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January 15, 2015

Mr. Sean Boyles
NC Department of Environment and Natural Resources
Division of Waste Management-Superfund Section
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Submitted by electronic mail

Re: Progress Report for 3rd and 4th Quarters 2014
Former Abbott Labs Facility, Solvent Release Incident
Laurinburg, Scotland County, North Carolina
NCDENR DWM Site #NONCD-000-0040

Dear Mr. Boyles:

ERM NC, Inc. (ERM), on behalf of Abbott Laboratories (Abbott), is pleased to submit the report *Progress Report for 3rd and 4th Quarters 2014: Groundwater Monitoring and Annual Remediation Effectiveness Evaluation* for the above-referenced site. An electronic version (pdf file) of the subject report is enclosed with this transmittal letter.

The current Progress Report provides data and results of the second 2014 semi-annual groundwater sampling event conducted at the site in November 2014. Additionally, this Progress Report also includes the annual remediation effectiveness evaluation.

For the pending April 2015 groundwater sampling event, Abbott proposes to follow the sampling program that was used for the April 2014 sampling event with respect to laboratory analysis of VOCs and alkalinity at specified wells. Abbott will also analyze groundwater for total organic carbon and for methane at several discretionary locations to be determined.

As described in Section 5.2 of the enclosed report, Abbott will also collect groundwater samples using passive diffusion bags (PDBs) that were installed at four test wells (MW-102C, MW-104C, MW-16D, and MW-19D) during the November 2014 sampling event. NCDENR verbally approved use of PDBs on a trial basis for the upcoming April 2015 event. One of the four PDB test wells will also be concurrently sampled using conventional low-flow purging/pumping techniques to compare the VOC results obtained using both sampling methods.

Please contact either of us at 919-233-4501 with any questions regarding this report.

Sincerely,

S. Grant Watkins

Grant Watkins, P.G., RSM
Partner

Gregory Kanellis

Gregory Kanellis
Project Manager

Attachment: *Progress Report for 3rd and 4th Quarters 2014*

Professional Certification Page

Progress Report for 3rd and 4th Quarters 2014: Groundwater Monitoring and Annual Remediation Effectiveness Evaluation
Former Abbott Facility
Solvent Release Remediation
Laurinburg, Scotland County, North Carolina

Case # NOCD 000 0040
January 2015

"I certify that, to the best of my knowledge, after thorough investigation, the information contained in or accompanying this certification is true, accurate, and complete."

Mr. Curtis R. Michols
Senior Principal Specialist
Abbott Laboratories

1/7/2015

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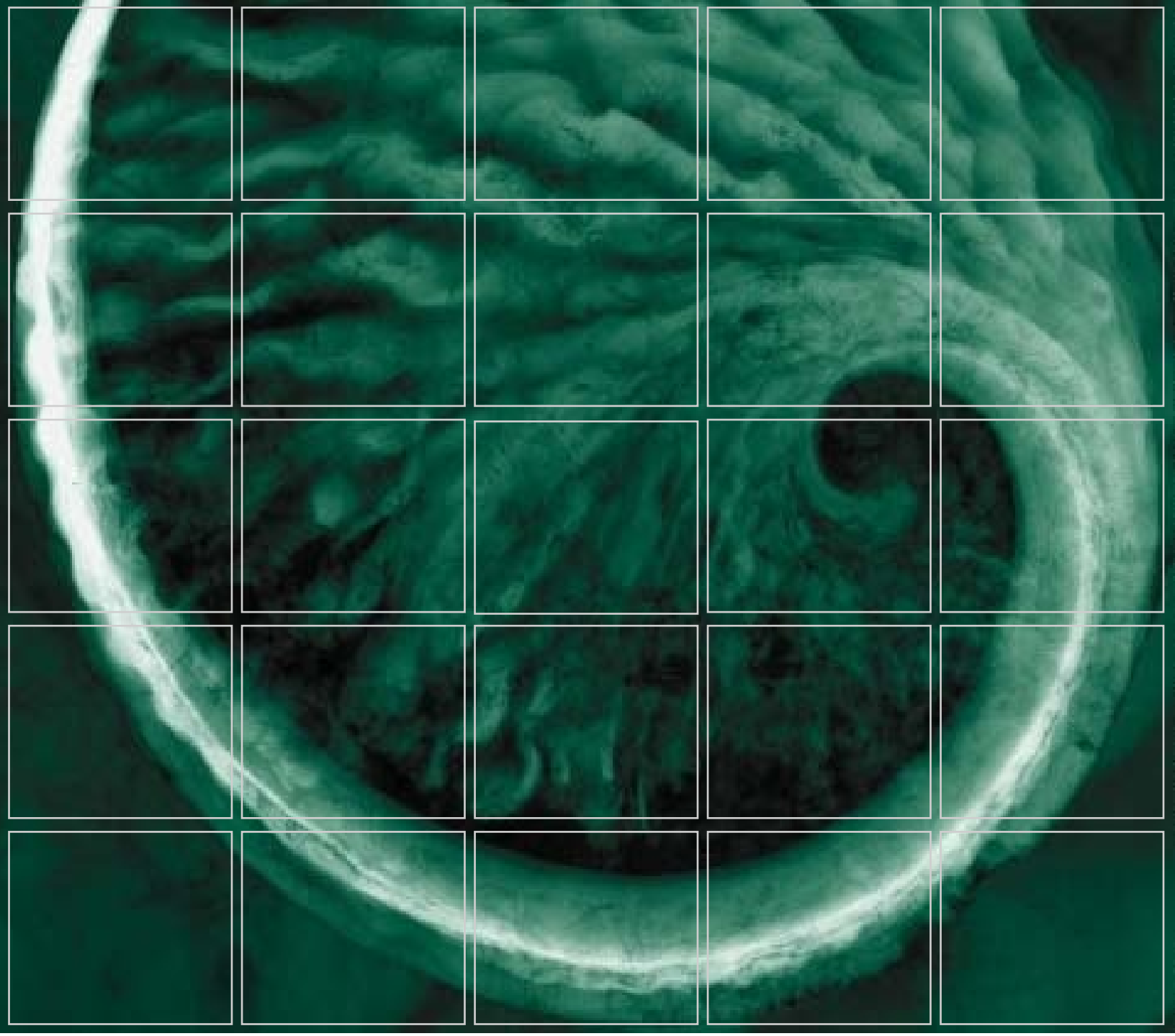
S. Grant Watkins
Mr. S. Grant Watkins, P.G., RSM
Principal in Charge
ERM NC, Inc.

MAYNARD L. JEANNIS
Notary Public
Wake Co., North Carolina
My Commission Expires May 5, 2019

1/13/2015



Abbott Laboratories

Progress Report for 3rd and 4th Quarters 2014: Groundwater Monitoring and Annual Remediation Effectiveness Evaluation

Former Abbott Facility
Solvent Release Remediation
NCDENR ID: NONCD-000-0040
Laurinburg, Scotland County, North Carolina

Delivering sustainable solutions in a more competitive world

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Abbott Laboratories

Progress Report for 3rd and 4th Quarters 2014: Groundwater Monitoring and Annual Remediation Effectiveness Evaluation

Former Abbott Facility
Solvent Release Remediation
NCDENR ID: NONCD-000-0040
Laurinburg, Scotland County, North Carolina

January 2015

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List of Acronyms

Abbott	Abbott Laboratories
AbbVie	AbbVie Global Environment, Health, and Safety Laboratory
ABC®	Anaerobic Biochem
Accutest	Accutest Laboratories
AECOM	AECOM North Carolina, Inc.
AFCEE	Air Force Center for Environmental Excellence
AOC	Administrative Order on Consent
bgs	below ground surface
COC	contaminant of concern
DCA	1,1-dichloroethane
DCE	1, 2-dichloroethene
DHB	dehalobacter
DHC	dehalococcoides spp.
DNAPL	dense nonaqueous phase liquid
DO	dissolved oxygen
DWM	Division of Waste Management
EPA	United States Environmental Protection Agency
ERM	ERM NC, Inc.
Freon 113	trichlorotrifluoroethane
HRC®	Hydrogen Release Compound®
Matrix	Matrix Environmental Southeast, Inc.
MEE	methane/ethane/ethene
MEK	methyl ethyl ketone
mg/L	milligrams per liter
MMPE	mobile multi-phase extraction
MNA	monitored natural attenuation
MOB	methane oxidizing bacteria
mV	millivolts
NCDENR	North Carolina Department of Environment and Natural Resources
ORP	oxidation-reduction potential
PCE	perchloroethene
Phoenix	Phoenix Environmental Associates, Inc.
PVC	polyvinyl chloride
RAP	Remedial Action Plan
RI	remedial investigation
SU	standard units
TCA	trichloroethane
TCE	trichloroethene
TEAP	terminal electron-accepting process
TIC	tentatively identified compound
TOC	total organic carbon
VC	vinyl chloride
VOC	volatile organic compound
µg/L	micrograms per liter
2L Standards	North Carolina Administrative Code Title 15A, Subchapter 2L Groundwater Quality Standards

1.0 INTRODUCTION

This Progress Report presents results of the second 2014 semi-annual groundwater monitoring event conducted by ERM NC, Inc. (ERM) on behalf of Abbott Laboratories (Abbott) for the solvent release incident at the Former Abbott facility located at 16000 Joy Street in Laurinburg, Scotland County, North Carolina (the "Site"). The Site is managed by the North Carolina Department of Environment and Natural Resources (NCDENR) Division of Waste Management (DWM) Superfund Section, Inactive Hazardous Sites Branch (IHSB).

The second 2014 semi-annual groundwater sampling event was conducted on November 11-13, 2014. This report addresses both the monitoring results for the 3rd and 4th quarters of 2014 and the annual remediation effectiveness evaluation for the ongoing groundwater remediation program. Abbott is performing the groundwater monitoring program as part of an ongoing in-situ bioremediation remedy at the Site.

Prior to October 2010, groundwater monitoring programs for the solvent release incident were conducted in accordance with the *Phase II Preconstruction Report Addendum* (Phoenix Environmental Associates, Inc. [Phoenix], 2006) and the modified sampling plans in the approved *Remedial Action Plan Amendment* 2 (Phoenix, 2008). The October 2010 and subsequent semi-annual groundwater sampling events were performed according to the modified sampling plan found in the *Preconstruction Report: Supplemental Organic Substrate Injections to Enhance Groundwater Bioremediation* (2010 Preconstruction Report) (AECOM, 2010a). Minor modifications to the sampling program have been proposed in subsequent semi-annual reports and approved by NCDENR.

The November 2014 groundwater monitoring event included the sampling and analysis of groundwater from 24 Site monitoring wells used to monitor the solvent plume. ERM followed the proposed sampling plan described in the June 24, 2014 transmittal letter to NCDENR. This was generally the same plan as the October 2013 event with exceptions made for the discretionary bio-geochemical analyses.

1.1 SITE DESCRIPTION AND BACKGROUND

The former Abbott facility is located on approximately 51 acres of land at the northeast intersection of U.S. Highway 401 and U.S. Highway 15-501 in Laurinburg, Scotland County, North Carolina (Figure 1-1). The current property infrastructure includes a main plant building, warehouse, several smaller support buildings and adjacent parking lots and service roads. The facility was constructed by Abbott on agricultural land in 1969 (Radian, 1993). Figure 1-2 shows a site plan with locations of existing monitoring wells, buildings, and other Site features.

From 1970 to June 2002, Abbott used the facility to manufacture medical devices for their Hospital Products Division. Medical devices manufactured at the facility included polyvinyl chloride (PVC) tubing and adapters that were used for intravenous drug

administration and health maintenance equipment. The manufacturing process included injection molding of PVC and other plastics, parts washing, parts assembly, packaging, and ethylene oxide sterilization. Chemicals used in the manufacturing process included cyclohexanone, methyl ethyl ketone (MEK); toluene; acetone; 1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113); di(2-ethylhexyl) phthalate; xylene; and various chlorinated volatile organic compounds such as trichloroethene (TCE) and methylene chloride. As part of their facility operations, Abbott also operated a solvent evaporation pit at the Site from 1970 through 1976. Solvents, including TCE, were disposed of in the pit located north of the main plant building (Radian, 1993).

Abbott ceased manufacturing operations in June 2002 and donated the Site property to Scotland County that same year. Scotland County then sold the facility to Marketta, LLC. QualPak (a business division of GOJO, Inc.), was the most recent operator of the facility under the Marketta ownership. QualPak previously used the facility to manufacture, package, and store alcohol-based hand sanitizer products. In July 2010 Marketta obtained a Brownfields Agreement with the NCDENR for the Site property. The QualPak facility was then shut down in late 2011.

Marketta, LLC transferred ownership of the Site property to Connelly Springs Road, LLC on December 18, 2013. Subsequently, on July 25, 2014 the property was transferred from Connelly Springs Road, LLC to the current owner of the property, John & Jeff Schwarz, LLC. The main manufacturing plant building has remained vacant since late 2011 when QualPak ceased operations and shuttered the facility. However, the remote warehouses on the east side of the property have maintained a commercial lease tenant for several years.

1.2 HISTORICAL REMEDIAL INVESTIGATIONS

Abbott notified the NCDENR-DWM Superfund Section of the solvent evaporation pit in 1989. Following this notification, Abbott entered into a regulatory order and conducted a series of investigations as follows:

- March-August, 1990: Abbott completed the initial phases of site investigation for the solvent pit during three separate field deployments. The first deployment in March 1990 confirmed soil and groundwater contamination at the solvent pit, including dense non-aqueous phase liquid (DNAPL) solvents. The second field deployment started in May 1990 and third deployment occurred in July 1990 (Radian, 1990).
- April 1991: Abbott entered into an Administrative Order on Consent (AOC) with the NCDENR on April 16, 1991. The AOC required Abbott to complete a remedial investigation (RI) and to develop and implement a Remedial Action Plan (RAP).
- June 1991 to November 1992: Abbott continues with the RI process that was initiated in 1990. A RI Work Plan was submitted and additional site investigation and private water well and receptor surveys were completed.

- February 1993: Abbott submits the comprehensive RI report to NCDENR to summarize the investigation results from 1990 through 1992. The RI identified groundwater impacted with dissolved volatile organic compounds (VOCs) extending from the solvent pit area to the southern portion of the facility. Solvent DNAPL and light (floating) NAPL were identified in the aquifer near the disposal pit. The RI results also identified soils impacted by VOCs in an area surrounding the former evaporation waste pit. Chemicals detected in soil and groundwater around the disposal pit included TCE, acetone, MEK, methylene chloride, 1, 2-dichloroethene (DCE), trichlorotrifluoroethane (Freon 113), toluene, 1,1,1-trichloroethane (TCA), and bis-(2-ethylhexyl) phthalate (Radian, 1993).
- September 2000 to September 2001: Supplemental site investigations are conducted around the former evaporation pit area and to support an in-situ bioremediation pilot test (Radian, 2001; URS, 2001).
- November 2009 to February 2010: AECOM conducted a pre-design supplemental investigation of soil and groundwater at the Site prior to additional bioremediation injections. The primary objective of the supplemental investigation was to further define the vertical and horizontal distribution of the remaining VOC mass and 'hot spots' that required additional, focused treatment. The investigation also included further delineation of the dissolved VOC plume in groundwater near the southwest corner of the Site property boundary. Results of the supplemental investigation were presented in the *Supplemental Subsurface Investigation Report* (AECOM, 2010b).
- May 2012 to April 2013: AECOM performed two rounds of soil gas sampling, once in May 2012 and again in April 2013, to support a vapor intrusion investigation beneath the main plant building. Results of each soil gas sampling event and vapor intrusion evaluation were presented to the NCDENR in individual letter reports (AECOM, 2012a; AECOM, 2013b). The findings indicated that current soil gas VOC concentrations did not pose an unacceptable vapor intrusion exposure risk, and no further vapor intrusion evaluations were recommended.

Work plans were developed for submittal to NCDENR and approved by the agency prior to conducting each phase of the RI and supplemental sampling programs from 1991 through 2013.

1.3 HISTORICAL REMEDIAL ACTIONS (1994-2010)

Abbott has developed and implemented several phases of site remediation and cleanup strategies since 1994. These remedial actions have been documented in past reports submitted to the NCDENR. Multiple technologies have been applied to remediate soils and groundwater to date. Initial remediation technologies applied to soil and groundwater at the Site from 1994 to 2002 used physical recovery, containment, and in situ volatilization methods.

Beginning in 2002, Abbott changed their remediation strategy for impacted groundwater and initiated an in situ bioremediation program. The bioremediation program was later supported by adding a monitored natural attenuation (MNA) component to the remediation plan. The current, ongoing remediation strategy is a continuation of the bioremediation and MNA monitoring program that began in 2002.

Details of the historical remedial actions and their results prior to October 2010 were previously summarized in the Work Plan for Supplemental Subsurface Investigation and Remedial Actions (AECOM, 2009) and in the Progress Report for 3rd and 4th Quarters 2009: Groundwater Monitoring and Annual Remediation Effectiveness Evaluation (AECOM, 2010c). These reports, as well as the historical documents, should be consulted for details of the past remediation activities at the Site. The major phases of historical remedial actions, their associated reports and their results are briefly discussed in the following chronology.

- Remedial Action Plan (1994): Radian Engineering, Inc. and RUST Environment and Infrastructure developed an initial remediation plan and submitted the *Remedial Action Plan* (RUST, 1994) report in August 1994. The RAP specified use of an innovative in situ mixing and volatilization tool (i.e., the MecTool™) for the solvent disposal pit source area soil and shallow groundwater, combined with multi-phase vacuum extraction technology for the shallow groundwater plume and conventional groundwater extraction and treatment for the deeper plume. The MecTool™ in situ mixing/volatilization process was used at the waste pit area from August 1995 to January 1996. The groundwater recovery systems operated from 1993 until 2006 (Phoenix, 2006). Abbott also began separate free product removal efforts at wells MW-100A and MW-101A using a mobile multi-phase extraction (MMPE) system. Free product removal with MMPE occurred in 2004 (two events) and in 2006.
- Remedial Action Plan Amendment (2002): Matrix Environmental Southeast, Inc. (Matrix), submitted a *Remedial Action Plan Amendment* (Matrix, 2002) report to NCDENR in June 2002. The RAP Amendment proposed in situ anaerobic bioremediation via reductive dechlorination processes, discontinuation of the groundwater extraction and treatment in the north yard source area, and continued short-term operation of the south yard groundwater extraction system. Hydrogen Release Compound® (HRC®) was proposed in the RAP Amendment as the organic substrate for the bioremediation program (Matrix, 2002). Three phases of HRC® injections were conducted, beginning with an initial injection event (Phase I) at the waste pit source area in November 2002. Two additional HRC® injection events occurred, one in June 2004 and the third in September 2006. The final (third) injection event was accompanied by shutdown of the south yard groundwater extraction system. The final HRC® injection event and the subsequent semi-annual groundwater monitoring program were performed in accordance with the Phase II Preconstruction Report Addendum (Phoenix, 2006).

- Remedial Action Plan Amendment No. 2 (2008): In April 2008, Phoenix submitted the *Remedial Action Plan Amendment 2: Solvent Release Remediation* (Phoenix, 2008) (RAP Amendment 2) report to NCDENR. The report summarized the effectiveness of ongoing bioremediation programs, and included contaminant fate and transport modeling analysis of the remaining TCE plume. A modified plan for continued bioremediation and MNA of VOCs in groundwater was selected based on the modeling results. A contingency remedy was included that specified additional HRC® enhanced bioremediation should the progress of the MNA remediation deviate from the plume model predictions (Phoenix, 2008). This remedial action contingency allowed additional engineered bioremediation to be initiated in the future on an as-needed basis.
- 2010 Preconstruction Report (2010): AECOM prepared the *Preconstruction Report: Supplemental Organic Substrate Injections to Enhance Groundwater Bioremediation* (AECOM, 2010a) and submitted it to the NCDENR in September 2010. The 2010 Preconstruction Report provided a detailed plan and design basis for additional electron donor (i.e., organic substrate) injections to continue the bioremediation enhancements, as allowed under the RAP Amendment 2 (Phoenix, 2008). Supplemental injections of the organic substrate Anaerobic Biochem (ABC®) occurred from October 15, 2010 to November 1, 2010 to enhance and accelerate the ongoing groundwater bioremediation program. Additionally, a bioaugmentation pilot study was initiated by performing limited injections of RTB-1, a proprietary culture of Dehalococcoides spp. (DHC) dechlorinating microbes, into the aquifer upgradient of the MW-102 well cluster.

The October to November 2010 ABC® electron donor injections were the last engineered remediation enhancements used at the Site. Performance monitoring of the ongoing bioremediation and MNA processes has continued since that time.

1.4 Groundwater Remediation and Monitoring Programs

The 2010 Preconstruction Report also presented a Performance Monitoring and Evaluation Plan, which included a short-term monitoring plan and changes and updates to the Site-wide groundwater monitoring program. The NCDENR approved the revised groundwater monitoring plan presented in the 2010 Preconstruction Report, which superseded the prior monitoring plan from the approved RAP Amendment 2. The October 2010 groundwater sampling event was the first semi-annual sampling event to follow the revised groundwater monitoring plan, and included the collection of baseline performance monitoring data prior to the supplemental injections of ABC® organic substrate.

As specified in the 2010 Preconstruction Report monitoring plan, four post-injection pilot test groundwater sampling events were conducted following the supplemental ABC® injections in 2010. In addition, eight regularly scheduled semi-annual groundwater sampling events (April 2011, October 2011, May 2012, November 2012, May 2013, October 2013, April 2014, and November 2014) have been conducted and the results submitted in semi-annual reports (AECOM, 2011a; AECOM, 2011b; AECOM,

2012b; AECOM, 2013a; AECOM, 2013b; AECOM, 2014a). Data from each of these sampling events are summarized in this Progress Report and collectively represent performance results for a four-year period following the supplemental ABC® injections.

1.4.1 Current Groundwater Monitoring Program

Prior to the ABC® injections and the October 2010 sampling event, two semi-annual groundwater monitoring events were performed each year. The groundwater monitoring plan in the 2010 Preconstruction Report specified continuing the semi-annual sampling and reporting schedule for one additional year, through the end of 2011. The plan proposed changes to the analytical parameters and/or sampling frequency for certain wells sampled during the semi-annual monitoring events.

The groundwater sampling program was modified again in 2012 as specified in the July 31, 2012 letter and Table A-1 of the 1st 2012 Progress Report (AECOM, 2012b). With NCDENR's approval of the modified sampling plan, laboratory analysis of alkalinity, field analysis of ferrous iron and carbon dioxide, and free product gauging was suspended beginning with the November 2012 sampling event. Additionally, the 2012 modified sampling plan allowed future discretionary analysis of other bio-geochemical parameters such as metabolic acids, methane/ethane/ethane (MEE), and microbial speciation analyses.

Following the completion of each groundwater monitoring event, the monitoring plan is evaluated and, if needed, changes are proposed to NCDENR. The most recent modifications to the groundwater monitoring plan were described in the June 24, 2014 cover letter to NCDENR that accompanied the submittal of the 1st 2014 semi-annual Progress Report. Currently, the monitored analytical parameters include VOCs, total organic carbon (TOC), VOC tentatively identified compounds (TICs), and chloride collected at specified wells and sampling events. None of the discretionary parameter analyses were performed during the November 2014 sampling event.

Figure 1-2 presents a Site plan with the locations of the existing Abbott monitoring well network. To demonstrate the progress of historical and ongoing remediation the former waste pit solvent plume, groundwater sampling is conducted at 24 of the existing 27 monitoring wells. Three additional monitoring wells that are not sampled are currently used only for water level gauging. Table 1-1 lists the 27 existing solvent plume monitoring wells and summarizes their construction information.

Table 1-2 summarizes the semi-annual groundwater monitoring program sampling and analysis plan that was followed for the November 2014 event. The November 2014 sampling event represents the thirteenth semi-annual groundwater sampling event that has occurred since the submittal of the RAP Amendment 2 and the ninth since the submittal of the 2010 Preconstruction Report. The current November 2014 semi-annual sampling event represents 12 years of groundwater monitoring data since the in situ bioremediation remedy was first implemented at the Site. The current groundwater sampling event also represents the four-year (Month 49) sampling event that followed the October 2010 ABC® injections.

2.0 GROUNDWATER SAMPLING METHODS

This section describes the sampling program and methods used during the November 2014 semi-annual groundwater monitoring event. The proposed November 2014 sampling plan was presented to NCDENR in the June 24, 2014 transmittal letter for the *Progress Report for 1st and 2nd Quarters 2014* (AECOM, 2014b). The plan proposed to follow the same sampling program that was used for the October 2013 monitoring event, with discretionary allowances for analyses of biogeochemical parameters.

A summary of the November 2014 sampling program is provided in Table 1-2. Groundwater sampling results are discussed in Section 3.0.

2.1 GROUNDWATER MONITORING PROGRAM

The Second 2014 (3rd and 4th Quarters 2014) semi-annual groundwater monitoring event was conducted on November 11-13, 2014 by ERM. Groundwater was sampled at 24 of the 27 active solvent plume Site monitoring wells. Additionally, two blind duplicate samples and three trip blank samples were submitted.

Each of the groundwater samples (including the two duplicates) and the trip blanks was analyzed for VOCs by United States Environmental Protection Agency (EPA) Method 8260B. As done in the prior October 2013 sampling event (and proposed in the June 24, 2014 letter to NCDENR), a select set of groundwater samples were also analyzed for VOC TICs by EPA Method 8260B, TOC by EPA Method SM5310B, and total chloride by EPA Method 300/SW846 9056A.

Samples for VOC and VOC TIC analyses were sent to AbbVie (formerly Abbott Laboratories) Global Environment, Health, and Safety Laboratory (AbbVie), which is a North Carolina-certified analytical laboratory based in Abbott Park, Illinois. AbbVie subcontracted the laboratory analyses to TestAmerica Laboratories, Inc. (TestAmerica), which is also a North Carolina-certified analytical laboratory based in University Park, Illinois. TOC and chloride analyses were performed by Accutest Laboratories (Accutest), a North Carolina-certified analytical laboratory based in Orlando, Florida.

Groundwater levels were gauged at each of the 27 active Site solvent plume wells during the first day of the semi-annual groundwater monitoring event (November 11, 2014). Table 2-1 summarizes the depth to water measurements and groundwater elevations in Site monitoring wells.

The field water quality indicator parameters of temperature, pH, specific conductance, dissolved oxygen (DO), oxidation-reduction potential (ORP), and turbidity were measured during the purging process in each well sampled during the sampling events. Table 2-2 summarizes field water quality measurements from each sampling event that occurred during the past four years from October 2010 through the current November 2014 semi-annual sampling event. Although not tested during the November 2014

event, historical field measurements of ferrous iron and carbon dioxide concentrations (using a HACH® portable kit) are also included in Table 2-2.

Table 2-3 summarizes historical results for the geochemical parameters of TOC, alkalinity, sulfate, chloride, total iron, ferrous iron, total manganese, dissolved hydrogen, and MEE that were analyzed on select groundwater samples during the October 2010 to November 2014 time period. With the exception of TOC, alkalinity, and chloride, other biogeochemical parameters are analyzed by Abbott on an infrequent, discretionary basis.

The field generated sample collection records for the November 2014 sampling event are included in Appendix A. Laboratory analytical reports for the November 2014 sampling event are found in Appendix B.

2.2 SAMPLING PROCEDURES

Groundwater sampling procedures were performed in accordance with the EPA Region IV Science and Ecosystem Support Division Field Branches Quality System and Technical Procedures protocols. These general protocols and the sampling program specified in the June 24, 2014 update letter to NCDENR were followed.

Each well was purged and sampled using low-flow techniques. A peristaltic pump and new polyethylene tubing were used to purge and sample each well. The wells were considered sufficiently purged when measurements of groundwater temperature, pH, specific conductance, DO, and ORP were stable. Field parameters were considered stable if consecutive measurements were within 10 percent of the previous well volume measurements.

Groundwater samples were collected in a sequence from locations with the lowest to highest VOC concentrations, as determined from past analytical data. A groundwater sample collection record was prepared for each well sampled. Sample containers were labeled in the field and a chain-of-custody form was completed. Samples were stored on ice in laboratory supplied coolers pending delivery to the labs.

2.2.1 Decontamination and Containment Procedures

Non-disposable sampling equipment was thoroughly decontaminated with a dilute, phosphate-free soap/water solution prior to fieldwork and between monitoring wells to prevent cross-contamination. Decontamination water and water generated during the purging of monitoring wells were temporarily contained in 5-gallon buckets and transferred to 55-gallon drums staged on-site, pending off-site transport and disposal at a permitted facility.

2.2.2 Quality Control/Quality Assurance Procedures

Field sampling activities were documented on individual groundwater sampling records and in a field log book. The samples collected on November 11-13, 2014 were appropriately labeled, stored in sample containers on ice, and delivered to AbbVie and

Accutest in good condition and properly preserved. AbbVie subcontracted the laboratory analyses to TestAmerica. TestAmerica processed VOC samples and reported the results under lab project number 500-87930-1. Accutest processed the remaining samples and reported the results under lab project number FA19973.

Blind field duplicates (112014-GW-DUP01 & 112014-GW-DUP02) were collected for primary sample MW-10D and MW-102B, respectively, and analyzed for VOCs by EPA Method 8260B for quality assurance and field precision. Three trip blanks (Trip Blank 1, Trip Blank 2 and Trip Blank 3) were submitted with the coolers containing water samples for VOC analyses.

Water quality meters were calibrated in the field each day before collecting samples.

3.0 GROUNDWATER MONITORING RESULTS

This section presents results of both the current (November 2014) groundwater monitoring event and long term analytical trends. During the November 2014 monitoring event, the discretionary analyses for organic metabolic acids, microbial speciations, dissolved hydrogen, alkalinity, MEE, iron (total and ferrous), manganese, carbon dioxide, and sulfate were not conducted. In these cases, the historical bio-geochemical data are presented herein by reference to illustrate bioremediation processes and trends.

3.1 GROUNDWATER FLOW AND HYDROLOGY

Water level measurements collected on November 11, 2014 are listed in Table 2-1. These data were used to prepare groundwater potentiometric flow maps for the shallow and deep aquifer units. Groundwater potentiometric elevations and equipotential contours for the shallow aquifer unit (i.e., the upper 30 feet of the water table aquifer) on November 11, 2014 are presented in Figure 3-1. This groundwater flow map represents data from the shallow "A" labeled monitoring wells, although data from several very shallow "B" labeled wells are also included to represent the same hydrostratigraphic aquifer unit.

The potentiometric map in Figure 3-1 indicates that shallow groundwater flow in the upper 30 feet of the water table aquifer was generally toward the south-southeast in November 2014, consistent with prior semi-annual observations. A reoccurring depression in groundwater elevation around MW-101A was again observed in November 2014. The current MW-101A elevation data appears to be an anomaly and has been disregarded in the interpretation of current groundwater flow in the vicinity of that well.

Figure 3-2 shows a potentiometric map that represents groundwater levels in wells screened in the deeper aquifer zones, at depths greater than 30 feet bgs but less than 78 feet bgs. These data include the deeper "B" wells and each of the "C" and "D" labeled monitoring wells. Groundwater flow in the deeper hydrostratigraphic units was predominantly toward the south in November 2014, which is consistent with the October 2013 and November 2012 monitoring events. However, deep groundwater flow can also be toward the southwest as observed during the October 2011 even or multi-directional toward the southeast, south and southwest (October 2010 event).

Overall the November 2014 groundwater elevations were approximately 2 feet lower than those observed during the October 2013 sampling event and approximately 1 foot lower than the November 2012 sampling event. However, the November 2014 groundwater elevations were approximately 4 to 5 feet lower than those observed during the October 2010 and October 2011 gauging events. The slight change in seasonal groundwater flow direction during the current and previous groundwater monitoring events may be a result of the water table fluctuations. Based on

groundwater elevations measured on November 11, 2014, downward vertical gradients were present at the majority of the multilevel well clusters.

3.2 GROUNDWATER VOLATILE ORGANIC COMPOUND ANALYTICAL RESULTS

Groundwater samples were collected from 24 Site monitoring wells on November 11-13, 2014. Analytical VOC results for the November 2014 sampling event are summarized in Table 3-1. Laboratory analytical reports for the November 2014 sampling event are included as Appendix B.

Table 3-1 also includes four years of VOC data since the October 2010 (pre-ABC® injection) baseline sampling event for comparison. These combined data sets represent four full years of performance monitoring, from October 2010 through November 2014, inclusive of pre-injection and post-injection VOC results.

3.2.1 Volatile Organic Compounds in Groundwater

Groundwater analytical results for VOCs were compared to the current North Carolina Administrative Code Title 15A, Subchapter 2L Groundwater Quality Standards (2L Standards; revised effective April 1, 2013). As summarized in Table 3-1, during the November 2014 sampling event the following twelve VOCs were detected in groundwater above their respective 2L standard at one or more monitoring wells: perchloroethene (PCE); TCE; 1,1-dichloroethene (DCE); cis-1,2-DCE; vinyl chloride (VC); 1,1,1-TCA; 1,1-dichloroethane (DCA); 1,2-DCA; benzene; chloroform; methylene chloride; and toluene. The VOCs detected at concentrations above their respective 2L Standard were found in the wells listed below (see Table 3-1 for concentrations):

- PCE: MW-102B and MW-102C
- TCE: MW-100A; MW-100B; MW-101A; MW-101B; MW-102C; MW-103A; MW-103B; MW-103C; MW-104B; and MW-104C
- Cis-1,2-DCE: MW-100A; MW-100B; MW-101B; MW-102B; MW-102C; MW-103A; MW-103B; MW-103C; and MW-104A
- VC: MW-100A, MW-100B; MW-102B; MW-104A; MW-104B; MW-104C; MW-10D (duplicate); and MW-19D
- 1,1,1-TCA: MW-100A and MW-100B
- 1,1-DCA: MW-100A and MW-100B
- 1,2-DCA: MW-100A, MW-100B, MW-104A, and MW-19D
- Benzene: MW-100A and MW-100B
- Chloroform: MW-100A and MW-100B
- Methylene Chloride: MW-100A, MW-100B and MW-102C
- Toluene: MW-100A, MW-100B and MW-102C

Other VOCs, including trans-1,2-DCE, acetone, ethylbenzene, methyl-tert butyl ether, xylene, Freon 12 and Freon 113, were detected above the laboratory detection limits at one or more wells, but the concentrations were below their respective 2L Standards. Freon 113, toluene, TCE, and cis-1,2-DCE were detected at off-site deep well MW-18D at concentrations below their 2L Standards.

Historical concentrations of VOCs in groundwater are tabulated in Appendix C.

3.2.2 Trichloroethene Distribution in Groundwater

TCE is the predominant contaminant of concern (COC) for remediation in Site groundwater. This is based on its historically elevated concentrations, its widespread occurrence and its relatively low 2L Standard compared to the other groundwater COCs. Historically, TCE has had the largest numbers and frequencies of concentrations that exceed the 2L Standard compared to other VOCs in Site groundwater. During the November 2014 sampling event, TCE was detected at concentrations above its 2L Standard of 3.0 micrograms per liter (µg/L) in groundwater samples collected from ten wells (Table 3-1).

Concentrations of TCE in groundwater collected from shallow "A" and "B" wells screened <30 feet bgs are shown on Figure 3-3 as a TCE isoconcentration plume map for November 2014. This map illustrates that the shallow TCE plume in groundwater currently extends approximately 450 feet south from the waste pit source area and is not found off-site at detectable concentrations in the shallow hydrostratigraphic zone. The outer extent of the shallow TCE plume has not changed significantly in the past few years, indicating that the dissolved plume remains stable and is not expanding in the shallow aquifer units. TCE concentrations have been declining steadily in shallow groundwater at the northern source areas that underwent enhanced biodegradation treatment.

TCE concentrations in groundwater samples collected from intermediate and deep wells (>30 feet bgs) during the November 2014 sampling event are shown on Figure 3-4. The TCE plume in deeper aquifer strata migrates generally toward the south away from the former disposal pit area, and then appears to turn toward the southwest near the southern Site property boundary. The anomalous shape of the deeper TCE plume has been previously documented and its potential causes attributed to lithology-controlled preferential flow paths and/or interpretations of the plume's lateral and vertical distribution that could be influenced by variations in the screened intervals of the existing deeper wells (AECOM, 2013a; AECOM, 2014a).

Historical data from off-site well MW-18D confirm that since the late 1990's TCE had previously migrated off-site in deeper groundwater toward the south at very low concentrations, detected below either the 2L Standard or below detection limits (which are also below the TCE 2L Standard). Additionally, the continued absence of detectable TCE at well MW-105C demonstrates that the deeper (i.e., less than 65 feet bgs) TCE plume is not migrating off-site in the southwest direction.

The TCE biodegradation daughter products cis-1,2-DCE and VC were also detected in groundwater samples above their respective 2L Standards. In November 2014, VC was detected above its 2L Standard in eight wells and cis-1,2-DCE exceeded its 2L standard at nine wells. The degradation compound 1,1-DCE was detected above the 2L Standard limit in groundwater at three wells. 1,1-DCE is formed by either halorespiration (biological dechlorination) of TCE or by abiotic degradation of TCA.

3.3 Trends for Trichloroethene and Daughter Products

Concentrations of TCE and its dechlorination daughter products have shown the largest changes in wells closest to the source area. Large variations were observed after the ABC® injection program was performed in October 2010. A comparison of short-term (i.e., one year or less) and long-term concentration changes in TCE and its daughter products are provided below and discussed in more detail in Section 4 of this report. Appendix D presents concentration trend graphs for TCE, cis-1,2-DCE and vinyl chloride in the source area wells from November 2002 through November 2014.

3.3.1 Trichloroethene

A summary of the short-term and long-term TCE concentration trends that have resulted since the bioremediation program was initiated in 2002 are provided below. The historical concentrations data tables (Appendix C) and the concentration trend graphs (Appendix D) should be referenced for more details.

- Long-term TCE concentrations in groundwater have been reduced by more than 99.5 percent in each of the source area well clusters MW-100A/B and MW101A/B since the bioremediation program was initiated in 2002. The greatest long-term TCE reduction of 99.997 percent is observed at monitoring well MW-101A, where the concentration has been reduced from 390,000 µg/L in October 2002 to 12 µg/L in November 2014.
- On a short-term basis, TCE has declined 99.97 percent at MW-101A (from 44,000 µg/L in October 2010 to 12 µg/L) during the four-year period following the ABC® injections. At well MW-101B, the short-term TCE concentrations have declined from 4,500 µg/L (pre-injection; October 2010) to 40 µg/L in November 2014. Well cluster MW-101A/B is located in an area downgradient of the former solvent disposal pit that historically had measurable free phase product.
- TCE concentrations have remained below the 2L Standard in well MW-102A for the past four years. At well MW-102B, the TCE concentration has declined two orders of magnitude following the ABC® injections and has remained below the 2L Standard since May 2012.
- The highest current concentration of TCE (8,300 µg/L) occurs at well MW-102C. TCE concentrations initially quadrupled at this well during the first year after the ABC® injections (through October 2011). However, the concentrations have since declined and are currently at pre-injection concentrations.

- TCE concentrations have remained relatively stable in the mid-plume MW-103 well cluster. Outside of the source area, TCE concentrations have generally remained stable and below 2L Standards, with the exception of MW-104B and MW-104C. TCE concentrations in these two wells remain slightly above 2L Standards but have generally declined since concentrations peaked in or before October 2008.
- In well MW-19D, TCE has remained below the 2L Standard since October 2013.

Short-term fluctuations in TCE concentrations and biodegradation rates were evident following the 2010 ABC® injections. TCE concentrations in well MW-100A initially increased the first ten months following the October 2010 ABC® injections, as expected due to matrix desorption effects (AECOM, 2013a; AECOM, 2014a). By May 2012, however, TCE had decreased by an order of magnitude at MW-100A. The TCE concentrations have further declined at MW-100A are now approximately one-third of the May 2012 concentration. A similar trend was observed in well MW-100B, where TCE concentrations increased five-fold immediately after the injections followed by a steady decline to below pre-injection (October 2010) baseline levels.

3.3.2 Trichloroethene Daughter Products

The VOC cis-1,2-DCE is produced as TCE undergoes reductive dechlorination, and cis-1,2-DCE can be further dechlorinated to VC. Production of cis-1,2-DCE is expected as one line of evidence that TCE is undergoing biological reductive dechlorination.

Concentrations of the daughter products cis-1,2-DCE and VC have fluctuated by well location, well depth, and seasonally. As previously documented, elevated reporting limits for trans-1,2-DCE and VC have prevented consistent detection of these two compounds, making it difficult to ascertain their potential trends in the source area wells (AECOM, 2014a). A summary of the short-term and long-term cis-1,2-DCE, VC and other daughter VOC concentration trends and other observations that have resulted from the bioremediation program is provided below.

- In the MW-100A/B well cluster, cis-1,2-DCE concentrations appear to fluctuate seasonally. Current concentrations of cis-1,2-DCE in the MW-100A/B well cluster are now below the maximum values observed following the ABC® injection program.
- Cis-1,2-DCE concentrations in MW-101A peaked one month post-injection (December 2010) and in MW-102B at six months post-injection (April 2011), followed by declines to below pre-injection levels. Cis-1,2-DCE concentrations have generally declined in wells MW-101B and MW-104A since the injections.
- In wells MW-101A and MW-104B, the cis-1,2-DCE concentrations have declined to below the 2L Standard.
- Concentrations of cis-1,2-DCE are increasing in well MW-102C (from 25,000 µg/L in October 2010 to 41,000 µg/L in November 2014). In the remaining

source area wells, cis-1,2-DCE concentrations are relatively stable or decreasing. The changes in cis-1,2-DCE at MW-102C closely correlate to TCE trends in this well.

- The VOC trans-1,2-DCE was detected above the 2L Standard in wells MW-100A, MW-100B, and MW-102C in August 2011 (10 months post-injection); reporting limits or detected concentrations of trans-1,2-DCE have been below the detected peaks since then.
- VC was first detected in MW-100A and MW-100B in April 2011 (6 months post-injection). When above the reporting limits, VC concentrations in these wells appear relatively stable. VC has been consistently been detected in well MW-104A, though concentrations have remained consistent since the pre-injection sampling event.
- Molar concentration trend plots of TCE, cis-1,2-DCE, and vinyl chloride for selected wells are included in Appendix D. In general, the molar mass trends in each well were controlled largely by changes in cis-1,2-DCE concentrations.
- TCE daughter product concentrations in the mid-plume and perimeter wells have remained relatively constant for the past year. With the exception of VC in MW-19D (detected at 1 µg/L) and MW-10D (detected at 0.6 µg/L), no TCE daughter products or other chlorinated ethenes exceeded their 2L Standard in the on-site and off-site wells south of the Main Plant Building.

The molar mass calculations and high concentrations of cis-1,2-DCE relative to TCE concentrations in some of the source area wells suggest that the increases in cis-1,2-DCE were not caused entirely by the reductive dehalogenation of existing dissolved TCE. Matrix desorption of contaminant mass and increased solubility of cis-1,2-DCE is suspected due to the strong co-solvent properties of the injected ABC® product. Maximum molar masses in the source area wells were observed in April 2011 (MW-100A) and November 2012 (MW-100B and MW-102C), which suggests that either the solubility of cis-1,2-DCE is decreasing as subsurface conditions return to pre-injection levels or the residual contaminant mass has largely been desorbed and is now available for further degradation.

The mid-plume monitoring well clusters MW-103 and MW-104 also have relatively stable cis-1,2-DCE and VC concentrations. Stable VOC (including TCE) concentrations at the mid-plume well clusters indicate that the plume is biodegrading and attenuating at a rate sufficient to overcome the downgradient migration that would otherwise have occurred due to the temporary, post-injection increases of VOCs in the source area.

3.4 Post-Injection Trends of Other Volatile Organic Compounds

Concentrations of other VOCs in source area well clusters (MW-100, MW-101, MW-102, and MW-103) have varied by well location and depth since the ABC® injections were completed in November 2010. Of particular interest are the compounds 1,1,1-TCA, methylene chloride, toluene, and Freon 113. Trends of each of these VOCs during the four year period following ABC® injections are summarized below:

- Dissolved 1,1,1-TCA concentrations initially tripled in groundwater at wells MW-100A and MW-100B one year after the ABC® injections, but have returned to near pre-injection levels during the November 2014 sampling event.
- From October 2010 to November 2014, 1,1,1-TCA decreased by greater than two orders of magnitude in well MW-101A. A significant reduction in 1,1,1-TCA concentration occurred between the April and November 2014 sampling events in well MW-101B. 1,1,1-TCA decreased by three orders of magnitude (now below the 2L standard). A similar reduction of 1,1,1-TCA concentration in well MW-101B occurred between the December 2010 and January 2011 sampling events. 1,1,1-TCA concentrations have not exceeded 2L Standards in the remaining wells since at least October 2010.
- Methylene chloride concentrations increased by more than one order of magnitude at MW-100A and MW-100B within one year after the ABC® injections, due to enhanced matrix desorption and increased aqueous solubility. Methylene chloride concentrations in both wells peaked in October 2011 and have since declined due to biodegradation and other attenuation processes. Concentrations remain above pre-injection levels in well MW-100B. This VOC has limited occurrence in groundwater outside of the waste pit boundary and, therefore, no meaningful data trends are available for other wells.
- Freon 113 concentrations in groundwater remain highly variable, showing numerous fluctuations with both well location and time. No meaningful trends of Freon 113 are evident, and it appears that the ABC® substrate injections did not have any effects on this compound. The site wide Freon 113 concentrations in groundwater remain below its 2L Standard in each of the Site wells.
- Toluene concentrations have increased at well MW-102C during the past three years. In the other wells where detected, toluene concentrations have remained relatively stable or shown a decrease. The largest toluene decrease (three orders of magnitude during the past three years) was observed at well MW-101A.

Historical trend plots from 2002 to present for TCE; cis-1,2-DCE; 1,1,1-TCA; Freon 113; and methylene chloride are provided in Appendix E.

3.5 GROUNDWATER GEOCHEMISTRY

Field parameters, including temperature, DO, pH, conductivity, ORP, and turbidity were recorded during the November 2014 sampling event. Laboratory analyses of TOC and chloride were also performed on various groundwater samples.

Field water quality parameters and groundwater geochemical data are presented in Table 2-2 and in Table 2-3, respectively, and are discussed in the sections below. Post-injection trend graphs of field parameters are included in Appendix F and the results are discussed below.

3.5.1 pH

During the November 2014 sampling event, groundwater pH values ranged from 3.35 standard units (SU) in MW-16B to 6.38 SU in MW-101B. A pH value between 5.0 and 9.0 is generally most favorable for biologically enhanced reductive dechlorination by DHC bacteria. The pH values observed in Site groundwater appear to be on the low end of the optimal range for biological reductive dechlorination by DHC. Following the ABC® injections, pH values did not change significantly during the course of the performance monitoring, with the following exceptions:

- Relative to the baseline sampling in October 2010, pH values initially increased by more than 1 SU in monitoring wells MW-101B and MW-102A. The pH values in these wells have since fluctuated from near baseline values to more than 2 SU above baseline values. The cause for the fluctuation during the current monitoring event is unclear.
- The pH values spiked for an undetermined reason in the MW-103 well cluster in August 2011 (post-injection Month 10).

3.5.2 Dissolved Oxygen

Biological reductive dechlorination requires an anaerobic environment. Most anaerobic bacteria do not function at DO concentrations greater than approximately 0.5 milligram per liter (mg/L). The target DO concentration for reductive dechlorination to occur is less than 1.0 mg/L (Air Force Center for Environmental Excellence [AFCEE], 2004). With the exception of MW-101B, groundwater DO concentrations remained below 1.0 mg/L in the source area wells during each of the post-injection sampling events since October 2010. The DO concentration has been historically below 0.5 mg/L in MW-101B. The reason for the increase in DO concentration to 2.25 mg/L during the November 2014 sampling event is unknown.

During November 2014, concentrations of DO equal to or greater than 1.0 mg/L were measured in four downgradient monitoring wells outside of the source area: MW-105C, MW-18B, MW-20B and MW-20D. Groundwater DO remains suppressed within the dissolved VOC plume boundary.

3.5.3 Oxidation-Reduction Potential

The ORP of groundwater is a measure of electron activity and indicates the relative tendency of a solution to accept or transfer electrons. Oxidation-reduction reactions in groundwater containing organic compounds are typically biologically mediated. Therefore, the ORP of groundwater in an aquifer often depends upon the rate of biodegradation. Monitoring ORP can help determine which terminal electron accepting processes (TEAPs) are occurring (AFCEE, 2004).

Optimal ORP conditions for promotion of anaerobic reductive dechlorination are -200 millivolts (mV) or less, although biodegradation can occur along multiple pathways at higher ORP values. Following the ABC® supplemental injections, short-term ORP measurements ranged from -162mV to -280mV during the first month as certain

components of the organic substrate were quickly fermented. However, these strong reducing conditions were not maintained long term, as no monitoring wells had groundwater ORP values less than -200 mV during the sampling events during the post-injection sampling events through November 2014.

Reduced ORP values were observed in numerous wells over a ten-month period following the ABC® injection. During the subsequent three years of the performance monitoring program, the ORP values generally rebounded to higher levels, although groundwater at many wells maintained a negative ORP during this period. In November 2014, five monitoring wells (MW-100A, MW-100B, MW-102B, MW-103B, and MW-103C) had negative groundwater ORP values.

3.5.4 Chloride

Dehalogenation of chlorinated VOCs produces free chloride in groundwater. Higher levels of chloride are one indicator that reductive dechlorination has occurred and free chloride will often accumulate in or near an area with increased biological respiration of chlorinated VOCs.

Chloride was measured in groundwater at thirteen monitoring wells during the November 2014 sampling event and at various wells during the post-injection performance monitoring. In November 2013, detected chloride concentrations ranged from <0.8 mg/L at MW-101B to 133 mg/L at MW-100B. During the four years since the October 2010 injections, chloride concentrations have remained relatively stable in the sampled monitoring wells, with the highest values observed at the MW-100A/B well cluster. Free chloride concentrations continue to remain elevated in the source area wells, demonstrating ongoing biological respiration.

3.5.5 Total Organic Carbon

Total organic carbon is an indicator of the natural organic carbon present in the aquifer that is available as an electron donor substrate for reductive dechlorination reactions. Concentrations of TOC greater than 20 mg/L are generally necessary to sustain biological metabolism. Low TOC levels (less than 20 mg/L) combined with elevated levels of VOCs and alternate electron acceptors indicate that additional carbon substrate is required to sustain biodegradation. Prior to the ABC® injections, the October 2010 baseline sampling event indicated that TOC concentrations had continued to decline after the HRC-X® injections and were greater than 20 mg/L at only five of the source area wells (AECOM, 2010d).

TOC concentrations had increased four-fold in the MW-100A/B and MW-101A/B well clusters one month following the ABC® injections. And TOC increased by two orders of magnitude in wells MW-102A and MW-102B during this same time period (see Table 2-3). The TOC concentrations in these six wells have slowly declined since that time, although concentrations generally remained at or above the pre-injection levels.

Further downgradient, a TOC spike was observed in well MW-103B at post-injection Month 10 (August 2011) and in MW-103C in October 2011 (1 year post-injection). TOC

concentrations returned to pre-injection levels in subsequent sampling events. A similar increase was observed in well MW-104C during November 2012 (2 years post-injection), and TOC concentrations returned to below baseline during the current November 2014 event.

As of November 2014, TOC concentrations remained above 20 mg/L in three source area monitoring wells. The greatest current concentrations of TOC (up to 443 mg/L) are found in the two source area wells MW-100A and MW-100B.

4.0 REMEDIATION EFFECTIVENESS EVALUATION

This section discusses the overall effectiveness of the bioremediation remedy at the Site since 2002, with an emphasis on the results obtained from the 2010 supplemental organic substrate injections. Evaluation of the bioremediation effectiveness includes a review of VOC concentration trends, microbial populations and trends, TEAPs, changes in the extent of the dissolved groundwater plume, changes in molar mass, and occurrence of biodegradation daughter products. Biodegradation indicator parameters have been collected and analyzed in groundwater from selected wells since 2002. Additionally, microbial populations and organic metabolic acids were periodically analyzed at select wells during prior sampling events.

Multiple lines of evidence indicate the continued occurrence and increased rates of biodegradation at the Site. These include the predominant decrease in parent contaminant concentrations in the main plume, the presence of biodegradation daughter products, changes in groundwater geochemistry and TEAPs, historical evidence showing increased microbial populations, and detections of methane, ethane, and ethene. The detections of certain daughter products indicate that reductive dechlorination of chlorinated ethenes and chlorinated ethanes is ongoing throughout the VOC plume. There is also evidence that aerobic co-metabolic biodegradation has occurred when certain geochemical and microbial conditions are favorable to support this process in Site groundwater. Abiotic reductions are also likely but have not been quantified.

4.1 VOLATILE ORGANIC COMPOUND TREATMENT AND DEGRADATION TRENDS

Long-term concentration trends of several VOCs in Site groundwater are discussed in this section. Reduction of the parent compounds and increases in intermediate daughter products is a primary line of evidence that biodegradation processes are continuing in Site groundwater. Individual trend graphs for TCE, cis-1,2-DCE and vinyl chloride at various wells are provided in Appendix D. Cumulative trend graphs for TCE, cis-1,2-DCE, Freon 113, methylene chloride, and 1,1,1-TCA at monitoring well clusters MW-100, MW-101, MW-102, and MW-103 are provided in Appendix E.

As discussed in Section 3.2 of this report, TCE is the most prominent parent contaminant that is tracked in Site groundwater due to its historical distribution, frequency and magnitude of detections, and its relatively low 2L regulatory cleanup standard. TCE concentrations in Site monitoring wells have decreased significantly since monitoring began in June 1993. Excluding MW-102C, TCE reductions have ranged from 99.4 percent to more than 99.9 percent in the primary source area groundwater since the in situ bioremediation program began in 2002.

Molar concentrations for TCE and its daughter products have also continued to decrease on a long-term basis, indicating a net loss of the compounds due to sequential reductive dechlorination (Excel, 2009). Temporary increases in total ethene and total ethane molar concentrations were observed in groundwater from several wells

following the ABC® injections due to the matrix desorption of residual contaminant mass into the aqueous phase (AECOM, 2014a).

Historical concentrations of all VOCs, including TCE and its daughter products, detected in Site groundwater are included in the tables provided in Appendix C. Graphs of TCE, cis-1,2-DCE and vinyl chloride concentrations over time in selected monitoring wells since September 2002 are found in Appendix D. These graphs represent the TCE concentration trends observed during the time period that enhanced anaerobic bioremediation has been used as a remedy for groundwater remediation at the Site.

4.1.1 Trichloroethene Treatment in the Primary Source Area

TCE concentrations in groundwater from wells located in and near the waste pit source area (MW-100A, MW-100B, MW-101A, MW-101B, MW-102A, and MW-102B) declined following the HRC® and HRC-X® injections performed in November 2002 and June 2004, respectively. Since the ABC® injections were conducted in October 2010, TCE concentrations have generally continued to decrease in the shallow source area monitoring wells, but have temporarily increased in some of the deeper wells. TCE concentrations in well MW-100B temporarily increased after the injections, followed by continued reductions to below pre-injection levels through November 2014.

In well MW-102C, TCE concentrations tripled from October 2010 to October 2011. The spike in TCE concentrations is not unexpected since the prior Membrane Interface Probe survey showed a very high level of residual contaminant mass in the aquifer strata just above the well screen of MW-102C. This heavily impacted stratum had not been previously treated with HRC® at this depth, and it was directly injected with ABC® solution in October 2010. The decline to pre-injection concentrations observed in 2012 through 2014 suggests the residual TCE contaminant mass has been successfully treated.

Since 2002, there have been sequential increases in cis-1,2-DCE production in the source area monitoring wells, presumably from first order decay via biodegradation of TCE following the 2002 and 2004 HRC® injections. Following the October 2010 ABC® injections, cis-1,2-DCE concentrations increased in most source area wells within one to four months, followed by a subsequent decline in some wells. Cis-1,2-DCE concentrations continue to increase or have stabilized above pre-injection concentrations in wells MW-100A, MW-100B, and MW-102C. The sustained, elevated concentrations of cis-1,2-DCE relative to TCE concentrations suggest that, in addition to the reductive dechlorination of TCE, some of the cis-1,2-DCE increases may be due to matrix desorption of accumulated cis-1,2-DCE and/or increased solubility of cis-1,2-DCE with partitioning into the aqueous phase.

Though some daughter products may not be detected due to elevated reporting limits, detectable concentrations of VC were also found in monitoring wells MW-100A and MW-100B by Month 6 following the ABC® injections. Trend graphs of TCE, cis-1,2-DCE

and vinyl chloride concentrations from November 2002 to present in treatment area monitoring wells are provided in Appendix D.

Ethene, the final daughter product of TCE dechlorination, has been detected at the highest concentrations in the MW-100A/B well cluster (located in the source area) and in the MW-103A/B/C well cluster. Although evidence of complete dechlorination to ethene is not present in all wells, it is occurring as the plume migrates downgradient.

4.1.2 *Trichloroethene Treatment in the Southern Boundary Treatment Area*

TCE concentrations in groundwater at the Southern Boundary Treatment Area monitoring wells (i.e., the vicinity of MW-10B, MW-10D, MW-16B, and MW-16D) remain relatively stable following the HRC® injections performed on that part of the property in September 2006. Trend graphs of TCE and cis-1,2-DCE concentrations from November 2002 to present (Appendix D) indicate cis-1,2-DCE increased immediately following the September 2006 injections, but have since declined to near pre-injection concentrations. TCE concentrations, which slightly exceeded the 2L Standard in the MW-10 well cluster prior to the 2006 injections, are currently below the 2L Standard. TCE has been slightly below the 2L Standard in deep well MW-19D since the October 2013 sampling event. TCE concentrations have been consistently and slowly declining in this well since peaking during the October 2008 sampling event.

November 2014 data indicate the presence of low concentrations of cis-1,2-DCE in several of the Southern Boundary wells, but their concentrations remain below the 2L Standard.

4.1.3 Methylene Chloride

Methylene chloride was historically present at elevated concentrations greater than 200 mg/L in groundwater beneath the former waste pit prior to starting the bioremediation program in 2002. This VOC has limited distribution in groundwater outside the former waste pit area and it has never been detected in the Southern Boundary Treatment Area above its 2L Standard. In wells MW-100A and MW-100B, methylene chloride concentrations were reduced by up to 99.7 percent from 2002 through 2010.

Following the ABC® injections in 2010, dissolved methylene chloride concentrations increased by several orders of magnitude in MW-100A and MW-100B through 2011, but have since been declining. The November 2014 concentrations in well MW-100A are less than the 2010 pre-injection concentration. In well MW-100B, methylene chloride concentrations in November 2014 remain above the 2010 pre-injection concentrations, but are 99.5 percent lower than the 2002 pre-bioremediation concentrations. The temporary increase in methylene chloride concentrations during 2011 was most likely caused by matrix desorption and increased aqueous solubility in groundwater following the 2010 ABC® injections.

Appendix E includes a cumulative trend graph of methylene chloride concentrations measured during the past twelve-year bioremediation treatment period.

Methylene chloride has several possible degradation pathways. It can degrade to methane via reductive halorespiration, or it can degrade directly to carbon dioxide via aerobic and/or anaerobic oxidation pathways. Methylene chloride also biodegrades to intermediate products and to carbon dioxide by the pathway of aerobic co-metabolism. Biodegradation of methylene chloride is one potential contributor to the methane and carbon dioxide detected in groundwater. Concentrations of both gases increased during the course of the performance monitoring and as methylene chloride concentrations decreased over time.

4.1.4 Freon 113

The compound Freon 113 is a known Site contaminant with widespread occurrence in groundwater that currently does not exceed its 2L Standard. Appendix E includes a cumulative trend graph for this compound. Degradation of Freon 113 has been slower than the other VOCs and appears to be limited in groundwater. Reductions of this compound in the source area groundwater have varied from 46 percent to near 100 percent during the treatment period 2002-2014, with temporary increases in concentrations observed in several wells following the 2002, 2004, and 2010 organic substrate injections. Additionally, Freon 113 concentrations in well MW-102C have increased from an average of 2,300 µg/L (February 2002 to November 2009) to 10,000 µg/L (November 2014). The potential cause for the temporary increases in Freon 113 concentrations following each injection is matrix desorption (i.e., decreased interfacial tension) and changes to aqueous solubility of the Freon 113 in the presence of the introduced ABC® organic co-solvent.

Additional treatment is not necessary for Freon 113 in order to comply with the current 2L regulatory cleanup standard. However, its widespread presence in Site groundwater is an important factor due to its potential interference with efficient biodegradation of the remaining target VOCs.

4.2 TOTAL ORGANIC CARBON AVAILABILITY

An adequate supply of organic carbon is required to sustain continued biodegradation of the remaining chlorinated VOCs in groundwater. During 2009, a rapid decline of TOC in groundwater, concurrent with an increased rate of TCE biodegradation, was observed in several locations, particularly in the intermediate depth groundwater. In 2009, the greatest reductions of TOC occurred in the intermediate and deeper zones of the aquifer where the highest dissolved concentrations of VOCs were located. Immediately following the October 2010 ABC® injections, TOC concentrations increased as expected in most source area monitoring wells by Month 1. By post-injection Month 6, TOC concentrations had dropped, returning to near pre-injection levels in the shallow aquifer, but remaining well above baseline concentrations in the deeper hydrostratigraphic units. The maximum post-injection TOC concentrations in wells MW-102C, MW-103B, and MW-103C occurred in August 2011 (Month 10) or in October 2011.

TOC concentrations remained elevated in wells MW-100A/B well cluster, MW-101A, and MW-102A/B/C well cluster. TCE concentrations in these wells continued to decrease during 2014. Although TOC concentrations in MW-101B are currently below the pre-injection concentrations, the TCE concentrations at that well declined during the past year.

In wells MW-103B and MW-103C, TOC concentrations peaked in August 2011 (Month 10 post-injection) or October 2011 (1 year post-injection), respectively, before returning to near baseline concentrations. Since 2010, no significant changes in VOC concentrations have been observed in MW-103B and MW-103C. Biodegradation rates are typically slower when the initial contaminant concentration is also low; however, it is possible that available TOC is also too low to support efficient biodegradation in the vicinity of wells MW-103B and MW-103C.

4.3 MICROBIAL POPULATIONS

Microbial analyses were not performed on any groundwater samples collected during the 2014 semi-annual sampling events. Microbial analyses were performed on select groundwater samples during four sampling events between October 2010 and October 2013 (AECOM, 2014a). A brief summary of the historical microbial results is provided below:

- DHC are generally absent in Site groundwater, and where they occur their populations are very low. A DHC inoculation (bioaugmentation) pilot test in 2010 was not successful. Low pH in groundwater is most likely inhibiting DHC propagation.
- Dehalobacter (DHB) bacteria are present at low to moderate concentrations in the aquifer and have a highly variable spatial distribution. Accumulation of cis-1,2-DCE is observed in wells with the highest DHB populations, suggesting that DHB are prominent TCE degraders within large portions of the plume.
- Despite marginally anaerobic conditions, methanogenic and methanotrophic methane oxidizing bacteria (MOB) populations have flourished following the ABC® substrate injections. Combined geochemical and microbial data from 2010 through 2013 suggest that co-metabolism of chlorinated VOCs by MOB may be one of the primary biodegradation pathways of the chlorinated ethenes in groundwater (AECOM, 2014a).

5.0 CONCLUSIONS

Abbott conducted semi-annual groundwater monitoring in November 2014 as specified in the June 24, 2014 letter to NCDENR. The current groundwater monitoring program follows the revised sampling plan found in the 2010 Preconstruction Report, the subsequent July 31, 2012 changes to that sampling plan, and discretionary changes to the plan submitted to NCDENR in semi-annual reports and approved by the agency. The following conclusions and recommendations for future sampling programs are based on results of the historical and current sampling events, as well as the 2014 annual remediation effectiveness evaluation.

5.1 MONITORING AND REMEDIATION CONCLUSIONS

Conclusions from the November 2014 semi-annual monitoring program and the bioremediation effectiveness from the organic substrate injections are summarized as follows:

- During the November 2014 monitoring event, groundwater flow patterns at the Site were generally consistent with historical gauging events. Shallow groundwater flow at the Site was predominantly to the south-southeast, and deep groundwater flow was toward the south. Historical data have shown multi-directional flow patterns ranging from southeast to southwest. The slight fluctuations in groundwater flow direction appear to be related to seasonal and annual changes in groundwater elevations that vary from 2-3 feet.
- The chlorinated ethenes PCE, TCE, cis-1,2-DCE, 1,1-DCE, and VC were detected at concentrations above the 2L Standard in multiple Site monitoring wells in November 2014. Trans-1,2-DCE was previously detected above its 2L Groundwater Standard at three wells in August 2011, but this compound has not been detected above the 2L Standard since then.
- The chlorinated ethanes 1,1,1-TCA and 1,1-DCA were detected at concentrations above its 2L Standard during November 2014 at two Site wells located in the primary source area. 1,2-DCA was detected above its 2L Standards in two wells in the primary source area (MW-100A and MW-100B), one well in the mid-plume (MW-104A), and one well at the downgradient extent of the plume (MW-19D). The downgradient detection of 1,2-DCA was slightly above the 2L standard of 0.4 µg/L with a concentration 0.43 µg/L. The value was flagged by the laboratory as an estimated value because it was detected above the method detection limit, but below the reporting limit.
- In November 2014, toluene was detected at concentrations above the 2L Standard in source area wells MW-100A, MW-100B, and MW-102C. Since October 2010, toluene has also been detected above its 2L Standard in wells MW-101A and MW-102B, and concentrations have been increasing in MW-102C. Toluene was most likely desorbed and increased at MW-102C due to changes in aqueous solubility caused by the ABC® substrate injections.

- Methylene chloride was detected above its 2L Standard in source area monitoring wells MW-100A, MW-100B, and MW-102C during November 2014 event. Additionally, MEK has not been detected above its 2L Standard for the past four years, but it was detected once above the 2L Standard in well MW-100A during pre-injection monitoring. During the November 2014 sampling event, methylene chloride was detected in well MW-16D with a concentration of 0.69 µg/L. The concentration was flagged as an estimated value because it was detected above the method detection limit, but below the reporting limit. Methylene chloride and MEK were not detected in any other groundwater samples collected from the southern boundary plume area.
- In November 2014, Freon 113 was detected at concentrations above the laboratory reporting limits in 20 of the Site monitoring wells, and concentrations exceeded 20 mg/L at several of the source area wells. However, it was not detected at concentrations above the 2L Standard in any Site monitoring wells. These data confirm the widespread distribution of Freon 113 in groundwater throughout the shallow and deeper aquifer zones. Freon reductions have ranged from 46 to near 100 percent in source area wells since bioremediation was initiated in 2002.
- Historical trends show that TCE concentrations in the primary source area well clusters MW-100A/B and MW-101A/B have decreased more than 99.5 percent since the in situ bioremediation remedy began in November 2002. The largest reduction of 99.997 percent has occurred at MW-101A, where TCE was reduced from 390,000 µg/L in October 2002 to 12 µg/L in November 2014.
- Historical trends in the southern plume area show relatively stable TCE concentrations with an overall decrease in cis-1,2-DCE since the September 2006 HRC® injections on that portion of the Site property.
- Groundwater geochemical data indicate that TOC concentrations increased in most primary source area wells immediately following the October 2010 injections and concentrations are currently equal to or greater than pre-injection conditions in most wells. The site groundwater conditions remain marginally anaerobic and anoxic. Methanogenic conditions have increased as evidenced by the increased methane production.
- Historically, DHC bacteria are absent from Site groundwater, most likely due to the low pH in groundwater. Based on microbial sampling conducted through 2013, DHB and MOB are the dominant bacteria in Site groundwater that appear to be metabolizing the chlorinated ethenes and ethanes.
- No VOCs were detected in groundwater at concentrations exceeding their respective 2L Standards in any off-site wells.

Current data demonstrate that the bioremediation remedy has been very effective and the 2010 ABC® substrate injections were effective at rejuvenating the declining TOC concentrations in groundwater and at further suppressing groundwater ORP. As a result of these enhanced bio-geochemical conditions, the rate of in situ chlorinated VOC biodegradation has been accelerated in the source area for the past four years.

Additionally, the strong co-solvent properties of the ABC® organic substrate also caused significant matrix desorption and increased aqueous solubility of contaminant mass in the aquifer for more effective biological treatment. This co-solvent desorption reaction has eliminated the free phase product and it is expected to minimize future dissolved VOC rebound caused by matrix diffusion.

5.2 PROPOSED 2015 MONITORING PROGRAM

The next Site-wide semi-annual monitoring event will be conducted in April 2015. Based on the current analytical results, Abbott proposes to generally replicate the same sampling program for April 2015 that was previously followed in April 2014. Groundwater samples will therefore be analyzed for the following parameters at pre-specified wells: VOCs (20 wells) and alkalinity (6 wells). Discretionary analyses of TOC and MEE will also be performed at various wells to be determined by Abbott and ERM. In addition to these standard analyses, Abbott may elect to analyze various wells for microbial suites, dissolved hydrogen and various TEAP parameters on an as-needed basis that is currently unspecified.

For the upcoming April 2015 sampling event, Abbott will use passive diffusion bags (PDBs) as a test at four wells. The use of PDBs on a limited trial basis was verbally approved by NCDENR in October 2014. The PDBs were placed in the screened intervals of the four test wells (MW-102C, MW-104C, MW-16D, and MW-19D) at the end of the November 2014 sampling event and will remain in those wells until the April 2015 sampling event. As requested by NCDENR, one of the four PDB test wells will also be concurrently sampled using conventional low-flow purging/pumping techniques to compare the VOC results obtained using both sampling methods.

A proposed monitoring program for the future October 2015 sampling event will be included in the Progress Report developed for the April 2015 sampling event and will be based on the continuing results for the bioremediation remedy in groundwater. Semi-annual Progress Reports will continue to be submitted for the 2015 sampling events.

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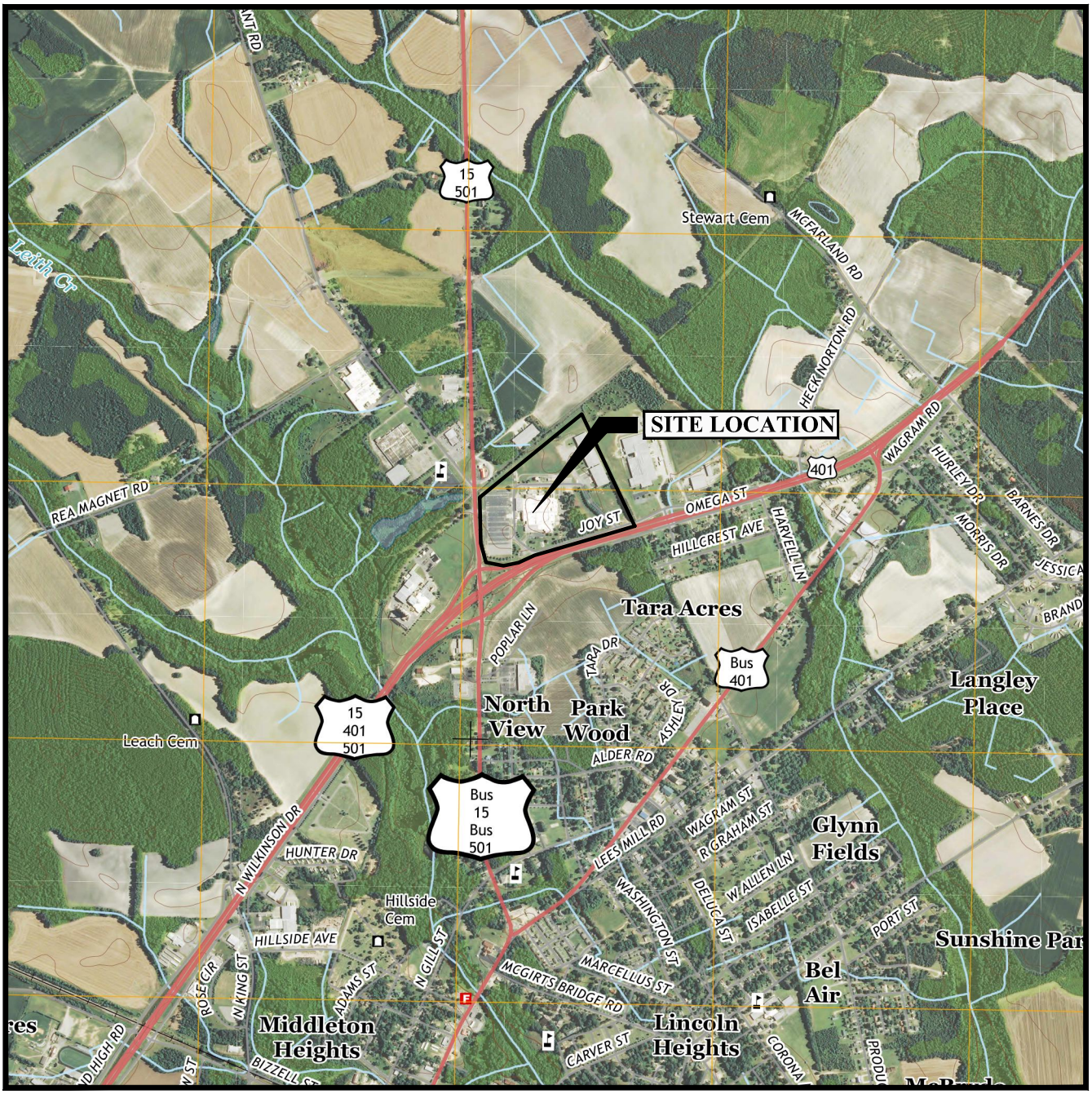
Figures



SOURCE: USGS 7.5 MINUTE TOPOGRAPHIC QUADRANGLE: LAURINBURG, NC 2013

SCALE 1:24000

1 1/2 0 1 MILE

NORTH CAROLINA

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

N

CONTOUR INTERVAL 10 FEET

QUADRANGLE LOCATION

NATIONAL GEODETIC VERTICAL DATUM OF 1988

ABF 2014-12-22 2014_Abbott_Labs_NovemberRpt.dwg

ERM

ERM NC, Inc.

SITE LOCATION MAP
Former Abbott Laboratories Facility
Laurinburg, Scotland County, North Carolina

FIGURE
1-1

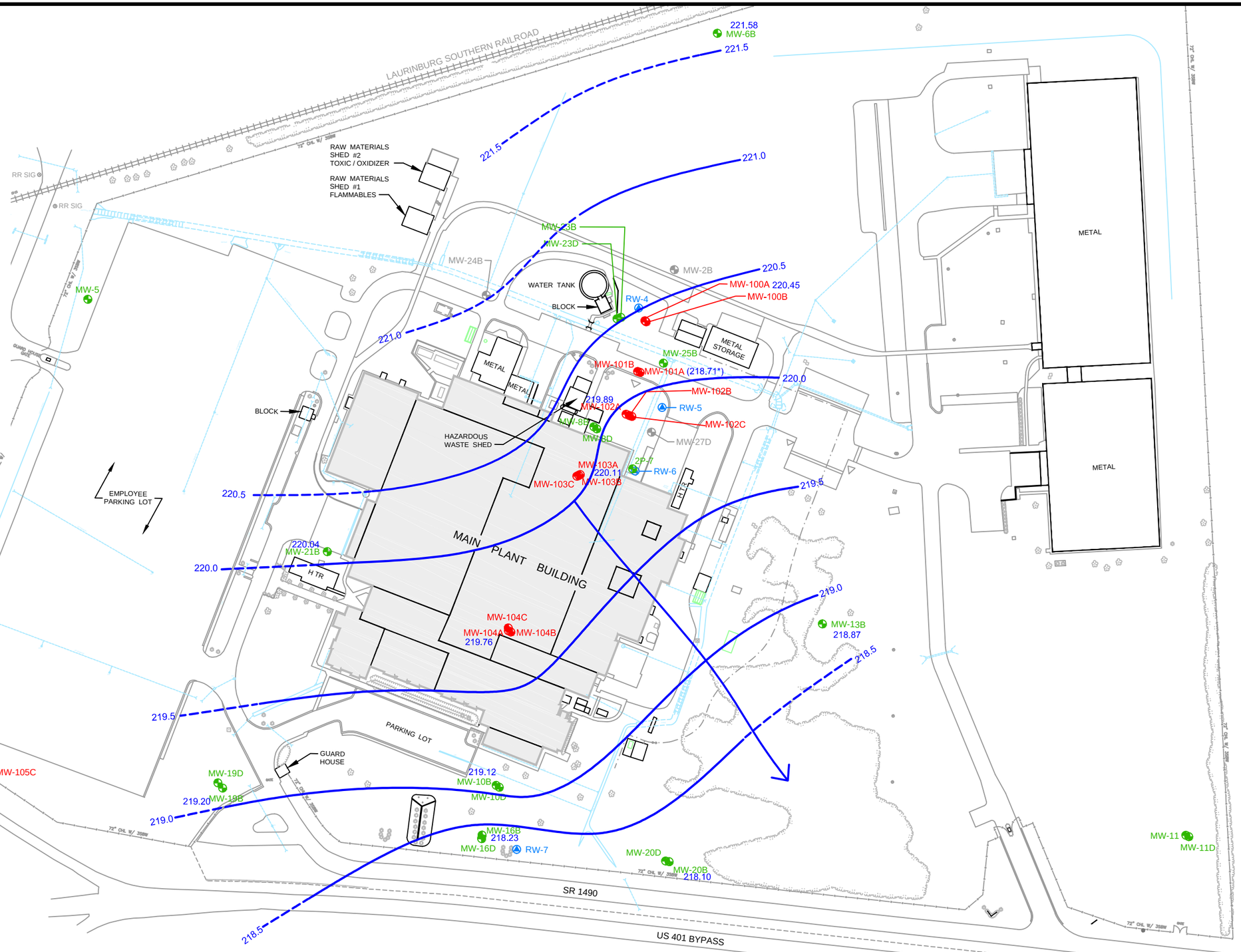
Explanation
Railroad Tracks
NCDOT Fence Line
Site Fence Line
Groundwater Remediation Line
Drainage Line
Bioremediation Monitor Well (Post 2002)
Recovery System Monitor Well (Pre 2002)
Abandoned Monitor Well
Inactive Groundwater Recovery Well
Notes:
1. Wells labeled with "A" suffix monitor shallow groundwater at depths <30 feet below ground surface (bgs). Progressively deeper monitor intervals are shown as "B", "C" and "D" labeled wells.
RAW MATERIALS SHED #2 TOXIC / OXIDIZER
RAW MATERIALS SHED #1 FLAMMABLES
WATER TANK
BLOCK
METAL STORAGE
METAL
HAZARDOUS WASTE SHED
MAIN PLANT BUILDING
EMPLOYEE PARKING LOT
PARKING LOT
GUARD HOUSE
US 15 & 501
SR 1490
US 401 BYPASS
MW-6B
MW-23B
MW-23D
MW-100A
MW-100B
RW-4
MW-25B
MW-101B
MW-101A
MW-102B
MW-102A
RW-5
MW-102C
MW-103A
MW-103C
MW-103B
RW-6
MW-21B
MW-104C
MW-104A
MW-104B
MW-5
MW-105C
MW-19D
MW-19B
MW-10B
MW-10D
MW-16B
MW-16D
RW-7
MW-20B
MW-11
MW-11D
MW-18D
MW-18B
SCALE IN FEET
0 75 150
Sources: Base Map provided by AECOM, originally by Excel Civil & Environmental Associates, PLLC. Aerial photography provided by NCOneMap.
ERM NC, Inc.
SITE PLAN
Former Abbott Laboratories Facility
Laurinburg, Scotland County, North Carolina
FIGURE
1-2
2014_Abbott_Labs_NovemberRpt.dwg 2014-12-22 ABF

Explanation

- Railroad Tracks
- NCDOT Fence Line
- Site Fence Line
- Groundwater Remediation Line
- Drainage Line
- Bioremediation Monitor Well (Post 2002)
- Recovery System Monitor Well (Pre 2002)
- Abandoned Monitor Well
- Inactive Groundwater Recovery Well
- 218.10 Groundwater Elevation (ft msl)
- 219 Groundwater Surface Elevation Contour (ft msl), Dashed in areas of less certainty
- Generalized Groundwater Flow Direction

Notes:

1. Potentiometric surface contours for shallow groundwater based on water levels from wells screened <30 feet bgs.
2. Groundwater elevations were measured on November 11, 2014.
3. * Monitor well MW-101A was not used for contour interpretation due to anomalous groundwater elevation.



SCALE IN FEET
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Sources: Base Map provided by AECOM, originally by Excel Civil & Environmental Associates, PLLC. Aerial photography provided by NCOneMap.

ERM NC, Inc.

SHALLOW GROUNDWATER POTENTIOMETRIC MAP
NOVEMBER 2014
Former Abbott Laboratories Facility
Laurinburg, Scotland County, North Carolina

FIGURE
3-1

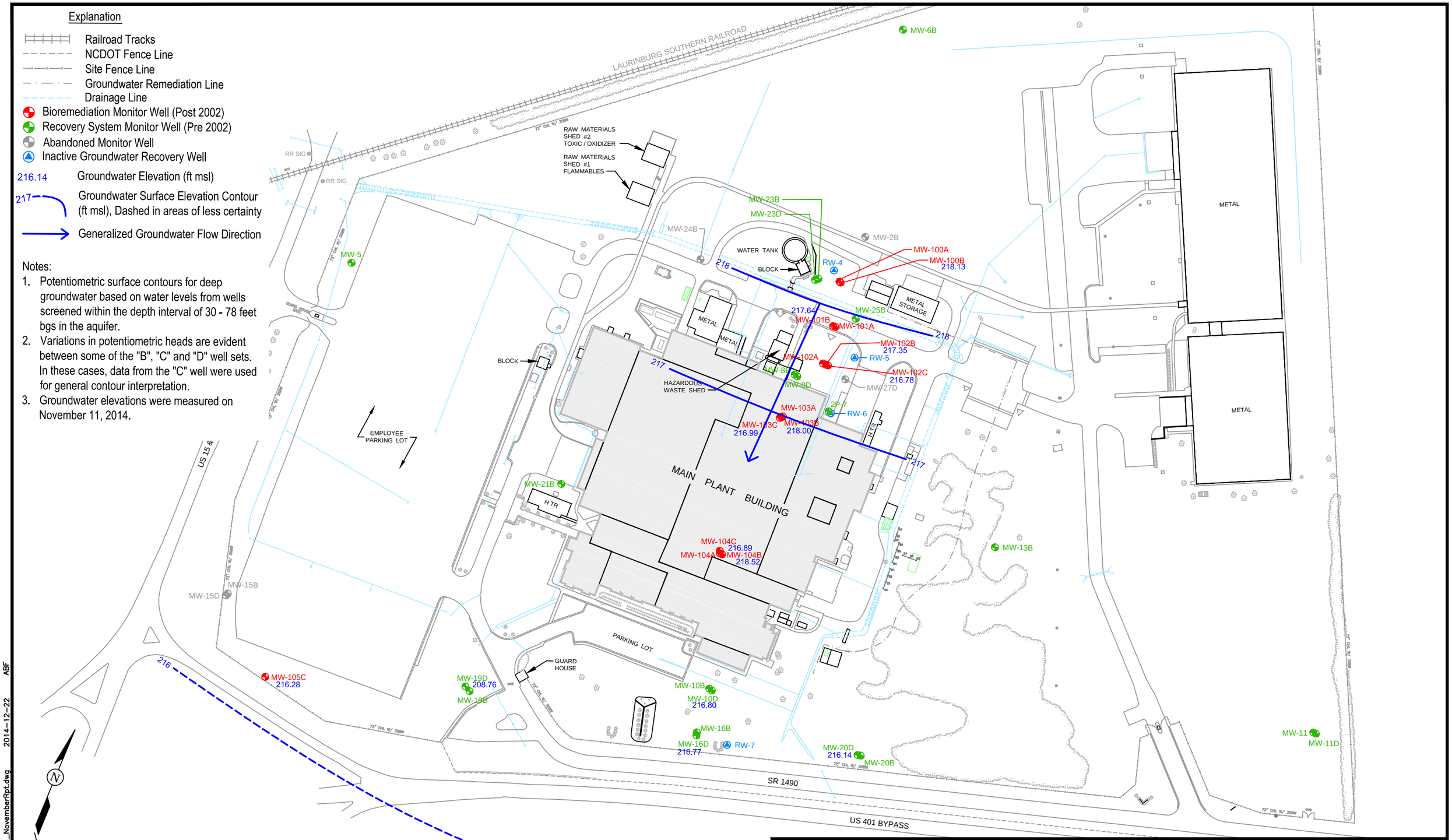
2014_Abbott_Labs_NovemberRpt.dwg 2014-12-22 ABF

Explanation

- Railroad Tracks
- NCDOT Fence Line
- Site Fence Line
- Groundwater Remediation Line
- Drainage Line
- Bioremediation Monitor Well (Post 2002)
- Recovery System Monitor Well (Pre 2002)
- Abandoned Monitor Well
- Inactive Groundwater Recovery Well
- 216.14 Groundwater Elevation (ft msl)
- 217 Groundwater Surface Elevation Contour (ft msl), Dashed in areas of less certainty
- Generalized Groundwater Flow Direction

Notes:

1. Potentiometric surface contours for deep groundwater based on water levels from wells screened within the depth interval of 30 - 78 feet bgs in the aquifer.
2. Variations in potentiometric heads are evident between some of the "B", "C" and "D" well sets. In these cases, data from the "C" well were used for general contour interpretation.
3. Groundwater elevations were measured on November 11, 2014.



Sources: Base Map provided by AECOM, originally by Excel Civil & Environmental Associates, PLLC. Aerial photography provided by NCOneMap.

ERM NC, Inc.

DEEP GROUNDWATER POTENTIOMETRIC MAP
NOVEMBER 2014
Former Abbott Laboratories Facility
Laurinburg, Scotland County, North Carolina

FIGURE
3-2

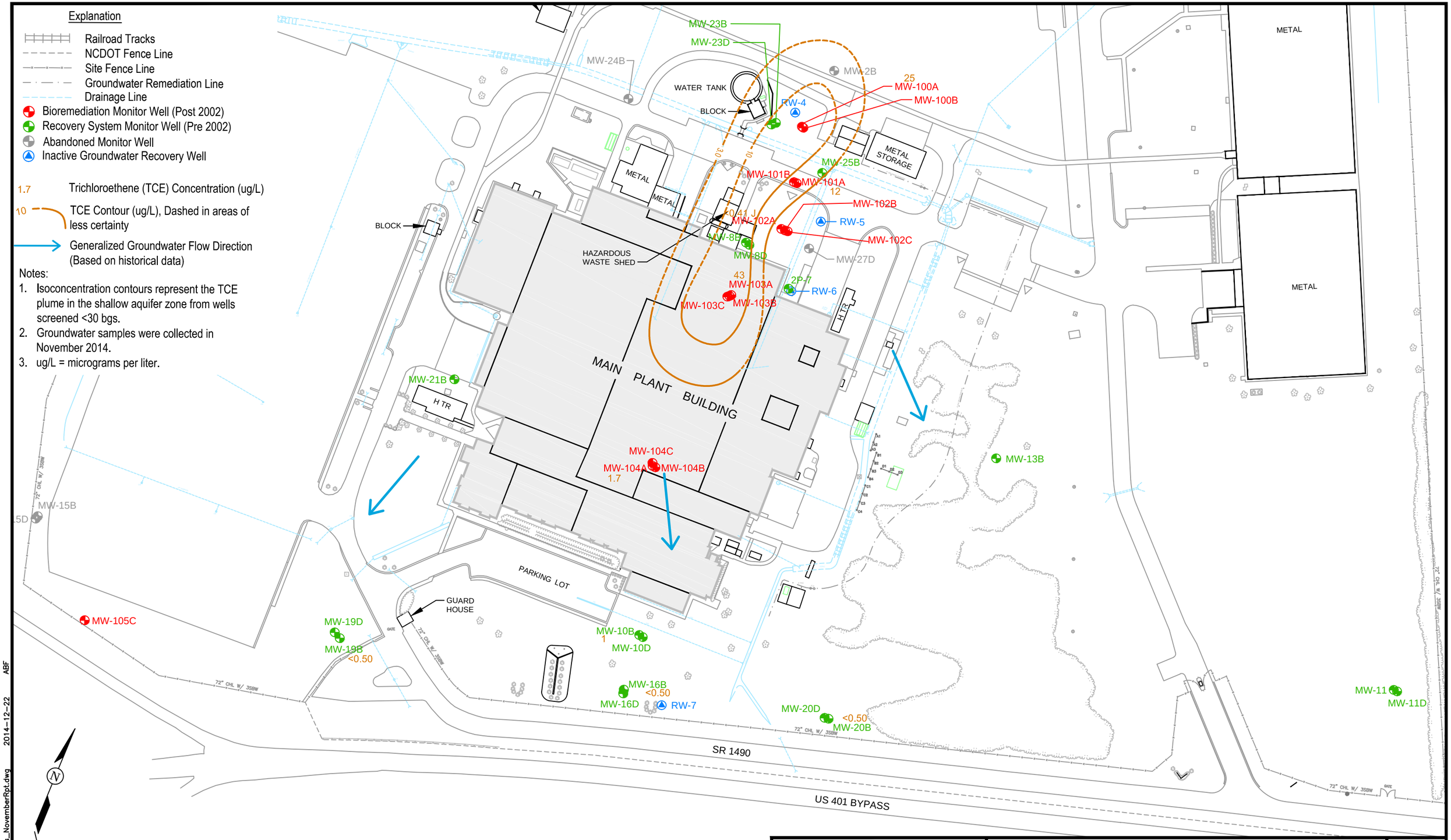
2014_Abbott_Labs_NovemberRpt.dwg 2014-12-22 ABF

Explanation

- Railroad Tracks
- NCDOT Fence Line
- Site Fence Line
- Groundwater Remediation Line
- Drainage Line
- Bioremediation Monitor Well (Post 2002)
- Recovery System Monitor Well (Pre 2002)
- Abandoned Monitor Well
- Inactive Groundwater Recovery Well
- 1.7 Trichloroethene (TCE) Concentration (ug/L)
- 10 TCE Contour (ug/L), Dashed in areas of less certainty
- Generalized Groundwater Flow Direction (Based on historical data)

Notes:

1. Isoconcentration contours represent the TCE plume in the shallow aquifer zone from wells screened <30 bgs.
2. Groundwater samples were collected in November 2014.
3. ug/L = micrograms per liter.



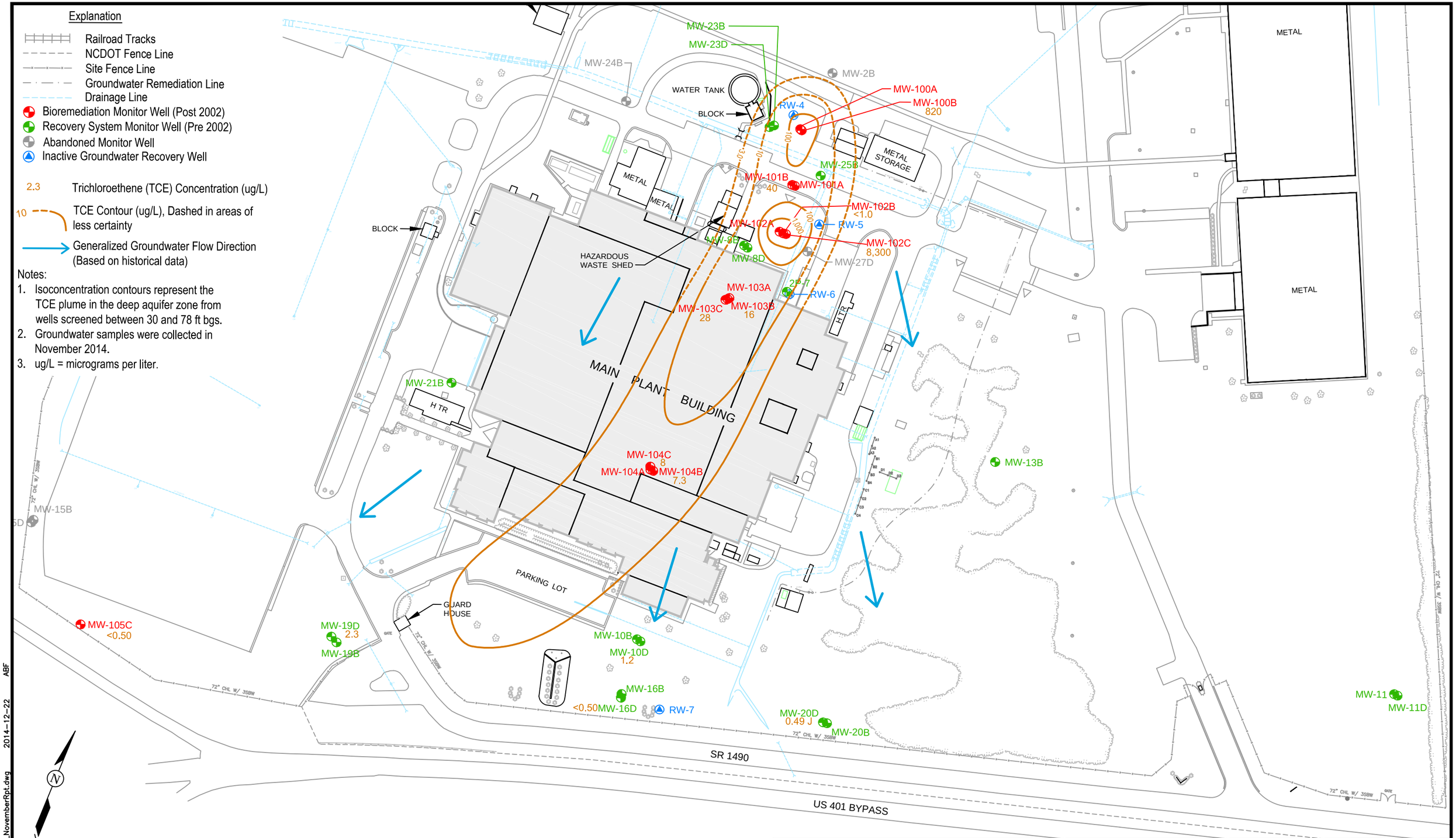
Sources: Base Map provided by AECOM, originally by Excel Civil & Environmental Associates, PLLC. Aerial photography provided by NCOneMap.

ERM NC, Inc.

TCE IN SHALLOW GROUNDWATER
NOVEMBER 2014
Former Abbott Laboratories Facility
Laurinburg, Scotland County, North Carolina

FIGURE
3-3

2014_Abbott_Labs_NovemberRpt.dwg 2014-12-22 ABF



Sources: Base Map provided by AECOM, originally by Excel Civil & Environmental Associates, PLLC. Aerial photography provided by NCOneMap.

ERM NC, Inc.

TCE IN DEEP GROUNDWATER
NOVEMBER 2014
Former Abbott Laboratories Facility
Laurinburg, Scotland County, North Carolina

FIGURE
3-4

2014_Abbott_Labs_NovemberRpt.dwg 2014-12-22 ABF

Tables

Table 1-1: Monitor Well Construction Details

Well Number*	Date Installed	Well Materials	Top of Casing MP Elevation (ft, msl)	Screened Interval (ft, bgs)	Total Well Depth (ft, bgs)	Total Well Depth (ft, msl)
MW-100A	10/8/2002	2 in Sch 40 PVC	228.86	20 - 30	30.00	198.86
MW-100B	10/7/2002	2 in Sch 40 PVC	228.92	35 - 45	45.00	183.92
MW-101A	10/11/2002	2 in Sch 40 PVC	228.18	20 - 30	30.00	198.18
MW-101B	10/11/2002	2 in Sch 40 PVC	228.17	35 - 45	45.00	183.17
MW-102A	10/11/2002	2 in Sch 40 PVC	229.56	20 - 30	30.00	199.56
MW-102B	10/10/2002	2 in Sch 40 PVC	229.47	35 - 45	45.00	184.47
MW-102C	10/10/2002	2 in Sch 40 PVC	229.54	55 - 65	65.00	164.54
MW-103A	10/9/2002	2 in Sch 40 PVC	230.58	20 - 30	30.00	200.58
MW-103B	10/8/2002	2 in Sch 40 PVC	230.58	35 - 45	45.00	185.58
MW-103C	10/9/2002	2 in Sch 40 PVC	230.60	55 - 65	65.00	165.60
MW-104A	6/5/2004	2 in Sch 40 PVC	230.58	2 - 12	12.00	218.58
MW-104B	6/5/2004	2 in Sch 40 PVC	230.59	35 - 45	45.00	185.59
MW-104C	6/5/2004	2 in Sch 40 PVC	230.56	63.5 - 73.5	73.50	157.06
MW-105C	2/9/2009	2 in Sch 40 PVC	233.25	54 - 64	64.00	169.25
MW-6B	7/25/1990	2 in Sch 40 PVC	230.30	14 - 19	19.00	211.30
MW-10B	7/24/1990	2 in Sch 40 PVC	229.10	16.5 - 26.5	26.50	202.60
MW-10D	1/17/1996	2 in Sch 40 PVC	228.70	30 - 40	40.00	188.70
MW-13B	7/18/1991	2 in Sch 40 PVC	230.30	9.3 - 18	18.00	212.30
MW-16B	1/17/1991	2 in Sch 40 PVC	227.90	15.25 - 24.25	24.25	203.65
MW-16D	1/18/1991	2 in Sch 40 PVC	228.90	62.5 - 71.5	71.50	157.40
MW-18B	2/5/1992	2 in Sch 40 PVC	228.70	5.5 - 14.5	14.50	214.20
MW-18D	2/7/1992	2 in Sch 40 PVC	228.70	48.1 - 57.1	57.10	171.60
MW-19B	4/24/1992	2 in Sch 40 PVC	228.70	15 - 25	25.00	203.70
MW-19D	4/27/1992	2 in Sch 40 PVC	228.70	63.8 - 73.8	73.80	154.90
MW-20B	4/28/1992	2 in Sch 40 PVC	227.90	17 - 27	27.00	200.90
MW-20D	4/27/1992	2 in Sch 40 PVC	228.10	68 - 78	78.00	150.10
MW-21B[1]	1996	2 in Sch 40 PVC	227.00	15 - 25	25.00	202.00

Notes:

*Only existing wells are listed in this table. Previously abandoned site wells are excluded.

