59.8	0.513	0.36	7.45	0.3	85	"
1000	59.9	0.512	0.26	7.38	0.3	79	"
1250	59.8	0.511	0.21	7.38	0.3	74	"
1500	59.9	0.510	0.20	7.37	0.3	69	"
1750	60.1	0.512	0.18	7.37	0.3	66	"
2000	60.2	0.511	0.19	7.36	0.3	61	"

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
5	(VOA) / Amber / Poly	3 (HCL) / None / Nitric / Sulfuric / Other	Y / N
1	VOA / (Amber) / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y / N
3	VOA / Amber / (Poly)	HCL / (None) / (Nitric) / (Sulfuric) / Other	1 Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature Date: 090315

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no:	DMW-34	Project name:	SIDL
Sample no:	DMW-34	Project no:	1122
Date:	090315	Sample Time: 1000	Collector:

Well Information

Monument condition: ~~Good~~ / Needs repair

Well cap condition: ~~Good~~ / Locked / Replaced / Needs replacement

Headspace reading: ~~Not measured~~ / ppm Odor Y / N

Elevation mark: ~~Yes~~ / Added / Other Well diameter: ~~2-inch~~ / 4-inch / 6-inch / Other

Purge Data

4.67

Total well depth: 35.59 ft Top of screen: 32.75 ft bgs

Depth to product: ft Water above screen: Y / N

Depth to water: 27.62 ft Pump/Tubing Intake Depth: ~35 ft bgs

Casing volume: 10.97 ft H_2O X gpf = X 3 =

Casing volumes (GPF) 3/4"=0.02 1"=0.04 2"=0.16 4"=0.65 6"=1.47

Purge Method

Pump type: ~~Peristaltic~~ / Submersible / Bladder / Pneumatic / Other

Purge tubing: ~~New LDPE~~ / New Teflon / Other

Purge start time: 0930 Purge stop time: 0950 Purge rate: 100 mL/m

Refill Timer Setting: Discharge Timer Setting: Pressure Setting:

Field Parameters

Meter used: QED / YSI / Hanna / Other

Gallons/mL	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
250	60.7	0.384	1.14	7.60	0.3	50	Clear
500	60.7	0.385	0.69	7.50	0.3	45	"
750	60.8	0.393	0.38	7.42	0.3	40	"
1000	60.9	0.395	0.32	7.41	0.3	35	"
1250	61.0	0.395	0.26	7.39	0.3	29	"
1500	61.1	0.394	0.24	7.38	0.3	26	"
1750	61.2	0.395	0.23	7.35	0.3	24	"
2000	61.3	0.394	0.22	7.38	0.3	20	"

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
5	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
1	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
3	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature Date: 090315

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no:	I MW-35	Project name:	2127
Sample no:	I MW-35	Project no:	1122
Date:	090315	Sample Time: 1111	Collector:

Well Information

Monument condition: (Good) / Needs repair

Well cap condition: (Good) / Locked / Replaced / Needs replacement

Headspace reading: (Not measured) ppm Odor Y / (N)

Elevation mark: (Yes) / Added / Other Well diameter = (2-inch) / 4-inch / 6-inch / Other

Purge Data

Total well depth	29.29 ft	Top of screen	23.49 ft bgs	4.67	
Depth to product	ft	Water above screen	Y (N)		
Depth to water	25.05 ft	Pump/Tubing Intake Depth	26.6 ft bgs		
Casing volume	4.24 ft H_2O X	gpf =	X 3 =		
Casing volumes (GPF)	3/4"=0.02	1"=0.04	2"=0.16	4"=0.65	6"=1.47

Purge Method

Pump type: (Peristaltic) / Submersible / Bladder / Pneumatic / Other

Purge tubing: (New LDPE) / New Teflon / Other

Purge start time 1042 Purge stop time 1102 Purge rate 100 mL/m

Refill Timer Setting Discharge Timer Setting Pressure Setting

Field Parameters

Meter used: (QED) / YSI / Hanna / Other

Gallons/mL	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
250	64.7	0.342	1.14	7.66	0.2	6	Clear
500	65.2	0.338	0.81	7.59	0.2	3	"
750	65.4	0.336	0.54	7.51	0.2	-11	"
1000	64.9	0.342	0.39	7.48	0.2	-19	"
1250	64.7	0.354	0.23	7.47	0.2	-34	"
1500	64.8	0.351	0.25	7.47	0.2	-43	"
1750	65.2	0.346	0.27	7.47	0.2	-46	"
2000	65.5	0.342	0.26	7.46	0.2	-51	"

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
5	(VOA) / Amber / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y / N
7	VOA / Amber / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y / N
3	VOA / Amber / Poly	HCL / (None) / Nitric / Sulfuric / Other	(Y) / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature Date: 090315

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no:	DMW-35	Project name:	HH
Sample no:	DMW-35	Project no:	1122
Date:	090315 Sample Time: 1042	Collector:	

Well Information

Monument condition: ~~Good~~ / Needs repair

Well cap condition: ~~Good~~ / Locked / Replaced / Needs replacement

Headspace reading: ~~Not measured~~ / ppm Odor Y (N)

Elevation mark: ~~Yes~~ / Added / Other Well diameter: ~~2-inch~~ / 4-inch / 6-inch / Other

Purge Data

Total well depth	41.92 ft	Top of screen	36.09 ft bgs
Depth to product	ft	Water above screen	(Y) N
Depth to water	25.19 ft	Pump/Tubing Intake Depth	38.5 ft bgs
Casing volume	16.73 ft H_2O X	gpf =	X 3 =

41.67

Casing volumes (GPF): 3/4"=0.02 1"=0.04 2"=0.16 4"=0.65 6"=1.47

Purge Method

Pump type: ~~Peristaltic~~ / Submersible / Bladder / Pneumatic / Other

Purge tubing: New LDPE / New Teflon / Other

Purge start time	1014	Purge stop time	1033	Purge rate	100 mL/m
Refill Timer Setting		Discharge Timer Setting		Pressure Setting	

Field Parameters

Meter used: (YSI) / Hanna / Other

Gallons/mL	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
250	63.2	0.357	1.00	7.67	0.2	28	Clear
500	61.9	0.362	0.49	7.68	0.2	24	"
750	61.7	0.364	0.35	7.67	0.2	12	"
1000	61.7	0.364	0.27	7.69	0.2	6	"
1250	61.7	0.364	0.23	7.71	0.2	1	"
1500	62.0	0.363	0.21	7.70	0.2	0	"
1750	62.4	0.361	0.22	7.71	0.2	-6	"
2000	62.5	0.359	0.21	7.68	0.2	-8	"

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
5	(VOA) / Amber / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y / N
1	VOA / (Amber) / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y / N
3	VOA / Amber / (Poly)	HCL / (None) / Nitric / (Sulfuric) / Other	(Y) N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature Date: 090315

090315

Form G

GROUNDWATER
SAMPLE COLLECTION FORM

Well ID no. DMW-36 | Project name Evonik
Sample no. DMW-36 | Project no. 1122
Date 9/3/15 | Collector SVB

Well Information

Monument condition	☒ Good	☐ Needs repair		
Well cap condition	☒ Good	☐ Locked	☐ Replaced	☐ Needs replacement
Headspace reading	☒ Not measured	_____ ppm		☐ Odor
Elevation mark	☒ Yes	☐ Added	☐ Other	
Well diameter	☐ 2-inch	☐ 4-inch	☒ 6-inch	☐ Other