[1]Well construction logs are not available for MW-21B. Screened intervals are estimates.

ft = feet

bgs = below ground surface

msl = mean sea level

PVC=Polyvinyl chloride

MP = monitoring point

Table 1-2: Summary of Groundwater Monitoring Program: November 2014

Well No.	Fixed-Base Laboratory Analyses[1]				Field Measurements	
	VOCs (Method 8260B)	VOCs + TICs (Method 8260B)	Total Organic Carbon (SM-5310B)	Total Chloride (EPA 300/9056A)	Water Quality Indicators[2]	Water Level
Number of Samples	24	7	13	14	24	27
MW-100A	X	X	X	X	X	X
MW-100B	X	X	X	X	X	X
MW-101A	X	X	X	X	X	X
MW-101B	X	X	X	X	X	X
MW-102A	X	X	X	X	X	X
MW-102B	X	X	X	X	X	X
MW-102C	X	X	X	X	X	X
MW-103A	X		X	X	X	X
MW-103B	X		X	X	X	X
MW-103C	X		X	X	X	X
MW-104A	X		X		X	X
MW-104B	X		X	X	X	X
MW-104C	X		X	X	X	X
MW-105C	X				X	X
MW-6B						X
MW-10B	X			X	X	X
MW-10D	X			X	X	X
MW-13B						X
MW-16B	X				X	X
MW-16D	X				X	X
MW-18B	X				X	X
MW-18D	X				X	X
MW-19B	X				X	X
MW-19D	X				X	X
MW-20B	X				X	X
MW-20D	X				X	X
MW-21B						X

Notes:

[1] Fixed-base laboratories include Accutest Laboratories and AbbVie EHS Laboratory (formerly Abbott EHS Laboratory)

[2] Water quality indicators include pH, temperature, dissolved oxygen, oxidation-reduction potential, turbidity, and specific conductance

VOCs = volatile organic compounds

Table 2-1: Groundwater Level Gauging and Elevation Data: November 2014

Well Identication	TOC Elevation (ft msl)	Depth to Water (ft btoc)	Groundwater Elevation (ft msl)
MW-100A	228.86	8.41	220.45
MW-100B	228.92	10.79	218.13
MW-101A	228.18	9.47	218.71
MW-101B	228.17	10.53	217.64
MW-102A	229.56	9.67	219.89
MW-102B	229.47	12.12	217.35
MW-102C	229.54	12.76	216.78
MW-103A	230.58	10.47	220.11
MW-103B	230.58	12.58	218.00
MW-103C	230.60	13.61	216.99
MW-104A	230.58	10.82	219.76
MW-104B	230.59	12.07	218.52
MW-104C	230.56	13.67	216.89
MW-105C	233.25	16.97	216.28
MW-6B	230.30	8.72	221.58
MW-10B	229.10	9.98	219.12
MW-10D	228.70	11.90	216.80
MW-13B	230.30	11.43	218.87
MW-16B	227.90	9.67	218.23
MW-16D	228.90	12.13	216.77
MW-18B	228.70	10.60	218.10
MW-18D	228.70	12.64	216.06
MW-19B	228.70	9.50	219.20
MW-19D	228.70	19.94	208.76
MW-20B	227.90	9.80	218.10
MW-20D	228.10	11.96	216.14
MW-21B	227.00	6.96	220.04

Notes:

Water levels were measured on November 11, 2014
TOC: Top of Casing
ft: Feet
ft btoc: feet below the top of casing
msl: mean sea level
NM - not measured

Table 2-2: Field Water Quality Measurements (2010-2014)

Field Parameter		Temperature	pH	Specific Conductivity	Dissolved Oxygen	ORP	Turbidity	*Ferrous Iron	*Carbon Dioxide
Sample ID	Date	°C	SU	µS/cm	mg/L	mV	NTU	mg/L	mg/L
MW-100A	10/12/2010	23.25	5.60	910	0.24	-60.2	12.4	3.3	> 500
	12/2/2010	19.88	5.16	1009	0.12	-134.2	NM	NM	NM
	1/25/2011	16.57	5.44	899	0.21	-69.3	9.3	NM	435
	4/21/2011	17.95	5.42	916	0.19	-12.9	9.8	NM	> 500
	8/17/2011	23.89	5.50	879	0.55	21.2	NM	3.2	> 500
	10/5/2011	22.77	5.44	834	0.14	10.7	171	4	> 500
	5/17/2012	21.78	5.91	862	0.12	-72.1	6.61	NM	> 100
	11/7/2012	21.43	5.39	851	0.3	-48.8	1.04	NM	NM
	5/7/2013	18.59	4.93	923	0.35	-32.7	47.2	NM	NM
	10/23/2013	20.30	5.67	930	0.31	-33.7	6.78	NM	NM
	4/29/2014	16.70	5.55	824	0.22	-20.5	58.4	NM	NM
	11/12/2014	23.72	5.36	809	0.23	-29.1	1.83	NM	NM
MW-100B	10/13/2010	22.54	5.55	945	0.28	-79.2	8.55	25.12	> 500
	12/2/2010	20.05	5.19	1019	0.42	-30	NM	NM	NM
	1/25/2011	17.20	5.28	921	0.19	-31.7	8.9	NM	400
	4/21/2011	18.75	5.24	1030	0.67	-59.8	7.77	NM	> 500
	8/17/2011	24.32	5.51	1132	0.31	16.9	NM	4.2	> 500
	10/5/2011	22.64	5.41	1099	0.11	-5.2	8.68	4.6	> 500
	5/17/2012	22.75	5.66	1074	0.35	-0.3	9.06	NM	> 100
	11/7/2012	20.04	5.45	1001	0.19	-55.5	3.1	NM	NM
	5/7/2013	19.03	5.43	965	0.44	39.2	5.43	NM	> 350
	10/23/2013	19.90	5.51	1036	0.49	-27.5	2.83	NM	NM
	4/29/2014	17.90	5.44	925	0.16	-19.4	22.9	NM	NM
	11/12/2014	23.86	5.21	951	0.29	-46.1	2.5	NM	NM
MW-101A	10/13/2010	24.90	5.84	166	NM**	-0.8	4.99	8.7	165
	12/2/2010	19.79	5.74	256	0.5	-58.9	NM	NM	NM
	1/25/2011	16.50	6.06	189	0.36	-91.4	60	NM	95
	4/19/2011	20.63	6.33	114	0.13	-59.7	12.1	NM	55
	8/16/2011	24.47	5.77	105	0.46	27.1	NM	3.2	95
	10/5/2011	23.72	5.88	109	0.19	13.3	20.1	NM	NM
	5/17/2012	21.35	5.76	98	0.17	-24.7	22.2	NM	> 100
	11/7/2012	22.01	5.00	53	0.26	81.9	3.9	NM	NM
	5/8/2013	19.83	5.18	73	0.27	194.8	5.41	NM	NM
	10/23/2013	22.30	4.94	48.2	0.4	138.4	5.4	NM	NM
	4/29/2014	19.20	5.76	108.3	0.14	16.7	6.93	NM	NM
	11/12/2014	23.83	4.18	43	0.66	81.5	3.07	NM	NM
MW-101B	10/13/2010	23.54	4.81	222	0.44	30.9	5.21	7.75	125
	12/2/2010	19.57	4.95	239	0.27	-114.5	NM	NM	NM
	1/25/2011	17.78	6.49	82	0.29	-47.9	13	NM	30
	4/19/2011	21.88	6.08	220	0.28	-62.3	31.5	NM	175
	8/16/2011	25.91	4.82	379	0.24	92.5	NM	3.2	395
	10/5/2011	24.85	6.21	119	0.25	-43.2	3.13	NM	NM
	5/17/2012	21.78	5.64	305	0.16	-47.9	14	NM	> 100
	11/7/2012	20.85	5.39	222	0.21	-39.5	8.1	NM	NM
	5/8/2013	20.30	4.08	221	0.28	-27.5	7.25	NM	215
	10/23/2013	22.20	6.07	238	0.18	-60.5	3.02	NM	NM
	4/29/2014	20.50	6.03	209	0.16	-59	11.8	NM	NM
	11/12/2014	23.27	6.38	87	2.25	116.6	0.85	NM	NM

Table 2-2: Field Water Quality Measurements (2010-2014)

Field Parameter		Temperature	pH	Specific Conductivity	Dissolved Oxygen	ORP	Turbidity	*Ferrous Iron	*Carbon Dioxide
Sample ID	Date	°C	SU	µS/cm	mg/L	mV	NTU	mg/L	mg/L
MW-102A	10/13/2010	21.61	3.82	130	0.38	163	9.04	0.75	60
	12/2/2010	17.79	4.34	122	0.79	-103.5		NM	NM
	1/25/2011	15.85	4.73	97	0.41	-26.5	12	NM	60
	4/20/2011	18.60	5.15	91	0.18	30	9.79	NM	150
	8/16/2011	21.92	5.09	81	0.63	62	NM	2.6	125
	10/5/2011	20.67	4.99	82	0.4	49.5	2.67	3.2	175
	5/17/2012	18.86	5.26	83	0.47	11.1	13.6	NM	> 100
	11/7/2012	19.93	5.03	76	0.37	-15.9	1.25	NM	NM
	5/8/2013	18.34	3.96	84	0.43	-0.2	3.98	NM	NM
	10/23/2013	21.30	6.19	80	0.3	67.6	7.7	NM	NM
	4/29/2014	19.20	5.08	73	0.14	39.5	7.76	NM	NM
	11/12/2014	20.55	4.90	64	0.43	33.1	5.46	NM	NM
MW-102B	10/13/2010	20.26	5.43	125	0.45	-18.2	9.4	4.89	95
	12/2/2010	18.35	5.09	342	0.44	11.6		NM	NM
	1/25/2011	16.75	5.29	312	0.27	-8.4	10	NM	200
	4/20/2011	19.72	5.61	331	0.24	-15.9	13.4	NM	125
	8/16/2011	22.18	5.73	275	0.51	-11.5	NM	2.8	250
	10/5/2011	19.66	5.80	242	0.43	-28	0.05	5.4	200
	5/17/2012	19.83	6.00	254	0.41	-1.8	0.81	NM	> 100
	11/7/2012	19.09	5.72	224	0.27	-81.6	6.27	NM	NM
	5/8/2013	19.19	5.68	223	0.19	41.7	50.6	NM	235
	10/23/2013	20.30	6.13	82	0.14	21.3	5.53	NM	NM
	4/29/2014	18.90	5.98	193	0.13	-74.6	2.93	NM	NM
	11/12/2014	19.49	5.64	163	0.33	-42.6	3.96	NM	NM
MW-102C	10/13/2010	20.11	4.86	240	36**	-6.9	5.54	8.76	110
	12/2/2010	17.83	4.38	165	0.31	-101.5		NM	NM
	1/25/2011	17.05	4.93	263	0.14	45.4	45	NM	235
	4/20/2011	19.53	5.08	306	0.25	27.7	9.5	NM	85
	8/16/2011	22.54	5.20	331	0.25	50.7	NM	4.4	375
	10/5/2011	18.61	4.80	339	0.17	53.7	766	2.5	450
	5/17/2012	19.87	5.40	264	0.36	34.4	2.5	NM	> 100
	11/7/2012	19.22	4.98	270	0.27	27.4	1.99	NM	NM
	5/8/2013	19.33	4.85	383	0.27	187.8	12.9	NM	275
	10/23/2013	20.10	5.30	490	0.15	19.2	5.63	NM	NM
	4/29/2014	19.80	5.14	298	0.11	35.8	9.72	NM	NM
	11/12/2014	18.05	4.30	242	0.38	44.8	2.12	NM	NM
MW-103A	10/12/2010	21.64	4.54	92	0.44	214.6	9.2	NM	NM
	1/25/2011	21.46	6.34	217	0.26	-57.6	8.8	NM	NM
	4/20/2011	21.76	5.17	103	0.13	148.9	7.67	NM	NM
	8/15/2011	21.60	7.53	226	0.6	-15.8	NM	2.6	135
	10/4/2011	21.68	5.20	97	0.22	67.8	18.1	NM	NM
	5/16/2012	21.61	6.29	181	0.14	-27	41.6	NM	> 100
	11/7/2012	21.60	5.72	120	0.19	71.9	53.4	NM	NM
	5/7/2013	20.89	5.95	188	0.56	65.9	2.11	NM	150
	10/22/2013	21.70	6.04	183.5	0.4	-14.9	3.56	NM	NM
	4/29/2014	19.70	5.78	163.2	0.22	79.1	24.2	NM	NM
	11/13/2014	20.64	5.12	97	0.35	107.2	4.69	NM	NM

Table 2-2: Field Water Quality Measurements (2010-2014)

Field Parameter		Temperature	pH	Specific Conductivity	Dissolved Oxygen	ORP	Turbidity	*Ferrous Iron	*Carbon Dioxide
Sample ID	Date	°C	SU	µS/cm	mg/L	mV	NTU	mg/L	mg/L
MW-103B	10/12/2010	21.26	5.97	230	0.31	-32	4.42	NM	NM
	12/2/2010	21.44	6.40	212	0.71	-52.9	NM	NM	NM
	1/25/2011	21.25	6.48	213	0.38	-80.4	11	NM	NM
	4/20/2011	21.44	6.23	210	0.17	-37.1	0.19	NM	NM
	8/15/2011	21.48	8.04	226	0.47	-54.6	NM	4.2	115
	10/4/2011	21.49	6.45	203	0.24	-80.9	7.24	NM	NM
	5/17/2012	21.52	6.36	220	0.26	-48.8	2.69	NM	> 100
	11/7/2012	20.97	6.48	257	0.24	-106.1	6.39	NM	NM
	5/7/2013	20.90	6.27	200	0.4	55.1	1.73	NM	25
	10/22/2013	21.90	6.39	199.8	0.24	-86.7	0.95	NM	NM
	4/29/2014	19.90	6.31	221.1	0.22	-64.2	2.59	NM	NM
	11/13/2014	20.37	6.23	216	0.46	-80.6	0.45	NM	NM
MW-103C	10/12/2010	21.49	5.77	187	0.67	-17.5	10.3	NM	NM
	12/2/2010	21.18	6.26	174	0.37	-61.4	NM	NM	NM
	1/25/2011	21.04	5.83	128	0.3	-26.5	5.4	NM	NM
	4/20/2011	21.35	5.90	157	0.29	20.1	< 2	NM	NM
	8/15/2011	21.55	7.71	139	0.56	23.5	NM	2.25	140
	10/4/2011	21.45	5.89	184	0.2	-2.8	4.38	NM	NM
	5/16/2012	21.09	5.34	101	0.33	-17.1	1.35	NM	> 100
	11/7/2012	21.11	6.08	177	0.26	-90.7	20.2	NM	NM
	5/8/2013	20.45	5.51	128	0.33	-29.8	22.9	NM	150
	10/22/2013	21.00	5.38	110.3	0.46	5.5	2.04	NM	NM
	4/29/2014	19.90	5.26	136.6	0.29	13.8	2.41	NM	NM
	11/13/2014	20.21	5.78	134	0.27	-31.9	0.31	NM	NM
MW-104A	10/12/2010	22.12	5.45	157	NM **	24.2	3.55	NM	NM
	4/20/2011	21.88	5.32	135	0.88	142.4	6.5	NM	NM
	10/4/2011	21.90	5.42	150	1.19	52.4	37.9	NM	NM
	5/16/2012	22.00	5.21	124	0.49	-14.4	4.26	NM	NM
	11/7/2012	22.57	5.47	110	0.59	65.9	7.83	NM	NM
	5/8/2013	21.50	5.33	118	1.22	107.3	2.12	NM	NM
	10/22/2013	23.30	5.33	114	0.41	108.9	9.67	NM	NM
	4/28/2014	19.80	5.16	139.9	0.79	237.1	3.76	NM	NM
	11/13/2014	21.16	4.71	98	0.63	5.2	4.7	NM	NM
MW-104B	10/12/2010	21.12	4.65	85	NM **	325.3	1.46	NM	NM
	4/20/2011	21.44	4.83	97	0.24	259.2	0.9	NM	NM
	10/4/2011	21.69	4.69	109	0.38	102.6	0.49	0	75
	5/16/2012	21.65	4.90	91	0.17	10.5	0.97	NM	> 100
	11/7/2012	21.66	5.00	97	0.37	180.5	2.07	NM	NM
	5/8/2013	20.62	4.83	93	0.47	141.5	0.47	NM	NM
	10/22/2013	22.20	4.92	86	0.14	335.6	3.87	NM	NM
	4/28/2014	20.80	4.75	97.8	0.16	305	0.56	NM	NM
	11/13/2014	21.03	4.30	73	0.75	117.4	2.46	NM	NM
MW-104C	10/12/2010	20.99	5.05	95	NM **	227.1	60.8	NM	NM
	4/20/2011	21.62	5.18	97	0.22	224.2	39.4	NM	NM
	10/4/2011	21.68	5.10	104	0.34	89.3	19.1	0	40
	5/16/2012	21.80	5.09	105	0.46	-15.4	13.1	NM	> 100
	11/7/2012	21.37	5.27	104	0.36	189.1	36.1	NM	NM
	5/8/2012	21.05	5.14	76	0.32	17.9	0.54	NM	NM
	10/22/2013	21.80	5.22	99	0.14	319.7	7.53	NM	NM
	4/28/2014	20.80	5.26	92	0.14	205.8	2.17	NM	NM
	11/13/2014	21.05	4.64	84	0.9	135.2	2.07	NM	NM

Table 2-2: Field Water Quality Measurements (2010-2014)

Field Parameter		Temperature	pH	Specific Conductivity	Dissolved Oxygen	ORP	Turbidity	*Ferrous Iron	*Carbon Dioxide
Sample ID	Date	°C	SU	µS/cm	mg/L	mV	NTU	mg/L	mg/L
MW-105C	10/12/2010	22.10	5.20	101	0.76	129.2	6.18	NM	NM
	4/19/2011	20.36	5.10	72	2.15	206.5	1.5	NM	NM
	10/4/2011	22.25	4.71	72	0.87	102.6	1.17	NM	NM
	5/16/2012	21.66	4.89	73	1.28	32.8	3.26	NM	NM
	11/6/2012	18.04	4.94	70	1.37	207.9	1.81	NM	NM
	5/7/2013	20.90	4.43	70	1.33	38.3	4.77	NM	NM
	10/22/2013	21.20	4.85	70	1	305.8	5.13	NM	NM
	4/28/2014	21.60	4.84	66	1.08	204	5.71	NM	NM
	11/12/2014	22.19	4.01	63	1.21	162.2	1.26	NM	NM
MW-10B	10/11/2010	22.51	5.07	81	3.08	65.1	3.1	NM	NM
	4/19/2011	17.74	4.95	57	0.22	187.8	6.05	NM	NM
	10/4/2011	21.67	5.39	79	0.29	41.3	2.9	NM	NM
	5/16/2012	20.81	4.98	74	0.17	-4.7	6.4	NM	NM
	11/6/2012	19.46	4.91	59	0.58	179.9	1.49	NM	NM
	5/7/2013	18.99	4.94	70	0.47	135.3	4.54	NM	NM
	10/22/2013	20.90	4.96	73.8	0.7	108.4	25.8	NM	NM
	4/28/2014	20.30	4.86	88.4	0.22	78.3	25.8	NM	NM
	11/11/2014	21.41	3.51	60	0.54	159.7	5.32	NM	NM
MW-10D	10/11/2010	22.43	5.16	100	0.52	34.8	2.21	NM	NM
	4/19/2010	18.95	4.73	60	0.8	-20	0	NM	NM
	10/4/2011	21.97	5.32	84	0.27	24	0	NM	NM
	5/16/2012	21.44	5.26	87	0.23	1.1	2.2	NM	NM
	11/6/2012	19.91	4.83	61	0.38	180.6	7.23	NM	NM
	5/7/2013	18.79	4.72	60	0.5	189	2.84	NM	NM
	10/22/2013	20.40	5.28	81.8	0.17	100.6	3.98	NM	NM
	4/28/2014	20.90	4.89	99.1	0.17	97.5	9.45	NM	NM
	11/11/2014	23.61	5.09	108	0.47	172.7	5.12	NM	NM
MW-16B	10/11/2010	21.93	4.41	65	3.55	272.6	5.47	NM	NM
	4/19/2011	17.34	4.81	42	2.48	223.1	3	NM	NM
	10/4/2011	20.20	5.02	69	0.46	138.4	1.96	NM	NM
	5/16/2012	21.34	4.67	68	0.49	8.7	13.2	NM	NM
	11/6/2012	20.20	4.85	50	1.6	251.7	1.87	NM	NM
	5/7/2013	18.50	4.65	68	1.35	138.2	0.51	NM	NM
	10/22/2013	20.00	5.00	61	3.53	81.2	0.49	NM	NM
	4/28/2014	18.90	5.01	61	0.18	199.4	4.93	NM	NM
	11/11/2014	20.48	3.35	45	0.45	185.2	2.67	NM	NM
MW-16D	10/11/2010	21.75	5.82	72	3.09	111.7	46.2	NM	NM
	4/19/2011	18.78	5.36	57	1.25	2.5	9.8	NM	NM
	10/4/2011	20.10	6.16	84	0.38	-3.7	22.2	NM	NM
	5/16/2012	21.30	6.05	67	1.23	-2.4	56.3	NM	NM
	11/6/2012	20.07	6.15	60	0.29	115.7	2.31	NM	NM
	5/7/2013	19.35	5.95	72	1.37	97.2	8.1	NM	NM
	10/22/2013	19.60	6.30	106	0.21	12.9	10.7	NM	NM
	4/28/2014	19.20	6.00	123.7	0.16	42	12.9	NM	NM
	11/11/2014	20.91	6.23	95	0.35	138.3	5.01	NM	NM
MW-18B	10/12/2010	20.95	5.65	172	4.97	181.9	46	NM	NM
	10/3/2011	22.08	5.51	126	3.77	71.4	9.97	NM	NM
	11/6/2012	19.10	5.04	100	4.73	240.9	20.3	NM	NM
	10/22/2013	20.00	5.28	115	4.99	257.7	38.2	NM	NM
	11/12/2014	19.95	4.80	101	3.98	232.7	8.65	NM	NM

Table 2-2: Field Water Quality Measurements (2010-2014)

Field Parameter		Temperature	pH	Specific Conductivity	Dissolved Oxygen	ORP	Turbidity	*Ferrous Iron	*Carbon Dioxide
Sample ID	**Date**	**°C**	**SU**	**µS/cm**	**mg/L**	**mV**	**NTU**	**mg/L**	**mg/L**
MW-18D	10/12/2010	19.74	4.48	76	4.05	282.4	2.5	NM	NM
	4/19/2011	22.93	4.82	66	2.17	249.4	5.82	NM	NM
	10/3/2011	21.60	4.78	74	0.95	114.2	9.35	NM	NM
	5/16/2012	21.94	5.04	78	2.69	22.2	103	NM	NM
	11/6/2012	19.48	4.93	68	1.19	204.7	1.57	NM	NM
	5/7/2013	18.95	4.30	70	1.18	78.9	3.17	NM	NM
	10/22/2013	18.80	4.78	67	0.67	211.5	7.86	NM	NM
	4/28/2014	21.10	4.94	63	1.59	178	1.9	NM	NM
	11/12/2014	20.64	4.44	61	0.69	216.9	0.89	NM	NM
MW-19B	10/12/2010	21.98	4.49	55	3.82	320.4	2.28	NM	NM
	10/4/2011	22.96	4.78	52	1.5	91.1	0.91	NM	NM
	11/6/2012	17.09	5.06	41	1	182.1	23.2	NM	NM
	10/22/2013	20.50	4.99	93.3	1.03	123.9	1.8	NM	NM
	11/11/2014	20.07	3.98	43	0.98	186.7	4.49	NM	NM
MW-19D	10/12/2010	20.71	4.75	83	4.15	440.7	8.02	NM	NM
	4/19/2011	19.20	4.23	65	0.79	-51.2	19.5	NM	NM
	10/4/2011	21.43	5.01	70	0.41	45.2	115	NM	NM
	5/16/2012	20.53	5.35	73	0.5	11.9	6.96	NM	NM
	11/6/2012	18.26	5.33	73	0.46	104.4	7.7	NM	NM
	5/7/2013	19.43	4.69	61	0.49	170.9	6.47	NM	NM
	10/22/2013	19.70	5.14	55.9	0.32	89.9	7.05	NM	NM
	4/28/2014	19.70	5.27	64	0.18	126.5	9.13	NM	NM
	11/11/2014	20.00	5.59	110	0.52	105.4	4.28	NM	NM
MW-20B	10/11/2010	21.47	3.51	80	1.77	165.4	0.47	NM	NM
	4/19/2011	18.81	4.54	50	1.48	182.8	0	NM	NM
	10/3/2011	20.97	4.29	53	1.37	180.5	0	NM	NM
	11/6/2012	19.68	4.51	46	1.47	238.9	0.29	NM	NM
	10/22/2013	20.10	4.65	49.2	0.79	126	2.78	NM	NM
	11/12/2014	18.78	4.09	54	2.38	167	0.18	NM	NM
MW-20D	10/11/2010	20.76	3.86	74	6.95	183.5	0.75	NM	NM
	10/3/2011	19.32	3.87	48	6.92	170	4.24	NM	NM
	11/6/2012	19.17	5.38	48	4.77	211	0.59	NM	NM
	10/22/2013	19.60	5.00	49.9	5.49	150.3	2.11	NM	NM
	11/12/2014	20.21	3.78	40	6.16	233	5.72	NM	NM

Notes:

uS/cm: microseimens per centimeter
mg/L: milligrams per liter
ug/L: micrograms per liter
SU: Standard Units
°C: Degrees Celsius

ORP: oxidation-reduction potential
NTU: Nephelometric Turbidity Units
mV: millivolts
NM: Not Measured
TOC: total organic carbon

*Ferrous iron and carbon dioxide measurements were analyzed using a HACH field Colorimeter.
**DO probe on one of the field instruments not working properly.

Table 2-3: Geochemical Parameters in Groundwater: October 2010 to November 2014

Sample ID	Chemical Name	Ethane	Ethene	Methane	Dissolved Hydrogen	*Carbon Dioxide	Alkalinity	TOC	Chloride	Sulfate	Iron	Manganese	*Ferrous Iron
	Date	ug/L	ug/L	ug/L	nM	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
MW-100A	10/12/2010	24	145	2640	710	500 +	128	246	125	< 5.0	188	0.457	3.3
	12/2/2010	NA	NA	NA	NA	NA	NA	1150	155	NA	NA	NA	NA
	1/25/2011	15.3	82.9	1930	130000	435	NA	NA	129	< 5.0	191	0.505	NA
	4/21/2011	NA	NA	NA	35000	500 +	220	391	140	NA	NA	NA	NA
	8/17/2011	16	70.4	4050	NA	500 +	NA	NA	NA	NA	158	0.557	3.2
	10/5/2011	< 10	< 10	14.3	NA	500 +	147	353	123	NA	NA	NA	4
	5/17/2012	NA	NA	NA	NA	100 +	NA	289	NA	NA	NA	NA	NA
	11/7/2012	NA	NA	NA	NA	NA	NA	415	153	NA	NA	NA	NA
	5/7/2013	NA	NA	NA	NA	NA	NA	373	NA	NA	NA	NA	NA
	10/23/2013	15.3	132	8,460 E	110	NA	NA	357	148	NA	NA	NA	NA
	4/29/2014	NA	NA	NA	NA	NA	NA	338	NA	NA	NA	NA	NA
	11/12/2014	NA	NA	NA	NA	NA	NA	333	126	NA	NA	NA	NA
MW-100B	10/13/2010	24.8	122	3990	3700	500 +	188	304	113	< 5.0	196	0.392	25.12
	12/2/2010	NA	NA	NA	NA	NA	NA	2360	123	NA	NA	NA	NA
	1/25/2011	NA	NA	NA	180000	400	NA	NA	13.9	< 5.0	223	0.474	NA
	4/21/2011	11.1	46	1020	98000	500 +	277	673	141	NA	NA	NA	NA
	8/17/2011	19.6	95.4	3760	NA	500 +	NA	NA	NA	NA	244	0.698	4.2
	10/5/2011	26.7	117	5990	NA	500 +	256	690	141	NA	NA	NA	4.6
	5/17/2012	10.4	61	5260	NA	100 +	274	592	NA	NA	NA	NA	NA
	11/7/2012	18	91.4	8070	NA	NA	NA	568	140	NA	NA	NA	NA
	5/7/2013	17.6	97.6	11400	NA	350 +	131	484	NA	NA	NA	NA	NA
	10/23/2013	9.4	57.7	4250	1600	NA	NA	467	145	NA	NA	NA	NA
	4/29/2014	14.3	93.7	6840	NA	200	188	446	NA	NA	NA	NA	NA
	11/12/2014	NA	NA	NA	NA	NA	NA	443	133	NA	NA	NA	NA
MW-101A	10/13/2010	< 10	< 10	794	NA	165	44.2	22	14.3	< 5.0	40.4	0.0408	8.7
	12/2/2010	NA	NA	NA	NA	NA	NA	169	NA	NA	NA	NA	NA
	1/25/2011	< 10	< 10	1200	NA	95	NA	NA	< 5.0	NA	NA	NA	NA
	4/19/2011	NA	NA	NA	NA	55	50.6	24.5	14.2	NA	NA	NA	NA
	8/17/2011	< 10	< 10	12800	NA	95	NA	NA	NA	NA	19.8	0.0182	3.2

Table 2-3: Geochemical Parameters in Groundwater: October 2010 to November 2014

Sample ID	Chemical Name	Ethane	Ethene	Methane	Dissolved Hydrogen	*Carbon Dioxide	Alkalinity	TOC	Chloride	Sulfate	Iron	Manganese	*Ferrous Iron
	Date	ug/L	ug/L	ug/L	nM	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
	10/5/2011	< 10	< 10	7100	NA	NA	35.4	10.4	10.5	NA	NA	NA	NA
	5/17/2012	NA	NA	NA	NA	100 +	NA	7	NA	NA	NA	NA	NA
	11/7/2012	NA	NA	NA	NA	NA	NA	5.6	8.4	NA	NA	NA	NA
	5/8/2013	NA	NA	NA	NA	NA	NA	24.8	NA	NA	NA	NA	NA
	10/23/2013	< 6.2	< 6.2	7780	NA	NA	NA	32.6	8.3	NA	NA	NA	NA
	4/29/2014	NA	NA	NA	NA	NA	NA	7.2	NA	NA	NA	NA	NA
	11/12/2014	NA	NA	NA	NA	NA	NA	0.95 B	8.6	NA	NA	NA	NA
MW-101B	10/13/2010	< 10	< 10	1120	NA	125	6.2	102	24.6	< 5.0	32.6	0.0936	7.75
	12/2/2010	NA	NA	NA	NA	NA	NA	403	NA	NA	NA	NA	NA
	1/25/2011	NA	NA	NA	NA	30	NA	NA	12.4	NA	NA	NA	NA
	4/19/2011	NA	NA	NA	NA	175	48.6	17.6	< 5.0	NA	NA	NA	NA
	8/17/2011	< 10	< 10	4630	NA	395	NA	NA	NA	NA	75.6	0.111	3.2
	10/5/2011	< 10	< 10	6650	NA	NA	59.4	128	16.3	NA	NA	NA	NA
	5/17/2012	< 6.2	< 6.2	7300	NA	100 +	76.6	158	NA	NA	NA	NA	NA
	11/7/2012	< 6.2	0.92 J	5290	NA	NA	NA	133	12.2	NA	NA	NA	NA
	5/8/2013	< 6.2	< 6.2	5690	NA	215	56.4	90.6	NA	NA	NA	NA	NA
	10/23/2013	< 6.2	< 6.2	8340	NA	NA	NA	34.9	13.6	NA	NA	NA	NA
	4/29/2014	< 6.2	< 6.2	6340	NA	275	46.7	36.6	NA	NA	NA	NA	NA
	11/12/2014	NA	NA	NA	NA	NA	NA	1.7	<0.80	NA	NA	NA	NA
MW-102A	10/13/2010	< 10	< 10	2340	NA	60	< 5.0	3.1	10.8	< 5.0	0.688	0.0163	0.75
	12/2/2010	NA	NA	NA	NA	NA	NA	143	NA	NA	NA	NA	NA
	1/25/2011	< 10	< 10	3520	NA	60	NA	NA	11	NA	NA	NA	NA
	4/20/2011	NA	NA	NA	NA	150	26	17.7	12.1	NA	NA	NA	NA
	8/17/2011	< 10	< 10	4890	NA	125	NA	NA	NA	NA	12.1	13.9	2.6
	10/5/2011	< 10	< 10	852	NA	175	13.5	12.3	10.9	NA	NA	NA	3.2
	5/17/2012	NA	NA	NA	NA	100 +	NA	43.1	NA	NA	NA	NA	NA
	11/7/2012	NA	NA	NA	NA	NA	NA	8.5	9.5	NA	NA	NA	NA
	5/8/2013	NA	NA	NA	NA	NA	NA	10	NA	NA	NA	NA	NA
	10/23/2013	1.8 J	< 6.2	8,840 E	NA	NA	NA	9.9	10.4	NA	NA	NA	NA
	4/29/2014	NA	NA	NA	NA	NA	NA	9.8	NA	NA	NA	NA	NA
	11/12/2014	NA	NA	NA	NA	NA	NA	1.8	9.9	NA	NA	NA	NA

Table 2-3: Geochemical Parameters in Groundwater: October 2010 to November 2014

Sample ID	Chemical Name	Ethane	Ethene	Methane	Dissolved Hydrogen	*Carbon Dioxide	Alkalinity	TOC	Chloride	Sulfate	Iron	Manganese	*Ferrous Iron
	Date	ug/L	ug/L	ug/L	nM	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
MW-102B	10/13/2010	< 10	< 10	7060	NA	95	43.2	4.7	11.6	< 5.0	22.1	0.0472	4.89
	12/2/2010	NA	NA	NA	NA	NA	NA	311	NA	NA	NA	NA	NA
	1/25/2011	NA	NA	NA	NA	200	NA	NA	< 5.0	NA	NA	NA	NA
	4/20/2011	< 10	< 10	92.9	NA	125	130	101	12.3	NA	NA	NA	NA
	8/17/2011	< 10	< 10	6240	NA	250	NA	NA	NA	NA	61.9	131	2.8
	10/5/2011	< 10	< 10	17200	NA	200	NA	NA	NA	NA	NA	NA	5.4
	5/17/2012	3.2 J	3.3 J	11800	NA	100 +	96.8	33.3	NA	NA	NA	NA	NA
	11/7/2012	5.2 J	3.1 J	14000	NA	NA	NA	24.3	11.2	NA	NA	NA	NA
	5/8/2013	4.4 J	2.5 J	14800	NA	235	45.3	17.8	NA	NA	NA	NA	NA
	10/23/2013	< 6.2	< 6.2	388	4.7	NA	NA	16.5	11.4	NA	NA	NA	NA
	4/29/2014	< 6.2	< 6.2	12,000 E	NA	240	51.7	13.3	NA	NA	NA	NA	NA
	11/12/2014	NA	NA	NA	NA	NA	NA	6.4	11.1	NA	NA	NA	NA
MW-102C	10/13/2010	< 10	< 10	7400	NA	110	48.4	92	19.9	< 5.0	43.2	0.236	8.76
	12/2/2010	NA	NA	NA	NA	NA	NA	69.9	NA	NA	NA	NA	NA
	1/25/2011	< 10	< 10	8170	NA	235	NA	NA	25.6	NA	NA	NA	NA
	4/20/2011	NA	NA	NA	NA	85	84	198	25.6	NA	NA	NA	NA
	8/17/2011	< 10	< 10	7840	NA	375	NA	NA	NA	NA	65.7	433	4.4
	10/5/2011	12.5	< 10	12000	NA	450	56.2	512	24.6	NA	NA	NA	2.5
	5/17/2012	NA	NA	NA	NA	100 +	49.4	92.7	NA	NA	NA	NA	NA
	11/7/2012	NA	NA	NA	NA	NA	NA	396	31.2	NA	NA	NA	NA
	5/8/2013	NA	NA	NA	NA	275	50.7	234	NA	NA	NA	NA	NA
	10/23/2013	16.2	3.8 J	10,700 E	2100	NA	NA	266	31.7	NA	NA	NA	NA
	4/29/2014	NA	NA	NA	NA	225	67.1	154	NA	NA	NA	NA	NA
	11/12/2014	NA	NA	NA	NA	NA	NA	265	33.3	NA	NA	NA	NA
MW-103A	10/12/2010	<10.0	< 10	572	NA	NA	9.3	19.5	19.8	< 5.0	15.1	0.0607	NA
	1/25/2011	NA	NA	NA	NA	NA	NA	2.9	NA	NA	NA	NA	NA
	4/20/2011	NA	NA	NA	NA	NA	24	NA	NA	NA	NA	NA	NA
	8/17/2011	< 10	31.2	3650	NA	135	NA	5.7	NA	NA	NA	NA	2.6
	10/4/2011	< 10	41.8	3830	NA	NA	54.4	4.2	16.5	NA	NA	NA	NA
	5/16/2012	NA	NA	NA	NA	100 +	NA	NA	NA	NA	NA	NA	NA
	11/7/2012	NA	NA	NA	NA	NA	NA	5.1	20.4	NA	NA	NA	NA
	5/7/2013	NA	NA	NA	NA	150	NA	NA	NA	NA	NA	NA	NA
	10/22/2013	< 6.2	63.3	8,250 E	NA	NA	NA	2	18.6	NA	NA	NA	NA
	4/29/2014	NA	NA	NA	NA	275	NA	NA	NA	NA	NA	NA	NA
	11/13/2014	NA	NA	NA	NA	NA	NA	1.4	20.9	NA	NA	NA	NA

Table 2-3: Geochemical Parameters in Groundwater: October 2010 to November 2014

Sample ID	Chemical Name	Ethane	Ethene	Methane	Dissolved Hydrogen	*Carbon Dioxide	Alkalinity	TOC	Chloride	Sulfate	Iron	Manganese	*Ferrous Iron
	Date	ug/L	ug/L	ug/L	nM	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
MW-103B	10/12/2010	< 10	21.4	1510	NA	NA	26.8	3.4	12.2	< 5.0	40.7	0.144	NA
	12/2/2010	NA	NA	NA	NA	NA	NA	3.1	NA	NA	NA	NA	NA
	1/25/2011	NA	NA	NA	NA	NA	NA	2.9	NA	NA	NA	NA	NA
	4/20/2011	< 10	49.9	3350	NA	NA	39	3.7	NA	NA	NA	NA	NA
	8/17/2011	< 10	91.8	5450	NA	115	NA	32.4	NA	NA	NA	NA	4.2
	10/4/2011	< 10	65	5440	NA	NA	41.8	3.7	12.1	NA	NA	NA	NA
	5/17/2012	< 10	26.8	2600	NA	100 +	57.5	2.8	NA	NA	NA	NA	NA
	11/7/2012	< 6.2	29.8	5340	NA	NA	NA	4.7	15.6	NA	NA	NA	NA
	5/7/2013	< 6.2	33.7	5130	NA	25	32.1	4.6	NA	NA	NA	NA	NA
	10/22/2013	< 6.2	50.3	5480	NA	NA	NA	3.8	12.7	NA	NA	NA	NA
	4/29/2014	< 6.2	41.8	4010	NA	235	50.7	4.5	NA	NA	NA	NA	NA
	11/13/2014	NA	NA	NA	NA	NA	NA	1.1	15.8	NA	NA	NA	NA
MW-103C	10/12/2010	NA	NA	NA	NA	NA	45.1	3.1	15	< 5.0	25.1	0.112	NA
	12/2/2010	NA	NA	NA	NA	NA	NA	2.9	NA	NA	NA	NA	NA
	1/25/2011	< 10	39.3	2470	NA	NA	NA	2.6	NA	NA	NA	NA	NA
	4/20/2011	NA	NA	NA	NA	NA	33	3.9	NA	NA	NA	NA	NA
	8/17/2011	< 10	55.5	3320	NA	140	NA	4.1	NA	NA	NA	NA	2.25
	10/4/2011	NA	NA	NA	NA	NA	43.9	27	15.1	NA	NA	NA	NA
	5/16/2012	NA	NA	NA	NA	100 +	24.2	6.3	NA	NA	NA	NA	NA
	11/7/2012	NA	NA	NA	NA	NA	NA	4.6	16	NA	NA	NA	NA
	5/8/2013	NA	NA	NA	NA	150	26.5	12.9	NA	NA	NA	NA	NA
	10/22/2013	NA	NA	NA	NA	NA	NA	16	17.7	NA	NA	NA	NA
	4/29/2014	NA	NA	NA	NA	160	20	47.8	NA	NA	NA	NA	NA
	11/13/2014	NA	NA	NA	NA	NA	NA	1.6	14.5	NA	NA	NA	NA
MW-104A	10/4/2011	NA	NA	NA	NA	NA	NA	4	NA	NA	NA	NA	NA
	11/7/2012	NA	NA	NA	NA	NA	NA	4.9	NA	NA	NA	NA	NA
	10/22/2013	NA	NA	NA	NA	NA	NA	4.8	NA	NA	NA	NA	NA
	11/13/2014	NA	NA	NA	NA	NA	NA	0.69 B	NA	NA	NA	NA	NA
MW-104B	10/12/2010	NA	NA	NA	NA	NA	< 5.0	2.3	14.9	NA	NA	NA	NA
	10/4/2011	NA	NA	NA	NA	75	6.3	2.6	18.9	NA	NA	NA	0
	5/16/2012	NA	NA	NA	NA	100 +	NA	NA	NA	NA	NA	NA	NA
	11/7/2012	NA	NA	NA	NA	NA	NA	3.1	18	NA	NA	NA	NA
	10/22/2013	NA	NA	NA	NA	NA	NA	3.9	15.2	NA	NA	NA	NA
	11/13/2014	NA	NA	NA	NA	NA	NA	0.66 B	14.1	NA	NA	NA	NA

Table 2-3: Geochemical Parameters in Groundwater: October 2010 to November 2014

Sample ID	Chemical Name	Ethane	Ethene	Methane	Dissolved Hydrogen	*Carbon Dioxide	Alkalinity	TOC	Chloride	Sulfate	Iron	Manganese	*Ferrous Iron
	Date	ug/L	ug/L	ug/L	nM	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
MW-104C	10/12/2010	NA	NA	NA	NA	NA	9.3	3.1	17.2	NA	NA	NA	NA
	10/4/2011	NA	NA	NA	NA	40	11.5	2.8	17.5	NA	NA	NA	0
	5/16/2012	NA	NA	NA	NA	100 +	NA	NA	NA	NA	NA	NA	NA
	11/7/2012	NA	NA	NA	NA	NA	NA	25	18.8	NA	NA	NA	NA
	10/22/2013	NA	NA	NA	NA	NA	NA	29.8	18.3	NA	NA	NA	NA
	11/13/2014	NA	NA	NA	NA	NA	NA	0.62 B	16.6	NA	NA	NA	NA
MW-10B	10/11/2010	NA	NA	NA	NA	NA	NA	NA	19.7	NA	NA	NA	NA
	10/4/2011	NA	NA	NA	NA	NA	NA	NA	11.4	NA	NA	NA	NA
	11/6/2012	NA	NA	NA	NA	NA	NA	NA	13	NA	NA	NA	NA
	10/22/2013	NA	NA	NA	NA	NA	NA	NA	14.4	NA	NA	NA	NA
	11/11/2014	NA	NA	NA	NA	NA	NA	NA	12.2	NA	NA	NA	NA
MW-10D	10/11/2010	NA	NA	NA	NA	NA	NA	NA	18.4	NA	NA	NA	NA
	10/4/2011	NA	NA	NA	NA	NA	NA	NA	12.1	NA	NA	NA	NA
	11/6/2012	NA	NA	NA	NA	NA	NA	NA	11.5	NA	NA	NA	NA
	10/22/2013	NA	NA	NA	NA	NA	NA	NA	14.4	NA	NA	NA	NA
	11/11/2014	NA	NA	NA	NA	NA	NA	NA	13.6	NA	NA	NA	NA
MW-16D	10/11/2010	NA	NA	NA	NA	NA	NA	13	NA	NA	NA	NA	NA
	10/4/2011	NA	NA	NA	NA	NA	NA	1.9	NA	NA	NA	NA	NA

Notes:
ug/L - micrograms per liter
mg/L - milligrams per liter
nM - nanoMoles per liter
TOC - total organic carbon
NA - not analyzed
cells/mL - cells per milliliter
*Ferrous iron and carbon dioxide measurements were analyzed using a HACH field Colorimeter.

Table 3-1: Volatile Organic Compound Analytical Results in Groundwater: October 2010 to November 2014

Chemical Name**		Chlorinated Ethanes (µg/L)					Chlorinated Ethenes (µg/L)						Chlorinated Methanes (µg/L)		Other Compounds (µg/L)															
		1,1,1-Trichloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,2-Dichloroethane	Chloroethane	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,1-Dichloroethene	Vinyl Chloride	Chloroform	Methylene Chloride	Acetone	Benzene	Ethyl-benzene	Isopropyl-benzene	Methyl Ethyl Ketone (MEK)	Methyl Isobutyl Ketone	Methyl tert Butyl Ether (MTBE)*	Naphthalene	Styrene	Toluene	Xylenes	1,2,4-Trimethylbenzene	Vinyl Acetate	Freon-11 (Trichlorofluoromethane)	Freon-12 (Dichlorodifluoromethane)	Freon- 113 (1,1,2-Trichlorotrifluoroethane)
2L Standard (µg/L)		**200**	**0.6**	**6**	**0.4**	**3000**	**0.7**	**3**	**70**	**100**	**350**	**0.03**	**70**	**5**	**6000**	**1**	**600**	**70**	**4000**	**100**	**20**	**6**	**70**	**600**	**500**	**400**	**88**	**2000**	**1000**	**200000**
Sample ID	**Date**																													
MW-100A	10/12/10	**630**	< 500	< 500	< 500	< 500	< 500	< 500	**38,000**	< 500	**600**	< 500	< 500	**790**	< 2500	< 500	< 500	< 500	**4,200**	< 2500	< 500	< 500	< 500	**2,400**	< 1,500	< 500	< 2500	< 500	< 2,500	22,000
MW-100A	12/02/11	< 500	< 500	< 500	< 500	< 500	< 500	< 500	**38,000**	< 500	< 500	< 500	< 500	**1,400**	< 2500	< 500	< 500	< 500	< 2500	< 2500	< 500	< 500	< 500	**2,400**	< 1,500	< 500	< 2500	< 500	< 2,500	14,000
MW-100A	01/25/11	**640**	< 500	< 500	< 500	< 500	< 500	< 500	**36,000**	< 500	**540**	< 500	< 500	**5,400**	< 2500	< 500	< 500	< 500	< 2500	< 2500	< 500	< 500	< 500	**2,500**	< 1,500	< 500	< 2500	< 500	< 2,500	18,000
MW-100A	04/21/11	**1,600**	< 100	< 100	**200**	< 100	< 100	**810**	**51,000**	< 100	**770**	**110**	**180**	**21,000**	< 500	< 100	< 100	< 100	< 500	< 500	< 100	< 100	< 100	**2,900**	< 300	< 100	< 500	< 100	< 500	25,000
MW-100A	08/17/11	**1,700**	< 100	< 100	**190**	< 100	< 100	**940**	**48,000**	**320**	**750**	< 100	**200**	**20,000**	< 500	< 100	< 100	< 100	1,400	< 500	< 100	< 100	< 100	**2,500**	120	< 100	< 500	< 100	< 500	18,000
MW-100A	10/05/11	**2,000**	< 100	< 100	**170**	< 100	< 100	**880**	**50,000**	< 100	**740**	< 100	**240**	**27,000**	< 500	< 100	< 100	< 100	< 500	< 500	< 100	< 100	< 100	**2,600**	< 300	< 100	< 500	< 100	< 500	20,000
MW-100A	05/17/12	**1,200**	< 20	**91**	**120**	< 20	**37**	**80**	**40,000**	22	**750**	**81**	**160**	**1,800**	< 100	**23**	22	< 20	< 100	< 100	< 20	< 20	< 20	**2,600**	90	< 20	< 100	< 20	< 100	22,000
MW-100A	11/07/12	**1,100**	< 50	**81**	**100**	< 50	< 50	**69**	**47,000**	< 1	**660**	**62**	**160**	**1,900**	580	< 50	< 50	< 50	< 5	< 5	< 1	< 50	< 50	**2,000**	50	< 50	< 5	< 1	< 5	17,000
MW-100A	05/07/13	**790**	**4.20**	**87**	**91**	< 1	**36**	**63**	**41,000**	22	**600**	**120**	**150**	**810**	518	**17**	21	2.1	3,500	100	< 1	**7.2**	4.6	**2,100**	92	4	5	< 1	150	16,000
MW-100A	10/23/13	**610**	< 50	**99**	**100**	< 50	**27 J**	**35**	**48,000**	< 50	**600**	**92**	**130**	< 250	370	**22 J**	17 J	< 50	3,400	< 250	< 50	< 50	< 50	**2,100**	66 J	< 50	< 100	< 50	< 250	17,000
MW-100A	04/29/14	**880**	< 50	**110**	**120**	< 50	**26**	**25**	**49,000**	< 50	< 50	**90**	**160**	< 250	520	**21**	20	< 50	< 250	< 250	< 250	< 50	< 50	**2,300**	86	< 50	< 100	< 50	< 250	18,000
MW-100A	11/12/14	**580**	< 50	**87**	**87**	< 50	< 50	**25**	**45,000**	< 50	**570**	**69**	**110**	**260**	420	**17 J**	15 J	< 50	< 250	< 250	< 50	< 50	< 50	**1,700**	58 J	< 50	< 100	< 50	< 250	12,000
MW-100B	10/13/10	**800**	< 500	< 500	< 500	< 500	< 500	**2,300**	**41,000**	< 500	**540**	< 500	< 500	**660**	< 2500	< 500	< 500	< 500	< 2500	< 2500	< 500	< 500	< 500	**2,700**	< 1,500	< 500	< 2500	< 500	< 2,500	25,000
MW-100B	12/02/10	**810**	< 500	< 500	< 500	< 500	< 500	**13,000**	**42,000**	< 500	**700**	< 500	< 500	**8,200**	< 2500	< 500	< 500	< 500	< 2500	< 2500	< 500	< 500	< 500	**3,300**	< 1,500	< 500	< 2500	< 500	< 2,500	13,000
MW-100B	01/25/11	**700**	< 500	< 500	< 500	< 500	< 500	**11,000**	**36,000**	< 500	**640**	< 500	< 500	**9,700**	< 2500	< 500	< 500	< 500	< 2500	< 2500	< 500	< 500	< 500	**2,900**	< 1,500	< 500	< 2500	< 500	< 2,500	14,000
MW-100B	04/21/11	**1,500**	< 100	< 100	**250**	< 100	**120**	**8,600**	**56,000**	< 100	**930**	**130**	**190**	**35,000**	< 500	< 100	< 100	< 100	< 500	< 500	< 100	< 100	< 100	**3,700**	< 300	< 100	< 500	< 100	< 500	31,000
MW-100B	08/17/11	**1,700**	< 100	< 100	**270**	< 100	< 100	**7,600**	**56,000**	**380**	**970**	**110**	**260**	**37,000**	< 500	< 100	< 100	< 100	510	< 500	< 100	< 100	< 100	**3,600**	< 300	< 100	< 500	100	< 500	22,000
MW-100B	10/05/11	**2,400**	< 100	**110**	**300**	< 100	< 100	**6,900**	**66,000**	< 100	**1,100**	**110**	**340**	**57,000**	< 500	< 100	< 100	< 100	< 500	< 500	< 100	< 100	< 100	**3,600**	< 300	< 100	< 500	< 100	< 500	25,000
MW-100B	05/17/12	**1,500**	< 20	**94**	**210**	< 20	**54**	**3,600**	**52,000**	26	**910**	**110**	**230**	**25,000**	< 100	**29**	25	< 20	< 100	< 100	< 20	< 20	< 20	**3,300**	99	< 20	< 100	< 20	< 100	18,000
MW-100B	11/07/12	**1,700**	< 200	< 200	**200**	< 200	< 200	**1,600**	**79,000**	< 200	**1,000**	< 200	**260**	**27,000**	< 200	< 200	< 200	< 200	< 200	< 200	< 200	< 200	< 200	**3,600**	29	< 200	< 200	< 200	< 1,000	23,000
MW-100B Dup	11/07/12	**2,000**	< 200	< 200	**210**	< 200	< 200	**1,700**	**80,000**	< 200	**1,100**	< 200	**270**	**29,000**	< 200	< 200	< 200	< 200	< 200	< 200	< 200	< 200	< 200	**3,700**	< 600	< 200	< 200	< 200	< 1,000	26,000
MW-100B	05/07/13	**1,600**	**6.70**	**90**	**150**	< 5	**57**	**1,100**	**62,000**	25	**940**	**95**	**200**	**11,000**	< 5	**24**	28	< 5	1,600	92	< 5	**8.9**	6.5	**3,400**	118	5.5	< 25	< 5	140	22,000
MW-100B Dup	05/07/13	**1,600**	**7.10**	**89**	**150**	< 1	**55**	**1,100**	**59,000**	24	**910**	**92**	**200**	**11,000**	326	**24**	28	< 1	1,600	94	< 5	**10**	6.7	**3,400**	119	5.7	5.5	< 5	130	20,000
MW-100B	10/23/13	**1,300**	< 50	**100**	**150**	< 50	**44 J**	**1,000**	**63,000**	< 50	**830**	**91**	**180**	**5,300**	< 250	**29**	27	< 50	< 250	< 250	< 50	< 50	< 50	**3,300**	103	< 50	**100**	< 50	< 250	21,000
MW-100B	04/29/14	**1,500**	< 50	**110**	**180**	< 50	**34**	**430**	**69,000**	< 50	< 50	**86**	**210**	**2,500**	360	**28**	29	< 50	< 250	< 250	< 250	< 50	< 50	**3,300**	112	< 50	< 100	< 50	< 250	23,000
MW-100B	11/12/14	**1,100**	< 50	**98**	**130**	< 50	< 50	**820**	**57,000**	< 50	**740**	**90**	**150**	**1,100**	< 250	**22 J**	20 J	< 50	< 250	< 250	< 50	< 50	< 50	**2,700**	78 J	< 50	< 100	< 50	< 250	16,000
MW-101A	10/13/10	**3,700**	< 500	< 500	< 500	< 500	< 500	**44,000**	**5,600**	< 500	< 500	< 500	< 500	< 500	< 2500	< 500	< 500	< 500	< 2500	< 2500	< 500	< 500	< 500	**1,900**	< 1,500	< 500	< 2500	< 500	< 2,500	23,000
MW-101A DUP	10/13/10	**3,600**	< 500	< 500	< 500	< 500	< 500	**44,000**	**5,400**	< 500	< 500	< 500	< 500	< 500	< 2500	< 500	< 500	< 500	< 2500	< 2500	< 500	< 500	< 500	**1,900**	< 1,500	< 500	< 2500	< 500	< 2,500	23,000
MW-101A	12/02/10	**1,600**	< 500	< 500	< 500	< 500	< 500	**13,000**	**15,000**	< 500	< 500	< 500	< 500	< 500	< 2500	< 500	< 500	< 500	< 2500	< 2500	< 500	< 500	< 500	**1,100**	< 1,500	< 500	< 2500	< 500	< 2,500	21,000
MW-101A	01/25/11	**1,000**	< 500	< 500	< 500	< 500	< 500	**1,600**	**13,000**	< 500	< 500	< 500	< 500	< 500	< 2500	< 500	< 500	< 500	< 2500	< 2500	< 500	< 500	< 500	**810**	< 1,500	< 500	< 2500	< 500	< 2,500	22,000
MW-101A	04/19/11	**1,100**	< 20	< 20	< 20	< 20	**97**	**790**	**8,300**	< 20	140	< 20	< 20	< 20	< 100	< 20	< 20	< 20	< 100	< 100	< 20	< 20	< 20	**630**	49	< 20	< 100	< 20	< 100	42,000
MW-101A	08/16/11	**720**	< 20	< 20	< 20	< 20	**49**	**940**	**1,700**	< 20	120	< 20	< 20	< 20	< 100	< 20	< 20	< 20	< 100	< 100	< 20	< 20	< 20	260	25	< 20	< 100	< 20	< 100	22,000
MW-101A	10/05/11	**820**	< 50	< 50	< 50	< 50	< 50	**1,800**	**2,700**	< 50	< 50	< 50	< 50	< 50	< 250	< 50	< 50	< 50	< 250	< 250	< 50	< 50	< 50	310	< 150	< 50	< 250	< 50	< 250	24,000
MW-101A	05/17/12	160	< 20	< 20	< 20	< 20	**40**	**310**	**470**	< 20	< 20	< 20	< 20	< 20	< 100	< 20	< 20	< 20	< 100	< 100	< 20	< 20	< 20	94	< 20	< 20	< 100	< 20	< 100	9,800
MW-101A	11/07/12	60	< 5	< 5	< 5	< 5	**10**	**86**	**140**	< 5	< 5	< 5	< 5	< 5	< 25	< 5	< 5	< 5	< 25	< 25	< 5	< 5	< 5	24	< 15	< 5	< 25	< 5	< 25	3,300
MW-101A	05/08/13	56	< 5	< 5	< 5	< 5	**18**	**110**	**190**	< 5	< 5	< 5	5.2	< 5	< 25	< 5	< 5	< 5	100	< 25	< 5	< 5	< 5	29	< 15	< 5	< 25	< 5	< 25	4,700
MW-101A	10/23/13	31	< 10	< 10	< 10	< 10	**9.4 J**	**32**	34	< 10	< 10	< 5	< 10	< 10	< 50	< 5	< 5	< 10	< 50	< 50	< 10	< 10	< 10	4.8 J	< 15	< 10	< 20	< 10	< 50	4,900
MW-101A DUP	10/23/13	< 1	< 1	< 1	< 1	< 1	< 1	2.8	68	< 1	< 1	**0.8**	< 1	< 1	< 5	0.5 J	< 1	< 1	< 5	< 5	< 1	< 1	< 1	< 0.5	< 1.5	< 1	< 2	< 1	< 5	150
MW-101A	04/29/14	19	< 10	< 10	< 10	< 10	**19**	**100**	**350**	< 10	< 10	< 10	< 10	< 10	< 50	< 5	3	< 10	< 50	< 50	< 50	< 10	< 10	32	9.3	< 10	< 20	< 10	< 50	6,600
MW-101A	11/12/14	< 10	< 10	< 10	< 10	< 10	< 10	**12**	22	< 10	< 10	< 5.0	< 10	< 50	< 50	< 5.0	< 5.0	< 10	< 50	< 50	< 10	< 10	< 10	< 5.0	<10	< 10	< 20	< 10	< 50	2,200

Table 3-1: Volatile Organic Compound Analytical Results in Groundwater: October 2010 to November 2014

Chemical Name**		Chlorinated Ethanes (µg/L)					Chlorinated Ethenes (µg/L)						Chlorinated Methanes (µg/L)		Other Compounds (µg/L)															
		1,1,1-Trichloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,2-Dichloroethane	Chloroethane	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,1-Dichloroethene	Vinyl Chloride	Chloroform	Methylene Chloride	Acetone	Benzene	Ethyl-benzene	Isopropyl-benzene	Methyl Ethyl Ketone (MEK)	Methyl Isobutyl Ketone	Methyl tert Butyl Ether (MTBE)*	Naphthalene	Styrene	Toluene	Xylenes	1,2,4-Trimethylbenzene	Vinyl Acetate	Freon-11 (Trichlorofluoromethane)	Freon-12 (Dichlorodifluoromethane)	Freon- 113 (1,1,2-Trichlorotrifluoroethane)
2L Standard (µg/L)		**200**	**0.6**	**6**	**0.4**	**3000**	**0.7**	**3**	**70**	**100**	**350**	**0.03**	**70**	**5**	**6000**	**1**	**600**	**70**	**4000**	**100**	**20**	**6**	**70**	**600**	**500**	**400**	**88**	**2000**	**1000**	**200000**
MW-101B	10/13/10	**1,500**	< 500	< 500	< 500	< 500	< 500	**4,500**	**30,000**	< 500	< 500	< 500	< 500	< 500	< 2500	< 500	< 500	< 500	< 2500	< 2500	< 500	< 500	< 500	**1,400**	< 1,500	< 500	< 2500	< 500	< 2,500	14,000
MW-101B	12/02/10	**1,500**	< 500	< 500	< 500	< 500	< 500	**1,800**	**29,000**	< 500	< 500	< 500	< 500	< 500	< 2500	< 500	< 500	< 500	< 2500	< 2500	< 500	< 500	< 500	**1,200**	< 1,500	< 500	< 2500	< 500	< 2,500	11,000
MW-101B	01/25/11	77	< 20	< 20	< 20	< 20	< 20	< 20	**2,800**	< 20	26	< 20	< 20	**20**	< 100	< 20	< 20	< 20	< 100	< 100	< 20	< 20	< 20	47	< 60	< 20	< 100	< 20	< 100	300
MW-101B	04/19/11	83	< 5	< 5	< 5	< 5	< 5	< 5	**2,000**	< 5	23	< 5	< 5	**10**	< 25	< 5	< 5	< 5	< 25	< 25	< 5	< 5	< 5	71	< 15	< 5	< 25	< 5	< 25	660
MW-101B	08/16/11	**1,500**	< 20	**42**	< 20	< 20	**37**	**1,300**	**23,000**	99	230	< 20	< 20	**52**	< 100	< 20	< 20	< 20	< 100	< 100	< 20	< 20	< 20	**1,100**	< 60	< 20	< 100	< 20	< 100	10,000
MW-101B	10/05/11	**770**	< 20	**23**	< 20	< 20	< 20	**110**	**8,200**	< 20	< 20	< 20	< 20	< 20	< 100	< 20	< 20	< 20	< 100	< 100	< 20	< 20	< 20	560	< 60	< 20	< 100	< 20	< 100	5,600
MW-101B	05/17/12	**1,200**	< 20	**31**	< 20	< 20	**50**	**360**	**16,000**	< 20	190	< 20	< 20	< 20	< 100	< 20	< 20	< 20	< 100	< 100	< 20	< 20	< 20	**1,300**	42	< 20	< 100	< 20	< 100	17,000
MW-101B	11/07/12	**610**	< 10	**17**	< 10	< 10	**47**	**410**	**9,400**	< 10	120	< 10	< 10	< 10	< 50	< 10	12	< 10	< 50	< 50	< 10	< 10	< 10	**840**	50	< 10	< 50	< 10	< 50	13,000
MW-101B	05/08/13	**500**	< 5	**14**	< 5	< 5	**61**	**400**	**8,600**	< 5	100	< 5	11	**14**	< 25	< 5	13	< 5	140	< 25	< 5	< 5	< 5	**770**	53	< 5	< 25	< 5	39	18,000
MW-101B	10/23/13	**490**	< 20	13 J	< 20	< 20	**64**	**110**	**9,200**	< 20	85	< 10	< 20	< 100	< 100	< 10	13	< 20	< 100	< 100	< 20	< 20	< 20	**750**	49	< 20	< 40	< 20	< 100	17,000
MW-101B	04/29/14	**460**	< 20	**14**	< 20	< 20	**49**	**40**	**9,100**	< 20	< 20	< 10	< 20	< 100	< 100	< 10	12	< 20	< 100	< 100	< 20	< 20	< 20	**680**	48	< 20	< 40	< 20	< 100	15,000
MW-101B Dup	04/29/14	**480**	< 20	**16**	< 20	< 20	**51**	**44**	**9,300**	< 20	< 20	< 10	< 20	< 100	< 100	< 10	12	< 20	< 100	< 100	< 20	< 20	< 20	**710**	51	< 20	< 40	< 20	< 100	16,000
MW-101B	11/12/14	0.54 J	< 1.0	< 1.0	< 1.0	< 1.0	0.64 J	**40**	**120**	0.54 J	< 1.0	< 0.50	< 1.0	< 5.0	< 5.0	< 0.50	< 0.50	< 1.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	0.31 J	<1.0	< 1.0	< 2.0	< 1.0	< 5.0	7.4
MW-102A	10/13/10	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 100	< 20	< 20	< 20	< 100	< 100	< 20	< 20	< 20	< 20	< 60	< 20	< 100	< 20	< 100	890
MW-102A	12/02/10	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 100	< 20	< 20	< 20	< 100	< 100	< 20	< 20	< 20	< 20	< 60	< 20	< 100	< 20	< 100	760
MW-102A	01/25/11	< 10	< 10	< 10	< 10	< 10	< 10	< 10	19	< 10	< 10	< 10	< 10	< 10	< 50	< 10	< 10	< 10	< 50	< 50	< 10	< 10	< 10	< 10	< 30	< 10	< 50	< 10	< 50	1,300
MW-102A	04/20/11	< 1	< 1	< 1	< 1	< 1	< 1	2.5	23	< 1	9.2	< 1	< 1	< 1	< 5	< 1	< 1	< 1	< 5	< 5	< 1	< 1	< 1	< 1	< 3	< 1	< 5	< 1	< 5	1,900
MW-102A	08/16/11	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 100	< 20	< 20	< 20	< 100	< 100	< 20	< 20	< 20	< 20	< 60	< 20	< 100	< 20	< 100	710
MW-102A	10/05/11	< 2	< 2	< 2	< 2	< 2	< 2	< 2	18	< 2	< 2	< 2	< 2	< 2	< 10	< 2	< 2	< 2	< 10	< 10	< 2	< 2	< 2	< 2	< 6	< 2	< 10	< 2	< 10	1,200
MW-102A	05/17/12	< 2	< 2	< 2	< 2	< 2	< 2	< 2	23	< 2	< 2	< 2	< 2	< 2	< 10	< 2	< 2	< 2	< 10	< 10	< 2	< 2	< 2	< 2	< 6	< 2	< 10	< 2	19	920
MW-102A	11/07/12	< 1	< 1	< 1	< 1	< 1	< 1	0.8	20	< 1	9.1	< 1	< 1	< 1	< 5	< 1	< 1	< 1	< 5	< 5	< 1	< 1	< 1	< 1	< 3	< 1	< 5	< 1	< 5	830
MW-102A	05/08/13	< 1	< 1	< 1	< 1	< 1	< 1	2.1	35	< 1	16	< 1	< 1	< 1	< 5	< 1	< 1	< 1	5.9	< 5	< 1	< 1	< 1	< 1	< 3	< 1	< 5	< 1	59	710
MW-102A	10/23/13	< 1	< 1	< 1	< 1	< 1	< 1	0.6	25	< 1	13	< 0.5	< 1	< 5	< 5	< 0.5	< 0.5	< 1	< 5	< 5	< 1	< 1	< 1	0.3 J	< 1.5	< 1	< 2	< 1	< 5	580
MW-102A	04/29/14	< 2	< 2	< 2	< 2	< 2	< 2	< 1	32	< 2	< 2	< 1	< 2	< 10	< 10	< 1	< 1	< 2	< 10	< 10	< 10	< 2	< 2	< 1	< 3	< 2	< 4	< 2	< 10	580
MW-102A	11/12/14	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	0.41 J	21	< 1.0	12	< 0.50	< 1.0	< 5.0	< 5.0	< 0.50	< 0.50	< 1.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	0.36 J	<1.0	< 1.0	< 2.0	< 1.0	< 5.0	450
MW-102B	10/13/10	< 50	< 50	< 50	< 50	< 50	< 50	**480**	**810**	< 50	89	< 50	< 50	< 50	< 250	< 50	< 50	< 50	< 250	< 250	< 50	< 50	< 50	< 50	< 150	< 50	< 250	< 50	< 250	3,400
MW-102B	12/02/10	< 50	< 50	< 50	< 50	< 50	< 50	**78**	**410**	< 50	< 50	< 50	< 50	< 50	< 250	< 50	< 50	< 50	< 250	< 250	< 50	< 50	< 50	< 50	< 150	< 50	< 250	< 50	< 250	1,600
MW-102B	01/25/11	< 50	< 50	< 50	< 50	< 50	< 50	< 50	**550**	< 50	< 50	< 50	< 50	< 50	< 250	< 50	< 50	< 50	< 250	< 250	< 50	< 50	< 50	< 50	< 150	< 50	< 250	< 50	< 250	3,300
MW-102B	04/20/11	< 10	< 10	< 10	< 10	< 10	< 10	< 10	**1,500**	< 10	< 10	< 10	< 10	< 10	< 50	< 10	< 10	< 10	< 50	< 50	< 10	< 10	< 10	**810**	< 30	< 10	< 50	< 10	< 50	4,700
MW-102B	08/16/11	21	< 10	< 10	< 10	< 10	< 10	< 10	**1,100**	< 10	67	< 10	< 10	< 10	71	< 10	< 10	< 10	100	< 50	< 10	< 10	< 10	51	11	< 10	< 50	< 10	< 50	3,700
MW-102B	10/05/11	19	< 10	< 10	< 10	< 10	< 10	< 10	**910**	< 10	63	< 10	< 10	< 10	< 50	< 10	< 10	< 10	< 50	< 50	< 10	< 10	< 10	54	< 30	< 10	< 50	< 10	< 50	4,100
MW-102B	05/17/12	< 2	< 2	< 2	< 2	< 2	**4.3**	**5**	**910**	< 2	< 2	**2.5**	< 2	< 2	< 10	< 2	< 2	< 2	< 10	< 10	< 2	< 2	< 2	47	< 6	< 2	< 10	< 2	64	3,600
MW-102B	11/07/12	9.7	< 2	< 2	< 2	< 2	**3.5**	1.2	**630**	< 2	79	< 2	< 2	< 2	< 10	< 2	< 2	< 2	< 10	< 10	< 2	< 2	< 2	35	2.4	< 2	< 10	< 2	< 10	2,900
MW-102B	05/08/13	6.8	< 1	1.3	< 1	< 1	**3.6**	1.2	**450**	< 1	68	**1.8**	1.1	< 1	7.6	< 1	< 1	< 1	23	< 5	< 1	< 1	< 1	28	2.3	< 1	< 5	< 1	120	2,700
MW-102B	10/23/13	5.8	< 5	< 5	< 5	< 5	**3.8 J**	< 2.5	**580**	< 5	69	< 2.5	< 5	< 25	< 25	< 2.5	< 2.5	< 5	< 25	< 25	< 5	< 5	< 5	36	2.3	< 5	< 10	< 5	< 25	2,500
MW-102B	04/29/14	6	< 5	< 5	< 5	< 5	**3.6**	1.8	**520**	< 5	< 5	**2.8**	< 5	< 25	< 25	< 2.5	< 2.5	< 5	< 25	< 25	< 5	< 5	< 5	32	2.5 J	< 5	< 10	< 5	< 25	2,300
MW-102B	11/12/14	3.6	< 2.0	1.1 J	< 2.0	< 2.0	**2.3**	< 1.0	**420**	< 2.0	31	**3.5**	< 2.0	< 10	< 10	< 1.0	< 1.0	< 2.0	< 10	< 10	< 2.0	< 2.0	< 2.0	21	1.4 J	< 2.0	< 4.0	< 2.0	< 10	860
MW-102B Dup	11/12/14	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**3.3 J**	< 2.5	**510**	< 5.0	39	**4.4**	< 5.0	< 25	< 25	< 2.5	< 2.5	< 5.0	< 25	< 25	< 5.0	< 5.0	< 5.0	29	<5.0	< 5.0	< 10	< 5.0	< 25	1,300

Table 3-1: Volatile Organic Compound Analytical Results in Groundwater: October 2010 to November 2014

Chemical Name**		Chlorinated Ethanes (µg/L)					Chlorinated Ethenes (µg/L)						Chlorinated Methanes (µg/L)		Other Compounds (µg/L)															
		1,1,1-Trichloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,2-Dichloroethane	Chloroethane	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,1-Dichloroethene	Vinyl Chloride	Chloroform	Methylene Chloride	Acetone	Benzene	Ethyl-benzene	Isopropyl-benzene	Methyl Ethyl Ketone (MEK)	Methyl Isobutyl Ketone	Methyl tert Butyl Ether (MTBE)*	Naphthalene	Styrene	Toluene	Xylenes	1,2,4-Trimethylbenzene	Vinyl Acetate	Freon-11 (Trichlorofluoromethane)	Freon-12 (Dichlorodifluoromethane)	Freon- 113 (1,1,2-Trichlorotrifluoroethane)
2L Standard (µg/L)		**200**	**0.6**	**6**	**0.4**	**3000**	**0.7**	**3**	**70**	**100**	**350**	**0.03**	**70**	**5**	**6000**	**1**	**600**	**70**	**4000**	**100**	**20**	**6**	**70**	**600**	**500**	**400**	**88**	**2000**	**1000**	**200000**
MW-102C	10/13/10	< 500	< 500	< 500	< 500	< 500	< 500	**5,900**	**25,000**	< 500	**720**	< 500	< 500	< 500	< 2500	< 500	< 500	< 500	< 2500	< 2500	< 500	< 500	< 500	< 500	< 1,500	< 500	< 2500	< 500	< 2,500	9,600
MW-102C DUP	10/13/10	< 500	< 500	< 500	< 500	< 500	< 500	**4,800**	**21,000**	< 500	**580**	< 500	< 500	< 500	< 2500	< 500	< 500	< 500	< 2500	< 2500	< 500	< 500	< 500	< 500	< 1,500	< 500	< 2500	< 500	< 2,500	8,700
MW-102C	12/02/10	< 500	< 500	< 500	< 500	< 500	< 500	**2,000**	**46,000**	< 500	**1,200**	< 500	< 500	< 500	< 2500	< 500	< 500	< 500	< 2500	< 2500	< 500	< 500	< 500	< 500	< 1,500	< 500	< 2500	< 500	< 2,500	13,000
MW-102C	01/25/11	< 500	< 500	< 500	< 500	< 500	< 500	**8,000**	**36,000**	< 500	**950**	< 500	< 500	< 500	< 2500	< 500	< 500	< 500	< 2500	< 2500	< 500	< 500	< 500	570	< 1,500	< 500	< 2500	< 500	< 2,500	9,700
MW-102C	04/20/11	< 100	< 100	< 100	< 100	< 100	< 100	**13,000**	**30,000**	< 100	< 100	< 100	< 100	< 100	< 500	< 100	< 100	< 100	< 500	< 500	< 100	< 100	< 100	**690**	< 300	< 100	< 500	< 100	< 500	11,000
MW-102C	08/16/11	140	< 100	< 100	< 100	< 100	< 100	**21,000**	**32,000**	**160**	**1,200**	< 100	< 100	**110**	< 500	< 100	< 100	< 100	< 500	< 500	< 100	< 100	< 100	**740**	< 300	< 100	< 500	< 100	< 500	9,800
MW-102C	10/05/11	< 20	< 20	< 20	< 20	< 20	**27**	**21,000**	**29,000**	< 20	**1,100**	< 20	59	**130**	< 100	< 20	< 20	< 20	< 100	< 100	< 20	< 20	< 20	**1,000**	< 60	< 20	< 100	< 20	< 100	10,000
MW-102C	05/17/12	< 20	< 20	< 20	< 20	< 20	< 20	**4,700**	**44,000**	< 20	**1,200**	< 20	56	**170**	< 100	< 20	< 20	< 20	< 100	< 100	< 20	< 20	< 20	**700**	20	< 20	< 100	< 20	< 100	9,500
MW-102C	11/07/12	160	< 50	< 50	< 50	< 50	< 50	**12,000**	**48,000**	< 50	**1,500**	< 50	59	< 50	< 250	< 50	< 50	< 50	< 250	< 250	< 50	< 50	< 50	**1,500**	< 150	< 50	< 250	< 50	< 250	14,000
MW-102C	05/08/13	100	< 50	< 50	< 50	< 50	< 50	**5,300**	**38,000**	< 50	**1,000**	< 50	< 50	**110**	< 250	< 50	< 50	< 50	< 250	< 250	< 50	< 50	< 50	**1,100**	< 150	< 50	< 250	< 50	< 250	9,100
MW-102C	10/23/13	100	< 50	< 50	< 50	< 50	**32**	**5,100**	**48,000**	< 50	**1,200**	< 25	57	< 250	< 250	**13 J**	10 J	< 50	< 250	< 250	< 50	< 50	< 50	**1,700**	41.1 J	< 50	< 100	< 50	< 250	13,000
MW-102C	04/29/14	74	< 20	< 20	< 20	< 20	**21**	**1,800**	**33,000**	< 20	**790**	< 10	32	**110**	< 100	**8.6**	9.3	< 20	< 100	< 100	< 20	< 20	< 20	**1,200**	26	< 20	< 40	< 20	< 100	10,000
MW-102C	11/12/14	100	< 50	< 50	< 50	< 50	**37 J**	**8,300**	**41,000**	< 50	**1,100**	< 25	35 J	**310**	< 250	< 25	< 25	< 50	< 250	< 250	< 50	< 50	< 50	**1,800**	40.6 J	< 50	< 100	< 50	< 250	10,000
MW-103A	10/12/10	< 50	< 50	< 50	< 50	< 50	< 50	**54**	**71**	< 50	100	< 50	< 50	< 50	< 250	< 50	< 50	< 50	< 250	< 250	< 50	< 50	< 50	< 50	< 150	< 50	< 250	< 50	< 250	31,000
MW-103A	01/25/11	< 50	< 50	< 50	< 50	< 50	< 50	< 50	**210**	< 50	< 50	< 50	< 50	< 50	< 250	< 50	< 50	< 50	< 250	< 250	< 50	< 50	< 50	< 50	< 150	< 50	< 250	< 50	< 250	5,700
MW-103A	04/20/11	< 50	< 50	< 50	< 50	< 50	< 50	**64**	**180**	< 50	< 50	< 50	< 50	< 50	< 250	< 50	< 50	< 50	< 250	< 250	< 50	< 50	< 50	< 50	< 150	< 50	< 250	< 50	< 250	24,000
MW-103A	08/15/11	< 50	< 50	< 50	< 50	< 50	< 50	**78**	**230**	< 50	< 50	< 50	< 50	< 50	< 250	< 50	< 50	< 50	< 250	< 250	< 50	< 50	< 50	< 50	< 150	< 50	< 250	< 50	< 250	35,000
MW-103A	10/04/11	< 100	< 100	< 100	< 100	< 100	< 100	< 100	**160**	< 100	100	< 100	< 100	< 100	< 500	< 100	< 100	< 100	< 500	< 500	< 100	< 100	< 100	< 100	< 300	< 100	< 500	< 100	< 500	31,000
MW-103A	05/16/12	< 20	< 20	< 20	< 20	< 20	< 20	< 20	**200**	< 20	< 20	< 20	< 20	< 20	< 100	< 20	< 20	< 20	< 100	< 100	< 20	< 20	< 20	< 20	< 60	< 20	< 100	< 20	< 100	17,000
MW-103A	11/07/12	< 50	< 50	< 50	< 50	< 50	< 50	**79**	**180**	< 50	< 50	< 50	< 50	< 50	< 250	< 50	< 50	< 50	< 250	< 250	< 50	< 50	< 50	< 50	< 150	< 50	< 250	< 50	< 250	36,000
MW-103A	05/08/13	< 1	< 1	1.9	**1.6**	< 1	**1.5**	**40**	**190**	< 1	< 1	**8**	4.9	< 1	< 5	< 1	< 1	< 1	< 5	< 5	< 1	< 1	< 1	4	< 3	< 1	< 5	< 1	100	23,000
MW-103A	10/22/13	< 20	< 20	< 20	< 20	< 20	< 20	**26**	**170**	< 20	< 20	< 10	< 20	< 20	< 100	< 20	< 10	< 20	< 100	< 100	< 20	< 20	< 20	12	< 30	< 20	< 40	< 20	< 100	15,000
MW-103A	04/29/14	< 20	< 20	< 20	< 20	< 20	< 20	**33**	**130**	< 20	< 20	**7.6**	< 20	< 100	< 100	< 10	< 10	< 20	< 100	< 100	< 20	< 20	< 20	<10	< 30	< 20	< 40	< 20	< 100	18,000
MW-103A	11/13/14	< 50	< 50	< 50	< 50	< 50	< 50	**43**	**140**	< 50	< 50	< 25	< 50	< 250	< 250	< 25	< 25	< 50	< 250	< 250	< 50	< 50	< 50	< 25	<50	< 50	< 100	< 50	< 250	21,000
MW-103B	10/12/10	< 50	< 50	< 50	< 50	< 50	< 50	< 50	**160**	< 50	< 50	< 50	< 50	< 50	< 250	< 50	< 50	< 50	< 250	< 250	< 50	< 50	< 50	< 50	< 150	< 50	< 250	< 50	< 250	7,600
MW-103B	12/02/10	< 100	< 100	< 100	< 100	< 100	< 100	< 100	**230**	< 100	< 100	< 100	< 100	< 100	< 500	< 100	< 100	< 100	< 500	< 500	< 100	< 100	< 100	< 100	< 300	< 100	< 500	< 100	< 500	7,200
MW-103B	01/25/11	< 50	< 50	< 50	< 50	< 50	< 50	< 50	**160**	< 50	< 50	< 50	< 50	< 50	< 250	< 50	< 50	< 50	< 250	< 250	< 50	< 50	< 50	< 50	< 150	< 50	< 250	< 50	< 250	4,600
MW-103B	04/20/11	< 20	< 20	< 20	< 20	< 20	< 20	**32**	**210**	< 20	< 20	< 20	< 20	< 20	< 100	< 20	< 20	< 20	< 100	< 100	< 20	< 20	< 20	< 20	< 60	< 20	< 100	< 20	< 100	9,400
MW-103B DUP	04/20/11	< 20	< 20	< 20	< 20	< 20	< 20	**38**	**210**	< 20	< 20	**11**	< 20	< 20	< 100	< 20	< 20	< 20	< 100	< 100	< 20	< 20	< 20	< 20	< 60	< 20	< 100	< 20	< 100	13,000
MW-103B	08/15/11	< 20	< 20	< 20	< 20	< 20	< 20	**36**	**170**	< 20	< 20	< 20	< 20	< 20	< 100	< 20	< 20	< 20	< 100	< 100	< 20	< 20	< 20	< 20	< 60	< 20	< 100	< 20	< 100	14,000
MW-103B	10/04/11	< 20	< 20	< 20	< 20	< 20	< 20	**41**	**180**	< 20	< 20	< 20	< 20	< 20	< 100	< 20	< 20	< 20	< 100	< 100	< 20	< 20	< 20	< 20	< 60	< 20	< 100	< 20	< 100	15,000
MW-103B DUP	10/04/11	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 50	< 250	< 50	< 50	< 50	< 250	< 250	< 50	< 50	< 50	< 50	< 150	< 50	< 250	< 50	< 250	17,000
MW-103B	05/17/12	< 10	< 10	< 10	< 10	< 10	< 10	< 10	**250**	< 10	< 10	**14**	< 10	< 10	< 50	< 10	< 10	< 10	< 50	< 50	< 10	< 10	< 10	< 10	< 30	< 10	< 50	< 10	< 50	8,600
MW-103B DUP	05/17/12	< 20	< 20	< 20	< 20	< 20	< 20	**20**	**220**	< 20	< 20	< 20	< 20	< 20	< 100	< 20	< 20	< 20	< 100	< 100	< 20	< 20	< 20	< 20	< 60	< 20	< 100	< 20	< 100	6,700
MW-103B	11/07/12	< 10	< 10	< 10	< 10	< 10	< 10	**63**	**170**	< 10	< 10	< 10	< 10	< 10	< 50	< 10	< 10	< 10	< 50	< 50	< 10	< 10	< 10	7.5	< 30	< 10	< 50	< 10	< 50	16,000
MW-103B	05/08/13	< 1	< 1	1.6	**1.9**	< 1	< 1	**35**	**160**	< 1	< 1	**7.5**	2.7	< 1	< 5	< 1	< 1	< 1	< 5	< 5	< 1	< 1	< 1	2.5	< 3	< 1	< 5	< 1	80	15,000
MW-103B DUP	05/08/13	< 1	< 1	1.7	**1.9**	< 1	< 1	**36**	**160**	< 1	< 1	**8**	2.7	< 1	< 5	< 1	< 1	< 1	< 5	< 5	< 1	< 1	< 1	2.7	< 3	< 1	< 5	< 1	80	14,000
MW-103B	10/22/13	< 10	< 10	< 10	< 10	< 10	< 10	**22**	**160**	< 10	< 10	**11**	< 10	< 10	< 50	< 5	< 5	< 10	< 50	< 50	< 10	< 10	< 10	3.5 J	< 15	< 10	< 20	< 10	< 50	10,000
MW-103B DUP	10/22/13	< 10	< 10	< 10	< 10	< 10	< 10	**22**	**170**	< 10	< 10	**12**	< 10	< 10	< 50	< 5	< 5	< 10	< 50	< 50	< 10	< 10	< 10	3.6 J	< 15	< 10	< 20	< 10	< 50	10,000
MW-103B	04/29/14	< 10	< 10	< 10	< 10	< 10	< 10	**16**	**140**	< 10	< 10	**10**	< 10	< 50	< 50	< 5	< 5	< 10	< 50	< 50	< 10	< 10	< 10	< 5	< 15	< 10	< 20	< 10	< 50	7,300
MW-103B	11/13/14	< 20	< 20	< 20	< 20	< 20	< 20	**16**	**160**	< 20	< 20	< 10	< 20	< 100	< 100	< 10	< 10	< 20	< 100	< 100	< 20	< 20	< 20	8.2 J	<20	< 20	< 40	< 20	< 100	6,900

Table 3-1: Volatile Organic Compound Analytical Results in Groundwater: October 2010 to November 2014

Chemical Name**		Chlorinated Ethanes (µg/L)					Chlorinated Ethenes (µg/L)						Chlorinated Methanes (µg/L)		Other Compounds (µg/L)															
		1,1,1-Trichloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,2-Dichloroethane	Chloroethane	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,1-Dichloroethene	Vinyl Chloride	Chloroform	Methylene Chloride	Acetone	Benzene	Ethyl-benzene	Isopropyl-benzene	Methyl Ethyl Ketone (MEK)	Methyl Isobutyl Ketone	Methyl tert Butyl Ether (MTBE)*	Naphthalene	Styrene	Toluene	Xylenes	1,2,4-Trimethylbenzene	Vinyl Acetate	Freon-11 (Trichlorofluoromethane)	Freon-12 (Dichlorodifluoromethane)	Freon- 113 (1,1,2-Trichlorotrifluoroethane)
2L Standard (µg/L)		**200**	**0.6**	**6**	**0.4**	**3000**	**0.7**	**3**	**70**	**100**	**350**	**0.03**	**70**	**5**	**6000**	**1**	**600**	**70**	**4000**	**100**	**20**	**6**	**70**	**600**	**500**	**400**	**88**	**2000**	**1000**	**200000**
MW-103C	10/12/10	< 10	< 10	< 10	< 10	< 10	< 10	**27**	**240**	< 10	19	< 10	< 10	< 10	< 50	< 10	< 10	< 10	< 50	< 50	< 10	< 10	< 10	< 10	< 30	< 10	< 50	< 10	< 50	4,400
MW-103C	12/02/10	< 100	< 100	< 100	< 100	< 100	< 100	< 100	**260**	< 100	< 100	< 100	< 100	< 100	< 500	< 100	< 100	< 100	< 500	< 500	< 100	< 100	< 100	< 100	< 300	< 100	< 500	< 100	< 500	7,600
MW-103C	01/25/11	< 10	< 10	< 10	< 10	< 10	< 10	**43**	**310**	< 10	< 10	**10**	< 10	< 10	< 50	< 10	< 10	< 10	< 50	< 50	< 10	< 10	< 10	< 10	< 30	< 10	< 50	< 10	< 50	6,900
MW-103C	04/20/11	< 20	< 20	< 20	< 20	< 20	< 20	**49**	**310**	< 20	< 20	< 20	< 20	< 20	< 100	< 20	< 20	< 20	< 100	< 100	< 20	< 20	< 20	< 20	< 60	< 20	< 100	< 20	< 100	8,200
MW-103C	08/15/11	< 20	< 20	< 20	< 20	< 20	< 20	**40**	**270**	< 20	< 20	< 20	< 20	< 20	< 100	< 20	< 20	< 20	< 100	< 100	< 20	< 20	< 20	< 20	< 60	< 20	< 100	< 20	< 100	11,000
MW-103C	10/04/11	< 20	< 20	< 20	< 20	< 20	< 20	**41**	**270**	< 20	< 20	< 20	< 20	< 20	< 100	< 20	< 20	< 20	< 100	< 100	< 20	< 20	< 20	< 20	< 60	< 20	< 100	< 20	< 100	10,000
MW-103C	05/16/12	< 20	< 20	< 20	< 20	< 20	< 20	**59**	**280**	< 20	< 20	< 20	< 20	< 20	< 100	< 20	< 20	< 20	< 100	< 100	< 20	< 20	< 20	< 20	< 60	< 20	< 100	< 20	< 100	14,000
MW-103C	11/07/12	< 10	< 10	< 10	< 10	< 10	< 10	**44**	**210**	< 10	< 10	**7.9**	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 30	< 10	< 10	< 10	< 50	9,400
MW-103C	05/08/13	< 1	< 1	2.2	**3.1**	< 1	< 1	**68**	**300**	< 1	< 1	**8.9**	3.9	< 1	18	< 1	< 1	< 1	8	< 1	< 1	< 1	< 1	1.4	< 3	< 1	< 5	< 1	110	13,000
MW-103C	10/22/13	< 20	< 20	< 20	< 20	< 20	< 20	**56**	**290**	< 20	< 20	< 10	< 20	< 20	< 100	< 10	< 10	< 20	< 100	< 100	< 20	< 20	< 20	< 10	< 15	< 20	< 40	< 20	< 100	11,000
MW-103C	04/29/14	< 20	< 20	< 20	< 20	< 20	< 20	**65**	**310**	< 20	< 20	**10**	< 20	< 100	< 100	< 10	< 10	< 20	< 100	< 100	< 20	< 20	< 20	<10	< 30	< 20	< 40	< 20	< 100	13,000
MW-103C	11/13/14	< 20	< 20	< 20	< 20	< 20	< 20	**28**	**200**	< 20	< 20	< 10	< 20	< 100	< 100	< 10	< 10	< 20	< 100	< 100	< 20	< 20	< 20	< 10	<20	< 20	< 40	< 20	< 100	8,000
MW-104A	10/12/10	< 5	< 5	< 5	< 5	< 5	< 5	< 5	**740**	< 5	5.3	**19**	< 5	< 5	< 25	< 5	< 5	< 5	< 25	< 25	< 5	< 5	< 5	< 5	< 15	< 5	< 25	< 5	< 25	780
MW-104A	04/20/11	< 2	< 2	2.5	< 2	< 2	< 2	2.2	**600**	2.4	< 2	**9.4**	< 2	< 2	< 10	< 2	< 2	< 2	< 10	< 10	< 2	< 2	< 2	< 2	< 6	< 2	< 10	< 2	< 10	910
MW-104A	10/04/11	< 1	< 1	3.1	< 1	< 1	< 1	1.9	**440**	1.9	< 1	**8.4**	1.1	< 1	< 5	< 1	< 1	< 1	< 5	< 5	< 1	< 1	< 1	< 1	< 3	< 1	< 5	< 1	< 5	650
MW-104A	05/16/12	< 2	< 2	< 2	**3.2**	< 2	< 2	< 2	**470**	2.2	< 2	**9.3**	< 2	< 2	< 10	< 2	< 2	< 2	< 10	< 10	< 2	< 2	< 2	< 2	< 6	< 2	< 10	< 2	< 10	950
MW-104A	11/07/12	< 1	< 1	1.6	**2**	< 1	< 1	1.5	**340**	1.4	1.1	**4.9**	1	< 1	< 5	< 1	< 1	< 1	< 5	< 5	< 1	< 1	< 1	< 1	< 3	< 1	< 5	< 1	< 5	730
MW-104A Dup	11/07/12	< 1	< 1	1.6	**2.1**	< 1	< 1	1.6	**360**	1.4	1.1	**5.1**	1.1	< 1	< 5	< 1	< 1	< 1	< 5	< 5	< 1	< 1	< 1	< 1	< 3	< 1	< 5	< 1	< 5	740
MW-104A	05/08/13	< 1	< 1	1.5	**2**	< 1	< 1	1.8	**300**	1.5	1.8	**6.6**	< 1	< 1	< 5	< 1	< 1	< 1	< 5	< 5	< 1	< 1	< 1	< 1	< 3	< 1	< 5	< 1	91	660
MW-104A	10/22/13	< 1	< 1	1.6	**1.9**	3	< 1	1.4	32	1.7	< 1	**7.9**	1	< 1	< 5	< 0.5	< 0.5	< 1	< 5	< 5	< 1	< 1	< 1	< 0.5	< 1.5	< 1	< 5	< 1	< 5	47
MW-104A	04/28/14	< 1	< 1	1.9	**2.1**	< 1	< 1	1.7	**400**	1.9	< 1	**21**	0.77 J	< 5	< 5	< 0.5	< 0.5	< 1	< 5	< 5	< 1	< 1	< 1	< 0.5	< 1.5	< 1	< 2	< 1	< 5	500
MW-104A Dup-0	04/28/14	< 2	< 2	1.9 J	< 2	< 2	< 2	1.9	**450**	1.9 J	< 2	**20**	< 2	< 10	< 10	< 1	< 1	< 2	< 10	< 10	< 2	< 2	< 2	< 1	< 3	< 2	< 4	< 2	< 10	540
MW-104A	11/13/14	< 2.0	< 2.0	1.8 J	**1.9 J**	< 2.0	< 2.0	1.7	**390**	1.7 J	< 2.0	**15**	< 2.0	< 10	< 10	< 1.0	< 1.0	< 2.0	< 10	< 10	< 2.0	< 2.0	< 2.0	< 1.0	<2.0	< 2.0	< 4.0	< 2.0	< 10	610
MW-104B	10/12/10	< 5	< 5	< 5	< 5	< 5	< 5	**15**	67	< 5	18	< 5	< 5	< 5	< 25	< 5	< 5	< 5	< 25	< 25	< 5	< 5	< 5	< 5	< 15	< 5	< 25	< 5	< 25	1,100
MW-104B	04/20/11	< 5	< 5	< 5	< 5	< 5	< 5	**13**	44	< 5	9.2	< 5	< 5	< 5	< 25	< 5	< 5	< 5	< 25	< 25	9.2	< 5	< 5	< 5	< 15	< 5	< 25	< 5	< 25	2,800
MW-104B	10/04/11	< 10	< 10	< 10	< 10	< 10	< 10	< 10	35	< 10	< 10	< 10	< 10	< 10	< 50	< 10	< 10	< 10	< 50	< 50	< 10	< 10	< 10	< 10	< 30	< 10	< 50	< 10	< 50	2,500
MW-104B	05/16/12	< 2	< 2	< 2	< 2	< 2	< 2	**11**	32	< 2	< 2	< 2	< 2	< 2	< 10	< 2	< 2	< 2	< 10	< 10	5.1	< 2	< 2	< 2	< 6	< 2	< 10	< 2	< 10	1,100
MW-104B	11/07/12	< 2	< 2	< 2	< 2	< 2	< 2	**7.8**	26	< 2	< 2	< 2	< 2	< 2	< 10	< 2	< 2	< 2	< 10	< 10	5.1	< 2	< 2	< 2	< 6	< 2	< 10	2.1	< 10	2,000
MW-104B	05/08/13	< 1	< 1	< 1	< 1	< 1	< 1	**7.8**	24	< 1	15	< 1	1.4	< 1	< 5	< 1	< 1	< 1	< 5	< 5	3.7	< 1	< 1	< 1	< 3	< 1	< 5	11	< 5	2,900
MW-104B	10/22/13	< 5	< 5	< 5	< 5	< 5	< 5	**6.2**	25	< 5	< 5	< 2.5	< 5	< 25	< 25	< 2.5	< 2.5	< 5	< 25	< 25	2.9 J	< 5	< 5	< 2.5	< 7.5	< 5	< 10	< 50	< 25	1,700
MW-104B	04/28/14	< 1	< 1	< 1	< 1	< 1	< 1	**7.1**	30	< 1	< 1	**1.3**	< 5	< 5	10	< 0.5	< 0.5	< 1	< 5	< 5	4.1	< 1	< 1	< 0.5	< 1.5	< 1	< 2	1.1	< 5	880
MW-104B	11/13/14	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**7.3**	24	< 5.0	< 5.0	**2 J**	< 5.0	< 25	< 25	< 2.5	< 2.5	< 5.0	< 25	< 25	< 5.0	< 5.0	< 5.0	< 2.5	<5.0	< 5.0	< 10	< 5.0	< 25	1,600
MW-104C	10/12/10	< 5	< 5	< 5	< 5	< 5	< 5	**12**	**110**	< 5	19	< 5	< 5	< 5	< 25	< 5	< 5	< 5	< 25	< 25	6	< 5	< 5	< 5	< 15	< 5	< 25	< 5	< 25	1,600
MW-104C	04/20/11	< 5	< 5	< 5	< 5	< 5	< 5	**13**	**100**	< 5	7.7	< 5	< 5	< 5	< 25	< 5	< 5	< 5	< 25	< 25	7.4	< 5	< 5	< 5	< 15	< 5	< 25	< 5	< 25	2,200
MW-104C	10/04/11	< 2	< 2	< 2	< 2	< 2	< 2	**13**	**87**	< 2	< 2	< 2	3.8	< 2	< 10	< 2	< 2	< 2	< 10	< 10	9.6	< 2	< 2	< 2	< 6	< 2	< 10	< 2	< 10	2,400
MW-104C	05/16/12	< 5	< 5	< 5	< 5	< 5	< 5	**9.8**	65	< 5	< 5	< 5	< 5	< 5	< 25	< 5	< 5	< 5	< 25	< 25	7.6	< 5	< 5	< 5	< 15	< 5	< 25	< 5	< 25	2,800
MW-104C	11/07/12	< 2	< 2	< 2	< 2	< 2	< 2	**7.8**	55	< 2	< 2	< 2	2.1	< 2	< 10	< 2	< 2	< 2	< 10	< 10	5.8	< 2	< 2	< 2	< 6	< 2	< 10	2.6	< 10	1,500
MW-104C	05/08/13	< 1	< 1	< 1	**1.1**	< 1	< 1	**9.6**	**130**	< 1	12	< 1	1.9	< 1	< 5	< 1	< 1	< 1	< 5	< 5	3.3	< 1	< 1	< 1	< 3	< 1	< 5	< 1	16	1,800
MW-104C	10/22/13	< 5	< 5	< 5	< 5	< 5	< 5	**7.8**	51	< 5	< 5	< 2.5	< 5	< 5	< 25	< 2.5	< 2.5	< 5	< 25	< 25	3.9 J	< 5	< 5	< 2.5	< 7.5	< 5	< 10	< 5	< 50	2,700
MW-104C	04/29/14	< 5	< 5	< 5	< 5	< 5	< 5	**7**	52	< 5	< 5	**2.1**	< 5	< 25	< 25	< 2.5	< 2.5	< 5	< 25	< 25	4.1	< 5	< 5	< 2.5	< 7.5	< 5	< 10	< 5	< 25	2,000
MW-104C	11/13/14	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	**8**	54	< 5.0	< 5.0	**2.6**	< 5.0	< 25	< 25	< 2.5	< 2.5	< 5.0	< 25	< 25	3.9 J	< 5.0	< 5.0	< 2.5	<5.0	< 5.0	< 10	< 5.0	< 25	20,000

Table 3-1: Volatile Organic Compound Analytical Results in Groundwater: October 2010 to November 2014

Chemical Name**		Chlorinated Ethanes (µg/L)					Chlorinated Ethenes (µg/L)						Chlorinated Methanes (µg/L)		Other Compounds (µg/L)															
		1,1,1-Trichloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,2-Dichloroethane	Chloroethane	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,1-Dichloroethene	Vinyl Chloride	Chloroform	Methylene Chloride	Acetone	Benzene	Ethyl-benzene	Isopropyl-benzene	Methyl Ethyl Ketone (MEK)	Methyl Isobutyl Ketone	Methyl tert Butyl Ether (MTBE)*	Naphthalene	Styrene	Toluene	Xylenes	1,2,4-Trimethylbenzene	Vinyl Acetate	Freon-11 (Trichlorofluoromethane)	Freon-12 (Dichlorodifluoromethane)	Freon- 113 (1,1,2-Trichlorotrifluoroethane)
2L Standard (µg/L)		**200**	**0.6**	**6**	**0.4**	**3000**	**0.7**	**3**	**70**	**100**	**350**	**0.03**	**70**	**5**	**6000**	**1**	**600**	**70**	**4000**	**100**	**20**	**6**	**70**	**600**	**500**	**400**	**88**	**2000**	**1000**	**200000**
MW-105C	10/12/10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 1	< 1	< 1	< 5	< 5	< 1	< 1	< 1	< 1	< 3	< 1	< 5	< 1	< 5	< 5
MW-105C	04/19/11	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 1	< 1	< 1	< 5	< 5	< 1	< 1	< 1	< 1	< 3	< 1	< 5	< 1	< 5	< 1
MW-105C	10/04/11	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 1	< 1	< 1	< 5	< 5	< 1	< 1	< 1	< 1	< 3	< 1	< 5	< 1	< 5	< 1
MW-105C	05/16/12	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 1	< 1	< 1	< 5	< 5	< 1	< 1	< 1	< 1	< 3	< 1	< 5	< 1	< 5	< 5
MW-105C	11/06/12	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 1	< 1	< 1	< 5	< 5	< 1	< 1	< 1	< 1	< 3	< 1	< 5	< 1	< 5	< 5
MW-105C	05/07/13	< 1	< 1	< 1	< 1	< 1	< 1	< 1	13	< 1	< 1	< 1	< 1	2.1	< 5	< 1	< 1	< 1	< 5	< 5	< 1	< 1	< 1	1	< 3	< 1	< 5	< 1	< 5	9.8
MW-105C	10/22/13	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 0.5	< 1	< 5	< 5	< 0.5	< 0.5	< 1	< 5	< 5	0.5 J	< 1	< 1	< 0.5	< 1.5	< 1	< 2	< 1	< 5	< 5
MW-105C	04/28/14	< 1	< 1	< 1	< 1	< 1	< 1	< 0.5	< 1	< 1	< 1	< 0.5	< 1	< 5	< 5	< 0.5	< 0.5	< 1	< 5	< 5	0.69 J	< 1	< 1	< 0.5	< 1.5	< 1	< 2	< 1	< 5	< 5
MW-105C	11/12/14	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 1.0	< 1.0	< 1.0	< 0.50	< 1.0	< 5.0	< 5.0	< 0.50	< 0.50	< 1.0	< 5.0	< 5.0	0.74 J	< 1.0	< 1.0	< 0.50	<1.0	< 1.0	< 2.0	< 1.0	< 5.0	< 5.0
MW-10B	10/11/10	< 5	< 5	< 5	< 5	< 5	< 5	< 5	67	< 5	9.7	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 15	< 5	< 5	< 5	< 25	580
MW-10B	04/19/11	< 1	< 1	< 1	< 1	< 1	< 1	1.8	40	< 1	< 1	< 1	< 1	< 1	< 5	< 1	< 1	< 1	< 5	< 5	1.8	< 1	< 1	< 1	< 3	< 1	< 5	< 1	< 5	490
MW-10B	10/04/11	< 1	< 1	< 1	< 1	< 1	< 1	1.3	18	< 1	< 1	< 1	< 1	< 1	< 5	< 1	< 1	< 1	< 5	< 5	1.5	< 1	< 1	< 1	< 3	< 1	< 5	< 1	< 5	140
MW-10B	05/16/12	< 1	< 1	< 1	< 1	< 1	< 1	1.4	31	< 1	< 1	< 1	< 1	< 1	< 5	< 1	< 1	< 1	< 5	< 5	< 1	< 1	< 1	< 1	< 3	< 1	< 5	< 1	< 5	420
MW-10B	11/06/12	< 1	< 1	< 1	< 1	< 1	< 1	1.4	18	< 1	< 1	< 1	< 1	< 1	< 5	< 1	< 1	< 1	< 5	< 5	2.4	< 1	< 1	< 1	< 3	< 1	< 5	< 1	< 5	190
MW-10B	05/07/13	< 1	< 1	< 1	< 1	< 1	< 1	1.2	16	< 1	3.2	< 1	< 1	< 1	< 5	< 1	< 1	< 1	< 5	< 5	1.4	< 1	< 1	< 1	< 3	< 1	< 5	< 1	< 5	230
MW-10B	10/22/13	< 1	< 1	< 1	< 1	< 1	< 1	1.2	24	< 1	< 1	< 0.5	< 1	< 1	< 5	< 0.5	< 0.5	< 1	< 5	< 5	0.8 J	< 1	< 1	< 0.5	< 1.5	< 1	< 5	< 1	< 5	340
MW-10B	04/29/14	< 1	< 1	< 1	< 1	< 1	< 1	1.5	25	< 1	< 1	**0.97**	< 1	< 5	< 5	< 0.5	< 0.5	< 1	< 5	< 5	1.6	< 1	< 1	< 0.5	< 1.5	< 1	< 2	< 1	< 5	380
MW-10B	11/11/14	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1	17	< 1.0	< 1.0	< 0.50	< 1.0	< 5.0	< 5.0	< 0.50	< 0.50	< 1.0	< 5.0	< 5.0	1.2	< 1.0	< 1.0	0.36 J	<1.0	< 1.0	< 2.0	< 1.0	< 5.0	230
MW-10D	10/11/10	< 5	< 5	< 5	< 5	< 5	< 5	< 5	**110**	< 5	13	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 5	< 15	< 5	< 5	< 5	< 25	830
MW-10D	04/19/11	< 1	< 1	< 1	< 1	< 1	< 1	2.5	46	< 1	< 1	< 1	< 1	< 1	< 5	< 1	< 1	< 1	< 5	< 5	2.7	< 1	< 1	< 1	< 3	< 1	< 5	< 1	< 5	470
MW-10D	10/04/11	< 1	< 1	< 1	< 1	< 1	< 1	1.7	27	< 1	< 1	< 1	< 1	< 1	< 5	< 1	< 1	< 1	< 5	< 5	1.7	< 1	< 1	< 1	< 3	< 1	< 5	< 1	< 5	180
MW-10D	05/16/12	< 1	< 1	< 1	< 1	< 1	< 1	2.7	48	< 1	< 1	< 1	< 1	< 1	< 5	< 1	< 1	< 1	< 5	< 5	< 1	< 1	< 1	< 1	< 3	< 1	< 5	< 1	< 5	750
MW-10D	11/06/12	< 1	< 1	< 1	< 1	< 1	< 1	1.2	17	< 1	< 1	< 1	< 1	< 1	< 5	< 1	< 1	< 1	< 5	< 5	1.9	< 1	< 1	< 1	< 3	< 1	< 5	< 1	< 5	150
MW-10D	05/07/13	< 1	< 1	< 1	< 1	< 1	< 1	< 1	10	< 1	1.2	< 1	< 1	< 1	< 5	< 1	< 1	< 1	< 5	< 5	1.6	< 1	< 1	< 1	< 3	< 1	< 5	< 1	< 5	96
MW-10D	10/22/13	< 1	< 1	< 1	< 1	< 1	< 1	1.9	30	< 1	< 1	< 1	< 1	< 1	< 5	< 0.5	< 0.5	< 1	< 5	< 5	1.2	< 1	< 1	< 0.5	< 1.5	< 1	< 2	< 1	< 5	460
MW-10D	04/29/14	< 1	< 1	< 1	< 1	< 1	< 1	**3.1**	67	< 1	< 1	**2.7**	0.89 J	< 5	< 5	< 0.5	< 0.5	< 1	< 5	< 5	1.2	< 1	< 1	< 0.5	< 1.5	< 1	< 2	< 1	< 5	970
MW-10D	11/11/14	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.2	28	< 1.0	< 1.0	< 0.50	< 1.0	< 5.0	< 5.0	< 0.50	< 0.50	< 1.0	< 5.0	< 5.0	2.1	< 1.0	< 1.0	1.3	<1.0	< 1.0	< 2.0	< 1.0	< 5.0	290
MW-10D Dup	11/11/14	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.4	26	< 1.0	< 1.0	**0.6**	0.52 J	< 5.0	< 5.0	< 0.50	< 0.50	< 1.0	< 5.0	< 5.0	1.3	< 1.0	< 1.0	0.69	<1.0	< 1.0	< 2.0	< 1.0	< 5.0	330
MW-16B	10/11/10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	4.5	< 1	< 1	< 1	< 1	< 1	< 5	< 1	< 1	< 1	< 5	< 5	1.5	< 1	< 1	< 1	< 3	< 1	< 5	< 1	< 5	44
MW-16B	04/19/11	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.3	< 1	< 1	< 1	< 1	< 1	< 5	< 1	< 1	< 1	< 5	< 5	< 1	< 1	< 1	< 1	< 3	< 1	< 5	< 1	< 5	18
MW-16B	10/04/11	< 1	< 1	< 1	< 1	< 1	< 1	< 1	2.3	< 1	< 1	< 1	< 1	< 1	< 5	< 1	< 1	< 1	< 5	< 5	< 1	< 1	< 1	< 1	< 3	< 1	< 5	< 1	< 5	22
MW-16B	05/16/12	< 1	< 1	< 1	< 1	< 1	< 1	< 1	2.6	< 1	< 1	< 1	< 1	< 1	< 5	< 1	< 1	< 1	< 5	< 5	< 1	< 1	< 1	< 1	< 3	< 1	< 5	< 1	< 5	33
MW-16B	11/06/12	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.1	< 1	< 1	< 1	< 1	< 1	6.6	< 1	< 1	< 1	< 5	< 5	< 1	< 1	< 1	< 1	< 3	< 1	< 5	< 1	< 5	6.9
MW-16B	05/07/13	< 1	< 1	< 1	< 1	< 1	< 1	< 1	1.9	< 1	< 1	< 1	< 1	< 1	< 5	< 1	< 1	< 1	< 5	< 5	< 1	< 1	< 1	< 1	< 3	< 1	< 5	< 1	< 5	27
MW-16B	10/22/13	< 1	< 1	< 1	< 1	< 1	< 1	0.4 J	2	< 1	< 1	< 0.5	< 1	< 1	< 5	< 0.5	< 0.5	< 1	< 5	< 5	0.8 J	< 1	< 1	< 1	< 1.5	< 1	< 5	< 1	< 5	24
MW-16B	04/28/14	< 1	< 1	< 1	< 1	< 1	< 1	0.53	2.5	< 1	< 1	< 0.5	0.58 J	< 5	< 5	< 0.5	< 0.5	< 1	< 5	< 5	1.2	< 1	< 1	< 0.5	< 1.5	< 1	< 2	< 1	< 5	30
MW-16B	11/11/14	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	1	< 1.0	< 1.0	< 0.50	< 1.0	< 5.0	< 5.0	< 0.50	< 0.50	< 1.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	0.46 J	<1.0	< 1.0	< 2.0	< 1.0	< 5.0	12

Table 3-1: Volatile Organic Compound Analytical Results in Groundwater: October 2010 to November 2014

Chemical Name**		Chlorinated Ethanes (µg/L)					Chlorinated Ethenes (µg/L)						Chlorinated Methanes (µg/L)		Other Compounds (µg/L)															
		1,1,1-Trichloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,2-Dichloroethane	Chloroethane	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,1-Dichloroethene	Vinyl Chloride	Chloroform	Methylene Chloride	Acetone	Benzene	Ethyl-benzene	Isopropyl-benzene	Methyl Ethyl Ketone (MEK)	Methyl Isobutyl Ketone	Methyl tert Butyl Ether (MTBE)*	Naphthalene	Styrene	Toluene	Xylenes	1,2,4-Trimethylbenzene	Vinyl Acetate	Freon-11 (Trichlorofluoromethane)	Freon-12 (Dichlorodifluoromethane)	Freon- 113 (1,1,2-Trichlorotrifluoroethane)
2L Standard (µg/L)		**200**	**0.6**	**6**	**0.4**	**3000**	**0.7**	**3**	**70**	**100**	**350**	**0.03**	**70**	**5**	**6000**	**1**	**600**	**70**	**4000**	**100**	**20**	**6**	**70**	**600**	**500**	**400**	**88**	**2000**	**1000**	**200000**
MW-16D	10/11/10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	2.5	< 1	< 1	< 1	< 1	< 1	< 5	< 1	< 1	< 1	< 5	< 5	< 1	< 1	< 1	< 1	< 3	< 1	< 5	< 1	< 5	< 5
MW-16D	04/19/11	< 1	< 1	< 1	< 1	< 1	< 1	< 1	3.3	< 1	< 1	< 1	< 1	< 1	< 5	< 1	< 1	< 1	< 5	< 5	< 1	< 1	< 1	< 1	< 3	< 1	< 5	< 1	< 5	< 1
MW-16D	10/04/11	< 1	< 1	< 1	< 1	< 1	< 1	< 1	13	< 1	< 1	< 1	< 1	< 1	< 5	< 1	< 1	< 1	< 5	< 5	< 1	< 1	< 1	< 1	< 3	< 1	< 5	< 1	< 5	< 1
MW-16D	05/16/12	< 1	< 1	< 1	< 1	< 1	< 1	< 1	2.4	< 1	< 1	< 1	< 1	< 1	< 5	< 1	< 1	< 1	< 5	< 5	< 1	< 1	< 1	< 1	< 3	< 1	< 5	< 1	< 5	< 5
MW-16D	11/06/12	< 1	< 1	< 1	< 1	< 1	< 1	< 1	2.8	< 1	< 1	< 1	< 1	< 1	< 5	< 1	< 1	< 1	< 5	< 5	< 1	< 1	< 1	< 1	< 3	< 1	< 5	< 1	< 5	5.2
MW-16D	05/07/13	< 1	< 1	< 1	< 1	< 1	< 1	< 1	5.7	< 1	< 1	< 1	< 1	< 1	< 5	< 1	< 1	< 1	< 5	< 5	< 1	< 1	< 1	< 1	< 3	< 1	< 5	< 1	< 5	< 5
MW-16D	10/22/13	< 1	< 1	< 1	< 1	< 1	< 1	< 1	5.8	< 1	< 1	< 1	< 1	< 1	< 5	< 0.5	< 0.5	< 1	< 5	< 5	< 1	< 1	< 1	< 1	< 3	< 1	< 5	< 1	< 5	6.5
MW-16D	04/28/14	< 1	< 1	< 1	< 1	< 1	< 1	< 0.5	10	< 1	< 1	< 0.5	< 1	< 5	< 5	< 0.5	< 0.5	< 1	< 5	< 5	< 1	< 1	< 1	< 0.5	< 1.5	< 1	< 2	< 1	< 5	9
MW-16D	11/11/14	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	5.5	< 1.0	< 1.0	< 0.50	< 1.0	0.69 J	< 5.0	< 0.50	< 0.50	< 1.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	0.37 J	<1.0	< 1.0	< 2.0	< 1.0	0.39 J	35
MW-18B	10/12/10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 1	< 1	< 1	< 5	< 5	< 1	< 1	< 1	< 1	< 3	< 1	< 5	< 1	< 5	< 5
MW-18B	10/03/11	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 1	< 1	< 1	< 5	< 5	< 1	< 1	< 1	< 1	< 3	< 1	< 5	< 1	< 5	68
MW-18B	11/06/12	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 1	< 1	< 1	< 5	< 5	< 1	< 1	< 1	< 1	< 3	< 1	< 5	< 1	< 5	< 5
MW-18B	10/22/13	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 0.5	< 0.5	< 1	< 5	< 5	< 1	< 1	< 1	< 1	< 3	< 1	< 5	< 1	< 5	< 5
MW-18B	11/12/14	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 1.0	< 1.0	< 1.0	< 0.50	< 1.0	< 5.0	< 5.0	< 0.50	< 0.50	< 1.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	0.32 J	<1.0	< 1.0	< 2.0	< 1.0	< 5.0	< 5.0
MW-18D	10/11/10	< 1	< 1	< 1	< 1	< 1	< 1	1.2	15	< 1	1.9	< 1	< 1	< 1	< 5	< 1	< 1	< 1	< 5	< 5	< 1	< 1	< 1	< 1	< 3	< 1	< 5	< 1	< 5	190
MW-18D	04/19/11	< 1	< 1	< 1	< 1	< 1	< 1	< 1	10	< 1	< 1	< 1	< 1	< 1	< 5	< 1	< 1	< 1	< 5	< 5	< 1	< 1	< 1	< 1	< 3	< 1	< 5	< 1	< 5	150
MW-18D	10/03/11	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 1	< 1	< 1	< 5	< 5	1.3	< 1	< 1	< 1	< 3	< 1	< 5	< 1	< 5	120
MW-18D	05/16/12	< 1	< 1	< 1	< 1	< 1	< 1	0.9	7.9	< 1	< 1	< 1	< 1	< 1	< 5	< 1	< 1	< 1	< 5	< 5	1.3	< 1	< 1	< 1	< 3	< 1	< 5	< 1	< 5	100
MW-18D	11/06/12	< 1	< 1	< 1	< 1	< 1	< 1	< 1	8.5	< 1	< 1	< 1	< 1	< 1	< 5	< 1	< 1	< 1	< 5	< 5	1	< 1	< 1	< 1	< 3	< 1	< 5	< 1	< 5	110
MW-18D	05/07/13	< 1	< 1	< 1	< 1	< 1	< 1	< 1	8.7	< 1	1.1	< 1	< 1	< 1	< 5	< 1	< 1	< 1	< 5	< 5	1	< 1	< 1	< 1	< 3	< 1	< 5	< 1	< 5	140
MW-18D	10/22/13	< 1	< 1	< 1	< 1	< 1	< 1	0.7	9.4	< 1	< 1	< 0.5	< 1	< 1	< 5	< 0.5	< 0.5	< 1	< 5	< 5	1	< 1	< 1	< 0.5	< 1.5	< 1	< 2	< 1	< 5	110
MW-18D	04/29/14	< 1	< 1	< 1	< 1	< 1	< 1	0.87	9.5	< 1	< 1	< 0.5	< 1	< 5	< 5	< 0.5	< 0.5	< 1	< 5	< 5	1.2	< 1	< 1	< 0.5	< 1.5	< 1	< 2	< 1	< 5	110
MW-18D	11/12/14	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	0.87	12	< 1.0	< 1.0	< 0.50	< 1.0	< 5.0	< 5.0	< 0.50	< 0.50	< 1.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	0.43 J	<1.0	< 1.0	< 2.0	< 1.0	< 5.0	130
MW-19B	10/12/10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 1	< 1	< 1	< 5	< 5	< 1	< 1	< 1	< 1	< 3	< 1	< 5	< 1	< 5	< 5
MW-19B	10/04/11	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 1	< 1	< 1	< 5	< 5	< 1	< 1	< 1	< 1	< 3	< 1	< 5	< 1	< 5	< 5
MW-19B	11/06/12	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 1	< 1	< 1	< 5	< 5	< 1	< 1	< 1	< 1	< 3	< 1	< 5	< 1	< 5	< 5
MW-19B	10/22/13	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 0.5	< 1	< 1	< 5	< 0.5	< 0.5	< 1	< 5	< 5	< 1	< 1	< 1	< 0.5	< 1.5	< 1	< 5	< 1	< 5	< 5
MW-19B	11/11/14	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 1.0	< 1.0	< 1.0	< 0.50	< 1.0	< 5.0	< 5.0	< 0.50	< 0.50	< 1.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	0.33 J	<1.0	< 1.0	< 2.0	< 1.0	< 5.0	< 5.0
MW-19D	10/11/10	< 1	< 1	< 1	< 1	< 1	< 1	**6.6**	51	< 1	2.1	< 1	< 1	< 1	< 5	< 1	< 1	< 1	< 5	< 5	< 1	< 1	< 1	< 1	< 3	< 1	< 5	2	< 5	310
MW-19D	04/19/11	< 1	< 1	< 1	< 1	< 1	< 1	**6.3**	66	< 1	< 1	< 1	< 1	< 1	< 5	< 1	< 1	< 1	< 5	< 5	< 1	< 1	< 1	< 1	< 3	< 1	< 5	2	< 5	650
MW-19D DUP	04/19/11	< 1	< 1	< 1	< 1	< 1	< 1	**6.4**	66	< 1	< 1	< 1	< 1	< 1	< 5	< 1	< 1	< 1	< 5	< 5	< 1	< 1	< 1	< 1	< 3	< 1	< 5	2.2	< 5	610
MW-19D	10/04/11	< 1	< 1	< 1	< 1	< 1	< 1	**4.6**	58	< 1	< 1	< 1	< 1	< 1	< 5	< 1	< 1	< 1	< 5	< 5	< 1	< 1	< 1	< 1	< 3	< 1	< 5	< 1	< 5	340
MW-19D DUP	10/04/11	< 1	< 1	< 1	< 1	< 1	< 1	**4.8**	63	< 1	< 1	< 1	< 1	< 1	< 5	< 1	< 1	< 1	< 5	< 5	< 1	< 1	< 1	< 1	< 3	< 1	< 5	1.4	< 5	340
MW-19D	05/16/12	< 1	< 1	< 1	< 1	< 1	< 1	**4.7**	63	< 1	< 1	< 1	< 1	< 1	< 5	< 1	< 1	< 1	< 5	< 5	< 1	< 1	< 1	< 1	< 3	< 1	< 5	< 1	< 5	240
MW-19D DUP	05/16/12	< 1	< 1	< 1	< 1	< 1	< 1	**4.6**	65	< 1	< 1	< 1	< 1	< 1	< 5	< 1	< 1	< 1	< 5	< 5	< 1	< 1	< 1	< 1	< 3	< 1	< 5	< 1	< 5	290
MW-19D	11/06/12	< 1	< 1	< 1	< 1	< 1	< 1	**3.4**	60	< 1	< 1	< 1	< 1	< 1	< 5	< 1	< 1	< 1	< 5	< 5	< 1	< 1	< 1	< 1	< 3	< 1	< 5	< 1	< 5	190
MW-19D	05/07/13	< 1	< 1	< 1	< 1	< 1	< 1	**3.7**	**76**	< 1	< 1	< 1	< 1	2	< 5	< 1	< 1	< 1	< 5	< 5	< 1	< 1	< 1	< 1	< 3	< 1	< 5	< 1	13	180
MW-19D	10/22/13	< 1	< 1	< 1	< 1	< 1	< 1	2.7	68	< 1	< 1	**0.8**	< 1	< 5	< 5	0.5	< 0.5	< 1	< 5	< 5	< 1	< 1	< 1	< 0.5	< 1.5	< 1	< 2	< 1	< 5	150
MW-19D	04/28/14	< 1	< 1	< 1	< 1	< 1	< 1	2.3	62	< 1	< 1	**0.8**	< 1	< 5	< 5	0.36 J	< 0.5	< 1	< 5	< 5	< 1	< 1	< 1	< 0.5	< 1.5	< 1	< 2	< 1	< 5	130
MW-19D	11/11/14	< 1.0	< 1.0	< 1.0	**0.48 J**	< 1.0	< 1.0	2.3	64	< 1.0	< 1.0	**1**	< 1.0	< 5.0	< 5.0	0.49 J	< 0.50	< 1.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	0.34 J	<1.0	< 1.0	< 2.0	< 1.0	15	170

Table 3-1: Volatile Organic Compound Analytical Results in Groundwater: October 2010 to November 2014

Chemical Name**		Chlorinated Ethanes (µg/L)					Chlorinated Ethenes (µg/L)						Chlorinated Methanes (µg/L)		Other Compounds (µg/L)															
		1,1,1-Trichloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,2-Dichloroethane	Chloroethane	Tetrachloroethene	Trichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	1,1-Dichloroethene	Vinyl Chloride	Chloroform	Methylene Chloride	Acetone	Benzene	Ethyl-benzene	Isopropyl-benzene	Methyl Ethyl Ketone (MEK)	Methyl Isobutyl Ketone	Methyl tert Butyl Ether (MTBE)*	Naphthalene	Styrene	Toluene	Xylenes	1,2,4-Trimethylbenzene	Vinyl Acetate	Freon-11 (Trichlorofluoromethane)	Freon-12 (Dichlorodifluoromethane)	Freon- 113 (1,1,2-Trichlorotrifluoroethane)
2L Standard (µg/L)		**200**	**0.6**	**6**	**0.4**	**3000**	**0.7**	**3**	**70**	**100**	**350**	**0.03**	**70**	**5**	**6000**	**1**	**600**	**70**	**4000**	**100**	**20**	**6**	**70**	**600**	**500**	**400**	**88**	**2000**	**1000**	**200000**
MW-20B	10/11/10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 1	< 1	< 1	< 5	< 5	< 1	< 1	< 1	< 1	< 3	< 1	< 5	< 1	< 5	< 5
MW-20B	10/03/11	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 1	< 1	< 1	< 5	< 5	< 1	< 1	< 1	< 1	< 3	< 1	< 5	< 1	< 5	13
MW-20B	11/06/12	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 1	< 1	< 1	< 5	< 5	< 1	< 1	< 1	< 1	< 3	< 1	< 5	< 1	< 5	< 5
MW-20B	10/22/13	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 0.5	< 0.5	< 1	< 5	< 5	< 1	< 1	< 1	< 1	0.4 J	< 1	< 5	< 1	< 5	< 5
MW-20B	11/12/14	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 1.0	< 1.0	< 1.0	< 0.50	< 1.0	< 5.0	< 5.0	< 0.50	< 0.50	< 1.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	< 0.50	<1.0	< 1.0	< 2.0	< 1.0	< 5.0	< 5.0
MW-20D	10/11/10	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 1	< 1	< 1	< 5	< 5	< 1	< 1	< 1	< 1	< 3	< 1	< 5	< 1	< 5	< 5
MW-20D	10/03/11	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 5	< 1	< 1	< 1	< 5	< 5	< 1	< 1	< 1	< 1	< 3	< 1	< 5	< 1	< 5	< 5
MW-20D	11/06/12	< 1	< 1	< 1	< 1	< 1	< 1	0.6	1.7	< 1	< 1	< 1	< 1	< 1	< 5	< 1	< 1	< 1	< 5	< 5	< 1	< 1	< 1	< 1	< 3	< 1	< 5	< 1	< 5	< 5
MW-20D	10/22/13	< 1	< 1	< 1	< 1	< 1	< 1	0.4 J	0.7 J	< 1	< 1	< 1	< 1	< 1	< 5	< 0.5	< 0.5	< 1	< 5	< 5	< 1	< 1	< 1	< 1	< 1.5	< 1	< 5	< 1	< 5	0.6 J
MW-20D	11/12/14	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	0.49 J	0.68 J	< 1.0	< 1.0	< 0.50	< 1.0	< 5.0	< 5.0	< 0.50	< 0.50	< 1.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0	0.35 J	<1.0	< 1.0	< 2.0	< 1.0	< 5.0	< 5.0

* During April 2011 sampling event, matrix spike duplicate (MSD) exceeded the control limits, though the associated laboratory control spike and matrix spike recovery met acceptance criteria. The relative percent difference (RPD) value was outside of quality control criteria.
** Only those VOCs detected in one or more wells during the October 2010 through November 2014 sampling events are listed in this table.
2L Standard: North Carolina Administrative Code (15A NCAC) Subchapter 2L Groundwater Standards (updates effective April 1, 2013)
µg/L: micrograms per liter
/a The NCDENR approved a change to the 2L Standard for 1,1-DCE , to increase from 7 ug/L to 350 ug/L, in January 10, 2013. The final 2L standard 2013 updates are dated April 1, 2013.
Bold and Shaded: Constituent concentration reported above the NCAC 2L Groundwater Standard (current 2L updates dated April 1, 2013)

Appendix A

Groundwater Sampling Records (Nov. 2014)

ERM

GROUND WATER SAMPLING LOG SHEET

Client: Abbott Laboratories
Project No.: 272871
Sampling Date: 11/12/14
Site/Location: 16000 Joy Street, Laurinburg, NC
Sampler's Name: T. Naumann, A. Neal

Well ID: MW-100A
Pump Type/Model: Peristaltic
Sample Collection Time: 1430
Total Depth (ft)[1]: 30
Tubing Material: Polyethylene
Sample Purge Rate (L/min)[3]: 0.1
Depth to Water (ft): 8.72
Pump Intake Depth (ft): 25'
Sample ID: MW-100A
Well Diameter (in): 2
Start/Stop Purge Time: 1355 1420
QA/QC Collected? NO
Well Volume (gal) = $0.041d^2h$:
Purge Rate (L/min)[2]: 0.2
QA/QC I.D. N/A
d = well diameter (inches) h = length of water column (feet)
Total Purge Volume (L): 5.0
Laboratory Analyses: VOC's, TOC, Cl
Well Condition: GOOD
Sampling Method (check all that apply): ☑ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☑ pump head discharge (Inorganics including cyanide) ☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1400	23.71	0.798	0.26	5.35	-24.7	2.50	1.0	8.80	0.2 L/min LOW FLOW LOW VOLUME. SLIGHT ODOR.
1405	23.66	0.804	0.25	5.36	-27.0	1.90	2.0	8.83	
1410	23.70	0.804	0.23	5.36	-22.7	1.96	3.0	8.85	
1415	23.75	0.808	0.23	5.36	-25.9	1.85	4.0	8.85	
1420	23.72	0.809	0.23	5.36	-29.1	1.83	5.0	8.86	
1430	SAMPLE COLLECTION TIME.								
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

Client: Abbott Laboratories
Project No.: 272871
Sampling Date: 11/12/14
Site/Location: 16000 Joy Street, Laurinburg, NC
Sampler's Name: T. Naumann / A. Neal

Well ID: MW-100B
Pump Type/Model: Peristaltic
Sample Collection Time: 1345
Total Depth (ft)[1]: 45
Tubing Material: Polyethylene
Sample Purge Rate (L/min)[3]: 0.1
Depth to Water (ft): 10.81
Pump Intake Depth (ft): 40'
Sample ID: MW-100B
Well Diameter (in): 2
Start/Stop Purge Time: 1305 1330
QA/QC Collected? NO
Well Volume (gal) = 0.041d²h:
Purge Rate (L/min)[2]: 0-1
QA/QC I.D. N/C
d = well diameter (inches) h = length of water column (feet)
Total Purge Volume (L): 2.5
Laboratory Analyses: VOC'S, TOC, Cl
Well Condition: GOOD
Sampling Method (check all that apply): ☑ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☑ pump head discharge (Inorganics including cyanide) ☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1310	23.51	0.941	0.82	5.22	-10.9	4.14	0.5	10.84	0.1 L/MIN. LOW FLOW LOW VOLUME. SLIGHT ODOR.
1315	23.52	0.944	0.61	5.22	-18.4	2.05	1.0	10.85	
1320	23.96	0.950	0.36	5.21	-38.6	2.37	1.5	10.86	
1325	23.94	0.950	0.32	5.21	-41.7	2.19	2.0	10.86	
1330	23.86	0.951	0.29	5.21	-46.1	2.50	2.5	10.86	PARAMETERS STABLE
1345	SAMPLE TIME								
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom or well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

Client: Abbott Laboratories
Project No.: 272871
Sampling Date: 11-12-14
Site/Location: 16000 Joy Street, Laurinburg, NC
Sampler's Name: T. Naumann/A. Neal

Well ID: MW-101A
Pump Type/Model: Peristaltic
Sample Collection Time: 16:05
Total Depth (ft)[1]: 30
Tubing Material: Polyethylene
Sample Purge Rate (L/min)[3]: 0.1
Depth to Water (ft): 10.03
Pump Intake Depth (ft): 25
Sample ID: MW-101A
Well Diameter (in): 2
Start/Stop Purge Time: 15:40 / 16:05
QA/QC Collected? No
Well Volume (gal) = 0.041d²h:
Purge Rate (L/min)[2]: 0.1
QA/QC I.D. NA
d = well diameter (inches) h = length of water column (feet)
Total Purge Volume (L): 2.5
Laboratory Analyses: VOCs, TOC, Total Cl
Well Condition: Good

Sampling Method (check all that apply): ☑ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☑ pump head discharge (inorganics including cyanide) ☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
15:45	23.92	0.047	4.82	4.36	109.6	2.44	0.5L	10.03	0.1L/min; low flow / low volume
15:50	23.98	0.043	1.68	4.25	98.1	2.32	1.0L	10.05	
15:55	24.03	0.043	1.03	4.22	83.8	3.16	1.5L	10.06	
16:00	23.93	0.043	0.85	4.19	80.5	2.86	2.0L	10.06	
16:05	23.83	0.043	0.06	4.18	81.5	3.07	2.5L	10.08	PARAMETERS STABLE
16:05	SAMPLE TIME								
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

Client: Abbott Laboratories
Project No.: 272871
Sampling Date: 11-12-14
Site/Location: 16000 Joy Street, Laurinburg, NC
Sampler's Name: T. Naumann, A. Neal

Well ID: MW-101B
Total Depth (ft)[1]: 45
Depth to Water (ft): 10.96
Well Diameter (in): 2
Well Volume (gal) = 0.041d²h:
d = well diameter (inches) h = length of water column (feet)
Well Condition: Good

Pump Type/Model: Peristaltic
Tubing Material: Polyethylene
Pump Intake Depth (ft): 40
Start/Stop Purge Time: 14:40/
Purge Rate (L/min)[2]: 0.1
Total Purge Volume (L): 3.0

Sample Collection Time: 15:10
Sample Purge Rate (L/min)[3]: 0.1
Sample ID: MW-101B
QA/QC Collected? NO
QA/QC I.D. NA
Laboratory Analyses: VOCs, TOC, Total Cl

Sampling Method (check all that apply): ☑ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☐ pump head discharge (Inorganics including cyanide) ☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
14:45	23.36	0.088	3.35	6.09	145.2	0.97	0.5	10.97	0.1 L/min; low flow/low volume
14:50	23.37	0.088	2.74	6.11	142.2	2.02	1.0	10.99	
14:55	23.46	0.088	2.46	6.23	132.5	0.67	1.5	11.00	
15:00	23.42	0.088	2.41	6.32	125.8	0.77	2.0	11.00	
15:05	23.31	0.088	2.36	6.34	121.9	0.62	2.5	11.00	
15:10	23.27	0.087	2.25	6.39	116.6	0.85	3.0	11.00	PARAMETERS STABLE
15:10	SAMPLE TIME								
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

Client: Abbott Laboratories | Project No.: 272871 | Sampling Date: 11/12/14

Site/Location: 16000 Joy Street, Laurinburg, NC | Sampler's Name: T. Naumann, A. Neal

Well ID: MW-102A | Pump Type/Model: Peristaltic | Sample Collection Time: 1100

Total Depth (ft)[1]: 30' | Tubing Material: Polyethylene | Sample Purge Rate (L/min)[3]: 0.2

Depth to Water (ft): 9.71 | Pump Intake Depth (ft): 25' | Sample ID: MW-102A

Well Diameter (in): 2 | Start/Stop Purge Time: 1020 1045 | QA/QC Collected? NO

Well Volume (gal) = $0.041d^2h$: | Purge Rate (L/min)[2]: 0.2 | QA/QC I.D. N/A

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 5.0 | Laboratory Analyses: VOC'S, TOC, Cl

Well Condition: GOOD | Sampling Method (check all that apply): ☑ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☑ pump head discharge (Inorganics including cyanide) ☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1025	20.24	0.066	1.44	5.05	42.7	9.23	1.0	9.87	0.2 L/min
1030	20.28	0.065	1.09	5.03	53.9	7.62	2.0	9.92	
1035	20.41	0.064	0.74	4.92	32.5	6.14	3.0	9.93	
1040	20.45	0.064	0.53	4.91	35.3	5.31	4.0	9.94	
1045	20.55	0.064	0.43	4.90	33.1	5.46	5.0	9.95	PARAMETERS STABLE
1100	SAMPLE TIME								
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

Client: Abbott Laboratories
Project No.: 272871
Sampling Date: 11/12/14
Site/Location: 16000 Joy Street, Laurinburg, NC
Sampler's Name: T. Naumann/A. Neal

Well ID: MW-102B
Pump Type/Model: Peristaltic
Sample Collection Time: 1600
Total Depth (ft)[1]: 45
Tubing Material: Polyethylene
Sample Purge Rate (L/min)[3]: 0.1
Depth to Water (ft): 12.17
Pump Intake Depth (ft): 40'
Sample ID: MW-102B
Well Diameter (in): 2
Start/Stop Purge Time: 0925 0950
QA/QC Collected? YES
Well Volume (gal) = 0.041d²h:
Purge Rate (L/min)[2]: 0.1
QA/QC I.D. 112014-GW-DUP02
d = well diameter (inches) h = length of water column (feet)
Total Purge Volume (L): 2.5
Laboratory Analyses: VOC'S, TOC, Cl
Well Condition: GOOD
Sampling Method (check all that apply): ☑ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☑ pump head discharge (inorganics including cyanide)
☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
0930	19.38	0.165	5.77	5.57	-32.7	2.33	0.5	12.20	0.1 L/MIN LOW FLOW, LOW VOLUME. SLIGHT ODOR.
0935	19.36	0.165	0.82	5.60	-40.4	2.32	1.0	12.22	
0940	19.46	0.164	0.51	5.63	-39.3	3.21	1.5	12.23	
0945	19.48	0.163	0.35	5.64	-42.3	4.05	2.0	12.23	
0950	19.49	0.163	0.33	5.64	-42.6	3.96	2.5	12.24	PARAMETERS STABLE
1000	SAMPLE TIME								
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/-10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
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(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

Client: Abbott Laboratories
Project No.: 272871
Sampling Date: 11/12/14
Site/Location: 16000 Joy Street, Laurinburg, NC
Sampler's Name: T. Naumann, A. Neal

Well ID: MW-102C
Pump Type/Model: Peristaltic
Sample Collection Time: 0900
Total Depth (ft)[1]: 65'
Tubing Material: Polyethylene
Sample Purge Rate (L/min)[3]: 0.1
Depth to Water (ft): 12.79
Pump Intake Depth (ft): 60'
Sample ID: MW-102C
Well Diameter (in): 2
Start/Stop Purge Time: 0830 0855
QA/QC Collected? NO
Well Volume (gal) = 0.041d²h:
Purge Rate (L/min)[2]: 0.1
QA/QC I.D. N/A
d = well diameter (inches) h = length of water column (feet)
Total Purge Volume (L): 2.5
Laboratory Analyses: VOC'S, TOC, Cl
Well Condition: GOOD
Sampling Method (check all that apply): ☑ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☑ pump head discharge (inorganics including cyanide)
☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
0835	17.59	0.241	0.96	4.29	56.7	9.21	0.5	12.81	0.1 L/MIN LOW FLOW LOW VOLUME. ODOR PRESENT.
0840	17.84	0.243	0.76	4.30	53.2	5.89	1.0	12.81	
0845	18.00	0.243	0.51	4.30	48.9	4.81	1.5	12.81	
0850	18.02	0.243	0.46	4.30	47.2	4.28	2.0	12.82	
0855	18.05	0.242	0.38	4.30	44.8	2.12	2.5	12.82	PARAMETERS STABLE
0900	SAMPLE TIME								
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[6]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
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(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

Client: Abbott Laboratories
Project No.: 272871
Sampling Date: 11/13/14
Site/Location: 16000 Joy Street, Laurinburg, NC
Sampler's Name: T. Naumann/A. Neal

Well ID: MW-103A
Total Depth (ft)[1]: 30
Depth to Water (ft): 10.55
Well Diameter (in): 2
Well Volume (gal) = 0.041d²h:
d = well diameter (inches) h = length of water column (feet)
Well Condition: GOOD

Pump Type/Model: Peristaltic
Tubing Material: Polyethylene
Pump Intake Depth (ft): 25
Start/Stop Purge Time: ~~0~~ 0755 0820
Purge Rate (L/min)[2]: 0.1
Total Purge Volume (L): 5.0

Sample Collection Time: 0830
Sample Purge Rate (L/min)[3]: 0.1
Sample ID: MW-103A
QA/QC Collected? NO
QA/QC I.D. N/A
Laboratory Analyses: VOC's, TOC, Cl

Sampling Method (check all that apply): ☑ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☑ pump head discharge (Inorganics including cyanide) ☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
0800	20.18	0.086	0.77	4.40	165.0	13.3	~~0~~ 1.0	10.57	0.2 L/min
0805	20.55	0.085	0.56	4.68	158.2	9.21	2.0	10.57	
0810	20.60	0.089	0.41	4.95	136.4	6.67	3.0	10.58	
0815	20.61	0.094	0.38	5.05	120.3	5.13	4.0	10.58	
0820	20.63	0.096	0.37	5.09	110.6	4.72	5.0	10.58	
0825	20.64	0.097	0.35	5.12	107.2	4.69	5.5	10.58	PARAMETERS STABLE
0830	SAMPLE TIME								
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

Client: Abbott Laboratories | Project No.: 272871 | Sampling Date: 11/13/14

Site/Location: 16000 Joy Street, Laurinburg, NC | Sampler's Name: T. Naumann/ A. Neal

Well ID: MW-103B | Pump Type/Model: Peristaltic | Sample Collection Time: 0930

Total Depth (ft)[1]: 45 | Tubing Material: Polyethylene | Sample Purge Rate (L/min)[3]: 0.2

Depth to Water (ft): 12.65 | Pump Intake Depth (ft): 40 | Sample ID: MW-103B

Well Diameter (in): 2 | Start/Stop Purge Time: 0845 0915 | QA/QC Collected? NO

Well Volume (gal) = 0.041d²h: | Purge Rate (L/min)[2]: 0.2 | QA/QC I.D. N/A

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 6.0 | Laboratory Analyses: VOC's, TOC, Cl

Well Condition: GOOD | Sampling Method (check all that apply): ☑ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☑ pump head discharge (inorganics including cyanide)

☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
0850	20.39	0.212	0.97	6.23	-68.3	1.35	1.0	12.68	0.2 L/min LOW FLOW & LOW VOLUME
0855	20.40	0.214	0.57	6.23	-70.6	0.78	2.0	12.70	
0900	20.40	0.217	0.48	6.23	-75.2	0.56	3.0	12.71	THE YSI TURNED ITSELF OFF FOLLOWING THIS READING.
0905	20.39	0.217	0.56	6.23	-79.9	0.52	4.0	12.71	I ~~YSI~~ TURNED THE YSI BACK ON.
0910	20.38	0.216	0.49	6.23	-80.4	0.49	5.0	12.71	
0915	20.37	0.216	0.46	6.23	-80.6	0.45	6.0	12.71	PARAMETERS STABLE
0930	SAMPLE	TIME							
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

Client: Abbott Laboratories
Project No.: 272871
Sampling Date: 11/13/14
Site/Location: 16000 Joy Street, Laurinburg, NC
Sampler's Name: T. Naumann/ A. Neal

Well ID: MW-103C
Pump Type/Model: Peristaltic
Sample Collection Time: 1030
Total Depth (ft)[1]: 65
Tubing Material: Polyethylene
Sample Purge Rate (L/min)[3]: 0.1
Depth to Water (ft): 13.62
Pump Intake Depth (ft): 60
Sample ID: MW-103C
Well Diameter (in): 2
Start/Stop Purge Time: 1000 1025
QA/QC Collected? NO
Well Volume (gal) = $0.041d^2h$:
Purge Rate (L/min)[2]: 0.1
QA/QC I.D. N/A
d = well diameter (inches) h = length of water column (feet)
Total Purge Volume (L): 2.5
Laboratory Analyses: VOC's, TOC, Cl
Well Condition: GOOD
Sampling Method (check all that apply): ☑ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☑ pump head discharge (inorganics including cyanide)
☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1005	20.17	0.140	1.43	5.88	-21.4	1.13	0.5	13.65	0.1 L/min
1010	20.23	0.140	0.49	5.85	-22.2	0.54	1.0	13.66	
1015	20.23	0.137	0.50	5.81	-30.2	0.52	1.5	13.66	
1020	20.22	0.134	0.30	5.79	-30.9	0.42	2.0	13.66	
1025	20.21	0.134	0.27	5.78	-31.9	0.31	2.5	13.66	PARAMETERS STABLE
1030	SAMPLE TIME								
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[6]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
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(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

Client: Abbott Laboratories
Project No.: 272871
Sampling Date: 11-13-14
Site/Location: 16000 Joy Street, Laurinburg, NC
Sampler's Name: T. Naumann / A. Neal

Well ID: MW104A
Pump Type/Model: Peristaltic
Sample Collection Time: 8:45
Total Depth (ft)[1]: 12
Tubing Material: Polyethylene
Sample Purge Rate (L/min)[3]: 0.1
Depth to Water (ft): 10.90
Pump Intake Depth (ft): 11.9
Sample ID: MW-104A
Well Diameter (in): 2
Start/Stop Purge Time: 8:05 / 8:45
QA/QC Collected? NO
Well Volume (gal) = $0.041d^2h$:
Purge Rate (L/min)[2]: 0.1
QA/QC I.D. NA
d = well diameter (inches) h = length of water column (feet)
Total Purge Volume (L): 4.0
Laboratory Analyses: VOCs, TOC, ~~Total Cl~~
Well Condition: Good
Sampling Method (check all that apply): ☑ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☑ pump head discharge (Inorganics including cyanide)
☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
8:10	20.17	0.136	4.72	5.43	-2.4	101	0.5	10.91	0.1 L/min; low flow / low volume
8:15	20.52	0.122	1.47	5.22	-1.5	53.6	1.0	10.91	
8:20	20.68	0.116	0.99	5.08	-0.9	3.37	1.5	10.91	
8:25	20.90	0.108	0.95	4.94	-6.3	233	2.0	10.91	
8:30	20.97	0.104	0.78	4.85	-5.5	5.31	2.5	10.91	
8:35	21.07	0.101	0.72	4.74	-6.2	241	3.0	10.91	
8:40	21.14	0.099	0.66	4.70	-4.4	5.28	3.5	10.91	
8:45	21.16	0.098	0.63	4.71	5.2	4.70	4.0	10.91	PARAMETERS STABLE
8:45	SAMPLE		TIME						
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

Client: Abbott Laboratories
Project No.: 272871
Sampling Date: 11-13-14
Site/Location: 16000 Joy Street, Laurinburg, NC
Sampler's Name: T. Naumann / A. Neal

Well ID: MW-104B
Pump Type/Model: Peristaltic
Sample Collection Time: 9:25
Total Depth (ft)[1]: 45
Tubing Material: Polyethylene
Sample Purge Rate (L/min)[3]: 0.1
Depth to Water (ft): 12.58
Pump Intake Depth (ft): 40
Sample ID: MW-104B
Well Diameter (in): 2
Start/Stop Purge Time: 9:00 / 9:25
QA/QC Collected? No
Well Volume (gal) = 0.041d²h:
Purge Rate (L/min)[2]: 0.1
QA/QC I.D. NA
d = well diameter (inches) h = length of water column (feet)
Total Purge Volume (L): 2.5
Laboratory Analyses: VOCs, TOC, Total Cl
Well Condition: Good
Sampling Method (check all that apply): ☑ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☑ pump head discharge (Inorganics including cyanide) ☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
9:05	20.99	0.073	3.32	4.41	105.7	3.49	0.5	12.58	0.1 L/min; lowflow/low volume
9:10	21.00	0.073	1.33	4.38	108.6	1.54	1.0	12.58	
9:15	21.01	0.073	1.08	4.37	111.3	1.43	1.5	12.58	
9:20	21.02	0.073	0.91	4.31	114.5	1.49	2.0	12.58	
9:25	21.03	0.073	0.75	4.30	117.1	2.46	2.5	12.58	PARAMETERS STABLE
9:25	SAMPLE	TIME							
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

Client: Abbott Laboratories
Project No.: 272871
Sampling Date: 11-13-14
Site/Location: 16000 Joy Street, Laurinburg, NC
Sampler's Name: T. Naumann / A. Neal

Well ID: ~~MW-104A~~ MW-104C
Pump Type/Model: Peristaltic
Sample Collection Time: 10:25
Total Depth (ft)[1]: 73.5
Tubing Material: Polyethylene
Sample Purge Rate (L/min)[3]: 0.1
Depth to Water (ft): 13.78
Pump Intake Depth (ft): 68.5
Sample ID: MW-104C
Well Diameter (in): 2
Start/Stop Purge Time: 10:00/10:25
QA/QC Collected? No
Well Volume (gal) = 0.041d²h:
Purge Rate (L/min)[2]: 0.1
QA/QC I.D. NA
d = well diameter (inches) h = length of water column (feet)
Total Purge Volume (L): 2.5
Laboratory Analyses: VOCs, TOC, Total Cl
Well Condition: Good
Sampling Method (check all that apply): ☑ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☑ pump head discharge (Inorganics including cyanide)
☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
10:05	20.96	0.083	6.97	4.69	137.0	8.21	0.5	13.78	0.1 L/min; low flow / low volume
10:10	21.00	0.084	2.24	4.67	145.6	7.34	1.0	13.78	
10:15	21.02	0.084	1.30	4.66	142.6	3.32	1.5	13.78	
10:20	21.04	0.084	1.13	4.65	138.4	2.37	2.0	13.78	
10:25	21.05	0.084	0.90	4.64	135.2	2.07	2.5	13.78	PARAMETERS STABLE
10:25	SAMPLE	TIME							
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

Client: Abbott Laboratories | Project No.: 272871 | Sampling Date: 11-12-14

Site/Location: 16000 Joy Street, Laurinburg, NC | Sampler's Name: T. Naumann, A. Neal

Well ID: MW-105C | Pump Type/Model: Peristaltic | Sample Collection Time: ~~2~~ 14:05

Total Depth (ft)[1]: 64 | Tubing Material: Polyethylene | Sample Purge Rate (L/min)[3]: 0.1

Depth to Water (ft): 17.70 | Pump Intake Depth (ft): 59 | Sample ID: MW-105C

Well Diameter (in): 2 | Start/Stop Purge Time: 11:00 / 13:55 | QA/QC Collected? No

Well Volume (gal) = 0.041d²h: 7.60 | Purge Rate (L/min)[2]: ~~0.1~~ / 0.5 | QA/QC I.D. NA

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 62.8 | Laboratory Analyses: VOCs

Well Condition: Good | Sampling Method (check all that apply): ☑ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☐ pump head discharge (inorganics including cyanide) ☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (gal)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
11:05	22.42	0.069	15.09	3.59	302.1	9.56	0.5L	17.30	0.1 L/min; ~~flow flow/low volume~~
11:10	22.51	0.065	11.84	3.55	256.2	7.13	1.0L	17.75	Excessive drawdown; switched to low
12:45	22.65	0.063	9.16	3.56	205.4	1.74	7.6gal	19.07	flow, low stress; 0.5L/min
13:45	22.23	0.062	3.15	3.97	168.0	2.06	15.2gal	18.92	
13:50	22.17	0.062	1.48	3.94	168.2	1.22	15.9gal	18.93	
13:55	22.19	0.063	1.21	4.01	162.2	1.26	16.6gal	18.93	PARAMETERS STABLE
14:05	SAMPLE TIME								
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

7.60 x 3 = 22.8 gal ~ 55 min / well vol.

.3785

.246

ERM

GROUND WATER SAMPLING LOG SHEET

Client: Abbott Laboratories
Project No.: 272871
Sampling Date: 11-11-14
Site/Location: 16000 Joy Street, Laurinburg, NC
Sampler's Name: T. Naumann/A. Neal

Well ID: MW-10B
Pump Type/Model: Peristaltic
Sample Collection Time: 14:00
Total Depth (ft)[1]: 26.5
Tubing Material: Polyethylene
Sample Purge Rate (L/min)[3]: 0.1
Depth to Water (ft): 9.98
Pump Intake Depth (ft): 21.5
Sample ID: MW-10B
Well Diameter (in): 2
Start/Stop Purge Time: 13:20 / 13:50
QA/QC Collected? NO
Well Volume (gal) = 0.041d²h:
Purge Rate (L/min)[2]: 0.1
QA/QC I.D. NA
d = well diameter (inches) h = length of water column (feet)
Total Purge Volume (L): 3
Laboratory Analyses: VOCs + Total Cl
Well Condition: Good
Sampling Method (check all that apply): ☑ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☑ pump head discharge (Inorganics including cyanide)
☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
13:25	21.64	0.119	2.86	4.21	109.6	19.0	0.5	10.03	0.1 L/min ; low flow / low volume
13:30	21.49	0.095	2.01	3.62	126.9	11.7	1.0	10.04	
13:35	21.52	0.079	1.24	3.50	129.5	11.5	1.5	10.04	
13:40	21.47	0.061	0.83	3.44	130.3	8.53	2.0	10.04	
13:45	21.44	0.060	0.61	3.48	155.3	6.21	2.5	10.04	
13:50	21.41	0.060	0.54	3.51	159.7	5.32	3.0	10.04	PARAMETERS STABLE
14:00	SAMPLE	TIME							
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

Client: Abbott Laboratories | Project No.: 272871 | Sampling Date: 11/11/14

Site/Location: 16000 Joy Street, Laurinburg, NC | Sampler's Name: T. Naumann / A. Neal

Well ID: MW-10D | Pump Type/Model: Peristaltic | Sample Collection Time: 1415

Total Depth (ft)[1]: 40' | Tubing Material: Polyethylene | Sample Purge Rate (L/min)[3]: 0.1

Depth to Water (ft): 11.90 | Pump Intake Depth (ft): 35' | Sample ID: MW-10D

Well Diameter (in): 2 | Start/Stop Purge Time: 1345 1410 | QA/QC Collected? YES

Well Volume (gal) = 0.041d²h: | Purge Rate (L/min)[2]: 0.1 | QA/QC I.D. 112014-GW-DUP01

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 2.5 | Laboratory Analyses: VOC'S, TOTAL Cl

Well Condition: GOOD | Sampling Method (check all that apply): ☑ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☑ pump head discharge (Inorganics including cyanide) ☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1350	22.04	0.108	0.37	5.03	174.7	12.3	0.5	11.99	0.1 L/MIN
1355	22.84	0.109	0.39	5.05	176.2	11.9	1.0	12.04	
1400	23.28	0.107	0.45	5.05	180.0	9.31	1.5	12.06	
1405	23.55	0.108	0.46	5.07	176.7	5.76	2.0	12.06	
1410	23.61	0.108	0.47	5.09	172.7	5.12	2.5	12.07	PARAMETERS STABLE
1415	SAMPLE TIME								
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

Client: Abbott Laboratories | Project No.: 272871 | Sampling Date: 11-11-14

Site/Location: 16000 Joy Street, Laurinburg, NC | Sampler's Name: T. Naumann, A. Neal

Well ID: MW-16B | Pump Type/Model: Peristaltic | Sample Collection Time: 16:43

Total Depth (ft)[1]: 24.25 | Tubing Material: Polyethylene | Sample Purge Rate (L/min)[3]: 0.1

Depth to Water (ft): 9.76 | Pump Intake Depth (ft): ~~20~~ 19.75 | Sample ID: MW-16B

Well Diameter (in): 2 | Start/Stop Purge Time: 16:15 / 16:43 | QA/QC Collected? NO

Well Volume (gal) = $0.041d^2h$: | Purge Rate (L/min)[2]: 0.1 | QA/QC I.D. NA

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 3 | Laboratory Analyses: VOCs

Well Condition: Good | Sampling Method (check all that apply): ☑ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☐ pump head discharge (Inorganics including cyanide) ☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
16:20	20.86	0.045	3.98	3.46	194.7	4.48	0.5	9.76	0.1 L/min; low flow / low volume
16:25	20.72	0.045	1.04	3.12	203.8	4.07	1.0	9.76	
16:30	20.71	0.045	0.71	3.16	200.2	2.28	1.5	9.76	
16:35	20.66	0.045	0.56	3.25	193.2	2.49	2.0	9.76	
16:40	20.54	0.045	0.49	3.33	186.9	1.98	2.5	9.76	
16:43	20.48	0.045	0.45	3.35	185.2	2.67	3.0	9.76	PARAMETERS STABLE
16:43	SAMPLE	TIME							
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

Client: Abbott Laboratories
Project No.: 272871
Sampling Date: 11/11/14
Site/Location: 16000 Joy Street, Laurinburg, NC
Sampler's Name: T. Naumann/A. Neal

Well ID: MW-16D
Pump Type/Model: Peristaltic
Sample Collection Time: 1745
Total Depth (ft)[1]: 71.5
Tubing Material: Polyethylene
Sample Purge Rate (L/min)[3]: 0.1
Depth to Water (ft): 12.11
Pump Intake Depth (ft): 67'
Sample ID: MW-16D
Well Diameter (in): 2
Start/Stop Purge Time: 1705 1730
QA/QC Collected? NO
Well Volume (gal) = $0.041d^2h$:
Purge Rate (L/min)[2]: 0.2
QA/QC I.D. N/A
d = well diameter (inches) h = length of water column (feet)
Total Purge Volume (L): 5.0
Laboratory Analyses: VOC'S
Well Condition: GOOD
Sampling Method (check all that apply): ☑ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☐ pump head discharge (Inorganics including cyanide) ☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1710	21.22	0.099	1.41	6.20	130.7	5.12	1.0	12.20	0.2 L/min LOW FLOW LOW VOLUME
1715	21.10	0.098	0.54	6.22	133.2	4.18	2.0	12.22	
1720	20.92	0.096	0.39	6.23	137.0	3.99	3.0	12.23	
1725	20.92	0.096	0.37	6.23	137.8	4.16	4.0	12.23	
1730	20.91	0.095	0.35	6.23	138.3	5.01	~~4~~ 5.0	12.23	PARAMETERS STABLE
1745	SAMPLE TIME								
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

Client: Abbott Laboratories | Project No.: 272871 | Sampling Date: 11/12/14

Site/Location: 16000 Joy Street, Laurinburg, NC | Sampler's Name: T. Naumann/A. Neal

Well ID: MW-18B | Pump Type/Model: Peristaltic | Sample Collection Time: 1645

Total Depth (ft)[1]: 14.5 | Tubing Material: Polyethylene | Sample Purge Rate (L/min)[3]: 0.1

Depth to Water (ft): 10.62 | Pump Intake Depth (ft): 12.5 | Sample ID: MW-18B

Well Diameter (in): 2 | Start/Stop Purge Time: 1605 | QA/QC Collected? NO

Well Volume (gal) = 0.041d²h: - | Purge Rate (L/min)[2]: 0.1 | QA/QC I.D. N/A

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 3.0 | Laboratory Analyses: VOC'S

Well Condition: GOOD | Sampling Method (check all that apply): ☑ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☐ pump head discharge (Inorganics including cyanide) ☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1610	20.90	0.104	4.74	4.84	221.0	45.5	0.5	10.63	0.1 L/min
1615	20.48	0.102	4.50	4.79	224.5	32.1	1.0	10.63	
1620	20.40	0.102	4.05	4.77	226.8	27.6	1.5	10.64	
1625	20.33	0.101	4.04	4.77	229.4	21.8	2.0	10.64	
1630	20.17	0.101	3.94	4.79	231.4	16.0	2.5	10.64	
1635	19.95	0.101	3.98	4.80	232.7	8.65	3.0	10.64	
1645	SAMPLE TIME								
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
(4) - Field parameter measurements to be recorded every 3 to 5 minutes.
(5) - Stabilization criteria based on three most recent consecutive measurements.
(6) - Monitor DTW every 5 min. Well drawdown to be 0.3 ft or less. Purge/sampling rate to be lowered as necessary to keep drawdown below 0.3 ft.
(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

Client: Abbott Laboratories | Project No.: 272871 | Sampling Date: 11/12/14

Site/Location: 16000 Joy Street, Laurinburg, NC | Sampler's Name: T. Naumann / A. Neal

Well ID: MW-18D | Pump Type/Model: Peristaltic | Sample Collection Time: 1600

Total Depth (ft)[1]: 57.1 | Tubing Material: Polyethylene | Sample Purge Rate (L/min)[3]: 0.2

Depth to Water (ft): 12.65 | Pump Intake Depth (ft): 54.6 | Sample ID: MW-18D

Well Diameter (in): 2 | Start/Stop Purge Time: 1520 1545 | QA/QC Collected? NO

Well Volume (gal) = 0.041d²h: | Purge Rate (L/min)[2]: 0.2 | QA/QC I.D. N/A

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 5.0 | Laboratory Analyses: VOC's

Well Condition: GOOD | Sampling Method (check all that apply): ☑ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☐ pump head discharge (inorganics including cyanide) ☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1525	21.33	0.076	1.43	4.71	138.1	7.77	1.0	12.67	0.2 L/MIN
1530	21.05	0.066	0.95	4.54	176.8	5.12	2.0	12.69	
1535	20.68	0.061	0.74	4.48	201.5	3.19	3.0	12.70	
1540	20.67	0.060	0.65	4.45	211.6	0.48	4.0	12.71	
1545	20.64	0.061	0.69	4.44	216.9	0.89	5.0	12.71	PARAMETERS STABLE
1600	SAMPLE TIME								
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
(2) - Purge rate to be 0.5 lpm or less.
(3) - Sampling rate to be 0.25 lpm or less.
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(5) - Stabilization criteria based on three most recent consecutive measurements.
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(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

Client: Abbott Laboratories | Project No.: 272871 | Sampling Date: 11-11-14

Site/Location: 16000 Joy Street, Laurinburg, NC | Sampler's Name: T. Naumann/A. Neal

Well ID: MW-19B | Pump Type/Model: Peristaltic | Sample Collection Time: 17:30

Total Depth (ft)[1]: 25 | Tubing Material: Polyethylene | Sample Purge Rate (L/min)[3]: 0.1

Depth to Water (ft): ~~10.59~~ 9.59 | Pump Intake Depth (ft): ~~1~~ 20 | Sample ID: MW-19B

Well Diameter (in): 2 | Start/Stop Purge Time: 17:05 / 17:30 | QA/QC Collected? NO

Well Volume (gal) = 0.041d²h: | Purge Rate (L/min)[2]: 0.1 | QA/QC I.D. NA

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 2.5 | Laboratory Analyses: VOCs

Well Condition: Good | Sampling Method (check all that apply): ☑ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☐ pump head discharge (inorganics including cyanide) ☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
17:10	20.05	0.043	3.58	3.86	187.4	17.7	0.5	9.63	0.1 L/min; low flow/low volume
17:15	20.07	0.043	1.73	3.79	188.0	12.6	1.0	9.63	
17:20	20.08	0.043	1.35	3.89	187.1	7.17	1.5	9.63	
17:25	20.09	0.043	1.16	3.96	187.0	5.69	2.0	9.63	
17:30	20.07	0.043	0.98	3.98	186.7	4.49	2.5	9.63	PARAMETERS STABLE
17:30	SAMPLE TIME								
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
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(3) - Sampling rate to be 0.25 lpm or less.
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(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

ERM

GROUND WATER SAMPLING LOG SHEET

Client: Abbott Laboratories
Project No.: 272871
Sampling Date: 11/11/14
Site/Location: 16000 Joy Street, Laurinburg, NC
Sampler's Name: T. Naumann/A. Neal

Well ID: MW-19D
Total Depth (ft)[1]: 73.8
Depth to Water (ft): 12.93
Well Diameter (in): 2
Well Volume (gal) = 0.041d²h:
d = well diameter (inches) h = length of water column (feet)
Well Condition: Good

Pump Type/Model: Peristaltic
Tubing Material: Polyethylene
Pump Intake Depth (ft): 68.8
Start/Stop Purge Time: 1800 1825
Purge Rate (L/min)[2]: 0.1
Total Purge Volume (L): 5.0

Sample Collection Time: 1830
Sample Purge Rate (L/min)[3]: 0.1
Sample ID: MW-19D
QA/QC Collected? NO
QA/QC I.D. N/A
Laboratory Analyses: VOCs

Sampling Method (check all that apply): ☑ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☑ pump head discharge (Inorganics including cyanide) ☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
1805	20.20	0.113	5.77	5.61	115.3	4.80	1.0	12.98	0.2 L/min LOW FLOW LOW VOLUME
1810	19.97	0.112	0.76	5.60	111.1	4.62	2.0	12.99	
1815	19.97	0.111	0.71	5.60	111.0	4.09	3.0	12.99	
1820	19.99	0.110	0.68	5.60	109.1	3.93	4.0	12.99	
1825	20.00	0.110	0.52	5.59	105.4	4.28	5.0	12.99	PARAMETERS STABLE
1830	SAMPLE TIME								
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
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ERM

GROUND WATER SAMPLING LOG SHEET

Client: Abbott Laboratories | Project No.: 272871 | Sampling Date: 11-17-14

Site/Location: 16000 Joy Street, Laurinburg, NC | Sampler's Name: T. Naumann, A. Neal

Well ID: MW-20B | Pump Type/Model: Peristaltic | Sample Collection Time: 8:40

Total Depth (ft)[1]: 27 | Tubing Material: Polyethylene | Sample Purge Rate (L/min)[3]: 0.1

Depth to Water (ft): 9.87 | Pump Intake Depth (ft): 22 | Sample ID: MW-20B

Well Diameter (in): 2 | Start/Stop Purge Time: 8:15 / 8:40 | QA/QC Collected? NO

Well Volume (gal) ≈ 0.041d²h: | Purge Rate (L/min)[2]: 0.1 | QA/QC I.D. NA

d = well diameter (inches) h = length of water column (feet) | Total Purge Volume (L): 2.5 | Laboratory Analyses: VOCs

Well Condition: Good | Sampling Method (check all that apply): ☑ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☐ pump head discharge (inorganics including cyanide) ☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
8:20	16.44	0.048	4.70	4.15	166.0	0.21	0.5	9.87	0.1 L/min ; low flow/low volume
8:25	17.06	0.048	3.21	4.12	165.0	0.23	1.0	9.87	
8:30	17.92	0.050	2.68	4.11	167.4	0.19	1.5	9.87	
8:35	18.51	0.050	2.68	4.10	167.0	0.20	2.0	9.87	
8:40	18.73	0.054	2.34	4.09	167.0	~~0.16~~ 0.18	2.5	9.87	PARAMETERS STABLE
8:40	SAMPLE TIME								
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/-10% (see note below)[7]	+/- 0.1 unit	+/-10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

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ERM

GROUND WATER SAMPLING LOG SHEET

Client: Abbott Laboratories
Project No.: 272871
Sampling Date: 11-12-14
Site/Location: 16000 Joy Street, Laurinburg, NC
Sampler's Name: T. Naumann/ A. Neal

Well ID: ~~MW-20B~~ MW-20D
Pump Type/Model: Peristaltic
Sample Collection Time: 10:30
Total Depth (ft)[1]: 73
Tubing Material: Polyethylene
Sample Purge Rate (L/min)[3]: 0.1
Depth to Water (ft): 12.04
Pump Intake Depth (ft): 73
Sample ID: MW-20D
Well Diameter (in): 2
Start/Stop Purge Time: 10:00 / 10:30
QA/QC Collected? NO
Well Volume (gal) = 0.041d²h:
Purge Rate (L/min)[2]: 0.1
QA/QC I.D. NA
d = well diameter (inches) h = length of water column (feet)
Total Purge Volume (L): 3.0
Laboratory Analyses: VOCs
Well Condition: Good
Sampling Method (check all that apply): ☑ soda straw (VOCs) ☐ vacuum jug (SVOCs) ☐ pump head discharge (Inorganics including cyanide) ☐ Bladder pump = pump discharge (all analytes) ☐ Bailer (only used if necessary)

Time	Temp. (°C)	Spec. Cond. (mS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Turbidity (NTUs)	Purge Volume (L)	H_2O Depth (ft)	Notes (Water clarity, odor, purge rate, issues with pump/well/weather/etc.)
10:05	20.09	0.041	6.84	3.51	250.9	4.65	0.5	12.04	0.1 L/min; low flow/low volume
10:10	19.82	0.040	6.55	3.47	260.1	5.47	1.0	12.04	
10:15	19.96	0.040	6.00	3.45	255.0	7.33	1.5	12.04	
10:20	20.11	0.040	6.09	3.71	240.3	6.34	2.0	12.04	
10:25	20.19	0.040	6.22	3.76	234.5	7.60	2.5	12.04	
10:30	20.21	0.040	6.16	3.78	233.0	5.72	3.0	12.04	PARAMETERS STABLE
10:30	SAMPLE TIME								
Stabilizing Criteria[5]	+/- 1°C	+/- 3%	+/- 10% (see note below)[7]	+/- 0.1 unit	+/- 10 mV (see note below)[8]	+/- 10% or <10 NTUs	(see note below)[4]	(see note below)[6]	

(1) - Do not measure depth to bottom of well until after purging and sampling to reduce resuspending fines that may be resting on the well bottom.
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(7) - DO is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.
(8) - ORP is not a stabilization criterion for the "Groundwater sampling" SESD Standard Operating Procedure.

Table 2-1
Groundwater Level Gauging and Elevation Data: November 2014
Former Abbott Facility
Laurinburg, Scotland County, North Carolina

Well Identication	TOC Elevation (ft msl)	Depth to Water (ft btoc)	Groundwater Elevation (ft msl)
MW-100A	228.86	8.41	
MW-100B	228.92	10.79	
MW-101A	228.18	9.47	
MW-101B	228.17	10.53	
MW-102A	229.56	9.67	
MW-102B	229.47	12.12	
MW-102C	229.54	12.76	
MW-103A	230.58	10.47	
MW-103B	230.58	12.58	
MW-103C	230.60	13.61	
MW-104A	230.58	10.82	
MW-104B	230.59	12.07	
MW-104C	230.56	13.67	
MW-105C	233.25	16.97	
MW-6B	230.30	8.72	
MW-10B	229.10	9.98	
MW-10D	228.70	11.90	
MW-13B	230.30	11.43	
MW-16B	227.90	9.67	
MW-16D	228.90	12.13	
MW-18B	228.70	10.60	
MW-18D	228.70	12.64	
MW-19B	228.70	9.50	
MW-19D	228.70	19.94	
MW-20B	227.90	9.80	
MW-20D	228.10	11.96	
MW-21B	227.00	6.96	

Notes:
Water levels were measured on November 11-13, 2014
TOC: Top of Casing
ft: Feet
ft btoc: feet below the top of casing
msl: mean sea level
NM - not measured

Appendix B

Laboratory Analytical Reports: November 2014

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Chicago
2417 Bond Street
University Park, IL 60484
Tel: (708)534-5200

TestAmerica Job ID: 500-87930-1
Client Project/Site: Laurinburg, NC VOC Testing (0272871))
Revision: 1

For:
AbbVie US LLC
200 Abbott Park Road
Dept V5IH, Bldg AP 52N
North Chicago, Illinois 60064-6217

Attn: Pam Kramer

Authorized for release by:
12/8/2014 11:47:32 AM

Jim Knapp, Project Manager II
(630)758-0262
jim.knapp@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Job ID: 500-87930-1

Laboratory: TestAmerica Chicago

Narrative

Job Narrative
500-87930-1

Comments
No additional comments.

Receipt
The samples were received on 11/15/2014 10:25 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 0.3º C and 2.8º C.

Except:

The report has been revised to change the reporting units to ug/L per client request.

GC/MS VOA
Method(s) 8260B: The following samples were diluted to bring the concentration of target analytes within the calibration range: 112014-GW-DUP01 (500-87930-25), 112014-GW-DUP02 (500-87930-26), IDW-DRUM-01 (500-87930-27), MW-100A (500-87930-11), MW-100B (500-87930-12), MW-101A (500-87930-13), MW-102B (500-87930-16), MW-102C (500-87930-17), MW-103A (500-87930-18), MW-103B (500-87930-19), MW-103C (500-87930-20), MW-104A (500-87930-21), MW-104B (500-87930-22), MW-104C (500-87930-23). Elevated reporting limits (RLs) are provided.

Method(s) 8260B: Surrogate recovery for the following sample was outside control limits: MW-10D (500-87930-2). Evidence of matrix interference is present. Re-analysis was performed at a dilution for target compounds, with all surrogates meeting QC limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: AbbVie US LLC
Project/Site: Laurinburg, NC VOC Testing (0272871))

TestAmerica Job ID: 500-87930-1

Client Sample ID: MW-10B — Lab Sample ID: 500-87930-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	17		1.0	0.12	ug/L	1		8260B	Total/NA
Methyl tert-butyl ether	1.2		1.0	0.24	ug/L	1		8260B	Total/NA
Toluene	0.36	J	0.50	0.11	ug/L	1		8260B	Total/NA
Trichloroethylene	1.0		0.50	0.19	ug/L	1		8260B	Total/NA
1,1,2-Trichlorotrifluoroethane - DL	230		25	1.1	ug/L	5		8260B	Total/NA

Client Sample ID: MW-10D — Lab Sample ID: 500-87930-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	28		1.0	0.12	ug/L	1		8260B	Total/NA
Methyl tert-butyl ether	2.1		1.0	0.24	ug/L	1		8260B	Total/NA
Toluene	1.3		0.50	0.11	ug/L	1		8260B	Total/NA
Trichloroethylene	1.2		0.50	0.19	ug/L	1		8260B	Total/NA
1,1,2-Trichlorotrifluoroethane - DL	290		25	1.1	ug/L	5		8260B	Total/NA

Client Sample ID: MW-16B — Lab Sample ID: 500-87930-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,2-Trichlorotrifluoroethane	12		5.0	0.22	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	1.0		1.0	0.12	ug/L	1		8260B	Total/NA
Toluene	0.46	J	0.50	0.11	ug/L	1		8260B	Total/NA

Client Sample ID: MW-16D — Lab Sample ID: 500-87930-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,2-Trichlorotrifluoroethane	35		5.0	0.22	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	5.5		1.0	0.12	ug/L	1		8260B	Total/NA
Dichlorodifluoromethane	0.39	J	5.0	0.20	ug/L	1		8260B	Total/NA
Methylene Chloride	0.69	J	5.0	0.68	ug/L	1		8260B	Total/NA
Toluene	0.37	J	0.50	0.11	ug/L	1		8260B	Total/NA

Client Sample ID: MW-18B — Lab Sample ID: 500-87930-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	0.32	J	0.50	0.11	ug/L	1		8260B	Total/NA

Client Sample ID: MW-18D — Lab Sample ID: 500-87930-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,2-Trichlorotrifluoroethane	130		5.0	0.22	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	12		1.0	0.12	ug/L	1		8260B	Total/NA
Toluene	0.43	J	0.50	0.11	ug/L	1		8260B	Total/NA
Trichloroethylene	0.87		0.50	0.19	ug/L	1		8260B	Total/NA

Client Sample ID: MW-19B — Lab Sample ID: 500-87930-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	0.33	J	0.50	0.11	ug/L	1		8260B	Total/NA

Client Sample ID: MW-19D — Lab Sample ID: 500-87930-8

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-19D (Continued) — Lab Sample ID: 500-87930-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichloroethane	0.48	J	1.0	0.28	ug/L	1		8260B	Total/NA
1,1,2-Trichlorotrifluoroethane	170		5.0	0.22	ug/L	1		8260B	Total/NA
Benzene	0.49	J	0.50	0.074	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	64		1.0	0.12	ug/L	1		8260B	Total/NA
Dichlorodifluoromethane	15		5.0	0.20	ug/L	1		8260B	Total/NA
Toluene	0.34	J	0.50	0.11	ug/L	1		8260B	Total/NA
Trichloroethylene	2.3		0.50	0.19	ug/L	1		8260B	Total/NA
Vinyl chloride	1.0		0.50	0.10	ug/L	1		8260B	Total/NA

Client Sample ID: MW-20B — Lab Sample ID: 500-87930-9

No Detections.

Client Sample ID: MW-20D — Lab Sample ID: 500-87930-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	0.68	J	1.0	0.12	ug/L	1		8260B	Total/NA
Toluene	0.35	J	0.50	0.11	ug/L	1		8260B	Total/NA
Trichloroethylene	0.49	J	0.50	0.19	ug/L	1		8260B	Total/NA

Client Sample ID: MW-100A — Lab Sample ID: 500-87930-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	580		50	10	ug/L	50		8260B	Total/NA
1,1-Dichloroethane	87		50	9.5	ug/L	50		8260B	Total/NA
1,1-Dichloroethylene	570		50	16	ug/L	50		8260B	Total/NA
1,2-Dichloroethane	87		50	14	ug/L	50		8260B	Total/NA
Acetone	420		250	65	ug/L	50		8260B	Total/NA
Benzene	17	J	25	3.7	ug/L	50		8260B	Total/NA
Chloroform	110		50	10	ug/L	50		8260B	Total/NA
Ethylbenzene	15	J	25	6.5	ug/L	50		8260B	Total/NA
m&p-Xylene	44	J	50	13	ug/L	50		8260B	Total/NA
Methylene Chloride	260		250	34	ug/L	50		8260B	Total/NA
o-Xylene	14	J	25	3.4	ug/L	50		8260B	Total/NA
Toluene	1700		25	5.5	ug/L	50		8260B	Total/NA
Trichloroethylene	25		25	9.5	ug/L	50		8260B	Total/NA
Vinyl chloride	69		25	5.0	ug/L	50		8260B	Total/NA
1,1,2-Trichlorotrifluoroethane - DL	12000		2500	110	ug/L	500		8260B	Total/NA
cis-1,2-Dichloroethene - DL	45000		500	60	ug/L	500		8260B	Total/NA

Client Sample ID: MW-100B — Lab Sample ID: 500-87930-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	1100		50	10	ug/L	50		8260B	Total/NA
1,1-Dichloroethane	98		50	9.5	ug/L	50		8260B	Total/NA
1,1-Dichloroethylene	740		50	16	ug/L	50		8260B	Total/NA
1,2-Dichloroethane	130		50	14	ug/L	50		8260B	Total/NA
Benzene	22	J	25	3.7	ug/L	50		8260B	Total/NA
Chloroform	150		50	10	ug/L	50		8260B	Total/NA
Ethylbenzene	20	J	25	6.5	ug/L	50		8260B	Total/NA
m&p-Xylene	57		50	13	ug/L	50		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-100B (Continued) — Lab Sample ID: 500-87930-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	1100		250	34	ug/L	50		8260B	Total/NA
o-Xylene	21	J	25	3.4	ug/L	50		8260B	Total/NA
Toluene	2700		25	5.5	ug/L	50		8260B	Total/NA
Trichloroethylene	820		25	9.5	ug/L	50		8260B	Total/NA
Vinyl chloride	90		25	5.0	ug/L	50		8260B	Total/NA
1,1,2-Trichlorotrifluoroethane - DL	16000		2500	110	ug/L	500		8260B	Total/NA
cis-1,2-Dichloroethene - DL	57000		500	60	ug/L	500		8260B	Total/NA

Client Sample ID: MW-101A — Lab Sample ID: 500-87930-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	22		10	1.2	ug/L	10		8260B	Total/NA
Trichloroethylene	12		5.0	1.9	ug/L	10		8260B	Total/NA
1,1,2-Trichlorotrifluoroethane - DL	2200		500	22	ug/L	100		8260B	Total/NA

Client Sample ID: MW-101B — Lab Sample ID: 500-87930-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.54	J	1.0	0.20	ug/L	1		8260B	Total/NA
1,1,2-Trichlorotrifluoroethane	7.4		5.0	0.22	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	120		1.0	0.12	ug/L	1		8260B	Total/NA
Perchloroethylene	0.64	J	1.0	0.17	ug/L	1		8260B	Total/NA
Toluene	0.31	J	0.50	0.11	ug/L	1		8260B	Total/NA
trans-1,2-Dichloroethene	0.54	J	1.0	0.25	ug/L	1		8260B	Total/NA
Trichloroethylene	40		0.50	0.19	ug/L	1		8260B	Total/NA

Client Sample ID: MW-102A — Lab Sample ID: 500-87930-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethylene	12		1.0	0.31	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	21		1.0	0.12	ug/L	1		8260B	Total/NA
Toluene	0.36	J	0.50	0.11	ug/L	1		8260B	Total/NA
Trichloroethylene	0.41	J	0.50	0.19	ug/L	1		8260B	Total/NA
1,1,2-Trichlorotrifluoroethane - DL	450		50	2.2	ug/L	10		8260B	Total/NA

Client Sample ID: MW-102B — Lab Sample ID: 500-87930-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	3.6		2.0	0.40	ug/L	2		8260B	Total/NA
1,1-Dichloroethane	1.1	J	2.0	0.38	ug/L	2		8260B	Total/NA
1,1-Dichloroethylene	31		2.0	0.62	ug/L	2		8260B	Total/NA
m&p-Xylene	1.4	J	2.0	0.52	ug/L	2		8260B	Total/NA
Perchloroethylene	2.3		2.0	0.34	ug/L	2		8260B	Total/NA
Toluene	21		1.0	0.22	ug/L	2		8260B	Total/NA
Vinyl chloride	3.5		1.0	0.20	ug/L	2		8260B	Total/NA
1,1,2-Trichlorotrifluoroethane - DL	860		100	4.4	ug/L	20		8260B	Total/NA
cis-1,2-Dichloroethene - DL	420		20	2.4	ug/L	20		8260B	Total/NA

Client Sample ID: MW-102C — Lab Sample ID: 500-87930-17

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-102C (Continued) — Lab Sample ID: 500-87930-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	100		50	10	ug/L	50		8260B	Total/NA
1,1-Dichloroethylene	1100		50	16	ug/L	50		8260B	Total/NA
Chloroform	35	J	50	10	ug/L	50		8260B	Total/NA
m&p-Xylene	31	J	50	13	ug/L	50		8260B	Total/NA
Methylene Chloride	310		250	34	ug/L	50		8260B	Total/NA
o-Xylene	9.6	J	25	3.4	ug/L	50		8260B	Total/NA
Perchloroethylene	37	J	50	8.5	ug/L	50		8260B	Total/NA
Toluene	1800		25	5.5	ug/L	50		8260B	Total/NA
Trichloroethylene	8300		25	9.5	ug/L	50		8260B	Total/NA
1,1,2-Trichlorotrifluoroethane - DL	10000		2500	110	ug/L	500		8260B	Total/NA
cis-1,2-Dichloroethene - DL	41000		500	60	ug/L	500		8260B	Total/NA

Client Sample ID: MW-103A — Lab Sample ID: 500-87930-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	140		50	6.0	ug/L	50		8260B	Total/NA
Trichloroethylene	43		25	9.5	ug/L	50		8260B	Total/NA
1,1,2-Trichlorotrifluoroethane - DL	21000		2500	110	ug/L	500		8260B	Total/NA

Client Sample ID: MW-103B — Lab Sample ID: 500-87930-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	160		20	2.4	ug/L	20		8260B	Total/NA
Toluene	8.2	J	10	2.2	ug/L	20		8260B	Total/NA
Trichloroethylene	16		10	3.8	ug/L	20		8260B	Total/NA
1,1,2-Trichlorotrifluoroethane - DL	6900		1000	44	ug/L	200		8260B	Total/NA

Client Sample ID: MW-103C — Lab Sample ID: 500-87930-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	200		20	2.4	ug/L	20		8260B	Total/NA
Trichloroethylene	28		10	3.8	ug/L	20		8260B	Total/NA
1,1,2-Trichlorotrifluoroethane - DL	8000		1000	44	ug/L	200		8260B	Total/NA

Client Sample ID: MW-104A — Lab Sample ID: 500-87930-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	1.8	J	2.0	0.38	ug/L	2		8260B	Total/NA
1,2-Dichloroethane	1.9	J	2.0	0.56	ug/L	2		8260B	Total/NA
cis-1,2-Dichloroethene	390		2.0	0.24	ug/L	2		8260B	Total/NA
trans-1,2-Dichloroethene	1.7	J	2.0	0.50	ug/L	2		8260B	Total/NA
Trichloroethylene	1.7		1.0	0.38	ug/L	2		8260B	Total/NA
Vinyl chloride	15		1.0	0.20	ug/L	2		8260B	Total/NA
1,1,2-Trichlorotrifluoroethane - DL	610		100	4.4	ug/L	20		8260B	Total/NA

Client Sample ID: MW-104B — Lab Sample ID: 500-87930-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	24		5.0	0.60	ug/L	5		8260B	Total/NA
Trichloroethylene	7.3		2.5	0.95	ug/L	5		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-104B (Continued) — Lab Sample ID: 500-87930-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Vinyl chloride	2.0	J	2.5	0.50	ug/L	5		8260B	Total/NA
1,1,2-Trichlorotrifluoroethane - DL	1600		250	11	ug/L	50		8260B	Total/NA

Client Sample ID: MW-104C — Lab Sample ID: 500-87930-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	54		5.0	0.60	ug/L	5		8260B	Total/NA
Methyl tert-butyl ether	3.9	J	5.0	1.2	ug/L	5		8260B	Total/NA
Trichloroethylene	8.0		2.5	0.95	ug/L	5		8260B	Total/NA
Vinyl chloride	2.6		2.5	0.50	ug/L	5		8260B	Total/NA
1,1,2-Trichlorotrifluoroethane - DL	20000		2500	110	ug/L	500		8260B	Total/NA

Client Sample ID: MW-105C — Lab Sample ID: 500-87930-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	0.74	J	1.0	0.24	ug/L	1		8260B	Total/NA

Client Sample ID: 112014-GW-DUP01 — Lab Sample ID: 500-87930-25

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.52	J	1.0	0.20	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	26		1.0	0.12	ug/L	1		8260B	Total/NA
Methyl tert-butyl ether	1.3		1.0	0.24	ug/L	1		8260B	Total/NA
Toluene	0.69		0.50	0.11	ug/L	1		8260B	Total/NA
Trichloroethylene	1.4		0.50	0.19	ug/L	1		8260B	Total/NA
Vinyl chloride	0.60		0.50	0.10	ug/L	1		8260B	Total/NA
1,1,2-Trichlorotrifluoroethane - DL	330		10	0.44	ug/L	2		8260B	Total/NA

Client Sample ID: 112014-GW-DUP02 — Lab Sample ID: 500-87930-26

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethylene	39		5.0	1.6	ug/L	5		8260B	Total/NA
cis-1,2-Dichloroethene	510		5.0	0.60	ug/L	5		8260B	Total/NA
Perchloroethylene	3.3	J	5.0	0.85	ug/L	5		8260B	Total/NA
Toluene	29		2.5	0.55	ug/L	5		8260B	Total/NA
Vinyl chloride	4.4		2.5	0.50	ug/L	5		8260B	Total/NA
1,1,2-Trichlorotrifluoroethane - DL	1300		250	11	ug/L	50		8260B	Total/NA

Client Sample ID: IDW-DRUM-01 — Lab Sample ID: 500-87930-27

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	53		10	2.0	ug/L	10		8260B	Total/NA
1,1-Dichloroethane	6.7	J	10	1.9	ug/L	10		8260B	Total/NA
1,1-Dichloroethylene	68		10	3.1	ug/L	10		8260B	Total/NA
Chloroform	11		10	2.0	ug/L	10		8260B	Total/NA
Toluene	170		5.0	1.1	ug/L	10		8260B	Total/NA
Trichloroethylene	230		5.0	1.9	ug/L	10		8260B	Total/NA
Vinyl chloride	7.3		5.0	1.0	ug/L	10		8260B	Total/NA
1,1,2-Trichlorotrifluoroethane - DL	2900		500	22	ug/L	100		8260B	Total/NA
cis-1,2-Dichloroethene - DL	4000		100	12	ug/L	100		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: AbbVie US LLC
Project/Site: Laurinburg, NC VOC Testing (0272871))

TestAmerica Job ID: 500-87930-1

Client Sample ID: IDW-DRUM-02 — Lab Sample ID: 500-87930-28

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,2-Trichlorotrifluoroethane	14		5.0	0.22	ug/L	1		8260B	Total/NA
Acetone	5.4		5.0	1.3	ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	14		1.0	0.12	ug/L	1		8260B	Total/NA
Toluene	2.5		0.50	0.11	ug/L	1		8260B	Total/NA

Client Sample ID: TRIP BLANK 1 — Lab Sample ID: 500-87930-29

No Detections.

Client Sample ID: TRIP BLANK 2 — Lab Sample ID: 500-87930-30

No Detections.

Client Sample ID: TRIP BLANK 3 — Lab Sample ID: 500-87930-31

No Detections.

This Detection Summary does not include radiochemical test results.

Method Summary

Client: AbbVie US LLC
Project/Site: Laurinburg, NC VOC Testing (0272871))

TestAmerica Job ID: 500-87930-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CHI

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Sample Summary

Client: AbbVie US LLC
Project/Site: Laurinburg, NC VOC Testing (0272871))

TestAmerica Job ID: 500-87930-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-87930-1	MW-10B	Water	11/11/14 14:00	11/15/14 10:25
500-87930-2	MW-10D	Water	11/11/14 14:15	11/15/14 10:25
500-87930-3	MW-16B	Water	11/11/14 16:43	11/15/14 10:25
500-87930-4	MW-16D	Water	11/11/14 17:45	11/15/14 10:25
500-87930-5	MW-18B	Water	11/12/14 16:45	11/15/14 10:25
500-87930-6	MW-18D	Water	11/12/14 16:00	11/15/14 10:25
500-87930-7	MW-19B	Water	11/11/14 17:30	11/15/14 10:25
500-87930-8	MW-19D	Water	11/11/14 18:30	11/15/14 10:25
500-87930-9	MW-20B	Water	11/12/14 08:40	11/15/14 10:25
500-87930-10	MW-20D	Water	11/12/14 10:30	11/15/14 10:25
500-87930-11	MW-100A	Water	11/12/14 14:30	11/15/14 10:25
500-87930-12	MW-100B	Water	11/12/14 13:45	11/15/14 10:25
500-87930-13	MW-101A	Water	11/12/14 16:05	11/15/14 10:25
500-87930-14	MW-101B	Water	11/12/14 15:10	11/15/14 10:25
500-87930-15	MW-102A	Water	11/12/14 11:00	11/15/14 10:25
500-87930-16	MW-102B	Water	11/12/14 10:00	11/15/14 10:25
500-87930-17	MW-102C	Water	11/12/14 09:00	11/15/14 10:25
500-87930-18	MW-103A	Water	11/13/14 08:30	11/15/14 10:25
500-87930-19	MW-103B	Water	11/13/14 09:30	11/15/14 10:25
500-87930-20	MW-103C	Water	11/13/14 10:30	11/15/14 10:25
500-87930-21	MW-104A	Water	11/13/14 08:45	11/15/14 10:25
500-87930-22	MW-104B	Water	11/13/14 09:25	11/15/14 10:25
500-87930-23	MW-104C	Water	11/13/14 10:25	11/15/14 10:25
500-87930-24	MW-105C	Water	11/12/14 14:05	11/15/14 10:25
500-87930-25	112014-GW-DUP01	Water	11/11/14 14:15	11/15/14 10:25
500-87930-26	112014-GW-DUP02	Water	11/12/14 10:00	11/15/14 10:25
500-87930-27	IDW-DRUM-01	Water	11/13/14 12:30	11/15/14 10:25
500-87930-28	IDW-DRUM-02	Water	11/13/14 12:45	11/15/14 10:25
500-87930-29	TRIP BLANK 1	Water	11/11/14 10:00	11/15/14 10:25
500-87930-30	TRIP BLANK 2	Water	11/11/14 10:00	11/15/14 10:25
500-87930-31	TRIP BLANK 3	Water	11/11/14 10:00	11/15/14 10:25

Client Sample Results

Client: AbbVie US LLC
Project/Site: Laurinburg, NC VOC Testing (0272871))

TestAmerica Job ID: 500-87930-1

Client Sample ID: MW-10B

Lab Sample ID: 500-87930-1

Date Collected: 11/11/14 14:00

Matrix: Water

Date Received: 11/15/14 10:25

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			11/20/14 02:05	1
1,1,1-Trichloroethane	ND		1.0	0.20	ug/L			11/20/14 02:05	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.23	ug/L			11/20/14 02:05	1
1,1,2-Trichloroethane	ND		1.0	0.28	ug/L			11/20/14 02:05	1
1,1-Dichloroethane	ND		1.0	0.19	ug/L			11/20/14 02:05	1
1,1-Dichloroethylene	ND		1.0	0.31	ug/L			11/20/14 02:05	1
1,1-Dichloropropene	ND		1.0	0.34	ug/L			11/20/14 02:05	1
1,2,3-Trichlorobenzene	ND		1.0	0.24	ug/L			11/20/14 02:05	1
1,2,3-Trichloropropane	ND		1.0	0.45	ug/L			11/20/14 02:05	1
1,2,4-Trichlorobenzene	ND		1.0	0.31	ug/L			11/20/14 02:05	1
1,2,4-Trimethylbenzene	ND		1.0	0.14	ug/L			11/20/14 02:05	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.87	ug/L			11/20/14 02:05	1
1,2-Dibromoethane	ND		1.0	0.36	ug/L			11/20/14 02:05	1
1,2-Dichlorobenzene	ND		1.0	0.27	ug/L			11/20/14 02:05	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			11/20/14 02:05	1
1,2-Dichloropropane	ND		1.0	0.20	ug/L			11/20/14 02:05	1
1,3,5-Trimethylbenzene	ND		1.0	0.18	ug/L			11/20/14 02:05	1
1,3-Dichlorobenzene	ND		1.0	0.15	ug/L			11/20/14 02:05	1
1,3-Dichloropropane	ND		1.0	0.13	ug/L			11/20/14 02:05	1
1,4-Dichlorobenzene	ND		1.0	0.15	ug/L			11/20/14 02:05	1
2,2-Dichloropropane	ND		1.0	0.32	ug/L			11/20/14 02:05	1
2-Chlorotoluene	ND		1.0	0.21	ug/L			11/20/14 02:05	1
2-Hexanone	ND		5.0	0.56	ug/L			11/20/14 02:05	1
4-Chlorotoluene	ND		1.0	0.20	ug/L			11/20/14 02:05	1
4-Isopropyltoluene	ND		2.0	0.17	ug/L			11/20/14 02:05	1
Acetone	ND		5.0	1.3	ug/L			11/20/14 02:05	1
Benzene	ND		0.50	0.074	ug/L			11/20/14 02:05	1
Bromobenzene	ND		1.0	0.25	ug/L			11/20/14 02:05	1
Bromodichloromethane	ND		1.0	0.17	ug/L			11/20/14 02:05	1
Bromoform	ND		1.0	0.28	ug/L			11/20/14 02:05	1
Bromomethane	ND		5.0	0.31	ug/L			11/20/14 02:05	1
Carbon disulfide	ND		5.0	0.43	ug/L			11/20/14 02:05	1
Carbon tetrachloride	ND		1.0	0.26	ug/L			11/20/14 02:05	1
Chlorobenzene	ND		1.0	0.14	ug/L			11/20/14 02:05	1
Chlorobromomethane	ND		1.0	0.40	ug/L			11/20/14 02:05	1
Vinyl acetate	ND		2.0	0.33	ug/L			11/20/14 02:05	1
Chloroethane	ND		1.0	0.34	ug/L			11/20/14 02:05	1
Chloroform	ND		1.0	0.20	ug/L			11/20/14 02:05	1
Chloromethane	ND		1.0	0.18	ug/L			11/20/14 02:05	1
cis-1,2-Dichloroethene	**17**		1.0	0.12	ug/L			11/20/14 02:05	1
cis-1,3-Dichloropropene	ND		1.0	0.18	ug/L			11/20/14 02:05	1
Dibromochloromethane	ND		1.0	0.32	ug/L			11/20/14 02:05	1
Dibromomethane	ND		1.0	0.33	ug/L			11/20/14 02:05	1
Dichlorodifluoromethane	ND		5.0	0.20	ug/L			11/20/14 02:05	1
Ethylbenzene	ND		0.50	0.13	ug/L			11/20/14 02:05	1
Hexachlorobutadiene	ND		1.0	0.26	ug/L			11/20/14 02:05	1
Isopropylbenzene	ND		1.0	0.14	ug/L			11/20/14 02:05	1
m&p-Xylene	ND		1.0	0.26	ug/L			11/20/14 02:05	1
Methyl Ethyl Ketone	ND		5.0	1.5	ug/L			11/20/14 02:05	1

Client Sample Results

Client: AbbVie US LLC
Project/Site: Laurinburg, NC VOC Testing (0272871))

TestAmerica Job ID: 500-87930-1

Client Sample ID: MW-10B

Lab Sample ID: 500-87930-1

Date Collected: 11/11/14 14:00
Matrix: Water
Date Received: 11/15/14 10:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
methyl isobutyl ketone	ND		5.0	0.33	ug/L			11/20/14 02:05	1
Methyl tert-butyl ether	**1.2**		1.0	0.24	ug/L			11/20/14 02:05	1
Methylene Chloride	ND		5.0	0.68	ug/L			11/20/14 02:05	1
Naphthalene	ND		1.0	0.16	ug/L			11/20/14 02:05	1
n-Butylbenzene	ND		1.0	0.13	ug/L			11/20/14 02:05	1
N-Propylbenzene	ND		1.0	0.13	ug/L			11/20/14 02:05	1
o-Xylene	ND		0.50	0.068	ug/L			11/20/14 02:05	1
sec-Butylbenzene	ND		1.0	0.15	ug/L			11/20/14 02:05	1
Styrene	ND		1.0	0.10	ug/L			11/20/14 02:05	1
tert-Butylbenzene	ND		1.0	0.14	ug/L			11/20/14 02:05	1
Perchloroethylene	ND		1.0	0.17	ug/L			11/20/14 02:05	1
Toluene	**0.36**	**J**	0.50	0.11	ug/L			11/20/14 02:05	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			11/20/14 02:05	1
trans-1,3-Dichloropropene	ND		1.0	0.21	ug/L			11/20/14 02:05	1
Trichloroethylene	**1.0**		0.50	0.19	ug/L			11/20/14 02:05	1
Trichlorofluoromethane	ND		1.0	0.19	ug/L			11/20/14 02:05	1
Vinyl chloride	ND		0.50	0.10	ug/L			11/20/14 02:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*75 - 125*		*11/20/14 02:05*	*1*
4-Bromofluorobenzene (Surr)	*93*		*75 - 120*		*11/20/14 02:05*	*1*
Dibromofluoromethane	*103*		*75 - 120*		*11/20/14 02:05*	*1*
Toluene-d8 (Surr)	*105*		*75 - 120*		*11/20/14 02:05*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane	**230**		25	1.1	ug/L			11/20/14 18:26	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*75 - 125*		*11/20/14 18:26*	*5*
4-Bromofluorobenzene (Surr)	*93*		*75 - 120*		*11/20/14 18:26*	*5*
Dibromofluoromethane	*99*		*75 - 120*		*11/20/14 18:26*	*5*
Toluene-d8 (Surr)	*103*		*75 - 120*		*11/20/14 18:26*	*5*

Client Sample Results

Client: AbbVie US LLC
Project/Site: Laurinburg, NC VOC Testing (0272871))

TestAmerica Job ID: 500-87930-1

Client Sample ID: MW-10D

Date Collected: 11/11/14 14:15
Date Received: 11/15/14 10:25

Lab Sample ID: 500-87930-2

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			11/20/14 02:30	1
1,1,1-Trichloroethane	ND		1.0	0.20	ug/L			11/20/14 02:30	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.23	ug/L			11/20/14 02:30	1
1,1,2-Trichloroethane	ND		1.0	0.28	ug/L			11/20/14 02:30	1
1,1-Dichloroethane	ND		1.0	0.19	ug/L			11/20/14 02:30	1
1,1-Dichloroethylene	ND		1.0	0.31	ug/L			11/20/14 02:30	1
1,1-Dichloropropene	ND		1.0	0.34	ug/L			11/20/14 02:30	1
1,2,3-Trichlorobenzene	ND		1.0	0.24	ug/L			11/20/14 02:30	1
1,2,3-Trichloropropane	ND		1.0	0.45	ug/L			11/20/14 02:30	1
1,2,4-Trichlorobenzene	ND		1.0	0.31	ug/L			11/20/14 02:30	1
1,2,4-Trimethylbenzene	ND		1.0	0.14	ug/L			11/20/14 02:30	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.87	ug/L			11/20/14 02:30	1
1,2-Dibromoethane	ND		1.0	0.36	ug/L			11/20/14 02:30	1
1,2-Dichlorobenzene	ND		1.0	0.27	ug/L			11/20/14 02:30	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			11/20/14 02:30	1
1,2-Dichloropropane	ND		1.0	0.20	ug/L			11/20/14 02:30	1
1,3,5-Trimethylbenzene	ND		1.0	0.18	ug/L			11/20/14 02:30	1
1,3-Dichlorobenzene	ND		1.0	0.15	ug/L			11/20/14 02:30	1
1,3-Dichloropropane	ND		1.0	0.13	ug/L			11/20/14 02:30	1
1,4-Dichlorobenzene	ND		1.0	0.15	ug/L			11/20/14 02:30	1
2,2-Dichloropropane	ND		1.0	0.32	ug/L			11/20/14 02:30	1
2-Chlorotoluene	ND		1.0	0.21	ug/L			11/20/14 02:30	1
2-Hexanone	ND		5.0	0.56	ug/L			11/20/14 02:30	1
4-Chlorotoluene	ND		1.0	0.20	ug/L			11/20/14 02:30	1
4-Isopropyltoluene	ND		2.0	0.17	ug/L			11/20/14 02:30	1
Acetone	ND		5.0	1.3	ug/L			11/20/14 02:30	1
Benzene	ND		0.50	0.074	ug/L			11/20/14 02:30	1
Bromobenzene	ND		1.0	0.25	ug/L			11/20/14 02:30	1
Bromodichloromethane	ND		1.0	0.17	ug/L			11/20/14 02:30	1
Bromoform	ND		1.0	0.28	ug/L			11/20/14 02:30	1
Bromomethane	ND		5.0	0.31	ug/L			11/20/14 02:30	1
Carbon disulfide	ND		5.0	0.43	ug/L			11/20/14 02:30	1
Carbon tetrachloride	ND		1.0	0.26	ug/L			11/20/14 02:30	1
Chlorobenzene	ND		1.0	0.14	ug/L			11/20/14 02:30	1
Chlorobromomethane	ND		1.0	0.40	ug/L			11/20/14 02:30	1
Vinyl acetate	ND		2.0	0.33	ug/L			11/20/14 02:30	1
Chloroethane	ND		1.0	0.34	ug/L			11/20/14 02:30	1
Chloroform	ND		1.0	0.20	ug/L			11/20/14 02:30	1
Chloromethane	ND		1.0	0.18	ug/L			11/20/14 02:30	1
cis-1,2-Dichloroethene	**28**		1.0	0.12	ug/L			11/20/14 02:30	1
cis-1,3-Dichloropropene	ND		1.0	0.18	ug/L			11/20/14 02:30	1
Dibromochloromethane	ND		1.0	0.32	ug/L			11/20/14 02:30	1
Dibromomethane	ND		1.0	0.33	ug/L			11/20/14 02:30	1
Dichlorodifluoromethane	ND		5.0	0.20	ug/L			11/20/14 02:30	1
Ethylbenzene	ND		0.50	0.13	ug/L			11/20/14 02:30	1
Hexachlorobutadiene	ND		1.0	0.26	ug/L			11/20/14 02:30	1
Isopropylbenzene	ND		1.0	0.14	ug/L			11/20/14 02:30	1
m&p-Xylene	ND		1.0	0.26	ug/L			11/20/14 02:30	1
Methyl Ethyl Ketone	ND		5.0	1.5	ug/L			11/20/14 02:30	1

Client Sample ID: MW-10D

Lab Sample ID: 500-87930-2

Date Collected: 11/11/14 14:15

Matrix: Water

Date Received: 11/15/14 10:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
methyl isobutyl ketone	ND		5.0	0.33	ug/L			11/20/14 02:30	1
Methyl tert-butyl ether	**2.1**		1.0	0.24	ug/L			11/20/14 02:30	1
Methylene Chloride	ND		5.0	0.68	ug/L			11/20/14 02:30	1
Naphthalene	ND		1.0	0.16	ug/L			11/20/14 02:30	1
n-Butylbenzene	ND		1.0	0.13	ug/L			11/20/14 02:30	1
N-Propylbenzene	ND		1.0	0.13	ug/L			11/20/14 02:30	1
o-Xylene	ND		0.50	0.068	ug/L			11/20/14 02:30	1
sec-Butylbenzene	ND		1.0	0.15	ug/L			11/20/14 02:30	1
Styrene	ND		1.0	0.10	ug/L			11/20/14 02:30	1
tert-Butylbenzene	ND		1.0	0.14	ug/L			11/20/14 02:30	1
Perchloroethylene	ND		1.0	0.17	ug/L			11/20/14 02:30	1
Toluene	**1.3**		0.50	0.11	ug/L			11/20/14 02:30	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			11/20/14 02:30	1
trans-1,3-Dichloropropene	ND		1.0	0.21	ug/L			11/20/14 02:30	1
Trichloroethylene	**1.2**		0.50	0.19	ug/L			11/20/14 02:30	1
Trichlorofluoromethane	ND		1.0	0.19	ug/L			11/20/14 02:30	1
Vinyl chloride	ND		0.50	0.10	ug/L			11/20/14 02:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*124*		*75 - 125*		*11/20/14 02:30*	*1*
4-Bromofluorobenzene (Surr)	*99*		*75 - 120*		*11/20/14 02:30*	*1*
Dibromofluoromethane	*121*	*X*	*75 - 120*		*11/20/14 02:30*	*1*
Toluene-d8 (Surr)	*108*		*75 - 120*		*11/20/14 02:30*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane	**290**		25	1.1	ug/L			11/20/14 02:55	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*75 - 125*		*11/20/14 02:55*	*5*
4-Bromofluorobenzene (Surr)	*93*		*75 - 120*		*11/20/14 02:55*	*5*
Dibromofluoromethane	*101*		*75 - 120*		*11/20/14 02:55*	*5*
Toluene-d8 (Surr)	*105*		*75 - 120*		*11/20/14 02:55*	*5*

Client Sample Results

Client: AbbVie US LLC
Project/Site: Laurinburg, NC VOC Testing (0272871))

TestAmerica Job ID: 500-87930-1

Client Sample ID: MW-16B

Date Collected: 11/11/14 16:43
Date Received: 11/15/14 10:25

Lab Sample ID: 500-87930-3

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			11/20/14 03:20	1
1,1,1-Trichloroethane	ND		1.0	0.20	ug/L			11/20/14 03:20	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.23	ug/L			11/20/14 03:20	1
1,1,2-Trichloroethane	ND		1.0	0.28	ug/L			11/20/14 03:20	1
1,1-Dichloroethane	ND		1.0	0.19	ug/L			11/20/14 03:20	1
1,1-Dichloroethylene	ND		1.0	0.31	ug/L			11/20/14 03:20	1
1,1-Dichloropropene	ND		1.0	0.34	ug/L			11/20/14 03:20	1
1,2,3-Trichlorobenzene	ND		1.0	0.24	ug/L			11/20/14 03:20	1
1,2,3-Trichloropropane	ND		1.0	0.45	ug/L			11/20/14 03:20	1
1,2,4-Trichlorobenzene	ND		1.0	0.31	ug/L			11/20/14 03:20	1
1,2,4-Trimethylbenzene	ND		1.0	0.14	ug/L			11/20/14 03:20	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.87	ug/L			11/20/14 03:20	1
1,2-Dibromoethane	ND		1.0	0.36	ug/L			11/20/14 03:20	1
1,2-Dichlorobenzene	ND		1.0	0.27	ug/L			11/20/14 03:20	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			11/20/14 03:20	1
1,2-Dichloropropane	ND		1.0	0.20	ug/L			11/20/14 03:20	1
1,3,5-Trimethylbenzene	ND		1.0	0.18	ug/L			11/20/14 03:20	1
1,1,2-Trichlorotrifluoroethane	**12**		5.0	0.22	ug/L			11/20/14 03:20	1
1,3-Dichlorobenzene	ND		1.0	0.15	ug/L			11/20/14 03:20	1
1,3-Dichloropropane	ND		1.0	0.13	ug/L			11/20/14 03:20	1
1,4-Dichlorobenzene	ND		1.0	0.15	ug/L			11/20/14 03:20	1
2,2-Dichloropropane	ND		1.0	0.32	ug/L			11/20/14 03:20	1
2-Chlorotoluene	ND		1.0	0.21	ug/L			11/20/14 03:20	1
2-Hexanone	ND		5.0	0.56	ug/L			11/20/14 03:20	1
4-Chlorotoluene	ND		1.0	0.20	ug/L			11/20/14 03:20	1
4-Isopropyltoluene	ND		2.0	0.17	ug/L			11/20/14 03:20	1
Acetone	ND		5.0	1.3	ug/L			11/20/14 03:20	1
Benzene	ND		0.50	0.074	ug/L			11/20/14 03:20	1
Bromobenzene	ND		1.0	0.25	ug/L			11/20/14 03:20	1
Bromodichloromethane	ND		1.0	0.17	ug/L			11/20/14 03:20	1
Bromoform	ND		1.0	0.28	ug/L			11/20/14 03:20	1
Bromomethane	ND		5.0	0.31	ug/L			11/20/14 03:20	1
Carbon disulfide	ND		5.0	0.43	ug/L			11/20/14 03:20	1
Carbon tetrachloride	ND		1.0	0.26	ug/L			11/20/14 03:20	1
Chlorobenzene	ND		1.0	0.14	ug/L			11/20/14 03:20	1
Chlorobromomethane	ND		1.0	0.40	ug/L			11/20/14 03:20	1
Vinyl acetate	ND		2.0	0.33	ug/L			11/20/14 03:20	1
Chloroethane	ND		1.0	0.34	ug/L			11/20/14 03:20	1
Chloroform	ND		1.0	0.20	ug/L			11/20/14 03:20	1
Chloromethane	ND		1.0	0.18	ug/L			11/20/14 03:20	1
cis-1,2-Dichloroethene	**1.0**		1.0	0.12	ug/L			11/20/14 03:20	1
cis-1,3-Dichloropropene	ND		1.0	0.18	ug/L			11/20/14 03:20	1
Dibromochloromethane	ND		1.0	0.32	ug/L			11/20/14 03:20	1
Dibromomethane	ND		1.0	0.33	ug/L			11/20/14 03:20	1
Dichlorodifluoromethane	ND		5.0	0.20	ug/L			11/20/14 03:20	1
Ethylbenzene	ND		0.50	0.13	ug/L			11/20/14 03:20	1
Hexachlorobutadiene	ND		1.0	0.26	ug/L			11/20/14 03:20	1
Isopropylbenzene	ND		1.0	0.14	ug/L			11/20/14 03:20	1
m&p-Xylene	ND		1.0	0.26	ug/L			11/20/14 03:20	1

Client Sample ID: MW-16B

Lab Sample ID: 500-87930-3

Date Collected: 11/11/14 16:43

Matrix: Water

Date Received: 11/15/14 10:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Ethyl Ketone	ND		5.0	1.5	ug/L			11/20/14 03:20	1
methyl isobutyl ketone	ND		5.0	0.33	ug/L			11/20/14 03:20	1
Methyl tert-butyl ether	ND		1.0	0.24	ug/L			11/20/14 03:20	1
Methylene Chloride	ND		5.0	0.68	ug/L			11/20/14 03:20	1
Naphthalene	ND		1.0	0.16	ug/L			11/20/14 03:20	1
n-Butylbenzene	ND		1.0	0.13	ug/L			11/20/14 03:20	1
N-Propylbenzene	ND		1.0	0.13	ug/L			11/20/14 03:20	1
o-Xylene	ND		0.50	0.068	ug/L			11/20/14 03:20	1
sec-Butylbenzene	ND		1.0	0.15	ug/L			11/20/14 03:20	1
Styrene	ND		1.0	0.10	ug/L			11/20/14 03:20	1
tert-Butylbenzene	ND		1.0	0.14	ug/L			11/20/14 03:20	1
Perchloroethylene	ND		1.0	0.17	ug/L			11/20/14 03:20	1
Toluene	**0.46**	**J**	0.50	0.11	ug/L			11/20/14 03:20	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			11/20/14 03:20	1
trans-1,3-Dichloropropene	ND		1.0	0.21	ug/L			11/20/14 03:20	1
Trichloroethylene	ND		0.50	0.19	ug/L			11/20/14 03:20	1
Trichlorofluoromethane	ND		1.0	0.19	ug/L			11/20/14 03:20	1
Vinyl chloride	ND		0.50	0.10	ug/L			11/20/14 03:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*75 - 125*		*11/20/14 03:20*	*1*
4-Bromofluorobenzene (Surr)	*92*		*75 - 120*		*11/20/14 03:20*	*1*
Dibromofluoromethane	*103*		*75 - 120*		*11/20/14 03:20*	*1*
Toluene-d8 (Surr)	*105*		*75 - 120*		*11/20/14 03:20*	*1*

Client: AbbVie US LLC
Project/Site: Laurinburg, NC VOC Testing (0272871))

TestAmerica Job ID: 500-87930-1

Client Sample ID: MW-16D
Date Collected: 11/11/14 17:45
Date Received: 11/15/14 10:25

Lab Sample ID: 500-87930-4
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			11/20/14 03:45	1
1,1,1-Trichloroethane	ND		1.0	0.20	ug/L			11/20/14 03:45	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.23	ug/L			11/20/14 03:45	1
1,1,2-Trichloroethane	ND		1.0	0.28	ug/L			11/20/14 03:45	1
1,1-Dichloroethane	ND		1.0	0.19	ug/L			11/20/14 03:45	1
1,1-Dichloroethylene	ND		1.0	0.31	ug/L			11/20/14 03:45	1
1,1-Dichloropropene	ND		1.0	0.34	ug/L			11/20/14 03:45	1
1,2,3-Trichlorobenzene	ND		1.0	0.24	ug/L			11/20/14 03:45	1
1,2,3-Trichloropropane	ND		1.0	0.45	ug/L			11/20/14 03:45	1
1,2,4-Trichlorobenzene	ND		1.0	0.31	ug/L			11/20/14 03:45	1
1,2,4-Trimethylbenzene	ND		1.0	0.14	ug/L			11/20/14 03:45	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.87	ug/L			11/20/14 03:45	1
1,2-Dibromoethane	ND		1.0	0.36	ug/L			11/20/14 03:45	1
1,2-Dichlorobenzene	ND		1.0	0.27	ug/L			11/20/14 03:45	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			11/20/14 03:45	1
1,2-Dichloropropane	ND		1.0	0.20	ug/L			11/20/14 03:45	1
1,3,5-Trimethylbenzene	ND		1.0	0.18	ug/L			11/20/14 03:45	1
1,1,2-Trichlorotrifluoroethane	**35**		5.0	0.22	ug/L			11/20/14 03:45	1
1,3-Dichlorobenzene	ND		1.0	0.15	ug/L			11/20/14 03:45	1
1,3-Dichloropropane	ND		1.0	0.13	ug/L			11/20/14 03:45	1
1,4-Dichlorobenzene	ND		1.0	0.15	ug/L			11/20/14 03:45	1
2,2-Dichloropropane	ND		1.0	0.32	ug/L			11/20/14 03:45	1
2-Chlorotoluene	ND		1.0	0.21	ug/L			11/20/14 03:45	1
2-Hexanone	ND		5.0	0.56	ug/L			11/20/14 03:45	1
4-Chlorotoluene	ND		1.0	0.20	ug/L			11/20/14 03:45	1
4-Isopropyltoluene	ND		2.0	0.17	ug/L			11/20/14 03:45	1
Acetone	ND		5.0	1.3	ug/L			11/20/14 03:45	1
Benzene	ND		0.50	0.074	ug/L			11/20/14 03:45	1
Bromobenzene	ND		1.0	0.25	ug/L			11/20/14 03:45	1
Bromodichloromethane	ND		1.0	0.17	ug/L			11/20/14 03:45	1
Bromoform	ND		1.0	0.28	ug/L			11/20/14 03:45	1
Bromomethane	ND		5.0	0.31	ug/L			11/20/14 03:45	1
Carbon disulfide	ND		5.0	0.43	ug/L			11/20/14 03:45	1
Carbon tetrachloride	ND		1.0	0.26	ug/L			11/20/14 03:45	1
Chlorobenzene	ND		1.0	0.14	ug/L			11/20/14 03:45	1
Chlorobromomethane	ND		1.0	0.40	ug/L			11/20/14 03:45	1
Vinyl acetate	ND		2.0	0.33	ug/L			11/20/14 03:45	1
Chloroethane	ND		1.0	0.34	ug/L			11/20/14 03:45	1
Chloroform	ND		1.0	0.20	ug/L			11/20/14 03:45	1
Chloromethane	ND		1.0	0.18	ug/L			11/20/14 03:45	1
cis-1,2-Dichloroethene	**5.5**		1.0	0.12	ug/L			11/20/14 03:45	1
cis-1,3-Dichloropropene	ND		1.0	0.18	ug/L			11/20/14 03:45	1
Dibromochloromethane	ND		1.0	0.32	ug/L			11/20/14 03:45	1
Dibromomethane	ND		1.0	0.33	ug/L			11/20/14 03:45	1
Dichlorodifluoromethane	**0.39**	**J**	5.0	0.20	ug/L			11/20/14 03:45	1
Ethylbenzene	ND		0.50	0.13	ug/L			11/20/14 03:45	1
Hexachlorobutadiene	ND		1.0	0.26	ug/L			11/20/14 03:45	1
Isopropylbenzene	ND		1.0	0.14	ug/L			11/20/14 03:45	1
m&p-Xylene	ND		1.0	0.26	ug/L			11/20/14 03:45	1

Client Sample Results

Client: AbbVie US LLC
Project/Site: Laurinburg, NC VOC Testing (0272871))

TestAmerica Job ID: 500-87930-1

Client Sample ID: MW-16D

Lab Sample ID: 500-87930-4

Date Collected: 11/11/14 17:45
Matrix: Water
Date Received: 11/15/14 10:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Ethyl Ketone	ND		5.0	1.5	ug/L			11/20/14 03:45	1
methyl isobutyl ketone	ND		5.0	0.33	ug/L			11/20/14 03:45	1
Methyl tert-butyl ether	ND		1.0	0.24	ug/L			11/20/14 03:45	1
Methylene Chloride	**0.69**	**J**	5.0	0.68	ug/L			11/20/14 03:45	1
Naphthalene	ND		1.0	0.16	ug/L			11/20/14 03:45	1
n-Butylbenzene	ND		1.0	0.13	ug/L			11/20/14 03:45	1
N-Propylbenzene	ND		1.0	0.13	ug/L			11/20/14 03:45	1
o-Xylene	ND		0.50	0.068	ug/L			11/20/14 03:45	1
sec-Butylbenzene	ND		1.0	0.15	ug/L			11/20/14 03:45	1
Styrene	ND		1.0	0.10	ug/L			11/20/14 03:45	1
tert-Butylbenzene	ND		1.0	0.14	ug/L			11/20/14 03:45	1
Perchloroethylene	ND		1.0	0.17	ug/L			11/20/14 03:45	1
Toluene	**0.37**	**J**	0.50	0.11	ug/L			11/20/14 03:45	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			11/20/14 03:45	1
trans-1,3-Dichloropropene	ND		1.0	0.21	ug/L			11/20/14 03:45	1
Trichloroethylene	ND		0.50	0.19	ug/L			11/20/14 03:45	1
Trichlorofluoromethane	ND		1.0	0.19	ug/L			11/20/14 03:45	1
Vinyl chloride	ND		0.50	0.10	ug/L			11/20/14 03:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*75 - 125*		*11/20/14 03:45*	*1*
4-Bromofluorobenzene (Surr)	*94*		*75 - 120*		*11/20/14 03:45*	*1*
Dibromofluoromethane	*105*		*75 - 120*		*11/20/14 03:45*	*1*
Toluene-d8 (Surr)	*107*		*75 - 120*		*11/20/14 03:45*	*1*

Client Sample Results

Client: AbbVie US LLC
Project/Site: Laurinburg, NC VOC Testing (0272871))

TestAmerica Job ID: 500-87930-1

Client Sample ID: MW-18B

Lab Sample ID: 500-87930-5

Date Collected: 11/12/14 16:45
Matrix: Water
Date Received: 11/15/14 10:25

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			11/20/14 04:10	1
1,1,1-Trichloroethane	ND		1.0	0.20	ug/L			11/20/14 04:10	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.23	ug/L			11/20/14 04:10	1
1,1,2-Trichloroethane	ND		1.0	0.28	ug/L			11/20/14 04:10	1
1,1-Dichloroethane	ND		1.0	0.19	ug/L			11/20/14 04:10	1
1,1-Dichloroethylene	ND		1.0	0.31	ug/L			11/20/14 04:10	1
1,1-Dichloropropene	ND		1.0	0.34	ug/L			11/20/14 04:10	1
1,2,3-Trichlorobenzene	ND		1.0	0.24	ug/L			11/20/14 04:10	1
1,2,3-Trichloropropane	ND		1.0	0.45	ug/L			11/20/14 04:10	1
1,2,4-Trichlorobenzene	ND		1.0	0.31	ug/L			11/20/14 04:10	1
1,2,4-Trimethylbenzene	ND		1.0	0.14	ug/L			11/20/14 04:10	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.87	ug/L			11/20/14 04:10	1
1,2-Dibromoethane	ND		1.0	0.36	ug/L			11/20/14 04:10	1
1,2-Dichlorobenzene	ND		1.0	0.27	ug/L			11/20/14 04:10	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			11/20/14 04:10	1
1,2-Dichloropropane	ND		1.0	0.20	ug/L			11/20/14 04:10	1
1,3,5-Trimethylbenzene	ND		1.0	0.18	ug/L			11/20/14 04:10	1
1,1,2-Trichlorotrifluoroethane	ND		5.0	0.22	ug/L			11/20/14 04:10	1
1,3-Dichlorobenzene	ND		1.0	0.15	ug/L			11/20/14 04:10	1
1,3-Dichloropropane	ND		1.0	0.13	ug/L			11/20/14 04:10	1
1,4-Dichlorobenzene	ND		1.0	0.15	ug/L			11/20/14 04:10	1
2,2-Dichloropropane	ND		1.0	0.32	ug/L			11/20/14 04:10	1
2-Chlorotoluene	ND		1.0	0.21	ug/L			11/20/14 04:10	1
2-Hexanone	ND		5.0	0.56	ug/L			11/20/14 04:10	1
4-Chlorotoluene	ND		1.0	0.20	ug/L			11/20/14 04:10	1
4-Isopropyltoluene	ND		2.0	0.17	ug/L			11/20/14 04:10	1
Acetone	ND		5.0	1.3	ug/L			11/20/14 04:10	1
Benzene	ND		0.50	0.074	ug/L			11/20/14 04:10	1
Bromobenzene	ND		1.0	0.25	ug/L			11/20/14 04:10	1
Bromodichloromethane	ND		1.0	0.17	ug/L			11/20/14 04:10	1
Bromoform	ND		1.0	0.28	ug/L			11/20/14 04:10	1
Bromomethane	ND		5.0	0.31	ug/L			11/20/14 04:10	1
Carbon disulfide	ND		5.0	0.43	ug/L			11/20/14 04:10	1
Carbon tetrachloride	ND		1.0	0.26	ug/L			11/20/14 04:10	1
Chlorobenzene	ND		1.0	0.14	ug/L			11/20/14 04:10	1
Chlorobromomethane	ND		1.0	0.40	ug/L			11/20/14 04:10	1
Vinyl acetate	ND		2.0	0.33	ug/L			11/20/14 04:10	1
Chloroethane	ND		1.0	0.34	ug/L			11/20/14 04:10	1
Chloroform	ND		1.0	0.20	ug/L			11/20/14 04:10	1
Chloromethane	ND		1.0	0.18	ug/L			11/20/14 04:10	1
cis-1,2-Dichloroethene	ND		1.0	0.12	ug/L			11/20/14 04:10	1
cis-1,3-Dichloropropene	ND		1.0	0.18	ug/L			11/20/14 04:10	1
Dibromochloromethane	ND		1.0	0.32	ug/L			11/20/14 04:10	1
Dibromomethane	ND		1.0	0.33	ug/L			11/20/14 04:10	1
Dichlorodifluoromethane	ND		5.0	0.20	ug/L			11/20/14 04:10	1
Ethylbenzene	ND		0.50	0.13	ug/L			11/20/14 04:10	1
Hexachlorobutadiene	ND		1.0	0.26	ug/L			11/20/14 04:10	1
Isopropylbenzene	ND		1.0	0.14	ug/L			11/20/14 04:10	1
m&p-Xylene	ND		1.0	0.26	ug/L			11/20/14 04:10	1

Client Sample ID: MW-18B

Lab Sample ID: 500-87930-5

Date Collected: 11/12/14 16:45

Matrix: Water

Date Received: 11/15/14 10:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Ethyl Ketone	ND		5.0	1.5	ug/L			11/20/14 04:10	1
methyl isobutyl ketone	ND		5.0	0.33	ug/L			11/20/14 04:10	1
Methyl tert-butyl ether	ND		1.0	0.24	ug/L			11/20/14 04:10	1
Methylene Chloride	ND		5.0	0.68	ug/L			11/20/14 04:10	1
Naphthalene	ND		1.0	0.16	ug/L			11/20/14 04:10	1
n-Butylbenzene	ND		1.0	0.13	ug/L			11/20/14 04:10	1
N-Propylbenzene	ND		1.0	0.13	ug/L			11/20/14 04:10	1
o-Xylene	ND		0.50	0.068	ug/L			11/20/14 04:10	1
sec-Butylbenzene	ND		1.0	0.15	ug/L			11/20/14 04:10	1
Styrene	ND		1.0	0.10	ug/L			11/20/14 04:10	1
tert-Butylbenzene	ND		1.0	0.14	ug/L			11/20/14 04:10	1
Perchloroethylene	ND		1.0	0.17	ug/L			11/20/14 04:10	1
Toluene	**0.32**	**J**	0.50	0.11	ug/L			11/20/14 04:10	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			11/20/14 04:10	1
trans-1,3-Dichloropropene	ND		1.0	0.21	ug/L			11/20/14 04:10	1
Trichloroethylene	ND		0.50	0.19	ug/L			11/20/14 04:10	1
Trichlorofluoromethane	ND		1.0	0.19	ug/L			11/20/14 04:10	1
Vinyl chloride	ND		0.50	0.10	ug/L			11/20/14 04:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*75 - 125*		*11/20/14 04:10*	*1*
4-Bromofluorobenzene (Surr)	*92*		*75 - 120*		*11/20/14 04:10*	*1*
Dibromofluoromethane	*102*		*75 - 120*		*11/20/14 04:10*	*1*
Toluene-d8 (Surr)	*105*		*75 - 120*		*11/20/14 04:10*	*1*