Purge Data

Total well depth 42.60 ~~28.34~~ ft ☐ Clean bottom ☐ Muddy bottom ☐ Not measured
Depth to product — ft Top of Screen _____ ft bgs Water above Screen Y / N
Depth to water ~~0.90~~ 28.34 ft Pump/Tubing Intake Depth _____ ft
Casing volume 14.26 ft (H_2O) X _____ gpf = _____ X 3 = _____
Casing volumes 3/4"=0.02 gpf 1"=0.04 gpf 2"=0.16 gpf 4"=0.65 gpf 6"= 1.47 gpf
Bladder Pumps: ¼" Tubing purge: 5.3mL/ft + 100mL; 3/8" Tubing purge: 9.5 mL/ft + 500mL

Purge Method

Pump type	☒ Peristaltic	☐ Bladder	☐ Submersible	☐ Other	
Purge tubing	☒ New LDPE	☐ New HDPE	☐ New Teflon	☐ New Tygon	☐ Other
Bailer type	☐ Disposable	☐ Teflon	☐ Stainless	☐ PVC	☐ Other

Purge start time 0903 Purge stop time 0921 Purge rate ~100 mL/min
Refill Timer Setting _____ Discharge Timer Setting _____ Pressure Setting _____ Flow Rate

Field Parameters

Meter used ☐ HYDAC ☐ QED Flow Cell 2.81 ☐ Hanna ☒ Other YSI

Gallons / (mL)	Temp(°F)	Conductivity	DO mg/L	pH	Turbidity	ORP	Comments
250	58.28	0.614	~~0.399~~	7.79	0.399	158.6	clear
500	58.16	0.614	1.77	7.72	0.399	157.7	clear
750	59.05	0.625	0.83	7.38	0408	150.4	clear
1000	58.02	0.630	0.54	7.38	0.410	144.8	clear
1250	57.93	0.633	0.48	7.35	0.413	144.3	clear
1500	57.88	0.653	0.40	7.34	0.425	141.1	clear
1750	57.86	0.655	0.39	7.32	0.426	139.4	clear
2000	57.88	0.655	0.38	7.31	0.426	138.8	clear

Sampling Device

Bailer ☐ Disposable ☐ Stainless ☐ Teflon ☐ Other _____
Filter Type _____ Size _____ (micron) Bailer cord used ☐ Monofillament

Bottles Filled Time 0925

Number	Type			Preservative					Filtration
3	☒ VOA	☐ Amber	☐ Poly	☒ HCL	☐ Nitric	☐ Sulfuric	☐ None	☐ Other	☐ Yes ☒ No
1	☐ VOA	☒ Amber	☐ Poly	☒ HCL	☐ Nitric	☐ Sulfuric	☐ None	☐ Other	☐ Yes ☒ No
	☐ VOA	☐ Amber	☐ Poly	☐ HCL	☐ Nitric	☐ Sulfuric	☐ None	☐ Other	☐ Yes ☐ No
	☐ VOA	☐ Amber	☐ Poly	☐ HCL	☐ Nitric	☐ Sulfuric	☐ None	☐ Other	☐ Yes ☐ No

Comments: _____

Sampler's Signature SVB Date 9/3/15

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no:	DMW-37	Project name:	HH
Sample no:	DMW-37	Project no:	1122
Date:	09-01-15	Sample Time:	1420
		Collector:	

Well Information

Monument condition: (Good) / Needs repair

Well cap condition: (Good) / Locked / Replaced / Needs replacement

Headspace reading: (Not measured) / ppm Odor Y / (N)

Elevation mark: (Yes) / Added / Other Well diameter = 2-inch / 4-inch / (6-inch) / Other

Purge Data

Total well depth	40.00 ft	Top of screen	32.34 ft bgs	4.55	
Depth to product	ft	Water above screen	(Y) / N		
Depth to water	21.79 ft	Pump/Tubing Intake Depth	34.5 ft bgs		
Casing volume	15.21 ft H_2O X	gpf =	X 3 =		
Casing volumes (GPF)	3/4"=0.02	1"=0.04	2"=0.16	4"=0.65	6"=1.47

Purge Method

Pump type: (Peristaltic) / Submersible / Bladder / Pneumatic / Other

Purge tubing: (New LDPE) / New Teflon / Other

Purge start time: 1357 Purge stop time: 1418 Purge rate: 100 mL/m

Refill Timer Setting: Discharge Timer Setting: Pressure Setting:

Field Parameters

Meter used: QED / YSI / Hanna / Other

Gallons/~~gal~~	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
250	67.5	0.451	1.98	8.00	0.3	-36	clear
500	66.6	0.437	0.43	7.80	0.3	-41	"
750	66.7	0.438	0.37	7.74	0.3	-45	"
1000	66.6	0.438	0.30	7.70	0.3	-49	"
1250	66.6	0.437	0.26	7.67	0.3	-53	"
1500	66.9	0.435	0.24	7.65	0.3	-56	"
1750	67.0	0.435	0.22	7.63	0.3	-59	"
2000	66.9	0.435	0.22	7.62	0.3	-61	"

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
3	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
1	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature: Date: 09/01/15

Form G

GROUNDWATER
SAMPLE COLLECTION FORM

Well ID no. DMW-38 | Project name Evaniite
Sample no. DMW-38 | Project no. 1122
Date 9/3/15 | Collector SVB

Well Information

Monument condition	☒ Good	☐ Needs repair		
Well cap condition	☒ Good	☐ Locked	☐ Replaced	☐ Needs replacement
Headspace reading	☒ Not measured	_____ ppm	☐ Odor	
Elevation mark	☒ Yes	☐ Added	☐ Other	
Well diameter	☐ 2-inch	☐ 4-inch	☒ 6-inch	☐ Other

Purge Data

Total well depth 44.92 ft ☐ Clean bottom ☐ Muddy bottom ☐ Not measured
Depth to product ~ ft Top of Screen _____ ft bgs Water above Screen Y / N
Depth to water 30.04 ft Pump/Tubing Intake Depth _____ ft
Casing volume 14.88 ft (H_2O) X _____ gpf = _____ X 3 = _____
Casing volumes 3/4"=0.02 gpf 1"=0.04 gpf 2"=0.16 gpf 4"=0.65 gpf 6"= 1.47 gpf
Bladder Pumps: ¼" Tubing purge: 5.3mL/ft + 100mL; ⅜" Tubing purge: 9.5 mL/ft + 500mL

Purge Method

Pump type	☒ Peristaltic	☐ Bladder	☐ Submersible	☐ Other	
Purge tubing	☒ New LDPE	☐ New HDPE	☐ New Teflon	☐ New Tygon	☐ Other
Bailer type	☐ Disposable	☐ Teflon	☐ Stainless	☐ PVC	☐ Other

Purge start time 0954 Purge stop time 1012 Purge rate ~100 mL/min
Refill Timer Setting _____ Discharge Timer Setting _____ Pressure Setting _____ Flow Rate

Field Parameters

Meter used ☐ HYDAC ☐ QED Flow Cell ☐ Hanna ☒ Other YSI

Gallons / (mL)	Temp(°F)	Conductivity	DO mg/L	pH	Turbidity	ORP	Comments
250	64.30	0.383	2.85	8.08	0.247	158.5	clear
500	63.50	0.376	1.39	7.87	0.244	152.7	clear
750	63.79	0.374	0.75	7.63	0.243	145.1	clear
1000	63.57	0.372	0.60	7.52	0.242	139.6	clear
1250	63.66	0.372	0.50	7.49	0.242	133.5	clear
1500	63.66	0.372	0.45	7.46	0.242	130.1	clear
1750	63.70	0.372	0.43	7.44	0.241	128.0	clear
2000	63.72	0.372	0.42	7.44	0.242	125.6	clear

Sampling Device

Bailer ☐ Disposable ☐ Stainless ☐ Teflon ☐ Other _____
Filter Type _____ Size _____ (micron) Bailer cord used ☐ Monofillament

Bottles Filled Time 1015

Number	Type		Preservative						Filtration	
3	☒ VOA	☐ Amber ☐ Poly	☒ HCL	☐ Nitric	☐ Sulfuric	☐ None	☐ Other		☐ Yes	☒ No
9	☐ VOA	☒ Amber ☐ Poly	☒ HCL	☐ Nitric	☐ Sulfuric	☐ None	☐ Other		☐ Yes	☒ No
	☐ VOA	☐ Amber ☐ Poly	☐ HCL	☐ Nitric	☐ Sulfuric	☐ None	☐ Other		☐ Yes	☐ No
	☐ VOA	☐ Amber ☐ Poly	☐ HCL	☐ Nitric	☐ Sulfuric	☐ None	☐ Other		☐ Yes	☐ No

Comments: _____

Sampler's Signature SVB Date 9/3/15

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no:	MW-34	Project name:	HLV
Sample no:	MW-34	Project no:	1122
Date:	09-02-15	Sample Time:	1051
		Collector:	JM

Well Information

Monument condition: (Good) / Needs repair

Well cap condition: (Good) / Locked / Replaced / Needs replacement

Headspace reading: (Not measured) ppm Odor Y (N)

Elevation mark: (Yes) / Added / Other Well diameter = 2-inch / 4-inch / (6-inch) / Other

Purge Data

Total well depth	45.56 ft	Top of screen	32.90 ft bgs	9.5	
Depth to product	ft	Water above screen	Y / N		
Depth to water	30.74 ft	Pump/Tubing Intake Depth	36 ft bgs		
Casing volume	14.82 ft H_2O X	gpf =	X 3 =		
Casing volumes (GPF)	3/4"=0.02	1"=0.04	2"=0.16	4"=0.65	6"=1.47

Purge Method

Pump type: (Peristaltic) / Submersible / Bladder / Pneumatic / Other

Purge tubing: (New LDPE) / New Teflon / Other

Purge start time 1025 Purge stop time 1046 Purge rate 100 mL/m

Refill Timer Setting Discharge Timer Setting Pressure Setting

Field Parameters

Meter used: (QED) / YSI / Hanna / Other

Gallons/mL	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
250	62.9	0.290	4.06	8.02	0.2	-47	Clear
500	62.1	0.289	5.51	8.14	0.2	-51	"
750	61.5	0.288	5.35	8.22	0.2	-52	"
1000	61.5	0.288	5.32	8.20	0.2	-53	"
1250	61.7	0.289	5.26	8.25	0.2	-53	"
1500	61.9	0.289	5.20	8.30	0.2	-54	"
1750	61.9	0.293	5.17	8.31	0.2	-54	"
2000	62.2	0.287	4.98	8.33	0.2	-53	"

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
5	(VOA) / Amber / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y / N
1	VOA / (Amber) / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y / N
3	VOA / (Amber) / Poly	HCL / (None) / (Nitric) / (Sulfuric) / Other	1 (Y) / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments: TOC, VOC, NA

Sampler's Signature Date: 090215

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no: DMW-3	Project name: Evanite
Sample no: DMW-3	Project no: 1122
Date: 12/14/15 Sample Time: 1542	Collector: SD/SB

Well Information

Monument condition (Good) / Needs repair

Well cap condition (Good) / Locked / Replaced / Needs replacement

Headspace reading ~~Not measured~~ ppm Odor Y / N

Elevation mark Yes / Added / Other Well diameter = 2-inch / 4-inch / (6-inch) / Other

Purge Data

Total well depth 42.10 ft Top of screen _____ ft bgs PUMPING

Depth to product _____ ft Water above screen Y / N

Depth to water 38.95 ft Pump/Tubing Intake Depth _____ ft bgs

Casing volume _____ ft H_2O X _____ gpf = _____ X 3 = _____

Casing volumes (GPF) 3/4"=0.02 1"=0.04 2"=0.16 4"=0.65 6"=1.47

Purge Method

Pump type Peristaltic / Submersible / Bladder / Pneumatic / Other

Purge tubing New LDPE / New Teflon / Other _____

Purge start time _____ Purge stop time _____ Purge rate _____

Refill Timer Setting _____ Discharge Timer Setting _____ Pressure Setting _____

Field Parameters

Meter used QED / (YSI) / Hanna / Other

Gallons/mL	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
	55.45	0.446	1.95	7.77	0.446	27.5	Clear

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
3	(VOA) / Amber / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y / (N)
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature [signature] Date: 12/14/15

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no:	DMW-16	Project name:	Evanite
Sample no:	DMW-16	Project no:	1122
Date:	12/15/15	Sample Time: 1305	Collector: SD/SB

Well Information

Monument condition: (Good) / Needs repair

Well cap condition: Good / Locked / Replaced / Needs replacement

Headspace reading: (Not measured) / ppm Odor Y / (N)

Elevation mark: Yes / Added / Other Well diameter = 2-inch / 4-inch / (6-inch) / Other

Purge Data

Total well depth	43.08 ft	Top of screen	ft bgs			
Depth to product	ft	Water above screen	Y / N			
Depth to water	29.03 ft	Pump/Tubing Intake Depth	ft bgs			
Casing volume	14.05 ft H_2O X	1.47	gpf =	20.65	X 3 =	61.96
Casing volumes (GPF)	3/4"=0.02	1"=0.04	2"=0.16	4"=0.65	6"=1.47	

Purge Method

Pump type: Peristaltic / (Submersible) / Bladder / Pneumatic / Other

Purge tubing: (New LDPE) / New Teflon / Other

Purge start time 1219 Purge stop time 1306 Purge rate 1.5 gpm

Refill Timer Setting Discharge Timer Setting Pressure Setting

Field Parameters

Meter used: QED / (YSI) / Hanna / Other

Gallons/mL	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
1225 10	57.51	0.472	0.59	7.11	0.307	-67.5	clear
1232 20	57.65	0.472	0.20	7.13	0.307	-88.2	" "
1238 30	57.62	0.472	0.14	7.15	0.307	-97.6	" "
1245 40	57.66	0.472	0.10	7.20	0.307	-105.6	" "
1252 51	57.68	0.471	0.07	7.22	0.306	-113.0	" "
1300 62	57.59	0.471	0.06	7.23	0.306	-116.7	" "

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
3	(VOA) / Amber / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y / (N)
2	(VOA) / Amber / Poly	HCL / (None) / Nitric / Sulfuric / Other	Y / (N)
1	VOA / (Amber) / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y / (N)
2	VOA / Amber / (Poly)	HCL / (None) / (Nitric) / Sulfuric / Other	Y / (N)
1	VOA / Amber / (Poly)	HCL / None / (Nitric) / Sulfuric / Other	(Y) / N

Comments:

Sampler's Signature Date: 12/15/15

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no: DMW-17	Project name: Evanite
Sample no: DMW-17	Project no: 1122
Date: 12-15-15 Sample Time: 0920	Collector: SD/SB