Client Sample Results

Client: AbbVie US LLC
Project/Site: Laurinburg, NC VOC Testing (0272871))

TestAmerica Job ID: 500-87930-1

Client Sample ID: MW-18D

Lab Sample ID: 500-87930-6

Date Collected: 11/12/14 16:00
Matrix: Water
Date Received: 11/15/14 10:25

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			11/20/14 04:35	1
1,1,1-Trichloroethane	ND		1.0	0.20	ug/L			11/20/14 04:35	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.23	ug/L			11/20/14 04:35	1
1,1,2-Trichloroethane	ND		1.0	0.28	ug/L			11/20/14 04:35	1
1,1-Dichloroethane	ND		1.0	0.19	ug/L			11/20/14 04:35	1
1,1-Dichloroethylene	ND		1.0	0.31	ug/L			11/20/14 04:35	1
1,1-Dichloropropene	ND		1.0	0.34	ug/L			11/20/14 04:35	1
1,2,3-Trichlorobenzene	ND		1.0	0.24	ug/L			11/20/14 04:35	1
1,2,3-Trichloropropane	ND		1.0	0.45	ug/L			11/20/14 04:35	1
1,2,4-Trichlorobenzene	ND		1.0	0.31	ug/L			11/20/14 04:35	1
1,2,4-Trimethylbenzene	ND		1.0	0.14	ug/L			11/20/14 04:35	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.87	ug/L			11/20/14 04:35	1
1,2-Dibromoethane	ND		1.0	0.36	ug/L			11/20/14 04:35	1
1,2-Dichlorobenzene	ND		1.0	0.27	ug/L			11/20/14 04:35	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			11/20/14 04:35	1
1,2-Dichloropropane	ND		1.0	0.20	ug/L			11/20/14 04:35	1
1,3,5-Trimethylbenzene	ND		1.0	0.18	ug/L			11/20/14 04:35	1
1,1,2-Trichlorotrifluoroethane	**130**		5.0	0.22	ug/L			11/20/14 04:35	1
1,3-Dichlorobenzene	ND		1.0	0.15	ug/L			11/20/14 04:35	1
1,3-Dichloropropane	ND		1.0	0.13	ug/L			11/20/14 04:35	1
1,4-Dichlorobenzene	ND		1.0	0.15	ug/L			11/20/14 04:35	1
2,2-Dichloropropane	ND		1.0	0.32	ug/L			11/20/14 04:35	1
2-Chlorotoluene	ND		1.0	0.21	ug/L			11/20/14 04:35	1
2-Hexanone	ND		5.0	0.56	ug/L			11/20/14 04:35	1
4-Chlorotoluene	ND		1.0	0.20	ug/L			11/20/14 04:35	1
4-Isopropyltoluene	ND		2.0	0.17	ug/L			11/20/14 04:35	1
Acetone	ND		5.0	1.3	ug/L			11/20/14 04:35	1
Benzene	ND		0.50	0.074	ug/L			11/20/14 04:35	1
Bromobenzene	ND		1.0	0.25	ug/L			11/20/14 04:35	1
Bromodichloromethane	ND		1.0	0.17	ug/L			11/20/14 04:35	1
Bromoform	ND		1.0	0.28	ug/L			11/20/14 04:35	1
Bromomethane	ND		5.0	0.31	ug/L			11/20/14 04:35	1
Carbon disulfide	ND		5.0	0.43	ug/L			11/20/14 04:35	1
Carbon tetrachloride	ND		1.0	0.26	ug/L			11/20/14 04:35	1
Chlorobenzene	ND		1.0	0.14	ug/L			11/20/14 04:35	1
Chlorobromomethane	ND		1.0	0.40	ug/L			11/20/14 04:35	1
Vinyl acetate	ND		2.0	0.33	ug/L			11/20/14 04:35	1
Chloroethane	ND		1.0	0.34	ug/L			11/20/14 04:35	1
Chloroform	ND		1.0	0.20	ug/L			11/20/14 04:35	1
Chloromethane	ND		1.0	0.18	ug/L			11/20/14 04:35	1
cis-1,2-Dichloroethene	**12**		1.0	0.12	ug/L			11/20/14 04:35	1
cis-1,3-Dichloropropene	ND		1.0	0.18	ug/L			11/20/14 04:35	1
Dibromochloromethane	ND		1.0	0.32	ug/L			11/20/14 04:35	1
Dibromomethane	ND		1.0	0.33	ug/L			11/20/14 04:35	1
Dichlorodifluoromethane	ND		5.0	0.20	ug/L			11/20/14 04:35	1
Ethylbenzene	ND		0.50	0.13	ug/L			11/20/14 04:35	1
Hexachlorobutadiene	ND		1.0	0.26	ug/L			11/20/14 04:35	1
Isopropylbenzene	ND		1.0	0.14	ug/L			11/20/14 04:35	1
m&p-Xylene	ND		1.0	0.26	ug/L			11/20/14 04:35	1

Client Sample Results

Client: AbbVie US LLC
Project/Site: Laurinburg, NC VOC Testing (0272871))

TestAmerica Job ID: 500-87930-1

Client Sample ID: MW-18D

Lab Sample ID: 500-87930-6

Date Collected: 11/12/14 16:00
Matrix: Water
Date Received: 11/15/14 10:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Ethyl Ketone	ND		5.0	1.5	ug/L			11/20/14 04:35	1
methyl isobutyl ketone	ND		5.0	0.33	ug/L			11/20/14 04:35	1
Methyl tert-butyl ether	ND		1.0	0.24	ug/L			11/20/14 04:35	1
Methylene Chloride	ND		5.0	0.68	ug/L			11/20/14 04:35	1
Naphthalene	ND		1.0	0.16	ug/L			11/20/14 04:35	1
n-Butylbenzene	ND		1.0	0.13	ug/L			11/20/14 04:35	1
N-Propylbenzene	ND		1.0	0.13	ug/L			11/20/14 04:35	1
o-Xylene	ND		0.50	0.068	ug/L			11/20/14 04:35	1
sec-Butylbenzene	ND		1.0	0.15	ug/L			11/20/14 04:35	1
Styrene	ND		1.0	0.10	ug/L			11/20/14 04:35	1
tert-Butylbenzene	ND		1.0	0.14	ug/L			11/20/14 04:35	1
Perchloroethylene	ND		1.0	0.17	ug/L			11/20/14 04:35	1
Toluene	**0.43**	**J**	0.50	0.11	ug/L			11/20/14 04:35	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			11/20/14 04:35	1
trans-1,3-Dichloropropene	ND		1.0	0.21	ug/L			11/20/14 04:35	1
Trichloroethylene	**0.87**		0.50	0.19	ug/L			11/20/14 04:35	1
Trichlorofluoromethane	ND		1.0	0.19	ug/L			11/20/14 04:35	1
Vinyl chloride	ND		0.50	0.10	ug/L			11/20/14 04:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*75 - 125*		*11/20/14 04:35*	*1*
4-Bromofluorobenzene (Surr)	*92*		*75 - 120*		*11/20/14 04:35*	*1*
Dibromofluoromethane	*102*		*75 - 120*		*11/20/14 04:35*	*1*
Toluene-d8 (Surr)	*104*		*75 - 120*		*11/20/14 04:35*	*1*

Client Sample Results

Client: AbbVie US LLC
Project/Site: Laurinburg, NC VOC Testing (0272871))

TestAmerica Job ID: 500-87930-1

Client Sample ID: MW-19B

Date Collected: 11/11/14 17:30
Date Received: 11/15/14 10:25

Lab Sample ID: 500-87930-7
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			11/20/14 05:25	1
1,1,1-Trichloroethane	ND		1.0	0.20	ug/L			11/20/14 05:25	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.23	ug/L			11/20/14 05:25	1
1,1,2-Trichloroethane	ND		1.0	0.28	ug/L			11/20/14 05:25	1
1,1-Dichloroethane	ND		1.0	0.19	ug/L			11/20/14 05:25	1
1,1-Dichloroethylene	ND		1.0	0.31	ug/L			11/20/14 05:25	1
1,1-Dichloropropene	ND		1.0	0.34	ug/L			11/20/14 05:25	1
1,2,3-Trichlorobenzene	ND		1.0	0.24	ug/L			11/20/14 05:25	1
1,2,3-Trichloropropane	ND		1.0	0.45	ug/L			11/20/14 05:25	1
1,2,4-Trichlorobenzene	ND		1.0	0.31	ug/L			11/20/14 05:25	1
1,2,4-Trimethylbenzene	ND		1.0	0.14	ug/L			11/20/14 05:25	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.87	ug/L			11/20/14 05:25	1
1,2-Dibromoethane	ND		1.0	0.36	ug/L			11/20/14 05:25	1
1,2-Dichlorobenzene	ND		1.0	0.27	ug/L			11/20/14 05:25	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			11/20/14 05:25	1
1,2-Dichloropropane	ND		1.0	0.20	ug/L			11/20/14 05:25	1
1,3,5-Trimethylbenzene	ND		1.0	0.18	ug/L			11/20/14 05:25	1
1,1,2-Trichlorotrifluoroethane	ND		5.0	0.22	ug/L			11/20/14 05:25	1
1,3-Dichlorobenzene	ND		1.0	0.15	ug/L			11/20/14 05:25	1
1,3-Dichloropropane	ND		1.0	0.13	ug/L			11/20/14 05:25	1
1,4-Dichlorobenzene	ND		1.0	0.15	ug/L			11/20/14 05:25	1
2,2-Dichloropropane	ND		1.0	0.32	ug/L			11/20/14 05:25	1
2-Chlorotoluene	ND		1.0	0.21	ug/L			11/20/14 05:25	1
2-Hexanone	ND		5.0	0.56	ug/L			11/20/14 05:25	1
4-Chlorotoluene	ND		1.0	0.20	ug/L			11/20/14 05:25	1
4-Isopropyltoluene	ND		2.0	0.17	ug/L			11/20/14 05:25	1
Acetone	ND		5.0	1.3	ug/L			11/20/14 05:25	1
Benzene	ND		0.50	0.074	ug/L			11/20/14 05:25	1
Bromobenzene	ND		1.0	0.25	ug/L			11/20/14 05:25	1
Bromodichloromethane	ND		1.0	0.17	ug/L			11/20/14 05:25	1
Bromoform	ND		1.0	0.28	ug/L			11/20/14 05:25	1
Bromomethane	ND		5.0	0.31	ug/L			11/20/14 05:25	1
Carbon disulfide	ND		5.0	0.43	ug/L			11/20/14 05:25	1
Carbon tetrachloride	ND		1.0	0.26	ug/L			11/20/14 05:25	1
Chlorobenzene	ND		1.0	0.14	ug/L			11/20/14 05:25	1
Chlorobromomethane	ND		1.0	0.40	ug/L			11/20/14 05:25	1
Vinyl acetate	ND		2.0	0.33	ug/L			11/20/14 05:25	1
Chloroethane	ND		1.0	0.34	ug/L			11/20/14 05:25	1
Chloroform	ND		1.0	0.20	ug/L			11/20/14 05:25	1
Chloromethane	ND		1.0	0.18	ug/L			11/20/14 05:25	1
cis-1,2-Dichloroethene	ND		1.0	0.12	ug/L			11/20/14 05:25	1
cis-1,3-Dichloropropene	ND		1.0	0.18	ug/L			11/20/14 05:25	1
Dibromochloromethane	ND		1.0	0.32	ug/L			11/20/14 05:25	1
Dibromomethane	ND		1.0	0.33	ug/L			11/20/14 05:25	1
Dichlorodifluoromethane	ND		5.0	0.20	ug/L			11/20/14 05:25	1
Ethylbenzene	ND		0.50	0.13	ug/L			11/20/14 05:25	1
Hexachlorobutadiene	ND		1.0	0.26	ug/L			11/20/14 05:25	1
Isopropylbenzene	ND		1.0	0.14	ug/L			11/20/14 05:25	1
m&p-Xylene	ND		1.0	0.26	ug/L			11/20/14 05:25	1

Client Sample ID: MW-19B

Lab Sample ID: 500-87930-7

Date Collected: 11/11/14 17:30

Matrix: Water

Date Received: 11/15/14 10:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Ethyl Ketone	ND		5.0	1.5	ug/L			11/20/14 05:25	1
methyl isobutyl ketone	ND		5.0	0.33	ug/L			11/20/14 05:25	1
Methyl tert-butyl ether	ND		1.0	0.24	ug/L			11/20/14 05:25	1
Methylene Chloride	ND		5.0	0.68	ug/L			11/20/14 05:25	1
Naphthalene	ND		1.0	0.16	ug/L			11/20/14 05:25	1
n-Butylbenzene	ND		1.0	0.13	ug/L			11/20/14 05:25	1
N-Propylbenzene	ND		1.0	0.13	ug/L			11/20/14 05:25	1
o-Xylene	ND		0.50	0.068	ug/L			11/20/14 05:25	1
sec-Butylbenzene	ND		1.0	0.15	ug/L			11/20/14 05:25	1
Styrene	ND		1.0	0.10	ug/L			11/20/14 05:25	1
tert-Butylbenzene	ND		1.0	0.14	ug/L			11/20/14 05:25	1
Perchloroethylene	ND		1.0	0.17	ug/L			11/20/14 05:25	1
Toluene	**0.33**	**J**	0.50	0.11	ug/L			11/20/14 05:25	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			11/20/14 05:25	1
trans-1,3-Dichloropropene	ND		1.0	0.21	ug/L			11/20/14 05:25	1
Trichloroethylene	ND		0.50	0.19	ug/L			11/20/14 05:25	1
Trichlorofluoromethane	ND		1.0	0.19	ug/L			11/20/14 05:25	1
Vinyl chloride	ND		0.50	0.10	ug/L			11/20/14 05:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*75 - 125*		*11/20/14 05:25*	*1*
4-Bromofluorobenzene (Surr)	*94*		*75 - 120*		*11/20/14 05:25*	*1*
Dibromofluoromethane	*101*		*75 - 120*		*11/20/14 05:25*	*1*
Toluene-d8 (Surr)	*106*		*75 - 120*		*11/20/14 05:25*	*1*

Client Sample Results

Client: AbbVie US LLC
Project/Site: Laurinburg, NC VOC Testing (0272871))

TestAmerica Job ID: 500-87930-1

Client Sample ID: MW-19D

Lab Sample ID: 500-87930-8

Date Collected: 11/11/14 18:30
Matrix: Water
Date Received: 11/15/14 10:25

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			11/20/14 18:51	1
1,1,1-Trichloroethane	ND		1.0	0.20	ug/L			11/20/14 18:51	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.23	ug/L			11/20/14 18:51	1
1,1,2-Trichloroethane	ND		1.0	0.28	ug/L			11/20/14 18:51	1
1,1-Dichloroethane	ND		1.0	0.19	ug/L			11/20/14 18:51	1
1,1-Dichloroethylene	ND		1.0	0.31	ug/L			11/20/14 18:51	1
1,1-Dichloropropene	ND		1.0	0.34	ug/L			11/20/14 18:51	1
1,2,3-Trichlorobenzene	ND		1.0	0.24	ug/L			11/20/14 18:51	1
1,2,3-Trichloropropane	ND		1.0	0.45	ug/L			11/20/14 18:51	1
1,2,4-Trichlorobenzene	ND		1.0	0.31	ug/L			11/20/14 18:51	1
1,2,4-Trimethylbenzene	ND		1.0	0.14	ug/L			11/20/14 18:51	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.87	ug/L			11/20/14 18:51	1
1,2-Dibromoethane	ND		1.0	0.36	ug/L			11/20/14 18:51	1
1,2-Dichlorobenzene	ND		1.0	0.27	ug/L			11/20/14 18:51	1
1,2-Dichloroethane	**0.48**	**J**	1.0	0.28	ug/L			11/20/14 18:51	1
1,2-Dichloropropane	ND		1.0	0.20	ug/L			11/20/14 18:51	1
1,3,5-Trimethylbenzene	ND		1.0	0.18	ug/L			11/20/14 18:51	1
1,1,2-Trichlorotrifluoroethane	**170**		5.0	0.22	ug/L			11/20/14 18:51	1
1,3-Dichlorobenzene	ND		1.0	0.15	ug/L			11/20/14 18:51	1
1,3-Dichloropropane	ND		1.0	0.13	ug/L			11/20/14 18:51	1
1,4-Dichlorobenzene	ND		1.0	0.15	ug/L			11/20/14 18:51	1
2,2-Dichloropropane	ND		1.0	0.32	ug/L			11/20/14 18:51	1
2-Chlorotoluene	ND		1.0	0.21	ug/L			11/20/14 18:51	1
2-Hexanone	ND		5.0	0.56	ug/L			11/20/14 18:51	1
4-Chlorotoluene	ND		1.0	0.20	ug/L			11/20/14 18:51	1
4-Isopropyltoluene	ND		2.0	0.17	ug/L			11/20/14 18:51	1
Acetone	ND		5.0	1.3	ug/L			11/20/14 18:51	1
Benzene	**0.49**	**J**	0.50	0.074	ug/L			11/20/14 18:51	1
Bromobenzene	ND		1.0	0.25	ug/L			11/20/14 18:51	1
Bromodichloromethane	ND		1.0	0.17	ug/L			11/20/14 18:51	1
Bromoform	ND		1.0	0.28	ug/L			11/20/14 18:51	1
Bromomethane	ND		5.0	0.31	ug/L			11/20/14 18:51	1
Carbon disulfide	ND		5.0	0.43	ug/L			11/20/14 18:51	1
Carbon tetrachloride	ND		1.0	0.26	ug/L			11/20/14 18:51	1
Chlorobenzene	ND		1.0	0.14	ug/L			11/20/14 18:51	1
Chlorobromomethane	ND		1.0	0.40	ug/L			11/20/14 18:51	1
Vinyl acetate	ND		2.0	0.33	ug/L			11/20/14 18:51	1
Chloroethane	ND		1.0	0.34	ug/L			11/20/14 18:51	1
Chloroform	ND		1.0	0.20	ug/L			11/20/14 18:51	1
Chloromethane	ND		1.0	0.18	ug/L			11/20/14 18:51	1
cis-1,2-Dichloroethene	**64**		1.0	0.12	ug/L			11/20/14 18:51	1
cis-1,3-Dichloropropene	ND		1.0	0.18	ug/L			11/20/14 18:51	1
Dibromochloromethane	ND		1.0	0.32	ug/L			11/20/14 18:51	1
Dibromomethane	ND		1.0	0.33	ug/L			11/20/14 18:51	1
Dichlorodifluoromethane	**15**		5.0	0.20	ug/L			11/20/14 18:51	1
Ethylbenzene	ND		0.50	0.13	ug/L			11/20/14 18:51	1
Hexachlorobutadiene	ND		1.0	0.26	ug/L			11/20/14 18:51	1
Isopropylbenzene	ND		1.0	0.14	ug/L			11/20/14 18:51	1
m&p-Xylene	ND		1.0	0.26	ug/L			11/20/14 18:51	1

Client Sample ID: MW-19D

Lab Sample ID: 500-87930-8

Date Collected: 11/11/14 18:30

Matrix: Water

Date Received: 11/15/14 10:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Ethyl Ketone	ND		5.0	1.5	ug/L			11/20/14 18:51	1
methyl isobutyl ketone	ND		5.0	0.33	ug/L			11/20/14 18:51	1
Methyl tert-butyl ether	ND		1.0	0.24	ug/L			11/20/14 18:51	1
Methylene Chloride	ND		5.0	0.68	ug/L			11/20/14 18:51	1
Naphthalene	ND		1.0	0.16	ug/L			11/20/14 18:51	1
n-Butylbenzene	ND		1.0	0.13	ug/L			11/20/14 18:51	1
N-Propylbenzene	ND		1.0	0.13	ug/L			11/20/14 18:51	1
o-Xylene	ND		0.50	0.068	ug/L			11/20/14 18:51	1
sec-Butylbenzene	ND		1.0	0.15	ug/L			11/20/14 18:51	1
Styrene	ND		1.0	0.10	ug/L			11/20/14 18:51	1
tert-Butylbenzene	ND		1.0	0.14	ug/L			11/20/14 18:51	1
Perchloroethylene	ND		1.0	0.17	ug/L			11/20/14 18:51	1
Toluene	**0.34**	**J**	0.50	0.11	ug/L			11/20/14 18:51	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			11/20/14 18:51	1
trans-1,3-Dichloropropene	ND		1.0	0.21	ug/L			11/20/14 18:51	1
Trichloroethylene	**2.3**		0.50	0.19	ug/L			11/20/14 18:51	1
Trichlorofluoromethane	ND		1.0	0.19	ug/L			11/20/14 18:51	1
Vinyl chloride	**1.0**		0.50	0.10	ug/L			11/20/14 18:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*75 - 125*		*11/20/14 18:51*	*1*
4-Bromofluorobenzene (Surr)	*92*		*75 - 120*		*11/20/14 18:51*	*1*
Dibromofluoromethane	*101*		*75 - 120*		*11/20/14 18:51*	*1*
Toluene-d8 (Surr)	*104*		*75 - 120*		*11/20/14 18:51*	*1*

Client Sample Results

Client: AbbVie US LLC
Project/Site: Laurinburg, NC VOC Testing (0272871))

TestAmerica Job ID: 500-87930-1

Client Sample ID: MW-20B

Lab Sample ID: 500-87930-9

Date Collected: 11/12/14 08:40
Matrix: Water
Date Received: 11/15/14 10:25

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			11/20/14 06:39	1
1,1,1-Trichloroethane	ND		1.0	0.20	ug/L			11/20/14 06:39	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.23	ug/L			11/20/14 06:39	1
1,1,2-Trichloroethane	ND		1.0	0.28	ug/L			11/20/14 06:39	1
1,1-Dichloroethane	ND		1.0	0.19	ug/L			11/20/14 06:39	1
1,1-Dichloroethylene	ND		1.0	0.31	ug/L			11/20/14 06:39	1
1,1-Dichloropropene	ND		1.0	0.34	ug/L			11/20/14 06:39	1
1,2,3-Trichlorobenzene	ND		1.0	0.24	ug/L			11/20/14 06:39	1
1,2,3-Trichloropropane	ND		1.0	0.45	ug/L			11/20/14 06:39	1
1,2,4-Trichlorobenzene	ND		1.0	0.31	ug/L			11/20/14 06:39	1
1,2,4-Trimethylbenzene	ND		1.0	0.14	ug/L			11/20/14 06:39	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.87	ug/L			11/20/14 06:39	1
1,2-Dibromoethane	ND		1.0	0.36	ug/L			11/20/14 06:39	1
1,2-Dichlorobenzene	ND		1.0	0.27	ug/L			11/20/14 06:39	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			11/20/14 06:39	1
1,2-Dichloropropane	ND		1.0	0.20	ug/L			11/20/14 06:39	1
1,3,5-Trimethylbenzene	ND		1.0	0.18	ug/L			11/20/14 06:39	1
1,1,2-Trichlorotrifluoroethane	ND		5.0	0.22	ug/L			11/20/14 06:39	1
1,3-Dichlorobenzene	ND		1.0	0.15	ug/L			11/20/14 06:39	1
1,3-Dichloropropane	ND		1.0	0.13	ug/L			11/20/14 06:39	1
1,4-Dichlorobenzene	ND		1.0	0.15	ug/L			11/20/14 06:39	1
2,2-Dichloropropane	ND		1.0	0.32	ug/L			11/20/14 06:39	1
2-Chlorotoluene	ND		1.0	0.21	ug/L			11/20/14 06:39	1
2-Hexanone	ND		5.0	0.56	ug/L			11/20/14 06:39	1
4-Chlorotoluene	ND		1.0	0.20	ug/L			11/20/14 06:39	1
4-Isopropyltoluene	ND		2.0	0.17	ug/L			11/20/14 06:39	1
Acetone	ND		5.0	1.3	ug/L			11/20/14 06:39	1
Benzene	ND		0.50	0.074	ug/L			11/20/14 06:39	1
Bromobenzene	ND		1.0	0.25	ug/L			11/20/14 06:39	1
Bromodichloromethane	ND		1.0	0.17	ug/L			11/20/14 06:39	1
Bromoform	ND		1.0	0.28	ug/L			11/20/14 06:39	1
Bromomethane	ND		5.0	0.31	ug/L			11/20/14 06:39	1
Carbon disulfide	ND		5.0	0.43	ug/L			11/20/14 06:39	1
Carbon tetrachloride	ND		1.0	0.26	ug/L			11/20/14 06:39	1
Chlorobenzene	ND		1.0	0.14	ug/L			11/20/14 06:39	1
Chlorobromomethane	ND		1.0	0.40	ug/L			11/20/14 06:39	1
Vinyl acetate	ND		2.0	0.33	ug/L			11/20/14 06:39	1
Chloroethane	ND		1.0	0.34	ug/L			11/20/14 06:39	1
Chloroform	ND		1.0	0.20	ug/L			11/20/14 06:39	1
Chloromethane	ND		1.0	0.18	ug/L			11/20/14 06:39	1
cis-1,2-Dichloroethene	ND		1.0	0.12	ug/L			11/20/14 06:39	1
cis-1,3-Dichloropropene	ND		1.0	0.18	ug/L			11/20/14 06:39	1
Dibromochloromethane	ND		1.0	0.32	ug/L			11/20/14 06:39	1
Dibromomethane	ND		1.0	0.33	ug/L			11/20/14 06:39	1
Dichlorodifluoromethane	ND		5.0	0.20	ug/L			11/20/14 06:39	1
Ethylbenzene	ND		0.50	0.13	ug/L			11/20/14 06:39	1
Hexachlorobutadiene	ND		1.0	0.26	ug/L			11/20/14 06:39	1
Isopropylbenzene	ND		1.0	0.14	ug/L			11/20/14 06:39	1
m&p-Xylene	ND		1.0	0.26	ug/L			11/20/14 06:39	1

Client Sample ID: MW-20B

Lab Sample ID: 500-87930-9

Date Collected: 11/12/14 08:40

Matrix: Water

Date Received: 11/15/14 10:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Ethyl Ketone	ND		5.0	1.5	ug/L			11/20/14 06:39	1
methyl isobutyl ketone	ND		5.0	0.33	ug/L			11/20/14 06:39	1
Methyl tert-butyl ether	ND		1.0	0.24	ug/L			11/20/14 06:39	1
Methylene Chloride	ND		5.0	0.68	ug/L			11/20/14 06:39	1
Naphthalene	ND		1.0	0.16	ug/L			11/20/14 06:39	1
n-Butylbenzene	ND		1.0	0.13	ug/L			11/20/14 06:39	1
N-Propylbenzene	ND		1.0	0.13	ug/L			11/20/14 06:39	1
o-Xylene	ND		0.50	0.068	ug/L			11/20/14 06:39	1
sec-Butylbenzene	ND		1.0	0.15	ug/L			11/20/14 06:39	1
Styrene	ND		1.0	0.10	ug/L			11/20/14 06:39	1
tert-Butylbenzene	ND		1.0	0.14	ug/L			11/20/14 06:39	1
Perchloroethylene	ND		1.0	0.17	ug/L			11/20/14 06:39	1
Toluene	ND		0.50	0.11	ug/L			11/20/14 06:39	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			11/20/14 06:39	1
trans-1,3-Dichloropropene	ND		1.0	0.21	ug/L			11/20/14 06:39	1
Trichloroethylene	ND		0.50	0.19	ug/L			11/20/14 06:39	1
Trichlorofluoromethane	ND		1.0	0.19	ug/L			11/20/14 06:39	1
Vinyl chloride	ND		0.50	0.10	ug/L			11/20/14 06:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*75 - 125*		*11/20/14 06:39*	*1*
4-Bromofluorobenzene (Surr)	*92*		*75 - 120*		*11/20/14 06:39*	*1*
Dibromofluoromethane	*104*		*75 - 120*		*11/20/14 06:39*	*1*
Toluene-d8 (Surr)	*105*		*75 - 120*		*11/20/14 06:39*	*1*

Client Sample Results

Client: AbbVie US LLC
Project/Site: Laurinburg, NC VOC Testing (0272871))

TestAmerica Job ID: 500-87930-1

Client Sample ID: MW-20D

Date Collected: 11/12/14 10:30
Date Received: 11/15/14 10:25

Lab Sample ID: 500-87930-10

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			11/20/14 22:45	1
1,1,1-Trichloroethane	ND		1.0	0.20	ug/L			11/20/14 22:45	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.23	ug/L			11/20/14 22:45	1
1,1,2-Trichloroethane	ND		1.0	0.28	ug/L			11/20/14 22:45	1
1,1-Dichloroethane	ND		1.0	0.19	ug/L			11/20/14 22:45	1
1,1-Dichloroethylene	ND		1.0	0.31	ug/L			11/20/14 22:45	1
1,1-Dichloropropene	ND		1.0	0.34	ug/L			11/20/14 22:45	1
1,2,3-Trichlorobenzene	ND		1.0	0.24	ug/L			11/20/14 22:45	1
1,2,3-Trichloropropane	ND		1.0	0.45	ug/L			11/20/14 22:45	1
1,2,4-Trichlorobenzene	ND		1.0	0.31	ug/L			11/20/14 22:45	1
1,2,4-Trimethylbenzene	ND		1.0	0.14	ug/L			11/20/14 22:45	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.87	ug/L			11/20/14 22:45	1
1,2-Dibromoethane	ND		1.0	0.36	ug/L			11/20/14 22:45	1
1,2-Dichlorobenzene	ND		1.0	0.27	ug/L			11/20/14 22:45	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			11/20/14 22:45	1
1,2-Dichloropropane	ND		1.0	0.20	ug/L			11/20/14 22:45	1
1,3,5-Trimethylbenzene	ND		1.0	0.18	ug/L			11/20/14 22:45	1
1,1,2-Trichlorotrifluoroethane	ND		5.0	0.22	ug/L			11/20/14 22:45	1
1,3-Dichlorobenzene	ND		1.0	0.15	ug/L			11/20/14 22:45	1
1,3-Dichloropropane	ND		1.0	0.13	ug/L			11/20/14 22:45	1
1,4-Dichlorobenzene	ND		1.0	0.15	ug/L			11/20/14 22:45	1
2,2-Dichloropropane	ND		1.0	0.32	ug/L			11/20/14 22:45	1
2-Chlorotoluene	ND		1.0	0.21	ug/L			11/20/14 22:45	1
2-Hexanone	ND		5.0	0.56	ug/L			11/20/14 22:45	1
4-Chlorotoluene	ND		1.0	0.20	ug/L			11/20/14 22:45	1
4-Isopropyltoluene	ND		2.0	0.17	ug/L			11/20/14 22:45	1
Acetone	ND		5.0	1.3	ug/L			11/20/14 22:45	1
Benzene	ND		0.50	0.074	ug/L			11/20/14 22:45	1
Bromobenzene	ND		1.0	0.25	ug/L			11/20/14 22:45	1
Bromodichloromethane	ND		1.0	0.17	ug/L			11/20/14 22:45	1
Bromoform	ND		1.0	0.28	ug/L			11/20/14 22:45	1
Bromomethane	ND		5.0	0.31	ug/L			11/20/14 22:45	1
Carbon disulfide	ND		5.0	0.43	ug/L			11/20/14 22:45	1
Carbon tetrachloride	ND		1.0	0.26	ug/L			11/20/14 22:45	1
Chlorobenzene	ND		1.0	0.14	ug/L			11/20/14 22:45	1
Chlorobromomethane	ND		1.0	0.40	ug/L			11/20/14 22:45	1
Vinyl acetate	ND		2.0	0.33	ug/L			11/20/14 22:45	1
Chloroethane	ND		1.0	0.34	ug/L			11/20/14 22:45	1
Chloroform	ND		1.0	0.20	ug/L			11/20/14 22:45	1
Chloromethane	ND		1.0	0.18	ug/L			11/20/14 22:45	1
cis-1,2-Dichloroethene	**0.68**	**J**	1.0	0.12	ug/L			11/20/14 22:45	1
cis-1,3-Dichloropropene	ND		1.0	0.18	ug/L			11/20/14 22:45	1
Dibromochloromethane	ND		1.0	0.32	ug/L			11/20/14 22:45	1
Dibromomethane	ND		1.0	0.33	ug/L			11/20/14 22:45	1
Dichlorodifluoromethane	ND		5.0	0.20	ug/L			11/20/14 22:45	1
Ethylbenzene	ND		0.50	0.13	ug/L			11/20/14 22:45	1
Hexachlorobutadiene	ND		1.0	0.26	ug/L			11/20/14 22:45	1
Isopropylbenzene	ND		1.0	0.14	ug/L			11/20/14 22:45	1
m&p-Xylene	ND		1.0	0.26	ug/L			11/20/14 22:45	1

Client Sample Results

Client: AbbVie US LLC
Project/Site: Laurinburg, NC VOC Testing (0272871))

TestAmerica Job ID: 500-87930-1

Client Sample ID: MW-20D

Lab Sample ID: 500-87930-10

Date Collected: 11/12/14 10:30
Matrix: Water
Date Received: 11/15/14 10:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Ethyl Ketone	ND		5.0	1.5	ug/L			11/20/14 22:45	1
methyl isobutyl ketone	ND		5.0	0.33	ug/L			11/20/14 22:45	1
Methyl tert-butyl ether	ND		1.0	0.24	ug/L			11/20/14 22:45	1
Methylene Chloride	ND		5.0	0.68	ug/L			11/20/14 22:45	1
Naphthalene	ND		1.0	0.16	ug/L			11/20/14 22:45	1
n-Butylbenzene	ND		1.0	0.13	ug/L			11/20/14 22:45	1
N-Propylbenzene	ND		1.0	0.13	ug/L			11/20/14 22:45	1
o-Xylene	ND		0.50	0.068	ug/L			11/20/14 22:45	1
sec-Butylbenzene	ND		1.0	0.15	ug/L			11/20/14 22:45	1
Styrene	ND		1.0	0.10	ug/L			11/20/14 22:45	1
tert-Butylbenzene	ND		1.0	0.14	ug/L			11/20/14 22:45	1
Perchloroethylene	ND		1.0	0.17	ug/L			11/20/14 22:45	1
Toluene	**0.35**	**J**	0.50	0.11	ug/L			11/20/14 22:45	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			11/20/14 22:45	1
trans-1,3-Dichloropropene	ND		1.0	0.21	ug/L			11/20/14 22:45	1
Trichloroethylene	**0.49**	**J**	0.50	0.19	ug/L			11/20/14 22:45	1
Trichlorofluoromethane	ND		1.0	0.19	ug/L			11/20/14 22:45	1
Vinyl chloride	ND		0.50	0.10	ug/L			11/20/14 22:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*75 - 125*		*11/20/14 22:45*	*1*
4-Bromofluorobenzene (Surr)	*93*		*75 - 120*		*11/20/14 22:45*	*1*
Dibromofluoromethane	*101*		*75 - 120*		*11/20/14 22:45*	*1*
Toluene-d8 (Surr)	*106*		*75 - 120*		*11/20/14 22:45*	*1*

Client Sample Results

Client: AbbVie US LLC
Project/Site: Laurinburg, NC VOC Testing (0272871))

TestAmerica Job ID: 500-87930-1

Client Sample ID: MW-100A

Date Collected: 11/12/14 14:30
Date Received: 11/15/14 10:25

Lab Sample ID: 500-87930-11

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		50	13	ug/L			11/20/14 23:10	50
1,1,1-Trichloroethane	**580**		50	10	ug/L			11/20/14 23:10	50
1,1,2,2-Tetrachloroethane	ND		50	12	ug/L			11/20/14 23:10	50
1,1,2-Trichloroethane	ND		50	14	ug/L			11/20/14 23:10	50
1,1-Dichloroethane	**87**		50	9.5	ug/L			11/20/14 23:10	50
1,1-Dichloroethylene	**570**		50	16	ug/L			11/20/14 23:10	50
1,1-Dichloropropene	ND		50	17	ug/L			11/20/14 23:10	50
1,2,3-Trichlorobenzene	ND		50	12	ug/L			11/20/14 23:10	50
1,2,3-Trichloropropane	ND		50	23	ug/L			11/20/14 23:10	50
1,2,4-Trichlorobenzene	ND		50	16	ug/L			11/20/14 23:10	50
1,2,4-Trimethylbenzene	ND		50	7.0	ug/L			11/20/14 23:10	50
1,2-Dibromo-3-Chloropropane	ND		250	44	ug/L			11/20/14 23:10	50
1,2-Dibromoethane	ND		50	18	ug/L			11/20/14 23:10	50
1,2-Dichlorobenzene	ND		50	14	ug/L			11/20/14 23:10	50
1,2-Dichloroethane	**87**		50	14	ug/L			11/20/14 23:10	50
1,2-Dichloropropane	ND		50	10	ug/L			11/20/14 23:10	50
1,3,5-Trimethylbenzene	ND		50	9.0	ug/L			11/20/14 23:10	50
1,3-Dichlorobenzene	ND		50	7.5	ug/L			11/20/14 23:10	50
1,3-Dichloropropane	ND		50	6.5	ug/L			11/20/14 23:10	50
1,4-Dichlorobenzene	ND		50	7.5	ug/L			11/20/14 23:10	50
2,2-Dichloropropane	ND		50	16	ug/L			11/20/14 23:10	50
2-Chlorotoluene	ND		50	11	ug/L			11/20/14 23:10	50
2-Hexanone	ND		250	28	ug/L			11/20/14 23:10	50
4-Chlorotoluene	ND		50	10	ug/L			11/20/14 23:10	50
4-Isopropyltoluene	ND		100	8.5	ug/L			11/20/14 23:10	50
Acetone	**420**		250	65	ug/L			11/20/14 23:10	50
Benzene	**17**	**J**	25	3.7	ug/L			11/20/14 23:10	50
Bromobenzene	ND		50	13	ug/L			11/20/14 23:10	50
Bromodichloromethane	ND		50	8.5	ug/L			11/20/14 23:10	50
Bromoform	ND		50	14	ug/L			11/20/14 23:10	50
Bromomethane	ND		250	16	ug/L			11/20/14 23:10	50
Carbon disulfide	ND		250	22	ug/L			11/20/14 23:10	50
Carbon tetrachloride	ND		50	13	ug/L			11/20/14 23:10	50
Chlorobenzene	ND		50	7.0	ug/L			11/20/14 23:10	50
Chlorobromomethane	ND		50	20	ug/L			11/20/14 23:10	50
Vinyl acetate	ND		100	17	ug/L			11/20/14 23:10	50
Chloroethane	ND		50	17	ug/L			11/20/14 23:10	50
Chloroform	**110**		50	10	ug/L			11/20/14 23:10	50
Chloromethane	ND		50	9.0	ug/L			11/20/14 23:10	50
cis-1,3-Dichloropropene	ND		50	9.0	ug/L			11/20/14 23:10	50
Dibromochloromethane	ND		50	16	ug/L			11/20/14 23:10	50
Dibromomethane	ND		50	17	ug/L			11/20/14 23:10	50
Dichlorodifluoromethane	ND		250	10	ug/L			11/20/14 23:10	50
Ethylbenzene	**15**	**J**	25	6.5	ug/L			11/20/14 23:10	50
Hexachlorobutadiene	ND		50	13	ug/L			11/20/14 23:10	50
Isopropylbenzene	ND		50	7.0	ug/L			11/20/14 23:10	50
m&p-Xylene	**44**	**J**	50	13	ug/L			11/20/14 23:10	50
Methyl Ethyl Ketone	ND		250	74	ug/L			11/20/14 23:10	50
methyl isobutyl ketone	ND		250	17	ug/L			11/20/14 23:10	50

Client Sample ID: MW-100A

Lab Sample ID: 500-87930-11

Date Collected: 11/12/14 14:30

Matrix: Water

Date Received: 11/15/14 10:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		50	12	ug/L			11/20/14 23:10	50
Methylene Chloride	**260**		250	34	ug/L			11/20/14 23:10	50
Naphthalene	ND		50	8.0	ug/L			11/20/14 23:10	50
n-Butylbenzene	ND		50	6.5	ug/L			11/20/14 23:10	50
N-Propylbenzene	ND		50	6.5	ug/L			11/20/14 23:10	50
o-Xylene	**14**	**J**	25	3.4	ug/L			11/20/14 23:10	50
sec-Butylbenzene	ND		50	7.5	ug/L			11/20/14 23:10	50
Styrene	ND		50	5.0	ug/L			11/20/14 23:10	50
tert-Butylbenzene	ND		50	7.0	ug/L			11/20/14 23:10	50
Perchloroethylene	ND		50	8.5	ug/L			11/20/14 23:10	50
Toluene	**1700**		25	5.5	ug/L			11/20/14 23:10	50
trans-1,2-Dichloroethene	ND		50	13	ug/L			11/20/14 23:10	50
trans-1,3-Dichloropropene	ND		50	11	ug/L			11/20/14 23:10	50
Trichloroethylene	**25**		25	9.5	ug/L			11/20/14 23:10	50
Trichlorofluoromethane	ND		50	9.5	ug/L			11/20/14 23:10	50
Vinyl chloride	**69**		25	5.0	ug/L			11/20/14 23:10	50

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Ethane, 1,2-dichloro-1,1,2-trifluoro-	*270*	*T J N*	*ug/L*		*1.64*	*354-23-4*		*11/20/14 23:10*	*50*
Cyclohexane	*0.16*		*mg/L*		*3.72*	*110-82-7*		*11/20/14 23:10*	*50*
n-Heptane	*0.16*		*mg/L*		*4.26*	*142-82-5*		*11/20/14 23:10*	*50*
Methylcyclohexane	*0.16*		*mg/L*		*4.78*	*108-87-2*		*11/20/14 23:10*	*50*
Cyclohexanone	*4.7*	*J*	*mg/L*		*8.71*	*108-94-1*		*11/20/14 23:10*	*50*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*75 - 125*		*11/20/14 23:10*	*50*
4-Bromofluorobenzene (Surr)	*94*		*75 - 120*		*11/20/14 23:10*	*50*
Dibromofluoromethane	*100*		*75 - 120*		*11/20/14 23:10*	*50*
Toluene-d8 (Surr)	*104*		*75 - 120*		*11/20/14 23:10*	*50*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane	**12000**		2500	110	ug/L			11/20/14 23:35	500
cis-1,2-Dichloroethene	**45000**		500	60	ug/L			11/20/14 23:35	500

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*75 - 125*		*11/20/14 23:35*	*500*
4-Bromofluorobenzene (Surr)	*93*		*75 - 120*		*11/20/14 23:35*	*500*
Dibromofluoromethane	*103*		*75 - 120*		*11/20/14 23:35*	*500*
Toluene-d8 (Surr)	*104*		*75 - 120*		*11/20/14 23:35*	*500*

Client: AbbVie US LLC
Project/Site: Laurinburg, NC VOC Testing (0272871))

TestAmerica Job ID: 500-87930-1

Client Sample ID: MW-100B
Date Collected: 11/12/14 13:45
Date Received: 11/15/14 10:25

Lab Sample ID: 500-87930-12
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		50	13	ug/L			11/21/14 00:00	50
1,1,1-Trichloroethane	**1100**		50	10	ug/L			11/21/14 00:00	50
1,1,2,2-Tetrachloroethane	ND		50	12	ug/L			11/21/14 00:00	50
1,1,2-Trichloroethane	ND		50	14	ug/L			11/21/14 00:00	50
1,1-Dichloroethane	**98**		50	9.5	ug/L			11/21/14 00:00	50
1,1-Dichloroethylene	**740**		50	16	ug/L			11/21/14 00:00	50
1,1-Dichloropropene	ND		50	17	ug/L			11/21/14 00:00	50
1,2,3-Trichlorobenzene	ND		50	12	ug/L			11/21/14 00:00	50
1,2,3-Trichloropropane	ND		50	23	ug/L			11/21/14 00:00	50
1,2,4-Trichlorobenzene	ND		50	16	ug/L			11/21/14 00:00	50
1,2,4-Trimethylbenzene	ND		50	7.0	ug/L			11/21/14 00:00	50
1,2-Dibromo-3-Chloropropane	ND		250	44	ug/L			11/21/14 00:00	50
1,2-Dibromoethane	ND		50	18	ug/L			11/21/14 00:00	50
1,2-Dichlorobenzene	ND		50	14	ug/L			11/21/14 00:00	50
1,2-Dichloroethane	**130**		50	14	ug/L			11/21/14 00:00	50
1,2-Dichloropropane	ND		50	10	ug/L			11/21/14 00:00	50
1,3,5-Trimethylbenzene	ND		50	9.0	ug/L			11/21/14 00:00	50
1,3-Dichlorobenzene	ND		50	7.5	ug/L			11/21/14 00:00	50
1,3-Dichloropropane	ND		50	6.5	ug/L			11/21/14 00:00	50
1,4-Dichlorobenzene	ND		50	7.5	ug/L			11/21/14 00:00	50
2,2-Dichloropropane	ND		50	16	ug/L			11/21/14 00:00	50
2-Chlorotoluene	ND		50	11	ug/L			11/21/14 00:00	50
2-Hexanone	ND		250	28	ug/L			11/21/14 00:00	50
4-Chlorotoluene	ND		50	10	ug/L			11/21/14 00:00	50
4-Isopropyltoluene	ND		100	8.5	ug/L			11/21/14 00:00	50
Acetone	ND		250	65	ug/L			11/21/14 00:00	50
Benzene	**22**	**J**	25	3.7	ug/L			11/21/14 00:00	50
Bromobenzene	ND		50	13	ug/L			11/21/14 00:00	50
Bromodichloromethane	ND		50	8.5	ug/L			11/21/14 00:00	50
Bromoform	ND		50	14	ug/L			11/21/14 00:00	50
Bromomethane	ND		250	16	ug/L			11/21/14 00:00	50
Carbon disulfide	ND		250	22	ug/L			11/21/14 00:00	50
Carbon tetrachloride	ND		50	13	ug/L			11/21/14 00:00	50
Chlorobenzene	ND		50	7.0	ug/L			11/21/14 00:00	50
Chlorobromomethane	ND		50	20	ug/L			11/21/14 00:00	50
Vinyl acetate	ND		100	17	ug/L			11/21/14 00:00	50
Chloroethane	ND		50	17	ug/L			11/21/14 00:00	50
Chloroform	**150**		50	10	ug/L			11/21/14 00:00	50
Chloromethane	ND		50	9.0	ug/L			11/21/14 00:00	50
cis-1,3-Dichloropropene	ND		50	9.0	ug/L			11/21/14 00:00	50
Dibromochloromethane	ND		50	16	ug/L			11/21/14 00:00	50
Dibromomethane	ND		50	17	ug/L			11/21/14 00:00	50
Dichlorodifluoromethane	ND		250	10	ug/L			11/21/14 00:00	50
Ethylbenzene	**20**	**J**	25	6.5	ug/L			11/21/14 00:00	50
Hexachlorobutadiene	ND		50	13	ug/L			11/21/14 00:00	50
Isopropylbenzene	ND		50	7.0	ug/L			11/21/14 00:00	50
m&p-Xylene	**57**		50	13	ug/L			11/21/14 00:00	50
Methyl Ethyl Ketone	ND		250	74	ug/L			11/21/14 00:00	50
methyl isobutyl ketone	ND		250	17	ug/L			11/21/14 00:00	50

Client Sample Results

Client: AbbVie US LLC
Project/Site: Laurinburg, NC VOC Testing (0272871))

TestAmerica Job ID: 500-87930-1

Client Sample ID: MW-100B

Lab Sample ID: 500-87930-12

Date Collected: 11/12/14 13:45
Matrix: Water
Date Received: 11/15/14 10:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		50	12	ug/L			11/21/14 00:00	50
Methylene Chloride	**1100**		250	34	ug/L			11/21/14 00:00	50
Naphthalene	ND		50	8.0	ug/L			11/21/14 00:00	50
n-Butylbenzene	ND		50	6.5	ug/L			11/21/14 00:00	50
N-Propylbenzene	ND		50	6.5	ug/L			11/21/14 00:00	50
o-Xylene	**21**	**J**	25	3.4	ug/L			11/21/14 00:00	50
sec-Butylbenzene	ND		50	7.5	ug/L			11/21/14 00:00	50
Styrene	ND		50	5.0	ug/L			11/21/14 00:00	50
tert-Butylbenzene	ND		50	7.0	ug/L			11/21/14 00:00	50
Perchloroethylene	ND		50	8.5	ug/L			11/21/14 00:00	50
Toluene	**2700**		25	5.5	ug/L			11/21/14 00:00	50
trans-1,2-Dichloroethene	ND		50	13	ug/L			11/21/14 00:00	50
trans-1,3-Dichloropropene	ND		50	11	ug/L			11/21/14 00:00	50
Trichloroethylene	**820**		25	9.5	ug/L			11/21/14 00:00	50
Trichlorofluoromethane	ND		50	9.5	ug/L			11/21/14 00:00	50
Vinyl chloride	**90**		25	5.0	ug/L			11/21/14 00:00	50

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Ethane, 1,2-dichloro-1,1,2-trifluoro-	*310*	*T J N*	*ug/L*		*1.64*	*354-23-4*		*11/21/14 00:00*	*50*
Cyclohexane	*0.19*		*mg/L*		*3.72*	*110-82-7*		*11/21/14 00:00*	*50*
n-Heptane	*0.18*		*mg/L*		*4.26*	*142-82-5*		*11/21/14 00:00*	*50*
n-Butanol	*26*		*mg/L*		*4.77*	*71-36-3*		*11/21/14 00:00*	*50*
Methylcyclohexane	*0.18*		*mg/L*		*4.78*	*108-87-2*		*11/21/14 00:00*	*50*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*75 - 125*		*11/21/14 00:00*	*50*
4-Bromofluorobenzene (Surr)	*92*		*75 - 120*		*11/21/14 00:00*	*50*
Dibromofluoromethane	*101*		*75 - 120*		*11/21/14 00:00*	*50*
Toluene-d8 (Surr)	*103*		*75 - 120*		*11/21/14 00:00*	*50*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane	**16000**		2500	110	ug/L			11/21/14 00:25	500
cis-1,2-Dichloroethene	**57000**		500	60	ug/L			11/21/14 00:25	500

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*75 - 125*		*11/21/14 00:25*	*500*
4-Bromofluorobenzene (Surr)	*92*		*75 - 120*		*11/21/14 00:25*	*500*
Dibromofluoromethane	*101*		*75 - 120*		*11/21/14 00:25*	*500*
Toluene-d8 (Surr)	*104*		*75 - 120*		*11/21/14 00:25*	*500*

Client Sample ID: MW-101A
Date Collected: 11/12/14 16:05
Date Received: 11/15/14 10:25

Lab Sample ID: 500-87930-13
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		10	2.5	ug/L			11/21/14 00:50	10
1,1,1-Trichloroethane	ND		10	2.0	ug/L			11/21/14 00:50	10
1,1,2,2-Tetrachloroethane	ND		10	2.3	ug/L			11/21/14 00:50	10
1,1,2-Trichloroethane	ND		10	2.8	ug/L			11/21/14 00:50	10
1,1-Dichloroethane	ND		10	1.9	ug/L			11/21/14 00:50	10
1,1-Dichloroethylene	ND		10	3.1	ug/L			11/21/14 00:50	10
1,1-Dichloropropene	ND		10	3.4	ug/L			11/21/14 00:50	10
1,2,3-Trichlorobenzene	ND		10	2.4	ug/L			11/21/14 00:50	10
1,2,3-Trichloropropane	ND		10	4.5	ug/L			11/21/14 00:50	10
1,2,4-Trichlorobenzene	ND		10	3.1	ug/L			11/21/14 00:50	10
1,2,4-Trimethylbenzene	ND		10	1.4	ug/L			11/21/14 00:50	10
1,2-Dibromo-3-Chloropropane	ND		50	8.7	ug/L			11/21/14 00:50	10
1,2-Dibromoethane	ND		10	3.6	ug/L			11/21/14 00:50	10
1,2-Dichlorobenzene	ND		10	2.7	ug/L			11/21/14 00:50	10
1,2-Dichloroethane	ND		10	2.8	ug/L			11/21/14 00:50	10
1,2-Dichloropropane	ND		10	2.0	ug/L			11/21/14 00:50	10
1,3,5-Trimethylbenzene	ND		10	1.8	ug/L			11/21/14 00:50	10
1,3-Dichlorobenzene	ND		10	1.5	ug/L			11/21/14 00:50	10
1,3-Dichloropropane	ND		10	1.3	ug/L			11/21/14 00:50	10
1,4-Dichlorobenzene	ND		10	1.5	ug/L			11/21/14 00:50	10
2,2-Dichloropropane	ND		10	3.2	ug/L			11/21/14 00:50	10
2-Chlorotoluene	ND		10	2.1	ug/L			11/21/14 00:50	10
2-Hexanone	ND		50	5.6	ug/L			11/21/14 00:50	10
4-Chlorotoluene	ND		10	2.0	ug/L			11/21/14 00:50	10
4-Isopropyltoluene	ND		20	1.7	ug/L			11/21/14 00:50	10
Acetone	ND		50	13	ug/L			11/21/14 00:50	10
Benzene	ND		5.0	0.74	ug/L			11/21/14 00:50	10
Bromobenzene	ND		10	2.5	ug/L			11/21/14 00:50	10
Bromodichloromethane	ND		10	1.7	ug/L			11/21/14 00:50	10
Bromoform	ND		10	2.8	ug/L			11/21/14 00:50	10
Bromomethane	ND		50	3.1	ug/L			11/21/14 00:50	10
Carbon disulfide	ND		50	4.3	ug/L			11/21/14 00:50	10
Carbon tetrachloride	ND		10	2.6	ug/L			11/21/14 00:50	10
Chlorobenzene	ND		10	1.4	ug/L			11/21/14 00:50	10
Chlorobromomethane	ND		10	4.0	ug/L			11/21/14 00:50	10
Vinyl acetate	ND		20	3.3	ug/L			11/21/14 00:50	10
Chloroethane	ND		10	3.4	ug/L			11/21/14 00:50	10
Chloroform	ND		10	2.0	ug/L			11/21/14 00:50	10
Chloromethane	ND		10	1.8	ug/L			11/21/14 00:50	10
cis-1,2-Dichloroethene	**22**		10	1.2	ug/L			11/21/14 00:50	10
cis-1,3-Dichloropropene	ND		10	1.8	ug/L			11/21/14 00:50	10
Dibromochloromethane	ND		10	3.2	ug/L			11/21/14 00:50	10
Dibromomethane	ND		10	3.3	ug/L			11/21/14 00:50	10
Dichlorodifluoromethane	ND		50	2.0	ug/L			11/21/14 00:50	10
Ethylbenzene	ND		5.0	1.3	ug/L			11/21/14 00:50	10
Hexachlorobutadiene	ND		10	2.6	ug/L			11/21/14 00:50	10
Isopropylbenzene	ND		10	1.4	ug/L			11/21/14 00:50	10
m&p-Xylene	ND		10	2.6	ug/L			11/21/14 00:50	10
Methyl Ethyl Ketone	ND		50	15	ug/L			11/21/14 00:50	10

Client Sample ID: MW-101A

Lab Sample ID: 500-87930-13

Date Collected: 11/12/14 16:05

Matrix: Water

Date Received: 11/15/14 10:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
methyl isobutyl ketone	ND		50	3.3	ug/L			11/21/14 00:50	10
Methyl tert-butyl ether	ND		10	2.4	ug/L			11/21/14 00:50	10
Methylene Chloride	ND		50	6.8	ug/L			11/21/14 00:50	10
Naphthalene	ND		10	1.6	ug/L			11/21/14 00:50	10
n-Butylbenzene	ND		10	1.3	ug/L			11/21/14 00:50	10
N-Propylbenzene	ND		10	1.3	ug/L			11/21/14 00:50	10
o-Xylene	ND		5.0	0.68	ug/L			11/21/14 00:50	10
sec-Butylbenzene	ND		10	1.5	ug/L			11/21/14 00:50	10
Styrene	ND		10	1.0	ug/L			11/21/14 00:50	10
tert-Butylbenzene	ND		10	1.4	ug/L			11/21/14 00:50	10
Perchloroethylene	ND		10	1.7	ug/L			11/21/14 00:50	10
Toluene	ND		5.0	1.1	ug/L			11/21/14 00:50	10
trans-1,2-Dichloroethene	ND		10	2.5	ug/L			11/21/14 00:50	10
trans-1,3-Dichloropropene	ND		10	2.1	ug/L			11/21/14 00:50	10
Trichloroethylene	**12**		5.0	1.9	ug/L			11/21/14 00:50	10
Trichlorofluoromethane	ND		10	1.9	ug/L			11/21/14 00:50	10
Vinyl chloride	ND		5.0	1.0	ug/L			11/21/14 00:50	10

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Ethane, 1,2-dichloro-1,1,2-trifluoro-	*70*	*T J N*	*ug/L*		*1.64*	*354-23-4*		*11/21/14 00:50*	*10*
Cyclohexane	*0.061*		*mg/L*		*3.72*	*110-82-7*		*11/21/14 00:50*	*10*
Hexane, 3-methyl-	*51*	*T J N*	*ug/L*		*3.85*	*589-34-4*		*11/21/14 00:50*	*10*
n-Heptane	*0.19*		*mg/L*		*4.26*	*142-82-5*		*11/21/14 00:50*	*10*
n-Butanol	*10*		*mg/L*		*4.77*	*71-36-3*		*11/21/14 00:50*	*10*
Methylcyclohexane	*0.081*		*mg/L*		*4.78*	*108-87-2*		*11/21/14 00:50*	*10*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*75 - 125*		*11/21/14 00:50*	*10*
4-Bromofluorobenzene (Surr)	*92*		*75 - 120*		*11/21/14 00:50*	*10*
Dibromofluoromethane	*100*		*75 - 120*		*11/21/14 00:50*	*10*
Toluene-d8 (Surr)	*103*		*75 - 120*		*11/21/14 00:50*	*10*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane	**2200**		500	22	ug/L			11/21/14 01:14	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*75 - 125*		*11/21/14 01:14*	*100*
4-Bromofluorobenzene (Surr)	*92*		*75 - 120*		*11/21/14 01:14*	*100*
Dibromofluoromethane	*100*		*75 - 120*		*11/21/14 01:14*	*100*
Toluene-d8 (Surr)	*103*		*75 - 120*		*11/21/14 01:14*	*100*

Client Sample Results

Client: AbbVie US LLC
Project/Site: Laurinburg, NC VOC Testing (0272871))

TestAmerica Job ID: 500-87930-1

Client Sample ID: MW-101B

Lab Sample ID: 500-87930-14

Date Collected: 11/12/14 15:10
Matrix: Water
Date Received: 11/15/14 10:25

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			11/21/14 01:39	1
1,1,1-Trichloroethane	**0.54**	**J**	1.0	0.20	ug/L			11/21/14 01:39	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.23	ug/L			11/21/14 01:39	1
1,1,2-Trichloroethane	ND		1.0	0.28	ug/L			11/21/14 01:39	1
1,1-Dichloroethane	ND		1.0	0.19	ug/L			11/21/14 01:39	1
1,1-Dichloroethylene	ND		1.0	0.31	ug/L			11/21/14 01:39	1
1,1-Dichloropropene	ND		1.0	0.34	ug/L			11/21/14 01:39	1
1,2,3-Trichlorobenzene	ND		1.0	0.24	ug/L			11/21/14 01:39	1
1,2,3-Trichloropropane	ND		1.0	0.45	ug/L			11/21/14 01:39	1
1,2,4-Trichlorobenzene	ND		1.0	0.31	ug/L			11/21/14 01:39	1
1,2,4-Trimethylbenzene	ND		1.0	0.14	ug/L			11/21/14 01:39	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.87	ug/L			11/21/14 01:39	1
1,2-Dibromoethane	ND		1.0	0.36	ug/L			11/21/14 01:39	1
1,2-Dichlorobenzene	ND		1.0	0.27	ug/L			11/21/14 01:39	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			11/21/14 01:39	1
1,2-Dichloropropane	ND		1.0	0.20	ug/L			11/21/14 01:39	1
1,3,5-Trimethylbenzene	ND		1.0	0.18	ug/L			11/21/14 01:39	1
1,1,2-Trichlorotrifluoroethane	**7.4**		5.0	0.22	ug/L			11/21/14 01:39	1
1,3-Dichlorobenzene	ND		1.0	0.15	ug/L			11/21/14 01:39	1
1,3-Dichloropropane	ND		1.0	0.13	ug/L			11/21/14 01:39	1
1,4-Dichlorobenzene	ND		1.0	0.15	ug/L			11/21/14 01:39	1
2,2-Dichloropropane	ND		1.0	0.32	ug/L			11/21/14 01:39	1
2-Chlorotoluene	ND		1.0	0.21	ug/L			11/21/14 01:39	1
2-Hexanone	ND		5.0	0.56	ug/L			11/21/14 01:39	1
4-Chlorotoluene	ND		1.0	0.20	ug/L			11/21/14 01:39	1
4-Isopropyltoluene	ND		2.0	0.17	ug/L			11/21/14 01:39	1
Acetone	ND		5.0	1.3	ug/L			11/21/14 01:39	1
Benzene	ND		0.50	0.074	ug/L			11/21/14 01:39	1
Bromobenzene	ND		1.0	0.25	ug/L			11/21/14 01:39	1
Bromodichloromethane	ND		1.0	0.17	ug/L			11/21/14 01:39	1
Bromoform	ND		1.0	0.28	ug/L			11/21/14 01:39	1
Bromomethane	ND		5.0	0.31	ug/L			11/21/14 01:39	1
Carbon disulfide	ND		5.0	0.43	ug/L			11/21/14 01:39	1
Carbon tetrachloride	ND		1.0	0.26	ug/L			11/21/14 01:39	1
Chlorobenzene	ND		1.0	0.14	ug/L			11/21/14 01:39	1
Chlorobromomethane	ND		1.0	0.40	ug/L			11/21/14 01:39	1
Vinyl acetate	ND		2.0	0.33	ug/L			11/21/14 01:39	1
Chloroethane	ND		1.0	0.34	ug/L			11/21/14 01:39	1
Chloroform	ND		1.0	0.20	ug/L			11/21/14 01:39	1
Chloromethane	ND		1.0	0.18	ug/L			11/21/14 01:39	1
cis-1,2-Dichloroethene	**120**		1.0	0.12	ug/L			11/21/14 01:39	1
cis-1,3-Dichloropropene	ND		1.0	0.18	ug/L			11/21/14 01:39	1
Dibromochloromethane	ND		1.0	0.32	ug/L			11/21/14 01:39	1
Dibromomethane	ND		1.0	0.33	ug/L			11/21/14 01:39	1
Dichlorodifluoromethane	ND		5.0	0.20	ug/L			11/21/14 01:39	1
Ethylbenzene	ND		0.50	0.13	ug/L			11/21/14 01:39	1
Hexachlorobutadiene	ND		1.0	0.26	ug/L			11/21/14 01:39	1
Isopropylbenzene	ND		1.0	0.14	ug/L			11/21/14 01:39	1
m&p-Xylene	ND		1.0	0.26	ug/L			11/21/14 01:39	1

Client: AbbVie US LLC
Project/Site: Laurinburg, NC VOC Testing (0272871))

TestAmerica Job ID: 500-87930-1

Client Sample ID: MW-101B

Lab Sample ID: 500-87930-14

Date Collected: 11/12/14 15:10
Matrix: Water
Date Received: 11/15/14 10:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Ethyl Ketone	ND		5.0	1.5	ug/L			11/21/14 01:39	1
methyl isobutyl ketone	ND		5.0	0.33	ug/L			11/21/14 01:39	1
Methyl tert-butyl ether	ND		1.0	0.24	ug/L			11/21/14 01:39	1
Methylene Chloride	ND		5.0	0.68	ug/L			11/21/14 01:39	1
Naphthalene	ND		1.0	0.16	ug/L			11/21/14 01:39	1
n-Butylbenzene	ND		1.0	0.13	ug/L			11/21/14 01:39	1
N-Propylbenzene	ND		1.0	0.13	ug/L			11/21/14 01:39	1
o-Xylene	ND		0.50	0.068	ug/L			11/21/14 01:39	1
sec-Butylbenzene	ND		1.0	0.15	ug/L			11/21/14 01:39	1
Styrene	ND		1.0	0.10	ug/L			11/21/14 01:39	1
tert-Butylbenzene	ND		1.0	0.14	ug/L			11/21/14 01:39	1
Perchloroethylene	**0.64**	**J**	1.0	0.17	ug/L			11/21/14 01:39	1
Toluene	**0.31**	**J**	0.50	0.11	ug/L			11/21/14 01:39	1
trans-1,2-Dichloroethene	**0.54**	**J**	1.0	0.25	ug/L			11/21/14 01:39	1
trans-1,3-Dichloropropene	ND		1.0	0.21	ug/L			11/21/14 01:39	1
Trichloroethylene	**40**		0.50	0.19	ug/L			11/21/14 01:39	1
Trichlorofluoromethane	ND		1.0	0.19	ug/L			11/21/14 01:39	1
Vinyl chloride	ND		0.50	0.10	ug/L			11/21/14 01:39	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*11/21/14 01:39*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*75 - 125*		*11/21/14 01:39*	*1*
4-Bromofluorobenzene (Surr)	*91*		*75 - 120*		*11/21/14 01:39*	*1*
Dibromofluoromethane	*101*		*75 - 120*		*11/21/14 01:39*	*1*
Toluene-d8 (Surr)	*104*		*75 - 120*		*11/21/14 01:39*	*1*

Client Sample ID: MW-102A

Lab Sample ID: 500-87930-15

Date Collected: 11/12/14 11:00

Matrix: Water

Date Received: 11/15/14 10:25

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			11/21/14 02:04	1
1,1,1-Trichloroethane	ND		1.0	0.20	ug/L			11/21/14 02:04	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.23	ug/L			11/21/14 02:04	1
1,1,2-Trichloroethane	ND		1.0	0.28	ug/L			11/21/14 02:04	1
1,1-Dichloroethane	ND		1.0	0.19	ug/L			11/21/14 02:04	1
1,1-Dichloroethylene	**12**		1.0	0.31	ug/L			11/21/14 02:04	1
1,1-Dichloropropene	ND		1.0	0.34	ug/L			11/21/14 02:04	1
1,2,3-Trichlorobenzene	ND		1.0	0.24	ug/L			11/21/14 02:04	1
1,2,3-Trichloropropane	ND		1.0	0.45	ug/L			11/21/14 02:04	1
1,2,4-Trichlorobenzene	ND		1.0	0.31	ug/L			11/21/14 02:04	1
1,2,4-Trimethylbenzene	ND		1.0	0.14	ug/L			11/21/14 02:04	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.87	ug/L			11/21/14 02:04	1
1,2-Dibromoethane	ND		1.0	0.36	ug/L			11/21/14 02:04	1
1,2-Dichlorobenzene	ND		1.0	0.27	ug/L			11/21/14 02:04	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			11/21/14 02:04	1
1,2-Dichloropropane	ND		1.0	0.20	ug/L			11/21/14 02:04	1
1,3,5-Trimethylbenzene	ND		1.0	0.18	ug/L			11/21/14 02:04	1
1,3-Dichlorobenzene	ND		1.0	0.15	ug/L			11/21/14 02:04	1
1,3-Dichloropropane	ND		1.0	0.13	ug/L			11/21/14 02:04	1
1,4-Dichlorobenzene	ND		1.0	0.15	ug/L			11/21/14 02:04	1
2,2-Dichloropropane	ND		1.0	0.32	ug/L			11/21/14 02:04	1
2-Chlorotoluene	ND		1.0	0.21	ug/L			11/21/14 02:04	1
2-Hexanone	ND		5.0	0.56	ug/L			11/21/14 02:04	1
4-Chlorotoluene	ND		1.0	0.20	ug/L			11/21/14 02:04	1
4-Isopropyltoluene	ND		2.0	0.17	ug/L			11/21/14 02:04	1
Acetone	ND		5.0	1.3	ug/L			11/21/14 02:04	1
Benzene	ND		0.50	0.074	ug/L			11/21/14 02:04	1
Bromobenzene	ND		1.0	0.25	ug/L			11/21/14 02:04	1
Bromodichloromethane	ND		1.0	0.17	ug/L			11/21/14 02:04	1
Bromoform	ND		1.0	0.28	ug/L			11/21/14 02:04	1
Bromomethane	ND		5.0	0.31	ug/L			11/21/14 02:04	1
Carbon disulfide	ND		5.0	0.43	ug/L			11/21/14 02:04	1
Carbon tetrachloride	ND		1.0	0.26	ug/L			11/21/14 02:04	1
Chlorobenzene	ND		1.0	0.14	ug/L			11/21/14 02:04	1
Chlorobromomethane	ND		1.0	0.40	ug/L			11/21/14 02:04	1
Vinyl acetate	ND		2.0	0.33	ug/L			11/21/14 02:04	1
Chloroethane	ND		1.0	0.34	ug/L			11/21/14 02:04	1
Chloroform	ND		1.0	0.20	ug/L			11/21/14 02:04	1
Chloromethane	ND		1.0	0.18	ug/L			11/21/14 02:04	1
cis-1,2-Dichloroethene	**21**		1.0	0.12	ug/L			11/21/14 02:04	1
cis-1,3-Dichloropropene	ND		1.0	0.18	ug/L			11/21/14 02:04	1
Dibromochloromethane	ND		1.0	0.32	ug/L			11/21/14 02:04	1
Dibromomethane	ND		1.0	0.33	ug/L			11/21/14 02:04	1
Dichlorodifluoromethane	ND		5.0	0.20	ug/L			11/21/14 02:04	1
Ethylbenzene	ND		0.50	0.13	ug/L			11/21/14 02:04	1
Hexachlorobutadiene	ND		1.0	0.26	ug/L			11/21/14 02:04	1
Isopropylbenzene	ND		1.0	0.14	ug/L			11/21/14 02:04	1
m&p-Xylene	ND		1.0	0.26	ug/L			11/21/14 02:04	1
Methyl Ethyl Ketone	ND		5.0	1.5	ug/L			11/21/14 02:04	1

Client Sample Results

Client: AbbVie US LLC
Project/Site: Laurinburg, NC VOC Testing (0272871))

TestAmerica Job ID: 500-87930-1

Client Sample ID: MW-102A

Lab Sample ID: 500-87930-15

Date Collected: 11/12/14 11:00
Matrix: Water
Date Received: 11/15/14 10:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
methyl isobutyl ketone	ND		5.0	0.33	ug/L			11/21/14 02:04	1
Methyl tert-butyl ether	ND		1.0	0.24	ug/L			11/21/14 02:04	1
Methylene Chloride	ND		5.0	0.68	ug/L			11/21/14 02:04	1
Naphthalene	ND		1.0	0.16	ug/L			11/21/14 02:04	1
n-Butylbenzene	ND		1.0	0.13	ug/L			11/21/14 02:04	1
N-Propylbenzene	ND		1.0	0.13	ug/L			11/21/14 02:04	1
o-Xylene	ND		0.50	0.068	ug/L			11/21/14 02:04	1
sec-Butylbenzene	ND		1.0	0.15	ug/L			11/21/14 02:04	1
Styrene	ND		1.0	0.10	ug/L			11/21/14 02:04	1
tert-Butylbenzene	ND		1.0	0.14	ug/L			11/21/14 02:04	1
Perchloroethylene	ND		1.0	0.17	ug/L			11/21/14 02:04	1
Toluene	**0.36**	**J**	0.50	0.11	ug/L			11/21/14 02:04	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			11/21/14 02:04	1
trans-1,3-Dichloropropene	ND		1.0	0.21	ug/L			11/21/14 02:04	1
Trichloroethylene	**0.41**	**J**	0.50	0.19	ug/L			11/21/14 02:04	1
Trichlorofluoromethane	ND		1.0	0.19	ug/L			11/21/14 02:04	1
Vinyl chloride	ND		0.50	0.10	ug/L			11/21/14 02:04	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Ethene, chlorotrifluoro-	*100*	*T J N*	*ug/L*		*0.86*	*79-38-9*		*11/21/14 02:04*	*1*
Unknown alkane	*5.8*	*T J*	*ug/L*		*1.08*			*11/21/14 02:04*	*1*
Unknown	*7.4*	*T J*	*ug/L*		*1.28*			*11/21/14 02:04*	*1*
Ethane, 1,2-dichloro-1,1,2-trifluoro-	*120*	*T J N*	*ug/L*		*1.64*	*354-23-4*		*11/21/14 02:04*	*1*
Methyl acetate	*0.014*		*mg/L*		*2.08*	*79-20-9*		*11/21/14 02:04*	*1*
Cyclohexane	*0.0016*		*mg/L*		*3.72*	*110-82-7*		*11/21/14 02:04*	*1*
n-Butanol	*0.21*		*mg/L*		*4.77*	*71-36-3*		*11/21/14 02:04*	*1*
Methylcyclohexane	*0.0012*		*mg/L*		*4.78*	*108-87-2*		*11/21/14 02:04*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*75 - 125*		*11/21/14 02:04*	*1*
4-Bromofluorobenzene (Surr)	*93*		*75 - 120*		*11/21/14 02:04*	*1*
Dibromofluoromethane	*104*		*75 - 120*		*11/21/14 02:04*	*1*
Toluene-d8 (Surr)	*105*		*75 - 120*		*11/21/14 02:04*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane	**450**		50	2.2	ug/L			11/21/14 02:29	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*75 - 125*		*11/21/14 02:29*	*10*
4-Bromofluorobenzene (Surr)	*92*		*75 - 120*		*11/21/14 02:29*	*10*
Dibromofluoromethane	*102*		*75 - 120*		*11/21/14 02:29*	*10*
Toluene-d8 (Surr)	*104*		*75 - 120*		*11/21/14 02:29*	*10*

Client Sample Results

Client: AbbVie US LLC
Project/Site: Laurinburg, NC VOC Testing (0272871))

TestAmerica Job ID: 500-87930-1

Client Sample ID: MW-102B

Date Collected: 11/12/14 10:00
Date Received: 11/15/14 10:25

Lab Sample ID: 500-87930-16

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		2.0	0.50	ug/L			11/21/14 02:54	2
1,1,1-Trichloroethane	**3.6**		2.0	0.40	ug/L			11/21/14 02:54	2
1,1,2,2-Tetrachloroethane	ND		2.0	0.46	ug/L			11/21/14 02:54	2
1,1,2-Trichloroethane	ND		2.0	0.56	ug/L			11/21/14 02:54	2
1,1-Dichloroethane	**1.1**	**J**	2.0	0.38	ug/L			11/21/14 02:54	2
1,1-Dichloroethylene	**31**		2.0	0.62	ug/L			11/21/14 02:54	2
1,1-Dichloropropene	ND		2.0	0.68	ug/L			11/21/14 02:54	2
1,2,3-Trichlorobenzene	ND		2.0	0.48	ug/L			11/21/14 02:54	2
1,2,3-Trichloropropane	ND		2.0	0.90	ug/L			11/21/14 02:54	2
1,2,4-Trichlorobenzene	ND		2.0	0.62	ug/L			11/21/14 02:54	2
1,2,4-Trimethylbenzene	ND		2.0	0.28	ug/L			11/21/14 02:54	2
1,2-Dibromo-3-Chloropropane	ND		10	1.7	ug/L			11/21/14 02:54	2
1,2-Dibromoethane	ND		2.0	0.72	ug/L			11/21/14 02:54	2
1,2-Dichlorobenzene	ND		2.0	0.54	ug/L			11/21/14 02:54	2
1,2-Dichloroethane	ND		2.0	0.56	ug/L			11/21/14 02:54	2
1,2-Dichloropropane	ND		2.0	0.40	ug/L			11/21/14 02:54	2
1,3,5-Trimethylbenzene	ND		2.0	0.36	ug/L			11/21/14 02:54	2
1,3-Dichlorobenzene	ND		2.0	0.30	ug/L			11/21/14 02:54	2
1,3-Dichloropropane	ND		2.0	0.26	ug/L			11/21/14 02:54	2
1,4-Dichlorobenzene	ND		2.0	0.30	ug/L			11/21/14 02:54	2
2,2-Dichloropropane	ND		2.0	0.64	ug/L			11/21/14 02:54	2
2-Chlorotoluene	ND		2.0	0.42	ug/L			11/21/14 02:54	2
2-Hexanone	ND		10	1.1	ug/L			11/21/14 02:54	2
4-Chlorotoluene	ND		2.0	0.40	ug/L			11/21/14 02:54	2
4-Isopropyltoluene	ND		4.0	0.34	ug/L			11/21/14 02:54	2
Acetone	ND		10	2.6	ug/L			11/21/14 02:54	2
Benzene	ND		1.0	0.15	ug/L			11/21/14 02:54	2
Bromobenzene	ND		2.0	0.50	ug/L			11/21/14 02:54	2
Bromodichloromethane	ND		2.0	0.34	ug/L			11/21/14 02:54	2
Bromoform	ND		2.0	0.56	ug/L			11/21/14 02:54	2
Bromomethane	ND		10	0.62	ug/L			11/21/14 02:54	2
Carbon disulfide	ND		10	0.86	ug/L			11/21/14 02:54	2
Carbon tetrachloride	ND		2.0	0.52	ug/L			11/21/14 02:54	2
Chlorobenzene	ND		2.0	0.28	ug/L			11/21/14 02:54	2
Chlorobromomethane	ND		2.0	0.80	ug/L			11/21/14 02:54	2
Vinyl acetate	ND		4.0	0.66	ug/L			11/21/14 02:54	2
Chloroethane	ND		2.0	0.68	ug/L			11/21/14 02:54	2
Chloroform	ND		2.0	0.40	ug/L			11/21/14 02:54	2
Chloromethane	ND		2.0	0.36	ug/L			11/21/14 02:54	2
cis-1,3-Dichloropropene	ND		2.0	0.36	ug/L			11/21/14 02:54	2
Dibromochloromethane	ND		2.0	0.64	ug/L			11/21/14 02:54	2
Dibromomethane	ND		2.0	0.66	ug/L			11/21/14 02:54	2
Dichlorodifluoromethane	ND		10	0.40	ug/L			11/21/14 02:54	2
Ethylbenzene	ND		1.0	0.26	ug/L			11/21/14 02:54	2
Hexachlorobutadiene	ND		2.0	0.52	ug/L			11/21/14 02:54	2
Isopropylbenzene	ND		2.0	0.28	ug/L			11/21/14 02:54	2
m&p-Xylene	**1.4**	**J**	2.0	0.52	ug/L			11/21/14 02:54	2
Methyl Ethyl Ketone	ND		10	2.9	ug/L			11/21/14 02:54	2
methyl isobutyl ketone	ND		10	0.66	ug/L			11/21/14 02:54	2

Client Sample ID: MW-102B

Lab Sample ID: 500-87930-16

Date Collected: 11/12/14 10:00

Matrix: Water

Date Received: 11/15/14 10:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		2.0	0.48	ug/L			11/21/14 02:54	2
Methylene Chloride	ND		10	1.4	ug/L			11/21/14 02:54	2
Naphthalene	ND		2.0	0.32	ug/L			11/21/14 02:54	2
n-Butylbenzene	ND		2.0	0.26	ug/L			11/21/14 02:54	2
N-Propylbenzene	ND		2.0	0.26	ug/L			11/21/14 02:54	2
o-Xylene	ND		1.0	0.14	ug/L			11/21/14 02:54	2
sec-Butylbenzene	ND		2.0	0.30	ug/L			11/21/14 02:54	2
Styrene	ND		2.0	0.20	ug/L			11/21/14 02:54	2
tert-Butylbenzene	ND		2.0	0.28	ug/L			11/21/14 02:54	2
Perchloroethylene	**2.3**		2.0	0.34	ug/L			11/21/14 02:54	2
Toluene	**21**		1.0	0.22	ug/L			11/21/14 02:54	2
trans-1,2-Dichloroethene	ND		2.0	0.50	ug/L			11/21/14 02:54	2
trans-1,3-Dichloropropene	ND		2.0	0.42	ug/L			11/21/14 02:54	2
Trichloroethylene	ND		1.0	0.38	ug/L			11/21/14 02:54	2
Trichlorofluoromethane	ND		2.0	0.38	ug/L			11/21/14 02:54	2
Vinyl chloride	**3.5**		1.0	0.20	ug/L			11/21/14 02:54	2

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Ethene, chlorotrifluoro-	*350*	*T J N*	*ug/L*		*0.86*	*79-38-9*		*11/21/14 02:54*	*2*
Ethane, 1,2-dichloro-1,1,2-trifluoro-	*120*	*T J N*	*ug/L*		*1.64*	*354-23-4*		*11/21/14 02:54*	*2*
Methyl acetate	*0.040*		*mg/L*		*2.08*	*79-20-9*		*11/21/14 02:54*	*2*
Cyclohexane	*0.012*		*mg/L*		*3.72*	*110-82-7*		*11/21/14 02:54*	*2*
n-Heptane	*0.013*		*mg/L*		*4.26*	*142-82-5*		*11/21/14 02:54*	*2*
n-Butanol	*1.6*		*mg/L*		*4.77*	*71-36-3*		*11/21/14 02:54*	*2*
Methylcyclohexane	*0.012*		*mg/L*		*4.78*	*108-87-2*		*11/21/14 02:54*	*2*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*75 - 125*		*11/21/14 02:54*	*2*
4-Bromofluorobenzene (Surr)	*92*		*75 - 120*		*11/21/14 02:54*	*2*
Dibromofluoromethane	*102*		*75 - 120*		*11/21/14 02:54*	*2*
Toluene-d8 (Surr)	*104*		*75 - 120*		*11/21/14 02:54*	*2*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane	**860**		100	4.4	ug/L			11/21/14 03:18	20
cis-1,2-Dichloroethene	**420**		20	2.4	ug/L			11/21/14 03:18	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*75 - 125*		*11/21/14 03:18*	*20*
4-Bromofluorobenzene (Surr)	*90*		*75 - 120*		*11/21/14 03:18*	*20*
Dibromofluoromethane	*101*		*75 - 120*		*11/21/14 03:18*	*20*
Toluene-d8 (Surr)	*103*		*75 - 120*		*11/21/14 03:18*	*20*

Client Sample ID: MW-102C
Date Collected: 11/12/14 09:00
Date Received: 11/15/14 10:25

Lab Sample ID: 500-87930-17
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		50	13	ug/L			11/21/14 03:43	50
1,1,1-Trichloroethane	**100**		50	10	ug/L			11/21/14 03:43	50
1,1,2,2-Tetrachloroethane	ND		50	12	ug/L			11/21/14 03:43	50
1,1,2-Trichloroethane	ND		50	14	ug/L			11/21/14 03:43	50
1,1-Dichloroethane	ND		50	9.5	ug/L			11/21/14 03:43	50
1,1-Dichloroethylene	**1100**		50	16	ug/L			11/21/14 03:43	50
1,1-Dichloropropene	ND		50	17	ug/L			11/21/14 03:43	50
1,2,3-Trichlorobenzene	ND		50	12	ug/L			11/21/14 03:43	50
1,2,3-Trichloropropane	ND		50	23	ug/L			11/21/14 03:43	50
1,2,4-Trichlorobenzene	ND		50	16	ug/L			11/21/14 03:43	50
1,2,4-Trimethylbenzene	ND		50	7.0	ug/L			11/21/14 03:43	50
1,2-Dibromo-3-Chloropropane	ND		250	44	ug/L			11/21/14 03:43	50
1,2-Dibromoethane	ND		50	18	ug/L			11/21/14 03:43	50
1,2-Dichlorobenzene	ND		50	14	ug/L			11/21/14 03:43	50
1,2-Dichloroethane	ND		50	14	ug/L			11/21/14 03:43	50
1,2-Dichloropropane	ND		50	10	ug/L			11/21/14 03:43	50
1,3,5-Trimethylbenzene	ND		50	9.0	ug/L			11/21/14 03:43	50
1,3-Dichlorobenzene	ND		50	7.5	ug/L			11/21/14 03:43	50
1,3-Dichloropropane	ND		50	6.5	ug/L			11/21/14 03:43	50
1,4-Dichlorobenzene	ND		50	7.5	ug/L			11/21/14 03:43	50
2,2-Dichloropropane	ND		50	16	ug/L			11/21/14 03:43	50
2-Chlorotoluene	ND		50	11	ug/L			11/21/14 03:43	50
2-Hexanone	ND		250	28	ug/L			11/21/14 03:43	50
4-Chlorotoluene	ND		50	10	ug/L			11/21/14 03:43	50
4-Isopropyltoluene	ND		100	8.5	ug/L			11/21/14 03:43	50
Acetone	ND		250	65	ug/L			11/21/14 03:43	50
Benzene	ND		25	3.7	ug/L			11/21/14 03:43	50
Bromobenzene	ND		50	13	ug/L			11/21/14 03:43	50
Bromodichloromethane	ND		50	8.5	ug/L			11/21/14 03:43	50
Bromoform	ND		50	14	ug/L			11/21/14 03:43	50
Bromomethane	ND		250	16	ug/L			11/21/14 03:43	50
Carbon disulfide	ND		250	22	ug/L			11/21/14 03:43	50
Carbon tetrachloride	ND		50	13	ug/L			11/21/14 03:43	50
Chlorobenzene	ND		50	7.0	ug/L			11/21/14 03:43	50
Chlorobromomethane	ND		50	20	ug/L			11/21/14 03:43	50
Vinyl acetate	ND		100	17	ug/L			11/21/14 03:43	50
Chloroethane	ND		50	17	ug/L			11/21/14 03:43	50
Chloroform	**35**	**J**	50	10	ug/L			11/21/14 03:43	50
Chloromethane	ND		50	9.0	ug/L			11/21/14 03:43	50
cis-1,3-Dichloropropene	ND		50	9.0	ug/L			11/21/14 03:43	50
Dibromochloromethane	ND		50	16	ug/L			11/21/14 03:43	50
Dibromomethane	ND		50	17	ug/L			11/21/14 03:43	50
Dichlorodifluoromethane	ND		250	10	ug/L			11/21/14 03:43	50
Ethylbenzene	ND		25	6.5	ug/L			11/21/14 03:43	50
Hexachlorobutadiene	ND		50	13	ug/L			11/21/14 03:43	50
Isopropylbenzene	ND		50	7.0	ug/L			11/21/14 03:43	50
m&p-Xylene	**31**	**J**	50	13	ug/L			11/21/14 03:43	50
Methyl Ethyl Ketone	ND		250	74	ug/L			11/21/14 03:43	50
methyl isobutyl ketone	ND		250	17	ug/L			11/21/14 03:43	50

Client Sample ID: MW-102C

Lab Sample ID: 500-87930-17

Date Collected: 11/12/14 09:00

Matrix: Water

Date Received: 11/15/14 10:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		50	12	ug/L			11/21/14 03:43	50
Methylene Chloride	**310**		250	34	ug/L			11/21/14 03:43	50
Naphthalene	ND		50	8.0	ug/L			11/21/14 03:43	50
n-Butylbenzene	ND		50	6.5	ug/L			11/21/14 03:43	50
N-Propylbenzene	ND		50	6.5	ug/L			11/21/14 03:43	50
o-Xylene	**9.6**	**J**	25	3.4	ug/L			11/21/14 03:43	50
sec-Butylbenzene	ND		50	7.5	ug/L			11/21/14 03:43	50
Styrene	ND		50	5.0	ug/L			11/21/14 03:43	50
tert-Butylbenzene	ND		50	7.0	ug/L			11/21/14 03:43	50
Perchloroethylene	**37**	**J**	50	8.5	ug/L			11/21/14 03:43	50
Toluene	**1800**		25	5.5	ug/L			11/21/14 03:43	50
trans-1,2-Dichloroethene	ND		50	13	ug/L			11/21/14 03:43	50
trans-1,3-Dichloropropene	ND		50	11	ug/L			11/21/14 03:43	50
Trichloroethylene	**8300**		25	9.5	ug/L			11/21/14 03:43	50
Trichlorofluoromethane	ND		50	9.5	ug/L			11/21/14 03:43	50
Vinyl chloride	ND		25	5.0	ug/L			11/21/14 03:43	50

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Cyclohexane	*0.070*		*mg/L*		*3.72*	*110-82-7*		*11/21/14 03:43*	*50*
n-Butanol	*11*		*mg/L*		*4.77*	*71-36-3*		*11/21/14 03:43*	*50*
Tentatively Identified Compound	*None*		*ug/L*					*11/21/14 03:43*	*50*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*75 - 125*		*11/21/14 03:43*	*50*
4-Bromofluorobenzene (Surr)	*93*		*75 - 120*		*11/21/14 03:43*	*50*
Dibromofluoromethane	*101*		*75 - 120*		*11/21/14 03:43*	*50*
Toluene-d8 (Surr)	*102*		*75 - 120*		*11/21/14 03:43*	*50*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane	**10000**		2500	110	ug/L			11/21/14 04:08	500
cis-1,2-Dichloroethene	**41000**		500	60	ug/L			11/21/14 04:08	500

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*75 - 125*		*11/21/14 04:08*	*500*
4-Bromofluorobenzene (Surr)	*91*		*75 - 120*		*11/21/14 04:08*	*500*
Dibromofluoromethane	*102*		*75 - 120*		*11/21/14 04:08*	*500*
Toluene-d8 (Surr)	*104*		*75 - 120*		*11/21/14 04:08*	*500*

Client Sample Results

Client: AbbVie US LLC
Project/Site: Laurinburg, NC VOC Testing (0272871))

TestAmerica Job ID: 500-87930-1

Client Sample ID: MW-103A

Lab Sample ID: 500-87930-18

Date Collected: 11/13/14 08:30
Matrix: Water
Date Received: 11/15/14 10:25

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		50	13	ug/L			11/21/14 04:33	50
1,1,1-Trichloroethane	ND		50	10	ug/L			11/21/14 04:33	50
1,1,2,2-Tetrachloroethane	ND		50	12	ug/L			11/21/14 04:33	50
1,1,2-Trichloroethane	ND		50	14	ug/L			11/21/14 04:33	50
1,1-Dichloroethane	ND		50	9.5	ug/L			11/21/14 04:33	50
1,1-Dichloroethylene	ND		50	16	ug/L			11/21/14 04:33	50
1,1-Dichloropropene	ND		50	17	ug/L			11/21/14 04:33	50
1,2,3-Trichlorobenzene	ND		50	12	ug/L			11/21/14 04:33	50
1,2,3-Trichloropropane	ND		50	23	ug/L			11/21/14 04:33	50
1,2,4-Trichlorobenzene	ND		50	16	ug/L			11/21/14 04:33	50
1,2,4-Trimethylbenzene	ND		50	7.0	ug/L			11/21/14 04:33	50
1,2-Dibromo-3-Chloropropane	ND		250	44	ug/L			11/21/14 04:33	50
1,2-Dibromoethane	ND		50	18	ug/L			11/21/14 04:33	50
1,2-Dichlorobenzene	ND		50	14	ug/L			11/21/14 04:33	50
1,2-Dichloroethane	ND		50	14	ug/L			11/21/14 04:33	50
1,2-Dichloropropane	ND		50	10	ug/L			11/21/14 04:33	50
1,3,5-Trimethylbenzene	ND		50	9.0	ug/L			11/21/14 04:33	50
1,3-Dichlorobenzene	ND		50	7.5	ug/L			11/21/14 04:33	50
1,3-Dichloropropane	ND		50	6.5	ug/L			11/21/14 04:33	50
1,4-Dichlorobenzene	ND		50	7.5	ug/L			11/21/14 04:33	50
2,2-Dichloropropane	ND		50	16	ug/L			11/21/14 04:33	50
2-Chlorotoluene	ND		50	11	ug/L			11/21/14 04:33	50
2-Hexanone	ND		250	28	ug/L			11/21/14 04:33	50
4-Chlorotoluene	ND		50	10	ug/L			11/21/14 04:33	50
4-Isopropyltoluene	ND		100	8.5	ug/L			11/21/14 04:33	50
Acetone	ND		250	65	ug/L			11/21/14 04:33	50
Benzene	ND		25	3.7	ug/L			11/21/14 04:33	50
Bromobenzene	ND		50	13	ug/L			11/21/14 04:33	50
Bromodichloromethane	ND		50	8.5	ug/L			11/21/14 04:33	50
Bromoform	ND		50	14	ug/L			11/21/14 04:33	50
Bromomethane	ND		250	16	ug/L			11/21/14 04:33	50
Carbon disulfide	ND		250	22	ug/L			11/21/14 04:33	50
Carbon tetrachloride	ND		50	13	ug/L			11/21/14 04:33	50
Chlorobenzene	ND		50	7.0	ug/L			11/21/14 04:33	50
Chlorobromomethane	ND		50	20	ug/L			11/21/14 04:33	50
Vinyl acetate	ND		100	17	ug/L			11/21/14 04:33	50
Chloroethane	ND		50	17	ug/L			11/21/14 04:33	50
Chloroform	ND		50	10	ug/L			11/21/14 04:33	50
Chloromethane	ND		50	9.0	ug/L			11/21/14 04:33	50
cis-1,2-Dichloroethene	**140**		50	6.0	ug/L			11/21/14 04:33	50
cis-1,3-Dichloropropene	ND		50	9.0	ug/L			11/21/14 04:33	50
Dibromochloromethane	ND		50	16	ug/L			11/21/14 04:33	50
Dibromomethane	ND		50	17	ug/L			11/21/14 04:33	50
Dichlorodifluoromethane	ND		250	10	ug/L			11/21/14 04:33	50
Ethylbenzene	ND		25	6.5	ug/L			11/21/14 04:33	50
Hexachlorobutadiene	ND		50	13	ug/L			11/21/14 04:33	50
Isopropylbenzene	ND		50	7.0	ug/L			11/21/14 04:33	50
m&p-Xylene	ND		50	13	ug/L			11/21/14 04:33	50
Methyl Ethyl Ketone	ND		250	74	ug/L			11/21/14 04:33	50

Client Sample ID: MW-103A

Lab Sample ID: 500-87930-18

Date Collected: 11/13/14 08:30

Matrix: Water

Date Received: 11/15/14 10:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
methyl isobutyl ketone	ND		250	17	ug/L			11/21/14 04:33	50
Methyl tert-butyl ether	ND		50	12	ug/L			11/21/14 04:33	50
Methylene Chloride	ND		250	34	ug/L			11/21/14 04:33	50
Naphthalene	ND		50	8.0	ug/L			11/21/14 04:33	50
n-Butylbenzene	ND		50	6.5	ug/L			11/21/14 04:33	50
N-Propylbenzene	ND		50	6.5	ug/L			11/21/14 04:33	50
o-Xylene	ND		25	3.4	ug/L			11/21/14 04:33	50
sec-Butylbenzene	ND		50	7.5	ug/L			11/21/14 04:33	50
Styrene	ND		50	5.0	ug/L			11/21/14 04:33	50
tert-Butylbenzene	ND		50	7.0	ug/L			11/21/14 04:33	50
Perchloroethylene	ND		50	8.5	ug/L			11/21/14 04:33	50
Toluene	ND		25	5.5	ug/L			11/21/14 04:33	50
trans-1,2-Dichloroethene	ND		50	13	ug/L			11/21/14 04:33	50
trans-1,3-Dichloropropene	ND		50	11	ug/L			11/21/14 04:33	50
Trichloroethylene	**43**		25	9.5	ug/L			11/21/14 04:33	50
Trichlorofluoromethane	ND		50	9.5	ug/L			11/21/14 04:33	50
Vinyl chloride	ND		25	5.0	ug/L			11/21/14 04:33	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*75 - 125*		*11/21/14 04:33*	*50*
4-Bromofluorobenzene (Surr)	*91*		*75 - 120*		*11/21/14 04:33*	*50*
Dibromofluoromethane	*102*		*75 - 120*		*11/21/14 04:33*	*50*
Toluene-d8 (Surr)	*104*		*75 - 120*		*11/21/14 04:33*	*50*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane	**21000**		2500	110	ug/L			11/21/14 04:58	500

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*75 - 125*		*11/21/14 04:58*	*500*
4-Bromofluorobenzene (Surr)	*92*		*75 - 120*		*11/21/14 04:58*	*500*
Dibromofluoromethane	*104*		*75 - 120*		*11/21/14 04:58*	*500*
Toluene-d8 (Surr)	*104*		*75 - 120*		*11/21/14 04:58*	*500*

Client Sample ID: MW-103B

Lab Sample ID: 500-87930-19

Date Collected: 11/13/14 09:30

Matrix: Water

Date Received: 11/15/14 10:25

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		20	5.0	ug/L			11/21/14 05:23	20
1,1,1-Trichloroethane	ND		20	4.0	ug/L			11/21/14 05:23	20
1,1,2,2-Tetrachloroethane	ND		20	4.6	ug/L			11/21/14 05:23	20
1,1,2-Trichloroethane	ND		20	5.6	ug/L			11/21/14 05:23	20
1,1-Dichloroethane	ND		20	3.8	ug/L			11/21/14 05:23	20
1,1-Dichloroethylene	ND		20	6.2	ug/L			11/21/14 05:23	20
1,1-Dichloropropene	ND		20	6.8	ug/L			11/21/14 05:23	20
1,2,3-Trichlorobenzene	ND		20	4.8	ug/L			11/21/14 05:23	20
1,2,3-Trichloropropane	ND		20	9.0	ug/L			11/21/14 05:23	20
1,2,4-Trichlorobenzene	ND		20	6.2	ug/L			11/21/14 05:23	20
1,2,4-Trimethylbenzene	ND		20	2.8	ug/L			11/21/14 05:23	20
1,2-Dibromo-3-Chloropropane	ND		100	17	ug/L			11/21/14 05:23	20
1,2-Dibromoethane	ND		20	7.2	ug/L			11/21/14 05:23	20
1,2-Dichlorobenzene	ND		20	5.4	ug/L			11/21/14 05:23	20
1,2-Dichloroethane	ND		20	5.6	ug/L			11/21/14 05:23	20
1,2-Dichloropropane	ND		20	4.0	ug/L			11/21/14 05:23	20
1,3,5-Trimethylbenzene	ND		20	3.6	ug/L			11/21/14 05:23	20
1,3-Dichlorobenzene	ND		20	3.0	ug/L			11/21/14 05:23	20
1,3-Dichloropropane	ND		20	2.6	ug/L			11/21/14 05:23	20
1,4-Dichlorobenzene	ND		20	3.0	ug/L			11/21/14 05:23	20
2,2-Dichloropropane	ND		20	6.4	ug/L			11/21/14 05:23	20
2-Chlorotoluene	ND		20	4.2	ug/L			11/21/14 05:23	20
2-Hexanone	ND		100	11	ug/L			11/21/14 05:23	20
4-Chlorotoluene	ND		20	4.0	ug/L			11/21/14 05:23	20
4-Isopropyltoluene	ND		40	3.4	ug/L			11/21/14 05:23	20
Acetone	ND		100	26	ug/L			11/21/14 05:23	20
Benzene	ND		10	1.5	ug/L			11/21/14 05:23	20
Bromobenzene	ND		20	5.0	ug/L			11/21/14 05:23	20
Bromodichloromethane	ND		20	3.4	ug/L			11/21/14 05:23	20
Bromoform	ND		20	5.6	ug/L			11/21/14 05:23	20
Bromomethane	ND		100	6.2	ug/L			11/21/14 05:23	20
Carbon disulfide	ND		100	8.6	ug/L			11/21/14 05:23	20
Carbon tetrachloride	ND		20	5.2	ug/L			11/21/14 05:23	20
Chlorobenzene	ND		20	2.8	ug/L			11/21/14 05:23	20
Chlorobromomethane	ND		20	8.0	ug/L			11/21/14 05:23	20
Vinyl acetate	ND		40	6.6	ug/L			11/21/14 05:23	20
Chloroethane	ND		20	6.8	ug/L			11/21/14 05:23	20
Chloroform	ND		20	4.0	ug/L			11/21/14 05:23	20
Chloromethane	ND		20	3.6	ug/L			11/21/14 05:23	20
cis-1,2-Dichloroethene	**160**		20	2.4	ug/L			11/21/14 05:23	20
cis-1,3-Dichloropropene	ND		20	3.6	ug/L			11/21/14 05:23	20
Dibromochloromethane	ND		20	6.4	ug/L			11/21/14 05:23	20
Dibromomethane	ND		20	6.6	ug/L			11/21/14 05:23	20
Dichlorodifluoromethane	ND		100	4.0	ug/L			11/21/14 05:23	20
Ethylbenzene	ND		10	2.6	ug/L			11/21/14 05:23	20
Hexachlorobutadiene	ND		20	5.2	ug/L			11/21/14 05:23	20
Isopropylbenzene	ND		20	2.8	ug/L			11/21/14 05:23	20
m&p-Xylene	ND		20	5.2	ug/L			11/21/14 05:23	20
Methyl Ethyl Ketone	ND		100	29	ug/L			11/21/14 05:23	20

Client Sample ID: MW-103B

Lab Sample ID: 500-87930-19

Date Collected: 11/13/14 09:30

Matrix: Water

Date Received: 11/15/14 10:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
methyl isobutyl ketone	ND		100	6.6	ug/L			11/21/14 05:23	20
Methyl tert-butyl ether	ND		20	4.8	ug/L			11/21/14 05:23	20
Methylene Chloride	ND		100	14	ug/L			11/21/14 05:23	20
Naphthalene	ND		20	3.2	ug/L			11/21/14 05:23	20
n-Butylbenzene	ND		20	2.6	ug/L			11/21/14 05:23	20
N-Propylbenzene	ND		20	2.6	ug/L			11/21/14 05:23	20
o-Xylene	ND		10	1.4	ug/L			11/21/14 05:23	20
sec-Butylbenzene	ND		20	3.0	ug/L			11/21/14 05:23	20
Styrene	ND		20	2.0	ug/L			11/21/14 05:23	20
tert-Butylbenzene	ND		20	2.8	ug/L			11/21/14 05:23	20
Perchloroethylene	ND		20	3.4	ug/L			11/21/14 05:23	20
Toluene	**8.2**	**J**	10	2.2	ug/L			11/21/14 05:23	20
trans-1,2-Dichloroethene	ND		20	5.0	ug/L			11/21/14 05:23	20
trans-1,3-Dichloropropene	ND		20	4.2	ug/L			11/21/14 05:23	20
Trichloroethylene	**16**		10	3.8	ug/L			11/21/14 05:23	20
Trichlorofluoromethane	ND		20	3.8	ug/L			11/21/14 05:23	20
Vinyl chloride	ND		10	2.0	ug/L			11/21/14 05:23	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*75 - 125*		*11/21/14 05:23*	*20*
4-Bromofluorobenzene (Surr)	*91*		*75 - 120*		*11/21/14 05:23*	*20*
Dibromofluoromethane	*104*		*75 - 120*		*11/21/14 05:23*	*20*
Toluene-d8 (Surr)	*104*		*75 - 120*		*11/21/14 05:23*	*20*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane	**6900**		1000	44	ug/L			11/21/14 05:47	200

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*75 - 125*		*11/21/14 05:47*	*200*
4-Bromofluorobenzene (Surr)	*90*		*75 - 120*		*11/21/14 05:47*	*200*
Dibromofluoromethane	*101*		*75 - 120*		*11/21/14 05:47*	*200*
Toluene-d8 (Surr)	*105*		*75 - 120*		*11/21/14 05:47*	*200*

Client Sample ID: MW-103C
Date Collected: 11/13/14 10:30
Date Received: 11/15/14 10:25

Lab Sample ID: 500-87930-20
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		20	5.0	ug/L			11/21/14 06:12	20
1,1,1-Trichloroethane	ND		20	4.0	ug/L			11/21/14 06:12	20
1,1,2,2-Tetrachloroethane	ND		20	4.6	ug/L			11/21/14 06:12	20
1,1,2-Trichloroethane	ND		20	5.6	ug/L			11/21/14 06:12	20
1,1-Dichloroethane	ND		20	3.8	ug/L			11/21/14 06:12	20
1,1-Dichloroethylene	ND		20	6.2	ug/L			11/21/14 06:12	20
1,1-Dichloropropene	ND		20	6.8	ug/L			11/21/14 06:12	20
1,2,3-Trichlorobenzene	ND		20	4.8	ug/L			11/21/14 06:12	20
1,2,3-Trichloropropane	ND		20	9.0	ug/L			11/21/14 06:12	20
1,2,4-Trichlorobenzene	ND		20	6.2	ug/L			11/21/14 06:12	20
1,2,4-Trimethylbenzene	ND		20	2.8	ug/L			11/21/14 06:12	20
1,2-Dibromo-3-Chloropropane	ND		100	17	ug/L			11/21/14 06:12	20
1,2-Dibromoethane	ND		20	7.2	ug/L			11/21/14 06:12	20
1,2-Dichlorobenzene	ND		20	5.4	ug/L			11/21/14 06:12	20
1,2-Dichloroethane	ND		20	5.6	ug/L			11/21/14 06:12	20
1,2-Dichloropropane	ND		20	4.0	ug/L			11/21/14 06:12	20
1,3,5-Trimethylbenzene	ND		20	3.6	ug/L			11/21/14 06:12	20
1,3-Dichlorobenzene	ND		20	3.0	ug/L			11/21/14 06:12	20
1,3-Dichloropropane	ND		20	2.6	ug/L			11/21/14 06:12	20
1,4-Dichlorobenzene	ND		20	3.0	ug/L			11/21/14 06:12	20
2,2-Dichloropropane	ND		20	6.4	ug/L			11/21/14 06:12	20
2-Chlorotoluene	ND		20	4.2	ug/L			11/21/14 06:12	20
2-Hexanone	ND		100	11	ug/L			11/21/14 06:12	20
4-Chlorotoluene	ND		20	4.0	ug/L			11/21/14 06:12	20
4-Isopropyltoluene	ND		40	3.4	ug/L			11/21/14 06:12	20
Acetone	ND		100	26	ug/L			11/21/14 06:12	20
Benzene	ND		10	1.5	ug/L			11/21/14 06:12	20
Bromobenzene	ND		20	5.0	ug/L			11/21/14 06:12	20
Bromodichloromethane	ND		20	3.4	ug/L			11/21/14 06:12	20
Bromoform	ND		20	5.6	ug/L			11/21/14 06:12	20
Bromomethane	ND		100	6.2	ug/L			11/21/14 06:12	20
Carbon disulfide	ND		100	8.6	ug/L			11/21/14 06:12	20
Carbon tetrachloride	ND		20	5.2	ug/L			11/21/14 06:12	20
Chlorobenzene	ND		20	2.8	ug/L			11/21/14 06:12	20
Chlorobromomethane	ND		20	8.0	ug/L			11/21/14 06:12	20
Vinyl acetate	ND		40	6.6	ug/L			11/21/14 06:12	20
Chloroethane	ND		20	6.8	ug/L			11/21/14 06:12	20
Chloroform	ND		20	4.0	ug/L			11/21/14 06:12	20
Chloromethane	ND		20	3.6	ug/L			11/21/14 06:12	20
cis-1,2-Dichloroethene	**200**		20	2.4	ug/L			11/21/14 06:12	20
cis-1,3-Dichloropropene	ND		20	3.6	ug/L			11/21/14 06:12	20
Dibromochloromethane	ND		20	6.4	ug/L			11/21/14 06:12	20
Dibromomethane	ND		20	6.6	ug/L			11/21/14 06:12	20
Dichlorodifluoromethane	ND		100	4.0	ug/L			11/21/14 06:12	20
Ethylbenzene	ND		10	2.6	ug/L			11/21/14 06:12	20
Hexachlorobutadiene	ND		20	5.2	ug/L			11/21/14 06:12	20
Isopropylbenzene	ND		20	2.8	ug/L			11/21/14 06:12	20
m&p-Xylene	ND		20	5.2	ug/L			11/21/14 06:12	20
Methyl Ethyl Ketone	ND		100	29	ug/L			11/21/14 06:12	20