Well Information

Monument condition: (Good) / Needs repair

Well cap condition: (Good) / Locked / Replaced / Needs replacement

Headspace reading: (Not measured) / ppm Odor Y / N

Elevation mark: Yes / Added / Other Well diameter = 2-inch / 4-inch / (6-inch) / Other

Purge Data

Total well depth	46.40 ft	Top of screen	ft bgs			
Depth to product	— ft	Water above screen	Y / N			
Depth to water	32.00 ft	Pump/Tubing Intake Depth	ft bgs			
Casing volume	14.40 ft H_2O X	1.47	gpf =	21.17	X 3 =	63.50
Casing volumes (GPF)	3/4"=0.02	1"=0.04	2"=0.16	4"=0.65	6"=1.47	

Purge Method

Pump type: Peristaltic / (Submersible) / Bladder / Pneumatic / Other

Purge tubing: (New LDPE) / New Teflon / Other

Purge start time 0836 Purge stop time 0919 Purge rate 1.5 gpm

Refill Timer Setting Discharge Timer Setting Pressure Setting

Field Parameters

Meter used: QED / (YSI) / Hanna / Other

Gallons/mL	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
11	58.71	0.663	0.48	7.10	0.431	-53.3	clear
22	58.57	0.669	0.22	7.43	0.436	-75.6	" "
33	58.53	0.667	0.14	7.47	0.435	-84.9	" "
44	58.49	0.670	0.10	7.45	0.435	-93.1	" "
55	58.47	0.667	0.09	7.54	0.433	-98.6	" "
65	58.38	0669	0.07	7.63	0.436	-102.9	" "
~~75~~							
~~85~~							

843 851 858 905 912 919

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
3	(VOA) / Amber / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y / (N)
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature Date: 12/15/15

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no:	DMW-23	Project name:	Evanite
Sample no:	DMW-23	Project no:	1122
Date:	12/15/15	Sample Time: 1335	Collector: SD/SB

Well Information

Monument condition: (Good) / Needs repair

Well cap condition: Good / Locked / Replaced / Needs replacement

Headspace reading: (Not measured) ppm Odor Y / N

Elevation mark: Yes / Added / Other Well diameter = 2-inch / (4-inch) / 6-inch / Other

Purge Data

Total well depth: 46.80 ft Top of screen _____ ft bgs PUMPING

Depth to product: — ft Water above screen Y / N

Depth to water: 35.53 ft Pump/Tubing Intake Depth _____ ft bgs

Casing volume: _____ ft H_2O X _____ gpf = _____ X 3 = _____

Casing volumes (GPF): 3/4"=0.02 1"=0.04 2"=0.16 4"=0.65 6"=1.47

Purge Method

Pump type: Peristaltic / Submersible / Bladder / Pneumatic / Other

Purge tubing: New LDPE / New Teflon / Other _____

Purge start time _____ Purge stop time _____ Purge rate _____

Refill Timer Setting _____ Discharge Timer Setting _____ Pressure Setting _____

Field Parameters

Meter used: QED / (YSI) / Hanna / Other

Gallons/mL	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
	56.27	0437	1.89	7.35	0.284	16.7	clear

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

9 bottles

See DMW-16

Number	Type	Preservative	Filtered
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature Scott Sum Date: 12/15/15

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no: DMW-24	Project name: Evanite
Sample no: DMW-24	Project no: 1122
Date: 12/14/15 Sample Time: 1532	Collector: SD/SB

Well Information

Monument condition (Good) / Needs repair _____

Well cap condition (Good) / Locked / Replaced / Needs replacement

Headspace reading (Not measured) / _____ ppm Odor Y / N

Elevation mark Yes / Added / Other Well diameter = 2-inch / (4-inch) / 6-inch / Other

Purge Data

Total well depth 33.48.22 ft Top of screen _____ ft bgs PUMPING

Depth to product _____ ft Water above screen Y / N

Depth to water 34.69 ft Pump/Tubing Intake Depth _____ ft bgs

Casing volume _____ ft H_2O X _____ gpf = _____ X 3 = _____

Casing volumes (GPF) 3/4"=0.02 1"=0.04 2"=0.16 4"=0.65 6"=1.47

Purge Method

Pump type Peristaltic / Submersible / Bladder / Pneumatic / Other

Purge tubing New LDPE / New Teflon / Other _____

Purge start time _____ Purge stop time _____ Purge rate _____

Refill Timer Setting _____ Discharge Timer Setting _____ Pressure Setting _____

Field Parameters

Meter used QED (YSI) / Hanna / Other

Gallons/mL	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
	56.26	0.715	2.28	7.63	0.465	36.8	Clear

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
3	(VOA) / Amber / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y (N)
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature _____ Date: 12/14/15

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no:	DMW-25	Project name:	Evanite
Sample no:	DMW-25	Project no:	1122
Date: 12/15/15	Sample Time: 1202	Collector:	SD/SB

Well Information

Monument condition (Good) / Needs repair _____

Well cap condition (Good) / Locked / Replaced / Needs replacement

Headspace reading (Not measured) / ppm Odor Y / N

Elevation mark (Yes) / Added / Other Well diameter = 2-inch / (4-inch) / 6-inch / Other

Purge Data

Total well depth	46.94 ft	Top of screen	_____ ft bgs				
Depth to product	— ft	Water above screen	Y / N				
Depth to water	30.56 ft	Pump/Tubing Intake Depth	_____ ft bgs				
Casing volume	16.38 ft H_2O X	0.65	gpf =	10.65	X 3 =	31.94	
Casing volumes (GPF)	3/4"=0.02	1"=0.04	2"=0.16	4"=0.65	6"=1.47		

Purge Method

Pump type Peristaltic / (Submersible) / Bladder / Pneumatic / Other

Purge tubing (New LDPE) / New Teflon / Other _____

Purge start time 1140 Purge stop time 1201 Purge rate 1.5 gpm

Refill Timer Setting _____ Discharge Timer Setting _____ Pressure Setting _____

Field Parameters

Meter used QED / (YSI) / Hanna / Other

Gallons/mL	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
1143 5	55.05	0.160	1.25	7.11	0.161	-7.4	clear
1147 10	55.71	0.177	0.50	7.08	0.115	-23.7	clear
1150 15	55.87	0.187	0.36	7.07	0.120	-30.2	" "
1154 21	55.86	0.187	0.29	7.07	0.123	-33.5	" "
1158 26	55.94	0.196	0.26	7.07	0.123	-35.4	" "
1201 32	55.92	0.183	0.25	7.08	0.119	-36.3	" "

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
3	(VOA) / Amber / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y / (N)
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature _____ Date: 12/15/15

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no:	PMW-26	Project name:	Evanite
Sample no:	DMW-26	Project no:	1127
Date:	12/14/15	Sample Time: 1615	Collector: SD KSB

Well Information

Monument condition	(Good) / Needs repair
Well cap condition	(Good) / Locked / Replaced / Needs replacement
Headspace reading	(Not measured) / ppm Odor Y / N
Elevation mark	(Yes) / Added / Other Well diameter = 2-inch / 4-inch / 6-inch / Other

Purge Data

Total well depth	44.84 ft	Top of screen	ft bgs			
Depth to product	– ft	Water above screen	Y / N			
Depth to water	32.81 ft	Pump/Tubing Intake Depth	ft bgs			
Casing volume	12.03 ft H_2O X	(1.47) gpf =	17.68	X 3 =	53.05	
Casing volumes (GPF)	3/4"=0.02	1"=0.04	2"=0.16	4"=0.65	6"=1.47	

Purge Method

Pump type	(Peristaltic) / Submersible / Bladder / Pneumatic / Other		
Purge tubing	(New LDPE) / New Teflon / Other		
Purge start time	~~1558~~ 1606	Purge stop time 1640	Purge rate
Refill Timer Setting		Discharge Timer Setting	Pressure Setting

Field Parameters

Meter used: QED / (YSI) / Hanna / Other

Gallons/(mL)	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
250	51.21	0.482	5.60	7.82	0.303	46.8	Clear
500	51.90	0.448	2.69	7.41	0.291	63.0	" "
750	54.41	0.451	2.80	7.37	0.294	72.2	" "
1000	52.51	0.467	6.70	7.54	0.303	88.6	" "
1250	50.86	0.454	6.18	7.55	0.295	80.2	" "
1500	51.22	0.446	3.51	7.46	0.290	70.0	" "
1750	51.43	0.446	3.01	7.40	0.290	65.1	" "
2000	52.09	0.442	2.75	7.37	0.287	63.6	" "
2250	52.56	0.443	2.63	7.41	0.288	60.4	" "
2500	52.42	0.444	2.50	7.41	0.289	61.3	" "

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
3	(VOA) / Amber / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y / (N)
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments: Air bubbles in line, high DO

Sampler's Signature: [signature] Date: 12/14/15

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no:	DMW-27	Project name:	Granite
Sample no:	DMW-27	Project no:	1122
Date:	12/15/15	Sample Time: 1010	Collector: SD/SB

Well Information

Monument condition: Good / Needs repair

Well cap condition: Good / Locked / Replaced / Needs replacement

Headspace reading: Not measured / ppm Odor Y / N

Elevation mark: Yes / Added / Other Well diameter = 2-inch / 4-inch / 6-inch / Other

Purge Data

Total well depth	46.55 ft	Top of screen	ft bgs		
Depth to product	— ft	Water above screen	Y / N		
Depth to water	28.26 ft	Pump/Tubing Intake Depth	ft bgs		
Casing volume	18.29 ft H_2O X	0.65 gpf =	11.89	X 3 =	35.67
Casing volumes (GPF)	3/4"=0.02	1"=0.04	2"=0.16	4"=0.65	6"=1.47

Purge Method

Pump type: Peristaltic / Submersible / Bladder / Pneumatic / Other

Purge tubing: New LDPE / New Teflon / Other

Purge start time 938 Purge stop time 1009 Purge rate 1.2 gpm

Refill Timer Setting Discharge Timer Setting Pressure Setting

Field Parameters

Meter used: QED / YSI / Hanna / Other

	Gallons/mL	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
943	6	58.66	1.079	0.99	8.41	0.695	11.6	Clear
948	12	59.24	1.091	0.36	7.21	0.721	0.8	" "
953	18	58.93	1.145	0.26	7.16	0.745	-3.6	" "
958	24	60.13	1.191	0.20	7.04	0.774	-6.9	" "
1003	30	60.67	1.207	0.18	6.94	0.784	-8.7	" "
1009	35	60.96	1.217	0.15	6.79	0.791	-13.2	" "

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
3	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature: Date: 12/15/15

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no:	DMW-28	Project name:	Corona 1115
Sample no:	DMW-28	Project no:	1122
Date:	12/15/15	Sample Time: 1106	Collector: SD / SB

Well Information

Monument condition: (Good) / Needs repair

Well cap condition: (Good) / Locked / Replaced / Needs replacement

Headspace reading: (Not measured) ppm Odor Y / N

Elevation mark: Yes / Added / Other Well diameter = 2-inch / (4-inch) / 6-inch / Other

Purge Data

Total well depth	48.67 ft	Top of screen	ft bgs			
Depth to product	— ft	Water above screen	Y / N			
Depth to water	28.12 ft	Pump/Tubing Intake Depth	ft bgs			
Casing volume	19.95 ft H_2O X	0.65 gpf =	12.97	X 3 =	38.90	
Casing volumes (GPF)	3/4"=0.02	1"=0.04	2"=0.16	4"=0.65	6"=1.47	

Purge Method

Pump type: Peristaltic / (Submersible) / Bladder / Pneumatic / Other

Purge tubing: (New LDPE) / New Teflon / Other

Purge start time: 1037 Purge stop time: 1105 Purge rate: 1.5 gpm

Refill Timer Setting: Discharge Timer Setting: Pressure Setting:

Field Parameters

Meter used: QED / YSI / Hanna / Other

Gallons/mL	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
1041 6	59.60	0.788	1.03	7.27	0.512	85.0	Clear
1046 13	59.76	0.788	0.30	7.09	0.512	21.1	" "
1050 20	59.78	0.788	0.20	7.05	0.512	-7.7	" "
1056 26	59.80	0.788	0.14	7.04	0.513	-21.8	" "
1101 34	59.73	0.788	0.11	7.03	0.513	-39.5	" "
1105 40	59.81	0.788	0.09	7.04	0.513	-46.3	" "

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
3	(VOA) / Amber / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y / (N)
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature: Date: 12/15/16

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no: DMW-29	Project name: Evanite
Sample no: DMW-29	Project no: 1122
Date: 12/14/15 Sample Time: 1742	Collector: SD/SB

Well Information

Monument condition (Good) / Needs repair _____

Well cap condition (Good) / Locked / Replaced / Needs replacement

Headspace reading Not measured ppm Odor Y / N

Elevation mark Yes / Added / Other Well diameter = 2-inch / (4-inch) / 6-inch / Other

Purge Data

Total well depth 42.85 ~~28.96~~ ft Top of screen _____ ft bgs PUMPING

Depth to product _____ ft Water above screen Y / N

Depth to water 33.77 ft Pump/Tubing Intake Depth _____ ft bgs

Casing volume ~~9.08~~ ft H_2O X _____ gpf = _____ X 3 = _____

Casing volumes (GPF) 3/4"=0.02 1"=0.04 2"=0.16 4"=0.65 6"=1.47

Purge Method

Pump type Peristaltic / Submersible / Bladder / Pneumatic / Other

Purge tubing New LDPE / New Teflon / Other _____

Purge start time _____ Purge stop time _____ Purge rate _____

Refill Timer Setting _____ Discharge Timer Setting _____ Pressure Setting _____

Field Parameters

Meter used QED / (YSI) / Hanna / Other

Gallons/mL	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
	58.86	0.476	1.85	7.76	0.310	41.5	Clear

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
3	(VOA) / Amber / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y (N)
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature _____ Date: 12/14/15

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no: DMW-30	Project name: Evanite
Sample no: DMW-30	Project no: 1122
Date: 12/14/15 Sample Time: 1729	Collector: SD/SB

Well Information

Monument condition: (Good) / Needs repair

Well cap condition: (Good) / Locked / Replaced / Needs replacement

Headspace reading: (Not measured) / ppm Odor Y / N

Elevation mark: (Yes) / Added / Other Well diameter = 2-inch / (4-inch) / 6-inch / Other

Purge Data

Total well depth	45.55 ft	Top of screen	ft bgs			
Depth to product	— ft	Water above screen	Y / N			
Depth to water	28.34 ft	Pump/Tubing Intake Depth	ft bgs			
Casing volume	17.21 ft H_2O X	0.65	gpf =	11.19	X 3 =	33.56
Casing volumes (GPF)	3/4"=0.02	1"=0.04	2"=0.16	4"=0.65	6"=1.47	