Client Sample ID: MW-103C

Lab Sample ID: 500-87930-20

Date Collected: 11/13/14 10:30

Matrix: Water

Date Received: 11/15/14 10:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
methyl isobutyl ketone	ND		100	6.6	ug/L			11/21/14 06:12	20
Methyl tert-butyl ether	ND		20	4.8	ug/L			11/21/14 06:12	20
Methylene Chloride	ND		100	14	ug/L			11/21/14 06:12	20
Naphthalene	ND		20	3.2	ug/L			11/21/14 06:12	20
n-Butylbenzene	ND		20	2.6	ug/L			11/21/14 06:12	20
N-Propylbenzene	ND		20	2.6	ug/L			11/21/14 06:12	20
o-Xylene	ND		10	1.4	ug/L			11/21/14 06:12	20
sec-Butylbenzene	ND		20	3.0	ug/L			11/21/14 06:12	20
Styrene	ND		20	2.0	ug/L			11/21/14 06:12	20
tert-Butylbenzene	ND		20	2.8	ug/L			11/21/14 06:12	20
Perchloroethylene	ND		20	3.4	ug/L			11/21/14 06:12	20
Toluene	ND		10	2.2	ug/L			11/21/14 06:12	20
trans-1,2-Dichloroethene	ND		20	5.0	ug/L			11/21/14 06:12	20
trans-1,3-Dichloropropene	ND		20	4.2	ug/L			11/21/14 06:12	20
Trichloroethylene	**28**		10	3.8	ug/L			11/21/14 06:12	20
Trichlorofluoromethane	ND		20	3.8	ug/L			11/21/14 06:12	20
Vinyl chloride	ND		10	2.0	ug/L			11/21/14 06:12	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*75 - 125*		*11/21/14 06:12*	*20*
4-Bromofluorobenzene (Surr)	*92*		*75 - 120*		*11/21/14 06:12*	*20*
Dibromofluoromethane	*102*		*75 - 120*		*11/21/14 06:12*	*20*
Toluene-d8 (Surr)	*105*		*75 - 120*		*11/21/14 06:12*	*20*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane	**8000**		1000	44	ug/L			11/21/14 06:37	200

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*75 - 125*		*11/21/14 06:37*	*200*
4-Bromofluorobenzene (Surr)	*92*		*75 - 120*		*11/21/14 06:37*	*200*
Dibromofluoromethane	*100*		*75 - 120*		*11/21/14 06:37*	*200*
Toluene-d8 (Surr)	*104*		*75 - 120*		*11/21/14 06:37*	*200*

Client Sample Results

Client: AbbVie US LLC
Project/Site: Laurinburg, NC VOC Testing (0272871))

TestAmerica Job ID: 500-87930-1

Client Sample ID: MW-104A

Date Collected: 11/13/14 08:45
Date Received: 11/15/14 10:25

Lab Sample ID: 500-87930-21

Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		2.0	0.50	ug/L			11/21/14 19:07	2
1,1,1-Trichloroethane	ND		2.0	0.40	ug/L			11/21/14 19:07	2
1,1,2,2-Tetrachloroethane	ND		2.0	0.46	ug/L			11/21/14 19:07	2
1,1,2-Trichloroethane	ND		2.0	0.56	ug/L			11/21/14 19:07	2
1,1-Dichloroethane	**1.8**	**J**	2.0	0.38	ug/L			11/21/14 19:07	2
1,1-Dichloroethylene	ND		2.0	0.62	ug/L			11/21/14 19:07	2
1,1-Dichloropropene	ND		2.0	0.68	ug/L			11/21/14 19:07	2
1,2,3-Trichlorobenzene	ND		2.0	0.48	ug/L			11/21/14 19:07	2
1,2,3-Trichloropropane	ND		2.0	0.90	ug/L			11/21/14 19:07	2
1,2,4-Trichlorobenzene	ND		2.0	0.62	ug/L			11/21/14 19:07	2
1,2,4-Trimethylbenzene	ND		2.0	0.28	ug/L			11/21/14 19:07	2
1,2-Dibromo-3-Chloropropane	ND		10	1.7	ug/L			11/21/14 19:07	2
1,2-Dibromoethane	ND		2.0	0.72	ug/L			11/21/14 19:07	2
1,2-Dichlorobenzene	ND		2.0	0.54	ug/L			11/21/14 19:07	2
1,2-Dichloroethane	**1.9**	**J**	2.0	0.56	ug/L			11/21/14 19:07	2
1,2-Dichloropropane	ND		2.0	0.40	ug/L			11/21/14 19:07	2
1,3,5-Trimethylbenzene	ND		2.0	0.36	ug/L			11/21/14 19:07	2
1,3-Dichlorobenzene	ND		2.0	0.30	ug/L			11/21/14 19:07	2
1,3-Dichloropropane	ND		2.0	0.26	ug/L			11/21/14 19:07	2
1,4-Dichlorobenzene	ND		2.0	0.30	ug/L			11/21/14 19:07	2
2,2-Dichloropropane	ND		2.0	0.64	ug/L			11/21/14 19:07	2
2-Chlorotoluene	ND		2.0	0.42	ug/L			11/21/14 19:07	2
2-Hexanone	ND		10	1.1	ug/L			11/21/14 19:07	2
4-Chlorotoluene	ND		2.0	0.40	ug/L			11/21/14 19:07	2
4-Isopropyltoluene	ND		4.0	0.34	ug/L			11/21/14 19:07	2
Acetone	ND		10	2.6	ug/L			11/21/14 19:07	2
Benzene	ND		1.0	0.15	ug/L			11/21/14 19:07	2
Bromobenzene	ND		2.0	0.50	ug/L			11/21/14 19:07	2
Bromodichloromethane	ND		2.0	0.34	ug/L			11/21/14 19:07	2
Bromoform	ND		2.0	0.56	ug/L			11/21/14 19:07	2
Bromomethane	ND		10	0.62	ug/L			11/21/14 19:07	2
Carbon disulfide	ND		10	0.86	ug/L			11/21/14 19:07	2
Carbon tetrachloride	ND		2.0	0.52	ug/L			11/21/14 19:07	2
Chlorobenzene	ND		2.0	0.28	ug/L			11/21/14 19:07	2
Chlorobromomethane	ND		2.0	0.80	ug/L			11/21/14 19:07	2
Vinyl acetate	ND		4.0	0.66	ug/L			11/21/14 19:07	2
Chloroethane	ND		2.0	0.68	ug/L			11/21/14 19:07	2
Chloroform	ND		2.0	0.40	ug/L			11/21/14 19:07	2
Chloromethane	ND		2.0	0.36	ug/L			11/21/14 19:07	2
cis-1,2-Dichloroethene	**390**		2.0	0.24	ug/L			11/21/14 19:07	2
cis-1,3-Dichloropropene	ND		2.0	0.36	ug/L			11/21/14 19:07	2
Dibromochloromethane	ND		2.0	0.64	ug/L			11/21/14 19:07	2
Dibromomethane	ND		2.0	0.66	ug/L			11/21/14 19:07	2
Dichlorodifluoromethane	ND		10	0.40	ug/L			11/21/14 19:07	2
Ethylbenzene	ND		1.0	0.26	ug/L			11/21/14 19:07	2
Hexachlorobutadiene	ND		2.0	0.52	ug/L			11/21/14 19:07	2
Isopropylbenzene	ND		2.0	0.28	ug/L			11/21/14 19:07	2
m&p-Xylene	ND		2.0	0.52	ug/L			11/21/14 19:07	2
Methyl Ethyl Ketone	ND		10	2.9	ug/L			11/21/14 19:07	2

Client Sample ID: MW-104A

Lab Sample ID: 500-87930-21

Date Collected: 11/13/14 08:45

Matrix: Water

Date Received: 11/15/14 10:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
methyl isobutyl ketone	ND		10	0.66	ug/L			11/21/14 19:07	2
Methyl tert-butyl ether	ND		2.0	0.48	ug/L			11/21/14 19:07	2
Methylene Chloride	ND		10	1.4	ug/L			11/21/14 19:07	2
Naphthalene	ND		2.0	0.32	ug/L			11/21/14 19:07	2
n-Butylbenzene	ND		2.0	0.26	ug/L			11/21/14 19:07	2
N-Propylbenzene	ND		2.0	0.26	ug/L			11/21/14 19:07	2
o-Xylene	ND		1.0	0.14	ug/L			11/21/14 19:07	2
sec-Butylbenzene	ND		2.0	0.30	ug/L			11/21/14 19:07	2
Styrene	ND		2.0	0.20	ug/L			11/21/14 19:07	2
tert-Butylbenzene	ND		2.0	0.28	ug/L			11/21/14 19:07	2
Perchloroethylene	ND		2.0	0.34	ug/L			11/21/14 19:07	2
Toluene	ND		1.0	0.22	ug/L			11/21/14 19:07	2
trans-1,2-Dichloroethene	**1.7**	**J**	2.0	0.50	ug/L			11/21/14 19:07	2
trans-1,3-Dichloropropene	ND		2.0	0.42	ug/L			11/21/14 19:07	2
Trichloroethylene	**1.7**		1.0	0.38	ug/L			11/21/14 19:07	2
Trichlorofluoromethane	ND		2.0	0.38	ug/L			11/21/14 19:07	2
Vinyl chloride	**15**		1.0	0.20	ug/L			11/21/14 19:07	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*80*		*75 - 125*		*11/21/14 19:07*	*2*
4-Bromofluorobenzene (Surr)	*91*		*75 - 120*		*11/21/14 19:07*	*2*
Dibromofluoromethane	*84*		*75 - 120*		*11/21/14 19:07*	*2*
Toluene-d8 (Surr)	*93*		*75 - 120*		*11/21/14 19:07*	*2*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane	**610**		100	4.4	ug/L			11/21/14 19:35	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*80*		*75 - 125*		*11/21/14 19:35*	*20*
4-Bromofluorobenzene (Surr)	*92*		*75 - 120*		*11/21/14 19:35*	*20*
Dibromofluoromethane	*86*		*75 - 120*		*11/21/14 19:35*	*20*
Toluene-d8 (Surr)	*91*		*75 - 120*		*11/21/14 19:35*	*20*

Client: AbbVie US LLC
Project/Site: Laurinburg, NC VOC Testing (0272871))

TestAmerica Job ID: 500-87930-1

Client Sample ID: MW-104B
Date Collected: 11/13/14 09:25
Date Received: 11/15/14 10:25

Lab Sample ID: 500-87930-22
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.0	1.3	ug/L			11/21/14 20:02	5
1,1,1-Trichloroethane	ND		5.0	1.0	ug/L			11/21/14 20:02	5
1,1,2,2-Tetrachloroethane	ND		5.0	1.2	ug/L			11/21/14 20:02	5
1,1,2-Trichloroethane	ND		5.0	1.4	ug/L			11/21/14 20:02	5
1,1-Dichloroethane	ND		5.0	0.95	ug/L			11/21/14 20:02	5
1,1-Dichloroethylene	ND		5.0	1.6	ug/L			11/21/14 20:02	5
1,1-Dichloropropene	ND		5.0	1.7	ug/L			11/21/14 20:02	5
1,2,3-Trichlorobenzene	ND		5.0	1.2	ug/L			11/21/14 20:02	5
1,2,3-Trichloropropane	ND		5.0	2.3	ug/L			11/21/14 20:02	5
1,2,4-Trichlorobenzene	ND		5.0	1.6	ug/L			11/21/14 20:02	5
1,2,4-Trimethylbenzene	ND		5.0	0.70	ug/L			11/21/14 20:02	5
1,2-Dibromo-3-Chloropropane	ND		25	4.4	ug/L			11/21/14 20:02	5
1,2-Dibromoethane	ND		5.0	1.8	ug/L			11/21/14 20:02	5
1,2-Dichlorobenzene	ND		5.0	1.4	ug/L			11/21/14 20:02	5
1,2-Dichloroethane	ND		5.0	1.4	ug/L			11/21/14 20:02	5
1,2-Dichloropropane	ND		5.0	1.0	ug/L			11/21/14 20:02	5
1,3,5-Trimethylbenzene	ND		5.0	0.90	ug/L			11/21/14 20:02	5
1,3-Dichlorobenzene	ND		5.0	0.75	ug/L			11/21/14 20:02	5
1,3-Dichloropropane	ND		5.0	0.65	ug/L			11/21/14 20:02	5
1,4-Dichlorobenzene	ND		5.0	0.75	ug/L			11/21/14 20:02	5
2,2-Dichloropropane	ND		5.0	1.6	ug/L			11/21/14 20:02	5
2-Chlorotoluene	ND		5.0	1.1	ug/L			11/21/14 20:02	5
2-Hexanone	ND		25	2.8	ug/L			11/21/14 20:02	5
4-Chlorotoluene	ND		5.0	1.0	ug/L			11/21/14 20:02	5
4-Isopropyltoluene	ND		10	0.85	ug/L			11/21/14 20:02	5
Acetone	ND		25	6.5	ug/L			11/21/14 20:02	5
Benzene	ND		2.5	0.37	ug/L			11/21/14 20:02	5
Bromobenzene	ND		5.0	1.3	ug/L			11/21/14 20:02	5
Bromodichloromethane	ND		5.0	0.85	ug/L			11/21/14 20:02	5
Bromoform	ND		5.0	1.4	ug/L			11/21/14 20:02	5
Bromomethane	ND		25	1.6	ug/L			11/21/14 20:02	5
Carbon disulfide	ND		25	2.2	ug/L			11/21/14 20:02	5
Carbon tetrachloride	ND		5.0	1.3	ug/L			11/21/14 20:02	5
Chlorobenzene	ND		5.0	0.70	ug/L			11/21/14 20:02	5
Chlorobromomethane	ND		5.0	2.0	ug/L			11/21/14 20:02	5
Vinyl acetate	ND		10	1.7	ug/L			11/21/14 20:02	5
Chloroethane	ND		5.0	1.7	ug/L			11/21/14 20:02	5
Chloroform	ND		5.0	1.0	ug/L			11/21/14 20:02	5
Chloromethane	ND		5.0	0.90	ug/L			11/21/14 20:02	5
cis-1,2-Dichloroethene	**24**		5.0	0.60	ug/L			11/21/14 20:02	5
cis-1,3-Dichloropropene	ND		5.0	0.90	ug/L			11/21/14 20:02	5
Dibromochloromethane	ND		5.0	1.6	ug/L			11/21/14 20:02	5
Dibromomethane	ND		5.0	1.7	ug/L			11/21/14 20:02	5
Dichlorodifluoromethane	ND		25	1.0	ug/L			11/21/14 20:02	5
Ethylbenzene	ND		2.5	0.65	ug/L			11/21/14 20:02	5
Hexachlorobutadiene	ND		5.0	1.3	ug/L			11/21/14 20:02	5
Isopropylbenzene	ND		5.0	0.70	ug/L			11/21/14 20:02	5
m&p-Xylene	ND		5.0	1.3	ug/L			11/21/14 20:02	5
Methyl Ethyl Ketone	ND		25	7.4	ug/L			11/21/14 20:02	5

Client Sample ID: MW-104B

Lab Sample ID: 500-87930-22

Date Collected: 11/13/14 09:25

Matrix: Water

Date Received: 11/15/14 10:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
methyl isobutyl ketone	ND		25	1.7	ug/L			11/21/14 20:02	5
Methyl tert-butyl ether	ND		5.0	1.2	ug/L			11/21/14 20:02	5
Methylene Chloride	ND		25	3.4	ug/L			11/21/14 20:02	5
Naphthalene	ND		5.0	0.80	ug/L			11/21/14 20:02	5
n-Butylbenzene	ND		5.0	0.65	ug/L			11/21/14 20:02	5
N-Propylbenzene	ND		5.0	0.65	ug/L			11/21/14 20:02	5
o-Xylene	ND		2.5	0.34	ug/L			11/21/14 20:02	5
sec-Butylbenzene	ND		5.0	0.75	ug/L			11/21/14 20:02	5
Styrene	ND		5.0	0.50	ug/L			11/21/14 20:02	5
tert-Butylbenzene	ND		5.0	0.70	ug/L			11/21/14 20:02	5
Perchloroethylene	ND		5.0	0.85	ug/L			11/21/14 20:02	5
Toluene	ND		2.5	0.55	ug/L			11/21/14 20:02	5
trans-1,2-Dichloroethene	ND		5.0	1.3	ug/L			11/21/14 20:02	5
trans-1,3-Dichloropropene	ND		5.0	1.1	ug/L			11/21/14 20:02	5
Trichloroethylene	**7.3**		2.5	0.95	ug/L			11/21/14 20:02	5
Trichlorofluoromethane	ND		5.0	0.95	ug/L			11/21/14 20:02	5
Vinyl chloride	**2.0**	**J**	2.5	0.50	ug/L			11/21/14 20:02	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*81*		*75 - 125*		*11/21/14 20:02*	*5*
4-Bromofluorobenzene (Surr)	*94*		*75 - 120*		*11/21/14 20:02*	*5*
Dibromofluoromethane	*84*		*75 - 120*		*11/21/14 20:02*	*5*
Toluene-d8 (Surr)	*92*		*75 - 120*		*11/21/14 20:02*	*5*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane	**1600**		250	11	ug/L			11/21/14 20:30	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*75 - 125*		*11/21/14 20:30*	*50*
4-Bromofluorobenzene (Surr)	*93*		*75 - 120*		*11/21/14 20:30*	*50*
Dibromofluoromethane	*89*		*75 - 120*		*11/21/14 20:30*	*50*
Toluene-d8 (Surr)	*89*		*75 - 120*		*11/21/14 20:30*	*50*

Client Sample Results

Client: AbbVie US LLC
Project/Site: Laurinburg, NC VOC Testing (0272871))

TestAmerica Job ID: 500-87930-1

Client Sample ID: MW-104C

Lab Sample ID: 500-87930-23

Date Collected: 11/13/14 10:25
Matrix: Water
Date Received: 11/15/14 10:25

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.0	1.3	ug/L			11/21/14 20:57	5
1,1,1-Trichloroethane	ND		5.0	1.0	ug/L			11/21/14 20:57	5
1,1,2,2-Tetrachloroethane	ND		5.0	1.2	ug/L			11/21/14 20:57	5
1,1,2-Trichloroethane	ND		5.0	1.4	ug/L			11/21/14 20:57	5
1,1-Dichloroethane	ND		5.0	0.95	ug/L			11/21/14 20:57	5
1,1-Dichloroethylene	ND		5.0	1.6	ug/L			11/21/14 20:57	5
1,1-Dichloropropene	ND		5.0	1.7	ug/L			11/21/14 20:57	5
1,2,3-Trichlorobenzene	ND		5.0	1.2	ug/L			11/21/14 20:57	5
1,2,3-Trichloropropane	ND		5.0	2.3	ug/L			11/21/14 20:57	5
1,2,4-Trichlorobenzene	ND		5.0	1.6	ug/L			11/21/14 20:57	5
1,2,4-Trimethylbenzene	ND		5.0	0.70	ug/L			11/21/14 20:57	5
1,2-Dibromo-3-Chloropropane	ND		25	4.4	ug/L			11/21/14 20:57	5
1,2-Dibromoethane	ND		5.0	1.8	ug/L			11/21/14 20:57	5
1,2-Dichlorobenzene	ND		5.0	1.4	ug/L			11/21/14 20:57	5
1,2-Dichloroethane	ND		5.0	1.4	ug/L			11/21/14 20:57	5
1,2-Dichloropropane	ND		5.0	1.0	ug/L			11/21/14 20:57	5
1,3,5-Trimethylbenzene	ND		5.0	0.90	ug/L			11/21/14 20:57	5
1,3-Dichlorobenzene	ND		5.0	0.75	ug/L			11/21/14 20:57	5
1,3-Dichloropropane	ND		5.0	0.65	ug/L			11/21/14 20:57	5
1,4-Dichlorobenzene	ND		5.0	0.75	ug/L			11/21/14 20:57	5
2,2-Dichloropropane	ND		5.0	1.6	ug/L			11/21/14 20:57	5
2-Chlorotoluene	ND		5.0	1.1	ug/L			11/21/14 20:57	5
2-Hexanone	ND		25	2.8	ug/L			11/21/14 20:57	5
4-Chlorotoluene	ND		5.0	1.0	ug/L			11/21/14 20:57	5
4-Isopropyltoluene	ND		10	0.85	ug/L			11/21/14 20:57	5
Acetone	ND		25	6.5	ug/L			11/21/14 20:57	5
Benzene	ND		2.5	0.37	ug/L			11/21/14 20:57	5
Bromobenzene	ND		5.0	1.3	ug/L			11/21/14 20:57	5
Bromodichloromethane	ND		5.0	0.85	ug/L			11/21/14 20:57	5
Bromoform	ND		5.0	1.4	ug/L			11/21/14 20:57	5
Bromomethane	ND		25	1.6	ug/L			11/21/14 20:57	5
Carbon disulfide	ND		25	2.2	ug/L			11/21/14 20:57	5
Carbon tetrachloride	ND		5.0	1.3	ug/L			11/21/14 20:57	5
Chlorobenzene	ND		5.0	0.70	ug/L			11/21/14 20:57	5
Chlorobromomethane	ND		5.0	2.0	ug/L			11/21/14 20:57	5
Vinyl acetate	ND		10	1.7	ug/L			11/21/14 20:57	5
Chloroethane	ND		5.0	1.7	ug/L			11/21/14 20:57	5
Chloroform	ND		5.0	1.0	ug/L			11/21/14 20:57	5
Chloromethane	ND		5.0	0.90	ug/L			11/21/14 20:57	5
cis-1,2-Dichloroethene	**54**		5.0	0.60	ug/L			11/21/14 20:57	5
cis-1,3-Dichloropropene	ND		5.0	0.90	ug/L			11/21/14 20:57	5
Dibromochloromethane	ND		5.0	1.6	ug/L			11/21/14 20:57	5
Dibromomethane	ND		5.0	1.7	ug/L			11/21/14 20:57	5
Dichlorodifluoromethane	ND		25	1.0	ug/L			11/21/14 20:57	5
Ethylbenzene	ND		2.5	0.65	ug/L			11/21/14 20:57	5
Hexachlorobutadiene	ND		5.0	1.3	ug/L			11/21/14 20:57	5
Isopropylbenzene	ND		5.0	0.70	ug/L			11/21/14 20:57	5
m&p-Xylene	ND		5.0	1.3	ug/L			11/21/14 20:57	5
Methyl Ethyl Ketone	ND		25	7.4	ug/L			11/21/14 20:57	5

Client Sample ID: MW-104C

Lab Sample ID: 500-87930-23

Date Collected: 11/13/14 10:25

Matrix: Water

Date Received: 11/15/14 10:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
methyl isobutyl ketone	ND		25	1.7	ug/L			11/21/14 20:57	5
Methyl tert-butyl ether	**3.9**	**J**	5.0	1.2	ug/L			11/21/14 20:57	5
Methylene Chloride	ND		25	3.4	ug/L			11/21/14 20:57	5
Naphthalene	ND		5.0	0.80	ug/L			11/21/14 20:57	5
n-Butylbenzene	ND		5.0	0.65	ug/L			11/21/14 20:57	5
N-Propylbenzene	ND		5.0	0.65	ug/L			11/21/14 20:57	5
o-Xylene	ND		2.5	0.34	ug/L			11/21/14 20:57	5
sec-Butylbenzene	ND		5.0	0.75	ug/L			11/21/14 20:57	5
Styrene	ND		5.0	0.50	ug/L			11/21/14 20:57	5
tert-Butylbenzene	ND		5.0	0.70	ug/L			11/21/14 20:57	5
Perchloroethylene	ND		5.0	0.85	ug/L			11/21/14 20:57	5
Toluene	ND		2.5	0.55	ug/L			11/21/14 20:57	5
trans-1,2-Dichloroethene	ND		5.0	1.3	ug/L			11/21/14 20:57	5
trans-1,3-Dichloropropene	ND		5.0	1.1	ug/L			11/21/14 20:57	5
Trichloroethylene	**8.0**		2.5	0.95	ug/L			11/21/14 20:57	5
Trichlorofluoromethane	ND		5.0	0.95	ug/L			11/21/14 20:57	5
Vinyl chloride	**2.6**		2.5	0.50	ug/L			11/21/14 20:57	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*82*		*75 - 125*		*11/21/14 20:57*	*5*
4-Bromofluorobenzene (Surr)	*92*		*75 - 120*		*11/21/14 20:57*	*5*
Dibromofluoromethane	*84*		*75 - 120*		*11/21/14 20:57*	*5*
Toluene-d8 (Surr)	*92*		*75 - 120*		*11/21/14 20:57*	*5*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane	**20000**		2500	110	ug/L			11/21/14 21:24	500

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*80*		*75 - 125*		*11/21/14 21:24*	*500*
4-Bromofluorobenzene (Surr)	*93*		*75 - 120*		*11/21/14 21:24*	*500*
Dibromofluoromethane	*84*		*75 - 120*		*11/21/14 21:24*	*500*
Toluene-d8 (Surr)	*92*		*75 - 120*		*11/21/14 21:24*	*500*

Client Sample ID: MW-105C
Date Collected: 11/12/14 14:05
Date Received: 11/15/14 10:25

Lab Sample ID: 500-87930-24
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			11/22/14 01:34	1
1,1,1-Trichloroethane	ND		1.0	0.20	ug/L			11/22/14 01:34	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.23	ug/L			11/22/14 01:34	1
1,1,2-Trichloroethane	ND		1.0	0.28	ug/L			11/22/14 01:34	1
1,1-Dichloroethane	ND		1.0	0.19	ug/L			11/22/14 01:34	1
1,1-Dichloroethylene	ND		1.0	0.31	ug/L			11/22/14 01:34	1
1,1-Dichloropropene	ND		1.0	0.34	ug/L			11/22/14 01:34	1
1,2,3-Trichlorobenzene	ND		1.0	0.24	ug/L			11/22/14 01:34	1
1,2,3-Trichloropropane	ND		1.0	0.45	ug/L			11/22/14 01:34	1
1,2,4-Trichlorobenzene	ND		1.0	0.31	ug/L			11/22/14 01:34	1
1,2,4-Trimethylbenzene	ND		1.0	0.14	ug/L			11/22/14 01:34	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.87	ug/L			11/22/14 01:34	1
1,2-Dibromoethane	ND		1.0	0.36	ug/L			11/22/14 01:34	1
1,2-Dichlorobenzene	ND		1.0	0.27	ug/L			11/22/14 01:34	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			11/22/14 01:34	1
1,2-Dichloropropane	ND		1.0	0.20	ug/L			11/22/14 01:34	1
1,3,5-Trimethylbenzene	ND		1.0	0.18	ug/L			11/22/14 01:34	1
1,1,2-Trichlorotrifluoroethane	ND		5.0	0.22	ug/L			11/22/14 01:34	1
1,3-Dichlorobenzene	ND		1.0	0.15	ug/L			11/22/14 01:34	1
1,3-Dichloropropane	ND		1.0	0.13	ug/L			11/22/14 01:34	1
1,4-Dichlorobenzene	ND		1.0	0.15	ug/L			11/22/14 01:34	1
2,2-Dichloropropane	ND		1.0	0.32	ug/L			11/22/14 01:34	1
2-Chlorotoluene	ND		1.0	0.21	ug/L			11/22/14 01:34	1
2-Hexanone	ND		5.0	0.56	ug/L			11/22/14 01:34	1
4-Chlorotoluene	ND		1.0	0.20	ug/L			11/22/14 01:34	1
4-Isopropyltoluene	ND		2.0	0.17	ug/L			11/22/14 01:34	1
Acetone	ND		5.0	1.3	ug/L			11/22/14 01:34	1
Benzene	ND		0.50	0.074	ug/L			11/22/14 01:34	1
Bromobenzene	ND		1.0	0.25	ug/L			11/22/14 01:34	1
Bromodichloromethane	ND		1.0	0.17	ug/L			11/22/14 01:34	1
Bromoform	ND		1.0	0.28	ug/L			11/22/14 01:34	1
Bromomethane	ND		5.0	0.31	ug/L			11/22/14 01:34	1
Carbon disulfide	ND		5.0	0.43	ug/L			11/22/14 01:34	1
Carbon tetrachloride	ND		1.0	0.26	ug/L			11/22/14 01:34	1
Chlorobenzene	ND		1.0	0.14	ug/L			11/22/14 01:34	1
Chlorobromomethane	ND		1.0	0.40	ug/L			11/22/14 01:34	1
Vinyl acetate	ND		2.0	0.33	ug/L			11/22/14 01:34	1
Chloroethane	ND		1.0	0.34	ug/L			11/22/14 01:34	1
Chloroform	ND		1.0	0.20	ug/L			11/22/14 01:34	1
Chloromethane	ND		1.0	0.18	ug/L			11/22/14 01:34	1
cis-1,2-Dichloroethene	ND		1.0	0.12	ug/L			11/22/14 01:34	1
cis-1,3-Dichloropropene	ND		1.0	0.18	ug/L			11/22/14 01:34	1
Dibromochloromethane	ND		1.0	0.32	ug/L			11/22/14 01:34	1
Dibromomethane	ND		1.0	0.33	ug/L			11/22/14 01:34	1
Dichlorodifluoromethane	ND		5.0	0.20	ug/L			11/22/14 01:34	1
Ethylbenzene	ND		0.50	0.13	ug/L			11/22/14 01:34	1
Hexachlorobutadiene	ND		1.0	0.26	ug/L			11/22/14 01:34	1
Isopropylbenzene	ND		1.0	0.14	ug/L			11/22/14 01:34	1
m&p-Xylene	ND		1.0	0.26	ug/L			11/22/14 01:34	1

Client Sample Results

Client: AbbVie US LLC
Project/Site: Laurinburg, NC VOC Testing (0272871))

TestAmerica Job ID: 500-87930-1

Client Sample ID: MW-105C

Lab Sample ID: 500-87930-24

Date Collected: 11/12/14 14:05
Matrix: Water
Date Received: 11/15/14 10:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Ethyl Ketone	ND		5.0	1.5	ug/L			11/22/14 01:34	1
methyl isobutyl ketone	ND		5.0	0.33	ug/L			11/22/14 01:34	1
Methyl tert-butyl ether	**0.74**	**J**	1.0	0.24	ug/L			11/22/14 01:34	1
Methylene Chloride	ND		5.0	0.68	ug/L			11/22/14 01:34	1
Naphthalene	ND		1.0	0.16	ug/L			11/22/14 01:34	1
n-Butylbenzene	ND		1.0	0.13	ug/L			11/22/14 01:34	1
N-Propylbenzene	ND		1.0	0.13	ug/L			11/22/14 01:34	1
o-Xylene	ND		0.50	0.068	ug/L			11/22/14 01:34	1
sec-Butylbenzene	ND		1.0	0.15	ug/L			11/22/14 01:34	1
Styrene	ND		1.0	0.10	ug/L			11/22/14 01:34	1
tert-Butylbenzene	ND		1.0	0.14	ug/L			11/22/14 01:34	1
Perchloroethylene	ND		1.0	0.17	ug/L			11/22/14 01:34	1
Toluene	ND		0.50	0.11	ug/L			11/22/14 01:34	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			11/22/14 01:34	1
trans-1,3-Dichloropropene	ND		1.0	0.21	ug/L			11/22/14 01:34	1
Trichloroethylene	ND		0.50	0.19	ug/L			11/22/14 01:34	1
Trichlorofluoromethane	ND		1.0	0.19	ug/L			11/22/14 01:34	1
Vinyl chloride	ND		0.50	0.10	ug/L			11/22/14 01:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*79*		*75 - 125*		*11/22/14 01:34*	*1*
4-Bromofluorobenzene (Surr)	*95*		*75 - 120*		*11/22/14 01:34*	*1*
Dibromofluoromethane	*86*		*75 - 120*		*11/22/14 01:34*	*1*
Toluene-d8 (Surr)	*94*		*75 - 120*		*11/22/14 01:34*	*1*

Client Sample ID: 112014-GW-DUP01
Date Collected: 11/11/14 14:15
Date Received: 11/15/14 10:25

Lab Sample ID: 500-87930-25
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			11/23/14 09:41	1
1,1,1-Trichloroethane	ND		1.0	0.20	ug/L			11/23/14 09:41	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.23	ug/L			11/23/14 09:41	1
1,1,2-Trichloroethane	ND		1.0	0.28	ug/L			11/23/14 09:41	1
1,1-Dichloroethane	ND		1.0	0.19	ug/L			11/23/14 09:41	1
1,1-Dichloroethylene	ND		1.0	0.31	ug/L			11/23/14 09:41	1
1,1-Dichloropropene	ND		1.0	0.34	ug/L			11/23/14 09:41	1
1,2,3-Trichlorobenzene	ND		1.0	0.24	ug/L			11/23/14 09:41	1
1,2,3-Trichloropropane	ND		1.0	0.45	ug/L			11/23/14 09:41	1
1,2,4-Trichlorobenzene	ND		1.0	0.31	ug/L			11/23/14 09:41	1
1,2,4-Trimethylbenzene	ND		1.0	0.14	ug/L			11/23/14 09:41	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.87	ug/L			11/23/14 09:41	1
1,2-Dibromoethane	ND		1.0	0.36	ug/L			11/23/14 09:41	1
1,2-Dichlorobenzene	ND		1.0	0.27	ug/L			11/23/14 09:41	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			11/23/14 09:41	1
1,2-Dichloropropane	ND		1.0	0.20	ug/L			11/23/14 09:41	1
1,3,5-Trimethylbenzene	ND		1.0	0.18	ug/L			11/23/14 09:41	1
1,3-Dichlorobenzene	ND		1.0	0.15	ug/L			11/23/14 09:41	1
1,3-Dichloropropane	ND		1.0	0.13	ug/L			11/23/14 09:41	1
1,4-Dichlorobenzene	ND		1.0	0.15	ug/L			11/23/14 09:41	1
2,2-Dichloropropane	ND		1.0	0.32	ug/L			11/23/14 09:41	1
2-Chlorotoluene	ND		1.0	0.21	ug/L			11/23/14 09:41	1
2-Hexanone	ND		5.0	0.56	ug/L			11/23/14 09:41	1
4-Chlorotoluene	ND		1.0	0.20	ug/L			11/23/14 09:41	1
4-Isopropyltoluene	ND		2.0	0.17	ug/L			11/23/14 09:41	1
Acetone	ND		5.0	1.3	ug/L			11/23/14 09:41	1
Benzene	ND		0.50	0.074	ug/L			11/23/14 09:41	1
Bromobenzene	ND		1.0	0.25	ug/L			11/23/14 09:41	1
Bromodichloromethane	ND		1.0	0.17	ug/L			11/23/14 09:41	1
Bromoform	ND		1.0	0.28	ug/L			11/23/14 09:41	1
Bromomethane	ND		5.0	0.31	ug/L			11/23/14 09:41	1
Carbon disulfide	ND		5.0	0.43	ug/L			11/23/14 09:41	1
Carbon tetrachloride	ND		1.0	0.26	ug/L			11/23/14 09:41	1
Chlorobenzene	ND		1.0	0.14	ug/L			11/23/14 09:41	1
Chlorobromomethane	ND		1.0	0.40	ug/L			11/23/14 09:41	1
Vinyl acetate	ND		2.0	0.33	ug/L			11/23/14 09:41	1
Chloroethane	ND		1.0	0.34	ug/L			11/23/14 09:41	1
Chloroform	**0.52**	**J**	1.0	0.20	ug/L			11/23/14 09:41	1
Chloromethane	ND		1.0	0.18	ug/L			11/23/14 09:41	1
cis-1,2-Dichloroethene	**26**		1.0	0.12	ug/L			11/23/14 09:41	1
cis-1,3-Dichloropropene	ND		1.0	0.18	ug/L			11/23/14 09:41	1
Dibromochloromethane	ND		1.0	0.32	ug/L			11/23/14 09:41	1
Dibromomethane	ND		1.0	0.33	ug/L			11/23/14 09:41	1
Dichlorodifluoromethane	ND		5.0	0.20	ug/L			11/23/14 09:41	1
Ethylbenzene	ND		0.50	0.13	ug/L			11/23/14 09:41	1
Hexachlorobutadiene	ND		1.0	0.26	ug/L			11/23/14 09:41	1
Isopropylbenzene	ND		1.0	0.14	ug/L			11/23/14 09:41	1
m&p-Xylene	ND		1.0	0.26	ug/L			11/23/14 09:41	1
Methyl Ethyl Ketone	ND		5.0	1.5	ug/L			11/23/14 09:41	1

Client Sample ID: 112014-GW-DUP01

Lab Sample ID: 500-87930-25

Date Collected: 11/11/14 14:15

Matrix: Water

Date Received: 11/15/14 10:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
methyl isobutyl ketone	ND		5.0	0.33	ug/L			11/23/14 09:41	1
Methyl tert-butyl ether	**1.3**		1.0	0.24	ug/L			11/23/14 09:41	1
Methylene Chloride	ND		5.0	0.68	ug/L			11/23/14 09:41	1
Naphthalene	ND		1.0	0.16	ug/L			11/23/14 09:41	1
n-Butylbenzene	ND		1.0	0.13	ug/L			11/23/14 09:41	1
N-Propylbenzene	ND		1.0	0.13	ug/L			11/23/14 09:41	1
o-Xylene	ND		0.50	0.068	ug/L			11/23/14 09:41	1
sec-Butylbenzene	ND		1.0	0.15	ug/L			11/23/14 09:41	1
Styrene	ND		1.0	0.10	ug/L			11/23/14 09:41	1
tert-Butylbenzene	ND		1.0	0.14	ug/L			11/23/14 09:41	1
Perchloroethylene	ND		1.0	0.17	ug/L			11/23/14 09:41	1
Toluene	**0.69**		0.50	0.11	ug/L			11/23/14 09:41	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			11/23/14 09:41	1
trans-1,3-Dichloropropene	ND		1.0	0.21	ug/L			11/23/14 09:41	1
Trichloroethylene	**1.4**		0.50	0.19	ug/L			11/23/14 09:41	1
Trichlorofluoromethane	ND		1.0	0.19	ug/L			11/23/14 09:41	1
Vinyl chloride	**0.60**		0.50	0.10	ug/L			11/23/14 09:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*75 - 125*		*11/23/14 09:41*	*1*
4-Bromofluorobenzene (Surr)	*93*		*75 - 120*		*11/23/14 09:41*	*1*
Dibromofluoromethane	*101*		*75 - 120*		*11/23/14 09:41*	*1*
Toluene-d8 (Surr)	*104*		*75 - 120*		*11/23/14 09:41*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane	**330**		10	0.44	ug/L			11/22/14 02:02	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*82*		*75 - 125*		*11/22/14 02:02*	*2*
4-Bromofluorobenzene (Surr)	*95*		*75 - 120*		*11/22/14 02:02*	*2*
Dibromofluoromethane	*88*		*75 - 120*		*11/22/14 02:02*	*2*
Toluene-d8 (Surr)	*91*		*75 - 120*		*11/22/14 02:02*	*2*

Client Sample ID: 112014-GW-DUP02
Date Collected: 11/12/14 10:00
Date Received: 11/15/14 10:25

Lab Sample ID: 500-87930-26
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.0	1.3	ug/L			11/22/14 02:58	5
1,1,1-Trichloroethane	ND		5.0	1.0	ug/L			11/22/14 02:58	5
1,1,2,2-Tetrachloroethane	ND		5.0	1.2	ug/L			11/22/14 02:58	5
1,1,2-Trichloroethane	ND		5.0	1.4	ug/L			11/22/14 02:58	5
1,1-Dichloroethane	ND		5.0	0.95	ug/L			11/22/14 02:58	5
1,1-Dichloroethylene	**39**		5.0	1.6	ug/L			11/22/14 02:58	5
1,1-Dichloropropene	ND		5.0	1.7	ug/L			11/22/14 02:58	5
1,2,3-Trichlorobenzene	ND		5.0	1.2	ug/L			11/22/14 02:58	5
1,2,3-Trichloropropane	ND		5.0	2.3	ug/L			11/22/14 02:58	5
1,2,4-Trichlorobenzene	ND		5.0	1.6	ug/L			11/22/14 02:58	5
1,2,4-Trimethylbenzene	ND		5.0	0.70	ug/L			11/22/14 02:58	5
1,2-Dibromo-3-Chloropropane	ND		25	4.4	ug/L			11/22/14 02:58	5
1,2-Dibromoethane	ND		5.0	1.8	ug/L			11/22/14 02:58	5
1,2-Dichlorobenzene	ND		5.0	1.4	ug/L			11/22/14 02:58	5
1,2-Dichloroethane	ND		5.0	1.4	ug/L			11/22/14 02:58	5
1,2-Dichloropropane	ND		5.0	1.0	ug/L			11/22/14 02:58	5
1,3,5-Trimethylbenzene	ND		5.0	0.90	ug/L			11/22/14 02:58	5
1,3-Dichlorobenzene	ND		5.0	0.75	ug/L			11/22/14 02:58	5
1,3-Dichloropropane	ND		5.0	0.65	ug/L			11/22/14 02:58	5
1,4-Dichlorobenzene	ND		5.0	0.75	ug/L			11/22/14 02:58	5
2,2-Dichloropropane	ND		5.0	1.6	ug/L			11/22/14 02:58	5
2-Chlorotoluene	ND		5.0	1.1	ug/L			11/22/14 02:58	5
2-Hexanone	ND		25	2.8	ug/L			11/22/14 02:58	5
4-Chlorotoluene	ND		5.0	1.0	ug/L			11/22/14 02:58	5
4-Isopropyltoluene	ND		10	0.85	ug/L			11/22/14 02:58	5
Acetone	ND		25	6.5	ug/L			11/22/14 02:58	5
Benzene	ND		2.5	0.37	ug/L			11/22/14 02:58	5
Bromobenzene	ND		5.0	1.3	ug/L			11/22/14 02:58	5
Bromodichloromethane	ND		5.0	0.85	ug/L			11/22/14 02:58	5
Bromoform	ND		5.0	1.4	ug/L			11/22/14 02:58	5
Bromomethane	ND		25	1.6	ug/L			11/22/14 02:58	5
Carbon disulfide	ND		25	2.2	ug/L			11/22/14 02:58	5
Carbon tetrachloride	ND		5.0	1.3	ug/L			11/22/14 02:58	5
Chlorobenzene	ND		5.0	0.70	ug/L			11/22/14 02:58	5
Chlorobromomethane	ND		5.0	2.0	ug/L			11/22/14 02:58	5
Vinyl acetate	ND		10	1.7	ug/L			11/22/14 02:58	5
Chloroethane	ND		5.0	1.7	ug/L			11/22/14 02:58	5
Chloroform	ND		5.0	1.0	ug/L			11/22/14 02:58	5
Chloromethane	ND		5.0	0.90	ug/L			11/22/14 02:58	5
cis-1,2-Dichloroethene	**510**		5.0	0.60	ug/L			11/22/14 02:58	5
cis-1,3-Dichloropropene	ND		5.0	0.90	ug/L			11/22/14 02:58	5
Dibromochloromethane	ND		5.0	1.6	ug/L			11/22/14 02:58	5
Dibromomethane	ND		5.0	1.7	ug/L			11/22/14 02:58	5
Dichlorodifluoromethane	ND		25	1.0	ug/L			11/22/14 02:58	5
Ethylbenzene	ND		2.5	0.65	ug/L			11/22/14 02:58	5
Hexachlorobutadiene	ND		5.0	1.3	ug/L			11/22/14 02:58	5
Isopropylbenzene	ND		5.0	0.70	ug/L			11/22/14 02:58	5
m&p-Xylene	ND		5.0	1.3	ug/L			11/22/14 02:58	5
Methyl Ethyl Ketone	ND		25	7.4	ug/L			11/22/14 02:58	5

Client Sample ID: 112014-GW-DUP02

Lab Sample ID: 500-87930-26

Date Collected: 11/12/14 10:00

Matrix: Water

Date Received: 11/15/14 10:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
methyl isobutyl ketone	ND		25	1.7	ug/L			11/22/14 02:58	5
Methyl tert-butyl ether	ND		5.0	1.2	ug/L			11/22/14 02:58	5
Methylene Chloride	ND		25	3.4	ug/L			11/22/14 02:58	5
Naphthalene	ND		5.0	0.80	ug/L			11/22/14 02:58	5
n-Butylbenzene	ND		5.0	0.65	ug/L			11/22/14 02:58	5
N-Propylbenzene	ND		5.0	0.65	ug/L			11/22/14 02:58	5
o-Xylene	ND		2.5	0.34	ug/L			11/22/14 02:58	5
sec-Butylbenzene	ND		5.0	0.75	ug/L			11/22/14 02:58	5
Styrene	ND		5.0	0.50	ug/L			11/22/14 02:58	5
tert-Butylbenzene	ND		5.0	0.70	ug/L			11/22/14 02:58	5
Perchloroethylene	**3.3**	**J**	5.0	0.85	ug/L			11/22/14 02:58	5
Toluene	**29**		2.5	0.55	ug/L			11/22/14 02:58	5
trans-1,2-Dichloroethene	ND		5.0	1.3	ug/L			11/22/14 02:58	5
trans-1,3-Dichloropropene	ND		5.0	1.1	ug/L			11/22/14 02:58	5
Trichloroethylene	ND		2.5	0.95	ug/L			11/22/14 02:58	5
Trichlorofluoromethane	ND		5.0	0.95	ug/L			11/22/14 02:58	5
Vinyl chloride	**4.4**		2.5	0.50	ug/L			11/22/14 02:58	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*81*		*75 - 125*		*11/22/14 02:58*	*5*
4-Bromofluorobenzene (Surr)	*94*		*75 - 120*		*11/22/14 02:58*	*5*
Dibromofluoromethane	*84*		*75 - 120*		*11/22/14 02:58*	*5*
Toluene-d8 (Surr)	*92*		*75 - 120*		*11/22/14 02:58*	*5*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane	**1300**		250	11	ug/L			11/22/14 03:25	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*80*		*75 - 125*		*11/22/14 03:25*	*50*
4-Bromofluorobenzene (Surr)	*95*		*75 - 120*		*11/22/14 03:25*	*50*
Dibromofluoromethane	*84*		*75 - 120*		*11/22/14 03:25*	*50*
Toluene-d8 (Surr)	*92*		*75 - 120*		*11/22/14 03:25*	*50*

Client Sample Results

Client: AbbVie US LLC
Project/Site: Laurinburg, NC VOC Testing (0272871))

TestAmerica Job ID: 500-87930-1

Client Sample ID: IDW-DRUM-01

Lab Sample ID: 500-87930-27

Date Collected: 11/13/14 12:30
Matrix: Water
Date Received: 11/15/14 10:25

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		10	2.5	ug/L			11/22/14 03:53	10
1,1,1-Trichloroethane	**53**		10	2.0	ug/L			11/22/14 03:53	10
1,1,2,2-Tetrachloroethane	ND		10	2.3	ug/L			11/22/14 03:53	10
1,1,2-Trichloroethane	ND		10	2.8	ug/L			11/22/14 03:53	10
1,1-Dichloroethane	**6.7**	**J**	10	1.9	ug/L			11/22/14 03:53	10
1,1-Dichloroethylene	**68**		10	3.1	ug/L			11/22/14 03:53	10
1,1-Dichloropropene	ND		10	3.4	ug/L			11/22/14 03:53	10
1,2,3-Trichlorobenzene	ND		10	2.4	ug/L			11/22/14 03:53	10
1,2,3-Trichloropropane	ND		10	4.5	ug/L			11/22/14 03:53	10
1,2,4-Trichlorobenzene	ND		10	3.1	ug/L			11/22/14 03:53	10
1,2,4-Trimethylbenzene	ND		10	1.4	ug/L			11/22/14 03:53	10
1,2-Dibromo-3-Chloropropane	ND		50	8.7	ug/L			11/22/14 03:53	10
1,2-Dibromoethane	ND		10	3.6	ug/L			11/22/14 03:53	10
1,2-Dichlorobenzene	ND		10	2.7	ug/L			11/22/14 03:53	10
1,2-Dichloroethane	ND		10	2.8	ug/L			11/22/14 03:53	10
1,2-Dichloropropane	ND		10	2.0	ug/L			11/22/14 03:53	10
1,3,5-Trimethylbenzene	ND		10	1.8	ug/L			11/22/14 03:53	10
1,3-Dichlorobenzene	ND		10	1.5	ug/L			11/22/14 03:53	10
1,3-Dichloropropane	ND		10	1.3	ug/L			11/22/14 03:53	10
1,4-Dichlorobenzene	ND		10	1.5	ug/L			11/22/14 03:53	10
2,2-Dichloropropane	ND		10	3.2	ug/L			11/22/14 03:53	10
2-Chlorotoluene	ND		10	2.1	ug/L			11/22/14 03:53	10
2-Hexanone	ND		50	5.6	ug/L			11/22/14 03:53	10
4-Chlorotoluene	ND		10	2.0	ug/L			11/22/14 03:53	10
4-Isopropyltoluene	ND		20	1.7	ug/L			11/22/14 03:53	10
Acetone	ND		50	13	ug/L			11/22/14 03:53	10
Benzene	ND		5.0	0.74	ug/L			11/22/14 03:53	10
Bromobenzene	ND		10	2.5	ug/L			11/22/14 03:53	10
Bromodichloromethane	ND		10	1.7	ug/L			11/22/14 03:53	10
Bromoform	ND		10	2.8	ug/L			11/22/14 03:53	10
Bromomethane	ND		50	3.1	ug/L			11/22/14 03:53	10
Carbon disulfide	ND		50	4.3	ug/L			11/22/14 03:53	10
Carbon tetrachloride	ND		10	2.6	ug/L			11/22/14 03:53	10
Chlorobenzene	ND		10	1.4	ug/L			11/22/14 03:53	10
Chlorobromomethane	ND		10	4.0	ug/L			11/22/14 03:53	10
Vinyl acetate	ND		20	3.3	ug/L			11/22/14 03:53	10
Chloroethane	ND		10	3.4	ug/L			11/22/14 03:53	10
Chloroform	**11**		10	2.0	ug/L			11/22/14 03:53	10
Chloromethane	ND		10	1.8	ug/L			11/22/14 03:53	10
cis-1,3-Dichloropropene	ND		10	1.8	ug/L			11/22/14 03:53	10
Dibromochloromethane	ND		10	3.2	ug/L			11/22/14 03:53	10
Dibromomethane	ND		10	3.3	ug/L			11/22/14 03:53	10
Dichlorodifluoromethane	ND		50	2.0	ug/L			11/22/14 03:53	10
Ethylbenzene	ND		5.0	1.3	ug/L			11/22/14 03:53	10
Hexachlorobutadiene	ND		10	2.6	ug/L			11/22/14 03:53	10
Isopropylbenzene	ND		10	1.4	ug/L			11/22/14 03:53	10
m&p-Xylene	ND		10	2.6	ug/L			11/22/14 03:53	10
Methyl Ethyl Ketone	ND		50	15	ug/L			11/22/14 03:53	10
methyl isobutyl ketone	ND		50	3.3	ug/L			11/22/14 03:53	10

Client Sample ID: IDW-DRUM-01

Lab Sample ID: 500-87930-27

Date Collected: 11/13/14 12:30

Matrix: Water

Date Received: 11/15/14 10:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl tert-butyl ether	ND		10	2.4	ug/L			11/22/14 03:53	10
Methylene Chloride	ND		50	6.8	ug/L			11/22/14 03:53	10
Naphthalene	ND		10	1.6	ug/L			11/22/14 03:53	10
n-Butylbenzene	ND		10	1.3	ug/L			11/22/14 03:53	10
N-Propylbenzene	ND		10	1.3	ug/L			11/22/14 03:53	10
o-Xylene	ND		5.0	0.68	ug/L			11/22/14 03:53	10
sec-Butylbenzene	ND		10	1.5	ug/L			11/22/14 03:53	10
Styrene	ND		10	1.0	ug/L			11/22/14 03:53	10
tert-Butylbenzene	ND		10	1.4	ug/L			11/22/14 03:53	10
Perchloroethylene	ND		10	1.7	ug/L			11/22/14 03:53	10
Toluene	**170**		5.0	1.1	ug/L			11/22/14 03:53	10
trans-1,2-Dichloroethene	ND		10	2.5	ug/L			11/22/14 03:53	10
trans-1,3-Dichloropropene	ND		10	2.1	ug/L			11/22/14 03:53	10
Trichloroethylene	**230**		5.0	1.9	ug/L			11/22/14 03:53	10
Trichlorofluoromethane	ND		10	1.9	ug/L			11/22/14 03:53	10
Vinyl chloride	**7.3**		5.0	1.0	ug/L			11/22/14 03:53	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*80*		*75 - 125*		*11/22/14 03:53*	*10*
4-Bromofluorobenzene (Surr)	*94*		*75 - 120*		*11/22/14 03:53*	*10*
Dibromofluoromethane	*87*		*75 - 120*		*11/22/14 03:53*	*10*
Toluene-d8 (Surr)	*93*		*75 - 120*		*11/22/14 03:53*	*10*

Method: 8260B - Volatile Organic Compounds (GC/MS) - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane	**2900**		500	22	ug/L			11/22/14 04:21	100
cis-1,2-Dichloroethene	**4000**		100	12	ug/L			11/22/14 04:21	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*81*		*75 - 125*		*11/22/14 04:21*	*100*
4-Bromofluorobenzene (Surr)	*97*		*75 - 120*		*11/22/14 04:21*	*100*
Dibromofluoromethane	*84*		*75 - 120*		*11/22/14 04:21*	*100*
Toluene-d8 (Surr)	*90*		*75 - 120*		*11/22/14 04:21*	*100*

Client Sample Results

Client: AbbVie US LLC
Project/Site: Laurinburg, NC VOC Testing (0272871))

TestAmerica Job ID: 500-87930-1

Client Sample ID: IDW-DRUM-02

Lab Sample ID: 500-87930-28

Date Collected: 11/13/14 12:45
Matrix: Water
Date Received: 11/15/14 10:25

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			11/22/14 04:48	1
1,1,1-Trichloroethane	ND		1.0	0.20	ug/L			11/22/14 04:48	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.23	ug/L			11/22/14 04:48	1
1,1,2-Trichloroethane	ND		1.0	0.28	ug/L			11/22/14 04:48	1
1,1-Dichloroethane	ND		1.0	0.19	ug/L			11/22/14 04:48	1
1,1-Dichloroethylene	ND		1.0	0.31	ug/L			11/22/14 04:48	1
1,1-Dichloropropene	ND		1.0	0.34	ug/L			11/22/14 04:48	1
1,2,3-Trichlorobenzene	ND		1.0	0.24	ug/L			11/22/14 04:48	1
1,2,3-Trichloropropane	ND		1.0	0.45	ug/L			11/22/14 04:48	1
1,2,4-Trichlorobenzene	ND		1.0	0.31	ug/L			11/22/14 04:48	1
1,2,4-Trimethylbenzene	ND		1.0	0.14	ug/L			11/22/14 04:48	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.87	ug/L			11/22/14 04:48	1
1,2-Dibromoethane	ND		1.0	0.36	ug/L			11/22/14 04:48	1
1,2-Dichlorobenzene	ND		1.0	0.27	ug/L			11/22/14 04:48	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			11/22/14 04:48	1
1,2-Dichloropropane	ND		1.0	0.20	ug/L			11/22/14 04:48	1
1,3,5-Trimethylbenzene	ND		1.0	0.18	ug/L			11/22/14 04:48	1
1,1,2-Trichlorotrifluoroethane	**14**		5.0	0.22	ug/L			11/22/14 04:48	1
1,3-Dichlorobenzene	ND		1.0	0.15	ug/L			11/22/14 04:48	1
1,3-Dichloropropane	ND		1.0	0.13	ug/L			11/22/14 04:48	1
1,4-Dichlorobenzene	ND		1.0	0.15	ug/L			11/22/14 04:48	1
2,2-Dichloropropane	ND		1.0	0.32	ug/L			11/22/14 04:48	1
2-Chlorotoluene	ND		1.0	0.21	ug/L			11/22/14 04:48	1
2-Hexanone	ND		5.0	0.56	ug/L			11/22/14 04:48	1
4-Chlorotoluene	ND		1.0	0.20	ug/L			11/22/14 04:48	1
4-Isopropyltoluene	ND		2.0	0.17	ug/L			11/22/14 04:48	1
Acetone	**5.4**		5.0	1.3	ug/L			11/22/14 04:48	1
Benzene	ND		0.50	0.074	ug/L			11/22/14 04:48	1
Bromobenzene	ND		1.0	0.25	ug/L			11/22/14 04:48	1
Bromodichloromethane	ND		1.0	0.17	ug/L			11/22/14 04:48	1
Bromoform	ND		1.0	0.28	ug/L			11/22/14 04:48	1
Bromomethane	ND		5.0	0.31	ug/L			11/22/14 04:48	1
Carbon disulfide	ND		5.0	0.43	ug/L			11/22/14 04:48	1
Carbon tetrachloride	ND		1.0	0.26	ug/L			11/22/14 04:48	1
Chlorobenzene	ND		1.0	0.14	ug/L			11/22/14 04:48	1
Chlorobromomethane	ND		1.0	0.40	ug/L			11/22/14 04:48	1
Vinyl acetate	ND		2.0	0.33	ug/L			11/22/14 04:48	1
Chloroethane	ND		1.0	0.34	ug/L			11/22/14 04:48	1
Chloroform	ND		1.0	0.20	ug/L			11/22/14 04:48	1
Chloromethane	ND		1.0	0.18	ug/L			11/22/14 04:48	1
cis-1,2-Dichloroethene	**14**		1.0	0.12	ug/L			11/22/14 04:48	1
cis-1,3-Dichloropropene	ND		1.0	0.18	ug/L			11/22/14 04:48	1
Dibromochloromethane	ND		1.0	0.32	ug/L			11/22/14 04:48	1
Dibromomethane	ND		1.0	0.33	ug/L			11/22/14 04:48	1
Dichlorodifluoromethane	ND		5.0	0.20	ug/L			11/22/14 04:48	1
Ethylbenzene	ND		0.50	0.13	ug/L			11/22/14 04:48	1
Hexachlorobutadiene	ND		1.0	0.26	ug/L			11/22/14 04:48	1
Isopropylbenzene	ND		1.0	0.14	ug/L			11/22/14 04:48	1
m&p-Xylene	ND		1.0	0.26	ug/L			11/22/14 04:48	1

Client: AbbVie US LLC
Project/Site: Laurinburg, NC VOC Testing (0272871))

TestAmerica Job ID: 500-87930-1

Client Sample ID: IDW-DRUM-02
Date Collected: 11/13/14 12:45
Date Received: 11/15/14 10:25

Lab Sample ID: 500-87930-28
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Ethyl Ketone	ND		5.0	1.5	ug/L			11/22/14 04:48	1
methyl isobutyl ketone	ND		5.0	0.33	ug/L			11/22/14 04:48	1
Methyl tert-butyl ether	ND		1.0	0.24	ug/L			11/22/14 04:48	1
Methylene Chloride	ND		5.0	0.68	ug/L			11/22/14 04:48	1
Naphthalene	ND		1.0	0.16	ug/L			11/22/14 04:48	1
n-Butylbenzene	ND		1.0	0.13	ug/L			11/22/14 04:48	1
N-Propylbenzene	ND		1.0	0.13	ug/L			11/22/14 04:48	1
o-Xylene	ND		0.50	0.068	ug/L			11/22/14 04:48	1
sec-Butylbenzene	ND		1.0	0.15	ug/L			11/22/14 04:48	1
Styrene	ND		1.0	0.10	ug/L			11/22/14 04:48	1
tert-Butylbenzene	ND		1.0	0.14	ug/L			11/22/14 04:48	1
Perchloroethylene	ND		1.0	0.17	ug/L			11/22/14 04:48	1
Toluene	**2.5**		0.50	0.11	ug/L			11/22/14 04:48	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			11/22/14 04:48	1
trans-1,3-Dichloropropene	ND		1.0	0.21	ug/L			11/22/14 04:48	1
Trichloroethylene	ND		0.50	0.19	ug/L			11/22/14 04:48	1
Trichlorofluoromethane	ND		1.0	0.19	ug/L			11/22/14 04:48	1
Vinyl chloride	ND		0.50	0.10	ug/L			11/22/14 04:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*81*		*75 - 125*		*11/22/14 04:48*	*1*
4-Bromofluorobenzene (Surr)	*95*		*75 - 120*		*11/22/14 04:48*	*1*
Dibromofluoromethane	*85*		*75 - 120*		*11/22/14 04:48*	*1*
Toluene-d8 (Surr)	*92*		*75 - 120*		*11/22/14 04:48*	*1*

Client Sample Results

Client: AbbVie US LLC
Project/Site: Laurinburg, NC VOC Testing (0272871))

TestAmerica Job ID: 500-87930-1

Client Sample ID: TRIP BLANK 1

Lab Sample ID: 500-87930-29

Date Collected: 11/11/14 10:00
Matrix: Water
Date Received: 11/15/14 10:25

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			11/22/14 05:15	1
1,1,1-Trichloroethane	ND		1.0	0.20	ug/L			11/22/14 05:15	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.23	ug/L			11/22/14 05:15	1
1,1,2-Trichloroethane	ND		1.0	0.28	ug/L			11/22/14 05:15	1
1,1-Dichloroethane	ND		1.0	0.19	ug/L			11/22/14 05:15	1
1,1-Dichloroethylene	ND		1.0	0.31	ug/L			11/22/14 05:15	1
1,1-Dichloropropene	ND		1.0	0.34	ug/L			11/22/14 05:15	1
1,2,3-Trichlorobenzene	ND		1.0	0.24	ug/L			11/22/14 05:15	1
1,2,3-Trichloropropane	ND		1.0	0.45	ug/L			11/22/14 05:15	1
1,2,4-Trichlorobenzene	ND		1.0	0.31	ug/L			11/22/14 05:15	1
1,2,4-Trimethylbenzene	ND		1.0	0.14	ug/L			11/22/14 05:15	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.87	ug/L			11/22/14 05:15	1
1,2-Dibromoethane	ND		1.0	0.36	ug/L			11/22/14 05:15	1
1,2-Dichlorobenzene	ND		1.0	0.27	ug/L			11/22/14 05:15	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			11/22/14 05:15	1
1,2-Dichloropropane	ND		1.0	0.20	ug/L			11/22/14 05:15	1
1,3,5-Trimethylbenzene	ND		1.0	0.18	ug/L			11/22/14 05:15	1
1,1,2-Trichlorotrifluoroethane	ND		5.0	0.22	ug/L			11/22/14 05:15	1
1,3-Dichlorobenzene	ND		1.0	0.15	ug/L			11/22/14 05:15	1
1,3-Dichloropropane	ND		1.0	0.13	ug/L			11/22/14 05:15	1
1,4-Dichlorobenzene	ND		1.0	0.15	ug/L			11/22/14 05:15	1
2,2-Dichloropropane	ND		1.0	0.32	ug/L			11/22/14 05:15	1
2-Chlorotoluene	ND		1.0	0.21	ug/L			11/22/14 05:15	1
2-Hexanone	ND		5.0	0.56	ug/L			11/22/14 05:15	1
4-Chlorotoluene	ND		1.0	0.20	ug/L			11/22/14 05:15	1
4-Isopropyltoluene	ND		2.0	0.17	ug/L			11/22/14 05:15	1
Acetone	ND		5.0	1.3	ug/L			11/22/14 05:15	1
Benzene	ND		0.50	0.074	ug/L			11/22/14 05:15	1
Bromobenzene	ND		1.0	0.25	ug/L			11/22/14 05:15	1
Bromodichloromethane	ND		1.0	0.17	ug/L			11/22/14 05:15	1
Bromoform	ND		1.0	0.28	ug/L			11/22/14 05:15	1
Bromomethane	ND		5.0	0.31	ug/L			11/22/14 05:15	1
Carbon disulfide	ND		5.0	0.43	ug/L			11/22/14 05:15	1
Carbon tetrachloride	ND		1.0	0.26	ug/L			11/22/14 05:15	1
Chlorobenzene	ND		1.0	0.14	ug/L			11/22/14 05:15	1
Chlorobromomethane	ND		1.0	0.40	ug/L			11/22/14 05:15	1
Vinyl acetate	ND		2.0	0.33	ug/L			11/22/14 05:15	1
Chloroethane	ND		1.0	0.34	ug/L			11/22/14 05:15	1
Chloroform	ND		1.0	0.20	ug/L			11/22/14 05:15	1
Chloromethane	ND		1.0	0.18	ug/L			11/22/14 05:15	1
cis-1,2-Dichloroethene	ND		1.0	0.12	ug/L			11/22/14 05:15	1
cis-1,3-Dichloropropene	ND		1.0	0.18	ug/L			11/22/14 05:15	1
Dibromochloromethane	ND		1.0	0.32	ug/L			11/22/14 05:15	1
Dibromomethane	ND		1.0	0.33	ug/L			11/22/14 05:15	1
Dichlorodifluoromethane	ND		5.0	0.20	ug/L			11/22/14 05:15	1
Ethylbenzene	ND		0.50	0.13	ug/L			11/22/14 05:15	1
Hexachlorobutadiene	ND		1.0	0.26	ug/L			11/22/14 05:15	1
Isopropylbenzene	ND		1.0	0.14	ug/L			11/22/14 05:15	1
m&p-Xylene	ND		1.0	0.26	ug/L			11/22/14 05:15	1

Client: AbbVie US LLC
Project/Site: Laurinburg, NC VOC Testing (0272871))

TestAmerica Job ID: 500-87930-1

Client Sample ID: TRIP BLANK 1

Lab Sample ID: 500-87930-29

Date Collected: 11/11/14 10:00

Matrix: Water

Date Received: 11/15/14 10:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Ethyl Ketone	ND		5.0	1.5	ug/L			11/22/14 05:15	1
methyl isobutyl ketone	ND		5.0	0.33	ug/L			11/22/14 05:15	1
Methyl tert-butyl ether	ND		1.0	0.24	ug/L			11/22/14 05:15	1
Methylene Chloride	ND		5.0	0.68	ug/L			11/22/14 05:15	1
Naphthalene	ND		1.0	0.16	ug/L			11/22/14 05:15	1
n-Butylbenzene	ND		1.0	0.13	ug/L			11/22/14 05:15	1
N-Propylbenzene	ND		1.0	0.13	ug/L			11/22/14 05:15	1
o-Xylene	ND		0.50	0.068	ug/L			11/22/14 05:15	1
sec-Butylbenzene	ND		1.0	0.15	ug/L			11/22/14 05:15	1
Styrene	ND		1.0	0.10	ug/L			11/22/14 05:15	1
tert-Butylbenzene	ND		1.0	0.14	ug/L			11/22/14 05:15	1
Perchloroethylene	ND		1.0	0.17	ug/L			11/22/14 05:15	1
Toluene	ND		0.50	0.11	ug/L			11/22/14 05:15	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			11/22/14 05:15	1
trans-1,3-Dichloropropene	ND		1.0	0.21	ug/L			11/22/14 05:15	1
Trichloroethylene	ND		0.50	0.19	ug/L			11/22/14 05:15	1
Trichlorofluoromethane	ND		1.0	0.19	ug/L			11/22/14 05:15	1
Vinyl chloride	ND		0.50	0.10	ug/L			11/22/14 05:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*81*		*75 - 125*		*11/22/14 05:15*	*1*
4-Bromofluorobenzene (Surr)	*92*		*75 - 120*		*11/22/14 05:15*	*1*
Dibromofluoromethane	*86*		*75 - 120*		*11/22/14 05:15*	*1*
Toluene-d8 (Surr)	*93*		*75 - 120*		*11/22/14 05:15*	*1*

Client Sample Results

Client: AbbVie US LLC
Project/Site: Laurinburg, NC VOC Testing (0272871))

TestAmerica Job ID: 500-87930-1

Client Sample ID: TRIP BLANK 2

Lab Sample ID: 500-87930-30

Date Collected: 11/11/14 10:00

Matrix: Water

Date Received: 11/15/14 10:25

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			11/22/14 05:42	1
1,1,1-Trichloroethane	ND		1.0	0.20	ug/L			11/22/14 05:42	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.23	ug/L			11/22/14 05:42	1
1,1,2-Trichloroethane	ND		1.0	0.28	ug/L			11/22/14 05:42	1
1,1-Dichloroethane	ND		1.0	0.19	ug/L			11/22/14 05:42	1
1,1-Dichloroethylene	ND		1.0	0.31	ug/L			11/22/14 05:42	1
1,1-Dichloropropene	ND		1.0	0.34	ug/L			11/22/14 05:42	1
1,2,3-Trichlorobenzene	ND		1.0	0.24	ug/L			11/22/14 05:42	1
1,2,3-Trichloropropane	ND		1.0	0.45	ug/L			11/22/14 05:42	1
1,2,4-Trichlorobenzene	ND		1.0	0.31	ug/L			11/22/14 05:42	1
1,2,4-Trimethylbenzene	ND		1.0	0.14	ug/L			11/22/14 05:42	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.87	ug/L			11/22/14 05:42	1
1,2-Dibromoethane	ND		1.0	0.36	ug/L			11/22/14 05:42	1
1,2-Dichlorobenzene	ND		1.0	0.27	ug/L			11/22/14 05:42	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			11/22/14 05:42	1
1,2-Dichloropropane	ND		1.0	0.20	ug/L			11/22/14 05:42	1
1,3,5-Trimethylbenzene	ND		1.0	0.18	ug/L			11/22/14 05:42	1
1,1,2-Trichlorotrifluoroethane	ND		5.0	0.22	ug/L			11/22/14 05:42	1
1,3-Dichlorobenzene	ND		1.0	0.15	ug/L			11/22/14 05:42	1
1,3-Dichloropropane	ND		1.0	0.13	ug/L			11/22/14 05:42	1
1,4-Dichlorobenzene	ND		1.0	0.15	ug/L			11/22/14 05:42	1
2,2-Dichloropropane	ND		1.0	0.32	ug/L			11/22/14 05:42	1
2-Chlorotoluene	ND		1.0	0.21	ug/L			11/22/14 05:42	1
2-Hexanone	ND		5.0	0.56	ug/L			11/22/14 05:42	1
4-Chlorotoluene	ND		1.0	0.20	ug/L			11/22/14 05:42	1
4-Isopropyltoluene	ND		2.0	0.17	ug/L			11/22/14 05:42	1
Acetone	ND		5.0	1.3	ug/L			11/22/14 05:42	1
Benzene	ND		0.50	0.074	ug/L			11/22/14 05:42	1
Bromobenzene	ND		1.0	0.25	ug/L			11/22/14 05:42	1
Bromodichloromethane	ND		1.0	0.17	ug/L			11/22/14 05:42	1
Bromoform	ND		1.0	0.28	ug/L			11/22/14 05:42	1
Bromomethane	ND		5.0	0.31	ug/L			11/22/14 05:42	1
Carbon disulfide	ND		5.0	0.43	ug/L			11/22/14 05:42	1
Carbon tetrachloride	ND		1.0	0.26	ug/L			11/22/14 05:42	1
Chlorobenzene	ND		1.0	0.14	ug/L			11/22/14 05:42	1
Chlorobromomethane	ND		1.0	0.40	ug/L			11/22/14 05:42	1
Vinyl acetate	ND		2.0	0.33	ug/L			11/22/14 05:42	1
Chloroethane	ND		1.0	0.34	ug/L			11/22/14 05:42	1
Chloroform	ND		1.0	0.20	ug/L			11/22/14 05:42	1
Chloromethane	ND		1.0	0.18	ug/L			11/22/14 05:42	1
cis-1,2-Dichloroethene	ND		1.0	0.12	ug/L			11/22/14 05:42	1
cis-1,3-Dichloropropene	ND		1.0	0.18	ug/L			11/22/14 05:42	1
Dibromochloromethane	ND		1.0	0.32	ug/L			11/22/14 05:42	1
Dibromomethane	ND		1.0	0.33	ug/L			11/22/14 05:42	1
Dichlorodifluoromethane	ND		5.0	0.20	ug/L			11/22/14 05:42	1
Ethylbenzene	ND		0.50	0.13	ug/L			11/22/14 05:42	1
Hexachlorobutadiene	ND		1.0	0.26	ug/L			11/22/14 05:42	1
Isopropylbenzene	ND		1.0	0.14	ug/L			11/22/14 05:42	1
m&p-Xylene	ND		1.0	0.26	ug/L			11/22/14 05:42	1

Client: AbbVie US LLC
Project/Site: Laurinburg, NC VOC Testing (0272871))

TestAmerica Job ID: 500-87930-1

Client Sample ID: TRIP BLANK 2

Lab Sample ID: 500-87930-30

Date Collected: 11/11/14 10:00

Matrix: Water

Date Received: 11/15/14 10:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Ethyl Ketone	ND		5.0	1.5	ug/L			11/22/14 05:42	1
methyl isobutyl ketone	ND		5.0	0.33	ug/L			11/22/14 05:42	1
Methyl tert-butyl ether	ND		1.0	0.24	ug/L			11/22/14 05:42	1
Methylene Chloride	ND		5.0	0.68	ug/L			11/22/14 05:42	1
Naphthalene	ND		1.0	0.16	ug/L			11/22/14 05:42	1
n-Butylbenzene	ND		1.0	0.13	ug/L			11/22/14 05:42	1
N-Propylbenzene	ND		1.0	0.13	ug/L			11/22/14 05:42	1
o-Xylene	ND		0.50	0.068	ug/L			11/22/14 05:42	1
sec-Butylbenzene	ND		1.0	0.15	ug/L			11/22/14 05:42	1
Styrene	ND		1.0	0.10	ug/L			11/22/14 05:42	1
tert-Butylbenzene	ND		1.0	0.14	ug/L			11/22/14 05:42	1
Perchloroethylene	ND		1.0	0.17	ug/L			11/22/14 05:42	1
Toluene	ND		0.50	0.11	ug/L			11/22/14 05:42	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			11/22/14 05:42	1
trans-1,3-Dichloropropene	ND		1.0	0.21	ug/L			11/22/14 05:42	1
Trichloroethylene	ND		0.50	0.19	ug/L			11/22/14 05:42	1
Trichlorofluoromethane	ND		1.0	0.19	ug/L			11/22/14 05:42	1
Vinyl chloride	ND		0.50	0.10	ug/L			11/22/14 05:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*80*		*75 - 125*		*11/22/14 05:42*	*1*
4-Bromofluorobenzene (Surr)	*94*		*75 - 120*		*11/22/14 05:42*	*1*
Dibromofluoromethane	*85*		*75 - 120*		*11/22/14 05:42*	*1*
Toluene-d8 (Surr)	*92*		*75 - 120*		*11/22/14 05:42*	*1*

Client Sample ID: TRIP BLANK 3

Lab Sample ID: 500-87930-31

Date Collected: 11/11/14 10:00

Matrix: Water

Date Received: 11/15/14 10:25

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			11/22/14 06:10	1
1,1,1-Trichloroethane	ND		1.0	0.20	ug/L			11/22/14 06:10	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.23	ug/L			11/22/14 06:10	1
1,1,2-Trichloroethane	ND		1.0	0.28	ug/L			11/22/14 06:10	1
1,1-Dichloroethane	ND		1.0	0.19	ug/L			11/22/14 06:10	1
1,1-Dichloroethylene	ND		1.0	0.31	ug/L			11/22/14 06:10	1
1,1-Dichloropropene	ND		1.0	0.34	ug/L			11/22/14 06:10	1
1,2,3-Trichlorobenzene	ND		1.0	0.24	ug/L			11/22/14 06:10	1
1,2,3-Trichloropropane	ND		1.0	0.45	ug/L			11/22/14 06:10	1
1,2,4-Trichlorobenzene	ND		1.0	0.31	ug/L			11/22/14 06:10	1
1,2,4-Trimethylbenzene	ND		1.0	0.14	ug/L			11/22/14 06:10	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.87	ug/L			11/22/14 06:10	1
1,2-Dibromoethane	ND		1.0	0.36	ug/L			11/22/14 06:10	1
1,2-Dichlorobenzene	ND		1.0	0.27	ug/L			11/22/14 06:10	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			11/22/14 06:10	1
1,2-Dichloropropane	ND		1.0	0.20	ug/L			11/22/14 06:10	1
1,3,5-Trimethylbenzene	ND		1.0	0.18	ug/L			11/22/14 06:10	1
1,1,2-Trichlorotrifluoroethane	ND		5.0	0.22	ug/L			11/22/14 06:10	1
1,3-Dichlorobenzene	ND		1.0	0.15	ug/L			11/22/14 06:10	1
1,3-Dichloropropane	ND		1.0	0.13	ug/L			11/22/14 06:10	1
1,4-Dichlorobenzene	ND		1.0	0.15	ug/L			11/22/14 06:10	1
2,2-Dichloropropane	ND		1.0	0.32	ug/L			11/22/14 06:10	1
2-Chlorotoluene	ND		1.0	0.21	ug/L			11/22/14 06:10	1
2-Hexanone	ND		5.0	0.56	ug/L			11/22/14 06:10	1
4-Chlorotoluene	ND		1.0	0.20	ug/L			11/22/14 06:10	1
4-Isopropyltoluene	ND		2.0	0.17	ug/L			11/22/14 06:10	1
Acetone	ND		5.0	1.3	ug/L			11/22/14 06:10	1
Benzene	ND		0.50	0.074	ug/L			11/22/14 06:10	1
Bromobenzene	ND		1.0	0.25	ug/L			11/22/14 06:10	1
Bromodichloromethane	ND		1.0	0.17	ug/L			11/22/14 06:10	1
Bromoform	ND		1.0	0.28	ug/L			11/22/14 06:10	1
Bromomethane	ND		5.0	0.31	ug/L			11/22/14 06:10	1
Carbon disulfide	ND		5.0	0.43	ug/L			11/22/14 06:10	1
Carbon tetrachloride	ND		1.0	0.26	ug/L			11/22/14 06:10	1
Chlorobenzene	ND		1.0	0.14	ug/L			11/22/14 06:10	1
Chlorobromomethane	ND		1.0	0.40	ug/L			11/22/14 06:10	1
Vinyl acetate	ND		2.0	0.33	ug/L			11/22/14 06:10	1
Chloroethane	ND		1.0	0.34	ug/L			11/22/14 06:10	1
Chloroform	ND		1.0	0.20	ug/L			11/22/14 06:10	1
Chloromethane	ND		1.0	0.18	ug/L			11/22/14 06:10	1
cis-1,2-Dichloroethene	ND		1.0	0.12	ug/L			11/22/14 06:10	1
cis-1,3-Dichloropropene	ND		1.0	0.18	ug/L			11/22/14 06:10	1
Dibromochloromethane	ND		1.0	0.32	ug/L			11/22/14 06:10	1
Dibromomethane	ND		1.0	0.33	ug/L			11/22/14 06:10	1
Dichlorodifluoromethane	ND		5.0	0.20	ug/L			11/22/14 06:10	1
Ethylbenzene	ND		0.50	0.13	ug/L			11/22/14 06:10	1
Hexachlorobutadiene	ND		1.0	0.26	ug/L			11/22/14 06:10	1
Isopropylbenzene	ND		1.0	0.14	ug/L			11/22/14 06:10	1
m&p-Xylene	ND		1.0	0.26	ug/L			11/22/14 06:10	1

Client: AbbVie US LLC
Project/Site: Laurinburg, NC VOC Testing (0272871))

TestAmerica Job ID: 500-87930-1

Client Sample ID: TRIP BLANK 3

Lab Sample ID: 500-87930-31

Date Collected: 11/11/14 10:00

Matrix: Water

Date Received: 11/15/14 10:25

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Ethyl Ketone	ND		5.0	1.5	ug/L			11/22/14 06:10	1
methyl isobutyl ketone	ND		5.0	0.33	ug/L			11/22/14 06:10	1
Methyl tert-butyl ether	ND		1.0	0.24	ug/L			11/22/14 06:10	1
Methylene Chloride	ND		5.0	0.68	ug/L			11/22/14 06:10	1
Naphthalene	ND		1.0	0.16	ug/L			11/22/14 06:10	1
n-Butylbenzene	ND		1.0	0.13	ug/L			11/22/14 06:10	1
N-Propylbenzene	ND		1.0	0.13	ug/L			11/22/14 06:10	1
o-Xylene	ND		0.50	0.068	ug/L			11/22/14 06:10	1
sec-Butylbenzene	ND		1.0	0.15	ug/L			11/22/14 06:10	1
Styrene	ND		1.0	0.10	ug/L			11/22/14 06:10	1
tert-Butylbenzene	ND		1.0	0.14	ug/L			11/22/14 06:10	1
Perchloroethylene	ND		1.0	0.17	ug/L			11/22/14 06:10	1
Toluene	ND		0.50	0.11	ug/L			11/22/14 06:10	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			11/22/14 06:10	1
trans-1,3-Dichloropropene	ND		1.0	0.21	ug/L			11/22/14 06:10	1
Trichloroethylene	ND		0.50	0.19	ug/L			11/22/14 06:10	1
Trichlorofluoromethane	ND		1.0	0.19	ug/L			11/22/14 06:10	1
Vinyl chloride	ND		0.50	0.10	ug/L			11/22/14 06:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*81*		*75 - 125*		*11/22/14 06:10*	*1*
4-Bromofluorobenzene (Surr)	*93*		*75 - 120*		*11/22/14 06:10*	*1*
Dibromofluoromethane	*85*		*75 - 120*		*11/22/14 06:10*	*1*
Toluene-d8 (Surr)	*91*		*75 - 120*		*11/22/14 06:10*	*1*

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery exceeds the control limits
X	Surrogate is outside control limits
F2	MS/MSD RPD exceeds control limits

GC/MS VOA TICs

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
J	Indicates an Estimated Value for TICs
N	Presumptive evidence of material.
T	Result is a tentatively identified compound (TIC) and an estimated value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

QC Association Summary

Client: AbbVie US LLC
Project/Site: Laurinburg, NC VOC Testing (0272871))

TestAmerica Job ID: 500-87930-1

GC/MS VOA

Analysis Batch: 265023

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-87930-1	MW-10B	Total/NA	Water	8260B	
500-87930-2	MW-10D	Total/NA	Water	8260B	
500-87930-2 - DL	MW-10D	Total/NA	Water	8260B	
500-87930-3	MW-16B	Total/NA	Water	8260B	
500-87930-4	MW-16D	Total/NA	Water	8260B	
500-87930-5	MW-18B	Total/NA	Water	8260B	
500-87930-6	MW-18D	Total/NA	Water	8260B	
500-87930-7	MW-19B	Total/NA	Water	8260B	
500-87930-9	MW-20B	Total/NA	Water	8260B	
500-87930-9 MS	MW-20B	Total/NA	Water	8260B	
500-87930-9 MSD	MW-20B	Total/NA	Water	8260B	
LCS 500-265023/4	Lab Control Sample	Total/NA	Water	8260B	
MB 500-265023/6	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 265115

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-87930-1 - DL	MW-10B	Total/NA	Water	8260B	
500-87930-8	MW-19D	Total/NA	Water	8260B	
LCS 500-265115/4	Lab Control Sample	Total/NA	Water	8260B	
MB 500-265115/6	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 265193

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-87930-10	MW-20D	Total/NA	Water	8260B	
500-87930-11	MW-100A	Total/NA	Water	8260B	
500-87930-11 - DL	MW-100A	Total/NA	Water	8260B	
500-87930-12	MW-100B	Total/NA	Water	8260B	
500-87930-12 - DL	MW-100B	Total/NA	Water	8260B	
500-87930-13	MW-101A	Total/NA	Water	8260B	
500-87930-13 - DL	MW-101A	Total/NA	Water	8260B	
500-87930-14	MW-101B	Total/NA	Water	8260B	
500-87930-14 MS	MW-101B	Total/NA	Water	8260B	
500-87930-14 MSD	MW-101B	Total/NA	Water	8260B	
500-87930-15	MW-102A	Total/NA	Water	8260B	
500-87930-15 - DL	MW-102A	Total/NA	Water	8260B	
500-87930-16	MW-102B	Total/NA	Water	8260B	
500-87930-16 - DL	MW-102B	Total/NA	Water	8260B	
500-87930-17	MW-102C	Total/NA	Water	8260B	
500-87930-17 - DL	MW-102C	Total/NA	Water	8260B	
500-87930-18	MW-103A	Total/NA	Water	8260B	
500-87930-18 - DL	MW-103A	Total/NA	Water	8260B	
500-87930-19	MW-103B	Total/NA	Water	8260B	
500-87930-19 - DL	MW-103B	Total/NA	Water	8260B	
500-87930-20	MW-103C	Total/NA	Water	8260B	
500-87930-20 - DL	MW-103C	Total/NA	Water	8260B	
LCS 500-265193/4	Lab Control Sample	Total/NA	Water	8260B	
MB 500-265193/6	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 265364

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-87930-21	MW-104A	Total/NA	Water	8260B	

GC/MS VOA (Continued)

Analysis Batch: 265364 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-87930-21 - DL	MW-104A	Total/NA	Water	8260B	
500-87930-22	MW-104B	Total/NA	Water	8260B	
500-87930-22 - DL	MW-104B	Total/NA	Water	8260B	
500-87930-23	MW-104C	Total/NA	Water	8260B	
500-87930-23 - DL	MW-104C	Total/NA	Water	8260B	
LCS 500-265364/5	Lab Control Sample	Total/NA	Water	8260B	
MB 500-265364/7	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 265449

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-87930-24	MW-105C	Total/NA	Water	8260B	
500-87930-25 - DL	112014-GW-DUP01	Total/NA	Water	8260B	
500-87930-26	112014-GW-DUP02	Total/NA	Water	8260B	
500-87930-26 - DL	112014-GW-DUP02	Total/NA	Water	8260B	
500-87930-27	IDW-DRUM-01	Total/NA	Water	8260B	
500-87930-27 - DL	IDW-DRUM-01	Total/NA	Water	8260B	
500-87930-28	IDW-DRUM-02	Total/NA	Water	8260B	
500-87930-28 MS	IDW-DRUM-02	Total/NA	Water	8260B	
500-87930-28 MSD	IDW-DRUM-02	Total/NA	Water	8260B	
500-87930-29	TRIP BLANK 1	Total/NA	Water	8260B	
500-87930-30	TRIP BLANK 2	Total/NA	Water	8260B	
500-87930-31	TRIP BLANK 3	Total/NA	Water	8260B	
LCS 500-265449/4	Lab Control Sample	Total/NA	Water	8260B	
MB 500-265449/6	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 265560

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-87930-25	112014-GW-DUP01	Total/NA	Water	8260B	
LCS 500-265560/4	Lab Control Sample	Total/NA	Water	8260B	
MB 500-265560/6	Method Blank	Total/NA	Water	8260B	

Surrogate Summary

Client: AbbVie US LLC
Project/Site: Laurinburg, NC VOC Testing (0272871))

TestAmerica Job ID: 500-87930-1

Method: 8260B - Volatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(75-125)	(75-120)	(75-120)	(75-120)
500-87930-1	MW-10B	96	93	103	105
500-87930-1 - DL	MW-10B	94	93	99	103
500-87930-2	MW-10D	124	99	121 X	108
500-87930-2 - DL	MW-10D	94	93	101	105
500-87930-3	MW-16B	96	92	103	105
500-87930-4	MW-16D	98	94	105	107
500-87930-5	MW-18B	97	92	102	105
500-87930-6	MW-18D	94	92	102	104
500-87930-7	MW-19B	97	94	101	106
500-87930-8	MW-19D	94	92	101	104
500-87930-9	MW-20B	98	92	104	105
500-87930-9 MS	MW-20B	94	96	101	103
500-87930-9 MSD	MW-20B	92	97	101	104
500-87930-10	MW-20D	94	93	101	106
500-87930-11	MW-100A	93	94	100	104
500-87930-11 - DL	MW-100A	97	93	103	104
500-87930-12	MW-100B	91	92	101	103
500-87930-12 - DL	MW-100B	92	92	101	104
500-87930-13	MW-101A	92	92	100	103
500-87930-13 - DL	MW-101A	92	92	100	103
500-87930-14	MW-101B	92	91	101	104
500-87930-14 MS	MW-101B	92	94	100	102
500-87930-14 MSD	MW-101B	89	94	98	103
500-87930-15	MW-102A	97	93	104	105
500-87930-15 - DL	MW-102A	95	92	102	104
500-87930-16	MW-102B	94	92	102	104
500-87930-16 - DL	MW-102B	95	90	101	103
500-87930-17	MW-102C	92	93	101	102
500-87930-17 - DL	MW-102C	92	91	102	104
500-87930-18	MW-103A	93	91	102	104
500-87930-18 - DL	MW-103A	94	92	104	104
500-87930-19	MW-103B	97	91	104	104
500-87930-19 - DL	MW-103B	94	90	101	105
500-87930-20	MW-103C	96	92	102	105
500-87930-20 - DL	MW-103C	92	92	100	104
500-87930-21	MW-104A	80	91	84	93
500-87930-21 - DL	MW-104A	80	92	86	91
500-87930-22	MW-104B	81	94	84	92
500-87930-22 - DL	MW-104B	91	93	89	89
500-87930-23	MW-104C	82	92	84	92
500-87930-23 - DL	MW-104C	80	93	84	92
500-87930-24	MW-105C	79	95	86	94
500-87930-25 - DL	112014-GW-DUP01	82	95	88	91
500-87930-25	112014-GW-DUP01	93	93	101	104
500-87930-26	112014-GW-DUP02	81	94	84	92
500-87930-26 - DL	112014-GW-DUP02	80	95	84	92
500-87930-27	IDW-DRUM-01	80	94	87	93
500-87930-27 - DL	IDW-DRUM-01	81	97	84	90
500-87930-28	IDW-DRUM-02	81	95	85	92

Surrogate Summary

Client: AbbVie US LLC
Project/Site: Laurinburg, NC VOC Testing (0272871))

TestAmerica Job ID: 500-87930-1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(75-125)	(75-120)	(75-120)	(75-120)
500-87930-28 MS	IDW-DRUM-02	79	95	88	93
500-87930-28 MSD	IDW-DRUM-02	80	96	87	93
500-87930-29	TRIP BLANK 1	81	92	86	93
500-87930-30	TRIP BLANK 2	80	94	85	92
500-87930-31	TRIP BLANK 3	81	93	85	91
LCS 500-265023/4	Lab Control Sample	93	96	100	104
LCS 500-265115/4	Lab Control Sample	91	98	98	103
LCS 500-265193/4	Lab Control Sample	94	99	103	105
LCS 500-265364/5	Lab Control Sample	78	91	88	93
LCS 500-265449/4	Lab Control Sample	79	94	89	94
LCS 500-265560/4	Lab Control Sample	90	97	100	103
MB 500-265023/6	Method Blank	95	95	101	105
MB 500-265115/6	Method Blank	98	96	103	105
MB 500-265193/6	Method Blank	94	94	102	105
MB 500-265364/7	Method Blank	81	95	85	93
MB 500-265449/6	Method Blank	80	93	85	93
MB 500-265560/6	Method Blank	90	92	100	105

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane
TOL = Toluene-d8 (Surr)

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 500-265023/6
Matrix: Water
Analysis Batch: 265023

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			11/19/14 22:46	1
1,1,1-Trichloroethane	ND		1.0	0.20	ug/L			11/19/14 22:46	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.23	ug/L			11/19/14 22:46	1
1,1,2-Trichloroethane	ND		1.0	0.28	ug/L			11/19/14 22:46	1
1,1-Dichloroethane	ND		1.0	0.19	ug/L			11/19/14 22:46	1
1,1-Dichloroethylene	ND		1.0	0.31	ug/L			11/19/14 22:46	1
1,1-Dichloropropene	ND		1.0	0.34	ug/L			11/19/14 22:46	1
1,2,3-Trichlorobenzene	ND		1.0	0.24	ug/L			11/19/14 22:46	1
1,2,3-Trichloropropane	ND		1.0	0.45	ug/L			11/19/14 22:46	1
1,2,4-Trichlorobenzene	ND		1.0	0.31	ug/L			11/19/14 22:46	1
1,2,4-Trimethylbenzene	ND		1.0	0.14	ug/L			11/19/14 22:46	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.87	ug/L			11/19/14 22:46	1
1,2-Dibromoethane	ND		1.0	0.36	ug/L			11/19/14 22:46	1
1,2-Dichlorobenzene	ND		1.0	0.27	ug/L			11/19/14 22:46	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			11/19/14 22:46	1
1,2-Dichloropropane	ND		1.0	0.20	ug/L			11/19/14 22:46	1
1,3,5-Trimethylbenzene	ND		1.0	0.18	ug/L			11/19/14 22:46	1
1,1,2-Trichlorotrifluoroethane	ND		5.0	0.22	ug/L			11/19/14 22:46	1
1,3-Dichlorobenzene	ND		1.0	0.15	ug/L			11/19/14 22:46	1
1,3-Dichloropropane	ND		1.0	0.13	ug/L			11/19/14 22:46	1
1,4-Dichlorobenzene	ND		1.0	0.15	ug/L			11/19/14 22:46	1
2,2-Dichloropropane	ND		1.0	0.32	ug/L			11/19/14 22:46	1
2-Chlorotoluene	ND		1.0	0.21	ug/L			11/19/14 22:46	1
2-Hexanone	ND		5.0	0.56	ug/L			11/19/14 22:46	1
4-Chlorotoluene	ND		1.0	0.20	ug/L			11/19/14 22:46	1
4-Isopropyltoluene	ND		2.0	0.17	ug/L			11/19/14 22:46	1
Acetone	ND		5.0	1.3	ug/L			11/19/14 22:46	1
Benzene	ND		0.50	0.074	ug/L			11/19/14 22:46	1
Bromobenzene	ND		1.0	0.25	ug/L			11/19/14 22:46	1
Bromodichloromethane	ND		1.0	0.17	ug/L			11/19/14 22:46	1
Bromoform	ND		1.0	0.28	ug/L			11/19/14 22:46	1
Bromomethane	ND		5.0	0.31	ug/L			11/19/14 22:46	1
Carbon disulfide	ND		5.0	0.43	ug/L			11/19/14 22:46	1
Carbon tetrachloride	ND		1.0	0.26	ug/L			11/19/14 22:46	1
Chlorobenzene	ND		1.0	0.14	ug/L			11/19/14 22:46	1
Chlorobromomethane	ND		1.0	0.40	ug/L			11/19/14 22:46	1
Vinyl acetate	ND		2.0	0.33	ug/L			11/19/14 22:46	1
Chloroethane	ND		1.0	0.34	ug/L			11/19/14 22:46	1
Chloroform	ND		1.0	0.20	ug/L			11/19/14 22:46	1
Chloromethane	ND		1.0	0.18	ug/L			11/19/14 22:46	1
cis-1,2-Dichloroethene	ND		1.0	0.12	ug/L			11/19/14 22:46	1
cis-1,3-Dichloropropene	ND		1.0	0.18	ug/L			11/19/14 22:46	1
Dibromochloromethane	ND		1.0	0.32	ug/L			11/19/14 22:46	1
Dibromomethane	ND		1.0	0.33	ug/L			11/19/14 22:46	1
Dichlorodifluoromethane	ND		5.0	0.20	ug/L			11/19/14 22:46	1
Ethylbenzene	ND		0.50	0.13	ug/L			11/19/14 22:46	1
Hexachlorobutadiene	ND		1.0	0.26	ug/L			11/19/14 22:46	1
Isopropylbenzene	ND		1.0	0.14	ug/L			11/19/14 22:46	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-265023/6
Matrix: Water
Analysis Batch: 265023

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m&p-Xylene	ND		1.0	0.26	ug/L			11/19/14 22:46	1
Methyl Ethyl Ketone	ND		5.0	1.5	ug/L			11/19/14 22:46	1
methyl isobutyl ketone	ND		5.0	0.33	ug/L			11/19/14 22:46	1
Methyl tert-butyl ether	ND		1.0	0.24	ug/L			11/19/14 22:46	1
Methylene Chloride	ND		5.0	0.68	ug/L			11/19/14 22:46	1
Naphthalene	ND		1.0	0.16	ug/L			11/19/14 22:46	1
n-Butylbenzene	ND		1.0	0.13	ug/L			11/19/14 22:46	1
N-Propylbenzene	ND		1.0	0.13	ug/L			11/19/14 22:46	1
o-Xylene	ND		0.50	0.068	ug/L			11/19/14 22:46	1
sec-Butylbenzene	ND		1.0	0.15	ug/L			11/19/14 22:46	1
Styrene	ND		1.0	0.10	ug/L			11/19/14 22:46	1
tert-Butylbenzene	ND		1.0	0.14	ug/L			11/19/14 22:46	1
Perchloroethylene	ND		1.0	0.17	ug/L			11/19/14 22:46	1
Toluene	ND		0.50	0.11	ug/L			11/19/14 22:46	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			11/19/14 22:46	1
trans-1,3-Dichloropropene	ND		1.0	0.21	ug/L			11/19/14 22:46	1
Trichloroethylene	ND		0.50	0.19	ug/L			11/19/14 22:46	1
Trichlorofluoromethane	ND		1.0	0.19	ug/L			11/19/14 22:46	1
Vinyl chloride	ND		0.50	0.10	ug/L			11/19/14 22:46	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*75 - 125*		*11/19/14 22:46*	*1*
4-Bromofluorobenzene (Surr)	*95*		*75 - 120*		*11/19/14 22:46*	*1*
Dibromofluoromethane	*101*		*75 - 120*		*11/19/14 22:46*	*1*
Toluene-d8 (Surr)	*105*		*75 - 120*		*11/19/14 22:46*	*1*

Lab Sample ID: LCS 500-265023/4
Matrix: Water
Analysis Batch: 265023

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	50.0	48.9		ug/L		98	75 - 122
1,1,1-Trichloroethane	50.0	45.1		ug/L		90	72 - 130
1,1,2,2-Tetrachloroethane	50.0	48.9		ug/L		98	72 - 130
1,1,2-Trichloroethane	50.0	47.8		ug/L		96	75 - 120
1,1-Dichloroethane	50.0	47.2		ug/L		94	75 - 120
1,1-Dichloroethylene	50.0	45.9		ug/L		92	69 - 120
1,1-Dichloropropene	50.0	47.0		ug/L		94	75 - 130
1,2,3-Trichlorobenzene	50.0	45.6		ug/L		91	69 - 131
1,2,3-Trichloropropane	50.0	52.3		ug/L		105	65 - 132
1,2,4-Trichlorobenzene	50.0	46.7		ug/L		93	73 - 130
1,2,4-Trimethylbenzene	50.0	49.1		ug/L		98	75 - 121
1,2-Dibromo-3-Chloropropane	50.0	46.3		ug/L		93	62 - 130
1,2-Dibromoethane	50.0	47.9		ug/L		96	78 - 122
1,2-Dichlorobenzene	50.0	49.4		ug/L		99	75 - 120
1,2-Dichloroethane	50.0	44.4		ug/L		89	69 - 130
1,2-Dichloropropane	50.0	49.2		ug/L		98	75 - 120
1,3,5-Trimethylbenzene	50.0	49.5		ug/L		99	75 - 121

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-265023/4
Matrix: Water
Analysis Batch: 265023

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,2-Trichlorotrifluoroethane	50.0	45.7		ug/L		91	69 - 120
1,3-Dichlorobenzene	50.0	49.5		ug/L		99	75 - 120
1,3-Dichloropropane	50.0	48.8		ug/L		98	77 - 124
1,4-Dichlorobenzene	50.0	49.3		ug/L		99	75 - 120
2,2-Dichloropropane	50.0	42.1		ug/L		84	65 - 132
2-Chlorotoluene	50.0	49.1		ug/L		98	75 - 120
2-Hexanone	50.0	42.7		ug/L		85	55 - 140
4-Chlorotoluene	50.0	49.4		ug/L		99	75 - 120
4-Isopropyltoluene	50.0	50.3		ug/L		101	75 - 121
Acetone	50.0	45.0		ug/L		90	48 - 149
Benzene	50.0	48.2		ug/L		96	75 - 120
Bromobenzene	50.0	49.7		ug/L		99	75 - 120
Bromodichloromethane	50.0	46.6		ug/L		93	77 - 121
Bromoform	50.0	49.0		ug/L		98	68 - 126
Bromomethane	50.0	46.2		ug/L		92	45 - 169
Carbon disulfide	50.0	44.4		ug/L		89	56 - 130
Carbon tetrachloride	50.0	45.3		ug/L		91	70 - 130
Chlorobenzene	50.0	48.4		ug/L		97	75 - 120
Chlorobromomethane	50.0	47.0		ug/L		94	76 - 120
Vinyl acetate	50.0	35.1		ug/L		70	40 - 137
Chloroethane	50.0	55.5		ug/L		111	58 - 147
Chloroform	50.0	45.6		ug/L		91	76 - 120
Chloromethane	50.0	50.6		ug/L		101	63 - 133
cis-1,2-Dichloroethene	50.0	46.8		ug/L		94	75 - 120
cis-1,3-Dichloropropene	50.0	46.3		ug/L		93	78 - 130
Dibromochloromethane	50.0	49.2		ug/L		98	71 - 126
Dibromomethane	50.0	45.1		ug/L		90	75 - 120
Dichlorodifluoromethane	50.0	53.6		ug/L		107	41 - 146
Ethylbenzene	50.0	48.3		ug/L		97	75 - 120
Hexachlorobutadiene	50.0	47.2		ug/L		94	71 - 131
Isopropylbenzene	50.0	49.9		ug/L		100	75 - 121
m&p-Xylene	50.0	47.5		ug/L		95	75 - 120
Methyl Ethyl Ketone	50.0	44.3		ug/L		89	53 - 142
methyl isobutyl ketone	50.0	43.9		ug/L		88	58 - 135
Methyl tert-butyl ether	50.0	41.2		ug/L		82	75 - 130
Methylene Chloride	50.0	47.8		ug/L		96	73 - 130
Naphthalene	50.0	44.9		ug/L		90	69 - 135
n-Butylbenzene	50.0	49.9		ug/L		100	75 - 121
N-Propylbenzene	50.0	50.4		ug/L		101	75 - 120
o-Xylene	50.0	48.5		ug/L		97	75 - 120
sec-Butylbenzene	50.0	50.0		ug/L		100	75 - 120
Styrene	50.0	49.6		ug/L		99	75 - 120
tert-Butylbenzene	50.0	49.8		ug/L		100	75 - 123
Perchloroethylene	50.0	48.4		ug/L		97	75 - 120
Toluene	50.0	47.8		ug/L		96	75 - 120
trans-1,2-Dichloroethene	50.0	46.9		ug/L		94	77 - 120
trans-1,3-Dichloropropene	50.0	45.9		ug/L		92	74 - 130
Trichloroethylene	50.0	48.9		ug/L		98	75 - 120

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-265023/4
Matrix: Water
Analysis Batch: 265023

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Trichlorofluoromethane	50.0	43.7		ug/L		87	71 - 130
Vinyl chloride	50.0	48.7		ug/L		97	72 - 123

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*93*		*75 - 125*
4-Bromofluorobenzene (Surr)	*96*		*75 - 120*
Dibromofluoromethane	*100*		*75 - 120*
Toluene-d8 (Surr)	*104*		*75 - 120*

Lab Sample ID: 500-87930-9 MS
Matrix: Water
Analysis Batch: 265023

Client Sample ID: MW-20B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	ND		50.0	46.6		ug/L		93	75 - 122
1,1,1-Trichloroethane	ND		50.0	43.8		ug/L		88	72 - 130
1,1,2,2-Tetrachloroethane	ND		50.0	48.1		ug/L		96	72 - 130
1,1,2-Trichloroethane	ND		50.0	44.6		ug/L		89	75 - 120
1,1-Dichloroethane	ND		50.0	46.1		ug/L		92	75 - 120
1,1-Dichloroethylene	ND		50.0	45.1		ug/L		90	69 - 120
1,1-Dichloropropene	ND		50.0	45.1		ug/L		90	75 - 130
1,2,3-Trichlorobenzene	ND		50.0	41.1		ug/L		82	69 - 131
1,2,3-Trichloropropane	ND		50.0	40.8		ug/L		82	65 - 132
1,2,4-Trichlorobenzene	ND		50.0	39.6		ug/L		79	73 - 130
1,2,4-Trimethylbenzene	ND		50.0	46.7		ug/L		93	75 - 121
1,2-Dibromo-3-Chloropropane	ND		50.0	45.1		ug/L		90	62 - 130
1,2-Dibromoethane	ND		50.0	46.0		ug/L		92	78 - 122
1,2-Dichlorobenzene	ND		50.0	47.2		ug/L		94	75 - 120
1,2-Dichloroethane	ND		50.0	42.6		ug/L		85	69 - 130
1,2-Dichloropropane	ND		50.0	47.0		ug/L		94	75 - 120
1,3,5-Trimethylbenzene	ND		50.0	47.9		ug/L		96	75 - 121
1,1,2-Trichlorotrifluoroethane	ND		50.0	45.3		ug/L		91	69 - 120
1,3-Dichlorobenzene	ND		50.0	46.5		ug/L		93	75 - 120
1,3-Dichloropropane	ND		50.0	47.0		ug/L		94	77 - 124
1,4-Dichlorobenzene	ND		50.0	45.7		ug/L		91	75 - 120
2,2-Dichloropropane	ND		50.0	39.9		ug/L		80	65 - 132
2-Chlorotoluene	ND		50.0	47.7		ug/L		95	75 - 120
2-Hexanone	ND		50.0	45.1		ug/L		90	55 - 140
4-Chlorotoluene	ND		50.0	46.7		ug/L		93	75 - 120
4-Isopropyltoluene	ND		50.0	47.4		ug/L		95	75 - 121
Acetone	ND		50.0	44.0		ug/L		88	48 - 149
Benzene	ND		50.0	46.8		ug/L		94	75 - 120
Bromobenzene	ND		50.0	49.2		ug/L		98	75 - 120
Bromodichloromethane	ND		50.0	44.4		ug/L		89	77 - 121
Bromoform	ND		50.0	45.9		ug/L		92	68 - 126
Bromomethane	ND		50.0	42.5		ug/L		85	45 - 169
Carbon disulfide	ND		50.0	43.2		ug/L		86	56 - 130
Carbon tetrachloride	ND		50.0	44.2		ug/L		88	70 - 130

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-87930-9 MS
Matrix: Water
Analysis Batch: 265023