Purge Method

Pump type: (Peristaltic) / Submersible / Bladder / Pneumatic / Other

Purge tubing: (New LDPE) / New Teflon / Other

Purge start time 1708 Purge stop time 1728 Purge rate 117.5

Refill Timer Setting Discharge Timer Setting Pressure Setting

Field Parameters

Meter used: QED / (YSI) / Hanna / Other

Gallons/ml	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
250	54.07	0.540	1.98	7.68	0.352	16.0	Clear
500	54.58	0.547	1.07	7.64	0.356	-13.2	" "
750	54.65	0.550	0.68	7.59	0.357	-25.5	" "
1000	54.56	0.550	0.57	7.57	0.358	-28.0	" "
1250	54.88	0.550	0.49	7.55	0.357	-45.1	" "
1500	55.00	0.548	0.45	7.55	0.358	-49.5	" "
1750	55.06	0.550	0.42	7.54	0.358	-59.3	" "
2000	55.03	0.551	0.40	7.54	0.358	-61.9	" "
2250	54.99	0.550	0.39	7.54	0.358	-64.8	" "

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
3	(VOA) / Amber / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y / (N)
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature Date: 12/14/15

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no: TMW-32	Project name: Evanite
Sample no: TMW-32	Project no: 1122
Date: 12-14-15 Sample Time: 1518	Collector: SD / SB

Well Information

Monument condition: (Good) / Needs repair

Well cap condition: (Good) / Locked / Replaced / Needs replacement

Headspace reading: (Not measured) / ppm Odor Y / N

Elevation mark: (Yes) / Added / Other Well diameter = 2-inch / (4-inch) / 6-inch / Other

Purge Data

Total well depth	34.88 ft	Top of screen	ft bgs			
Depth to product	— ft	Water above screen	Y / N			
Depth to water	24.73 ft	Pump/Tubing Intake Depth	ft bgs			
Casing volume	10.15 ft H_2O X	0.65	gpf =	6.60	X 3 =	19.80
Casing volumes (GPF)	3/4"=0.02	1"=0.04	2"=0.16	4"=0.65	6"=1.47	

Purge Method

Pump type: (Peristaltic) / Submersible / Bladder / Pneumatic / Other

Purge tubing: (New LDPE) / New Teflon / Other

Purge start time 1458 Purge stop time 1518 Purge rate 137.50

Refill Timer Setting Discharge Timer Setting Pressure Setting

Field Parameters

Meter used: QED / (YSI) / Hanna / Other

Gallons/mL	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
250	54.91	0.753	3.24	7.04	0.499	-15.8	Clear
500	55.84	0.779	1.22	7.17	0.507	-75.5	"
750	55.90	0.781	0.92	7.19	0.508	-103.8	"
1000	55.82	0.780	0.82	7.18	0.508	-119.9	"
1250	55.62	0.781	0.75	7.16	0.507	-128.2	"
1500	55.75	0.780	0.65	7.15	0.506	-133.9	"
1750	55.65	0.777	0.57	7.13	0.505	-135.8	"
2000	55.80	0.776	0.52	7.13	0.505	-139.1	"
2250	55.63	0.778	0.47	7.12	0.506	-142.3	"
2500	55.69	0.778	0.46	7.12	0.507	-142.2	"
2750	55.50	0.779	0.44	7.12	0.506	-143.6	"

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
3	(VOA) / Amber / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y (N)
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature Date: 12/14/15

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no: DMW-32	Project name: Evanite
Sample no: DMW-32	Project no: 1122
Date: 12/16/15 Sample Time: 1120	Collector: SD/SB

Well Information

Monument condition: (Good) / Needs repair

Well cap condition: (Good) / Locked / Replaced / Needs replacement

Headspace reading: ~~Not measured~~ / ppm Odor Y / N

Elevation mark: (Yes) / Added / Other Well diameter = 2-inch / 4-inch / (6-inch) / Other

Purge Data

Total well depth	42.32 ft	Top of screen	ft bgs			
Depth to product	— ft	Water above screen	Y / N			
Depth to water	25.29 ft	Pump/Tubing Intake Depth	ft bgs			
Casing volume	17.03 ft H_2O X	1.47	gpf =	25.03	X 3 =	75.10
Casing volumes (GPF)	3/4"=0.02	1"=0.04	2"=0.16	4"=0.65	6"=1.47	

Purge Method

Pump type: (Peristaltic) / Submersible / Bladder / Pneumatic / Other

Purge tubing: (New LDPE) / New Teflon / Other

Purge start time 1059 Purge stop time 1118 Purge rate 118.4 mL/min

Refill Timer Setting Discharge Timer Setting Pressure Setting

Field Parameters

Meter used: QED (YSI) / Hanna / Other

Gallons/mL	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
250	55.88	0.805	2.91	7.54	0.524	-31.0	clear
500	56.09	0.812	1.42	7.48	0.528	-50.3	" "
750	55.99	0.815	0.83	7.38	0.530	-65.1	" "
1000	56.21	0.815	0.66	7.34	0.530	-73.8	" "
1250	55.90	0.813	0.58	7.30	0.528	-77.7	" "
1500	55.62	0.813	0.50	7.28	0.529	-82.9	" "
1750	55.79	0.815	0.42	7.26	0.530	-87.5	" "
2000	55.67	0.815	0.40	7.25	0.530	-89.2	" "
2250	55.42	0.815	0.37	7.24	0.530	-90.5	" "

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

9 bottles see DMW-16

Comments:

Sampler's Signature Date:

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no: DMW-36	Project name: Evanite
Sample no: DMW-36	Project no: 1122
Date: 12/14/15 Sample Time: 1218	Collector: SD/SB

Well Information

Monument condition (Good) / Needs repair _____

Well cap condition (Good) / Locked / Replaced / Needs replacement

Headspace reading (Not measured) / ppm Odor Y / N

Elevation mark (Yes) / Added / Other Well diameter = 2-inch / 4-inch / (6-inch) / Other

Purge Data

Total well depth 42.6 ft Top of screen _____ ft bgs

Depth to product — ft Water above screen Y / N

Depth to water 28.43 ft Pump/Tubing Intake Depth _____ ft bgs

Casing volume 14.17 ft H_2O X 1.47 gpf = 20.83 X 3 = 62.49

Casing volumes (GPF) 3/4"=0.02 1"=0.04 2"=0.16 4"=0.65 6"=1.47

Purge Method

Pump type (Peristaltic) / Submersible / Bladder / Pneumatic / Other

Purge tubing (New LDPE) / New Teflon / Other _____

Purge start time 1153 Purge stop time 1212 Purge rate _____

Refill Timer Setting _____ Discharge Timer Setting _____ Pressure Setting _____

Field Parameters

Meter used QED (YSI) Hanna / Other

Gallons (ml)	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
250	54.69	0.581	1.65	7.88	0.378	-39.9	clear
500	54.72	0.578	0.93	7.74	0.376	-55.8	clear
750	54.75	0.582	0.64	7.62	0.378	-67.9	clear
1000	54.74	0.579	0.55	7.57	0.377	-73.5	clear
1250	54.88	0.581	0.47	7.52	0.377	-78.0	clear
1500	55.11	0.581	0.40	7.49	0.377	-81.7	clear
1750	55.17	0.579	0.39	7.48	0.377	-82.9	clear
2000	55.20	0.581	0.38	7.47	0.378	-84.9	clear

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

9 bottles see DMW-12

Comments:

Sampler's Signature SB Date: 12/16/15

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no: DMW-37	Project name: Evanite
Sample no: DMW-37	Project no: 1172
Date: 12/16/15 Sample Time: 945	Collector: SD / SB

Well Information

Monument condition (Good) / Needs repair _____

Well cap condition (Good) / Locked / Replaced / Needs replacement

Headspace reading (Not measured) / _____ ppm Odor Y / N

Elevation mark (Yes) / Added / Other Well diameter = 2-inch / 4-inch / (6-inch) / Other

Purge Data

Total well depth _____ ft Top of screen _____ ft bgs

Depth to product _____ ft Water above screen Y / N

Depth to water 24.27 ft Pump/Tubing Intake Depth _____ ft bgs

Casing volume _____ ft H_2O X _____ gpf = _____ X 3 = _____

Casing volumes (GPF) 3/4"=0.02 1"=0.04 2"=0.16 4"=0.65 6"=1.47

Purge Method

Pump type (Peristaltic) / Submersible / Bladder / Pneumatic / Other

Purge tubing (New LDPE) / New Teflon / Other _____

Purge start time 0926 Purge stop time 0941 Purge rate 133.3 mL/min

Refill Timer Setting _____ Discharge Timer Setting _____ Pressure Setting _____

Field Parameters

Meter used QED / YSI / Hanna / Other

Gallons/mL	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
250	53.86	0.491	2.70	7.54	0.321	-27.6	clear
500	53.56	0.498	1.06	7.55	0.324	-56.0	" "
750	53.39	0.500	0.74	7.51	0.326	-72.5	" "
1000	53.37	0.500	0.60	7.48	0.325	-81.7	" "
1250	53.51	0.500	0.55	7.47	0.325	-85.1	" "
1500	53.25	0.499	0.50	7.46	0.324	-88.4	" "
1750	53.43	0.500	0.47	7.44	0.325	-91.2	" "
2000	53.38	0.500	0.45	7.44	0.325	-92.7	" "

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
9 bottles see DMW-10	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature _____ Date: 12/16/15

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no: DMW-38	Project name: Evonik
Sample no: DMW-38	Project no: 1127
Date: 12/16/15 Sample Time: 1036	Collector: SD/SB

Well Information

Monument condition: (Good) / Needs repair _____

Well cap condition: (Good) / Locked / Replaced / Needs replacement

Headspace reading: (Not measured) / _____ ppm Odor Y / (N)

Elevation mark: (Yes) / Added / Other Well diameter = 2-inch / 4-inch / (6-inch) / Other

Purge Data

Total well depth	44.92 ft	Top of screen _____ ft bgs					
Depth to product	— ft	Water above screen Y / N					
Depth to water	27.34 ft	Pump/Tubing Intake Depth _____ ft bgs					
Casing volume	17.58 ft H_2O X	1.47	gpf =	25.84	X 3 =	77.52	
Casing volumes (GPF)		3/4"=0.02	1"=0.04	2"=0.16	4"=0.65	6"=1.47	

Purge Method

Pump type: (Peristaltic) / Submersible / Bladder / Pneumatic / Other

Purge tubing: (New LDPE) / New Teflon / Other _____

Purge start time 1012 Purge stop time 1031 Purge rate 105.3 mL/min

Refill Timer Setting _____ Discharge Timer Setting _____ Pressure Setting _____

Field Parameters

Meter used: QED / YSI / Hanna / Other

Gallons/mL	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
250	54.82	0.480	2.23	7.77	0.313	-54.2	clear
500	54.44	0.483	1.11	7.68	0.314	-72.8	" "
750	53.23	0.481	0.76	7.54	0.313	-85.1	" "
1000	52.69	0.482	0.67	7.48	0.314	-90.8	" "
1250	52.69	0.480	0.53	7.41	0.312	-96.4	" "
1500	53.02	0.481	0.49	7.39	0.313	-96.6	" "
1750	52.71	0.481	0.47	7.38	0.312	-100.5	" "
2000	53.26	0.480	0.44	7.37	0.312	-101.8	" "

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

9 bottles see DMW-16

Number	Type	Preservative	Filtered
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature [signature] Date: 12/16/15

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no: DMW-39	Project name: Evanite
Sample no: DMW-39	Project no: 1122
Date: 12/16/15 Sample Time: 0905	Collector: SD / SB

Well Information

Monument condition: (Good) / Needs repair

Well cap condition: (Good) / Locked / Replaced / Needs replacement

Headspace reading: (Not measured) / ppm Odor Y / N

Elevation mark: (Yes) / Added / Other Well diameter = 2-inch / 4-inch / (6-inch) / Other

Purge Data

Total well depth	45.56 ft	Top of screen	ft bgs			
Depth to product	— ft	Water above screen	Y / N			
Depth to water	19.97 ft	Pump/Tubing Intake Depth	ft bgs			
Casing volume	25.59 ft H_2O X	1.47 gpf =	37.62	X 3 =	112.85	
Casing volumes (GPF)	3/4"=0.02	1"=0.04	2"=0.16	4"=0.65	6"=1.47	

Purge Method

Pump type: (Peristaltic) / Submersible / Bladder / Pneumatic / Other

Purge tubing: (New LDPE) / New Teflon / Other

Purge start time 843 Purge stop time 0900 Purge rate 285.7 mL/min

Refill Timer Setting Discharge Timer Setting Pressure Setting

Field Parameters

Meter used: QED / (YSI) / Hanna / Other

Gallons/mL	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
250	54.08	0.257	7.61	8.09	0.167	-25.4	clear
500	53.98	0.257	~~7.88~~ 3.22	7.84	0.168	-8.5	" "
750	54.15	0.262	2.73	7.70	0.170	-6.4	" "
1000	54.14	0.264	2.59	7.61	0.172	-3.8	" "
1250	54.60	0.262	2.44	7.52	0.171	1.1	" "
1500	54.58	0.264	2.43	7.48	0.172	2.2	" "
1750	54.53	0.258	2.41	7.46	0.167	4.7	" "
2000	54.80	0.254	2.45	7.44	0.165	6.4	" "

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
9 Bottles	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
See DMW-16	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature: Date: 12/16/15

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no: IMW-40	Project name: Evanite
Sample no: IMW-40	Project no: 1127
Date: 12-14-2015 Sample Time: 1445	Collector: SD/SB

Well Information

Monument condition (Good) / Needs repair _____

Well cap condition (Good) / Locked / Replaced / Needs replacement

Headspace reading (Not measured) / _____ ppm Odor Y / N

Elevation mark (Yes) / Added / Other Well diameter = 2-inch / (4-inch) / 6-inch / Other

Purge Data

Total well depth	30.08	ft	Top of screen	_____	ft bgs	
Depth to product	—	ft	Water above screen	Y / N		
Depth to water	24.04	ft	Pump/Tubing Intake Depth	_____	ft bgs	
Casing volume	6.04	ft H_2O X	0.65	gpf =	3.93	X 3 = 11.80
Casing volumes (GPF)		3/4"=0.02	1"=0.04	2"=0.16	4"=0.65	6"=1.47