Client Sample ID: MW-20B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chlorobenzene	ND		50.0	46.3		ug/L		93	75 - 120
Chlorobromomethane	ND		50.0	46.8		ug/L		94	76 - 120
Vinyl acetate	ND		50.0	32.7		ug/L		65	40 - 137
Chloroethane	ND		50.0	61.7		ug/L		123	58 - 147
Chloroform	ND		50.0	44.2		ug/L		88	76 - 120
Chloromethane	ND		50.0	53.2		ug/L		106	63 - 133
cis-1,2-Dichloroethene	ND		50.0	46.5		ug/L		93	75 - 120
cis-1,3-Dichloropropene	ND		50.0	42.6		ug/L		85	78 - 130
Dibromochloromethane	ND		50.0	46.9		ug/L		94	71 - 126
Dibromomethane	ND		50.0	44.3		ug/L		89	75 - 120
Dichlorodifluoromethane	ND		50.0	54.6		ug/L		109	41 - 146
Ethylbenzene	ND		50.0	46.6		ug/L		93	75 - 120
Hexachlorobutadiene	ND		50.0	44.4		ug/L		89	71 - 131
Isopropylbenzene	ND		50.0	49.6		ug/L		99	75 - 121
m&p-Xylene	ND		50.0	45.8		ug/L		92	75 - 120
Methyl Ethyl Ketone	ND		50.0	42.9		ug/L		86	53 - 142
methyl isobutyl ketone	ND		50.0	43.2		ug/L		86	58 - 135
Methyl tert-butyl ether	ND		50.0	39.0		ug/L		78	75 - 130
Methylene Chloride	ND		50.0	45.9		ug/L		92	73 - 130
Naphthalene	ND		50.0	41.6		ug/L		83	69 - 135
n-Butylbenzene	ND		50.0	44.9		ug/L		90	75 - 121
N-Propylbenzene	ND		50.0	48.5		ug/L		97	75 - 120
o-Xylene	ND		50.0	46.3		ug/L		93	75 - 120
sec-Butylbenzene	ND		50.0	48.6		ug/L		97	75 - 120
Styrene	ND		50.0	46.4		ug/L		93	75 - 120
tert-Butylbenzene	ND		50.0	49.3		ug/L		99	75 - 123
Perchloroethylene	ND		50.0	46.1		ug/L		92	75 - 120
Toluene	ND		50.0	45.5		ug/L		91	75 - 120
trans-1,2-Dichloroethene	ND		50.0	45.8		ug/L		92	77 - 120
trans-1,3-Dichloropropene	ND		50.0	42.4		ug/L		85	74 - 130
Trichloroethylene	ND		50.0	46.3		ug/L		93	75 - 120
Trichlorofluoromethane	ND		50.0	45.7		ug/L		91	71 - 130
Vinyl chloride	ND		50.0	51.0		ug/L		102	72 - 123

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*94*		*75 - 125*
4-Bromofluorobenzene (Surr)	*96*		*75 - 120*
Dibromofluoromethane	*101*		*75 - 120*
Toluene-d8 (Surr)	*103*		*75 - 120*

Lab Sample ID: 500-87930-9 MSD
Matrix: Water
Analysis Batch: 265023

Client Sample ID: MW-20B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	ND		50.0	49.9		ug/L		100	75 - 122	7	20
1,1,1-Trichloroethane	ND		50.0	47.1		ug/L		94	72 - 130	7	20
1,1,2,2-Tetrachloroethane	ND		50.0	51.4		ug/L		103	72 - 130	7	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-87930-9 MSD
Matrix: Water
Analysis Batch: 265023

Client Sample ID: MW-20B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,2-Trichloroethane	ND		50.0	48.4		ug/L		97	75 - 120	8	20
1,1-Dichloroethane	ND		50.0	50.1		ug/L		100	75 - 120	8	20
1,1-Dichloroethylene	ND		50.0	48.7		ug/L		97	69 - 120	8	20
1,1-Dichloropropene	ND		50.0	49.5		ug/L		99	75 - 130	9	20
1,2,3-Trichlorobenzene	ND		50.0	46.2		ug/L		92	69 - 131	12	20
1,2,3-Trichloropropane	ND		50.0	42.5		ug/L		85	65 - 132	4	20
1,2,4-Trichlorobenzene	ND		50.0	45.4		ug/L		91	73 - 130	14	20
1,2,4-Trimethylbenzene	ND		50.0	51.2		ug/L		102	75 - 121	9	20
1,2-Dibromo-3-Chloropropane	ND		50.0	48.9		ug/L		98	62 - 130	8	20
1,2-Dibromoethane	ND		50.0	48.6		ug/L		97	78 - 122	5	20
1,2-Dichlorobenzene	ND		50.0	51.0		ug/L		102	75 - 120	8	20
1,2-Dichloroethane	ND		50.0	45.5		ug/L		91	69 - 130	7	20
1,2-Dichloropropane	ND		50.0	50.6		ug/L		101	75 - 120	8	20
1,3,5-Trimethylbenzene	ND		50.0	52.0		ug/L		104	75 - 121	8	20
1,1,2-Trichlorotrifluoroethane	ND		50.0	47.6		ug/L		95	69 - 120	5	20
1,3-Dichlorobenzene	ND		50.0	51.0		ug/L		102	75 - 120	9	20
1,3-Dichloropropane	ND		50.0	49.9		ug/L		100	77 - 124	6	20
1,4-Dichlorobenzene	ND		50.0	50.8		ug/L		102	75 - 120	11	20
2,2-Dichloropropane	ND		50.0	42.7		ug/L		85	65 - 132	7	20
2-Chlorotoluene	ND		50.0	51.7		ug/L		103	75 - 120	8	20
2-Hexanone	ND		50.0	47.3		ug/L		95	55 - 140	5	20
4-Chlorotoluene	ND		50.0	51.1		ug/L		102	75 - 120	9	20
4-Isopropyltoluene	ND		50.0	52.1		ug/L		104	75 - 121	9	20
Acetone	ND		50.0	46.0		ug/L		92	48 - 149	5	20
Benzene	ND		50.0	50.2		ug/L		100	75 - 120	7	20
Bromobenzene	ND		50.0	52.0		ug/L		104	75 - 120	6	20
Bromodichloromethane	ND		50.0	47.4		ug/L		95	77 - 121	7	20
Bromoform	ND		50.0	48.5		ug/L		97	68 - 126	5	20
Bromomethane	ND		50.0	48.6		ug/L		97	45 - 169	13	20
Carbon disulfide	ND		50.0	46.6		ug/L		93	56 - 130	8	20
Carbon tetrachloride	ND		50.0	47.8		ug/L		96	70 - 130	8	20
Chlorobenzene	ND		50.0	49.9		ug/L		100	75 - 120	7	20
Chlorobromomethane	ND		50.0	50.3		ug/L		101	76 - 120	7	20
Vinyl acetate	ND		50.0	34.2		ug/L		68	40 - 137	5	20
Chloroethane	ND		50.0	64.8		ug/L		130	58 - 147	5	20
Chloroform	ND		50.0	47.5		ug/L		95	76 - 120	7	20
Chloromethane	ND		50.0	58.3		ug/L		117	63 - 133	9	20
cis-1,2-Dichloroethene	ND		50.0	49.4		ug/L		99	75 - 120	6	20
cis-1,3-Dichloropropene	ND		50.0	46.5		ug/L		93	78 - 130	9	20
Dibromochloromethane	ND		50.0	50.3		ug/L		101	71 - 126	7	20
Dibromomethane	ND		50.0	47.1		ug/L		94	75 - 120	6	20
Dichlorodifluoromethane	ND		50.0	60.0		ug/L		120	41 - 146	9	20
Ethylbenzene	ND		50.0	50.4		ug/L		101	75 - 120	8	20
Hexachlorobutadiene	ND		50.0	49.7		ug/L		99	71 - 131	11	20
Isopropylbenzene	ND		50.0	53.6		ug/L		107	75 - 121	8	20
m&p-Xylene	ND		50.0	49.0		ug/L		98	75 - 120	7	20
Methyl Ethyl Ketone	ND		50.0	44.8		ug/L		90	53 - 142	4	20
methyl isobutyl ketone	ND		50.0	45.7		ug/L		91	58 - 135	6	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-87930-9 MSD
Matrix: Water
Analysis Batch: 265023

Client Sample ID: MW-20B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl tert-butyl ether	ND		50.0	41.9		ug/L		84	75 - 130	7	20
Methylene Chloride	ND		50.0	49.0		ug/L		98	73 - 130	7	20
Naphthalene	ND		50.0	46.3		ug/L		93	69 - 135	11	20
n-Butylbenzene	ND		50.0	50.0		ug/L		100	75 - 121	11	20
N-Propylbenzene	ND		50.0	53.0		ug/L		106	75 - 120	9	20
o-Xylene	ND		50.0	49.8		ug/L		100	75 - 120	7	20
sec-Butylbenzene	ND		50.0	53.1		ug/L		106	75 - 120	9	20
Styrene	ND		50.0	50.2		ug/L		100	75 - 120	8	20
tert-Butylbenzene	ND		50.0	53.4		ug/L		107	75 - 123	8	20
Perchloroethylene	ND		50.0	49.7		ug/L		99	75 - 120	7	20
Toluene	ND		50.0	49.6		ug/L		99	75 - 120	9	20
trans-1,2-Dichloroethene	ND		50.0	49.7		ug/L		99	77 - 120	8	20
trans-1,3-Dichloropropene	ND		50.0	46.2		ug/L		92	74 - 130	9	20
Trichloroethylene	ND		50.0	50.8		ug/L		102	75 - 120	9	20
Trichlorofluoromethane	ND		50.0	50.0		ug/L		100	71 - 130	9	20
Vinyl chloride	ND		50.0	54.8		ug/L		110	72 - 123	7	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*92*		*75 - 125*
4-Bromofluorobenzene (Surr)	*97*		*75 - 120*
Dibromofluoromethane	*101*		*75 - 120*
Toluene-d8 (Surr)	*104*		*75 - 120*

Lab Sample ID: MB 500-265115/6
Matrix: Water
Analysis Batch: 265115

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			11/20/14 10:32	1
1,1,1-Trichloroethane	ND		1.0	0.20	ug/L			11/20/14 10:32	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.23	ug/L			11/20/14 10:32	1
1,1,2-Trichloroethane	ND		1.0	0.28	ug/L			11/20/14 10:32	1
1,1-Dichloroethane	ND		1.0	0.19	ug/L			11/20/14 10:32	1
1,1-Dichloroethylene	ND		1.0	0.31	ug/L			11/20/14 10:32	1
1,1-Dichloropropene	ND		1.0	0.34	ug/L			11/20/14 10:32	1
1,2,3-Trichlorobenzene	ND		1.0	0.24	ug/L			11/20/14 10:32	1
1,2,3-Trichloropropane	ND		1.0	0.45	ug/L			11/20/14 10:32	1
1,2,4-Trichlorobenzene	ND		1.0	0.31	ug/L			11/20/14 10:32	1
1,2,4-Trimethylbenzene	ND		1.0	0.14	ug/L			11/20/14 10:32	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.87	ug/L			11/20/14 10:32	1
1,2-Dibromoethane	ND		1.0	0.36	ug/L			11/20/14 10:32	1
1,2-Dichlorobenzene	ND		1.0	0.27	ug/L			11/20/14 10:32	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			11/20/14 10:32	1
1,2-Dichloropropane	ND		1.0	0.20	ug/L			11/20/14 10:32	1
1,3,5-Trimethylbenzene	ND		1.0	0.18	ug/L			11/20/14 10:32	1
1,1,2-Trichlorotrifluoroethane	ND		5.0	0.22	ug/L			11/20/14 10:32	1
1,3-Dichlorobenzene	ND		1.0	0.15	ug/L			11/20/14 10:32	1
1,3-Dichloropropane	ND		1.0	0.13	ug/L			11/20/14 10:32	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-265115/6
Matrix: Water
Analysis Batch: 265115

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		1.0	0.15	ug/L			11/20/14 10:32	1
2,2-Dichloropropane	ND		1.0	0.32	ug/L			11/20/14 10:32	1
2-Chlorotoluene	ND		1.0	0.21	ug/L			11/20/14 10:32	1
2-Hexanone	ND		5.0	0.56	ug/L			11/20/14 10:32	1
4-Chlorotoluene	ND		1.0	0.20	ug/L			11/20/14 10:32	1
4-Isopropyltoluene	ND		2.0	0.17	ug/L			11/20/14 10:32	1
Acetone	ND		5.0	1.3	ug/L			11/20/14 10:32	1
Benzene	ND		0.50	0.074	ug/L			11/20/14 10:32	1
Bromobenzene	ND		1.0	0.25	ug/L			11/20/14 10:32	1
Bromodichloromethane	ND		1.0	0.17	ug/L			11/20/14 10:32	1
Bromoform	ND		1.0	0.28	ug/L			11/20/14 10:32	1
Bromomethane	ND		5.0	0.31	ug/L			11/20/14 10:32	1
Carbon disulfide	ND		5.0	0.43	ug/L			11/20/14 10:32	1
Carbon tetrachloride	ND		1.0	0.26	ug/L			11/20/14 10:32	1
Chlorobenzene	ND		1.0	0.14	ug/L			11/20/14 10:32	1
Chlorobromomethane	ND		1.0	0.40	ug/L			11/20/14 10:32	1
Vinyl acetate	ND		2.0	0.33	ug/L			11/20/14 10:32	1
Chloroethane	ND		1.0	0.34	ug/L			11/20/14 10:32	1
Chloroform	ND		1.0	0.20	ug/L			11/20/14 10:32	1
Chloromethane	ND		1.0	0.18	ug/L			11/20/14 10:32	1
cis-1,2-Dichloroethene	ND		1.0	0.12	ug/L			11/20/14 10:32	1
cis-1,3-Dichloropropene	ND		1.0	0.18	ug/L			11/20/14 10:32	1
Dibromochloromethane	ND		1.0	0.32	ug/L			11/20/14 10:32	1
Dibromomethane	ND		1.0	0.33	ug/L			11/20/14 10:32	1
Dichlorodifluoromethane	ND		5.0	0.20	ug/L			11/20/14 10:32	1
Ethylbenzene	ND		0.50	0.13	ug/L			11/20/14 10:32	1
Hexachlorobutadiene	ND		1.0	0.26	ug/L			11/20/14 10:32	1
Isopropylbenzene	ND		1.0	0.14	ug/L			11/20/14 10:32	1
m&p-Xylene	ND		1.0	0.26	ug/L			11/20/14 10:32	1
Methyl Ethyl Ketone	ND		5.0	1.5	ug/L			11/20/14 10:32	1
methyl isobutyl ketone	ND		5.0	0.33	ug/L			11/20/14 10:32	1
Methyl tert-butyl ether	ND		1.0	0.24	ug/L			11/20/14 10:32	1
Methylene Chloride	ND		5.0	0.68	ug/L			11/20/14 10:32	1
Naphthalene	ND		1.0	0.16	ug/L			11/20/14 10:32	1
n-Butylbenzene	ND		1.0	0.13	ug/L			11/20/14 10:32	1
N-Propylbenzene	ND		1.0	0.13	ug/L			11/20/14 10:32	1
o-Xylene	ND		0.50	0.068	ug/L			11/20/14 10:32	1
sec-Butylbenzene	ND		1.0	0.15	ug/L			11/20/14 10:32	1
Styrene	ND		1.0	0.10	ug/L			11/20/14 10:32	1
tert-Butylbenzene	ND		1.0	0.14	ug/L			11/20/14 10:32	1
Perchloroethylene	ND		1.0	0.17	ug/L			11/20/14 10:32	1
Toluene	ND		0.50	0.11	ug/L			11/20/14 10:32	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			11/20/14 10:32	1
trans-1,3-Dichloropropene	ND		1.0	0.21	ug/L			11/20/14 10:32	1
Trichloroethylene	ND		0.50	0.19	ug/L			11/20/14 10:32	1
Trichlorofluoromethane	ND		1.0	0.19	ug/L			11/20/14 10:32	1
Vinyl chloride	ND		0.50	0.10	ug/L			11/20/14 10:32	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-265115/6
Matrix: Water
Analysis Batch: 265115

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		75 - 125		11/20/14 10:32	1
4-Bromofluorobenzene (Surr)	96		75 - 120		11/20/14 10:32	1
Dibromofluoromethane	103		75 - 120		11/20/14 10:32	1
Toluene-d8 (Surr)	105		75 - 120		11/20/14 10:32	1

Lab Sample ID: LCS 500-265115/4
Matrix: Water
Analysis Batch: 265115

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	50.0	48.2		ug/L		96	75 - 122
1,1,1-Trichloroethane	50.0	46.4		ug/L		93	72 - 130
1,1,2,2-Tetrachloroethane	50.0	46.6		ug/L		93	72 - 130
1,1,2-Trichloroethane	50.0	46.5		ug/L		93	75 - 120
1,1-Dichloroethane	50.0	49.0		ug/L		98	75 - 120
1,1-Dichloroethylene	50.0	47.8		ug/L		96	69 - 120
1,1-Dichloropropene	50.0	48.2		ug/L		96	75 - 130
1,2,3-Trichlorobenzene	50.0	44.5		ug/L		89	69 - 131
1,2,3-Trichloropropane	50.0	38.6		ug/L		77	65 - 132
1,2,4-Trichlorobenzene	50.0	47.0		ug/L		94	73 - 130
1,2,4-Trimethylbenzene	50.0	49.8		ug/L		100	75 - 121
1,2-Dibromo-3-Chloropropane	50.0	44.1		ug/L		88	62 - 130
1,2-Dibromoethane	50.0	48.1		ug/L		96	78 - 122
1,2-Dichlorobenzene	50.0	49.2		ug/L		98	75 - 120
1,2-Dichloroethane	50.0	44.1		ug/L		88	69 - 130
1,2-Dichloropropane	50.0	49.3		ug/L		99	75 - 120
1,3,5-Trimethylbenzene	50.0	50.9		ug/L		102	75 - 121
1,1,2-Trichlorotrifluoroethane	50.0	46.3		ug/L		93	69 - 120
1,3-Dichlorobenzene	50.0	50.2		ug/L		100	75 - 120
1,3-Dichloropropane	50.0	47.9		ug/L		96	77 - 124
1,4-Dichlorobenzene	50.0	49.3		ug/L		99	75 - 120
2,2-Dichloropropane	50.0	44.1		ug/L		88	65 - 132
2-Chlorotoluene	50.0	49.9		ug/L		100	75 - 120
2-Hexanone	50.0	45.3		ug/L		91	55 - 140
4-Chlorotoluene	50.0	49.9		ug/L		100	75 - 120
4-Isopropyltoluene	50.0	51.8		ug/L		104	75 - 121
Acetone	50.0	47.3		ug/L		95	48 - 149
Benzene	50.0	49.0		ug/L		98	75 - 120
Bromobenzene	50.0	49.7		ug/L		99	75 - 120
Bromodichloromethane	50.0	46.1		ug/L		92	77 - 121
Bromoform	50.0	46.8		ug/L		94	68 - 126
Bromomethane	50.0	48.2		ug/L		96	45 - 169
Carbon disulfide	50.0	45.3		ug/L		91	56 - 130
Carbon tetrachloride	50.0	47.3		ug/L		95	70 - 130
Chlorobenzene	50.0	49.4		ug/L		99	75 - 120
Chlorobromomethane	50.0	48.1		ug/L		96	76 - 120
Vinyl acetate	50.0	33.9		ug/L		68	40 - 137
Chloroethane	50.0	54.5		ug/L		109	58 - 147

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-265115/4
Matrix: Water
Analysis Batch: 265115

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloroform	50.0	46.5		ug/L		93	76 - 120
Chloromethane	50.0	54.5		ug/L		109	63 - 133
cis-1,2-Dichloroethene	50.0	47.9		ug/L		96	75 - 120
cis-1,3-Dichloropropene	50.0	46.1		ug/L		92	78 - 130
Dibromochloromethane	50.0	48.2		ug/L		96	71 - 126
Dibromomethane	50.0	45.2		ug/L		90	75 - 120
Dichlorodifluoromethane	50.0	56.1		ug/L		112	41 - 146
Ethylbenzene	50.0	50.6		ug/L		101	75 - 120
Hexachlorobutadiene	50.0	49.0		ug/L		98	71 - 131
Isopropylbenzene	50.0	51.2		ug/L		102	75 - 121
m&p-Xylene	50.0	49.0		ug/L		98	75 - 120
Methyl Ethyl Ketone	50.0	44.2		ug/L		88	53 - 142
methyl isobutyl ketone	50.0	43.7		ug/L		87	58 - 135
Methyl tert-butyl ether	50.0	40.6		ug/L		81	75 - 130
Methylene Chloride	50.0	47.3		ug/L		95	73 - 130
Naphthalene	50.0	42.3		ug/L		85	69 - 135
n-Butylbenzene	50.0	51.7		ug/L		103	75 - 121
N-Propylbenzene	50.0	51.9		ug/L		104	75 - 120
o-Xylene	50.0	49.4		ug/L		99	75 - 120
sec-Butylbenzene	50.0	51.3		ug/L		103	75 - 120
Styrene	50.0	50.3		ug/L		101	75 - 120
tert-Butylbenzene	50.0	50.6		ug/L		101	75 - 123
Perchloroethylene	50.0	50.8		ug/L		102	75 - 120
Toluene	50.0	48.7		ug/L		97	75 - 120
trans-1,2-Dichloroethene	50.0	49.0		ug/L		98	77 - 120
trans-1,3-Dichloropropene	50.0	45.5		ug/L		91	74 - 130
Trichloroethylene	50.0	50.0		ug/L		100	75 - 120
Trichlorofluoromethane	50.0	46.3		ug/L		93	71 - 130
Vinyl chloride	50.0	51.5		ug/L		103	72 - 123

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*91*		*75 - 125*
4-Bromofluorobenzene (Surr)	*98*		*75 - 120*
Dibromofluoromethane	*98*		*75 - 120*
Toluene-d8 (Surr)	*103*		*75 - 120*

Lab Sample ID: MB 500-265193/6
Matrix: Water
Analysis Batch: 265193

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			11/20/14 22:20	1
1,1,1-Trichloroethane	ND		1.0	0.20	ug/L			11/20/14 22:20	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.23	ug/L			11/20/14 22:20	1
1,1,2-Trichloroethane	ND		1.0	0.28	ug/L			11/20/14 22:20	1
1,1-Dichloroethane	ND		1.0	0.19	ug/L			11/20/14 22:20	1
1,1-Dichloroethylene	ND		1.0	0.31	ug/L			11/20/14 22:20	1
1,1-Dichloropropene	ND		1.0	0.34	ug/L			11/20/14 22:20	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-265193/6
Matrix: Water
Analysis Batch: 265193

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,3-Trichlorobenzene	ND		1.0	0.24	ug/L			11/20/14 22:20	1
1,2,3-Trichloropropane	ND		1.0	0.45	ug/L			11/20/14 22:20	1
1,2,4-Trichlorobenzene	ND		1.0	0.31	ug/L			11/20/14 22:20	1
1,2,4-Trimethylbenzene	ND		1.0	0.14	ug/L			11/20/14 22:20	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.87	ug/L			11/20/14 22:20	1
1,2-Dibromoethane	ND		1.0	0.36	ug/L			11/20/14 22:20	1
1,2-Dichlorobenzene	ND		1.0	0.27	ug/L			11/20/14 22:20	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			11/20/14 22:20	1
1,2-Dichloropropane	ND		1.0	0.20	ug/L			11/20/14 22:20	1
1,3,5-Trimethylbenzene	ND		1.0	0.18	ug/L			11/20/14 22:20	1
1,1,2-Trichlorotrifluoroethane	ND		5.0	0.22	ug/L			11/20/14 22:20	1
1,3-Dichlorobenzene	ND		1.0	0.15	ug/L			11/20/14 22:20	1
1,3-Dichloropropane	ND		1.0	0.13	ug/L			11/20/14 22:20	1
1,4-Dichlorobenzene	ND		1.0	0.15	ug/L			11/20/14 22:20	1
2,2-Dichloropropane	ND		1.0	0.32	ug/L			11/20/14 22:20	1
2-Chlorotoluene	ND		1.0	0.21	ug/L			11/20/14 22:20	1
2-Hexanone	ND		5.0	0.56	ug/L			11/20/14 22:20	1
4-Chlorotoluene	ND		1.0	0.20	ug/L			11/20/14 22:20	1
4-Isopropyltoluene	ND		2.0	0.17	ug/L			11/20/14 22:20	1
Acetone	ND		5.0	1.3	ug/L			11/20/14 22:20	1
Benzene	ND		0.50	0.074	ug/L			11/20/14 22:20	1
Bromobenzene	ND		1.0	0.25	ug/L			11/20/14 22:20	1
Bromodichloromethane	ND		1.0	0.17	ug/L			11/20/14 22:20	1
Bromoform	ND		1.0	0.28	ug/L			11/20/14 22:20	1
Bromomethane	ND		5.0	0.31	ug/L			11/20/14 22:20	1
Carbon disulfide	ND		5.0	0.43	ug/L			11/20/14 22:20	1
Carbon tetrachloride	ND		1.0	0.26	ug/L			11/20/14 22:20	1
Chlorobenzene	ND		1.0	0.14	ug/L			11/20/14 22:20	1
Chlorobromomethane	ND		1.0	0.40	ug/L			11/20/14 22:20	1
Vinyl acetate	ND		2.0	0.33	ug/L			11/20/14 22:20	1
Chloroethane	ND		1.0	0.34	ug/L			11/20/14 22:20	1
Chloroform	ND		1.0	0.20	ug/L			11/20/14 22:20	1
Chloromethane	ND		1.0	0.18	ug/L			11/20/14 22:20	1
cis-1,2-Dichloroethene	ND		1.0	0.12	ug/L			11/20/14 22:20	1
cis-1,3-Dichloropropene	ND		1.0	0.18	ug/L			11/20/14 22:20	1
Dibromochloromethane	ND		1.0	0.32	ug/L			11/20/14 22:20	1
Dibromomethane	ND		1.0	0.33	ug/L			11/20/14 22:20	1
Dichlorodifluoromethane	ND		5.0	0.20	ug/L			11/20/14 22:20	1
Ethylbenzene	ND		0.50	0.13	ug/L			11/20/14 22:20	1
Hexachlorobutadiene	ND		1.0	0.26	ug/L			11/20/14 22:20	1
Isopropylbenzene	ND		1.0	0.14	ug/L			11/20/14 22:20	1
m&p-Xylene	ND		1.0	0.26	ug/L			11/20/14 22:20	1
Methyl Ethyl Ketone	ND		5.0	1.5	ug/L			11/20/14 22:20	1
methyl isobutyl ketone	ND		5.0	0.33	ug/L			11/20/14 22:20	1
Methyl tert-butyl ether	ND		1.0	0.24	ug/L			11/20/14 22:20	1
Methylene Chloride	ND		5.0	0.68	ug/L			11/20/14 22:20	1
Naphthalene	ND		1.0	0.16	ug/L			11/20/14 22:20	1
n-Butylbenzene	ND		1.0	0.13	ug/L			11/20/14 22:20	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-265193/6
Matrix: Water
Analysis Batch: 265193

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
N-Propylbenzene	ND		1.0	0.13	ug/L			11/20/14 22:20	1
o-Xylene	ND		0.50	0.068	ug/L			11/20/14 22:20	1
sec-Butylbenzene	ND		1.0	0.15	ug/L			11/20/14 22:20	1
Styrene	ND		1.0	0.10	ug/L			11/20/14 22:20	1
tert-Butylbenzene	ND		1.0	0.14	ug/L			11/20/14 22:20	1
Perchloroethylene	ND		1.0	0.17	ug/L			11/20/14 22:20	1
Toluene	ND		0.50	0.11	ug/L			11/20/14 22:20	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			11/20/14 22:20	1
trans-1,3-Dichloropropene	ND		1.0	0.21	ug/L			11/20/14 22:20	1
Trichloroethylene	ND		0.50	0.19	ug/L			11/20/14 22:20	1
Trichlorofluoromethane	ND		1.0	0.19	ug/L			11/20/14 22:20	1
Vinyl chloride	ND		0.50	0.10	ug/L			11/20/14 22:20	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*75 - 125*		*11/20/14 22:20*	*1*
4-Bromofluorobenzene (Surr)	*94*		*75 - 120*		*11/20/14 22:20*	*1*
Dibromofluoromethane	*102*		*75 - 120*		*11/20/14 22:20*	*1*
Toluene-d8 (Surr)	*105*		*75 - 120*		*11/20/14 22:20*	*1*

Lab Sample ID: LCS 500-265193/4
Matrix: Water
Analysis Batch: 265193

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	50.0	48.6		ug/L		97	75 - 122
1,1,1-Trichloroethane	50.0	42.6		ug/L		85	72 - 130
1,1,2,2-Tetrachloroethane	50.0	48.7		ug/L		97	72 - 130
1,1,2-Trichloroethane	50.0	47.9		ug/L		96	75 - 120
1,1-Dichloroethane	50.0	45.1		ug/L		90	75 - 120
1,1-Dichloroethylene	50.0	41.7		ug/L		83	69 - 120
1,1-Dichloropropene	50.0	44.3		ug/L		89	75 - 130
1,2,3-Trichlorobenzene	50.0	44.2		ug/L		88	69 - 131
1,2,3-Trichloropropane	50.0	51.1		ug/L		102	65 - 132
1,2,4-Trichlorobenzene	50.0	44.8		ug/L		90	73 - 130
1,2,4-Trimethylbenzene	50.0	47.7		ug/L		95	75 - 121
1,2-Dibromo-3-Chloropropane	50.0	44.4		ug/L		89	62 - 130
1,2-Dibromoethane	50.0	48.4		ug/L		97	78 - 122
1,2-Dichlorobenzene	50.0	48.4		ug/L		97	75 - 120
1,2-Dichloroethane	50.0	44.0		ug/L		88	69 - 130
1,2-Dichloropropane	50.0	49.3		ug/L		99	75 - 120
1,3,5-Trimethylbenzene	50.0	48.3		ug/L		97	75 - 121
1,1,2-Trichlorotrifluoroethane	50.0	40.8		ug/L		82	69 - 120
1,3-Dichlorobenzene	50.0	48.1		ug/L		96	75 - 120
1,3-Dichloropropane	50.0	48.9		ug/L		98	77 - 124
1,4-Dichlorobenzene	50.0	48.3		ug/L		97	75 - 120
2,2-Dichloropropane	50.0	39.8		ug/L		80	65 - 132
2-Chlorotoluene	50.0	47.5		ug/L		95	75 - 120
2-Hexanone	50.0	52.8		ug/L		106	55 - 140

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-265193/4
Matrix: Water
Analysis Batch: 265193

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Chlorotoluene	50.0	47.6		ug/L		95	75 - 120
4-Isopropyltoluene	50.0	47.9		ug/L		96	75 - 121
Acetone	50.0	61.9		ug/L		124	48 - 149
Benzene	50.0	46.4		ug/L		93	75 - 120
Bromobenzene	50.0	49.3		ug/L		99	75 - 120
Bromodichloromethane	50.0	46.3		ug/L		93	77 - 121
Bromoform	50.0	49.2		ug/L		98	68 - 126
Bromomethane	50.0	50.3		ug/L		101	45 - 169
Carbon disulfide	50.0	39.1		ug/L		78	56 - 130
Carbon tetrachloride	50.0	42.5		ug/L		85	70 - 130
Chlorobenzene	50.0	47.9		ug/L		96	75 - 120
Chlorobromomethane	50.0	47.9		ug/L		96	76 - 120
Vinyl acetate	50.0	32.7		ug/L		65	40 - 137
Chloroethane	50.0	54.5		ug/L		109	58 - 147
Chloroform	50.0	44.8		ug/L		90	76 - 120
Chloromethane	50.0	57.8		ug/L		116	63 - 133
cis-1,2-Dichloroethene	50.0	46.8		ug/L		94	75 - 120
cis-1,3-Dichloropropene	50.0	46.4		ug/L		93	78 - 130
Dibromochloromethane	50.0	49.4		ug/L		99	71 - 126
Dibromomethane	50.0	45.7		ug/L		91	75 - 120
Dichlorodifluoromethane	50.0	57.5		ug/L		115	41 - 146
Ethylbenzene	50.0	47.6		ug/L		95	75 - 120
Hexachlorobutadiene	50.0	43.3		ug/L		87	71 - 131
Isopropylbenzene	50.0	48.3		ug/L		97	75 - 121
m&p-Xylene	50.0	46.8		ug/L		94	75 - 120
Methyl Ethyl Ketone	50.0	55.8		ug/L		112	53 - 142
methyl isobutyl ketone	50.0	49.6		ug/L		99	58 - 135
Methyl tert-butyl ether	50.0	40.3		ug/L		81	75 - 130
Methylene Chloride	50.0	50.7		ug/L		101	73 - 130
Naphthalene	50.0	45.1		ug/L		90	69 - 135
n-Butylbenzene	50.0	46.9		ug/L		94	75 - 121
N-Propylbenzene	50.0	48.4		ug/L		97	75 - 120
o-Xylene	50.0	47.6		ug/L		95	75 - 120
sec-Butylbenzene	50.0	47.7		ug/L		95	75 - 120
Styrene	50.0	49.2		ug/L		98	75 - 120
tert-Butylbenzene	50.0	48.2		ug/L		96	75 - 123
Perchloroethylene	50.0	46.5		ug/L		93	75 - 120
Toluene	50.0	46.9		ug/L		94	75 - 120
trans-1,2-Dichloroethene	50.0	44.8		ug/L		90	77 - 120
trans-1,3-Dichloropropene	50.0	45.7		ug/L		91	74 - 130
Trichloroethylene	50.0	47.8		ug/L		96	75 - 120
Trichlorofluoromethane	50.0	47.9		ug/L		96	71 - 130
Vinyl chloride	50.0	53.8		ug/L		108	72 - 123

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*94*		*75 - 125*
4-Bromofluorobenzene (Surr)	*99*		*75 - 120*
Dibromofluoromethane	*103*		*75 - 120*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-265193/4
Matrix: Water
Analysis Batch: 265193

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*105*		*75 - 120*

Lab Sample ID: 500-87930-14 MS
Matrix: Water
Analysis Batch: 265193

Client Sample ID: MW-101B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	ND		50.0	44.2		ug/L		88	75 - 122
1,1,1-Trichloroethane	0.54	J	50.0	41.2		ug/L		81	72 - 130
1,1,2,2-Tetrachloroethane	ND		50.0	46.2		ug/L		92	72 - 130
1,1,2-Trichloroethane	ND		50.0	42.7		ug/L		85	75 - 120
1,1-Dichloroethane	ND		50.0	43.6		ug/L		87	75 - 120
1,1-Dichloroethylene	ND		50.0	41.7		ug/L		83	69 - 120
1,1-Dichloropropene	ND		50.0	42.4		ug/L		85	75 - 130
1,2,3-Trichlorobenzene	ND		50.0	39.1		ug/L		78	69 - 131
1,2,3-Trichloropropane	ND		50.0	39.9		ug/L		80	65 - 132
1,2,4-Trichlorobenzene	ND		50.0	37.3		ug/L		75	73 - 130
1,2,4-Trimethylbenzene	ND		50.0	45.4		ug/L		91	75 - 121
1,2-Dibromo-3-Chloropropane	ND		50.0	42.0		ug/L		84	62 - 130
1,2-Dibromoethane	ND		50.0	43.5		ug/L		87	78 - 122
1,2-Dichlorobenzene	ND		50.0	45.6		ug/L		91	75 - 120
1,2-Dichloroethane	ND		50.0	39.9		ug/L		80	69 - 130
1,2-Dichloropropane	ND		50.0	44.6		ug/L		89	75 - 120
1,3,5-Trimethylbenzene	ND		50.0	46.3		ug/L		93	75 - 121
1,1,2-Trichlorotrifluoroethane	7.4		50.0	46.4		ug/L		78	69 - 120
1,3-Dichlorobenzene	ND		50.0	45.2		ug/L		90	75 - 120
1,3-Dichloropropane	ND		50.0	44.6		ug/L		89	77 - 124
1,4-Dichlorobenzene	ND		50.0	44.1		ug/L		88	75 - 120
2,2-Dichloropropane	ND		50.0	36.7		ug/L		73	65 - 132
2-Chlorotoluene	ND		50.0	45.9		ug/L		92	75 - 120
2-Hexanone	ND		50.0	44.8		ug/L		90	55 - 140
4-Chlorotoluene	ND		50.0	45.4		ug/L		91	75 - 120
4-Isopropyltoluene	ND		50.0	45.9		ug/L		92	75 - 121
Acetone	ND		50.0	43.8		ug/L		88	48 - 149
Benzene	ND		50.0	44.4		ug/L		89	75 - 120
Bromobenzene	ND		50.0	47.2		ug/L		94	75 - 120
Bromodichloromethane	ND		50.0	41.6		ug/L		83	77 - 121
Bromoform	ND		50.0	43.0		ug/L		86	68 - 126
Bromomethane	ND		50.0	40.2		ug/L		80	45 - 169
Carbon disulfide	ND		50.0	38.3		ug/L		77	56 - 130
Carbon tetrachloride	ND		50.0	41.2		ug/L		82	70 - 130
Chlorobenzene	ND		50.0	43.9		ug/L		88	75 - 120
Chlorobromomethane	ND		50.0	42.8		ug/L		86	76 - 120
Vinyl acetate	ND		50.0	27.4		ug/L		55	40 - 137
Chloroethane	ND		50.0	48.2		ug/L		96	58 - 147
Chloroform	ND		50.0	41.5		ug/L		83	76 - 120
Chloromethane	ND		50.0	52.7		ug/L		105	63 - 133
cis-1,2-Dichloroethene	120		50.0	152	F1	ug/L		74	75 - 120

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-87930-14 MS
Matrix: Water
Analysis Batch: 265193

Client Sample ID: MW-101B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,3-Dichloropropene	ND		50.0	40.3		ug/L		81	78 - 130
Dibromochloromethane	ND		50.0	43.9		ug/L		88	71 - 126
Dibromomethane	ND		50.0	41.1		ug/L		82	75 - 120
Dichlorodifluoromethane	ND		50.0	51.5		ug/L		103	41 - 146
Ethylbenzene	ND		50.0	44.1		ug/L		88	75 - 120
Hexachlorobutadiene	ND		50.0	43.3		ug/L		87	71 - 131
Isopropylbenzene	ND		50.0	47.9		ug/L		96	75 - 121
m&p-Xylene	ND		50.0	42.7		ug/L		85	75 - 120
Methyl Ethyl Ketone	ND		50.0	45.2		ug/L		90	53 - 142
methyl isobutyl ketone	ND		50.0	44.3		ug/L		89	58 - 135
Methyl tert-butyl ether	ND		50.0	36.6	F1	ug/L		73	75 - 130
Methylene Chloride	ND		50.0	44.3		ug/L		89	73 - 130
Naphthalene	ND		50.0	40.0		ug/L		80	69 - 135
n-Butylbenzene	ND		50.0	43.1		ug/L		86	75 - 121
N-Propylbenzene	ND		50.0	47.1		ug/L		94	75 - 120
o-Xylene	ND		50.0	43.7		ug/L		87	75 - 120
sec-Butylbenzene	ND		50.0	47.6		ug/L		95	75 - 120
Styrene	ND		50.0	44.4		ug/L		89	75 - 120
tert-Butylbenzene	ND		50.0	47.9		ug/L		96	75 - 123
Perchloroethylene	0.64	J	50.0	44.2		ug/L		87	75 - 120
Toluene	0.31	J	50.0	43.2		ug/L		86	75 - 120
trans-1,2-Dichloroethene	0.54	J	50.0	43.4		ug/L		86	77 - 120
trans-1,3-Dichloropropene	ND		50.0	40.3		ug/L		81	74 - 130
Trichloroethylene	40		50.0	82.4		ug/L		84	75 - 120
Trichlorofluoromethane	ND		50.0	44.7		ug/L		89	71 - 130
Vinyl chloride	ND		50.0	49.3		ug/L		99	72 - 123

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*92*		*75 - 125*
4-Bromofluorobenzene (Surr)	*94*		*75 - 120*
Dibromofluoromethane	*100*		*75 - 120*
Toluene-d8 (Surr)	*102*		*75 - 120*

Lab Sample ID: 500-87930-14 MSD
Matrix: Water
Analysis Batch: 265193

Client Sample ID: MW-101B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	ND		50.0	47.9		ug/L		96	75 - 122	8	20
1,1,1-Trichloroethane	0.54	J	50.0	44.3		ug/L		88	72 - 130	7	20
1,1,2,2-Tetrachloroethane	ND		50.0	49.0		ug/L		98	72 - 130	6	20
1,1,2-Trichloroethane	ND		50.0	45.9		ug/L		92	75 - 120	7	20
1,1-Dichloroethane	ND		50.0	46.6		ug/L		93	75 - 120	7	20
1,1-Dichloroethylene	ND		50.0	44.6		ug/L		89	69 - 120	7	20
1,1-Dichloropropene	ND		50.0	45.8		ug/L		92	75 - 130	8	20
1,2,3-Trichlorobenzene	ND		50.0	44.5		ug/L		89	69 - 131	13	20
1,2,3-Trichloropropane	ND		50.0	40.3		ug/L		81	65 - 132	1	20
1,2,4-Trichlorobenzene	ND		50.0	43.7		ug/L		87	73 - 130	16	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-87930-14 MSD
Matrix: Water
Analysis Batch: 265193

Client Sample ID: MW-101B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,4-Trimethylbenzene	ND		50.0	49.5		ug/L		99	75 - 121	8	20
1,2-Dibromo-3-Chloropropane	ND		50.0	43.8		ug/L		88	62 - 130	4	20
1,2-Dibromoethane	ND		50.0	46.9		ug/L		94	78 - 122	7	20
1,2-Dichlorobenzene	ND		50.0	49.3		ug/L		99	75 - 120	8	20
1,2-Dichloroethane	ND		50.0	41.9		ug/L		84	69 - 130	5	20
1,2-Dichloropropane	ND		50.0	48.4		ug/L		97	75 - 120	8	20
1,3,5-Trimethylbenzene	ND		50.0	50.3		ug/L		101	75 - 121	8	20
1,1,2-Trichlorotrifluoroethane	7.4		50.0	50.4		ug/L		86	69 - 120	8	20
1,3-Dichlorobenzene	ND		50.0	49.0		ug/L		98	75 - 120	8	20
1,3-Dichloropropane	ND		50.0	47.4		ug/L		95	77 - 124	6	20
1,4-Dichlorobenzene	ND		50.0	48.4		ug/L		97	75 - 120	9	20
2,2-Dichloropropane	ND		50.0	39.3		ug/L		79	65 - 132	7	20
2-Chlorotoluene	ND		50.0	49.5		ug/L		99	75 - 120	8	20
2-Hexanone	ND		50.0	47.4		ug/L		95	55 - 140	6	20
4-Chlorotoluene	ND		50.0	48.8		ug/L		98	75 - 120	7	20
4-Isopropyltoluene	ND		50.0	50.4		ug/L		101	75 - 121	9	20
Acetone	ND		50.0	46.2		ug/L		92	48 - 149	5	20
Benzene	ND		50.0	47.2		ug/L		94	75 - 120	6	20
Bromobenzene	ND		50.0	50.6		ug/L		101	75 - 120	7	20
Bromodichloromethane	ND		50.0	44.1		ug/L		88	77 - 121	6	20
Bromoform	ND		50.0	46.8		ug/L		94	68 - 126	8	20
Bromomethane	ND		50.0	44.4		ug/L		89	45 - 169	10	20
Carbon disulfide	ND		50.0	41.2		ug/L		82	56 - 130	7	20
Carbon tetrachloride	ND		50.0	44.6		ug/L		89	70 - 130	8	20
Chlorobenzene	ND		50.0	47.8		ug/L		96	75 - 120	8	20
Chlorobromomethane	ND		50.0	45.9		ug/L		92	76 - 120	7	20
Vinyl acetate	ND		50.0	30.2		ug/L		60	40 - 137	10	20
Chloroethane	ND		50.0	52.9		ug/L		106	58 - 147	9	20
Chloroform	ND		50.0	44.2		ug/L		88	76 - 120	6	20
Chloromethane	ND		50.0	57.1		ug/L		114	63 - 133	8	20
cis-1,2-Dichloroethene	120		50.0	154		ug/L		78	75 - 120	1	20
cis-1,3-Dichloropropene	ND		50.0	42.5		ug/L		85	78 - 130	5	20
Dibromochloromethane	ND		50.0	47.3		ug/L		95	71 - 126	7	20
Dibromomethane	ND		50.0	43.3		ug/L		87	75 - 120	5	20
Dichlorodifluoromethane	ND		50.0	56.1		ug/L		112	41 - 146	9	20
Ethylbenzene	ND		50.0	48.2		ug/L		96	75 - 120	9	20
Hexachlorobutadiene	ND		50.0	48.2		ug/L		96	71 - 131	11	20
Isopropylbenzene	ND		50.0	52.1		ug/L		104	75 - 121	8	20
m&p-Xylene	ND		50.0	46.8		ug/L		94	75 - 120	9	20
Methyl Ethyl Ketone	ND		50.0	45.8		ug/L		92	53 - 142	1	20
methyl isobutyl ketone	ND		50.0	46.1		ug/L		92	58 - 135	4	20
Methyl tert-butyl ether	ND		50.0	39.0		ug/L		78	75 - 130	6	20
Methylene Chloride	ND		50.0	46.5		ug/L		93	73 - 130	5	20
Naphthalene	ND		50.0	43.9		ug/L		88	69 - 135	9	20
n-Butylbenzene	ND		50.0	48.5		ug/L		97	75 - 121	12	20
N-Propylbenzene	ND		50.0	51.3		ug/L		103	75 - 120	8	20
o-Xylene	ND		50.0	47.3		ug/L		95	75 - 120	8	20
sec-Butylbenzene	ND		50.0	51.5		ug/L		103	75 - 120	8	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-87930-14 MSD
Matrix: Water
Analysis Batch: 265193

Client Sample ID: MW-101B
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Styrene	ND		50.0	48.0		ug/L		96	75 - 120	8	20
tert-Butylbenzene	ND		50.0	52.0		ug/L		104	75 - 123	8	20
Perchloroethylene	0.64	J	50.0	49.3		ug/L		97	75 - 120	11	20
Toluene	0.31	J	50.0	46.6		ug/L		93	75 - 120	8	20
trans-1,2-Dichloroethene	0.54	J	50.0	46.6		ug/L		92	77 - 120	7	20
trans-1,3-Dichloropropene	ND		50.0	43.4		ug/L		87	74 - 130	7	20
Trichloroethylene	40		50.0	85.5		ug/L		90	75 - 120	4	20
Trichlorofluoromethane	ND		50.0	47.6		ug/L		95	71 - 130	6	20
Vinyl chloride	ND		50.0	52.7		ug/L		105	72 - 123	7	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*89*		*75 - 125*
4-Bromofluorobenzene (Surr)	*94*		*75 - 120*
Dibromofluoromethane	*98*		*75 - 120*
Toluene-d8 (Surr)	*103*		*75 - 120*

Lab Sample ID: MB 500-265364/7
Matrix: Water
Analysis Batch: 265364

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			11/21/14 13:31	1
1,1,1-Trichloroethane	ND		1.0	0.20	ug/L			11/21/14 13:31	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.23	ug/L			11/21/14 13:31	1
1,1,2-Trichloroethane	ND		1.0	0.28	ug/L			11/21/14 13:31	1
1,1-Dichloroethane	ND		1.0	0.19	ug/L			11/21/14 13:31	1
1,1-Dichloroethylene	ND		1.0	0.31	ug/L			11/21/14 13:31	1
1,1-Dichloropropene	ND		1.0	0.34	ug/L			11/21/14 13:31	1
1,2,3-Trichlorobenzene	ND		1.0	0.24	ug/L			11/21/14 13:31	1
1,2,3-Trichloropropane	ND		1.0	0.45	ug/L			11/21/14 13:31	1
1,2,4-Trichlorobenzene	ND		1.0	0.31	ug/L			11/21/14 13:31	1
1,2,4-Trimethylbenzene	ND		1.0	0.14	ug/L			11/21/14 13:31	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.87	ug/L			11/21/14 13:31	1
1,2-Dibromoethane	ND		1.0	0.36	ug/L			11/21/14 13:31	1
1,2-Dichlorobenzene	ND		1.0	0.27	ug/L			11/21/14 13:31	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			11/21/14 13:31	1
1,2-Dichloropropane	ND		1.0	0.20	ug/L			11/21/14 13:31	1
1,3,5-Trimethylbenzene	ND		1.0	0.18	ug/L			11/21/14 13:31	1
1,1,2-Trichlorotrifluoroethane	ND		5.0	0.22	ug/L			11/21/14 13:31	1
1,3-Dichlorobenzene	ND		1.0	0.15	ug/L			11/21/14 13:31	1
1,3-Dichloropropane	ND		1.0	0.13	ug/L			11/21/14 13:31	1
1,4-Dichlorobenzene	ND		1.0	0.15	ug/L			11/21/14 13:31	1
2,2-Dichloropropane	ND		1.0	0.32	ug/L			11/21/14 13:31	1
2-Chlorotoluene	ND		1.0	0.21	ug/L			11/21/14 13:31	1
2-Hexanone	ND		5.0	0.56	ug/L			11/21/14 13:31	1
4-Chlorotoluene	ND		1.0	0.20	ug/L			11/21/14 13:31	1
4-Isopropyltoluene	ND		2.0	0.17	ug/L			11/21/14 13:31	1
Acetone	ND		5.0	1.3	ug/L			11/21/14 13:31	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-265364/7
Matrix: Water
Analysis Batch: 265364

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		0.50	0.074	ug/L			11/21/14 13:31	1
Bromobenzene	ND		1.0	0.25	ug/L			11/21/14 13:31	1
Bromodichloromethane	ND		1.0	0.17	ug/L			11/21/14 13:31	1
Bromoform	ND		1.0	0.28	ug/L			11/21/14 13:31	1
Bromomethane	ND		5.0	0.31	ug/L			11/21/14 13:31	1
Carbon disulfide	ND		5.0	0.43	ug/L			11/21/14 13:31	1
Carbon tetrachloride	ND		1.0	0.26	ug/L			11/21/14 13:31	1
Chlorobenzene	ND		1.0	0.14	ug/L			11/21/14 13:31	1
Chlorobromomethane	ND		1.0	0.40	ug/L			11/21/14 13:31	1
Vinyl acetate	ND		2.0	0.33	ug/L			11/21/14 13:31	1
Chloroethane	ND		1.0	0.34	ug/L			11/21/14 13:31	1
Chloroform	ND		1.0	0.20	ug/L			11/21/14 13:31	1
Chloromethane	ND		1.0	0.18	ug/L			11/21/14 13:31	1
cis-1,2-Dichloroethene	ND		1.0	0.12	ug/L			11/21/14 13:31	1
cis-1,3-Dichloropropene	ND		1.0	0.18	ug/L			11/21/14 13:31	1
Dibromochloromethane	ND		1.0	0.32	ug/L			11/21/14 13:31	1
Dibromomethane	ND		1.0	0.33	ug/L			11/21/14 13:31	1
Dichlorodifluoromethane	ND		5.0	0.20	ug/L			11/21/14 13:31	1
Ethylbenzene	ND		0.50	0.13	ug/L			11/21/14 13:31	1
Hexachlorobutadiene	ND		1.0	0.26	ug/L			11/21/14 13:31	1
Isopropylbenzene	ND		1.0	0.14	ug/L			11/21/14 13:31	1
m&p-Xylene	ND		1.0	0.26	ug/L			11/21/14 13:31	1
Methyl Ethyl Ketone	ND		5.0	1.5	ug/L			11/21/14 13:31	1
methyl isobutyl ketone	ND		5.0	0.33	ug/L			11/21/14 13:31	1
Methyl tert-butyl ether	ND		1.0	0.24	ug/L			11/21/14 13:31	1
Methylene Chloride	ND		5.0	0.68	ug/L			11/21/14 13:31	1
Naphthalene	ND		1.0	0.16	ug/L			11/21/14 13:31	1
n-Butylbenzene	ND		1.0	0.13	ug/L			11/21/14 13:31	1
N-Propylbenzene	ND		1.0	0.13	ug/L			11/21/14 13:31	1
o-Xylene	ND		0.50	0.068	ug/L			11/21/14 13:31	1
sec-Butylbenzene	ND		1.0	0.15	ug/L			11/21/14 13:31	1
Styrene	ND		1.0	0.10	ug/L			11/21/14 13:31	1
tert-Butylbenzene	ND		1.0	0.14	ug/L			11/21/14 13:31	1
Perchloroethylene	ND		1.0	0.17	ug/L			11/21/14 13:31	1
Toluene	ND		0.50	0.11	ug/L			11/21/14 13:31	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			11/21/14 13:31	1
trans-1,3-Dichloropropene	ND		1.0	0.21	ug/L			11/21/14 13:31	1
Trichloroethylene	ND		0.50	0.19	ug/L			11/21/14 13:31	1
Trichlorofluoromethane	ND		1.0	0.19	ug/L			11/21/14 13:31	1
Vinyl chloride	ND		0.50	0.10	ug/L			11/21/14 13:31	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*81*		*75 - 125*		*11/21/14 13:31*	*1*
4-Bromofluorobenzene (Surr)	*95*		*75 - 120*		*11/21/14 13:31*	*1*
Dibromofluoromethane	*85*		*75 - 120*		*11/21/14 13:31*	*1*
Toluene-d8 (Surr)	*93*		*75 - 120*		*11/21/14 13:31*	*1*

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-265364/5
Matrix: Water
Analysis Batch: 265364

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	50.0	48.4		ug/L		97	75 - 122
1,1,1-Trichloroethane	50.0	44.4		ug/L		89	72 - 130
1,1,2,2-Tetrachloroethane	50.0	52.0		ug/L		104	72 - 130
1,1,2-Trichloroethane	50.0	49.4		ug/L		99	75 - 120
1,1-Dichloroethane	50.0	44.6		ug/L		89	75 - 120
1,1-Dichloroethylene	50.0	45.5		ug/L		91	69 - 120
1,1-Dichloropropene	50.0	44.9		ug/L		90	75 - 130
1,2,3-Trichlorobenzene	50.0	46.7		ug/L		93	69 - 131
1,2,3-Trichloropropane	50.0	52.1		ug/L		104	65 - 132
1,2,4-Trichlorobenzene	50.0	50.5		ug/L		101	73 - 130
1,2,4-Trimethylbenzene	50.0	49.5		ug/L		99	75 - 121
1,2-Dibromo-3-Chloropropane	50.0	45.9		ug/L		92	62 - 130
1,2-Dibromoethane	50.0	48.2		ug/L		96	78 - 122
1,2-Dichlorobenzene	50.0	50.9		ug/L		102	75 - 120
1,2-Dichloroethane	50.0	39.2		ug/L		78	69 - 130
1,2-Dichloropropane	50.0	45.9		ug/L		92	75 - 120
1,3,5-Trimethylbenzene	50.0	50.1		ug/L		100	75 - 121
1,1,2-Trichlorotrifluoroethane	50.0	43.3		ug/L		87	69 - 120
1,3-Dichlorobenzene	50.0	49.0		ug/L		98	75 - 120
1,3-Dichloropropane	50.0	47.5		ug/L		95	77 - 124
1,4-Dichlorobenzene	50.0	49.4		ug/L		99	75 - 120
2,2-Dichloropropane	50.0	45.6		ug/L		91	65 - 132
2-Chlorotoluene	50.0	49.2		ug/L		98	75 - 120
2-Hexanone	50.0	44.8		ug/L		90	55 - 140
4-Chlorotoluene	50.0	48.7		ug/L		97	75 - 120
4-Isopropyltoluene	50.0	50.0		ug/L		100	75 - 121
Acetone	50.0	37.1		ug/L		74	48 - 149
Benzene	50.0	46.8		ug/L		94	75 - 120
Bromobenzene	50.0	50.3		ug/L		101	75 - 120
Bromodichloromethane	50.0	46.1		ug/L		92	77 - 121
Bromoform	50.0	49.0		ug/L		98	68 - 126
Bromomethane	50.0	42.7		ug/L		85	45 - 169
Carbon disulfide	50.0	43.3		ug/L		87	56 - 130
Carbon tetrachloride	50.0	44.4		ug/L		89	70 - 130
Chlorobenzene	50.0	46.2		ug/L		92	75 - 120
Chlorobromomethane	50.0	46.7		ug/L		93	76 - 120
Vinyl acetate	50.0	36.8		ug/L		74	40 - 137
Chloroethane	50.0	42.9		ug/L		86	58 - 147
Chloroform	50.0	44.7		ug/L		89	76 - 120
Chloromethane	50.0	51.6		ug/L		103	63 - 133
cis-1,2-Dichloroethene	50.0	46.0		ug/L		92	75 - 120
cis-1,3-Dichloropropene	50.0	48.6		ug/L		97	78 - 130
Dibromochloromethane	50.0	49.4		ug/L		99	71 - 126
Dibromomethane	50.0	44.9		ug/L		90	75 - 120
Dichlorodifluoromethane	50.0	46.3		ug/L		93	41 - 146
Ethylbenzene	50.0	47.4		ug/L		95	75 - 120
Hexachlorobutadiene	50.0	51.1		ug/L		102	71 - 131
Isopropylbenzene	50.0	50.2		ug/L		100	75 - 121

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-265364/5
Matrix: Water
Analysis Batch: 265364

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
m&p-Xylene	50.0	48.4		ug/L		97	75 - 120
Methyl Ethyl Ketone	50.0	40.2		ug/L		80	53 - 142
methyl isobutyl ketone	50.0	42.9		ug/L		86	58 - 135
Methyl tert-butyl ether	50.0	43.1		ug/L		86	75 - 130
Methylene Chloride	50.0	46.1		ug/L		92	73 - 130
Naphthalene	50.0	49.9		ug/L		100	69 - 135
n-Butylbenzene	50.0	50.8		ug/L		102	75 - 121
N-Propylbenzene	50.0	50.5		ug/L		101	75 - 120
o-Xylene	50.0	47.8		ug/L		96	75 - 120
sec-Butylbenzene	50.0	50.7		ug/L		101	75 - 120
Styrene	50.0	49.4		ug/L		99	75 - 120
tert-Butylbenzene	50.0	50.5		ug/L		101	75 - 123
Perchloroethylene	50.0	48.8		ug/L		98	75 - 120
Toluene	50.0	47.8		ug/L		96	75 - 120
trans-1,2-Dichloroethene	50.0	46.8		ug/L		94	77 - 120
trans-1,3-Dichloropropene	50.0	48.4		ug/L		97	74 - 130
Trichloroethylene	50.0	48.9		ug/L		98	75 - 120
Trichlorofluoromethane	50.0	48.3		ug/L		97	71 - 130
Vinyl chloride	50.0	51.7		ug/L		103	72 - 123

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*78*		*75 - 125*
4-Bromofluorobenzene (Surr)	*91*		*75 - 120*
Dibromofluoromethane	*88*		*75 - 120*
Toluene-d8 (Surr)	*93*		*75 - 120*

Lab Sample ID: MB 500-265449/6
Matrix: Water
Analysis Batch: 265449

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			11/22/14 01:06	1
1,1,1-Trichloroethane	ND		1.0	0.20	ug/L			11/22/14 01:06	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.23	ug/L			11/22/14 01:06	1
1,1,2-Trichloroethane	ND		1.0	0.28	ug/L			11/22/14 01:06	1
1,1-Dichloroethane	ND		1.0	0.19	ug/L			11/22/14 01:06	1
1,1-Dichloroethylene	ND		1.0	0.31	ug/L			11/22/14 01:06	1
1,1-Dichloropropene	ND		1.0	0.34	ug/L			11/22/14 01:06	1
1,2,3-Trichlorobenzene	ND		1.0	0.24	ug/L			11/22/14 01:06	1
1,2,3-Trichloropropane	ND		1.0	0.45	ug/L			11/22/14 01:06	1
1,2,4-Trichlorobenzene	ND		1.0	0.31	ug/L			11/22/14 01:06	1
1,2,4-Trimethylbenzene	ND		1.0	0.14	ug/L			11/22/14 01:06	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.87	ug/L			11/22/14 01:06	1
1,2-Dibromoethane	ND		1.0	0.36	ug/L			11/22/14 01:06	1
1,2-Dichlorobenzene	ND		1.0	0.27	ug/L			11/22/14 01:06	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			11/22/14 01:06	1
1,2-Dichloropropane	ND		1.0	0.20	ug/L			11/22/14 01:06	1
1,3,5-Trimethylbenzene	ND		1.0	0.18	ug/L			11/22/14 01:06	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-265449/6
Matrix: Water
Analysis Batch: 265449

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichlorotrifluoroethane	ND		5.0	0.22	ug/L			11/22/14 01:06	1
1,3-Dichlorobenzene	ND		1.0	0.15	ug/L			11/22/14 01:06	1
1,3-Dichloropropane	ND		1.0	0.13	ug/L			11/22/14 01:06	1
1,4-Dichlorobenzene	ND		1.0	0.15	ug/L			11/22/14 01:06	1
2,2-Dichloropropane	ND		1.0	0.32	ug/L			11/22/14 01:06	1
2-Chlorotoluene	ND		1.0	0.21	ug/L			11/22/14 01:06	1
2-Hexanone	ND		5.0	0.56	ug/L			11/22/14 01:06	1
4-Chlorotoluene	ND		1.0	0.20	ug/L			11/22/14 01:06	1
4-Isopropyltoluene	ND		2.0	0.17	ug/L			11/22/14 01:06	1
Acetone	ND		5.0	1.3	ug/L			11/22/14 01:06	1
Benzene	ND		0.50	0.074	ug/L			11/22/14 01:06	1
Bromobenzene	ND		1.0	0.25	ug/L			11/22/14 01:06	1
Bromodichloromethane	ND		1.0	0.17	ug/L			11/22/14 01:06	1
Bromoform	ND		1.0	0.28	ug/L			11/22/14 01:06	1
Bromomethane	ND		5.0	0.31	ug/L			11/22/14 01:06	1
Carbon disulfide	ND		5.0	0.43	ug/L			11/22/14 01:06	1
Carbon tetrachloride	ND		1.0	0.26	ug/L			11/22/14 01:06	1
Chlorobenzene	ND		1.0	0.14	ug/L			11/22/14 01:06	1
Chlorobromomethane	ND		1.0	0.40	ug/L			11/22/14 01:06	1
Vinyl acetate	ND		2.0	0.33	ug/L			11/22/14 01:06	1
Chloroethane	ND		1.0	0.34	ug/L			11/22/14 01:06	1
Chloroform	ND		1.0	0.20	ug/L			11/22/14 01:06	1
Chloromethane	ND		1.0	0.18	ug/L			11/22/14 01:06	1
cis-1,2-Dichloroethene	ND		1.0	0.12	ug/L			11/22/14 01:06	1
cis-1,3-Dichloropropene	ND		1.0	0.18	ug/L			11/22/14 01:06	1
Dibromochloromethane	ND		1.0	0.32	ug/L			11/22/14 01:06	1
Dibromomethane	ND		1.0	0.33	ug/L			11/22/14 01:06	1
Dichlorodifluoromethane	ND		5.0	0.20	ug/L			11/22/14 01:06	1
Ethylbenzene	ND		0.50	0.13	ug/L			11/22/14 01:06	1
Hexachlorobutadiene	ND		1.0	0.26	ug/L			11/22/14 01:06	1
Isopropylbenzene	ND		1.0	0.14	ug/L			11/22/14 01:06	1
m&p-Xylene	ND		1.0	0.26	ug/L			11/22/14 01:06	1
Methyl Ethyl Ketone	ND		5.0	1.5	ug/L			11/22/14 01:06	1
methyl isobutyl ketone	ND		5.0	0.33	ug/L			11/22/14 01:06	1
Methyl tert-butyl ether	ND		1.0	0.24	ug/L			11/22/14 01:06	1
Methylene Chloride	ND		5.0	0.68	ug/L			11/22/14 01:06	1
Naphthalene	ND		1.0	0.16	ug/L			11/22/14 01:06	1
n-Butylbenzene	ND		1.0	0.13	ug/L			11/22/14 01:06	1
N-Propylbenzene	ND		1.0	0.13	ug/L			11/22/14 01:06	1
o-Xylene	ND		0.50	0.068	ug/L			11/22/14 01:06	1
sec-Butylbenzene	ND		1.0	0.15	ug/L			11/22/14 01:06	1
Styrene	ND		1.0	0.10	ug/L			11/22/14 01:06	1
tert-Butylbenzene	ND		1.0	0.14	ug/L			11/22/14 01:06	1
Perchloroethylene	ND		1.0	0.17	ug/L			11/22/14 01:06	1
Toluene	ND		0.50	0.11	ug/L			11/22/14 01:06	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			11/22/14 01:06	1
trans-1,3-Dichloropropene	ND		1.0	0.21	ug/L			11/22/14 01:06	1
Trichloroethylene	ND		0.50	0.19	ug/L			11/22/14 01:06	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-265449/6
Matrix: Water
Analysis Batch: 265449

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichlorofluoromethane	ND		1.0	0.19	ug/L			11/22/14 01:06	1
Vinyl chloride	ND		0.50	0.10	ug/L			11/22/14 01:06	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*80*		*75 - 125*		*11/22/14 01:06*	*1*
4-Bromofluorobenzene (Surr)	*93*		*75 - 120*		*11/22/14 01:06*	*1*
Dibromofluoromethane	*85*		*75 - 120*		*11/22/14 01:06*	*1*
Toluene-d8 (Surr)	*93*		*75 - 120*		*11/22/14 01:06*	*1*

Lab Sample ID: LCS 500-265449/4
Matrix: Water
Analysis Batch: 265449

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	50.0	49.0		ug/L		98	75 - 122
1,1,1-Trichloroethane	50.0	43.4		ug/L		87	72 - 130
1,1,2,2-Tetrachloroethane	50.0	52.9		ug/L		106	72 - 130
1,1,2-Trichloroethane	50.0	49.4		ug/L		99	75 - 120
1,1-Dichloroethane	50.0	42.5		ug/L		85	75 - 120
1,1-Dichloroethylene	50.0	41.5		ug/L		83	69 - 120
1,1-Dichloropropene	50.0	42.9		ug/L		86	75 - 130
1,2,3-Trichlorobenzene	50.0	46.8		ug/L		94	69 - 131
1,2,3-Trichloropropane	50.0	52.1		ug/L		104	65 - 132
1,2,4-Trichlorobenzene	50.0	48.5		ug/L		97	73 - 130
1,2,4-Trimethylbenzene	50.0	49.7		ug/L		99	75 - 121
1,2-Dibromo-3-Chloropropane	50.0	45.3		ug/L		91	62 - 130
1,2-Dibromoethane	50.0	49.3		ug/L		99	78 - 122
1,2-Dichlorobenzene	50.0	51.3		ug/L		103	75 - 120
1,2-Dichloroethane	50.0	39.5		ug/L		79	69 - 130
1,2-Dichloropropane	50.0	45.7		ug/L		91	75 - 120
1,3,5-Trimethylbenzene	50.0	50.5		ug/L		101	75 - 121
1,1,2-Trichlorotrifluoroethane	50.0	39.2		ug/L		78	69 - 120
1,3-Dichlorobenzene	50.0	48.8		ug/L		98	75 - 120
1,3-Dichloropropane	50.0	48.4		ug/L		97	77 - 124
1,4-Dichlorobenzene	50.0	48.3		ug/L		97	75 - 120
2,2-Dichloropropane	50.0	42.3		ug/L		85	65 - 132
2-Chlorotoluene	50.0	49.2		ug/L		98	75 - 120
2-Hexanone	50.0	43.3		ug/L		87	55 - 140
4-Chlorotoluene	50.0	48.7		ug/L		97	75 - 120
4-Isopropyltoluene	50.0	49.9		ug/L		100	75 - 121
Acetone	50.0	36.6		ug/L		73	48 - 149
Benzene	50.0	46.5		ug/L		93	75 - 120
Bromobenzene	50.0	51.1		ug/L		102	75 - 120
Bromodichloromethane	50.0	46.4		ug/L		93	77 - 121
Bromoform	50.0	50.5		ug/L		101	68 - 126
Bromomethane	50.0	42.6		ug/L		85	45 - 169
Carbon disulfide	50.0	39.0		ug/L		78	56 - 130
Carbon tetrachloride	50.0	41.5		ug/L		83	70 - 130

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-265449/4
Matrix: Water
Analysis Batch: 265449

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chlorobenzene	50.0	46.6		ug/L		93	75 - 120
Chlorobromomethane	50.0	46.2		ug/L		92	76 - 120
Vinyl acetate	50.0	46.6		ug/L		93	40 - 137
Chloroethane	50.0	35.0		ug/L		70	58 - 147
Chloroform	50.0	44.1		ug/L		88	76 - 120
Chloromethane	50.0	49.0		ug/L		98	63 - 133
cis-1,2-Dichloroethene	50.0	46.7		ug/L		93	75 - 120
cis-1,3-Dichloropropene	50.0	47.7		ug/L		95	78 - 130
Dibromochloromethane	50.0	49.6		ug/L		99	71 - 126
Dibromomethane	50.0	44.7		ug/L		89	75 - 120
Dichlorodifluoromethane	50.0	42.2		ug/L		84	41 - 146
Ethylbenzene	50.0	47.0		ug/L		94	75 - 120
Hexachlorobutadiene	50.0	49.9		ug/L		100	71 - 131
Isopropylbenzene	50.0	50.4		ug/L		101	75 - 121
m&p-Xylene	50.0	47.7		ug/L		95	75 - 120
Methyl Ethyl Ketone	50.0	39.4		ug/L		79	53 - 142
methyl isobutyl ketone	50.0	41.1		ug/L		82	58 - 135
Methyl tert-butyl ether	50.0	43.3		ug/L		87	75 - 130
Methylene Chloride	50.0	44.9		ug/L		90	73 - 130
Naphthalene	50.0	50.7		ug/L		101	69 - 135
n-Butylbenzene	50.0	48.7		ug/L		97	75 - 121
N-Propylbenzene	50.0	49.0		ug/L		98	75 - 120
o-Xylene	50.0	47.2		ug/L		94	75 - 120
sec-Butylbenzene	50.0	50.1		ug/L		100	75 - 120
Styrene	50.0	49.0		ug/L		98	75 - 120
tert-Butylbenzene	50.0	51.3		ug/L		103	75 - 123
Perchloroethylene	50.0	47.2		ug/L		94	75 - 120
Toluene	50.0	47.6		ug/L		95	75 - 120
trans-1,2-Dichloroethene	50.0	44.5		ug/L		89	77 - 120
trans-1,3-Dichloropropene	50.0	48.2		ug/L		96	74 - 130
Trichloroethylene	50.0	47.1		ug/L		94	75 - 120
Trichlorofluoromethane	50.0	44.8		ug/L		90	71 - 130
Vinyl chloride	50.0	48.7		ug/L		97	72 - 123

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*79*		*75 - 125*
4-Bromofluorobenzene (Surr)	*94*		*75 - 120*
Dibromofluoromethane	*89*		*75 - 120*
Toluene-d8 (Surr)	*94*		*75 - 120*

Lab Sample ID: 500-87930-28 MS
Matrix: Water
Analysis Batch: 265449

Client Sample ID: IDW-DRUM-02
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	ND		50.0	51.0		ug/L		102	75 - 122
1,1,1-Trichloroethane	ND		50.0	48.2		ug/L		96	72 - 130
1,1,2,2-Tetrachloroethane	ND		50.0	55.9		ug/L		112	72 - 130

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-87930-28 MS
Matrix: Water
Analysis Batch: 265449

Client Sample ID: IDW-DRUM-02
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,2-Trichloroethane	ND		50.0	50.8		ug/L		102	75 - 120
1,1-Dichloroethane	ND		50.0	47.7		ug/L		95	75 - 120
1,1-Dichloroethylene	ND		50.0	46.8		ug/L		94	69 - 120
1,1-Dichloropropene	ND		50.0	47.7		ug/L		95	75 - 130
1,2,3-Trichlorobenzene	ND		50.0	50.1		ug/L		100	69 - 131
1,2,3-Trichloropropane	ND		50.0	54.7		ug/L		109	65 - 132
1,2,4-Trichlorobenzene	ND		50.0	50.6		ug/L		101	73 - 130
1,2,4-Trimethylbenzene	ND		50.0	52.7		ug/L		105	75 - 121
1,2-Dibromo-3-Chloropropane	ND		50.0	44.8		ug/L		90	62 - 130
1,2-Dibromoethane	ND		50.0	51.4		ug/L		103	78 - 122
1,2-Dichlorobenzene	ND		50.0	54.6		ug/L		109	75 - 120
1,2-Dichloroethane	ND		50.0	42.5		ug/L		85	69 - 130
1,2-Dichloropropane	ND		50.0	49.8		ug/L		100	75 - 120
1,3,5-Trimethylbenzene	ND		50.0	53.5		ug/L		107	75 - 121
1,1,2-Trichlorotrifluoroethane	14		50.0	58.3		ug/L		88	69 - 120
1,3-Dichlorobenzene	ND		50.0	52.2		ug/L		104	75 - 120
1,3-Dichloropropane	ND		50.0	50.4		ug/L		101	77 - 124
1,4-Dichlorobenzene	ND		50.0	51.4		ug/L		103	75 - 120
2,2-Dichloropropane	ND		50.0	44.1		ug/L		88	65 - 132
2-Chlorotoluene	ND		50.0	53.2		ug/L		106	75 - 120
2-Hexanone	ND		50.0	47.8		ug/L		96	55 - 140
4-Chlorotoluene	ND		50.0	52.5		ug/L		105	75 - 120
4-Isopropyltoluene	ND		50.0	52.9		ug/L		106	75 - 121
Acetone	5.4		50.0	47.1		ug/L		83	48 - 149
Benzene	ND		50.0	51.0		ug/L		102	75 - 120
Bromobenzene	ND		50.0	54.6		ug/L		109	75 - 120
Bromodichloromethane	ND		50.0	48.4		ug/L		97	77 - 121
Bromoform	ND		50.0	50.0		ug/L		100	68 - 126
Bromomethane	ND		50.0	46.3		ug/L		93	45 - 169
Carbon disulfide	ND		50.0	43.8		ug/L		88	56 - 130
Carbon tetrachloride	ND		50.0	46.0		ug/L		92	70 - 130
Chlorobenzene	ND		50.0	49.6		ug/L		99	75 - 120
Chlorobromomethane	ND		50.0	51.2		ug/L		102	76 - 120
Vinyl acetate	ND		50.0	44.5		ug/L		89	40 - 137
Chloroethane	ND		50.0	35.1		ug/L		70	58 - 147
Chloroform	ND		50.0	49.8		ug/L		100	76 - 120
Chloromethane	ND		50.0	56.3		ug/L		113	63 - 133
cis-1,2-Dichloroethene	14		50.0	64.3		ug/L		101	75 - 120
cis-1,3-Dichloropropene	ND		50.0	49.8		ug/L		100	78 - 130
Dibromochloromethane	ND		50.0	52.2		ug/L		104	71 - 126
Dibromomethane	ND		50.0	49.7		ug/L		99	75 - 120
Dichlorodifluoromethane	ND		50.0	47.7		ug/L		95	41 - 146
Ethylbenzene	ND		50.0	50.9		ug/L		102	75 - 120
Hexachlorobutadiene	ND		50.0	53.7		ug/L		107	71 - 131
Isopropylbenzene	ND		50.0	54.2		ug/L		108	75 - 121
m&p-Xylene	ND		50.0	51.2		ug/L		102	75 - 120
Methyl Ethyl Ketone	ND		50.0	46.2		ug/L		92	53 - 142
methyl isobutyl ketone	ND		50.0	47.8		ug/L		96	58 - 135

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-87930-28 MS
Matrix: Water
Analysis Batch: 265449

Client Sample ID: IDW-DRUM-02
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl tert-butyl ether	ND		50.0	46.7		ug/L		93	75 - 130
Methylene Chloride	ND		50.0	48.8		ug/L		98	73 - 130
Naphthalene	ND		50.0	53.5		ug/L		107	69 - 135
n-Butylbenzene	ND		50.0	52.1		ug/L		104	75 - 121
N-Propylbenzene	ND		50.0	53.4		ug/L		107	75 - 120
o-Xylene	ND		50.0	50.4		ug/L		101	75 - 120
sec-Butylbenzene	ND		50.0	54.3		ug/L		109	75 - 120
Styrene	ND		50.0	51.7		ug/L		103	75 - 120
tert-Butylbenzene	ND		50.0	54.5		ug/L		109	75 - 123
Perchloroethylene	ND		50.0	50.7		ug/L		101	75 - 120
Toluene	2.5		50.0	53.6		ug/L		102	75 - 120
trans-1,2-Dichloroethene	ND		50.0	49.7		ug/L		99	77 - 120
trans-1,3-Dichloropropene	ND		50.0	47.9		ug/L		96	74 - 130
Trichloroethylene	ND		50.0	52.3		ug/L		105	75 - 120
Trichlorofluoromethane	ND		50.0	49.7		ug/L		99	71 - 130
Vinyl chloride	ND		50.0	55.5		ug/L		111	72 - 123

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*79*		*75 - 125*
4-Bromofluorobenzene (Surr)	*95*		*75 - 120*
Dibromofluoromethane	*88*		*75 - 120*
Toluene-d8 (Surr)	*93*		*75 - 120*

Lab Sample ID: 500-87930-28 MSD
Matrix: Water
Analysis Batch: 265449

Client Sample ID: IDW-DRUM-02
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1,2-Tetrachloroethane	ND		50.0	51.6		ug/L		103	75 - 122	1	20
1,1,1-Trichloroethane	ND		50.0	46.7		ug/L		93	72 - 130	3	20
1,1,2,2-Tetrachloroethane	ND		50.0	56.2		ug/L		112	72 - 130	1	20
1,1,2-Trichloroethane	ND		50.0	51.8		ug/L		104	75 - 120	2	20
1,1-Dichloroethane	ND		50.0	46.6		ug/L		93	75 - 120	3	20
1,1-Dichloroethylene	ND		50.0	45.6		ug/L		91	69 - 120	3	20
1,1-Dichloropropene	ND		50.0	46.5		ug/L		93	75 - 130	2	20
1,2,3-Trichlorobenzene	ND		50.0	48.0		ug/L		96	69 - 131	4	20
1,2,3-Trichloropropane	ND		50.0	55.1		ug/L		110	65 - 132	1	20
1,2,4-Trichlorobenzene	ND		50.0	47.1		ug/L		94	73 - 130	7	20
1,2,4-Trimethylbenzene	ND		50.0	52.0		ug/L		104	75 - 121	1	20
1,2-Dibromo-3-Chloropropane	ND		50.0	47.6		ug/L		95	62 - 130	6	20
1,2-Dibromoethane	ND		50.0	50.7		ug/L		101	78 - 122	1	20
1,2-Dichlorobenzene	ND		50.0	54.0		ug/L		108	75 - 120	1	20
1,2-Dichloroethane	ND		50.0	41.8		ug/L		84	69 - 130	2	20
1,2-Dichloropropane	ND		50.0	48.8		ug/L		98	75 - 120	2	20
1,3,5-Trimethylbenzene	ND		50.0	53.4		ug/L		107	75 - 121	0	20
1,1,2-Trichlorotrifluoroethane	14		50.0	57.4		ug/L		87	69 - 120	2	20
1,3-Dichlorobenzene	ND		50.0	50.4		ug/L		101	75 - 120	3	20
1,3-Dichloropropane	ND		50.0	50.7		ug/L		101	77 - 124	1	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-87930-28 MSD
Matrix: Water
Analysis Batch: 265449

Client Sample ID: IDW-DRUM-02
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,4-Dichlorobenzene	ND		50.0	50.0		ug/L		100	75 - 120	3	20
2,2-Dichloropropane	ND		50.0	43.9		ug/L		88	65 - 132	1	20
2-Chlorotoluene	ND		50.0	51.3		ug/L		103	75 - 120	4	20
2-Hexanone	ND		50.0	46.4		ug/L		93	55 - 140	3	20
4-Chlorotoluene	ND		50.0	51.1		ug/L		102	75 - 120	3	20
4-Isopropyltoluene	ND		50.0	51.3		ug/L		103	75 - 121	3	20
Acetone	5.4		50.0	36.2	F2	ug/L		62	48 - 149	26	20
Benzene	ND		50.0	50.6		ug/L		101	75 - 120	1	20
Bromobenzene	ND		50.0	53.9		ug/L		108	75 - 120	1	20
Bromodichloromethane	ND		50.0	48.3		ug/L		97	77 - 121	0	20
Bromoform	ND		50.0	51.5		ug/L		103	68 - 126	3	20
Bromomethane	ND		50.0	46.1		ug/L		92	45 - 169	0	20
Carbon disulfide	ND		50.0	42.1		ug/L		84	56 - 130	4	20
Carbon tetrachloride	ND		50.0	45.8		ug/L		92	70 - 130	0	20
Chlorobenzene	ND		50.0	48.7		ug/L		97	75 - 120	2	20
Chlorobromomethane	ND		50.0	49.8		ug/L		100	76 - 120	3	20
Vinyl acetate	ND		50.0	44.9		ug/L		90	40 - 137	1	20
Chloroethane	ND		50.0	32.0		ug/L		64	58 - 147	9	20
Chloroform	ND		50.0	48.1		ug/L		96	76 - 120	3	20
Chloromethane	ND		50.0	53.8		ug/L		108	63 - 133	4	20
cis-1,2-Dichloroethene	14		50.0	63.3		ug/L		99	75 - 120	2	20
cis-1,3-Dichloropropene	ND		50.0	49.2		ug/L		98	78 - 130	1	20
Dibromochloromethane	ND		50.0	51.4		ug/L		103	71 - 126	1	20
Dibromomethane	ND		50.0	48.6		ug/L		97	75 - 120	2	20
Dichlorodifluoromethane	ND		50.0	47.1		ug/L		94	41 - 146	1	20
Ethylbenzene	ND		50.0	50.1		ug/L		100	75 - 120	2	20
Hexachlorobutadiene	ND		50.0	51.3		ug/L		103	71 - 131	5	20
Isopropylbenzene	ND		50.0	54.3		ug/L		109	75 - 121	0	20
m&p-Xylene	ND		50.0	49.8		ug/L		100	75 - 120	3	20
Methyl Ethyl Ketone	ND		50.0	45.6		ug/L		91	53 - 142	1	20
methyl isobutyl ketone	ND		50.0	46.0		ug/L		92	58 - 135	4	20
Methyl tert-butyl ether	ND		50.0	46.3		ug/L		93	75 - 130	1	20
Methylene Chloride	ND		50.0	48.9		ug/L		98	73 - 130	0	20
Naphthalene	ND		50.0	53.9		ug/L		108	69 - 135	1	20
n-Butylbenzene	ND		50.0	50.1		ug/L		100	75 - 121	4	20
N-Propylbenzene	ND		50.0	52.6		ug/L		105	75 - 120	1	20
o-Xylene	ND		50.0	49.1		ug/L		98	75 - 120	3	20
sec-Butylbenzene	ND		50.0	53.5		ug/L		107	75 - 120	2	20
Styrene	ND		50.0	50.9		ug/L		102	75 - 120	2	20
tert-Butylbenzene	ND		50.0	55.4		ug/L		111	75 - 123	2	20
Perchloroethylene	ND		50.0	49.5		ug/L		99	75 - 120	3	20
Toluene	2.5		50.0	52.6		ug/L		100	75 - 120	2	20
trans-1,2-Dichloroethene	ND		50.0	48.8		ug/L		98	77 - 120	2	20
trans-1,3-Dichloropropene	ND		50.0	49.4		ug/L		99	74 - 130	3	20
Trichloroethylene	ND		50.0	51.7		ug/L		103	75 - 120	1	20
Trichlorofluoromethane	ND		50.0	49.0		ug/L		98	71 - 130	1	20
Vinyl chloride	ND		50.0	54.2		ug/L		108	72 - 123	2	20

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 500-87930-28 MSD
Matrix: Water
Analysis Batch: 265449

Client Sample ID: IDW-DRUM-02
Prep Type: Total/NA

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	80		75 - 125
4-Bromofluorobenzene (Surr)	96		75 - 120
Dibromofluoromethane	87		75 - 120
Toluene-d8 (Surr)	93		75 - 120

Lab Sample ID: MB 500-265560/6
Matrix: Water
Analysis Batch: 265560

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		1.0	0.25	ug/L			11/23/14 08:51	1
1,1,1-Trichloroethane	ND		1.0	0.20	ug/L			11/23/14 08:51	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.23	ug/L			11/23/14 08:51	1
1,1,2-Trichloroethane	ND		1.0	0.28	ug/L			11/23/14 08:51	1
1,1-Dichloroethane	ND		1.0	0.19	ug/L			11/23/14 08:51	1
1,1-Dichloroethylene	ND		1.0	0.31	ug/L			11/23/14 08:51	1
1,1-Dichloropropene	ND		1.0	0.34	ug/L			11/23/14 08:51	1
1,2,3-Trichlorobenzene	ND		1.0	0.24	ug/L			11/23/14 08:51	1
1,2,3-Trichloropropane	ND		1.0	0.45	ug/L			11/23/14 08:51	1
1,2,4-Trichlorobenzene	ND		1.0	0.31	ug/L			11/23/14 08:51	1
1,2,4-Trimethylbenzene	ND		1.0	0.14	ug/L			11/23/14 08:51	1
1,2-Dibromo-3-Chloropropane	ND		5.0	0.87	ug/L			11/23/14 08:51	1
1,2-Dibromoethane	ND		1.0	0.36	ug/L			11/23/14 08:51	1
1,2-Dichlorobenzene	ND		1.0	0.27	ug/L			11/23/14 08:51	1
1,2-Dichloroethane	ND		1.0	0.28	ug/L			11/23/14 08:51	1
1,2-Dichloropropane	ND		1.0	0.20	ug/L			11/23/14 08:51	1
1,3,5-Trimethylbenzene	ND		1.0	0.18	ug/L			11/23/14 08:51	1
1,1,2-Trichlorotrifluoroethane	ND		5.0	0.22	ug/L			11/23/14 08:51	1
1,3-Dichlorobenzene	ND		1.0	0.15	ug/L			11/23/14 08:51	1
1,3-Dichloropropane	ND		1.0	0.13	ug/L			11/23/14 08:51	1
1,4-Dichlorobenzene	ND		1.0	0.15	ug/L			11/23/14 08:51	1
2,2-Dichloropropane	ND		1.0	0.32	ug/L			11/23/14 08:51	1
2-Chlorotoluene	ND		1.0	0.21	ug/L			11/23/14 08:51	1
2-Hexanone	ND		5.0	0.56	ug/L			11/23/14 08:51	1
4-Chlorotoluene	ND		1.0	0.20	ug/L			11/23/14 08:51	1
4-Isopropyltoluene	ND		2.0	0.17	ug/L			11/23/14 08:51	1
Acetone	ND		5.0	1.3	ug/L			11/23/14 08:51	1
Benzene	ND		0.50	0.074	ug/L			11/23/14 08:51	1
Bromobenzene	ND		1.0	0.25	ug/L			11/23/14 08:51	1
Bromodichloromethane	ND		1.0	0.17	ug/L			11/23/14 08:51	1
Bromoform	ND		1.0	0.28	ug/L			11/23/14 08:51	1
Bromomethane	ND		5.0	0.31	ug/L			11/23/14 08:51	1
Carbon disulfide	ND		5.0	0.43	ug/L			11/23/14 08:51	1
Carbon tetrachloride	ND		1.0	0.26	ug/L			11/23/14 08:51	1
Chlorobenzene	ND		1.0	0.14	ug/L			11/23/14 08:51	1
Chlorobromomethane	ND		1.0	0.40	ug/L			11/23/14 08:51	1
Vinyl acetate	ND		2.0	0.33	ug/L			11/23/14 08:51	1
Chloroethane	ND		1.0	0.34	ug/L			11/23/14 08:51	1

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 500-265560/6
Matrix: Water
Analysis Batch: 265560

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	ND		1.0	0.20	ug/L			11/23/14 08:51	1
Chloromethane	ND		1.0	0.18	ug/L			11/23/14 08:51	1
cis-1,2-Dichloroethene	ND		1.0	0.12	ug/L			11/23/14 08:51	1
cis-1,3-Dichloropropene	ND		1.0	0.18	ug/L			11/23/14 08:51	1
Dibromochloromethane	ND		1.0	0.32	ug/L			11/23/14 08:51	1
Dibromomethane	ND		1.0	0.33	ug/L			11/23/14 08:51	1
Dichlorodifluoromethane	ND		5.0	0.20	ug/L			11/23/14 08:51	1
Ethylbenzene	ND		0.50	0.13	ug/L			11/23/14 08:51	1
Hexachlorobutadiene	ND		1.0	0.26	ug/L			11/23/14 08:51	1
Isopropylbenzene	ND		1.0	0.14	ug/L			11/23/14 08:51	1
m&p-Xylene	ND		1.0	0.26	ug/L			11/23/14 08:51	1
Methyl Ethyl Ketone	ND		5.0	1.5	ug/L			11/23/14 08:51	1
methyl isobutyl ketone	ND		5.0	0.33	ug/L			11/23/14 08:51	1
Methyl tert-butyl ether	ND		1.0	0.24	ug/L			11/23/14 08:51	1
Methylene Chloride	ND		5.0	0.68	ug/L			11/23/14 08:51	1
Naphthalene	ND		1.0	0.16	ug/L			11/23/14 08:51	1
n-Butylbenzene	ND		1.0	0.13	ug/L			11/23/14 08:51	1
N-Propylbenzene	ND		1.0	0.13	ug/L			11/23/14 08:51	1
o-Xylene	ND		0.50	0.068	ug/L			11/23/14 08:51	1
sec-Butylbenzene	ND		1.0	0.15	ug/L			11/23/14 08:51	1
Styrene	ND		1.0	0.10	ug/L			11/23/14 08:51	1
tert-Butylbenzene	ND		1.0	0.14	ug/L			11/23/14 08:51	1
Perchloroethylene	ND		1.0	0.17	ug/L			11/23/14 08:51	1
Toluene	ND		0.50	0.11	ug/L			11/23/14 08:51	1
trans-1,2-Dichloroethene	ND		1.0	0.25	ug/L			11/23/14 08:51	1
trans-1,3-Dichloropropene	ND		1.0	0.21	ug/L			11/23/14 08:51	1
Trichloroethylene	ND		0.50	0.19	ug/L			11/23/14 08:51	1
Trichlorofluoromethane	ND		1.0	0.19	ug/L			11/23/14 08:51	1
Vinyl chloride	ND		0.50	0.10	ug/L			11/23/14 08:51	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*75 - 125*		*11/23/14 08:51*	*1*
4-Bromofluorobenzene (Surr)	*92*		*75 - 120*		*11/23/14 08:51*	*1*
Dibromofluoromethane	*100*		*75 - 120*		*11/23/14 08:51*	*1*
Toluene-d8 (Surr)	*105*		*75 - 120*		*11/23/14 08:51*	*1*

Lab Sample ID: LCS 500-265560/4
Matrix: Water
Analysis Batch: 265560

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	50.0	48.5		ug/L		97	75 - 122
1,1,1-Trichloroethane	50.0	44.9		ug/L		90	72 - 130
1,1,2,2-Tetrachloroethane	50.0	47.6		ug/L		95	72 - 130
1,1,2-Trichloroethane	50.0	47.4		ug/L		95	75 - 120
1,1-Dichloroethane	50.0	48.2		ug/L		96	75 - 120
1,1-Dichloroethylene	50.0	47.6		ug/L		95	69 - 120
1,1-Dichloropropene	50.0	47.6		ug/L		95	75 - 130

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-265560/4
Matrix: Water
Analysis Batch: 265560

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,3-Trichlorobenzene	50.0	45.8		ug/L		92	69 - 131
1,2,3-Trichloropropane	50.0	49.3		ug/L		99	65 - 132
1,2,4-Trichlorobenzene	50.0	47.5		ug/L		95	73 - 130
1,2,4-Trimethylbenzene	50.0	48.7		ug/L		97	75 - 121
1,2-Dibromo-3-Chloropropane	50.0	43.3		ug/L		87	62 - 130
1,2-Dibromoethane	50.0	49.0		ug/L		98	78 - 122
1,2-Dichlorobenzene	50.0	48.8		ug/L		98	75 - 120
1,2-Dichloroethane	50.0	43.8		ug/L		88	69 - 130
1,2-Dichloropropane	50.0	50.3		ug/L		101	75 - 120
1,3,5-Trimethylbenzene	50.0	49.7		ug/L		99	75 - 121
1,1,2-Trichlorotrifluoroethane	50.0	46.7		ug/L		93	69 - 120
1,3-Dichlorobenzene	50.0	50.0		ug/L		100	75 - 120
1,3-Dichloropropane	50.0	48.3		ug/L		97	77 - 124
1,4-Dichlorobenzene	50.0	49.4		ug/L		99	75 - 120
2,2-Dichloropropane	50.0	42.9		ug/L		86	65 - 132
2-Chlorotoluene	50.0	48.4		ug/L		97	75 - 120
2-Hexanone	50.0	47.2		ug/L		94	55 - 140
4-Chlorotoluene	50.0	48.9		ug/L		98	75 - 120
4-Isopropyltoluene	50.0	50.4		ug/L		101	75 - 121
Acetone	50.0	48.9		ug/L		98	48 - 149
Benzene	50.0	49.2		ug/L		98	75 - 120
Bromobenzene	50.0	49.2		ug/L		98	75 - 120
Bromodichloromethane	50.0	45.8		ug/L		92	77 - 121
Bromoform	50.0	48.6		ug/L		97	68 - 126
Bromomethane	50.0	44.3		ug/L		89	45 - 169
Carbon disulfide	50.0	46.0		ug/L		92	56 - 130
Carbon tetrachloride	50.0	45.9		ug/L		92	70 - 130
Chlorobenzene	50.0	49.2		ug/L		98	75 - 120
Chlorobromomethane	50.0	49.3		ug/L		99	76 - 120
Vinyl acetate	50.0	41.9		ug/L		84	40 - 137
Chloroethane	50.0	57.0		ug/L		114	58 - 147
Chloroform	50.0	45.8		ug/L		92	76 - 120
Chloromethane	50.0	54.8		ug/L		110	63 - 133
cis-1,2-Dichloroethene	50.0	48.3		ug/L		97	75 - 120
cis-1,3-Dichloropropene	50.0	46.8		ug/L		94	78 - 130
Dibromochloromethane	50.0	49.3		ug/L		99	71 - 126
Dibromomethane	50.0	45.8		ug/L		92	75 - 120
Dichlorodifluoromethane	50.0	52.2		ug/L		104	41 - 146
Ethylbenzene	50.0	49.9		ug/L		100	75 - 120
Hexachlorobutadiene	50.0	48.7		ug/L		97	71 - 131
Isopropylbenzene	50.0	50.0		ug/L		100	75 - 121
m&p-Xylene	50.0	48.5		ug/L		97	75 - 120
Methyl Ethyl Ketone	50.0	46.2		ug/L		92	53 - 142
methyl isobutyl ketone	50.0	45.7		ug/L		91	58 - 135
Methyl tert-butyl ether	50.0	41.6		ug/L		83	75 - 130
Methylene Chloride	50.0	47.5		ug/L		95	73 - 130
Naphthalene	50.0	43.4		ug/L		87	69 - 135
n-Butylbenzene	50.0	50.3		ug/L		101	75 - 121

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 500-265560/4
Matrix: Water
Analysis Batch: 265560

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
N-Propylbenzene	50.0	50.5		ug/L		101	75 - 120
o-Xylene	50.0	48.7		ug/L		97	75 - 120
sec-Butylbenzene	50.0	49.9		ug/L		100	75 - 120
Styrene	50.0	50.6		ug/L		101	75 - 120
tert-Butylbenzene	50.0	49.3		ug/L		99	75 - 123
Perchloroethylene	50.0	50.7		ug/L		101	75 - 120
Toluene	50.0	48.3		ug/L		97	75 - 120
trans-1,2-Dichloroethene	50.0	48.8		ug/L		98	77 - 120
trans-1,3-Dichloropropene	50.0	46.2		ug/L		92	74 - 130
Trichloroethylene	50.0	50.3		ug/L		101	75 - 120
Trichlorofluoromethane	50.0	45.2		ug/L		90	71 - 130
Vinyl chloride	50.0	51.2		ug/L		102	72 - 123

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*90*		*75 - 125*
4-Bromofluorobenzene (Surr)	*97*		*75 - 120*
Dibromofluoromethane	*100*		*75 - 120*
Toluene-d8 (Surr)	*103*		*75 - 120*

Lab Chronicle

Client: AbbVie US LLC
Project/Site: Laurinburg, NC VOC Testing (0272871))

TestAmerica Job ID: 500-87930-1

Client Sample ID: MW-10B — Lab Sample ID: 500-87930-1

Date Collected: 11/11/14 14:00 — **Matrix: Water**
Date Received: 11/15/14 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	265023	11/20/14 02:05	DJD	TAL CHI
Total/NA	Analysis	8260B	DL	5	265115	11/20/14 18:26	EMA	TAL CHI

Client Sample ID: MW-10D — Lab Sample ID: 500-87930-2

Date Collected: 11/11/14 14:15 — **Matrix: Water**
Date Received: 11/15/14 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	265023	11/20/14 02:30	DJD	TAL CHI
Total/NA	Analysis	8260B	DL	5	265023	11/20/14 02:55	DJD	TAL CHI

Client Sample ID: MW-16B — Lab Sample ID: 500-87930-3

Date Collected: 11/11/14 16:43 — **Matrix: Water**
Date Received: 11/15/14 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	265023	11/20/14 03:20	DJD	TAL CHI

Client Sample ID: MW-16D — Lab Sample ID: 500-87930-4

Date Collected: 11/11/14 17:45 — **Matrix: Water**
Date Received: 11/15/14 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	265023	11/20/14 03:45	DJD	TAL CHI

Client Sample ID: MW-18B — Lab Sample ID: 500-87930-5

Date Collected: 11/12/14 16:45 — **Matrix: Water**
Date Received: 11/15/14 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	265023	11/20/14 04:10	DJD	TAL CHI

Client Sample ID: MW-18D — Lab Sample ID: 500-87930-6

Date Collected: 11/12/14 16:00 — **Matrix: Water**
Date Received: 11/15/14 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	265023	11/20/14 04:35	DJD	TAL CHI

Lab Chronicle

Client: AbbVie US LLC
Project/Site: Laurinburg, NC VOC Testing (0272871))

TestAmerica Job ID: 500-87930-1

Client Sample ID: MW-19B — Lab Sample ID: 500-87930-7

Date Collected: 11/11/14 17:30 — **Matrix: Water**
Date Received: 11/15/14 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	265023	11/20/14 05:25	DJD	TAL CHI

Client Sample ID: MW-19D — Lab Sample ID: 500-87930-8

Date Collected: 11/11/14 18:30 — **Matrix: Water**
Date Received: 11/15/14 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	265115	11/20/14 18:51	EMA	TAL CHI

Client Sample ID: MW-20B — Lab Sample ID: 500-87930-9

Date Collected: 11/12/14 08:40 — **Matrix: Water**
Date Received: 11/15/14 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	265023	11/20/14 06:39	DJD	TAL CHI

Client Sample ID: MW-20D — Lab Sample ID: 500-87930-10

Date Collected: 11/12/14 10:30 — **Matrix: Water**
Date Received: 11/15/14 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	265193	11/20/14 22:45	DJD	TAL CHI

Client Sample ID: MW-100A — Lab Sample ID: 500-87930-11

Date Collected: 11/12/14 14:30 — **Matrix: Water**
Date Received: 11/15/14 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		50	265193	11/20/14 23:10	DJD	TAL CHI
Total/NA	Analysis	8260B	DL	500	265193	11/20/14 23:35	DJD	TAL CHI

Client Sample ID: MW-100B — Lab Sample ID: 500-87930-12

Date Collected: 11/12/14 13:45 — **Matrix: Water**
Date Received: 11/15/14 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		50	265193	11/21/14 00:00	DJD	TAL CHI
Total/NA	Analysis	8260B	DL	500	265193	11/21/14 00:25	DJD	TAL CHI

Lab Chronicle

Client: AbbVie US LLC
Project/Site: Laurinburg, NC VOC Testing (0272871))

TestAmerica Job ID: 500-87930-1

Client Sample ID: MW-101A — Lab Sample ID: 500-87930-13

Date Collected: 11/12/14 16:05 — **Matrix: Water**
Date Received: 11/15/14 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		10	265193	11/21/14 00:50	DJD	TAL CHI
Total/NA	Analysis	8260B	DL	100	265193	11/21/14 01:14	DJD	TAL CHI

Client Sample ID: MW-101B — Lab Sample ID: 500-87930-14

Date Collected: 11/12/14 15:10 — **Matrix: Water**
Date Received: 11/15/14 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	265193	11/21/14 01:39	DJD	TAL CHI

Client Sample ID: MW-102A — Lab Sample ID: 500-87930-15

Date Collected: 11/12/14 11:00 — **Matrix: Water**
Date Received: 11/15/14 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	265193	11/21/14 02:04	DJD	TAL CHI
Total/NA	Analysis	8260B	DL	10	265193	11/21/14 02:29	DJD	TAL CHI

Client Sample ID: MW-102B — Lab Sample ID: 500-87930-16

Date Collected: 11/12/14 10:00 — **Matrix: Water**
Date Received: 11/15/14 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2	265193	11/21/14 02:54	DJD	TAL CHI
Total/NA	Analysis	8260B	DL	20	265193	11/21/14 03:18	DJD	TAL CHI

Client Sample ID: MW-102C — Lab Sample ID: 500-87930-17

Date Collected: 11/12/14 09:00 — **Matrix: Water**
Date Received: 11/15/14 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		50	265193	11/21/14 03:43	DJD	TAL CHI
Total/NA	Analysis	8260B	DL	500	265193	11/21/14 04:08	DJD	TAL CHI

Client Sample ID: MW-103A — Lab Sample ID: 500-87930-18

Date Collected: 11/13/14 08:30 — **Matrix: Water**
Date Received: 11/15/14 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		50	265193	11/21/14 04:33	DJD	TAL CHI
Total/NA	Analysis	8260B	DL	500	265193	11/21/14 04:58	DJD	TAL CHI

Lab Chronicle

Client: AbbVie US LLC
Project/Site: Laurinburg, NC VOC Testing (0272871))

TestAmerica Job ID: 500-87930-1

Client Sample ID: MW-103B — Lab Sample ID: 500-87930-19

Date Collected: 11/13/14 09:30 — **Matrix: Water**
Date Received: 11/15/14 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		20	265193	11/21/14 05:23	DJD	TAL CHI
Total/NA	Analysis	8260B	DL	200	265193	11/21/14 05:47	DJD	TAL CHI

Client Sample ID: MW-103C — Lab Sample ID: 500-87930-20

Date Collected: 11/13/14 10:30 — **Matrix: Water**
Date Received: 11/15/14 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		20	265193	11/21/14 06:12	DJD	TAL CHI
Total/NA	Analysis	8260B	DL	200	265193	11/21/14 06:37	DJD	TAL CHI

Client Sample ID: MW-104A — Lab Sample ID: 500-87930-21

Date Collected: 11/13/14 08:45 — **Matrix: Water**
Date Received: 11/15/14 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2	265364	11/21/14 19:07	EMA	TAL CHI
Total/NA	Analysis	8260B	DL	20	265364	11/21/14 19:35	EMA	TAL CHI

Client Sample ID: MW-104B — Lab Sample ID: 500-87930-22

Date Collected: 11/13/14 09:25 — **Matrix: Water**
Date Received: 11/15/14 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	265364	11/21/14 20:02	EMA	TAL CHI
Total/NA	Analysis	8260B	DL	50	265364	11/21/14 20:30	EMA	TAL CHI

Client Sample ID: MW-104C — Lab Sample ID: 500-87930-23

Date Collected: 11/13/14 10:25 — **Matrix: Water**
Date Received: 11/15/14 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	265364	11/21/14 20:57	EMA	TAL CHI
Total/NA	Analysis	8260B	DL	500	265364	11/21/14 21:24	EMA	TAL CHI

Client Sample ID: MW-105C — Lab Sample ID: 500-87930-24

Date Collected: 11/12/14 14:05 — **Matrix: Water**
Date Received: 11/15/14 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	265449	11/22/14 01:34	DJD	TAL CHI

Lab Chronicle

Client: AbbVie US LLC
Project/Site: Laurinburg, NC VOC Testing (0272871))

TestAmerica Job ID: 500-87930-1

Client Sample ID: 112014-GW-DUP01 — Lab Sample ID: 500-87930-25

Date Collected: 11/11/14 14:15 — **Matrix: Water**
Date Received: 11/15/14 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B	DL	2	265449	11/22/14 02:02	DJD	TAL CHI
Total/NA	Analysis	8260B		1	265560	11/23/14 09:41	DJD	TAL CHI

Client Sample ID: 112014-GW-DUP02 — Lab Sample ID: 500-87930-26

Date Collected: 11/12/14 10:00 — **Matrix: Water**
Date Received: 11/15/14 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	265449	11/22/14 02:58	DJD	TAL CHI
Total/NA	Analysis	8260B	DL	50	265449	11/22/14 03:25	DJD	TAL CHI

Client Sample ID: IDW-DRUM-01 — Lab Sample ID: 500-87930-27

Date Collected: 11/13/14 12:30 — **Matrix: Water**
Date Received: 11/15/14 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		10	265449	11/22/14 03:53	DJD	TAL CHI
Total/NA	Analysis	8260B	DL	100	265449	11/22/14 04:21	DJD	TAL CHI

Client Sample ID: IDW-DRUM-02 — Lab Sample ID: 500-87930-28

Date Collected: 11/13/14 12:45 — **Matrix: Water**
Date Received: 11/15/14 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	265449	11/22/14 04:48	DJD	TAL CHI

Client Sample ID: TRIP BLANK 1 — Lab Sample ID: 500-87930-29

Date Collected: 11/11/14 10:00 — **Matrix: Water**
Date Received: 11/15/14 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	265449	11/22/14 05:15	DJD	TAL CHI

Client Sample ID: TRIP BLANK 2 — Lab Sample ID: 500-87930-30

Date Collected: 11/11/14 10:00 — **Matrix: Water**
Date Received: 11/15/14 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	265449	11/22/14 05:42	DJD	TAL CHI

Lab Chronicle

Client: AbbVie US LLC
Project/Site: Laurinburg, NC VOC Testing (0272871))

TestAmerica Job ID: 500-87930-1

Client Sample ID: TRIP BLANK 3

Lab Sample ID: 500-87930-31

Date Collected: 11/11/14 10:00

Matrix: Water

Date Received: 11/15/14 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	265449	11/22/14 06:10	DJD	TAL CHI

Laboratory References:

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Certification Summary

Client: AbbVie US LLC
Project/Site: Laurinburg, NC VOC Testing (0272871))

TestAmerica Job ID: 500-87930-1

Laboratory: TestAmerica Chicago

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alabama	State Program	4	40461	04-30-15
California	State Program	9	2903	04-30-15
Georgia	State Program	4	N/A	04-30-15
Georgia	State Program	4	939	04-30-15
Hawaii	State Program	9	N/A	04-30-15
Illinois	NELAP	5	100201	04-30-15
Indiana	State Program	5	C-IL-02	04-30-15
Iowa	State Program	7	82	05-01-16
Kansas	NELAP	7	E-10161	01-31-15 *
Kentucky (UST)	State Program	4	66	04-30-15
Kentucky (WW)	State Program	4	KY90023	12-31-14 *
Massachusetts	State Program	1	M-IL035	06-30-15
Mississippi	State Program	4	N/A	04-30-15
New York	NELAP	2	IL00035	03-31-15
North Carolina (WW/SW)	State Program	4	291	12-31-14 *
North Dakota	State Program	8	R-194	04-30-15
Oklahoma	State Program	6	8908	08-31-15
South Carolina	State Program	4	77001	04-30-15
USDA	Federal		P330-12-00038	02-06-15
Wisconsin	State Program	5	999580010	08-31-15 *
Wyoming	State Program	8	8TMS-Q	04-30-15

* Certification renewal pending - certification considered valid.

AbbVie Environmental,Health and Safety Laboratory
AP52N, Abbott Park, IL

Page (1) of (3)

CHAIN OF CUSTODY

Phone: (847) 937-1254

PHONE NUMBER DOES NOT WORK!