Purge Method

Pump type (Peristaltic) / Submersible / Bladder / Pneumatic / Other

Purge tubing (New LDPE) / New Teflon / Other _____

Purge start time 1424 Purge stop time 1442 Purge rate 111 mL/min

Refill Timer Setting _____ Discharge Timer Setting _____ Pressure Setting _____

Field Parameters

Meter used QED (YSI) / Hanna / Other

Gallons/mL	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
250	55.66	0.121	4.77	8.35	0.078	0.5	Clear
500	56.38	0.116	2.13	8.42	0.076	-4.8	" "
750	56.05	0.115	1.76	8.47	0.075	-6.3	" "
1000	56.00	0.115	1.56	8.47	0.075	-4.3	" "
1250	55.87	0.115	1.48	8.42	0.075	-1.2	" "
1500	56.27	0.115	1.44	8.38	0.075	-1.3	" "
1750	56.35	0.115	1.44	8.32	0.075	-3.2	" "
2000	56.13	0.115	1.44	8.28	0.075	2.3	" "

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
3	(VOA) / Amber / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y / (N)
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature _____ Date: 12-14-15

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no: DMW-40	Project name: Granite
Sample no: DMW-40	Project no: 1122
Date: 12-14-2015 Sample Time: 1414	Collector: SD / SB

Well Information

Monument condition (Good) / Needs repair

Well cap condition (Good) / Locked / Replaced / Needs replacement

Headspace reading (Not measured) ppm Odor Y / N

Elevation mark (Yes) / Added / Other Well diameter = 2-inch / (4-inch) / 6-inch / Other

Purge Data

Total well depth 42.14 ~~45.55~~ 50 ft Top of screen _____ ft bgs

Depth to product NA ft Water above screen Y / N

Depth to water 24.76 ft Pump/Tubing Intake Depth _____ ft bgs

Casing volume 17.38 ft H_2O X 0.65 gpf = 11.30 X 3 = 33.90

Casing volumes (GPF) 3/4"=0.02 1"=0.04 2"=0.16 4"=0.65 6"=1.47

Purge Method

Pump type (Peristaltic) / Submersible / Bladder / Pneumatic / Other

Purge tubing (New LDPE) / New Teflon / Other

Purge start time 1354 Purge stop time 1411 Purge rate 132 mL/min

Refill Timer Setting Discharge Timer Setting Pressure Setting

Field Parameters

Meter used QED (YSI) Hanna / Other

Gallons/(mL)	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
250	57.46	0.428	2.15	8.89	0.277	3.0	Clear
500	57.79	0.421	1.37	8.67	0.273	-11.9	" "
750	58.28	0.416	0.86	8.34	0.271	-23.9	" "
1000	58.89	0.417	0.67	8.21	0.271	-42.5	" "
1250	58.44	0.421	0.59	8.11	0.274	-53.3	" "
1500	58.26	0.423	0.52	8.03	0.274	-59.3	" "
1750	58.30	0.421	0.46	7.95	0.274	-60.5	" "
2000	58.48	0.421	0.43	7.91	0.274	-63.5	" "
2250	58.50	0.424	0.42	7.89	0.275	-59.7	" "

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
3	(VOA) / Amber / Poly	(HCL) / None / Nitric / Sulfuric / Other	Y / (N)
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature [signature] Date: 12-14-15

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no: DMW-41 (MW-99)		Project name: Evanik	
Sample no: DMW-41 MW-99		Project no: 1122	
Date: 12/16/15	Sample Time: 1354 (1356)	Collector: SD/SB	

Well Information

Monument condition	Good / Needs repair
Well cap condition	Good / Locked / Replaced / Needs replacement
Headspace reading	Not measured / ppm Odor Y / N
Elevation mark	Yes / Added / Other Well diameter = 2-inch / 4-inch / 6-inch / Other

Purge Data

Total well depth	46.35 ft	Top of screen	ft bgs				
Depth to product	— ft	Water above screen	Y / N				
Depth to water	27.29 ft	Pump/Tubing Intake Depth	ft bgs				
Casing volume	19.06 ft H_2O X	0.65	gpf =	12.39	X 3 =	37.17	
Casing volumes (GPF)	3/4"=0.02	1"=0.04	2"=0.16	4"=0.65	6"=1.47		

Purge Method

Pump type	Peristaltic / Submersible / Bladder / Pneumatic / Other		
Purge tubing	New LDPE / New Teflon / Other		
Purge start time 1329	Purge stop time	Purge rate	
Refill Timer Setting	Discharge Timer Setting	Pressure Setting	

Field Parameters

Meter used: QED / YSI / Hanna / Other

Gallons/ml	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
250	56.43	0.468	2.39	7.83	0.305	-23.0	clear
500	56.51	0.468	1.27	7.72	0.304	-35.2	" "
750	56.57	0.468	0.91	7.66	0.304	-36.5	" "
1000	56.51	0.468	0.73	7.60	0.304	-39.3	" "
1250	56.52	0.468	0.68	7.56	0.304	-46.8	" "
1500	56.60	0.467	0.55	7.55	0.304	-51.4	" "
1750	56.61	0.467	0.51	7.52	0.304	-49.9	" "
2000	56.63	0.468	0.51	7.51	0.304	-49.6	" "

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

9 bottles see DMW-16

Number	Type	Preservative	Filtered
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature Date:

GROUNDWATER SAMPLE COLLECTION FORM

PNG Environmental, Inc.

Well ID no: DMW-42		Project name: Evoqua	
Sample no: DMW-42		Project no: 1122	
Date: 12/16/15	Sample Time: 1307	Collector: SB / SD	

Well Information

Monument condition: (Good) / Needs repair

Well cap condition: (Good) / Locked / Replaced / Needs replacement

Headspace reading: Not measured / ppm Odor Y / N

Elevation mark: (Yes) / Added / Other Well diameter = 2-inch / (4-inch) / 6-inch / Other

Purge Data

Total well depth	38.71 ft	Top of screen	ft bgs			
Depth to product	— ft	Water above screen	Y / N			
Depth to water	25.51 ft	Pump/Tubing Intake Depth	ft bgs			
Casing volume	13.20 ft H_2O X	0.65	gpf =	8.58	X 3 =	25.7
Casing volumes (GPF)	3/4"=0.02	1"=0.04	2"=0.16	4"=0.65	6"=1.47	

Purge Method

Pump type: (Peristaltic) / Submersible / Bladder / Pneumatic / Other

Purge tubing: (New LDPE) / New Teflon / Other

Purge start time 1243 Purge stop time 1301 Purge rate 111.1 mL/min

Refill Timer Setting Discharge Timer Setting Pressure Setting

Field Parameters

Meter used: QED / (YSI) / Hanna / Other

Gallons/(mL)	Temp (°F)	Conductivity (µS/cm)	DO (mg/L)	pH St units	Turbidity (NTU)	ORP mV	Comments
250	57.44	0.469	1.86	7.86	0.305	-98.1	clear
500	57.82	0.470	0.97	7.69	0.306	-114.8	" "
750	58.00	0.470	0.66	7.60	0.306	-128.1	" "
1000	58.07	0.471	0.52	7.55	0.306	-133.0	" "
1250	58.10	0.470	0.44	7.52	0.305	-137.7	" "
1500	58.13	0.469	0.42	7.50	0.305	-139.2	" "
1750	58.16	0.469	0.38	7.48	0.305	-140.8	
2000	58.18	0.469	0.37	7.47	0.305	-146.8	

Ferrous Iron (mg/L): Total / Dissolved

Sample Containers

Number	Type	Preservative	Filtered
7 bottles see DMW-16	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N
	VOA / Amber / Poly	HCL / None / Nitric / Sulfuric / Other	Y / N

Comments:

Sampler's Signature Date: 12/16/15