Sample Collector(s): TOM NAUMANN, ANDY NEAL

Requested By: ERM

Division:

Dept: RALEIGH, NC

Site: FORMER ABBOTT, LAURINBURG NC

500-87930 COC

Report Sent to: GREG.KANELLIS@ERM.com

Field Project Name / Number: 0272871

TURNAROUND TIME REQUESTED: Normal RUSH*

* If RUSH, Date Needed: / /

Are any of the samples for compliance monitoring purposes, or being reported to a regulatory agency? Yes No

ANALYSIS & METHOD REQUESTED: VOC's (8260B); VOC's (8260B) + TICs

500-87930

Sample Temperature[d]: 1.4°C & 0.5°C

	SAMPLE IDENTIFICATION	COLLECTION DATE	COLLECTION TIME	MATRIX[a]	COMP	GRAB	CONTAINERS No.	G	P	TYPE[b]	PRESERVATIVE[c] TYPE	VOC's (8260B)	VOC's (8260B) + TICs			A[e]	R[e]	CONDITION CODE[f]
1	MW-10B	11/11/14	1400	O		X	3	3	0	A	1	X				✓		
2	MW-10D	11/11/14	1415													✓		
3	MW-16B	11/11/14	1643													✓		
4	MW-16D	11/11/14	1745													✓		
5	MW-18B	11/12/14	1645													✓		
6	MW-18D	11/12/14	1600													✓		
7	MW-19B	11/11/14	1730													✓		
8	MW-19D	11/11/14	1830													✓		
9	MW-20B	11/12/14	0840													✓		
10	MW-20D	11/12/14	1030													✓		
11	MW-100A	11/12/14	1430										X			✓		

GLOSSARY:
[a]MATRIX = WasteWater (W), InProcess (I) Other (O)
[b]CONTAINER TYPE= 40mL Vial(A), 100mL(B), 1Liter(C), Glass(G), Plastic(P)
[c]PRESERVATION = HCl(1), H_2SO_4(2), Sodium Thiosulfate(3), Other(O), None(N)
[d]TEMPERATURE = Received on Ice(ROI), Not Received on Ice(NRI)
[e]GENERAL = Not Applicable(N/A), Accept(A), Reject(R)
[f]CONDITION = Improper container/cap(1), Improper preservation(2), Damaged container/cap(3), Insufficient sample volume(4), Headspace/air bubbles(5), Received past holding time(6), Received frozen(7), Label conflicts with COC(8)

COMMENTS & SPECIAL INSTRUCTIONS:

2,8,0,3

1. Relinquished By: TOM NAUMANN	Date: 11/13/14 Time: 1645	2. Relinquished By: Pam Kern	Date: 11-14-14 Time: 9:40 Am	3. Relinquished By:	Date: Time:
Received By: Pam Kern	Date: 11-14-14 Time: 9:45 AM	Received By: [illegible]	Date: 11/15/14 Time: 1025	Received By:	Date: Time:

PLEASE FILL OUT CHAIN OF CUSTODY RECORD COMPLETELY!

AbbVie Environmental,Health and Safety Laboratory
AP52N, Abbott Park, IL

Page (2) of (3)

CHAIN OF CUSTODY

Phone: (847) 937-1254

Sample Collector(s): Tom Naumann, Andy Neal

Requested By: ERM

Division: Raleigh, NC

Dept:

Site: Former Abbott, Lavrinburg ~~NC~~

Report Sent to: Greg.Kanellis@erm.com

Field Project Name / Number: 0272871

TURNAROUND TIME REQUESTED: (Normal) RUSH*

* If RUSH, Date Needed: / /

Are any of the samples for compliance monitoring purposes, or being reported to a regulatory agency? (Yes) No

ANALYSIS & METHOD REQUESTED: 500-87930

Sample Temperature[d]: 1.4° & 0.5°

	SAMPLE IDENTIFICATION	COLLECTION DATE	COLLECTION TIME	MATRIX[a]	COMP	GRAB	CONTAINERS No.	G	P	TYPE[b]	PRESERVATIVE[c] TYPE	VOCs (8260B)	VOCs (8260B) + TICs			A[e]	R[e]	CONDITION CODE[f]
12	MW-100B	11/12/14	1345	O		X	3	3	O	A	1		X			✓		
13	MW-101A	11/12/14	1605	↓		↓	↓	↓	↓	↓	↓		X			✓		
14	MW-101B	11/12/14	1510	↓		↓	↓	↓	↓	↓	↓		X			✓		
15	MW-102A	11/12/14	1100	↓		↓	↓	↓	↓	↓	↓		X			✓		
16	MW-102B	11/12/14	1000	↓		↓	↓	↓	↓	↓	↓		X			✓		
17	MW-102C	11/12/14	0900	↓		↓	↓	↓	↓	↓	↓		X			✓		
18	MW-103A	11/13/14	0830	↓		↓	↓	↓	↓	↓	↓	X				✓		
19	MW-103B	11/13/14	0930	↓		↓	↓	↓	↓	↓	↓	X				✓		
20	MW-103C	11/13/14	1030	↓		↓	↓	↓	↓	↓	↓	X				✓		
21	MW-104A	11/13/14	0845	↓		↓	↓	↓	↓	↓	↓	X				✓		
22	MW-104B	11/13/14	0925	↓		↓	↓	↓	↓	↓	↓	X				✓		

GLOSSARY:
[a]MATRIX = WasteWater (W), InProcess (I) Other (O)
[b]CONTAINER TYPE= 40mL Vial(A), 100mL(B), 1Liter(C), Glass(G), Plastic(P)
[c]PRESERVATION = HCl(1), H_2SO_4(2), Sodium Thiosulfate(3), Other(O), None(N)
[d]TEMPERATURE = Received on Ice(ROI), Not Received on Ice(NRI)
[e]GENERAL = Not Applicable(N/A), Accept(A), Reject(R)
[f]CONDITION = Improper container/cap(1), Improper preservation(2), Damaged container/cap(3), Insufficient sample volume(4), Headspace/air bubbles(5), Received past holding time(6), Received frozen(7), Label conflicts with COC(8)

COMMENTS & SPECIAL INSTRUCTIONS:

1. Relinquished By: Tom Naumann	Date: 11/13/14 Time: 1645	2. Relinquished By: Pam Klem	Date: 11-14-14 Time: 9:40 am	3. Relinquished By:	Date: Time:
Received By: Pam Klem	Date: 11-14-14 Time: 9:45 am	Received By: Sherri Scott	Date: 11/15/14 Time: 1025	Received By:	Date: Time:

PLEASE FILL OUT CHAIN OF CUSTODY RECORD COMPLETELY!

AbbVie Environmental,Health and Safety Laboratory
AP52N, Abbott Park, IL

Page (3) of (3)

CHAIN OF CUSTODY

Phone: (847) 937-1254

Sample Collector(s): TOM NAUMANN, ANDY NEAL

Requested By: ERM

Division: RALEIGH, NC

Dept:

Site: FORMER ABBOTT - LAURINBURG

Report Sent to: GREG.ICANELLIS@ERM.com

Field Project Name / Number: 0272871

TURNAROUND TIME REQUESTED: Normal (circled) RUSH*

* If RUSH, Date Needed: / /

Are any of the samples for compliance monitoring purposes, or being reported to a regulatory agency? Yes (circled) No

ANALYSIS & METHOD REQUESTED: VOC's (8260B)

500-87930

Sample Temperature[d]: 1.4°C & 0.5°C

	SAMPLE IDENTIFICATION	COLLECTION DATE	COLLECTION TIME	MATRIX[a]	COMP	GRAB	CONTAINERS No.	G	P	TYPE[b]	PRESERVATIVE[c] TYPE	VOC's (8260B)				A[e]	R[e]	CONDITION CODE[f]
23	MW-104C	11/13/14	1025	O		X	3	3	O	A	1	X				✓		
24	MW-105C	11/12/14	1405	↓		↓	↓	↓	↓	↓	↓	↓				✓		
25	112014-GW-DUP01	11/11/14	1415	↓		↓	↓	↓	↓	↓	↓	↓				✓		
26	112014-GW-DUP02	11/12/14	1000	↓		↓	↓	↓	↓	↓	↓	↓				✓		
27	IDW-DRUM-01	11/13/14	1230	↓		↓	↓	↓	↓	↓	↓	↓				✓		
28	IDW-DRUM-02	11/13/14	1245	↓		↓	↓	↓	↓	↓	↓	↓				✓		
29	TRIP BLANK 1	10/31/14	1000				2 pk									✓		
30	TRIP BLANK 2	10/31/14	1000				↓ 2 pk	↓	↓	↓	↓	↓				✓		
	~~TEMP BLANK~~ IN	/ /					* 1 pk									✓		
31	TRIP BLANK 3	10/31/14	1000	O		X	↓	X	NA	A	1					✓		
		/ /																

GLOSSARY:

[a]**MATRIX** = WasteWater (W), InProcess (I) Other (O)
[b]**CONTAINER TYPE**= 40mL Vial(A), 100mL(B), 1Liter(C), Glass(G), Plastic(P)
[c]**PRESERVATION** = HCl(1), H_2SO_4(2), Sodium Thiosulfate(3), Other(O), None(N)
[d]**TEMPERATURE** = Received on Ice(ROI), Not Received on Ice(NRI)
[e]**GENERAL** = Not Applicable(N/A), Accept(A), Reject(R)
[f]**CONDITION** = Improper container/cap(1), Improper preservation(2), Damaged container/cap(3), Insufficient sample volume(4), Headspace/air bubbles(5), Received past holding time(6), Received frozen(7), Label conflicts with COC(8)

COMMENTS & SPECIAL INSTRUCTIONS:

* 3 trip blanks received in total; 1 in cooler #1 and 2 in cooler #2 Pam Kram 11-14-14

1. Relinquished By: TOM NAUMANN	Date: 11/13/14 Time: 1645	2. Relinquished By: Pam Kram	Date: 11-14-14 Time: 4:40pm	3. Relinquished By:	Date: Time:
Received By: Pam Kram	Date: 11-14-14 Time: 9:45am	Received By: Sherri Scott	Date: 11/15/14 Time: 1025	Received By:	Date: Time:

PLEASE FILL OUT CHAIN OF CUSTODY RECORD COMPLETELY!

Login Sample Receipt Checklist

Client: AbbVie US LLC

Job Number: 500-87930-1

Login Number: 87930

List Source: TestAmerica Chicago

List Number: 1

Creator: Scott, Sherri L

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.8,0.3
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Southeast ACCUTEST LABORATORIES

11/26/14

Technical Report for

ERM

Former Abbott; Joy St, Laurinburg, NC

0272871

Accutest Job Number: FA19973

Sampling Dates: 11/11/14 - 11/13/14

Report to:

ERM
1130 Situs Court Suite 250
Raleigh, NC 27606
gregory.kanellis@erm.com

ATTN: Greg Kanellis

Total number of pages in report: **32**

Norm Farmer
Technical Director

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Client Service contact: Jean Dent-Smith 407-425-6700

Certifications: FL (E83510), LA (03051), KS (E-10327), IA (366), IL (200063), NC (573), NJ (FL002), SC (96038001) DoD ELAP (L-A-B L2229), CA (2937), TX (T104704404), PA (68-03573), VA (460177), AK, AR, GA, KY, MA, NV, OK, UT, WA

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Test results relate only to samples analyzed.

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Accutest Laboratories

Sample Summary

ERM

Job No: FA19973

Former Abbott; Joy St, Laurinburg, NC
Project No: 0272871

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA19973-1	11/11/14	14:00	TNAN	11/14/14	AQ	Ground Water	MW-10B
FA19973-2	11/11/14	14:15	TNAN	11/14/14	AQ	Ground Water	MW-10D
FA19973-3	11/12/14	14:30	TNAN	11/14/14	AQ	Ground Water	MW-100A
FA19973-4	11/12/14	13:45	TNAN	11/14/14	AQ	Ground Water	MW-100B
FA19973-5	11/12/14	16:05	TNAN	11/14/14	AQ	Ground Water	MW-101A
FA19973-6	11/12/14	15:10	TNAN	11/14/14	AQ	Ground Water	MW-101B
FA19973-7	11/12/14	11:00	TNAN	11/14/14	AQ	Ground Water	MW-102A
FA19973-8	11/12/14	10:00	TNAN	11/14/14	AQ	Ground Water	MW-102B
FA19973-9	11/12/14	09:00	TNAN	11/14/14	AQ	Ground Water	MW-102C
FA19973-10	11/13/14	08:30	TNAN	11/14/14	AQ	Ground Water	MW-103A
FA19973-11	11/13/14	09:30	TNAN	11/14/14	AQ	Ground Water	MW-103B
FA19973-12	11/13/14	10:30	TNAN	11/14/14	AQ	Ground Water	MW-103C
FA19973-13	11/13/14	08:45	TNAN	11/14/14	AQ	Ground Water	MW-104A

Sample Summary
(continued)

ERM

Job No: FA19973

Former Abbott; Joy St, Laurinburg, NC
Project No: 0272871

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA19973-14	11/13/14	09:25	TNAN	11/14/14	AQ	Ground Water	MW-104B
FA19973-15	11/13/14	10:25	TNAN	11/14/14	AQ	Ground Water	MW-104C

Summary of Hits

Job Number: FA19973
Account: ERM
Project: Former Abbott; Joy St, Laurinburg, NC
Collected: 11/11/14 thru 11/13/14

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FA19973-1	**MW-10B**					
Chloride		12.2	2.0	0.80	mg/l	EPA 300/SW846 9056A
FA19973-2	**MW-10D**					
Chloride		13.6	2.0	0.80	mg/l	EPA 300/SW846 9056A
FA19973-3	**MW-100A**					
Chloride		126	4.0	1.6	mg/l	EPA 300/SW846 9056A
Total Organic Carbon		333	1.0	0.23	mg/l	SM5310 B-11/SW9060A
FA19973-4	**MW-100B**					
Chloride		133	4.0	1.6	mg/l	EPA 300/SW846 9056A
Total Organic Carbon		443	1.0	0.23	mg/l	SM5310 B-11/SW9060A
FA19973-5	**MW-101A**					
Chloride		8.6	2.0	0.80	mg/l	EPA 300/SW846 9056A
Total Organic Carbon		0.95 B	1.0	0.23	mg/l	SM5310 B-11/SW9060A
FA19973-6	**MW-101B**					
Total Organic Carbon		1.7	1.0	0.23	mg/l	SM5310 B-11/SW9060A
FA19973-7	**MW-102A**					
Chloride		9.9	2.0	0.80	mg/l	EPA 300/SW846 9056A
Total Organic Carbon		1.8	1.0	0.23	mg/l	SM5310 B-11/SW9060A
FA19973-8	**MW-102B**					
Chloride		11.1	2.0	0.80	mg/l	EPA 300/SW846 9056A
Total Organic Carbon		6.4	1.0	0.23	mg/l	SM5310 B-11/SW9060A
FA19973-9	**MW-102C**					
Chloride		33.3	2.0	0.80	mg/l	EPA 300/SW846 9056A
Total Organic Carbon		265	1.0	0.23	mg/l	SM5310 B-11/SW9060A
FA19973-10	**MW-103A**					
Chloride		20.9	2.0	0.80	mg/l	EPA 300/SW846 9056A

Summary of Hits

Job Number: FA19973
Account: ERM
Project: Former Abbott; Joy St, Laurinburg, NC
Collected: 11/11/14 thru 11/13/14

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Total Organic Carbon		1.4	1.0	0.23	mg/l	SM5310 B-11/SW9060A
FA19973-11	**MW-103B**					
Chloride		15.8	2.0	0.80	mg/l	EPA 300/SW846 9056A
Total Organic Carbon		1.1	1.0	0.23	mg/l	SM5310 B-11/SW9060A
FA19973-12	**MW-103C**					
Chloride		14.5	2.0	0.80	mg/l	EPA 300/SW846 9056A
Total Organic Carbon		1.6	1.0	0.23	mg/l	SM5310 B-11/SW9060A
FA19973-13	**MW-104A**					
Total Organic Carbon		0.69 B	1.0	0.23	mg/l	SM5310 B-11/SW9060A
FA19973-14	**MW-104B**					
Chloride		14.1	2.0	0.80	mg/l	EPA 300/SW846 9056A
Total Organic Carbon		0.66 B	1.0	0.23	mg/l	SM5310 B-11/SW9060A
FA19973-15	**MW-104C**					
Chloride		16.6	2.0	0.80	mg/l	EPA 300/SW846 9056A
Total Organic Carbon		0.62 B	1.0	0.23	mg/l	SM5310 B-11/SW9060A

Southeast ACCUTEST LABORATORIES

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	MW-10B		
Lab Sample ID:	FA19973-1	**Date Sampled:**	11/11/14
Matrix:	AQ - Ground Water	**Date Received:**	11/14/14
		Percent Solids:	n/a
Project:	Former Abbott; Joy St, Laurinburg, NC		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Chloride	12.2	2.0	0.80	mg/l	1	11/24/14 17:27	VK	EPA 300/SW846 9056A

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	MW-10D		
Lab Sample ID:	FA19973-2	**Date Sampled:**	11/11/14
Matrix:	AQ - Ground Water	**Date Received:**	11/14/14
		Percent Solids:	n/a
Project:	Former Abbott; Joy St, Laurinburg, NC		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Chloride	13.6	2.0	0.80	mg/l	1	11/24/14 17:43	VK	EPA 300/SW846 9056A

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	MW-100A		
Lab Sample ID:	FA19973-3	**Date Sampled:**	11/12/14
Matrix:	AQ - Ground Water	**Date Received:**	11/14/14
		Percent Solids:	n/a
Project:	Former Abbott; Joy St, Laurinburg, NC		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Chloride	126	4.0	1.6	mg/l	2	11/26/14 05:06	VK	EPA 300/SW846 9056A
Total Organic Carbon	333	1.0	0.23	mg/l	1	11/18/14 17:49	FN	SM5310 B-11/SW9060A

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	MW-100B		
Lab Sample ID:	FA19973-4	**Date Sampled:**	11/12/14
Matrix:	AQ - Ground Water	**Date Received:**	11/14/14
		Percent Solids:	n/a
Project:	Former Abbott; Joy St, Laurinburg, NC		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Chloride	133	4.0	1.6	mg/l	2	11/24/14 18:17	VK	EPA 300/SW846 9056A
Total Organic Carbon	443	1.0	0.23	mg/l	1	11/18/14 19:12	FN	SM5310 B-11/SW9060A

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	MW-101A		
Lab Sample ID:	FA19973-5	**Date Sampled:**	11/12/14
Matrix:	AQ - Ground Water	**Date Received:**	11/14/14
		Percent Solids:	n/a
Project:	Former Abbott; Joy St, Laurinburg, NC		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Chloride	8.6	2.0	0.80	mg/l	1	11/24/14 18:34	VK	EPA 300/SW846 9056A
Total Organic Carbon	0.95 B	1.0	0.23	mg/l	1	11/18/14 19:44	FN	SM5310 B-11/SW9060A

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	MW-101B		
Lab Sample ID:	FA19973-6	**Date Sampled:**	11/12/14
Matrix:	AQ - Ground Water	**Date Received:**	11/14/14
		Percent Solids:	n/a
Project:	Former Abbott; Joy St, Laurinburg, NC		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Chloride	0.80 U	2.0	0.80	mg/l	1	11/24/14 18:51	VK	EPA 300/SW846 9056A
Total Organic Carbon	1.7	1.0	0.23	mg/l	1	11/18/14 20:01	FN	SM5310 B-11/SW9060A

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	MW-102A		
Lab Sample ID:	FA19973-7	**Date Sampled:**	11/12/14
Matrix:	AQ - Ground Water	**Date Received:**	11/14/14
		Percent Solids:	n/a
Project:	Former Abbott; Joy St, Laurinburg, NC		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Chloride	9.9	2.0	0.80	mg/l	1	11/24/14 19:42	VK	EPA 300/SW846 9056A
Total Organic Carbon	1.8	1.0	0.23	mg/l	1	11/18/14 20:18	FN	SM5310 B-11/SW9060A

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	MW-102B		
Lab Sample ID:	FA19973-8	**Date Sampled:**	11/12/14
Matrix:	AQ - Ground Water	**Date Received:**	11/14/14
		Percent Solids:	n/a
Project:	Former Abbott; Joy St, Laurinburg, NC		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Chloride	11.1	2.0	0.80	mg/l	1	11/24/14 19:59	VK	EPA 300/SW846 9056A
Total Organic Carbon	6.4	1.0	0.23	mg/l	1	11/18/14 20:36	FN	SM5310 B-11/SW9060A

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	MW-102C		
Lab Sample ID:	FA19973-9	**Date Sampled:**	11/12/14
Matrix:	AQ - Ground Water	**Date Received:**	11/14/14
		Percent Solids:	n/a
Project:	Former Abbott; Joy St, Laurinburg, NC		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Chloride	33.3	2.0	0.80	mg/l	1	11/24/14 20:16	VK	EPA 300/SW846 9056A
Total Organic Carbon	265	1.0	0.23	mg/l	1	11/18/14 21:27	FN	SM5310 B-11/SW9060A

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	MW-103A		
Lab Sample ID:	FA19973-10	**Date Sampled:**	11/13/14
Matrix:	AQ - Ground Water	**Date Received:**	11/14/14
		Percent Solids:	n/a
Project:	Former Abbott; Joy St, Laurinburg, NC		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Chloride	20.9	2.0	0.80	mg/l	1	11/24/14 20:33	VK	EPA 300/SW846 9056A
Total Organic Carbon	1.4	1.0	0.23	mg/l	1	11/18/14 21:57	FN	SM5310 B-11/SW9060A

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	MW-103B		
Lab Sample ID:	FA19973-11	**Date Sampled:**	11/13/14
Matrix:	AQ - Ground Water	**Date Received:**	11/14/14
		Percent Solids:	n/a
Project:	Former Abbott; Joy St, Laurinburg, NC		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Chloride	15.8	2.0	0.80	mg/l	1	11/24/14 20:50	VK	EPA 300/SW846 9056A
Total Organic Carbon	1.1	1.0	0.23	mg/l	1	11/18/14 22:14	FN	SM5310 B-11/SW9060A

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	MW-103C		
Lab Sample ID:	FA19973-12	**Date Sampled:**	11/13/14
Matrix:	AQ - Ground Water	**Date Received:**	11/14/14
		Percent Solids:	n/a
Project:	Former Abbott; Joy St, Laurinburg, NC		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Chloride	14.5	2.0	0.80	mg/l	1	11/24/14 21:07	VK	EPA 300/SW846 9056A
Total Organic Carbon	1.6	1.0	0.23	mg/l	1	11/19/14 01:08	FN	SM5310 B-11/SW9060A

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	MW-104A		
Lab Sample ID:	FA19973-13	**Date Sampled:**	11/13/14
Matrix:	AQ - Ground Water	**Date Received:**	11/14/14
		Percent Solids:	n/a
Project:	Former Abbott; Joy St, Laurinburg, NC		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Total Organic Carbon	0.69 B	1.0	0.23	mg/l	1	11/19/14 01:25	FN	SM5310 B-11/SW9060A

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	MW-104B		
Lab Sample ID:	FA19973-14	**Date Sampled:**	11/13/14
Matrix:	AQ - Ground Water	**Date Received:**	11/14/14
		Percent Solids:	n/a
Project:	Former Abbott; Joy St, Laurinburg, NC		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Chloride	14.1	2.0	0.80	mg/l	1	11/24/14 21:24	VK	EPA 300/SW846 9056A
Total Organic Carbon	0.66 B	1.0	0.23	mg/l	1	11/19/14 01:42	FN	SM5310 B-11/SW9060A

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Report of Analysis

Client Sample ID:	MW-104C		
Lab Sample ID:	FA19973-15	**Date Sampled:**	11/13/14
Matrix:	AQ - Ground Water	**Date Received:**	11/14/14
		Percent Solids:	n/a
Project:	Former Abbott; Joy St, Laurinburg, NC		

General Chemistry

Analyte	Result	RL	MDL	Units	DF	Analyzed	By	Method
Chloride	16.6	2.0	0.80	mg/l	1	11/24/14 21:41	VK	EPA 300/SW846 9056A
Total Organic Carbon	0.62 B	1.0	0.23	mg/l	1	11/19/14 01:59	FN	SM5310 B-11/SW9060A

RL = Reporting Limit
MDL = Method Detection Limit

U = Indicates a result < MDL
B = Indicates a result > = MDL but < RL

Southeast ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

Accutest Laboratories Southeast
Chain of Custody

ACCUTEST LABORATORIES

4405 Vineland Road, Suite C-15 Orlando, Fl 32811
TEL. 407-425-6700 • FAX: 407-425-0707
www.accutest.com

Accutest JOB # FA19973 PAGE 1 OF 2

Accutest Quote # | SKIFF#

Client / Reporting Information

Company Name: ERM
Address: ERM
City: RALEIGH State: NC Zip:
Project Contact: GREG KANELLIS E-mail:
Phone#: 919-745-7197
Sampler(s) Name(s) (Printed): TOM NAUMANN, ANDY NEAL

Project Information

Project Name: FORMER ABBOTT - LAURINBURG
Street: JOY ST
City: LAURINBURG State: NC
Project #: 0272871
Fax #:
Client Purchase Order #:

Accutest Sample #	Field ID / Point of Collection	Date	Time	Sampled By	Matrix	Total # of Bottles	Other	None	HCl	NaOH	HNO3	H2SO4	NaOH+ZnAc	DI Water	VOCH	SM-5310B Total Organic Carbon	Total Chloride										Matrix Codes / LAB USE ONLY
1	MW-10B	11/11/14	1400	AN	GW	1		1								X											
2	MW-10D	11/11/14	1415	TEN		1		1								X											
3	MW-100A	11/12/14	1430	TEN		3		1	2							X	X										
4	MW-100B	11/12/14	1345	TEN		3		1	2							X	X										
5	MW-101A	11/12/14	1605	AN		3		1	2							X	X										
6	MW-101B	11/12/14	1510	AN		3		1	2							X	X										
7	~~MW-101C~~ MW-102A	11/12/14	1100	TEN		3		1	2							X	X										
8	MW-102B	11/12/14	1000	TEN		3		1	2							X	X										
9	MW-102C	11/12/14	0900	TEN		3		1	2							X	X										
10	MW-103A	11/13/14	0830	TEN		3		1	2							X	X										
11	MW-103B	11/13/14	0930	TEN		3		1	2							X	X										
12	MW-103C	11/13/14	1030	TEN		3		1	2							X	X										

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL - Sludge; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe

TURNAROUND TIME (Business Days)

Approved By: / Rush Code

- [x] 10 Days Standard
- [ ] 7 Day RUSH
- [ ] 5 Day RUSH
- [ ] 3 Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 1 Day EMERGENCY
- [ ] OTHER

Emergency or Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- [ ] COMMERCIAL "A" (RESULTS ONLY)
- [ ] COMMERCIAL "B" (RESULTS PLUS QC)
- [ ] REDT1 (EPA LEVEL 3)
- [ ] FULT1 (EPA LEVEL 4)
- [ ] EDD'S

Comments / Remarks

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished by:	Date Time:	Received By:
1 TOM NAUMANN	11/13/14 1645	2 FEDEX	3 RP 11-14-14	945	4 [signature]
Relinquished by: 5	Date Time:	Received By: 6	Relinquished by: 7	Date Time:	Received By: 8

Lab Use Only: Custody Seal in Place: Y N Temp Blank Provided: Y N Preserved where Applicable: Y N Total # of Coolers: Cooler Temperature (s) Celsius: 2.2

4.1 4

FA19973: Chain of Custody
Page 1 of 4

Accutest Laboratories Southeast
Chain of Custody

ACCUTEST LABORATORIES

4405 Vineland Road, Suite C-15 Orlando, FL 32811
TEL. 407-425-6700 • FAX: 407-425-0707
www.accutest.com

Accutest JOB # FA19973 PAGE 2 OF 2

Accutest Quote # | SKIFF#

Client / Reporting Information

Company Name: ERM
Address: 1130 SITUS COURT
City: RALEIGH State: NC Zip: 27606
Project Contact: GREG KANELLIS E-mail:
Phone#: 919 233 4501
Sampler(s) Name(s) (Printed): TOM NAUMANN, ANDY NEAL

Project Information

Project Name: FORMER ABBOTT - LAURINBURG
Street: JOY ST
City: LAURINBURG State: NC
Project #: 0272871
Fax #:
Client Purchase Order #:

Analytical Information

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL - Sludge
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe

Accutest Sample #	Field ID / Point of Collection	COLLECTION DATE	TIME	SAMPLED BY	MATRIX	TOTAL # OF BOTTLES	CONTAINER INFORMATION OTHER	NONE	HCl	NaOH	HNO3	H2SO4	NaOH-ZnAc	DI WATER	MEOH	SM-53.013 TOTAL ORGANIC CARBON	TOTAL CHLORIDE	LAB USE ONLY
13	MW-104A	11/13/14	0845	AN	GW	2			2							X		
14	MW-104B	11/13/14	0925	AN	GW	3		1	2							X	X	
15	MW-104C	11/13/14	1025	AN	GW	3		1	2							X	X	

TURNAROUND TIME (Business Days)

Approved By: / Rush Code

- [x] 10 Days Standard
- [ ] 7 Day RUSH
- [ ] 5 Day RUSH
- [ ] 3 Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 1 Day EMERGENCY
- [ ] OTHER

Emergency or Rush T/A Data Available VIA Email or Lablink

Data Deliverable Information

- [ ] COMMERCIAL "A" (RESULTS ONLY)
- [ ] COMMERCIAL "B" (RESULTS PLUS QC)
- [ ] REDT1 (EPA LEVEL 3)
- [ ] FULT1 (EPA LEVEL 4)
- [ ] EDD'S

Comments / Remarks

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished by:	Date Time:	Received By:
1 TOM NAUMANN	11/13/14 1645	2 FEDEX	3 [signature] 11-14-14	945	4 [signature]
Relinquished by: 5	Date Time:	Received By: 6	Relinquished by: 7	Date Time:	Received By: 8

Lab Use Only: Custody Seal in Place: Y N Temp Blank Provided: Y N Preserved where Applicable: Y N Total # of Coolers: Cooler Temperature (s) Celsius:

4.1
4

FA19973: Chain of Custody
Page 2 of 4

ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: FA19973 CLIENT: ERM PROJECT: Former Abbott

DATE/TIME RECEIVED: 11-14-14 945 {MM/DD/YY 24:00} NUMBER OF COOLERS RECEIVED: 1

METHOD OF DELIVERY: (FEDEX) UPS ACCUTEST COURIER DELIVERY OTHER:

AIRBILL NUMBERS: 8063 1883 8841

COOLER INFORMATION

- [ ] CUSTODY SEAL NOT PRESENT OR NOT INTACT
- [ ] CHAIN OF CUSTODY NOT RECEIVED (COC)
- [ ] ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- [ ] SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- [ ] TEMPERATURE CRITERIA NOT MET

TEMPERATURE INFORMATION

- [ ] IR THERM ID 1 CORR. FACTOR -0.4
- [ ] OBSERVED TEMPS: 1.8
- [ ] CORRECTED TEMPS: 2.2

TRIP BLANK INFORMATION

- [ ] TRIP BLANK PROVIDED
- [x] TRIP BLANK NOT PROVIDED
- [x] TRIP BLANK NOT ON COC
- [ ] TRIP BLANK INTACT
- [ ] TRIP BLANK NOT INTACT
- [ ] RECEIVED WATER TRIP BLANK
- [ ] RECEIVED SOIL TRIP BLANK

SAMPLE INFORMATION

- [ ] INCORRECT NUMBER OF CONTAINERS USED
- [ ] SAMPLE RECEIVED IMPROPERLY PRESERVED
- [ ] INSUFFICIENT VOLUME FOR ANALYSIS
- [ ] DATES/TIMES ON COC DO NOT MATCH SAMPLE LABEL
- [ ] ID'S ON COC DO NOT MATCH LABEL
- [ ] VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- [ ] BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- [ ] NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- [ ] UNCLEAR FILTERING OR COMPOSITING INSTRUCTIONS
- [ ] SAMPLE CONTAINER(S) RECEIVED BROKEN
- [ ] 5035 FIELD KITS NOT RECEIVED WITHIN 48 HOURS
- [ ] BULK VOA SOIL JARS NOT RECEIVED WITHIN 48 HOURS
- [ ] % SOLIDS JAR NOT RECEIVED
- [ ] RESIDUAL CHLORINE PRESENT LOT#

{APPLICABLE TO EPA 600 SERIES OR NORTH CAROLINA ORGANICS}

MISC. INFORMATION

NUMBER OF ENCORES ? 25-GRAM 5-GRAM

NUMBER OF 5035 FIELD KITS ?

NUMBER OF LAB FILTERED METALS ?

pH PAPER LOT#s WIDE RANGE A036122 NARROW RANGE HC421754 OTHER (specify) 405-230010

SUMMARY OF COMMENTS:

TECHNICIAN SIGNATURE/DATE 11-14-14 REVIEWER SIGNATURE/DATE 11-14-14

NF 10/14 receipt confirmation 102914.xls

4.1

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FA19973: Chain of Custody

Page 3 of 3

ORIGIN ID:SOPA (732) 329-0200
ACCUTEST LABORATORIES SE, INC
4405 VINELAND RD STE C15
ORLANDO, FL 328115803
UNITED STATES US

SHIP DATE: 13NOV14
ACTWGT: 49.9 LB
CAD: /OFFC1522
DIMS: 26x15x14 IN
BILL SENDER

TO
ACCUTEST LABORATORIES SE,INC.
4405 VINELAND RD
STE C15
ORLANDO FL 32811
(407) 426-6700 REF:
INV: DEPT:
PO:

FedEx Express

TRK# 0215 8063 1883 8841

FRI - 14 NOV 10:30A
PRIORITY OVERNIGHT
AHS
32811
FL-US MCO

XH TIXA

FA19973: Chain of Custody

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Southeast ACCUTEST LABORATORIES

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA19973
Account: ERMNCR - ERM
Project: Former Abbott; Joy St, Laurinburg, NC

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Chloride	GP25043/GN64231	2.0	0.0	mg/l	50	49.3	98.6	90-110%
Total Organic Carbon	GP24999/GN64156	1.0	0.0	mg/l	15	15.5	103.3	90-110%

Associated Samples:
Batch GP24999: FA19973-3, FA19973-4, FA19973-5, FA19973-6, FA19973-7, FA19973-8, FA19973-9, FA19973-10, FA19973-11, FA19973-12, FA19973-13, FA19973-14, FA19973-15
Batch GP25043: FA19973-1, FA19973-2, FA19973-3, FA19973-4, FA19973-5, FA19973-6, FA19973-7, FA19973-8, FA19973-9, FA19973-10, FA19973-11, FA19973-12, FA19973-14, FA19973-15
(*) Outside of QC limits

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA19973
Account: ERMNCR - ERM
Project: Former Abbott; Joy St, Laurinburg, NC

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Total Organic Carbon	GP24999/GN64156	FA19973-3	mg/l	333	332	0.3	0-20%

Associated Samples:
Batch GP24999: FA19973-3, FA19973-4, FA19973-5, FA19973-6, FA19973-7, FA19973-8, FA19973-9, FA19973-10, FA19973-11, FA19973-12, FA19973-13, FA19973-14, FA19973-15
(*) Outside of QC limits

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA19973
Account: ERMNCR - ERM
Project: Former Abbott; Joy St, Laurinburg, NC

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Chloride	GP25043/GN64231	FA19973-14	mg/l	14.1	50	65.2	102.2	90-110%
Chloride	GP25043/GN64231	FA19973-15	mg/l	16.6	50	65.7	98.2	90-110%
Total Organic Carbon	GP24999/GN64156	FA19973-3	mg/l	333	15	346	86.7(a)	90-110%

Associated Samples:
Batch GP24999: FA19973-3, FA19973-4, FA19973-5, FA19973-6, FA19973-7, FA19973-8, FA19973-9, FA19973-10, FA19973-11, FA19973-12, FA19973-13, FA19973-14, FA19973-15
Batch GP25043: FA19973-1, FA19973-2, FA19973-3, FA19973-4, FA19973-5, FA19973-6, FA19973-7, FA19973-8, FA19973-9, FA19973-10, FA19973-11, FA19973-12, FA19973-14, FA19973-15
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits
(a) Spike amount low relative to the sample amount. Refer to lab control or spike blank for recovery information.

MATRIX SPIKE DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: FA19973
Account: ERMNCR - ERM
Project: Former Abbott; Joy St, Laurinburg, NC

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MSD Result	RPD	QC Limit
Chloride	GP25043/GN64231	FA19973-14	mg/l	14.1	50	65.3	0.2	20%
Chloride	GP25043/GN64231	FA19973-15	mg/l	16.6	50	65.7	0.0	20%

Associated Samples:
Batch GP25043: FA19973-1, FA19973-2, FA19973-3, FA19973-4, FA19973-5, FA19973-6, FA19973-7, FA19973-8, FA19973-9, FA19973-10, FA19973-11, FA19973-12, FA19973-14, FA19973-15
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits

Appendix C

Historical VOC Analytical Results at Solvent Plume Wells (Table C.1)

Table C.1: Historical Volatile Organic Compound Analytical Results at Solvent Plume Wells

Sample ID	Date	Parameter (in ug/L)																															
		1,1,1-Trichloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2-Dichloroethane	2-Butanone (MEK)	4-Methyl-2-pentanone (MIBK)	Acetone	Benzene	Carbon disulfide	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	Freon-12 (Dichlorodifluoromethane)	Ethylbenzene	m&p-Xylenes	Methylene chloride	Methyl-tert-butyl-ether (MTBE)	Naphthalene	n-Butylbenzene	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	Trichloroethene	Freon-11 (Trichlorofluoromethane)	Freon- 113 (1,1,2-Trichlorotrifluoroethane)	Vinyl acetate	Vinyl chloride
2L Standards		200	0.6	6	350	NE	400	0.4	4000	NE	6000	1	700	3000	70	3	70	1000	600	500	5	20	6	70	500	70	0.7	600	100	3	2000	200000	88	0.03
MW-100A	10/30/02	6,500	<1,000	<1,000	1,400	<1,000	<1,000	<1,000	31,000	<5,000	10,000	<1,000	<5,000	<1,000	<1,000	<1,000	15,000	<1,000	<1,000	<2,000	200,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	5,300	<1,000	150,000	<1,000	27,000	NA	<1,000
MW-100A	02/04/03	5,000	<500	<500	1,000	<500	<500	350 J	19,000	<2,500	<2,500	<500	<2,500	<500	<500	<500	14,000	<500	<500	<1,000	42,000	<500	<500	<500	<500	<500	<500	4,700	<500	120,000	<500	32,000	<2,500	<500
MW-100A	04/01/03	5,900	<1,000	<1,000	1,200	<1,000	<1,000	<1,000	<5,000	<5,000	<5,000	<1,000	<5,000	<1,000	<1,000	<1,000	14,000	<1,000	<1,000	<2,000	42,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	5,400	<1,000	120,000	<1,000	37,000	<5,000J	<1,000
MW-100A	06/01/03	5,800 J	<500	<500	<500	<500	<500	250 J	<2,500	<2,500	<2,500	<500	<2,500	<500	<500	<500	18,000	<500	<500	<1,000	31,000	<500	<500J	<500	<500	<500	<500	4,600	<500	100,000	<500	30,000	<2,500J	<500
MW-100A	09/09/03	5,300	<500	<500	940	<500	<500	290 J	18,000	<2,500	<2,500	<500	<2,500	<500	<500	<500	19,000	<500	<500	<1,000	26,000	<500	<500	<500	<500	<500	<500	3,900	<500	82,000	<500	18,000	<2,500	<500
MW-100A	12/03/03	6,000	<500	<500	1,100	250 J	<500	380 J	<2,500	<2,500	16,000	<500	<2,500	<500	260 J	<500	29,000	<500	<500	<1,000	20,000	<500	<500	<500J	<500	<500	<500	4,600	<500	70,000	<500	33,000	<2,500J	<500
MW-100A	05/12/04	1,600	<50	53	350	<50	<50	180	8,200	110 J	740	<50	<250	<50	130	<50J	31,000	<50	<50	51 J	14,000	<50	190	<50	<50	<50	54	2,700	<50	32,000	<50	6,200	<250	<50
MW-100A	09/08/04	3,700	<500	<500	1,000	<500	<500	<500	5,800	<2,500	<2,500	<500	<2,500	<500	<500	<500	55,000	<500	<500	<1,000	13,000	<500	550	<500	<500	<500	<500	4,100	<500	37,000	<500	59,000	<2,500	<500
MW-100A	12/01/04	2,900	<100	89 J	810	<100	<100	210	<5,000	<500	<500	<100	<500	<100	170	<100	66,000	<100	<100	<200	6,800	<100	<100	<100	<100	<100	68 J	3,200	<100	18,000	<100	28,000	<500	120
MW-100A	06/08/05	3,600	<100	<100	960	<100	<100	200	3,800	<500	<500	<100	<500	<100	140	<100	63,000	350	<100	<200	6,300 J	<100	<100	<100	<100	<100	73 J	3,400	<100	15,000	<100	37,000	<500	150
MW-100A	12/19/05	4,300 J	<500	<500	<500	<500	<500	<500	6,000	<2,500	<2,500	<500	<2,500	<500	<500	<500	77,000	<500	<500	<1,000	4,700	<500	<500	<500	<500	<500	<500	5,400	1,800	14,000	<500	23,000 J	<2,500	380 J
MW-100A	03/14/06	3,500	<500	<500	960	<500	<500	<500	2,900	<2,500	<2,500	<500	<2,500	<500	<500	<500	71,000	<2,500	<500	<1,000	2,500	<500	<500	<500	<500	<500	<500	4,400	<500	7,400	<500	30,000	<2,500	<500
MW-100A	06/13/06	2,800	<500	<500	810	<500	<500	<500	5,700	<2,500	<2,500	<500	<2,500	<500	<500	<500	58,000	<2,500	<500	<1,000	3,100	<500	<500	<500	<500	<500	<500	3,700	<500	11,000	<500	25,000	<2,500	<500
MW-100A	09/01/06	1,800	<500	<500	1,200	<500	<500	<500	<2,500	<2,500	<2,500	<500	<2,500	<500	<500	<500	55,000	<2,500	<500	<1,000	34,000	<500	<500	<500	<500	<500	<500	3,800	<500	32,000	<500	18,000	<2,500	<500
MW-100A	04/02/07	2,200	<500	<500	910	<500	<500	<500	<2,500	<2,500	<2,500	<500	<2,500	<500	<500	<500	70,000	<2,500	<500	<1,000	3,100	<500	<500	<500	<500	<500	<500	3,900	<500	7,300	<500	17,000	<2,500	<500
MW-100A	10/29/07	2,100	<500	<500	1,100	<500	<500	<500	<2,500	<2,500	<2,500	<500	<2,500	<500	<500	<500	59,000	<2,500	<500	<1,000	2,600	<500	<500	<500	<500	<500	<500	3,900	<500	6,600	<500	26,000	<2,500	<500
MW-100A	04/22/08	1,800	NA	<500	760	<500	NA	<500	4,500	<2,500	<2,500	<500	<2,500	<500	<500	<500	58,000	<2,500	<500	<1,000	870	<500	<500	<500	<500	<500	<500	3,800	<500	<500	<500	23,000	<2,500	<500
MW-100A	10/27/08	1,300	NA	<500	510	<500	NA	<500	6,600	<2,500	<2,500	<500	<2,500	<500	<500	<500	52,000	<2,500	<500	<1,000	1,500	<500	<500	<500	<500	<500	<500	3,300	<500	1,900	<500	21,000	<2,500	<500
MW-100A	04/27/09	1,400	NA	<500	730	<500	NA	<500	4,500	<2,500	<2,500	<500	<2,500	<500	<500	<500	50,000	<2,500	<500	<1,000	1,300	<500	<500	<500	<500	<500	<500	3,500	<500	620	<500	28,000	<2,500	<500
MW-100A	11/05/09	720	NA	<500	<500	<500	NA	<500	<2,500	<2,500	<2,500	<500	<2,500	<500	<500	<500	38,000	<2,500	<500	<1,000	920	<500	<500	<500	<500	<500	<500	2,300	<500	3,200	<500	5,200	<2,500	<500
MW-100A	05/05/10	880	NA	<100	<100	<100	NA	130	5,500	<500	2,800	<100	<500	<100	<100	<100	44,000	<500	<100	<200	440	<100	<100	<100	<100	<100	<100	2,600	<100	1,300	<100	27,000	<500	160
MW-100A	10/12/10	630	<500	<500	600	<500	<500	<500	4,200	<2,500	<2,500	<500	<2,500	<500	<500	<500	38,000	<2,500	<500	<1,000	790	<500	<500	<500	<500	<500	<500	2,400	<500	<500	<500	22,000	<2,500	<500
MW-100A	12/02/10	<500	<500	<500	<500	<500	<500	<500	<2,500	<2,500	<2,500	<500	<2,500	<500	<500	<500	38,000	<2,500	<500	<1,000	1,400	<500	<500	<500	<500	<500	<500	2,400	<500	<500	<500	14,000	<2,500	<500
MW-100A	01/25/11	640	<500	<500	540	<500	<500	<500	<2,500	<2,500	<2,500	<500	<2,500	<500	<500	<500	36,000	<2,500	<500	<1,000	5,400	<500	<500	<500	<500	<500	<500	2,500	<500	<500	<500	18,000	<2,500	<500
MW-100A	04/11/11	1,600	<100	<100	770	<100	<100	200	<500	<500	<500	<100	<500	<100	180	<100	51,000	<500	<100	<200	21,000	<100	<100	<100	<100	<100	<100	2,900	<100	810	<100	25,000	<500	110
MW-100A	08/17/11	1,700	<100	<100	750	<100	<100	190	1,400	<500	<500	<100	<500	<100	200	<100	48,000	<500	<100	<200	20,000	<100	<100	<100	120	<100	<100	2,500	320	940	<100	18,000	<500	<100
MW-100A	10/05/11	2,000	<100	<100	740	<100	<100	170	<500	<500	<500	<100	<500	<100	240	<100	50,000	<500	<100	<200	27,000	<100	<100	<100	<100	<100	<100	2,600	<100	880	<100	20,000	<500	<100
MW-100A	05/17/12	1,200	<20	91	750	<20	<20	120	<100	<100	<100	<20	<100	<20	160	<20	40,000	<100	22	68	1,800	<20	<20	<20	22	<20	37	2,600	22	80	<20	22,000	<100	81
MW-100A	11/07/12	1,100	<50	81	660	<50	<50	100	<250	<250	<250	<50	<250	<50	160	<50	47,000	<250	<50	50	1,900	<50	<50	<50	<50	<50	<50	2,000	<50	69	<50	17,000	<250	62
MW-100A	05/07/13	791	4.19	87.47	597.5	<1	4.02	90.8	3,459	101.32	518	16.93	<5	<1	149.3	<1	41,265	148.33	21.35	70.29	813	<1	7.18	<1	22.06	4.58	36.45	2,058	21.73	63.12	<1	16,215	5.01	115.12
MW-100A	10/13/13	610	<50	99	600	<50	<50	100	3,400	<250	370	22	<250	<50	130	<50	48,000	<250	17	48	<250	<50	<50	<50	18	<50	27	2,100	<50	35	<50	17,000	<100	92
MW-100A	04/29/14	880	<50	110	<50	<50	<50	120	<250	<250	520	21 J	<250	<50	160	<50	49,000	<250	20 J	65	<250	<50	<50	<50	21 J	<50	26 J	2,300	<50	25	<50	18,000	<100	90
MW-100A	11/12/14	580	<50	87	570	<50	<50	87	<250	<250	420	17 J	<250	<50	110	<50	45,000	<250	15 J	44 J	260	<50	<50	<50	14 J	<50	<50	1,700	<50	25	<50	12,000	<100	69
MW-100B	10/30/02	8,000	<1,000	<1,000	2,000	<1,000	<1,000	<1,000	27,000	<5,000	13,000	<1,000	<5,000	<1,000	<1,000	<1,000	12,000	<1,000	<1,000	<2,000	230,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	6,900	<1,000	190,000	<1,000	35,000	NA	<1,000
MW-100B	02/04/03	6,100	<500	<500	1,300	<500	<500	400 J	12,000	<2,500	<2,500	<500	<2,500	<500	290 J	<500	10,000	<500	<500	<1,000	54,000	<500	<500	<500	<500	<500	210 J	5,700	<500	160,000	<500	36,000	<2,500	<500
MW-100B	04/01/03	3,100	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<5,000	<5,000	<5,000	<1,000	<5,000	<1,000	<1,000	<1,000	15,000	<1,000	<1,000	<2,000	31,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	3,400	<1,000	65,000	<1,000	9,200	<5,000J	<1,000
MW-100B	06/01/03	6,100	<1,000	<1,000	1,200	<1,000	<1,000	<1,000	9,200	<5,000	2,400 J	<1,000	<5,000	<1,000	<1,000	<1,000	14,000	<1,000	<1,000	<2,000	37,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	4,900	<1,000	120,000	<1,000	34,000	<5,000	<1,000
MW-100B	09/09/03	6,900	<500	<500	1,500	<500	<500	420 J	9,600	<2,500	<2,500	<500	<2,500	<500	270 J	<500	19,000	<500	<500	<1,000	46,000	<500	<500	<500	<500	<500	<500	5,900	<500	120,000	<500	27,000	<2,500	<500
MW-100B	12/03/03	6,300	<500	<500	1,700	<500	<500	400 J	<2,500	<2,500	24,000 J	<500	<2,500	<500	350 J	<500	30,000	<500	<500	<1,000	48,000	<500	<500	<500J	<500	<500	<500	5,800	<500	100,000	<500	46,000	<2,500J	<500
MW-100B	05/12/04	4,100	<100	<100	1,800	<100	<100	250	4,800	<500	<500	<100	<500	<100	280	<100J	45,000	200	<100	100 J	60,000	<100	<100	<100	<100	<100	200	5,400	<100	98,000	<100	80,000	<500	<100
MW-100B	09/08/04	4,300	<500	<500	1,100	<500	<500	<500	<2,500	<2,500	<2,500	<500	<2,500	<500	<500	<500	59,000	<500	<500	<1,000	20,000	<500	550	<500	<500	<500	<500	4,900	<500	50,000	<500	71,000	<2,500	<500
MW-100B	12/01/04	2,300	<500	<500	1,400	<500	<500	<500	<2,500	<2,500	<2,500	<500	<2,500	<500	310 J	<500	59,000	<500	<500	<1,000	68,000	<500	<500	<500	<500	<500	<500	4,200	<500	64,000	<500	28,000	<2,500	<500
MW-100B	06/08/05	2,800	<200	<200	2,200	<200	<200	340	1,900	<1,000	<1,000	<200	<1,000	<200	340	<200	41,000	640	<200	<400	75,000 J	<200	<200	<200	<200	<200	<200	4,400	<200	43,000	<200	32,000	<1,000	<200
MW-100B	12/19/05	3,300 J	<500	<500	1,500	<500	<500	<500	<2,500	<2,500	<2,500	<500	<2,500	<500	<500	<500	69,000	<500	<500	<1,000	27,000	<500	<500	<500	<500	<500	<500	5,300	1,200	29,000	<500	39,000	<2,500	<500
MW-100B	03/14/06	2,900	<500	<500	1,100	<500	<500	<500	<2,500	<2,500	<2,500	<500	<2,500	<500	<500	<500	73,000	<2,500	<500	<1,000	12,000	<500	<500	<500	<500	<500	<500	4,300	<500	13,000	<500	33,000	<2,500	<500
MW-100B	06/13/06	2,900	<500	<500	960	<500	<500	<500	<2,500	<2,500	<2,500	<500	<2,500	<500	<500	<500	61,000	<2,500	<500	<1,000	10,000	<500	<500	<500	<500	<500	<500	4,200	<500	21,000	<500	28,000	<2,500	<500
MW-100B	09/01/06	2,400	<500	<500	840	<500	<500	<500	5,500	<2,500	<2,500	<500	<2,500	<500	<500	<500	65,000	<2,500	<500	<1,000	1,700	<500	<500	<500	<500	<500	<500	3,600	<500	1,900	<500	26,000	<2,500	<500
MW-100B	04/02/07	2,100	<500	<500	1,000	<500	<500	<500	4,900	<2,500	<2,500	<500	<2,500	<500	<500	<500	67,000	<2,500	<500	<1,000	1,700	<500	<500	<500	<500	<500	<500	3,800	<500	3,100	<500	27,000	<2,500	<500
MW-100B	10/29/07	1,800	<500	<500	1,400	<500	<500	<500	2,800	<2,500	<2,500	<500	<2,500	<500	<500	<500	61,000	<2,500	<500	<1,000	28,000	<500	<500	<500	<500	<500	<500	4,600	<500	27,000	<500	26,000	<2,500	<500
MW-100B	04/14/08	970	NA	<500	790	<500	NA	<500	<2,500	<2,500	<2,500	<500	<2,500	<500	<500	<500	56,000	<2,500	<500	<1,000	32,000	<500	<500	<500	<500	<500	<500	3,300	<500	19,000	<500	6,400	<2,500	<500
MW-100B	10/27/08	1,200	NA	<500	<500	<500	NA	<500	<2,500	<2,500	<2,500	<500	<2,500	<500	<500	<500	55,000	<2,500	<500	<1,000	3,800	<500	<500	<500	<500	<500	<500	3,500	<500	7,800	<500	4,300	<2,500	<500
MW-100B	04/27/09	1,300	NA	<500	640	<500	NA	<500	1,000	<2,500	<2,500	<500	<2,500	<500	<500	<500	56,000	<2,500	<500	<1,000	2,000	<500	<500	<500	<500	<500	<500	3,800	<500	4,100	<500	12,000	<2,500	<500

Table C.1: Historical Volatile Organic Compound Analytical Results at Solvent Plume Wells

Sample ID	Date	Parameter (in ug/L)																															
		1,1,1-Trichloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2-Dichloroethane	2-Butanone (MEK)	4-Methyl-2-pentanone (MIBK)	Acetone	Benzene	Carbon disulfide	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	Freon-12 (Dichlorodifluoromethane)	Ethylbenzene	m&p-Xylenes	Methylene chloride	Methyl-tert-butyl-ether (MTBE)	Naphthalene	n-Butylbenzene	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	Trichloroethene	Freon-11 (Trichlorofluoromethane)	Freon- 113 (1,1,2-Trichlorotrifluoroethane)	Vinyl acetate	Vinyl chloride
2L Standards		200	0.6	6	350	NE	400	0.4	4000	NE	6000	1	700	3000	70	3	70	1000	600	500	5	20	6	70	500	70	0.7	600	100	3	2000	200000	88	0.03
MW-100B	11/05/09	870	NA	<500	680	<500	NA	<500	4,400	<2,500	<2,500	<500	<2,500	<500	<500	<500	47,000	<2,500	<500	<1,000	890	<500	<500	<500	<500	<500	<500	2,400	<500	<500	<500	25,000	<2,500	<500
MW-100B	05/06/10	81	NA	30	140	<20	NA	26	5,200	<100	1,300	<20	<100	<20	26	<20	14,000	<100	<20	<40	<40	<20	<20	<20	<20	<20	<20	370	<20	<20	<20	2,900	<100	<20
MW-100B	10/13/10	800	<500	<500	540	<500	<500	<500	<2,500	<2,500	<2,500	<500	<2,500	<500	<500	<500	41,000	<2,500	<500	<1,000	660	<500	<500	<500	<500	<500	<500	2,700	<500	2,300	<500	25,000	<2,500	<500
MW-100B	12/02/10	810	<500	<500	700	<500	<500	<500	<2,500	<2,500	<2,500	<500	<2,500	<500	<500	<500	42,000	<2,500	<500	<1,000	8,200	<500	<500	<500	<500	<500	<500	3,300	<500	13,000	<500	13,000	<2,500	<500
MW-100B	01/25/11	700	<500	<500	640	<500	<500	<500	<2,500	<2,500	<2,500	<500	<2,500	<500	<500	<500	36,000	<2,500	<500	<1,000	9,700	<500	<500	<500	<500	<500	<500	2,900	<500	11,000	<500	14,000	<2,500	<500
MW-100B	04/11/11	1,500	<100	<100	930	<100	<100	250	<500	<500	<500	<100	<500	<100	190	<100	56,000	<500	<100	<200	35,000	<100	<100	<100	<100	<100	120	3,700	<100	8,600	<100	31,000	<500	130
MW-100B	08/17/11	1,700	<100	<100	970	<100	<100	270	510	<500	<500	<100	<500	<100	260	<100	56,000	<500	<100	<200	37,000	<100	<100	<100	<100	<100	<100	3,600	380	7,600	100	22,000	<500	110
MW-100B	10/05/11	2,400	<100	110	1,100	<100	<100	300	<500	<500	<500	<100	<500	<100	340	<100	66,000	<500	<100	<200	57,000	<100	<100	<100	<100	<100	<100	3,600	<100	6,900	<100	25,000	<500	110
MW-100B	05/17/12	1,500	<20	94	900	<20	<20	200	<100	<100	<100	<20	<100	<20	230	<20	52,000	<100	25	74	25,000	<20	<20	<20	25	<20	54	3,300	26	3,600	<20	18,000	<100	110
MW-100B	11/07/12	2,000	<200	<200	1,100	<200	<200	210	<1,000	<1,000	<1,000	<200	<1,000	<200	270	<200	80,000	<1,000	<200	<400	29,000	<200	<200	<200	29	<200	<200	3,700	<200	1,700	<200	26,000	<1,000	<200
MW-100B	05/07/13	1,579	6.7	90.05	941	<5	5.45	147.35	1,630	92.3	326.65	24.25	<25	<5	204.55	<5	62,160	135.45	28.3	89.15	10,925	<5	8.9	<5	29.2	6.45	56.6	3,397	24.95	1,139	<5	21,755	<25	94.95
MW-100B	10/13/13	1,300	<50	100	830	<50	<50	150	<250	<250	<250	29	<250	<50	180	<50	63,000	<250	27	77	5,300	<50	<50	<50	26	<50	44	3,300	<50	1,000	<50	21,000	100	91
MW-100B	04/29/14	1,500	<50	110	<50	<50	<50	180	<250	<250	360	28	<250	<50	210	<50	69,000	<250	29	82	2,500	<50	<50	<50	30	<50	34 J	3,300	<50	430	<50	23,000	<100	86
MW-100B	11/12/14	1,100	<50	98	740	<50	<50	130	<250	<250	<250	22 J	<250	<50	150	<50	57,000	<250	20 J	57	1,100	<50	<50	<50	21 J	<50	<50	2,700	<50	820	<50	16,000	<100	90
MW-101A	10/30/02	37,000	<100	<100	1,200	<100	<100	<100	2,700	<500	<500	120	<500	<100	590	<100	800	<100	89 J	270	20,000	<100	<100	<100	93 J	72 J	470	13,000	48 J	390,000	<100	56,000	NA	<100
MW-101A	02/04/03	20,000	<5,000	<5,000	<5,000	<5,000	<5,000	<5,000	<25,000	<25,000	31,000	<5,000	<25,000	<5,000	<5,000	<5,000	<5,000	<5,000	<5,000	<10,000	<5,000	<5,000	<5,000	<5,000	<5,000	<5,000	<5,000	9,400	<5,000	270,000	<5,000	62,000	<25,000	<5,000
MW-101A	04/01/03	22,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<5,000	<5,000	<5,000	<1,000	<5,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	<2,000	3,800	<1,000	<1,000	<1,000	<1,000	<1,000	670 J	14,000	<1,000	250,000	<1,000	93,000	<5,000	<1,000
MW-101A	06/01/03	13,000	<500	<500	650	<500	<500	<500	<2,500	<2,500	<2,500	<500	<2,500	<500	<500	<500	340 J	<500	<500	<1,000	4,300	<500	<500	<500	<500	<500	<500	6,500	<500	110,000	<500	42,000	<2,500	<500
MW-101A	09/09/03	11,000	<500	<500	770	<500	<500	<500	<2,500	<2,500	<2,500	<500	<2,500	<500	<500	<500	500 J	<500	<500	<1,000	6,400	<500	<500	<500	<500	<500	<500	4,400	<500	99,000	<500	40,000	<2,500	<500
MW-101A	12/03/03	7,300	<500	<500	<500	<500	<500	<500	<2,500J	<2,500	6,300	<500	<2,500	<500	<500	<500	550	<500	<500	<1,000	5,000	<500	<500	<500	<500	<500	<500	3,100	<500	73,000	<500	14,000	<2,500J	<500
MW-101A	05/12/04	12,000	<500	<500	870	<500	<500	<500	<2,500	<2,500	1,700 J	<500	<2,500	<500	<500	<500J	2,600	<500	<500	<1,000	7,700	<500	<500	<500	<500	<500	<500	5,900	<500	190,000	<500	110,000	<2,500	<500
MW-101A	09/08/04	9,100	<500	<500	570	<500	<500	<500	<2,500	<2,500	<2,500	<500	<2,500	<500	<500	<500	1,200	<500	<500	<1,000	2,000	<500	540	<500	<500	<500	<500	4,100	<500	100,000	<500	92,000	<2,500	<500
MW-101A	12/01/04	5,500	<500	<500	370 J	<500	<500	<500	<2,500	<2,500	<2,500	<500	<2,500	<500	<500	<500	800	<500	<500	<1,000	1,800	<500	<500	<500	<500	<500	<500	2,700	<500	76,000	<500	24,000	<2,500	<500
MW-101A	06/08/05	9,000	<200	<200	630	<200	<200	<200	<1,000	<1,000	2,000	<200	<1,000	<200	<200	<200	1,000	<200	<200	<400	2,900 J	<200	<200	<200	<200	<200	160 J	3,100	<200	62,000	<200	34,000	<1,000	<200
MW-101A	12/19/05	8,200	<500	<500	500	<500	<500	<500	<2,500	<2,500	<2,500	<500	<2,500	<500	<500	<500	4,400	<500	<500	<1,000	1,500	<500	<500	<500	<500	<500	<500	4,100	<500	91,000	<500	37,000	<2,500	<500
MW-101A	03/14/06	6,000	<500	<500	<500	<500	<500	<500	<2,500	<2,500	<2,500	<500	<2,500	<500	<500	<500	3,400	<2,500	<500	<1,000	770	<500	<500	<500	<500	<500	<500	3,100	<500	64,000	<500	33,000	<2,500	<500
MW-101A	06/13/06	5,400	<500	<500	520	<500	<500	<500	<2,500	<2,500	<2,500	<500	<2,500	<500	<500	<500	1,900	<2,500	<500	<1,000	800	<500	<500	<500	<500	<500	<500	2,800	<500	66,000	<500	31,000	<2,500	<500
MW-101A	09/01/06	3,600	<500	<500	<500	<500	<500	<500	<2,500	<2,500	<2,500	<500	<2,500	<500	<500	<500	1,100	<2,500	<500	<1,000	<500	<500	<500	<500	<500	<500	<500	1,600	<500	36,000	<500	15,000	<2,500	<500
MW-101A	04/02/07	4,500	<500	<500	550	<500	<500	<500	<2,500	<2,500	<2,500	<500	<2,500	<500	<500	<500	5,900	<2,500	<500	<1,000	<500	<500	<500	<500	<500	<500	<500	2,600	<500	54,000	<500	32,000	<2,500	<500
MW-101A	10/29/07	1,900	<500	<500	<500	<500	<500	<500	<2,500	<2,500	<2,500	<500	<2,500	<500	<500	<500	1,000	<2,500	<500	<1,000	<500	<500	<500	<500	<500	<500	<500	1,000	<500	23,000	<500	16,000	<2,500	<500
MW-101A	04/14/08	4,300	NA	<500	<500	<500	NA	<500	<2,500	<2,500	<2,500	<500	<2,500	<500	<500	<500	9,300	<2,500	<500	<1,000	<500	<500	<500	<500	<500	<500	<500	2,400	<500	48,000	<500	32,000	<2,500	<500
MW-101A	10/27/08	4,900	NA	<500	<500	<500	NA	<500	<2,500	<2,500	<2,500	<500	<2,500	<500	<500	<500	12,000	<2,500	<500	<1,000	<500	<500	<500	<500	<500	<500	<500	2,600	<500	57,000	<500	31,000	<2,500	<500
MW-101A	04/27/09	4,300	NA	<250	420	<250	NA	<250	<1,250	<1,250	<1,250	<250	<1,250	<250	<250	<250	16,000	<1,250	<250	<500	<250	<250	<250	<250	<250	<250	<250	1,600	<250	41,000	<250	34,000	<1,250	<250
MW-101A	11/05/09	5,400	NA	<500	510	<500	NA	<500	<2,500	<2,500	<2,500	<500	<2,500	<500	<500	<500	12,000	<2,500	<500	<1,000	<500	<500	<500	<500	<500	<500	<500	2,700	<500	55,000	<500	29,000	<2,500	<500
MW-101A	05/05/10	3,900	NA	<100	<100	<100	NA	<100	<500	<500	2,500	<100	<500	<100	<100	<100	14,000	<500	<100	<200	220	<100	<100	<100	<100	<100	120	2,500	<100	38,000	<100	32,000	<500	<100
MW-101A	10/13/10	3,700	<500	<500	<500	<500	<500	<500	<2,500	<2,500	<2,500	<500	<2,500	<500	<500	<500	5,600	<2,500	<500	<1,000	<500	<500	<500	<500	<500	<500	<500	1,900	<500	44,000	<500	23,000	<2,500	<500
MW-101A	12/02/10	1,600	<500	<500	<500	<500	<500	<500	<2,500	<2,500	<2,500	<500	<2,500	<500	<500	<500	15,000	<2,500	<500	<1,000	<500	<500	<500	<500	<500	<500	<500	1,100	<500	13,000	<500	21,000	<2,500	<500
MW-101A	01/25/11	1,000	<500	<500	<500	<500	<500	<500	<2,500	<2,500	<2,500	<500	<2,500	<500	<500	<500	13,000	<2,500	<500	<1,000	<500	<500	<500	<500	<500	<500	<500	810	<500	1,600	<500	22,000	<2,500	<500
MW-101A	04/11/11	1,100	<20	<20	140	<20	<20	<20	<100	<100	<100	<20	<20	<20	<20	<20	8,300	<100	<20	<40	<20	<20	<20	<20	<20	<20	97	630	<20	790	<20	42,000	<100	<20
MW-101A	08/16/11	720	<20	<20	120	<20	<20	<20	<100	<100	<100	<20	<20	<20	<20	<20	1,700	<100	<20	<40	<20	<20	<20	<20	25	<20	49	260	<20	940	<20	22,000	<100	<20
MW-101A	10/05/11	820	<50	<50	<50	<50	<50	<50	<250	<250	<250	<50	<250	<50	<50	<50	2,700	<250	<50	<100	<50	<50	<50	<50	<50	<50	<50	310	<50	1,800	<50	24,000	<250	<50
MW-101A	05/17/12	160	<20	<20	<20	<20	<20	<20	<100	<100	<100	<20	<20	<20	<20	<20	470	<100	<20	<40		<20	<20	<20		<20	40	94	<20	310	<20	9,800	<100	<20
MW-101A	11/07/12	60	<5	<5	<5	<5	<5	<5	<25	<25	<25	<5	<5	<5	<5	<5	140	<5	<5	<10		<5	<5	<5		<5	10	24	<5	86	<5	3,300	<5	<5
MW-101A	05/07/13	56.45	<5	<5	<5	<5	<5	<5	101.4	<25	<25	<5	<25	<5	5.15	<5	186.45	<25	<5	<10	<5	<5	<5	<5	<5	<5	17.7	29.05	<5	106.45	<5	4,728	<25	<5
MW-101A	10/13/13	31	<10	<10	<10	<10	<10	<10	<50	<50	<50	<5	<50	<10	<10	<10	34	<50	<5	<10	<50	<10	<10	<10	<5	<10	9.4	4.8	<10	32	<10	4,900	<20	<5
MW-101A	04/29/14	19	<10	<10	<10	<10	<10	<10	<50	<50	<50	<5	<50	<10	<10	<10	350	<50	3 J	9.3 J	<50	<10	<10	<10	<5	<10	19	32	<10	100	<10	6,600	<20	<5
MW-101A	11/12/14	<10	<10	<10	<10	<10	<10	<10	<50	<50	<50	<5.0	<50	<10	<10	<10	22	<50	<5.0	<10	<50	<10	<10	<10	<5.0	<10	<10	<5.0	<10	12	<10	2,200	<20	<5.0
MW-101B	10/30/02	18,000	<500	<500	1,800	<500	<500	<500	<2,500	<2,500	<2,500	<500	<2,500	<500	450 J	<500	1,000	<500	<500	<1,000	13,000	<500	<500	<500	<500	<500	330 J	9,000	<500	380,000	<500	39,000	NA	<500
MW-101B	02/04/03	8,700	<500	<500	1,300	<500	<500	<500	<2,500	<2,500	<2,500	<500	<2,500	260 J	380 J	<500	700	<500	<500	<1,000	10,000	<500	<500	<500	<500	<500	<500	4,400	<500J	120,000	<500	34,000	<2,500J	<500
MW-101B	04/01/03	9,100	<1,000	<1,000	1,200	<1,000	<1,000	<1,000	<5,000	<5,000	<5,000	<1,000	<5,000	<1,000	<1,000	<1,000	870 J	<1,000	<1,000	<2,000	11,000	<1,000	<1,000	<1,000	<1,000	<1,000	<1,000	5,000	<1,000	140,000	<1,000	33,000	<5,000J	<1,000
MW-101B	06/01/03	9,800	<500	<500	1,300	<500	<500	<500	<2,500	<2,500	<2,500	<500	<2,500	<500	330 J	<500	900	<500	<500	<1,000	8,300	<500	<500	<500	<500	<500	<500	4,400	<500	130,000	<500	26,000	<2,500	<500

Table C.1: Historical Volatile Organic Compound Analytical Results at Solvent Plume Wells

Sample ID	Date	Parameter (in ug/L)																															
		1,1,1-Trichloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2-Dichloroethane	2-Butanone (MEK)	4-Methyl-2-pentanone (MIBK)	Acetone	Benzene	Carbon disulfide	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	Freon-12 (Dichlorodifluoromethane)	Ethylbenzene	m&p-Xylenes	Methylene chloride	Methyl-tert-butyl-ether (MTBE)	Naphthalene	n-Butylbenzene	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	Trichloroethene	Freon-11 (Trichlorofluoromethane)	Freon- 113 (1,1,2-Trichlorotrifluoroethane)	Vinyl acetate	Vinyl chloride
2L Standards		200	0.6	6	350	NE	400	0.4	4000	NE	6000	1	700	3000	70	3	70	1000	600	500	5	20	6	70	500	70	0.7	600	100	3	2000	200000	88	0.03
MW-101B	09/09/03	8,800	<500	<500	1,400	<500	<500	<500	<2,500	<2,500	<2,500	<500	<2,500	<500	350 J	<500	1,200	<500	<500	<1,000	10,000	<500	<500	<500	<500	<500	<500	4,600	<500	130,000	<500	21,000	<2,500	<500
MW-101B	12/03/03	7,500	<500	<500	1,400	<500	<500	<500	<2,500	<2,500	19,000 J	<500	<2,500	<500	320 J	<500	1,400	<500	<500	<1,000	8,000	<500	<500	<500J	<500	<500	<500	3,700	<500	94,000	<500	43,000	<2,500J	<500
MW-101B	05/12/04	8,100	<500	<500	1,200	<500	<500	<500	<2,500	<2,500	<2,500	<500	<2,500	<500	<500	<500J	1,300	<500	<500	<1,000	8,100	<500	<500	<500	<500	<500	<500	4,100	<500	150,000	<500	83,000	<2,500	<500
MW-101B	09/08/04	7,400	<500	<500	620	<500	<500	<500	<2,500	<2,500	<2,500	<500	<2,500	<500	<500	<500	2,100	<500	<500	<1,000	2,300	<500	590	<500	<500	<500	<500	3,500	<500	93,000	<500	73,000	<2,500	<500
MW-101B	12/01/04	8,200 J	<500	<500J	850	<500	<500	<500	<2,500J	<2,500	<2,500J	<500	<2,500	<500J	<500J	<500J	2,300	<500	<500	<1,000	3,600	<500	<500J	<500	<500J	<500	150 J	3,600	<500	99,000	<500	47,000	<2,500J	<500J
MW-101B	06/08/05	8,100	<200	<200	1,100	<200	<200	<200	<1,000	<1,000	<1,000	<200	<1,000	<200	<200	<200	10,000	<200	<200	<400	6,200 J	<200	<200	<200	<200	<200	<200	3,100	<200	79,000	<200	42,000	<1,000	<200
MW-101B	12/19/05	6,200	<500	<500	1,300	<500	<500	<500	<2,500	<2,500	<2,500	<500	<2,500	<500	<500	<500	27,000	<500	<500	<1,000	4,500	<500	<500	<500	<500	<500	<500	3,900	<500	69,000	<500	35,000	<2,500	<500
MW-101B	03/14/06	4,900	<500	<500	1,100	<500	<500	<500	<2,500	<2,500	<2,500	<500	<2,500	<500	<500	<500	28,000	<2,500	<500	<1,000	3,000	<500	<500	<500	<500	<500	<500	3,400	<500	58,700	<500	31,200	<2,500	<500
MW-101B	06/13/06	4,900	<500	<500	1,100	<500	<500	<500	<2,500	<2,500	<2,500	<500	<2,500	<500	<500	<500	24,000	<2,500	<500	<1,000	2,600	<500	<500	<500	<500	<500	<500	3,400	<500	64,000	<500	29,000	<2,500	<500
MW-101B	09/01/06	4,300	<500	<500	1,100	<500	<500	<500	<2,500	<2,500	<2,500	<500	<2,500	<500	<500	<500	31,000	<2,500	<500	<1,000	2,600	<500	<500	<500	<500	<500	<500	3,100	<500	44,000	<500	29,000	<2,500	<500
MW-101B	04/02/07	3,500	<500	<500	1,200	<500	<500	<500	<2,500	<2,500	<2,500	<500	<2,500	<500	<500	<500	22,000	<2,500	<500	<1,000	2,400	<500	<500	<500	<500	<500	<500	2,800	<500	53,000	<500	29,000	<2,500	<500
MW-101B	10/29/07	3,000	<500	<500	1,200	<500	<500	<500	<2,500	<2,500	<2,500	<500	<2,500	<500	<500	<500	20,000	<2,500	<500	<1,000	2,400	<500	<500	<500	<500	<500	<500	2,700	<500	46,000	<500	28,000	<2,500	<500
MW-101B	04/14/08	2,300	NA	<500	790	<500	NA	<500	<2,500	<2,500	<2,500	<500	<2,500	<500	<500	<500	23,000	<2,500	<500	<1,000	1,700	<500	<500	<500	<500	<500	<500	1,800	<500	28,000	<500	19,000	<2,500	<500
MW-101B	10/27/08	27,000	NA	2,000	<500	550	NA	<500	<500	<2,500	<2,500	<2,500	<500	<2,500	<500	<500	<500	<2,500	<500	<1,000	1,200	<500	<500	<500	<500	<500	<500	1,800	<500	22,000	<500	20,000	<2,500	<500
MW-101B	04/27/09	640	NA	2,300	<500	<500	NA	<500	<2,500	<2,500	<2,500	<500	<2,500	<500	<500	<500	32,000	<2,500	<500	<1,000	940	<500	<500	<500	<500	<500	<500	1,800	<500	14,000	<500	17,000	<2,500	<500
MW-101B	11/05/09	1,700	NA	<500	<500	<500	NA	<500	<2,500	<2,500	<2,500	<500	<2,500	<500	<500	<500	28,000	<2,500	<500	<1,000	<500	<500	<500	<500	<500	<500	<500	1,200	<500	1,100	<500	14,000	<2,500	<500
MW-101B	05/05/10	1,700	NA	<100	400	<100	NA	<100	<500	<500	870	<100	<500	<100	<100	<100	34,000	<500	<100	<200	240	<100	<100	<100	<100	<100	<100	1,200	<100	1,500	<100	12,000	<500	<100
MW-101B	10/13/10	1,500	<500	<500	<500	<500	<500	<500	<2,500	<2,500	<2,500	<500	<2,500	<500	<500	<500	30,000	<2,500	<500	<1,000	<500	<500	<500	<500	<500	<500	<500	1,400	<500	4,500	<500	14,000	<2,500	<500
MW-101B	12/02/10	1,500	<500	<500	<500	<500	<500	<500	<2,500	<2,500	<2,500	<500	<2,500	<500	<500	<500	29,000	<500	<500	<1,000	<500	<500	<500	<500	<500	<500	<500	1,200	<500	1,800	<500	11,000	<2,500	<500
MW-101B	01/25/11	77	<20	<20	26	<20	<20	<20	<100	<100	<100	<20	<20	<20	<20	<20	2,800	<20	<20	<40	20	<20	<20	<20	<20	<20	<20	47	<20	<20	<20	300	<20	<20
MW-101B	04/11/11	83	<5	<5	23	<5	<5	<5	<25	<25	<25	<5	<5	<5	<5	<5	2,000	<5	<5	<10	10	<5	<5	<5	<5	<5	<5	71	<5	<5	<5	660	<5	<5
MW-101B	08/16/11	1,500	<20	42	230	<20	<20	<20	<100	<100	<100	<20	<20	<20	<20	<20	23,000	<20	<20	<40	52	<20	<20	<20	<20	<20	37	1,100	99	1,300	<20	10,000	<20	<20
MW-101B	10/05/11	770	<20	23	<20	<20	<20	<20	<100	<100	<100	<20	<20	<20	<20	<20	8,200	<20	<20	<40	<20	<20	<20	<20	<20	<20	<20	560	<20	110	<20	5,600	<20	<20
MW-101B	05/17/12	1,200	<20	31	190	<20	<20	<20	<100	<100	<100	<20	<20	<20	<20	<20	16,000	<20	<20	42	<20	<20	<20	<20	<20	<20	50	1,300	<20	360	<20	17,000	<20	<20
MW-101B	11/07/12	610	<10	17	120	<10	<10	<10	<50	<50	<50	<10	<10	<10	<10	<10	9,400	<10	12	38	<10	<10	<10	<10	12	<10	47	840	<10	410	<10	13,000	<50	<10
MW-101B	05/07/13	501.6	<5	13.75	100.25	<5	<5	<5	143.2	<25	<25	<5	<25	<5	10.95	<5	8,599	39.25	12.65	40.8	13.55	<5	<5	<5	11.7	<5	60.5	773.7	<5	399.45	<5	17,615	<25	<5
MW-101B	10/13/13	490	<20	13	85	<20	<20	<20	<100	<100	<100	<10	<100	<20	<20	<20	9,200	<100	13	38	<100	<20	<20	<20	11	<20	64	750	<20	110	<20	17,000	<40	<10
MW-101B	04/29/14	460	<20	14 J	<20	<20	<20	<20	<100	<100	<100	<10	<100	<20	<20	<20	9,100	<100	12	37	<100	<20	<20	<20	11	<20	49	680	<20	40	<20	15,000	<40	<10
MW-101B	11/12/14	0.54 J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	<5.0	<0.50	<5.0	<1.0	<1.0	<1.0	120	<5.0	<0.50	<1.0	<5.0	<1.0	<1.0	<1.0	<0.50	<1.0	0.64 J	0.31 J	0.54 J	40	<1.0	7.4	<2.0	<0.50
MW-102A	10/30/02	180	<100	<100	<100	<100	<100	<100	<500	<500	<500	<100	<500	<100	<100	<100	51 J	<100	<100	<200	130	<100	<100	<100	<100	<100	<100	220	<100	6,200	<100	3,700	NA	<100
MW-102A	02/04/03	180	<50	<50	48 J	<50	<50	<50	<250	<250	<250	<50	<250	<50	<50	<50	86	<50	<50	<100	<50	<50	<50	<50	<50	<50	<50	130	<50	3,500	<50	4,600	<250	<50
MW-102A	04/01/03	83	<25	<25	<25	<25	<25	<25	<120	<120	<120	<25	<120	<25	<25	<25	<25	<25	<25	<50	<25	<25	<25	<25	<25	<25	<25	67	<25	1,200	<25	970	<120	<25
MW-102A	06/01/03	45	<10	<10	20	<10	<10	<10	<50	<50	<50	<10	<50	<10	<10	<10	5.2 J	14	<10	<20	<10	<10	<10J	<10	<10	<10	<10	28	<10	760	<10	4,100	<50J	<10
MW-102A	09/09/03	77	<50	<50	25 J	<50	<50	<50	<250	<250	<250	<50	<250	<50	<50	<50	56	<50	<50	<100	60	<50	<50	<50	<50	<50	<50	73	<50	1,700	<50	2,500	<250	<50
MW-102A	12/03/03	<25	<25	<25	<25	<25	<25	<25	<120J	<120	1,500	<25	<120	<25	<25	<25	<25	<25	<25	<50	<25	<25	<25	<25	<25	<25	<25	<25	<25	25 J	<25	3,300	<120J	<25
MW-102A	05/12/04	<20	<20	<20	<20	<20	<20	<20	<100	<100	<100	<20	<100	<20	<20	<20J	<20	<20	<20	<40	100	<20	<20	<20	<20	<20	<20	<20	<20	33	<20	6,500	<100	<20
MW-102A	09/08/04	<10	<10	<10	<10	<10	<10	<10	<50J	<50J	<50	<10	12 J	<10	<10	<10	<10	<10	<10	<20	<10	<10	<10	<10J	<10	<10	<10	<10	<10	25	<10	4,100	<50J	<10
MW-102A	12/01/04	<10	<10	<10	<10	<10	<10	<10	<50	<50	<50	<10	<50	<10	<10	<10	<10	<10	<10	<20	<10	<10	<10	<10	<10	<10	<10	<10	<10	22	<10	2,600	<50	<10
MW-102A	06/08/05	<5	<5	<5	<5	<5	<5	<5	<25	<25	<25J	<5	<25	<5	<5	<5	6.5	<5	<5	5.2 J	<5	<5	7.6	6.2	<5	<5	<5	<5	<5	11	<5	1,500	<25	<5
MW-102A	12/19/05	2.8	<1	<1	2.2	<1	<1	<1	8.2	<5	<5	<1	<5	<1	<1	<1	29	1.6	<1	<2	1.6	<1	<1	<1	<1	<1	<1	4.4	<1	44	<1	580	<5	<1
MW-102A	06/14/06	<1	<1	<1	4.4	<1	<1	<1	10	<5	5.3	<1	<5	<1	<1	<1	17	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	1.9	<1	14	<1	1,500	<5	<1
MW-102A	09/01/06	<5	<5	<5	<5	<5	<5	<5	<25	<25	<25	<5	<25	<5	<5	<5	8.6	<25	<5	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5	14	<5	1,000	<25	<5
MW-102A	04/02/07	23	<5	<5	13	<5	<5	<5	<25	<25	<25	<5	<25	<5	<5	<5	61	<25	<5	<10	<5	<5	<5	<5	<5	<5	<5	62	<5	920	<5	1,800	<25	<5
MW-102A	10/29/07	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<5	<1	<1	<1	8	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	11	<1	1,400	<5	<1
MW-102A	04/14/08	<1	NA	<1	6	<1	NA	<1	5	<5	11	<1	<5	<1	<1	<1	8	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	6	<1	1,400	<5	<1
MW-102A	10/27/08	6	NA	<1	4	<1	NA	<1	<5	<5	<5	<1	<5	<1	<1	<1	6	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1,600	<5	<1
MW-102A	04/27/09	<1	NA	<1	13	<1	NA	<1	5	<5	5.2	<1	<5	<1	<1	<1	15	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	7.4	<1	2,000	<5	<1
MW-102A*	11/04/09	<5	NA	<5	5.8	<5	NA	<5	<25	<25	<25	<5	<25	<5	<5	<5	11	<25	<5	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	1,500	<25	<5
MW-102A	05/05/10	<1	NA	<1	8.2	<1	NA	<1	<5	<5	130	<1	<5	<1	<1	<1	17	<5	<1	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	3.4	<1	1,400	<5	<1
MW-102A	10/13/10	<20	<20	<20	<20	<20	<20	<20	<100	<100	<100	<20	<100	<20	<20	<20	<20	<100	<20	<40	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	890	<100	<20
MW-102A	12/02/10	<20	<20	<20	<20	<20	<20	<20	<100	<100	<100	<20	<20	<20	<20	<20	<20	<20	<20	<40	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	760	<20	<20
MW-102A	01/25/11	<10	<10	<10	<10	<10	<10	<10	<50	<50	<50	<10	<10	<10	<10	<10	19	<10	<10	<20	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	1,300	<50	<10

Table C.1: Historical Volatile Organic Compound Analytical Results at Solvent Plume Wells

Sample ID	Date	Parameter (in ug/L)																																
		1,1,1-Trichloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2-Dichloroethane	2-Butanone (MEK)	4-Methyl-2-pentanone (MIBK)	Acetone	Benzene	Carbon disulfide	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	Freon-12 (Dichlorodifluoromethane)	Ethylbenzene	m&p-Xylenes	Methylene chloride	Methyl-tert-butyl-ether (MTBE)	Naphthalene	n-Butylbenzene	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	Trichloroethene	Freon-11 (Trichlorofluoromethane)	Freon- 113 (1,1,2-Trichlorotrifluoroethane)	Vinyl acetate	Vinyl chloride
2L Standards		200	0.6	6	350	NE	400	0.4	4000	NE	6000	1	700	3000	70	3	70	1000	600	500	5	20	6	70	500	70	0.7	600	100	3	2000	200000	88	0.03
MW-102A	04/11/11	<1	<1	<1	9.2	<1	<1	<1	<5	<5	<5	<1	<1	<1	<1	<1	23	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	2.5	<1	1,900	<5	<1
MW-102A	08/16/11	<20	<20	<20	<20	<20	<20	<20	<100	<100	<100	<20	<20	<20	<20	<20	<20	<20	<20	<40	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	710	<20	<20
MW-102A	10/05/11	<2	<2	<2	<2	<2	<2	<2	<10	<10	<10	<2	<2	<2	<2	<2	18	<2	<2	<4	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	1,200	<2	<2
MW-102A	05/17/12	<2	<2	<2	<2	<2	<2	<2	<10	<10	<10	<2	<2	<2	<2	<2	23	<2	<2	<4	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	920	<2	<2
MW-102A	11/07/12	<1	<1	<1	9.1	<1	<1	<1	<5	<5	<5	<1	<1	<1	<1	<1	20	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.8	<1	830	<5	<1
MW-102A	05/07/13	<1	<1	<1	15.91	<1	<1	<1	5.93	<5	<5	<1	<5	<1	<1	<1	34.67	59	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	2.08	<1	710	<5	<1
MW-102A	10/13/13	<1	<1	<1	13	<1	<1	<1	<5	<5	<5	<0.5	<5	<1	<1	<1	25	<5	<0.5	<1	<5	<1	<1	<1	<0.5	<1	<1	0.27	<1	0.65	<1	580	<2	<0.5
MW-102A	04/29/14	<2	<2	<2	<2	<2	<2	<2	<10	<10	<10	<1	<10	<2	<2	<2	32	<10	<1	<2	<10	<2	<2	<2	<1	<2	<2	<1	<2	<1	<2	580	<4	<1
MW-102A	11/12/14	<1.0	<1.0	<1.0	12	<1.0	<1.0	<1.0	<5.0	<5.0	<5.0	<0.50	<5.0	<1.0	<1.0	<1.0	21	<5.0	<0.50	<1.0	<5.0	<1.0	<1.0	<1.0	<0.50	<1.0	<1.0	0.36 J	<1.0	0.41 J	<1.0	450	<2.0	<0.50
MW-102B	10/30/02	59 J	<100	<100	70 J	<100	<100	<100	<500	<500	<500	<100	<500	<100	<100	<100	**75 J**	<100	<100	<200	<100	<100	<100	<100	<100	<100	<100	<100	<100	**7,400**	<100	1,600	NA	<100
MW-102B	02/04/03	**1,700**	<100	<100	270	<100	<100	<100	<500	<500	<500	<100	<500	<100	<100	<100	48 J	<100	<100	<200	**58 J**	<100	<100	<100	<100	<100	46 J	**820**	<100	**31,000**	<100	24,000	<500	<100
MW-102B	04/01/03	**670**	<100	<100	100	<100	<100	<100	<500	<500	<500	<100	<500	<100	<100	<100	<100	<100	<100	<200	<100	<100	<100	<100	<100	<100	<100	380	<100	**11,000**	<100	6,900	<500J	<100
MW-102B	06/01/03	**900**	<100	<100	200	<100	<100	<100	<500	<500	<500	<100	<500	<100	<100	<100	<100	<100	<100	<200	**100**	<100	<100	<100	<100	<100	<100	450	<100	**17,000**	<100	15,000	<500	<100
MW-102B	09/09/03	**740**	<100	<100	210	<100	<100	<100	<500	<500	<500	<100	<500	<100	<100	<100	**75 J**	<100	<100	<200	**57 J**	<100	<100	<100	<100	<100	<100	390	<100	**14,000**	<100	12,000	<500	<100
MW-102B	12/03/03	**480**	<100	<100	190	<100	<100	<100	<500	<500	<5,000	<100	<500	<100	<100	<100	57 J	<100	<100	<200	<100	<100	<100	<100J	<100	<100	<100	220	<100	**9,100**	<100	14,000	<500J	<100
MW-102B	05/12/04	**290**	<100	<100	160	<100	<100	<100	<500	<500	320 J	<100	<500	<100	<100	<100	<100	<100	<100	<200	<100	<100	<100	<100	<100	<100	<100	200	<100	**11,000**	<100	17,000	<500	<100
MW-102B	09/08/04	**290**	<50	<50	<50	<50	<50	<50	<250J	<250J	<250	<50	<250	<50	<50	<50	53	<50	<50	<100	<50	<50	<50	<50J	<50	<50	<50	190	<50	**10,000**	<50	20,000	<250J	<50
MW-102B	12/01/04	**310**	<50	<50	170	<50	<50	<50	<250	<250	<250	<50	<250	<50	<50	<50	60	<50	<50	<100	**72**	<50	<50	<50	<50	<50	<50	160	<50	**10,000**	<50	11,000	<250	<50
MW-102B	06/08/05	140	<20	<20	110 J	<20	<20	<20	<100	<100	<100J	<20	<100	<20	<20	<20	33	<20	<20	<40	**23**	<20	<20	<20	<20	<20	<20	110	<20	**5,500**	<20	7,900	<100	<20
MW-102B	12/19/05	200	<50	<50	170	<50	<50	<50	<250	<250	<250	<50	<250	<50	<50	<50	**94**	<50	<50	<100	<50	<50	<50	<50	<50	<50	<50	150 J	<50	**8,800**	<50	9,500	<250	<50
MW-102B	06/14/06	110	<50	<50	98	<50	<50	<50	<250	<250	<250	<50	<250	<50	<50	<50	**730**	<250	<50	<100	<50	<50	<50	<50	<50	<50	<50	100	<50	**5,500**	<50	5,800	<250	<50
MW-102B	09/01/06	110	<50	<50	110	<50	<50	<50	<250	<250	<250	<50	<250	<50	<50	<50	**2,000**	<250	<50	<100	<50	<50	<50	<50	<50	<50	<50	87	<50	**3,300**	<50	6,700	<250	<50
MW-102B	04/02/07	97	<50	<50	130	<50	<50	<50	<250	<250	<250	<50	<250	<50	<50	<50	**3,200**	<250	<50	<100	<50	<50	<50	<50	<50	<50	<50	110	<50	**2,800**	<50	7,000	<250	<50
MW-102B	10/29/07	71	<50	<50	120	<50	<50	<50	<250	<250	<250	<50	<250	<50	<50	<50	**2,400**	<250	<50	<100	<50	<50	<50	<50	<50	<50	<50	83	<50	**2,300**	<50	6,700	<250	<50
MW-102B	04/14/08	57	NA	<5	130	<5	NA	<5	<25	<25	<25	<5	<25	<5	<5	<5	**2,900**	<25	<5	<10	<5	<5	<5	<5	<5	<5	**7**	76	<5	**1,100**	<5	6,500	<25	<5
MW-102B	10/27/08	41	NA	<5	96	<5	NA	<5	<25	<25	<25	<5	<25	<5	<5	<5	**2,600**	<25	<5	<10	**7**	<5	<5	<5	<5	<5	**8**	63	<5	**800**	<5	3,900	<25	<5
MW-102B	04/27/09	<500	NA	<500	<500	<500	NA	<500	<2,500	<2,500	<2,500	<500	<2,500	<500	<500	<500	**2,600**	<2,500	<500	<1,000	<500	<500	<500	<500	<500	<500	<500	<500	<500	**550**	<500	6,000	<2,500	<500
MW-102B	11/04/09	17	NA	<5	71	<5	NA	<5	<25	<25	<25	<5	<25	<5	<5	<5	**1,100**	<25	<5	<10	<5	<5	<5	<5	<5	<5	<5	13	<5	**590**	<5	3,900	<25	<5
MW-102B	05/05/10	21	NA	<5	100	<5	NA	<5	35	<25	<25	<5	<25	<5	<5	<5	**1,400**	<25	<5	<10	<10	<5	<5	<5	<5	<5	<5	22	<5	**330**	<5	4,700	<25	<5
MW-102B	10/13/10	<50	<50	<50	89	<50	<50	<50	<250	<250	<250	<50	<250	<50	<50	<50	**810**	<250	<50	<100	<50	<50	<50	<50	<50	<50	<50	<50	<50	**480**	<50	3,400	<250	<50
MW-102B	12/02/10	<50	<50	<50	<50	<50	<50	<50	<250	<250	<250	<50	<250	<50	<50	<50	**410**	<50	<50	<100	<50	<50	<50	<50	<50	<50	<50	<50	<50	**78**	<50	1,600	<250	<50
MW-102B	01/25/11	<50	<50	<50	<50	<50	<50	<50	<250	<250	<250	<50	<250	<50	<50	<50	**550**	<50	<50	<100	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	3,300	<250	<50
MW-102B	04/11/11	<10	<10	<10	<10	<10	<10	<10	<50	<50	<50	<10	<10	<10	<10	<10	**1,500**	<10	<10	<20	<10	<10	<10	<10	<10	<10	<10	**810**	<10	<10	<10	4,700	<50	<10
MW-102B	08/16/11	21	<10	<10	67	<10	<10	<10	100	<50	71	<10	<10	<10	<10	<10	**1,100**	<10	<10	<20	<10	<10	<10	<10	11	<10	<10	51	<10	<10	<10	3,700	<50	<10
MW-102B	10/05/11	19	<10	<10	63	<10	<10	<10	<50	<50	<50	<10	<10	<10	<10	<10	**910**	<10	<10	<20	<10	<10	<10	<10	<10	<10	<10	54	<10	<10	<10	4,100	<50	<10
MW-102B	05/17/12	<2	<2	<2	<2	<2	<2	<2	<10	<10	<10	<2	<2	<2	<2	<2	**910**	<10	<2	<4	<2	<2	<2	<2	<2	<2	**4.3**	<2	47	**5**	<2	3,600	<10	**2.5**
MW-102B	11/07/12	9.7	<2	<2	79	<2	<2	<2	<10	<10	<10	<2	<2	<2	<2	<2	**630**	<10	<2	<4	<2	<2	<2	<2	2.4	<2	**3.5**	<2	35	1.2	<2	2,900	<10	<2
MW-102B	05/07/13	6.83	<1	1.28	68.08	<1	<1	<1	23.2	<5	7.57	<1	<5	<1	1.07	<1	**451.5**	121.34	<1	2.31	<1	<1	<1	<1	<1	<1	**3.59**	28.33	<1	1.15	<1	2,670	<5	**1.76**
MW-102B	10/13/13	5.8	<5	<5	69	<5	<5	<5	<25	<25	<25	<2.5	<25	<5	<5	<5	**580**	<25	<2.5	2.3	<25	<5	<5	<5	<2.5	<5	**3.8**	36	<5	<2.5	<5	2,500	<10	<2.5
MW-102B	04/29/14	6	<5	<5	<5	<5	<5	<5	<25	<25	<25	<2.5	<25	<5	<5	<5	**520**	<25	<2.5	2.5 J	<25	<5	<5	<5	<2.5	<5	3.6 J	32	<5	1.8 J	<5	2,300	<10	**2.8**
MW-102B	11/12/14	3.6	<2.0	1.1 J	31	<2.0	<2.0	<2.0	<10	<10	<10	<1.0	<10	<2.0	<2.0	<2.0	**420**	<10	<1.0	1.4 J	<10	<2.0	<2.0	<2.0	<1.0	<2.0	**2.3**	21	<2.0	<1.0	<2.0	860	<4.0	**3.5**
MW-102C	10/30/02	74	<50	<50	94	<50	<50	**31 J**	<250	<250	<250	<50	<250	<50	25 J	<50	**91**	<50	<50	<100	<50	<50	<50	<50	<50	<50	<50	43 J	<50	**8,000**	<50	2,500	NA	<50
MW-102C	02/04/03	<50	<50	<50	51	<50	<50	<50	<250	<250	<250	<50	<250	<50	<50	<50	**410**	<50	<50	<100	<50	<50	<50	<50	<50	<50	<50	110	<50	**4,200**	<50	1,800	<250	<50
MW-102C	04/01/03	91	<10	<10	26	<10	<10	<10	<50	<50	<50	<10	<50	<10	5.2 J	<10	**380**	<10	<10	<20	<10	<10	<10	<10	<10	<10	5.9 J	66	<10	**2,100**	<10	1,600	<50	<10
MW-102C	06/01/03	17	<5	<5	12	<5	<5	**3.2 J**	26	<25	140	<5	<25	<5	3.1 J	<5	**130**	<5	<5	<10	<5	<5	<5J	<5	<5	<5	<5	6.7	<5	**920**	<5	530	<25J	<5
MW-102C	09/09/03	49	<10	<10	42	<10	<10	**7.9 J**	<50	<50	<50	<10	<50	<10	7.7 J	<10	**100**	<10	<10	<20	**8.1 J**	<10	<10	<10	<10	<10	<10	16	<10	**2,600**	<10	990	<50	<10
MW-102C	12/03/03	55	<10	<10	<10	<10	<10	**11**	<50J	<50	570	<10	<50	<10	11	<10	**230**	<10	<10	<20	<10	<10	<10	<10	<10	<10	<10	17	<10	**2,300**	<10	1,200	<50J	<10
MW-102C	05/12/04	34	<10	<10	67	<10	<10	<10	24 J	<50	190	<10	<50	<10	<10	<10	**240**	24	<10	<20	<10	<10	<10	<10	<10	<10	<10	25	<10	**2,700**	<10	2,300	<50	<10
MW-102C	09/08/04	50	<20	<20	82	<20	<20	<20	<100J	<100J	<100	<20	<100	<20	<20	<20	**210**	<20	<20	<40	<20	<20	<20	<20J	<20	<20	<20	17 J	<20	**3,500**	<20	3,200	<100J	<20
MW-102C	12/01/04	39	<20	<20	82	<20	<20	<20	<100	<100	<100	<20	<100	<20	<20	<20	**220**	<20	<20	<40	<20	<20	<20	<20	<20	<20	<20	13 J	<20	**3,700**	<20	1,800	<100	<20
MW-102C	06/08/05	26	<20	<20	<20	<20	<20	<20	<100	<100	<100J	<20	<100	<20	<20	<20	**240**	<20	<20	<40	<20	<20	<20	<20	<20	<20	<20	<20	<20	**3,900**	<20	1,800	<100	<20

Table C.1: Historical Volatile Organic Compound Analytical Results at Solvent Plume Wells

Sample ID	Date	Parameter (in ug/L)																															
		1,1,1-Trichloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2-Dichloroethane	2-Butanone (MEK)	4-Methyl-2-pentanone (MIBK)	Acetone	Benzene	Carbon disulfide	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	Freon-12 (Dichlorodifluoromethane)	Ethylbenzene	m&p-Xylenes	Methylene chloride	Methyl-tert-butyl-ether (MTBE)	Naphthalene	n-Butylbenzene	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	Trichloroethene	Freon-11 (Trichlorofluoromethane)	Freon- 113 (1,1,2-Trichlorotrifluoroethane)	Vinyl acetate	Vinyl chloride
2L Standards		200	0.6	6	350	NE	400	0.4	4000	NE	6000	1	700	3000	70	3	70	1000	600	500	5	20	6	70	500	70	0.7	600	100	3	2000	200000	88	0.03
MW-102C	12/19/05	<5	<5	<5	46	<5	<5	<5	<25	<25	<25	<5	<25	<5	<5	<5	**300**	5.8	<5	<10	<5	<5	<5	<5	<5	<5	<5	8.3 J	<5	**2,100**	<5	1,000	<25	<5
MW-102C	06/16/06	32	<5	<5	110	<5	<5	<5	32	<25	27	<5	<25	<5	7.2	<5	**460**	<25	<5	<10	<5	<5	<5	<5	<5	<5	**5.9**	21	<5	**6,800**	<5	3,300	<25	<5
MW-102C	09/01/06	<50	<50	<50	130	<50	<50	<50	<250	<250	<250	<50	<250	<50	<50	<50	**640**	<250	<50	<100	<50	<50	<50	<50	<50	<50	<50	<50	<50	**5,800**	<50	2,400	<250	<50
MW-102C	04/02/07	12	<10	<10	61	<10	<10	<10	<50	<50	<50	<10	<50	<10	<10	<10	**870**	<50	<10	<20	<10	<10	<10	<10	<10	<10	<10	11	<10	**2,500**	<10	1,500	<50	<10
MW-102C	10/29/07	<100	<100	<100	**380**	<100	<100	<100	<500	<500	<500	<100	<500	<100	<100	<100	**5,400**	<500	<100	<200	<100	<100	<100	<100	<100	<100	<100	<100	<100	**12,000**	<100	5,800	<500	<100
MW-102C	04/14/08	<100	NA	<100	170	<100	NA	<100	<500	<500	<500	<100	<500	<100	<100	<100	**2,400**	<500	<100	<200	<100	<100	<100	<100	<100	<100	<100	<100	<100	**4,700**	<100	2,500	<500	<100
MW-102C	10/27/08	<100	NA	<100	200	<100	NA	<100	<500	<500	<500	<100	<500	<100	<100	<100	**4,800**	<500	<100	<200	<100	<100	<100	<100	<100	<100	<100	<100	<100	**6,000**	<100	3,600	<500	<100
MW-102C	04/27/09	61	NA	<50	**420**	<50	NA	<50	<250	<250	<250	<50	<250	<50	<50	<50	**14,000**	<250	<50	<100	<50	<50	<50	<50	<50	<50	<50	110	<50	**6,900**	<50	4,400	<250	<50
MW-102C*	11/04/09	84	NA	<50	**550**	<50	NA	<50	<250	<250	<250	<50	<250	<50	<50	<50	**24,000**	<250	<50	<100	<50	<50	<50	<50	<50	<50	<50	150	<50	**790**	<50	8,900	<250	<50
MW-102C	05/05/10	110	NA	<100	**900**	<100	NA	<100	<500	<500	<500	<100	<500	<100	<100	<100	**37,000**	<500	<100	<200	<200	<100	<100	<100	<100	<100	<100	250	<100	**3,000**	<100	9,700	<500	<100
MW-102C	10/13/10	<500	<500	<500	**720**	<500	<500	<500	<2,500	<2,500	<2,500	<500	<2,500	<500	<500	<500	**25,000**	<2,500	<500	<1,000	<500	<500	<500	<500	<500	<500	<500	<500	<500	**5,900**	<500	9,600	<2,500	<500
MW-102C	12/02/10	<500	<500	<500	**1,200**	<500	<500	<500	<2,500	<2,500	<2,500	<500	<2,500	<500	<500	<500	**46,000**	<2,500	<500	<1,000	<500	<500	<500	<500	<500	<500	<500	<500	<500	**2,000**	<500	13,000	<2,500	<500
MW-102C	01/25/11	<500	<500	<500	**950**	<500	<500	<500	<2,500	<2,500	<2,500	<500	<2,500	<500	<500	<500	**36,000**	<2,500	<500	<1,000	<500	<500	<500	<500	<500	<500	<500	570	<500	**8,000**	<500	9,700	<2,500	<500
MW-102C	04/11/11	<100	<100	<100	<100	<100	<100	<100	<500	<500	<500	<100	<500	<100	<100	<100	**30,000**	<500	<100	<200	<100	<100	<100	<100	<100	<100	<100	**690**	<100	**13,000**	<100	11,000	<500	<100
MW-102C	08/16/11	140	<100	<100	**1,200**	<100	<100	<100	<500	<500	<500	<100	<500	<100	<100	<100	**32,000**	<500	<100	<200	**110**	<100	<100	<100	<100	<100	<100	**740**	**160**	**21,000**	<100	9,800	<500	<100
MW-102C	10/05/11	<20	<20	<20	**1,100**	<20	<20	<20	<100	<100	<100	<20	<100	<20	59	<20	**29,000**	<100	<20	<40	**130**	<20	<20	<20	<20	<20	**27**	**1,000**	<20	**21,000**	<20	10,000	<100	<20
MW-102C	05/17/12	<20	<20	<20	**1,200**	<20	<20	<20	<100	<100	<100	<20	<100	<20	56	<20	**44,000**	<100	<20	<40	**170**	<20	<20	<20	20	<20	<20	**700**	<20	**4,700**	<20	9,500	<100	<20
MW-102C	11/07/12	160	<50	<50	**1,500**	<50	<50	<50	<250	<250	<250	<50	<250	<50	59	<50	**48,000**	<250	<50	<100	<50	<50	<50	<50	<50	<50	<50	**1,500**	<50	**12,000**	<50	14,000	<250	<50
MW-102C	05/07/13	104.5	<50	<50	**1,023**	<50	<50	<50	<250	<250	<250	<50	<250	<50	<50	<50	**37,880**	<250	<50	<100	**112**	<50	<50	<50	<50	<50	<50	**1,126**	<50	**5,345**	<50	9,050	<250	<50
MW-102C	10/13/13	100	<50	<50	**1,200**	<50	<50	<50	<250	<250	<250	**13**	<250	<50	57	<50	**48,000**	<250	10	32	<250	<50	<50	<50	9.1	<50	**32**	**1,700**	<50	**5,100**	<50	13,000	<100	<25
MW-102C	04/29/14	74	<20	<20	**790**	<20	<20	<20	<100	<100	<100	**8.6 J**	<100	<20	32	<20	**33,000**	<100	9.3 J	26	**110**	<20	<20	<20	<10	<20	**21**	**1,200**	<20	**1,800**	<20	10,000	<40	<10
MW-102C	11/12/14	100	<50	<50	**1,100**	<50	<50	<50	<250	<250	<250	<25	<250	<50	35 J	<50	**41,000**	<250	<25	31 J	**310**	<50	<50	<50	9.6 J	<50	37 J	**1,800**	<50	**8,300**	<50	10,000	<100	<25
MW-103A	10/30/02	<1	<1	0.44 J	<1	<1	<1	0.91 J	<5	<5	<5	0.59 J	<5	<1	2.8	1.6	**88**	19	<1	<2	0.92 J	7.8	<1	<1	<1	<1	0.63 J	0.61 J	<1	**36**	1.3	5,700	NA	<1
MW-103A	02/04/03	<500	<500	<500	<500	<500	<500	<500	<2,500	<2,500	<2,500	<500	<2,500	280 J	<500	<500	290 J	<500	<500	<1,000	<500	<500	<500	<500	<500	<500	<500	<500	<500J	<500	<500	25,000	<2,500J	<500
MW-103A	04/01/03	<250	<250	<250	<250	<250	<250	<250	<1,200	<1,200	<1,200	<250	<1,200	<250	<250	<250	**540**	<250	<250	<500	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	<250	16,000	<1,200	<250
MW-103A	06/01/03	<50	<50	<50	47 J	<50	<50	<50	<250	<250	<250	<50	<250	<50	<50	<50	**720**	60	<50	<100	<50	<50	<50J	<50	<50	<50	<50	<50	<50	**72**	<50	12,000	<250J	<50
MW-103A	09/09/03	<100	<100	<100	82 J	<100	<100	<100	<500	<500	<500	<100	<500	<100	<100	<100	**1,000**	<100	<100	<200	67 J	<100	<100	<100	<100	<100	<100	<100	<100	**230**	<100	25,000	<500	**67 J**
MW-103A	12/03/03	<100	<100	<100	<100	<100	<100	<100	<500J	<500	5,400	<100	<500	<100	<100	<100	**1,100**	<100	<100	<200	<100	<100	<100	<100	<100	<100	<100	<100	<100	**88 J**	<100	12,000	<500J	**60 J**
MW-103A	05/12/04	<50	<50	<50	61	<50	<50	<50	<250	<250	810	<50	<250	<50	<50	<50	**1,800**	130	<50	<100	<50	<50	<50	<50	<50	<50	<50	<50	<50	**52**	<50	21,000	<250	**61**
MW-103A	09/08/04	<20	<20	**14 J**	<20	<20	<20	**30**	<100J	<100J	<100	<20	<100	<20	10 J	<20	**3,900**	<20	<20	<40	<20	<20	<20	<20J	<20	<20	<20	12 J	<20	**27**	<20	9,800	<100J	**35**
MW-103A	12/01/04	<100	<100	<100	<100	<100	<100	<100	<500	<500	460 J	<100	<500	<100	<100	<100	**1,700**	<100	<100	<200	<100	<100	<100	<100	<100	<100	<100	<100	<100	**100**	<100	17,000	<500	<100
MW-103A	06/08/05	<10	<10	<10	15 J	<10	<10	<10	<50	<50	<50J	<10	<50	<10	<10	<10	**720**	<10	<10	<20	<10	<10	<10	<10	<10	<10	<10	<10	<10	**35**	<10	2,800	<50	**18**
MW-103A	12/19/05	<5	<5	<5	6.4	<5	<5	<5	<25	<25	<25	<5	<25	<5	<5	<5	**380**	<5	<5	<10	<5	<5	<5	<5	<5	<5	<5	<5	5.7	**23**	<5	1,900	<25	**8.7**
MW-103A	06/14/06	<5	<5	<5	9.9	<5	<5	<5	<25	<25	<25	<5	<25	<5	<5	<5	**360**	<25	<5	<10	<5	<5	<5	<5	<5	<5	<5	8.4	<5	**9.2**	<5	4,800	<25	**8.3**
MW-103A	09/01/06	<5	<5	<5	47	<5	<5	<5	<25	<25	<25	<5	<25	<5	<5	<5	**320**	<25	<5	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5	**27**	<5	13,000	<25	**20**
MW-103A	04/02/07	<5	<5	<5	25	<5	<5	<5	<25	<25	<25	<5	<25	<5	<5	<5	**230**	<25	<5	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5	**20**	<5	9,600	<25	**18**
MW-103A	10/29/07	<5	<5	<5	27	<5	<5	**11**	<25	<25	<25	<5	<25	<5	<5	<5	**670**	<25	<5	<10	<5	<5	<5	<5	<5	<5	<5	15	<5	**56**	<5	6,600	<25	**41**
MW-103A	04/14/08	<5	NA	<5	40	<5	NA	<5	<25	<25	<25	<5	<25	<5	<5	<5	**250**	<25	<5	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5	**22**	<5	13,000	<25	**13**
MW-103A	10/27/08	<5	NA	<5	15	<5	NA	<5	<25	<25	<25	<5	<25	<5	<5	<5	**210**	<25	<5	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5	**14**	<5	4,900	<25	**11**
MW-103A	04/28/09	<5	NA	<5	19	<5	NA	<5	<25	<25	<25	<5	<25	<5	<5	<5	**130**	<25	<5	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5	**12**	<5	4,500	<25	**8**
MW-103A	11/04/09	<20	NA	<20	<20	<20	NA	<20	<100	<100	<100	<20	<100	<20	<20	<20	**220**	<100	<20	<40	<20	<20	<20	<20	<20	<20	<20	<20	<20	**29**	<20	21,000	<100	<20
MW-103A	05/05/10	<50	NA	<50	<50	<50	NA	<50	<250	<250	<250	<50	<250	<50	<50	<50	**140**	<250	<50	<100	<100	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	14,000	<250	<50
MW-103A	10/12/10	<50	<50	<50	100	<50	<50	<50	<250	<250	<250	<50	<250	<50	<50	<50	**71**	<250	<50	<100	<50	<50	<50	<50	<50	<50	<50	<50	<50	**54**	<50	31,000	<250	<50
MW-103A	01/25/11	<50	<50	<50	<50	<50	<50	<50	<250	<250	<250	<50	<250	<50	<50	<50	**210**	<250	<50	<100	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	5,700	<250	<50
MW-103A	04/11/11	<50	<50	<50	<50	<50	<50	<50	<250	<250	<250	<50	<250	<50	<50	<50	**180**	<250	<50	<100	<50	<50	<50	<50	<50	<50	<50	<50	<50	**64**	<50	24,000	<250	<50
MW-103A	08/15/11	<50	<50	<50	<50	<50	<50	<50	<250	<250	<250	<50	<250	<50	<50	<50	**230**	<250	<50	<100	<50	<50	<50	<50	<50	<50	<50	<50	<50	**78**	<50	35,000	<250	<50
MW-103A	10/04/11	<100	<100	<100	100	<100	<100	<100	<500	<500	<500	<100	<500	<100	<100	<100	**160**	<500	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	31,000	<500	<100
MW-103A	05/17/12	<20	<20	<20	<20	<20	<20	<20	<100	<100	<100	<20	<100	<20	<20	<20	**200**	<100	<20	<40	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	17,000	<100	<20
MW-103A	11/07/12	<50	<50	<50	<50	<50	<50	<50	<250	<250	<250	<50	<250	<50	<50	<50	**180**	<250	<50	<100	<50	<50	<50	<50	<50	<50	<50	<50	<50	**79**	<50	36,000	<250	<50
MW-103A	05/07/13	<1	<1	1.9	<1	<1	<1	**1.56**	<5	<5	<5	<1	<5	<1	4.87	<1	**187.68**	102.33	<1	<2	<1	<1	<1	<1	<1	<1	**1.5**	4.04	<1	**40.04**	<1	23,020	<5	**8.04**
MW-103A	10/13/13	<20	<20	<20	<20	<20	<20	<20	<100	<100	<100	<10	<100	<20	<20	<20	**170**	<100	<10	<20	<100	<20	<20	<20	<10	<20	<20	12	<20	**26**	<20	15,000	<40	<10
MW-103A	04/29/14	<20	<20	<20	<20	<20	<20	<20	<100	<100	<100	<10	<100	<20	<20	<20	**130**	<100	<10	<20	<100	<20	<20	<20	<10	<20	<20	<10	<20	**33**	<20	18,000	<40	**7.6 J**

Table C.1: Historical Volatile Organic Compound Analytical Results at Solvent Plume Wells

Sample ID	Date	Parameter (in ug/L)																															
		1,1,1-Trichloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2-Dichloroethane	2-Butanone (MEK)	4-Methyl-2-pentanone (MIBK)	Acetone	Benzene	Carbon disulfide	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	Freon-12 (Dichlorodifluoromethane)	Ethylbenzene	m&p-Xylenes	Methylene chloride	Methyl-tert-butyl-ether (MTBE)	Naphthalene	n-Butylbenzene	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	Trichloroethene	Freon-11 (Trichlorofluoromethane)	Freon- 113 (1,1,2-Trichlorotrifluoroethane)	Vinyl acetate	Vinyl chloride
2L Standards		200	0.6	6	350	NE	400	0.4	4000	NE	6000	1	700	3000	70	3	70	1000	600	500	5	20	6	70	500	70	0.7	600	100	3	2000	200000	88	0.03
MW-103A	11/13/14	<50	<50	<50	<50	<50	<50	<50	<250	<250	<250	<25	<250	<50	<50	<50	**140**	<250	<25	<50	<250	<50	<50	<50	<25	<50	<50	<25	<50	**43**	<50	21,000	<100	<25
MW-103B	10/30/02	<1	<1	0.47 J	<1	<1	<1	**1.1**	<5	<5	<5	<1	<5	<1	3.3	1.8	**99**	14	<1	<2	1.1	7.8	<1	<1	<1	<1	0.57 J	1.2	<1	**34**	0.83 J	8,100	NA	<1
MW-103B	02/04/03	<50	<50	<50	<50	<50	<50	<50	<250	<250	<250	<50	<250	26 J	<50	<50	**160**	<50	<50	<100	<50	<50	<50	<50	<50	<50	<50	<50	<50	**83**	<50	15,000	<250	<50
MW-103B	04/01/03	110	<50	<50	<50	<50	<50	<50	<250	<250	<250	<50	<250	<50	<50	<50	**190**	<50	<50	<100	<50	<50	<50	<50	<50	<50	<50	82	<50	**1,300**	<50	1,800	<250	<50
MW-103B	06/01/03	<50	<50	<50	59	<50	<50	<50	<250	<250	<250	<50	<250	<50	<50	<50	**580**	49 J	<50	<100	<50	<50	<50J	<50	<50	<50	<50	<50	<50	**71**	<50	15,000	<250J	<50
MW-103B	09/09/03	<100	<100	<100	100	<100	<100	<100	<500	<500	<500	<100	<500	<100	<100	<100	**750**	<100	<100	<200	<100	<100	<100	<100	<100	<100	<100	<100	<100	**150**	<100	17,000	<500	<100
MW-103B	12/03/03	<100	<100	<100	<100	<100	<100	<100	<500J	<500	**9,700**	<100	<500	<100	<100	<100	**600**	<100	<100	<200	<100	<100	<100	<100	<100	<100	<100	<100	<100	**110**	<100	21,000	<500J	<100
MW-103B	05/12/04	<100	<100	<100	110	<100	<100	<100	<500	<500	1,900	<100	<500	<100	<100	<100	**970**	<100	<100	<200	**110**	<100	<100	<100	<100	<100	<100	130	<100	**100**	<100	50,000	<500	<100
MW-103B	09/08/04	<200	<200	<200	<200	<200	<200	<200	<1,000J	<1,000J	<1,000	<200	<1,000	<200	<200	<200	**2,100**	<200	<200	<400	<200	<200	<200	<200J	<200	<200	<200	<200	<200	<200	<200	34,000	<1,000J	<200
MW-103B	12/01/04	<100	<100	<100	<100	<100	<100	<100	<500	<500	<500	<100	<500	<100	<100	<100	**990**	<100	<100	<200	<100	<100	<100	<100	<100	<100	<100	<100	<100	**79 J**	<100	26,000	<500	<100
MW-103B	06/08/05	<20	<20	<20	<20	<20	<20	<20	<100	<100	<100J	<20	<100	<20	<20	<20	**690**	<20	<20	<40	<20	<20	<20	<20	<20	<20	<20	<20	<20	**65**	<20	18,000	<100	**23**
MW-103B	12/19/05	<5	<5	<5	41	<5	<5	<5	<25	<25	<25	<5	<25	<5	<5	<5	**690**	38	<5	<10	<5	<5	<5	<5	<5	<5	<5	<5	6.7	**53**	<5	12,000	<25	**27**
MW-103B	06/14/06	<5	<5	<5	37	<5	<5	<5	<25	<25	<25	<5	<25	<5	<5	<5	**440**	<25	<5	<10	<5	<5	<5	<5	<5	<5	<5	5.2	<5	**77**	<1	16,000	<25	**12**
MW-103B	09/01/06	<5	<5	<5	50	<5	<5	<5	<25	<25	<25	<5	<25	<5	<5	<5	**420**	<25	<5	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5	**41**	<5	9,900	<25	**18**
MW-103B	04/02/07	<5	<5	<5	90	<5	<5	<5	<25	<25	<25	<5	<25	<5	<5	<5	**410**	<25	<5	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5	**39**	<5	16,000	<25	**21**
MW-103B	10/29/07	<5	<5	<5	40	<5	<5	**8**	<25	<25	<25	<5	<25	<5	<5	<5	**550**	<25	<5	<10	<5	<5	<5	<5	<5	<5	<5	9	<5	**49**	<5	16,000	<25	**27**
MW-103B	04/14/08	<5	NA	<5	65	<5	NA	<5	<25	<25	<25	<5	<25	<5	<5	<5	**360**	<25	<5	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5	**35**	<5	17,000	<25	**21**
MW-103B	10/28/08	<5	NA	<5	42	<5	NA	<5	<25	<25	<25	<5	<25	<5	<5	<5	**270**	<25	<5	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5	**41**	<5	16,000	<25	<5
MW-103B	04/28/09	<5	NA	<5	51	<5	NA	<5	<25	<25	<25	<5	<25	<5	<5	<5	**240**	<25	<5	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5	**31**	<5	12,000	<25	**11**
MW-103B	11/04/09	<5	NA	<5	31	<5	NA	<5	<25	<25	<25	<5	<25	<5	<5	<5	**290**	<25	<5	<10	<5	<5	<5	<5	<5	<5	<5	6.6	<5	**27**	<5	8,800	<25	**12**
MW-103B	05/05/10	<50	NA	<50	<50	<50	NA	<50	<250	<250	<250	<50	<250	<50	<50	<50	**210**	<250	<50	<100	<100	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	7,200	<250	<50
MW-103B	10/12/10	<50	<50	<50	<50	<50	<50	<50	<250	<250	<250	<50	<250	<50	<50	<50	**160**	<250	<50	<100	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	7,600	<250	<50
MW-103B	12/02/10	<100	<100	<100	<100	<100	<100	<100	<500	<500	<500	<100	<500	<100	<100	<100	**230**	<100	<100	<200	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	7,200	<100	<100
MW-103B	01/25/11	<50	<50	<50	<50	<50	<50	<50	<250	<250	<250	<50	<250	<50	<50	<50	**160**	<50	<50	<100	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	4,600	<50	<50
MW-103B	04/11/11	<20	<20	<20	<20	<20	<20	<20	<100	<100	<100	<20	<20	<20	<20	<20	**210**	<20	<20	<40	<20	<20	<20	<20	<20	<20	<20	<20	<20	**32**	<20	9,400	<20	<20
MW-103B	08/15/11	<20	<20	<20	<20	<20	<20	<20	<100	<100	<100	<20	<20	<20	<20	<20	**170**	<20	<20	<40	<20	<20	<20	<20	<20	<20	<20	<20	<20	**36**	<20	14,000	<20	<20
MW-103B	10/04/11	<20	<20	<20	<20	<20	<20	<20	<100	<100	<100	<20	<20	<20	<20	<20	**180**	<20	<20	<40	<20	<20	<20	<20	<20	<20	<20	<20	<20	**41**	<20	15,000	<20	<20
MW-103B	05/17/12	<20	<20	<20	<20	<20	<20	<20	<100	<100	<100	<20	<20	<20	<20	<20	**250**	<20	<20	<40	<20	<20	<20	<20	<20	<20	<20	<20	<20	**20**	<20	8,600	<20	**14**
MW-103B	11/07/12	<10	<10	<10	<10	<10	<10	<10	<50	<50	<50	<10	<10	<10	<10	<10	**170**	<10	<10	<20	<10	<10	<10	<10	<10	<10	<10	7.5	<10	**63**	<10	16,000	<10	<10
MW-103B	05/07/13	<1	<1	1.63	<1	<1	<1	**1.89**	<5	<5	<5	<1	<5	<1	2.71	<1	**158.43**	80.18	<1	<2	<1	<1	<1	<1	<1	<1	<1	2.52	<1	**35.36**	<1	14,615	<5	**7.54**
MW-103B	10/13/13	<10	<10	<10	<10	<10	<10	<10	<50	<50	<50	<5	<50	<10	<10	<10	**160**	<50	<5	<10	<50	<10	<10	<10	<5	<10	<10	3.5	<10	**22**	<10	10,000	<20	**11**
MW-103B	04/29/14	<10	<10	<10	<10	<10	<10	<10	<50	<50	<50	<5	<50	<10	<10	<10	**140**	<50	<5	<10	<50	<10	<10	<10	<5	<10	<10	<5	<10	**16**	<10	7,300	<20	**10**
MW-103B	11/13/14	<20	<20	<20	<20	<20	<20	<20	<100	<100	<100	<10	<100	<20	<20	<20	**160**	<100	<10	<20	<100	<20	<20	<20	<10	<20	<20	8.2 J	<20	**16**	<20	6,900	<40	<10
MW-103C	10/30/02	<1	<1	1.2	<1	<1	<1	**3.5**	<5	<5	<5	<1	<5	<1	4.6	<1	**300**	8.4	<1	<2	1.2	<1	<1	<1	<1	<1	0.55 J	0.59 J	0.55 J	**43**	14	2,900	NA	<1
MW-103C	02/04/03	<10	<10	<10	19	<10	<10	<10	<50	<50	<50	<10	<50	<10	5.1 J	<10	**290**	13	<10	<20	<10	<10	<10	<10	<10	<10	<10	13	<10	**270**	9.3 J	3,500	<50	<10
MW-103C	04/01/03	<100	<100	<100	<100	<100	<100	<100	<500	<500	<500	<100	<500	<100	<100	<100	**500**	<100	<100	<200	<100	<100	<100	<100	<100	<100	<100	<100	<100	**500**	<100	4,300	<500	<100
MW-103C	06/01/03	4.3 J	<10	<10	18	<10	<10	**6.6 J**	<50	<50	<50	<10	<50	<10	6.4 J	<10	**510**	23	<10	<20	<10	<10	<10J	<10	<10	<10	<10	<10	<10	**150**	8 J	3,400	<50J	<10
MW-103C	09/09/03	49 J	<50	<50	<50	<50	<50	<50	<250	<250	<250	<50	<250	<50	<50	<50	**520**	<50	<50	<100	**28 J**	<50	<50	<50	<50	<50	<50	<50	<50	**550**	<50	6,400	<250	<50
MW-103C	12/03/03	<50	<50	<50	<50	<50	<50	<50	<250J	<250	2,700	<50	<250	<50	<50	<50	**500**	<50	<50	<100	<50	<50	<50	<50	<50	<50	<50	<50	<50	**60**	<50	6,500	<250J	<50
MW-103C	05/12/04	<50	<50	<50	<50	<50	<50	<50	<250	<250	660	<50	<250	<50	<50	<50	**650**	110	<50	<100	<50	<50	<50	<50	<50	<50	<50	<50	<50	**76**	<50	17,000	<250	<50
MW-103C	09/08/04	<100	<100	<100	<100	<100	<100	<100	<500J	<500J	<500	<100	<500	<100	<100	<100	**960**	<100	<100	<200	<100	<100	<100	<100J	<100	<100	<100	<100	<100	**60 J**	<100	15,000	<500J	<100
MW-103C	12/01/04	<25	<25	<25	<25	<25	<25	<25	<120	<120	<120	<25	<120	<25	<25	<25	**1,000**	<25	<25	<50	<25	<25	<25	<25	<25	<25	<25	<25	<25	**71**	<25	11,000	<120	**23 J**
MW-103C	06/08/05	<10	<10	<10	<10	<10	<10	<10	<50	<50	<50J	<10	<50	<10	<10	<10	**690**	<10	<10	<20	<10	<10	<10	<10	<10	<10	<10	<10	<10	**47**	<10	5,900	<50	**16**
MW-103C	12/19/05	<10	<10	<10	25	<10	<10	<10	<50	<50	<50	<10	<50	<10	<10	<10	**760**	37	<10	<20	<10	<10	<10	<10	<10	<10	<10	<10	<10	**57**	<10	7,600	<50	**16**
MW-103C	06/14/06	<5	<5	<5	13	<5	<5	<5	<25	<25	<25	<5	<25	<5	<5	<5	**360**	<25	<5	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5	**28**	<5	7,100	<25	**6.1**
MW-103C	09/01/06	<5	<5	<5	30	<5	<5	**7**	<25	<25	<25	<5	<25	<5	<5	<5	**720**	<25	<5	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5	**50**	<5	6,200	<25	**20**
MW-103C	04/02/07	<5	<5	<5	37	<5	<5	**6.9**	<25	<25	<25	<5	<25	<5	5.2	<5	**700**	<25	<5	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5	**56**	<5	7,400	<25	**17**
MW-103C	10/29/07	<5	<5	<5	39	<5	<5	**8**	<25	<25	<25	<5	<25	<5	5	<5	**810**	<25	<5	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5	**56**	<5	9,800	<25	**20**
MW-103C	04/14/08	<5	NA	<5	35	<5	NA	**7**	<25	<25	<25	<5	<25	<5	<5	<5	**600**	<25	<5	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5	**46**	<5	8,600	<25	**21**
MW-103C	10/28/08	<5	NA	<5	18	<5	NA	**6**	<25	<25	<25	<5	<25	<5	<5	<5	**630**	<25	<5	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5	**49**	<5	8,000	<25	**15**
MW-103C	04/28/09	<50	NA	<50	<50	<50	NA	<50	<250	<250	<250	<50	<250	<50	<50	<50	**620**	<250	<50	<100	<50	<50	<50	<50	<50	<50	<50	<50	<50	**56**	<50	9,600	<250	<50

Table C.1: Historical Volatile Organic Compound Analytical Results at Solvent Plume Wells

Sample ID	Date	Parameter (in ug/L)																															
		1,1,1-Trichloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2-Dichloroethane	2-Butanone (MEK)	4-Methyl-2-pentanone (MIBK)	Acetone	Benzene	Carbon disulfide	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	Freon-12 (Dichlorodifluoromethane)	Ethylbenzene	m&p-Xylenes	Methylene chloride	Methyl-tert-butyl-ether (MTBE)	Naphthalene	n-Butylbenzene	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	Trichloroethene	Freon-11 (Trichlorofluoromethane)	Freon- 113 (1,1,2-Trichlorotrifluoroethane)	Vinyl acetate	Vinyl chloride
2L Standards		200	0.6	6	350	NE	400	0.4	4000	NE	6000	1	700	3000	70	3	70	1000	600	500	5	20	6	70	500	70	0.7	600	100	3	2000	200000	88	0.03
MW-103C	11/04/09	<10	NA	<10	22	<10	NA	<10	<50	<50	<50	<10	<50	<10	<10	<10	280	<50	<10	<20	<10	<10	<10	<10	<10	<10	<10	<10	<10	23	<10	7,300	<50	12
MW-103C	05/05/10	<10	NA	<10	24	<10	NA	<10	<50	<50	<50	<10	<50	<10	<10	<10	300	<50	<10	<20	<20	<10	<10	<10	<10	<10	<10	<10	<10	35	<10	6,800	<50	11
MW-103C	10/12/10	<10	<10	<10	19	<10	<10	<10	<50	<50	<50	<10	<50	<10	<10	<10	240	<50	<10	<20	<10	<10	<10	<10	<10	<10	<10	<10	<10	27	<10	4,400	<50	<10
MW-103C	12/02/10	<100	<100	<100	<100	<100	<100	<100	<500	<500	<500	<100	<500	<100	<100	<100	260	<100	<100	<200	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	7,600	<100	<100
MW-103C	01/25/11	<10	<10	<10	<10	<10	<10	<10	<50	<50	<50	<10	<10	<10	<10	<10	310	<10	<10	<20	<10	<10	<10	<10	<10	<10	<10	<10	<10	43	<10	6,900	<10	10
MW-103C	04/11/11	<20	<20	<20	<20	<20	<20	<20	<20	<100	<100	<100	<20	<20	<20	<20	310	<20	<20	<40	<20	<20	<20	<20	<20	<20	<20	<20	<20	49	<20	8,200	<20	<20
MW-103C	08/15/11	<20	<20	<20	<20	<20	<20	<20	<20	<100	<100	<100	<20	<20	<20	<20	270	<20	<20	<40	<20	<20	<20	<20	<20	<20	<20	<20	<20	40	<20	11,000	<20	<20
MW-103C	10/04/11	<20	<20	<20	<20	<20	<20	<20	<20	<100	<100	<100	<20	<20	<20	<20	270	<20	<20	<40	<20	<20	<20	<20	<20	<20	<20	<20	<20	41	<20	10,000	<20	<20
MW-103C	05/17/12	<20	<20	<20	<20	<20	<20	<20	<20	<100	<100	<100	<20	<20	<20	<20	280	<20	<20	<40	<20	<20	<20	<20	<20	<20	<20	<20	<20	59	<20	14,000	<20	<20
MW-103C	11/07/12	<10	<10	<10	<10	<10	<10	<10	<50	<50	<50	<10	<10	<10	<10	<10	210	<10	<10	<20	<10	<10	<10	<10	<10	<10	<10	<10	<10	44	<10	9,400	<10	7.9
MW-103C	05/07/13	<1	<1	2.15	<1	<1	<1	3.11	8.01	<5	17.99	<1	<5	<1	3.85	<1	300	108.85	<1	<2	<1	<1	<1	<1	<1	<1	<1	1.37	<1	68.26	<1	13,420	<5	8.9
MW-103C	10/13/13	<20	<20	<20	<20	<20	<20	<20	<100	<100	<100	<10	<100	<20	<20	<20	290	<100	<10	<20	<100	<20	<20	<20	<10	<20	<20	<10	<20	56	<20	11,000	<40	<10
MW-103C	04/29/14	<20	<20	<20	<20	<20	<20	<20	<100	<100	<100	<10	<100	<20	<20	<20	310	<100	<10	<20	<100	<20	<20	<20	<10	<20	<20	<10	<20	65	<20	13,000	<40	10
MW-103C	11/13/14	<20	<20	<20	<20	<20	<20	<20	<100	<100	<100	<10	<100	<20	<20	<20	200	<100	<10	<20	<100	<20	<20	<20	<10	<20	<20	<10	<20	28	<20	8,000	<40	<10
MW-104A	09/08/04	<20	<20	<20	<20	<20	<20	<20	<100J	<100J	<100	<20	<100	<20	<20	<20	470	<20	<20	<40	<20	<20	<20	<20J	<20	<20	<20	<20	<20	<20	<20	3,300	<100J	<20
MW-104A	12/01/04	<10	<10	<10	<10	<10	<10	<10	<50	<50	<50	<10	<50	<10	<10	<10	490	<10	<10	<20	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	2,500	<50	<10
MW-104A	06/08/05	<2	<2	2 J	<2	<2	<2	3.1	<10	<10	<10J	<2	<10	<2	1.7 J	<2	450	<2	<2	<4	<2	<2	<2	<2	<2	<2	<2	<2	2.3	2.5	<2	2,200	<10	2.9
MW-104A	12/19/05	<10	<10	<10	15	<10	<10	<10	<50	<50	<50	<10	<50	<10	<10	<10	890	99	<10	<20	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	3,400	<50	<10
MW-104A	06/14/06	<5	<5	<5	<5	<5	<5	<5	<25	<25	<25	<5	<25	<5	<5	<5	310	<25	<5	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	980	<25	<5
MW-104A	09/01/06	<10	<10	<10	<10	<10	<10	<10	<50	<50	<50	<10	<50	<10	<10	<10	740	<50	<10	<20	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	1,900	<50	<10
MW-104A	04/02/07	<5	<5	<5	<5	<5	<5	<5	<25	<25	<25	<5	<25	<5	<5	<5	700	<25	<5	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	1,700	<25	<5
MW-104A	10/29/07	<5	<5	<5	7	<5	<5	<5	<25	<25	<25	<5	<25	<5	<5	<5	600	<25	<5	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	1,400	<25	7
MW-104A	04/14/08	<5	NA	<5	7	<5	NA	<5	<25	<25	<25	<5	<25	<5	<5	<5	610	<25	<5	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	1,000	<25	7
MW-104A	10/28/08	<5	NA	<5	<5	<5	NA	<5	<25	<25	<25	<5	<25	<5	<5	<5	620	<25	<5	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	900	<25	7
MW-104A	04/28/09	<1	NA	3.4	8	<1	NA	4.4	<5	<5	<5	<1	<5	<1	1.9	<1	650	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	3.8	2.5	<1	810	<5	14
MW-104A	11/04/09	<10	NA	3.1	2.8	<10	NA	3.8	<50	<50	<50	<10	<50	<10	2.1	<10	590	<50	<10	<20	<10	<10	<10	<10	<10	<10	<10	<10	3.3	2.4	<10	940	<50	12
MW-104A	05/05/10	<1	NA	2.8	3.8	<1	NA	3.5	<5	<5	64	<1	<5	1.3	1.4	<1	630	<5	<1	<2	<2	<1	<1	<1	<1	<1	<1	<1	3	2.2	<1	880	<5	13
MW-104A	10/12/10	<5	<5	<5	5.3	<5	<5	<5	<25	<25	<25	<5	<25	<5	<5	<5	740	<25	<5	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	780	<25	19
MW-104A	04/11/11	<2	<2	2.5	<2	<2	<2	<2	<10	<10	<10	<2	<2	<2	<2	<2	600	<10	<2	<4	<2	<2	<2	<2	<2	<2	<2	<2	2.4	2.2	<2	910	<10	9.4
MW-104A	10/04/11	<1	<1	3.1	<1	<1	<1	3.1	<5	<5	<5	<1	<5	<1	1.1	<1	440	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	1.9	1.9	<1	650	<5	8.4
MW-104A	05/17/12	<2	<2	<2	<2	<2	<2	3.2	<10	<10	<10	<2	<2	<2	<2	<2	470	<10	<2	<4	<2	<2	<2	<2	<2	<2	<2	<2	2.2	<2	<2	950	<10	9.3
MW-104A	11/07/12	<1	<1	1.6	1.1	<1	<1	2.1	<5	<5	<5	<1	<5	<1	1.1	<1	360	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	1.4	1.6	<1	740	<5	5.1
MW-104A	05/07/13	<1	<1	1.54	1.82	<1	<1	1.99	<5	<5	<5	<1	<5	<1	<1	<1	300.5	90.98	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	1.53	1.75	<1	661	<5	6.6
MW-104A	10/13/13	<1	<1	1.6	<1	<1	<1	1.9	<5	<5	<5	<0.5	<5	3	1	<1	32	<5	<0.5	<1	<5	<1	<1	<1	<0.5	<1	<1	<0.5	1.7	1.4	<1	47	<2	7.9
MW-104A	04/28/14	<1	<1	1.9	<1	<1	<1	2.1	<5	<5	<5	<0.5	<5	<1	0.77 J	<1	400	<5	<0.5	<1	<5	<1	<1	<1	<0.5	<1	<1	<0.5	1.9	1.7	<1	500	<2	21
MW-104A	11/13/14	<2.0	<2.0	1.8 J	<2.0	<2.0	<2.0	1.9 J	<10	<10	<10	<1.0	<10	<2.0	<2.0	<2.0	390	<10	<1.0	<2.0	<10	<2.0	<2.0	<2.0	<1.0	<2.0	<2.0	<1.0	1.7 J	1.7	<2.0	610	<4.0	15
MW-104B	09/08/04	<20	<20	<20	<20	<20	<20	<20	<100J	<100J	<100	<20	<100	<20	<20	<20	76	<20	<20	<40	<20	47	<20	<20J	<20	<20	<20	<20	<20	17 J	<20	3,900	<100J	<20
MW-104B	12/01/04	<10	<10	<10	<10	<10	<10	<10	<50	<50	<50	6.1 J	<50	<10	<10	<10	75	<10	<10	<20	<10	49	<10	<10	<10	<10	<10	<10	<10	17	<10	1,900	<50	<10
MW-104B	06/08/05	<2	<2	<2	<2	<2	<2	<2	<10	<10	<10J	4	<10	<2	<2	<2	56	<2	<2	<4	<2	<2	<2	<2	<2	<2	<2	<2	<2	14	<2	1,300	<10	<2
MW-104B	12/19/05	<10	<10	<10	<10	<10	<10	<10	<50	<50	<50	<10	<50	<10	<10	<10	110	16	<10	<20	<10	14	<10	<10	<10	<10	<10	<10	<10	26	<10	1,900	<50	<10
MW-104B	06/14/06	<10	<10	<10	23	<10	<10	<10	<50	<50	<50	<10	<50	<10	<10	<10	110	<50	<10	<20	<10	12	<10	<10	<10	<10	<10	<10	<10	22	<10	1,600	<50	<10
MW-104B	09/01/06	<10	<10	<10	30	<10	<10	<10	<50	<50	<50	<10	<50	<10	<10	<10	150	<50	<10	<20	<10	<10	<10	<10	<10	<10	<10	<10	<10	30	<10	2,000	<50	<10
MW-104B	04/02/07	<5	<5	<5	37	<5	<5	<5	<25	<25	<25	<5	<25	<5	<5	<5	300	<25	<5	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5	28	<5	3,500	<25	<5
MW-104B	10/29/07	<5	<5	<5	30	<5	<5	<5	<25	<25	<25	<5	<25	<5	<5	<5	170	<25	<5	<10	<5	10	<5	<5	<5	<5	<5	<5	<5	27	<5	2,800	<25	<5
MW-104B	04/14/08	<5	NA	<5	26	<5	NA	<5	<25	<25	<25	<5	<25	<5	<5	<5	81	<25	<5	<10	<5	11	<5	<5	<5	<5	<5	<5	<5	17	<5	2,000	<25	<5
MW-104B	10/28/08	<5	NA	<5	<5	<5	NA	<5	<25	<25	<25	<5	<25	<5	<5	<5	81	<25	<5	<10	<5	10	<5	<5	<5	<5	<5	<5	<5	18	<5	2,100	<25	<5
MW-104B	04/28/09	<5	NA	<5	24	<5	NA	<5	<25	<25	<25	<5	<25	<5	<5	<5	190	<25	<5	<10	<5	7.9	<5	<5	<5	<5	<5	<5	<5	22	<5	2,100	<25	<5
MW-104B	11/04/09	<5	NA	<5	12	<5	NA	<5	<25	<25	<25	<5	<25	<5	<5	<5	99	<25	<5	<10	<5	9.2	<5	<5	<5	<5	<5	<5	<5	18	<5	2,100	<25	<5
MW-104B	05/05/10	<5	NA	<5	<5	<5	NA	<5	<25	<25	170	<5	<25	<5	<5	<5	140	<25	<5	<10	<10	5.6	<5	<5	<5	<5	<5	<5	<5	18	<5	1,900	<25	<5
MW-104B	10/12/10	<5	<5	<5	18	<5	<5	<5	<25	<25	<25	<5	<25	<5	<5	<5	67	<25	<5	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5	15	<5	1,100	<25	<5
MW-104B	04/11/11	<5	<5	<5	9.2	<5	<5	<5	<25	<25	<25	<5	<5	<5	<5	<5	44	<25	<5	<10	<5	9.2	<5	<5	<5	<5	<5	<5	<5	13	<5	2,800	<25	<5

Table C.1: Historical Volatile Organic Compound Analytical Results at Solvent Plume Wells

Sample ID	Date	Parameter (in ug/L)																															
		1,1,1-Trichloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2-Dichloroethane	2-Butanone (MEK)	4-Methyl-2-pentanone (MIBK)	Acetone	Benzene	Carbon disulfide	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	Freon-12 (Dichlorodifluoromethane)	Ethylbenzene	m&p-Xylenes	Methylene chloride	Methyl-tert-butyl-ether (MTBE)	Naphthalene	n-Butylbenzene	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	Trichloroethene	Freon-11 (Trichlorofluoromethane)	Freon- 113 (1,1,2-Trichlorotrifluoroethane)	Vinyl acetate	Vinyl chloride
2L Standards		200	0.6	6	350	NE	400	0.4	4000	NE	6000	1	700	3000	70	3	70	1000	600	500	5	20	6	70	500	70	0.7	600	100	3	2000	200000	88	0.03
MW-104B	10/04/11	<10	<10	<10	<10	<10	<10	<10	<50	<50	<10	<10	<10	<10	<10	<10	35	<50	<10	<20	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	2,500	<50	<10
MW-104B	05/17/12	<2	<2	<2	<2	<2	<2	<2	<10	<10	<10	<2	<2	<2	<2	<2	32	<10	<2	<4	<2	5.1	<2	<2	<2	<2	<2	<2	<2	11	<2	1,100	<10	<2
MW-104B	11/07/12	<2	<2	<2	<2	<2	<2	<2	<10	<10	<10	<2	<2	<2	<2	<2	26	<10	<2	<4	<2	5.1	<2	<2	<2	<2	<2	<2	<2	7.8	2.1	2,000	<10	<2
MW-104B	05/07/13	<1	<1	<1	14.5	<1	<1	<1	<5	<5	<5	<1	<5	<1	1.42	<1	24.36	11.27	<1	<2	<1	3.68	<1	<1	<1	<1	<1	<1	<1	7.77	<1	2,891	<5	<1
MW-104B	10/13/13	<5	<5	<5	<5	<5	<5	<5	<25	<25	<25	<2.5	<25	<5	<5	<5	25	<25	<2.5	<5	<25	2.9	<5	<5	<2.5	<5	<5	<2.5	<5	6.2	<50	1,700	<10	<2.5
MW-104B	04/28/14	<1	<1	<1	<1	<1	<1	<1	<5	<5	10	<0.5	<5	<1	0.87 J	<1	30	<5	<0.5	<1	<5	2.3	<1	<1	<0.5	<1	<1	<0.5	<1	7.1	1.1	880	<2	1.3
MW-104B	11/13/14	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<25	<25	<2.5	<25	<5.0	<5.0	<5.0	24	<25	<2.5	<5.0	<25	<5.0	<5.0	<5.0	<2.5	<5.0	<5.0	<2.5	<5.0	7.3	<5.0	1,600	<10	2 J
MW-104C	09/08/04	<5	<5	<5	<5	<5	<5	<5	<25J	<25J	<25	<5	<25	<5	<5	<5	45	<5	<5	<10	<5	<5	<5	<5J	<5	<5	<5	<5	<5	4.8 J	4.2 J	1,300	<25J	<5
MW-104C	12/01/04	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<5	<1	<1	<1	16	<1	<1	<2	<1	1.2	<1	<1	<1	<1	<1	<1	<1	12	1.4	360	<5	<1
MW-104C	06/08/05	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5J	<1	<5	<1	<1	<1	37	<1	<1	<2	1	<1	<1	<1	<1	<1	<1	<1	<1	4.3	<1	480	<5	<1
MW-104C	12/19/05	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<5	<1	<1	<1	31	2	<1	<2	<1	1.3	<1	<1	<1	<1	<1	<1	<1	5.1	<1	220	<5	<1
MW-104C	06/16/06	<1	<1	<1	9	<1	<1	<1	5.6	<5	<5	<1	<5	<1	<1	<1	60	<5	<1	<2	<1	4.4	<1	<1	<1	<1	<1	<1	<1	7.7	<1	660	<5	<1
MW-104C	09/01/06	<10	<10	<10	17	<10	<10	<10	<50	<50	<50	<10	<50	<10	<10	<10	80	<50	<10	<20	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	1,200	<50	<10
MW-104C	04/02/07	<5	<5	<5	6.8	<5	<5	<5	<25	<25	<25	<5	<25	<5	<5	<5	49	<25	<5	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5	6.2	<5	390	<25	<5
MW-104C	10/29/07	<5	<5	<5	26	<5	<5	<5	<25	<25	<25	<5	<25	<5	<5	<5	170	<25	<5	<10	<5	7	<5	<5	<5	<5	<5	<5	<5	18	<5	2,200	<25	<5
MW-104C	04/14/08	<5	NA	<5	10	<5	NA	<5	<25	<25	<25	<5	<25	<5	<5	<5	71	<25	<5	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5	9	<5	760	<25	<5
MW-104C	10/28/08	<5	NA	<5	<5	<5	NA	<5	<25	<25	<25	<5	<25	<5	<5	<5	70	<25	<5	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5	9	<5	790	<25	<5
MW-104C	04/28/09	<5	NA	<5	8.9	<5	NA	<5	<25	<25	<25	<5	<25	<5	<5	<5	87	<25	<5	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5	8.3	<5	700	<25	<5
MW-104C	11/04/09	<5	NA	<5	20	<5	NA	<5	<25	<25	<25	<5	<25	<5	<5	<5	150	<25	<5	<10	<5	8	<5	<5	<5	<5	<5	<5	<5	15	<5	2,700	<25	<5
MW-104C	05/05/10	<5	NA	<5	17	<5	NA	<5	<25	<25	220	<5	<25	<5	<5	<5	130	<25	<5	<10	<10	7.7	<5	<5	<5	<5	<5	<5	<5	17	<5	2,500	<25	<5
MW-104C	10/12/10	<5	<5	<5	19	<5	<5	<5	<25	<25	<25	<5	<25	<5	<5	<5	110	<25	<5	<10	<5	6	<5	<5	<5	<5	<5	<5	<5	12	<5	1,600	<25	<5
MW-104C	04/11/11	<5	<5	<5	7.7	<5	<5	<5	<25	<25	<25	<5	<5	<5	<5	<5	100	<25	<5	<10	<5	7.4	<5	<5	<5	<5	<5	<5	<5	13	<5	2,200	<25	<5
MW-104C	10/04/11	<2	<2	<2	<2	<2	<2	<2	<10	<10	<10	<2	<2	<2	3.8	<2	87	<10	<2	<4	<2	9.6	<2	<2	<2	<2	<2	<2	<2	13	<2	2,400	<10	<2
MW-104C	05/17/12	<5	<5	<5	<5	<5	<5	<5	<25	<25	<25	<5	<5	<5	<5	<5	65	<25	<5	<10	<5	7.6	<5	<5	<5	<5	<5	<5	<5	9.8	2.6	2,800	<25	<5
MW-104C	11/07/12	<2	<2	<2	<2	<2	<2	<2	<10	<10	<10	<2	<2	<2	2.1	<2	55	<10	<2	<4	<2	5.8	<2	<2	<2	<2	<2	<2	<2	7.8	<2	1,500	<10	<2
MW-104C	05/07/13	<1	<1	<1	12	<1	<1	1.1	<5	<5	<5	<1	<5	<1	1.9	<1	130	16	<1	<2	<1	3.3	<1	<1	<1	<1	<1	<1	<1	9.6	<1	1,800	<5	<1
MW-104C	10/13/13	<5	<5	<5	<5	<5	<5	<5	<25	<25	<25	<2.5	<25	<5	<5	<5	51	<25	<2.5	<5	<25	3.9	<5	<5	<2.5	<5	<5	<2.5	<5	7.8	<50	2,700	<10	<2.5
MW-104C	04/28/14	<5	<5	<5	<5	<5	<5	<5	<25	<25	<25	<2.5	<25	<5	<5	<5	52	<25	<2.5	<5	<25	4.1 J	<5	<5	<2.5	<5	<5	<2.5	<5	7	<5	2,000	<10	2.1 J
MW-104C	11/13/14	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<25	<25	<25	<2.5	<25	<5.0	<5.0	<5.0	54	<25	<2.5	<5.0	<25	3.9 J	<5.0	<5.0	<2.5	<5.0	<5.0	<2.5	<5.0	8	<5.0	20,000	<10	2.6
MW-105C	02/17/10	<1	NA	<1	<1	<1	NA	<1	<5	<5	<5	<1	<5	<1	<1	<1	1.8	<5	<1	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	1.8	<1	8.8	<5	<1
MW-105C	05/06/10	<1	NA	<1	<1	<1	NA	<1	<5	<5	<5	<1	<5	<1	<1	<1	<1	<5	<1	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1
MW-105C	10/12/10	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<5	<1	<1	<1	<1	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1
MW-105C	04/11/11	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1
MW-105C	10/04/11	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1
MW-105C	05/17/12	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1
MW-105C	11/07/12	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1
MW-105C	05/07/13	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<5	<1	<1	<1	12.98	<5	<1	<2	2.05	<1	<1	<1	<1	<1	<1	1.01	<1	<1	<1	9.82	<5	<1
MW-105C	10/13/13	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<0.5	<5	<1	<1	<1	<1	<5	<0.5	<1	<5	0.54	<1	<1	<0.5	<1	<1	<0.5	<1	<0.5	<1	<5	<2	<0.5
MW-105C	04/28/14	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<0.5	<5	<1	<1	<1	<1	<5	<0.5	<1	<5	0.69 J	<1	<1	<0.5	<1	<1	<0.5	<1	<0.5	<1	<5	<2	<0.5
MW-105C	11/12/14	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	<5.0	<0.50	<5.0	<1.0	<1.0	<1.0	<1.0	<5.0	<0.50	<1.0	<5.0	0.74 J	<1.0	<1.0	<0.50	<1.0	<1.0	<0.50	<1.0	<0.50	<1.0	<5.0	<2.0	<0.50
MW-10B	09/04/02	<0.22	<0.33	<0.2	<0.19	<0.24	<0.2	<0.25	<1.7	<0.92	<1.5	<0.2	<0.4	<0.21	<0.23	<0.16	6.6	<0.14	<0.2	<0.39	<0.19	<0.21	<0.34	<0.22	<0.21	<0.23	<0.2	<0.21	<0.21	1.4	<0.22	72	NA	<0.18
MW-10B	09/08/03	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<5	<1	0.99 J	<1	29	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	2.2	<1	670	<5	<1
MW-10B	09/08/04	<5	<5	<5	<5	<5	<5	<5	<25	<25	<25	<5	<25	<5	<5	<5	22	<5	<5	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	890	<25	<5
MW-10B	09/13/05	<1	<1	<1	<1	<1	<1	<1	<5J	<5	<5	<1	<5	<1	<1	<1J	20	<1	<1	<2	<1	2.6 J	<1	<1	<1	<1	<1	<1	<1	1.9	<1	470	<5	<1
MW-10B	09/01/06	<1	<1	<1	17	<1	<1	<1	<5	<5	<5	<1	<5	<1	1.2	<1	120	<5	<1	<2	<1	5.2	<1	<1	<1	<1	<1	<1	<1	5.4	<1	1,300	<5	1.8
MW-10B	04/02/07	<1	<1	<1	27	<1	<1	1.1	6.2	<5	24	<1	<5	<1	1.4	<1	160	<5	<1	<2	<1	3.6	<1	<1	<1	<1	<1	<1	<1	5.4	<1	1,600	<5	3.1
MW-10B	10/29/07	<1	<1	<1	11	<1	<1	<1	<5	<5	<5	<1	<5	<1	<1	<1	81	<5	<1	<2	<1	8	<1	<1	<1	<1	<1	<1	<1	5	<1	820	<5	1
MW-10B	04/14/08	<1	NA	<1	6	<1	NA	<1	<5	<5	<5	<1	<5	<1	<1	<1	39	<5	<1	<2	<1	7	<1	<1	<1	<1	<1	<1	<1	4	<1	340	<5	<1
MW-10B	10/28/08	<1	NA	<1	1	<1	NA	<1	<5	<5	<5	<1	<5	<1	<1	<1	59	<5	<1	<2	<1	3	<1	<1	<1	<1	<1	<1	<1	3	<1	640	<5	<1
MW-10B	04/28/09	<1	NA	<1	22	<1	NA	<1	<5	<5	<5	<1	<5	<1	1.2	<1	120	<5	<1	<2	<1	2.6	<1	<1	<1	<1	<1	<1	<1	5.4	<1	990	<5	1.8

Table C.1: Historical Volatile Organic Compound Analytical Results at Solvent Plume Wells

Sample ID	Date	Parameter (in ug/L)																															
		1,1,1-Trichloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2-Dichloroethane	2-Butanone (MEK)	4-Methyl-2-pentanone (MIBK)	Acetone	Benzene	Carbon disulfide	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	Freon-12 (Dichlorodifluoromethane)	Ethylbenzene	m&p-Xylenes	Methylene chloride	Methyl-tert-butyl-ether (MTBE)	Naphthalene	n-Butylbenzene	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	Trichloroethene	Freon-11 (Trichlorofluoromethane)	Freon- 113 (1,1,2-Trichlorotrifluoroethane)	Vinyl acetate	Vinyl chloride
2L Standards		200	0.6	6	350	NE	400	0.4	4000	NE	6000	1	700	3000	70	3	70	1000	600	500	5	20	6	70	500	70	0.7	600	100	3	2000	200000	88	0.03
MW-10B	11/03/09	<1	NA	<1	9	<1	NA	<1	<5	<5	<5	<1	<5	<1	<1	<1	**90**	<5	<1	<2	<1	2	<1	<1	<1	<1	<1	<1	<1	**3.5**	<1	640	<5	**1.2**
MW-10B	05/06/10	<1	NA	<1	4.5	<1	NA	<1	<5	<5	53	<1	<5	<1	<1	<1	**87**	<5	<1	<2	<2	2.8	<1	<1	<1	<1	<1	<1	<1	**3.2**	<1	720	<5	**1**
MW-10B	10/11/10	<5	<1	<5	9.7	<5	<1	<5	<25	<25	<25	<5	<25	<5	<5	<5	67	<25	<5	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	580	<25	<5
MW-10B	04/11/11	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<1	<1	<1	<1	40	<5	<1	<2	<1	1.8	<1	<1	<1	<1	<1	<1	<1	1.8	<1	490	<5	<1
MW-10B	10/04/11	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<1	<1	<1	<1	18	<5	<1	<2	<1	1.5	<1	<1	<1	<1	<1	<1	<1	1.3	<1	140	<5	<1
MW-10B	05/17/12	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<1	<1	<1	<1	31	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.4	<1	420	<5	<1
MW-10B	11/07/12	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<1	<1	<1	<1	18	<5	<1	<2	<1	2.4	<1	<1	<1	<1	<1	<1	<1	1.4	<1	190	<5	<1
MW-10B	05/07/13	<1	<1	<1	3.2	<1	<1	<1	<5	<5	<5	<1	<5	<1	<1	<1	15.64	<5	<1	<2	<1	1.4	<1	<1	<1	<1	<1	<1	<1	1.24	<1	228	<5	<1
MW-10B	10/13/13	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<0.5	<5	<1	<1	<1	24	<5	<0.5	<1	<5	0.82	<1	<1	<0.5	<1	<1	<0.5	<1	1.2	<10	340	<2	<0.5
MW-10B	04/28/14	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<0.5	<5	<1	<1	<1	25	<5	<0.5	<1	<5	1.6	<1	<1	<0.5	<1	<1	<0.5	<1	1.5	<1	380	<2	**0.97**
MW-10B	11/11/14	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	<5.0	<0.50	<5.0	<1.0	<1.0	<1.0	17	<5.0	<0.50	<1.0	<5.0	1.2	<1.0	<1.0	<0.50	<1.0	<1.0	0.36 J	<1.0	1	<1.0	230	<2.0	<0.50
MW-10D	09/04/02	<0.22	<0.33	<0.2	<0.19	<0.24	<0.2	<0.25	<1.7	<0.92	<1.5	<0.2	<0.4	<0.21	<0.23	<0.16	12	<0.14	<0.2	<0.39	<0.19	<0.21	<0.34	<0.22	<0.21	<0.23	<0.2	<0.21	<0.21	1.7	<0.22	100	NA	<0.18
MW-10D	09/08/03	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<5	<1	1.2	<1	38	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	2.8	0.6 J	750	<5	<1
MW-10D	09/08/04	<5	<5	<5	<5	<5	<5	<5	<25	<25	<25	<5	<25	<5	<5	<5	26	<5	<5	<10	<5	4.6 J	<5	<5	<5	<5	<5	<5	<5	**8.3**	<5	1,200	<25	<5
MW-10D	09/13/05	<1	<1	<1	<1	<1	<1	<1	<5J	<5	<5	<1	<5	<1	<1	<1J	49	<1	<1	<2	<1	2.5 J	<1	<1	<1	<1	<1	<1	<1	2.6	<1	1,200	<5	<1
MW-10D	09/01/06	<1	<1	<1	23	<1	<1	**1.4**	<5	<5	<5	<1	<5	<1	1.8	<1	**190**	<5	<1	<2	<1	3.4	<1	<1	<1	<1	<1	<1	<1	**6.1**	<1	1,900	<5	**3.8**
MW-10D	04/02/07	<1	<1	<1	24	<1	<1	**1.2**	<5	<5	<5	<1	<5	<1	1.4	<1	**170**	<5	<1	<2	<1	3	<1	<1	<1	<1	<1	<1	<1	**5.4**	<1	1,400	<5	**4.6**
MW-10D	10/29/07	<1	<1	<1	15	<1	<1	<1	<5	<5	<5	<1	<5	<1	1	<1	**120**	<5	<1	<2	<1	9	<1	<1	<1	<1	<1	<1	<1	**8**	<1	1,200	<5	**2**
MW-10D	04/14/08	<1	NA	<1	13	<1	NA	<1	<5	<5	<5	<1	<5	<1	<1	<1	**76**	<5	<1	<2	<1	5	<1	<1	<1	<1	<1	<1	<1	**5**	<1	650	<5	**1**
MW-10D	10/28/08	<1	NA	<1	4	<1	NA	<1	<5	<5	<5	<1	<5	<1	1	<1	**130**	<5	<1	<2	<1	2	<1	<1	<1	<1	<1	<1	<1	**5**	<1	1,300	<5	**1**
MW-10D	04/28/09	<1	NA	<1	24	<1	NA	**1**	<5	<5	<5	<1	<5	<1	1.4	<1	**150**	<5	<1	<2	<1	2.5	<1	<1	<1	<1	<1	<1	<1	**6.1**	<1	1,300	<5	**2.8**
MW-10D	11/03/09	<1	NA	<1	10	<1	NA	<1	<5	<5	<5	<1	<5	<1	1.3	<1	**130**	<5	<1	<2	<1	2.4	<1	<1	<1	<1	<1	<1	<1	**4.7**	<1	820	<5	**2**
MW-10D	05/04/10	<5	NA	<5	<5	<5	NA	<5	<25	<25	110	<5	<25	<5	<5	<5	**150**	<25	<5	<10	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	1,200	<25	<5
MW-10D	10/11/10	<5	<5	<5	13	<5	<5	<5	<25	<25	<25	<5	<25	<5	<5	<5	**110**	<25	<5	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	830	<25	<5
MW-10D	04/11/11	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<1	<1	<1	<1	46	<5	<1	<2	<1	2.7	<1	<1	<1	<1	<1	<1	<1	2.5	<1	470	<5	<1
MW-10D	10/04/11	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<1	<1	<1	<1	27	<5	<1	<2	<1	1.7	<1	<1	<1	<1	<1	<1	<1	1.7	<1	180	<5	<1
MW-10D	05/17/12	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<1	<1	<1	<1	48	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	2.7	<1	750	<5	<1
MW-10D	11/07/12	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<1	<1	<1	<1	17	<5	<1	<2	<1	1.9	<1	<1	<1	<1	<1	<1	<1	1.2	<1	150	<5	<1
MW-10D	05/07/13	<1	<1	<1	1.17	<1	<1	<1	<5	<5	<5	<1	<5	<1	<1	<1	9.99	<5	<1	<2	<1	1.6	<1	<1	<1	<1	<1	<1	<1	<1	<1	96.4	<5	<1
MW-10D	10/13/13	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<0.5	<5	<1	<1	<1	30	<5	<0.5	<1	<5	1.2	<1	<1	<0.5	<1	<1	<0.5	<1	1.9	<1	460	<2	<0.5
MW-10D	04/28/14	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<0.5	<5	<1	0.89 J	<1	67	<5	<0.5	<1	<5	1.2	<1	<1	<0.5	<1	<1	<0.5	<1	**3.1**	<1	970	<2	**2.7**
MW-10D	11/11/14	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	<5.0	<0.50	<5.0	<1.0	<1.0	<1.0	28	<5.0	<0.50	<1.0	<5.0	2.1	<1.0	<1.0	<0.50	<1.0	<1.0	1.3	<1.0	1.2	<1.0	290	<2.0	<0.50
MW-16B	09/03/02	<0.22	<0.33	<0.2	<0.19	<0.24	<0.2	<0.25	<1.7	<0.92	6.7	<0.2	<0.4	<0.21	<0.23	<0.16	1.9	<0.14	<0.2	<0.39	<0.19	<0.21	<0.34	<0.22	<0.21	<0.23	<0.2	<0.21	<0.21	0.34 J	<0.22	21	NA	<0.18
MW-16B	04/03/03	<0.22	<0.33	<0.2	<0.19	<0.24	<0.2	<0.25	<1.7	<0.92	<1.5	<0.2	<0.4	<0.21	<0.23	<0.16	1.1	<0.14	<0.2	<0.39	<0.19	<0.21	<0.34	<0.22	<0.21	<0.23	<0.2	<0.21	<0.21	0.32 J	<0.22	22	<0.47J	<0.18
MW-16B	09/08/03	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<5	<1	<1	<1	2.4	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.57 J	<1	47	<5	<1
MW-16B	03/16/04	<1	<1	<1	<1	<1	<1	<1	<5	<5	8.5	<1	<5	<1	<1	<1	2	<1	<1	<2	<1	1.8	<1	<1	<1	<1	<1	<1	<1	0.57 J	<1	40	<5	<1
MW-16B	09/08/04	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<5	<1	<1	<1	1.2	<1	<1	<2	<1	1.5	<1	<1	<1	<1	<1	<1	<1	0.53 J	<1	31	<5	<1
MW-16B	03/07/05	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<5	<1	<1	<1	1.2	<1	<1	<2	<1	1.1	<1	<1	<1	<1	<1	<1	<1	<1	<1	16	<5	<1
MW-16B	09/13/05	<1	<1	<1	<1	<1	<1	<1	<5J	<5	<5	<1	<5	<1	<1	<1J	1.5	<1	<1	<2	<1	1.3 J	<1	<1	<1	<1	<1	<1	<1	<1	<1	20	<5	<1
MW-16B	09/01/06	<1	<1	<1	1.3	<1	<1	<1	<5	<5	<5	<1	<5	<1	<1	<1	4.2	<5	<1	<2	<1	4.6	<1	<1	<1	<1	<1	<1	<1	1.9	<1	71	<5	<1
MW-16B	04/02/07	<1	<1	<1	2.2	<1	<1	<1	<5	<5	<5	<1	<5	<1	<1	<1	7.2	<5	<1	<2	<1	9.7	<1	<1	<1	<1	<1	<1	<1	**3.5**	<1	91	<5	<1
MW-16B	10/29/07	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<5	<1	<1	<1	2	<5	<1	<2	<1	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	19	<5	<1
MW-16B	04/14/08	<1	NA	<1	1	<1	NA	<1	<5	<5	<5	<1	<5	<1	<1	<1	6	<5	<1	<2	<1	3	<1	<1	<1	<1	<1	<1	<1	2	<1	86	<5	<1
MW-16B	10/28/08	<1	NA	<1	<1	<1	NA	<1	<5	<5	<5	<1	<5	<1	<1	<1	6	<5	<1	<2	<1	2	<1	<1	<1	<1	<1	<1	<1	2	<1	84	<5	<1
MW-16B	04/28/09	<1	NA	<1	1.5	<1	NA	<1	<5	<5	<5	<1	<5	<1	<1	<1	9	<5	<1	<2	<1	2.4	<1	<1	<1	<1	<1	<1	<1	1.8	<1	110	<5	<1
MW-16B	11/03/09	<1	NA	<1	<1	<1	NA	<1	<5	<5	<5	<1	<5	<1	<1	<1	3.4	<5	<1	<2	<1	1.2	<1	<1	<1	<1	<1	<1	<1	<1	<1	36	<5	<1
MW-16B	05/04/10	<1	NA	<1	<1	<1	NA	<1	<5	<5	<5	<1	<5	<1	<1	<1	5.8	<5	<1	<2	<2	2	<1	<1	<1	<1	<1	<1	<1	1.1	<1	63	<5	<1
MW-16B	10/11/10	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<5	<1	<1	<1	4.5	<5	<1	<2	<1	1.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	44	<5	<1
MW-16B	04/11/11	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<1	<1	<1	<1	1.3	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	18	<5	<1
MW-16B	10/04/11	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<1	<1	<1	<1	2.3	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	22	<5	<1
MW-16B	05/17/12	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<1	<1	<1	<1	2.6	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	33	<5	<1

Table C.1: Historical Volatile Organic Compound Analytical Results at Solvent Plume Wells

Sample ID	Date	Parameter (in ug/L)																																
		1,1,1-Trichloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2-Dichloroethane	2-Butanone (MEK)	4-Methyl-2-pentanone (MIBK)	Acetone	Benzene	Carbon disulfide	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	Freon-12 (Dichlorodifluoromethane)	Ethylbenzene	m&p-Xylenes	Methylene chloride	Methyl-tert-butyl-ether (MTBE)	Naphthalene	n-Butylbenzene	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	Trichloroethene	Freon-11 (Trichlorofluoromethane)	Freon- 113 (1,1,2-Trichlorotrifluoroethane)	Vinyl acetate	Vinyl chloride
2L Standards		200	0.6	6	350	NE	400	0.4	4000	NE	6000	1	700	3000	70	3	70	1000	600	500	5	20	6	70	500	70	0.7	600	100	3	2000	200000	88	0.03
MW-16B	11/07/12	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<1	<1	<1	<1	1.1	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	6.9	<5	<1
MW-16B	05/07/13	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<5	<1	<1	<1	1.88	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	26.99	<5	<1
MW-16B	10/13/13	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<0.5	<5	<1	<1	<1	2	<5	<0.5	<1	<5	0.76	<1	<1	<0.5	<1	<1	<0.5	<1	0.4	<1	24	<2	<0.5
MW-16B	04/28/14	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<0.5	<5	<1	0.58 J	<1	2.5	<5	<0.5	<1	<5	1.2	<1	<1	<0.5	<1	<1	<0.5	<1	0.53	<1	30	<2	<0.5
MW-16B	11/11/14	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	<5.0	<0.50	<5.0	<1.0	<1.0	<1.0	1	<5.0	<0.50	<1.0	<5.0	<1.0	<1.0	<1.0	<0.50	<1.0	<1.0	0.46 J	<1.0	<0.50	<1.0	12	<2.0	<0.50
MW-16D	09/03/02	<0.22	<0.33	0.45 J	<0.19	<0.24	<0.2	**1.2**	<1.7	<0.92	<1.5	<0.2	<0.4	<0.21	1.3	<0.16	**90**	6.9	<0.2	<0.39	1.2	<0.21	<0.34	<0.22	<0.21	<0.23	<0.2	<0.21	<0.21	**7.1**	2.6	890	NA	<0.18
MW-16D	04/03/03	<0.22	<0.33	0.34 J	1.1	<0.24	<0.2	**0.81 J**	<1.7	<0.92	<1.5	<0.2	<0.4	<0.21	0.55 J	<0.16	63	2.5	<0.2	<0.39	<0.19	<0.21	<0.34	<0.22	<0.21	<0.23	<0.2	<0.21	<0.21	**3.3**	0.73 J	180	<0.47J	<0.18
MW-16D	09/08/03	<1	<1	<1	<1	<1	<1	**0.9 J**	<5	<5	<5	<1	<5	<1	<1	<1	64	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.6	<1	78	<5	<1
MW-16D	03/16/04	<1	<1	<1	<1	<1	<1	<1	<5	<5	11	<1	<5	<1	<1	<1	38	<1	<1	<2	0.69 J	<1	<1	<1	<1	<1	<1	<1	<1	1.2	<1	49	<5	<1
MW-16D	09/08/04	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<5	<1	<1	<1	41	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.3	<1	29	<5	<1
MW-16D	03/07/05	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<5	<1	<1	<1	36	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.2	<1	13	<5	<1
MW-16D	09/13/05	<1	<1	<1	<1	<1	<1	<1	<5J	<5	<5	<1	<5	<1	<1	<1J	27	<1	<1	<2	<1	<1J	<1	<1	<1	<1	<1	<1	<1	<1	<1	12	<5	<1
MW-16D	09/01/06	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<5	<1	<1	<1	70	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.1	<1	28	<5	<1
MW-16D	04/02/07	<1	<1	<1	<1	<1	<1	<1	<5	<5	7	<1	<5	<1	<1	<1	39	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	18	<5	<1
MW-16D	10/29/07	<1	<1	<1	<1	<1	<1	<1	<5	<5	8	<1	<5	<1	<1	<1	38	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	1	<1	12	<5	<1
MW-16D	04/14/08	<1	NA	<1	<1	<1	NA	<1	<5	<5	<5	<1	<5	<1	<1	<1	28	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	1	<1	9	<5	<1
MW-16D	10/28/08	<1	NA	<1	<1	<1	NA	<1	<5	<5	<5	<1	<5	<1	<1	<1	27	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	7	<5	<1
MW-16D	04/28/09	<1	NA	<1	<1	<1	NA	<1	<5	<5	<5	<1	<5	<1	<1	<1	27	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	7.6	<5	<1
MW-16D	11/04/09	<1	NA	<1	<1	<1	NA	<1	<5	<5	<5	<1	<5	<1	<1	<1	3.8	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	5.8	<5	<1
MW-16D	05/04/10	<1	NA	<1	<1	<1	NA	<1	<5	<5	<5	<1	<5	<1	<1	<1	2.9	<5	<1	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	3.3	<5	<1
MW-16D	10/11/10	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<5	<1	<1	<1	2.5	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1
MW-16D	04/11/11	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<1	<1	<1	<1	3.3	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1
MW-16D	10/04/11	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<1	<1	<1	<1	13	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1
MW-16D	05/17/12	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<1	<1	<1	<1	2.4	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1
MW-16D	11/07/12	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<1	<1	<1	<1	2.8	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	5.2	<5	<1
MW-16D	05/07/13	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<5	<1	<1	<1	5.72	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1
MW-16D	10/13/13	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<0.5	<5	<1	<1	<1	5.8	<5	<0.5	<1	<5	<1	<1	<1	<0.5	<1	<1	<0.5	<1	<0.5	<1	6.5	<2	<0.5
MW-16D	04/28/14	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<0.5	<5	<1	<1	<1	10	<5	<0.5	<1	<5	<1	<1	<1	<0.5	<1	<1	<0.5	<1	<0.5	<1	9	<2	<0.5
MW-16D	11/11/14	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	<5.0	<0.50	<5.0	<1.0	<1.0	<1.0	5.5	0.39 J	<0.50	<1.0	0.69 J	<1.0	<1.0	<1.0	<0.50	<1.0	<1.0	0.37 J	<1.0	<0.50	<1.0	35	<2.0	<0.50
MW-18B	09/05/02	<0.22	<0.33	<0.2	<0.19	<0.24	<0.2	<0.25	<1.7	<0.92	<1.5	<0.2	<0.4	<0.21	<0.23	<0.16	<0.21	<0.14	<0.2	<0.39	<0.19	<0.21	<0.34	<0.22	<0.21	<0.23	<0.2	<0.21	<0.21	<0.21	<0.22	<0.22	NA	<0.18
MW-18B	04/03/03	<0.22	<0.33	<0.2	<0.19	<0.24	<0.2	<0.25	<1.7	<0.92	<1.5	<0.2	<0.4	<0.21	<0.23	<0.16	<0.21	<0.14	<0.2	<0.39	<0.19	<0.21	<0.34	<0.22	<0.21	<0.23	<0.2	<0.21	<0.21	<0.21	<0.22	<0.22	<0.47J	<0.18
MW-18B	09/08/03	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<5	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1
MW-18B	03/16/04	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<5	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1
MW-18B	09/08/04	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<5	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1
MW-18B	03/07/05	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<5	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1
MW-18B	09/14/05	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<5	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1
MW-18B	09/01/06	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<5	<1	<1	<1	<1	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1
MW-18B	04/02/07	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<5	<1	<1	<1	<1	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1
MW-18B	10/29/07	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<5	<1	<1	<1	<1	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1
MW-18B	04/14/08	<1	NA	<1	<1	<1	NA	<1	<5	<5	<5	<1	<5	<1	<1	<1	<1	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1
MW-18B	10/28/08	<1	NA	<1	<1	<1	NA	<1	<5	<5	<5	<1	<5	<1	<1	<1	<1	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1
MW-18B	04/28/09	<1	NA	<1	<1	<1	NA	<1	<5	<5	<5	<1	<5	<1	<1	<1	<1	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1
MW-18B	11/04/09	<1	NA	<1	<1	<1	NA	<1	<5	<5	<5	<1	<5	<1	<1	<1	<1	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1
MW-18B	05/04/10	<1	NA	<1	<1	<1	NA	<1	<5	<5	<5	<1	<5	<1	<1	<1	<1	<5	<1	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1
MW-18B	10/12/10	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<5	<1	<1	<1	<1	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1
MW-18B	10/03/11	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<5	<1	<1	<1	<1	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	68	<5	<1
MW-18B	11/07/12	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<5	<1	<1	<1	<1	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1
MW-18B	10/13/13	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<0.5	<5	<1	<1	<1	<1	<5	<0.5	<1	<5	<1	<1	<1	<0.5	<1	<1	<0.5	<1	<0.5	<1	<5	<2	<0.5
MW-18B	11/12/14	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	<5.0	<0.50	<5.0	<1.0	<1.0	<1.0	<1.0	<5.0	<0.50	<1.0	<5.0	<1.0	<1.0	<1.0	<0.50	<1.0	<1.0	0.32 J	<1.0	<0.50	<1.0	<5.0	<2.0	<0.50
MW-18D	09/05/02	<0.22	<0.33	<0.2	<0.19	<0.24	<0.2	<0.25	<1.7	<0.92	<1.5	<0.2	<0.4	<0.21	<0.23	<0.16	21	<0.14	<0.2	<0.39	<0.19	<0.21	<0.34	<0.22	<0.21	<0.23	<0.2	<0.21	<0.21	2.7	<0.22	250	NA	<0.18

Table C.1: Historical Volatile Organic Compound Analytical Results at Solvent Plume Wells

Sample ID	Date	Parameter (in ug/L)																															
		1,1,1-Trichloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2-Dichloroethane	2-Butanone (MEK)	4-Methyl-2-pentanone (MIBK)	Acetone	Benzene	Carbon disulfide	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	Freon-12 (Dichlorodifluoromethane)	Ethylbenzene	m&p-Xylenes	Methylene chloride	Methyl-tert-butyl-ether (MTBE)	Naphthalene	n-Butylbenzene	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	Trichloroethene	Freon-11 (Trichlorofluoromethane)	Freon- 113 (1,1,2-Trichlorotrifluoroethane)	Vinyl acetate	Vinyl chloride
2L Standards		200	0.6	6	350	NE	400	0.4	4000	NE	6000	1	700	3000	70	3	70	1000	600	500	5	20	6	70	500	70	0.7	600	100	3	2000	200000	88	0.03
MW-18D	04/03/03	<0.22	<0.33	<0.2	<0.19	<0.24	<0.2	<0.25	<1.7	<0.92	<1.5	<0.2	<0.4	<0.21	<0.23	<0.16	26	2.5	<0.2	<0.39	<0.19	<0.21	<0.34	<0.22	<0.21	<0.23	<0.2	<0.21	<0.21	3	<0.22	330	<0.47J	<0.18
MW-18D	09/08/03	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<5	<1	<1	<1	30	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	**3.1**	<1	310	<5	<1
MW-18D	03/16/04	<5	<5	<5	<5	<5	<5	<5	<25	<25	64	<5	<25	<5	<5	<5	24	<5	<5	<10	<5	<5	<5	<5	<5	<5	<5	<5	<5	2.6 J	<5	330	<25	<5
MW-18D	09/08/04	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<5	<1	<1	<1	18	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	2.3	<1	270	<5	<1
MW-18D	03/07/05	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<5	<1	<1	<1	16	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	2.2	<1	120	<5	<1
MW-18D	09/14/05	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<5	<1	<1	<1	13	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.7	<1	78	<5	<1
MW-18D	09/01/06	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<5	<1	<1	<1	14	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.7	<1	120	<5	<1
MW-18D	04/02/07	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<5	<1	<1	<1	16	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	170	<5	<1
MW-18D	10/29/07	<1	<1	<1	2	<1	<1	<1	<5	<5	<5	<1	<5	<1	<1	<1	21	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	2	<1	260	<5	<1
MW-18D	04/14/08	<1	NA	<1	2	<1	NA	<1	<5	<5	<5	<1	<5	<1	<1	<1	23	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	2	<1	260	<5	<1
MW-18D	10/28/08	<1	NA	<1	<1	<1	NA	<1	<5	<5	<5	<1	<5	<1	<1	<1	26	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	2	<1	320	<5	<1
MW-18D	04/28/09	<1	NA	<1	2.7	<1	NA	<1	<5	<5	<5	<1	<5	<1	<1	<1	25	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.8	<1	260	<5	<1
MW-18D	11/04/09	<1	NA	<1	1.3	<1	NA	<1	<5	<5	<5	<1	<5	<1	<1	<1	18	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.4	<1	220	<5	<1
MW-18D	05/05/10	<1	NA	<1	<1	<1	NA	<1	<5	<5	<5	<1	<5	<1	<1	<1	13	<5	<1	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	1.3	<1	140	<5	<1
MW-18D	10/12/10	<1	<1	<1	1.9	<1	<1	<1	<5	<5	<5	<1	<5	<1	<1	<1	15	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.2	<1	190	<5	<1
MW-18D	04/11/11	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<1	<1	<1	<1	10	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	150	<5	<1
MW-18D	10/03/11	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<1	<1	<1	<1	<1	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	120	<5	<1
MW-18D	05/17/12	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<1	<1	<1	<1	7.9	<5	<1	<2	<1	1.3	<1	<1	<1	<1	<1	<1	<1	0.9	<1	100	<5	<1
MW-18D	11/07/12	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<1	<1	<1	<1	8.5	<5	<1	<2	<1	1	<1	<1	<1	<1	<1	<1	<1	<1	<1	110	<5	<1
MW-18D	05/07/13	<1	<1	<1	1.12	<1	<1	<1	<5	<5	<5	<1	<5	<1	<1	<1	8.72	<5	<1	<2	<1	1.01	<1	<1	<1	<1	<1	<1	<1	<1	<1	142.7	<5	<1
MW-18D	10/13/13	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<0.5	<5	<1	<1	<1	9.4	<5	<0.5	<1	<5	1	<1	<1	<0.5	<1	<1	<0.5	<1	0.74	<1	110	<2	<0.5
MW-18D	04/28/14	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<0.5	<5	<1	<1	<1	9.5	<5	<0.5	<1	<5	1.2	<1	<1	<0.5	<1	<1	<0.5	<1	0.87	<1	110	<2	<0.5
MW-18D	11/12/14	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	<5.0	<0.50	<5.0	<1.0	<1.0	<1.0	12	<5.0	<0.50	<1.0	<5.0	<1.0	<1.0	<1.0	<0.50	<1.0	<1.0	0.43 J	<1.0	0.87	<1.0	130	<2.0	<0.50
MW-19B	09/05/02	<0.22	<0.33	<0.2	0.89 J	<0.24	<0.2	<0.25	<1.7	<0.92	<1.5	<0.2	<0.4	<0.21	0.3 J	<0.16	11	<0.14	<0.2	<0.39	<0.19	<0.21	<0.34	<0.22	<0.21	<0.23	<0.2	<0.21	0.33 J	**3.1**	1.5	160	NA	<0.18
MW-19B	09/08/03	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<5	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1
MW-19B	09/08/04	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<5	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1
MW-19B	09/14/05	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<5	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1
MW-19B	09/01/06	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<5	<1	<1	<1	<1	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1
MW-19B	04/02/07	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<5	<1	<1	<1	<1	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1
MW-19B	10/29/07	<1	<1	<1	<1	<1	<1	<1	34	<5	7	<1	<5	<1	<1	<1	<1	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1
MW-19B	04/14/08	<1	NA	<1	<1	<1	NA	<1	<5	<5	<5	<1	<5	<1	<1	<1	<1	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1
MW-19B	10/27/08	<1	NA	<1	<1	<1	NA	<1	<5	<5	<5	<1	<5	<1	<1	<1	<1	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1
MW-19B	04/27/09	<1	NA	<1	<1	<1	NA	<1	<5	<5	<5	<1	<5	<1	<1	<1	<1	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	4.6	<5	<1
MW-19B	11/03/09	<1	NA	<1	<1	<1	NA	<1	<5	<5	<5	<1	<5	<1	<1	<1	<1	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1
MW-19B	05/04/10	<1	NA	<1	<1	<1	NA	<1	<5	<5	<5	<1	<5	<1	<1	<1	<1	<5	<1	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1
MW-19B	10/12/10	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<5	<1	<1	<1	<1	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1
MW-19B	10/04/11	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<5	<1	<1	<1	<1	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1
MW-19B	11/07/12	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<5	<1	<1	<1	<1	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1
MW-19B	10/13/13	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<0.5	<5	<1	<1	<1	<1	<5	<0.5	<1	<5	<1	<1	<1	<0.5	<1	<1	<0.5	<1	<0.5	<1	<5	<2	<0.5
MW-19B	11/11/14	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	<5.0	<0.50	<5.0	<1.0	<1.0	<1.0	<1.0	<5.0	<0.50	<1.0	<5.0	<1.0	<1.0	<1.0	<0.50	<1.0	<1.0	0.33 J	<1.0	<0.50	<1.0	<5.0	<2.0	<0.50
MW-19D	09/05/02	<0.22	<0.33	<0.2	1.1	<0.24	<0.2	<0.25	2 J	<0.92	<1.5	<0.2	<0.4	<0.21	0.33 J	<0.16	18	<0.14	<0.2	<0.39	<0.19	<0.21	<0.34	<0.22	<0.21	<0.23	<0.2	0.44 J	0.34 J	**3.2**	1.5	200	NA	**1**
MW-19D	09/08/03	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<5	<1	<1	<1	13	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	**3.6**	1.7	190	<5	<1
MW-19D	09/08/04	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<5	<1	<1	<1	21	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	**5.3**	2.4	560	<5	<1
MW-19D	09/14/05	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<5	<1	<1	<1	23	1.8	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	**6.3**	2.9	370	<5	<1
MW-19D	09/01/06	<1	<1	<1	2.1	<1	<1	<1	<5	<5	<5	<1	<5	<1	<1	<1	31	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	**8.1**	3.5	430	<5	<1
MW-19D	04/02/07	<1	<1	<1	3	<1	<1	<1	<5	<5	<5	<1	<5	<1	<1	<1	37	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	**9.4**	3.7	620	<5	<1
MW-19D	10/29/07	<1	<1	<1	3	<1	<1	<1	<5	<5	<5	<1	<5	<1	1	<1	55	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	**11**	3	760	<5	<1
MW-19D	04/14/08	<1	NA	<1	4	<1	NA	<1	<5	<5	<5	<1	<5	<1	1	<1	55	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	**11**	5	770	<5	<1
MW-19D	10/27/08	<1	NA	<1	2	<1	NA	<1	<5	<5	<5	<1	<5	<1	1	<1	69	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	**13**	4	920	<5	<1
MW-19D	04/27/09	<1	NA	<1	5.4	<1	NA	<1	<5	<5	<5	<1	<5	<1	1.4	<1	**78**	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	**12**	1.2	710	<5	<1
MW-19D	11/03/09	<1	NA	<1	3.3	<1	NA	<1	<5	<5	<5	<1	<5	<1	1	<1	**340**	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	**7.7**	<1	7,600	<5	<1

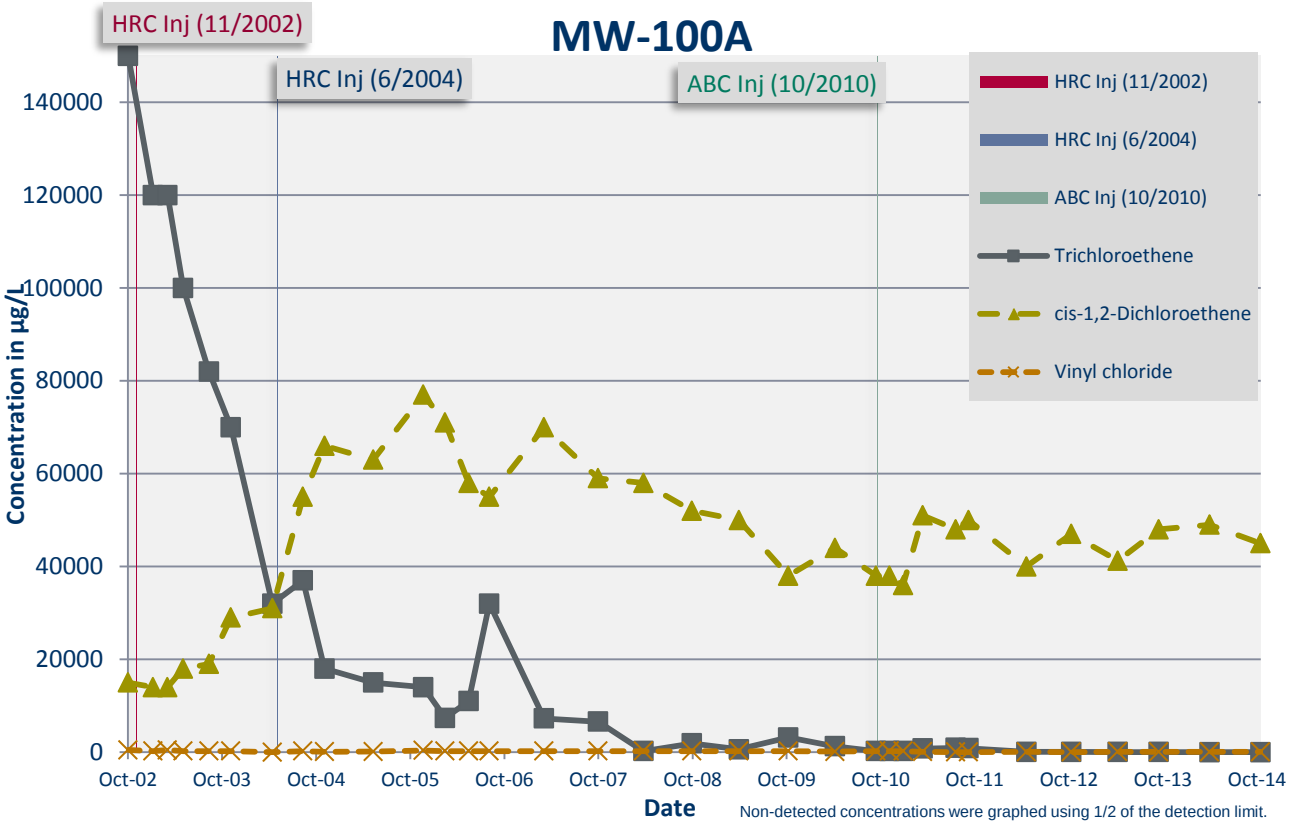
Table C.1: Historical Volatile Organic Compound Analytical Results at Solvent Plume Wells

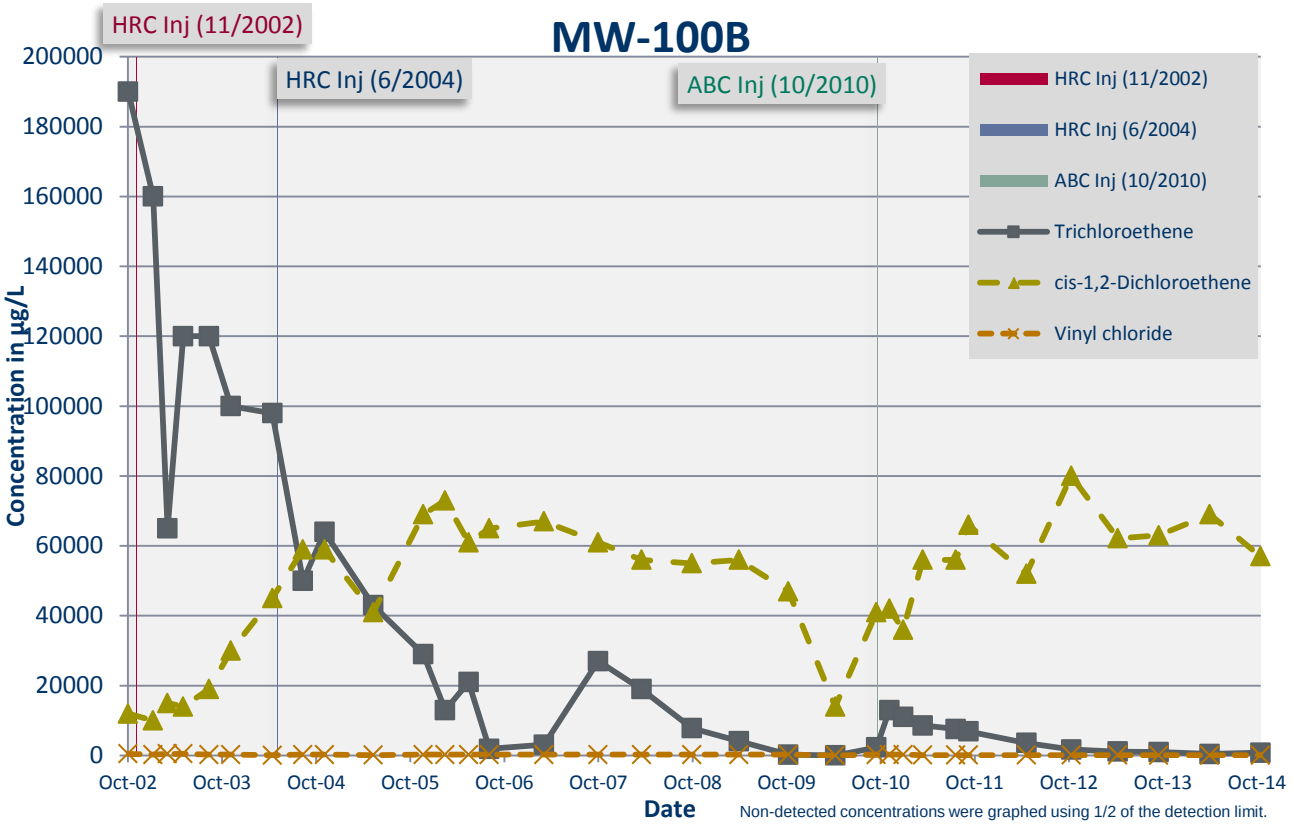
Sample ID	Date	Parameter (in ug/L)																															
		1,1,1-Trichloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2-Dichloroethane	2-Butanone (MEK)	4-Methyl-2-pentanone (MIBK)	Acetone	Benzene	Carbon disulfide	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	Freon-12 (Dichlorodifluoromethane)	Ethylbenzene	m&p-Xylenes	Methylene chloride	Methyl-tert-butyl-ether (MTBE)	Naphthalene	n-Butylbenzene	o-Xylene	Styrene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	Trichloroethene	Freon-11 (Trichlorofluoromethane)	Freon- 113 (1,1,2-Trichlorotrifluoroethane)	Vinyl acetate	Vinyl chloride
2L Standards		200	0.6	6	350	NE	400	0.4	4000	NE	6000	1	700	3000	70	3	70	1000	600	500	5	20	6	70	500	70	0.7	600	100	3	2000	200000	88	0.03
MW-19D	05/04/10	<1	NA	<1	<1	<1	NA	<1	<5	<5	<5	<1	<5	<1	<1	<1	50	<5	<1	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	**7.3**	2	450	<5	<1
MW-19D	10/12/10	<1	<1	<1	2.1	<1	<1	<1	<5	<5	<5	<1	<5	<1	<1	<1	51	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	**6.6**	2	310	<5	<1
MW-19D	04/11/11	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<1	<1	<1	<1	66	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	**6.3**	2	650	<5	<1
MW-19D	10/04/11	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<1	<1	<1	<1	58	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	**4.6**	<1	340	<5	<1
MW-19D	05/17/12	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<1	<1	<1	<1	63	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	**4.7**	<1	290	<5	<1
MW-19D	11/07/12	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<1	<1	<1	<1	60	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	**3.4**	<1	190	<5	<1
MW-19D	05/07/13	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<5	<1	<1	<1	**76.11**	13.17	<1	<2	2.01	<1	<1	<1	<1	<1	<1	<1	<1	**3.65**	<1	177.75	<5	<1
MW-19D	10/13/13	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	0.5	<5	<1	<1	<1	68	<5	<0.5	<1	<5	<1	<1	<1	<0.5	<1	<1	<0.5	<1	2.7	<1	150	<2	**0.8**
MW-19D	04/28/14	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	0.36 J	<5	<1	<1	<1	62	<5	<0.5	<1	<5	<1	<1	<1	<0.5	<1	<1	<0.5	<1	2.3	<1	130	<2	**0.8**
MW-19D	11/11/14	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**0.48 J**	<5.0	<5.0	<5.0	0.49 J	<5.0	<1.0	<1.0	<1.0	64	15	<0.50	<1.0	<5.0	<1.0	<1.0	<1.0	<0.50	<1.0	<1.0	0.34 J	<1.0	2.3	<1.0	170	<2.0	**1**
MW-20B	09/03/02	<0.22	<0.33	<0.2	<0.19	<0.24	<0.2	<0.25	<1.7	<0.92	<1.5	<0.2	<0.4	<0.21	<0.23	<0.16	<0.21	<0.14	<0.2	<0.39	<0.19	<0.21	<0.34	<0.22	<0.21	<0.23	<0.2	<0.21	<0.21	<0.21	<0.22	<0.22	NA	<0.18
MW-20B	09/08/03	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<5	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1
MW-20B	09/08/04	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<5	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1
MW-20B	09/13/05	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<5	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1
MW-20B	09/01/06	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<5	<1	<1	<1	<1	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1
MW-20B	04/02/07	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<5	<1	<1	<1	<1	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1
MW-20B	10/29/07	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<5	<1	<1	<1	<1	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1
MW-20B	04/14/08	<1	NA	<1	<1	<1	NA	<1	<5	<5	<5	<1	<5	<1	<1	<1	<1	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1
MW-20B	10/27/08	<1	NA	<1	<1	<1	NA	<1	<5	<5	<5	<1	<5	<1	<1	<1	<1	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1
MW-20B	04/27/09	<1	NA	<1	<1	<1	NA	<1	<5	<5	<5	<1	<5	<1	<1	<1	<1	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1
MW-20B	11/04/09	<1	NA	<1	<1	<1	NA	<1	<5	<5	<5	<1	<5	<1	<1	<1	<1	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1
MW-20B	05/04/10	<1	NA	<1	<1	<1	NA	<1	<5	<5	<5	<1	<5	<1	<1	<1	<1	<5	<1	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1
MW-20B	10/11/10	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<5	<1	<1	<1	<1	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1
MW-20B	10/03/11	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<5	<1	<1	<1	<1	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	13	<5	<1
MW-20B	11/07/12	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<5	<1	<1	<1	<1	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1
MW-20B	10/13/13	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<0.5	<5	<1	<1	<1	<1	<5	<0.5	0.36	<5	<1	<1	<1	<0.5	<1	<1	<0.5	<1	<0.5	<1	<5	<2	<0.5
MW-20B	11/12/14	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	<5.0	<0.50	<5.0	<1.0	<1.0	<1.0	<1.0	<5.0	<0.50	<1.0	<5.0	<1.0	<1.0	<1.0	<0.50	<1.0	<1.0	<0.50	<1.0	<0.50	<1.0	<5.0	<2.0	<0.50
MW-20D	09/04/02	<0.22	<0.33	<0.2	<0.19	<0.24	<0.2	<0.25	<1.7	<0.92	<1.5	<0.2	<0.4	<0.21	<0.23	<0.16	<0.21	<0.14	<0.2	<0.39	<0.19	<0.21	<0.34	<0.22	<0.21	<0.23	<0.2	<0.21	<0.21	<0.21	<0.22	0.87 J	NA	<0.18
MW-20D	09/08/03	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<5	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1
MW-20D	09/08/04	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<5	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1
MW-20D	09/13/05	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<5	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1
MW-20D	09/01/06	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<5	<1	<1	<1	<1	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1
MW-20D	04/02/07	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<5	<1	<1	<1	<1	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1
MW-20D	10/29/07	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<5	<1	<1	<1	<1	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1
MW-20D	04/14/08	<1	NA	<1	<1	<1	NA	<1	<5	<5	<5	<1	<5	<1	<1	<1	<1	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1
MW-20D	10/28/08	<1	NA	<1	<1	<1	NA	<1	<5	<5	<5	<1	<5	<1	<1	<1	<1	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1
MW-20D	04/28/09	<1	NA	<1	<1	<1	NA	<1	<5	<5	<5	<1	<5	<1	<1	<1	<1	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1
MW-20D	11/04/09	<1	NA	<1	<1	<1	NA	<1	<5	<5	<5	<1	<5	<1	<1	<1	<1	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1
MW-20D	05/04/10	<1	NA	<1	<1	<1	NA	<1	<5	<5	<5	<1	<5	<1	<1	<1	<1	<5	<1	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1
MW-20D	10/11/10	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<5	<1	<1	<1	<1	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1
MW-20D	10/01/11	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<5	<1	<1	<1	<1	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<5	<1
MW-20D	11/07/12	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<1	<5	<1	<1	<1	1.7	<5	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.6	<1	<5	<5	<1
MW-20D	10/13/13	<1	<1	<1	<1	<1	<1	<1	<5	<5	<5	<0.5	<5	<1	<1	<1	0.74	<5	<0.5	<1	<5	<1	<1	<1	<0.5	<1	<1	<0.5	<1	0.45	<1	0.63	<2	<0.5
MW-20D	11/12/14	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<5.0	<5.0	<0.50	<5.0	<1.0	<1.0	<1.0	0.68 J	<5.0	<0.50	<1.0	<5.0	<1.0	<1.0	<1.0	<0.50	<1.0	<1.0	0.35 J	<1.0	0.49 J	<1.0	<5.0	<2.0	<0.50

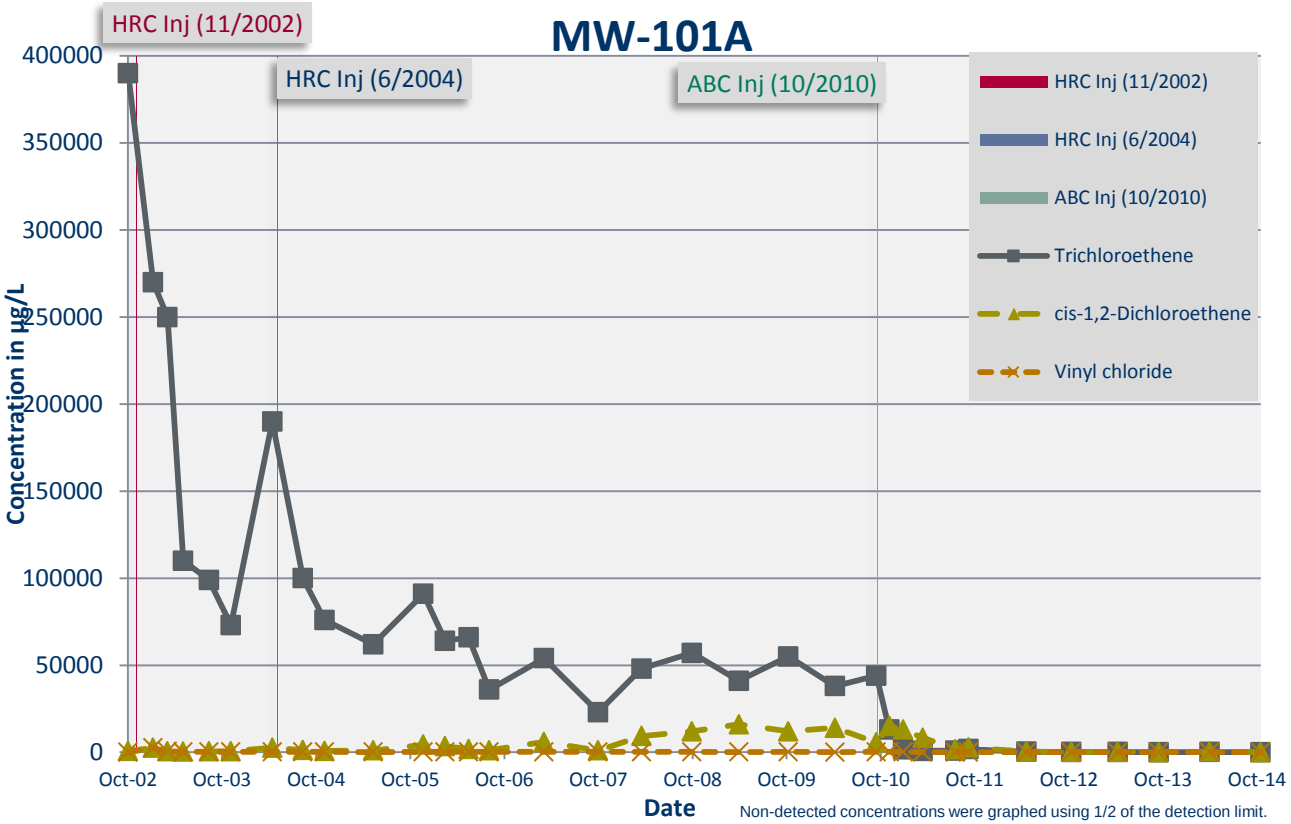
* During the 11/4/2009 sampling event, the samples for MW-102A and MW-102C were mislabled in the field. They have been corrected in this table.
µg/L: micrograms per liter
2L Standard: North Carolina Administrative Code (15A NCAC) Subchapter 2L Groundwater Standards (updates effective April 1, 2013)
The NCDENR approved a change to the 2L Standard for 1,1-DCE , to increase from 7 ug/L to 350 ug/L, in January 10, 2013. The final 2L standard 2013 updates are dated April 1, 2013.
"<" gray value indicates not detected
Bold and Shaded: Constituent concentration reported above the NCAC 2L Groundwater Standard (current 2L updates dated April 1, 2013)

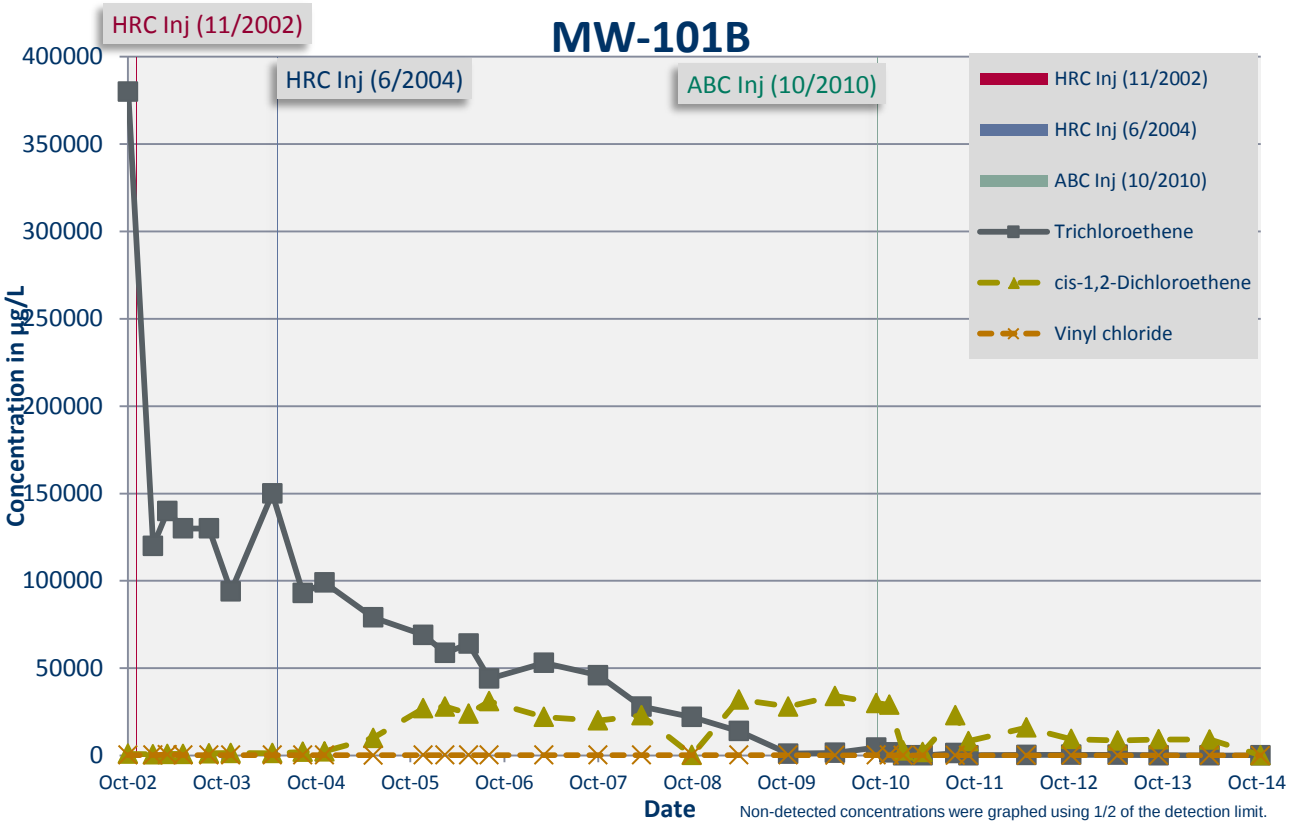
Appendix D

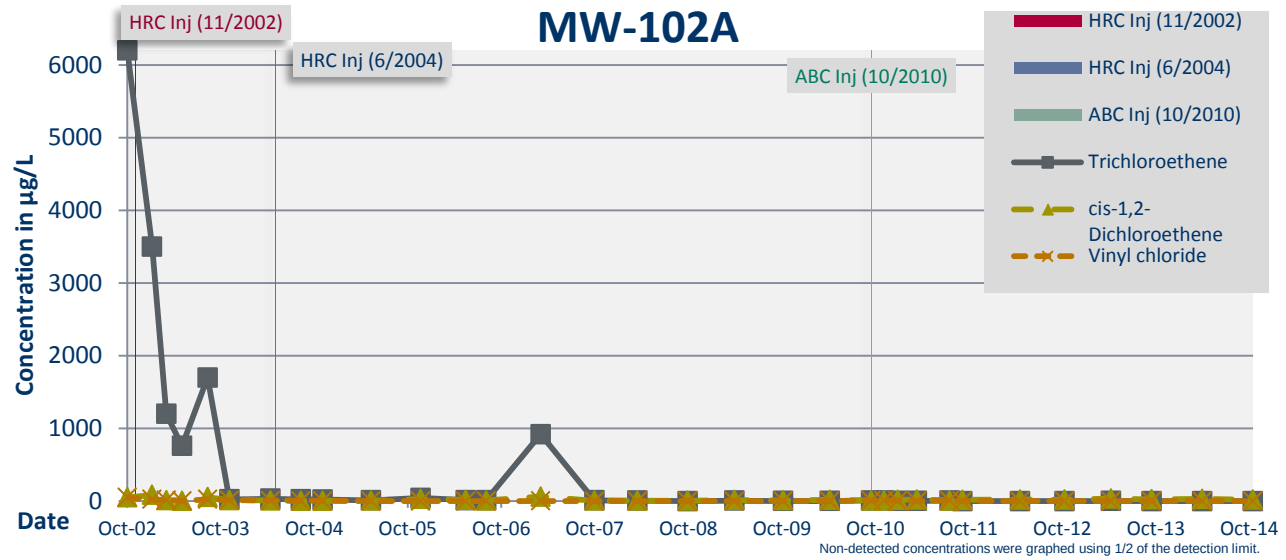
Trichloroethene, cis-1,2-DCE, and Vinyl Cloride Trend Plots for Selected Wells

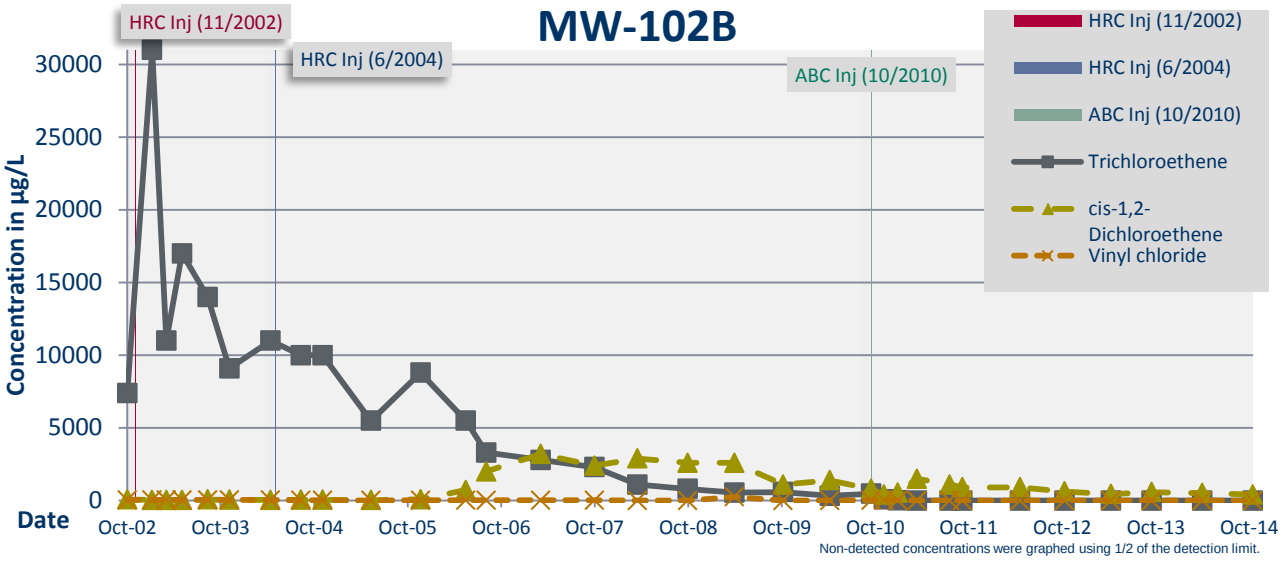

MW-100A
HRC Inj (11/2002)
HRC Inj (6/2004)
ABC Inj (10/2010)
Concentration in µg/L
140000
120000
100000
80000
60000
40000
20000
0
Oct-02
Oct-03
Oct-04
Oct-05
Oct-06
Oct-07
Oct-08
Oct-09
Oct-10
Oct-11
Oct-12
Oct-13
Oct-14
Date
Trichloroethene
cis-1,2-Dichloroethene
Vinyl chloride
Non-detected concentrations were graphed using 1/2 of the detection limit.

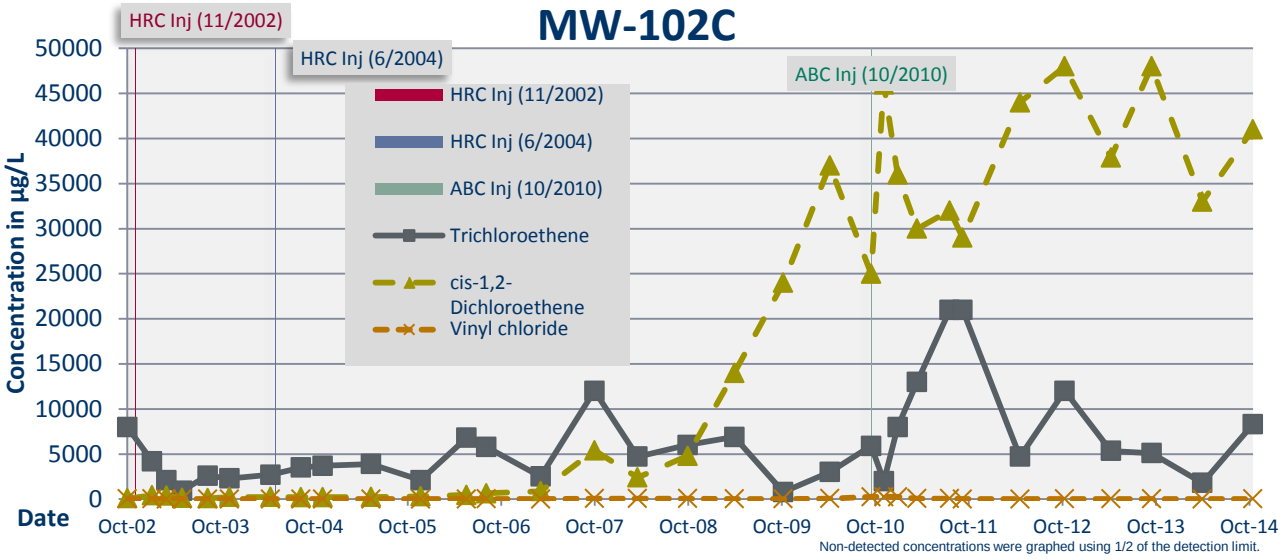

MW-100B
HRC Inj (11/2002)
HRC Inj (6/2004)
ABC Inj (10/2010)
Concentration in µg/L
200000
180000
160000
140000
120000
100000
80000
60000
40000
20000
0
Oct-02
Oct-03
Oct-04
Oct-05
Oct-06
Oct-07
Oct-08
Oct-09
Oct-10
Oct-11
Oct-12
Oct-13
Oct-14
Date
Trichloroethene
cis-1,2-Dichloroethene
Vinyl chloride
Non-detected concentrations were graphed using 1/2 of the detection limit.

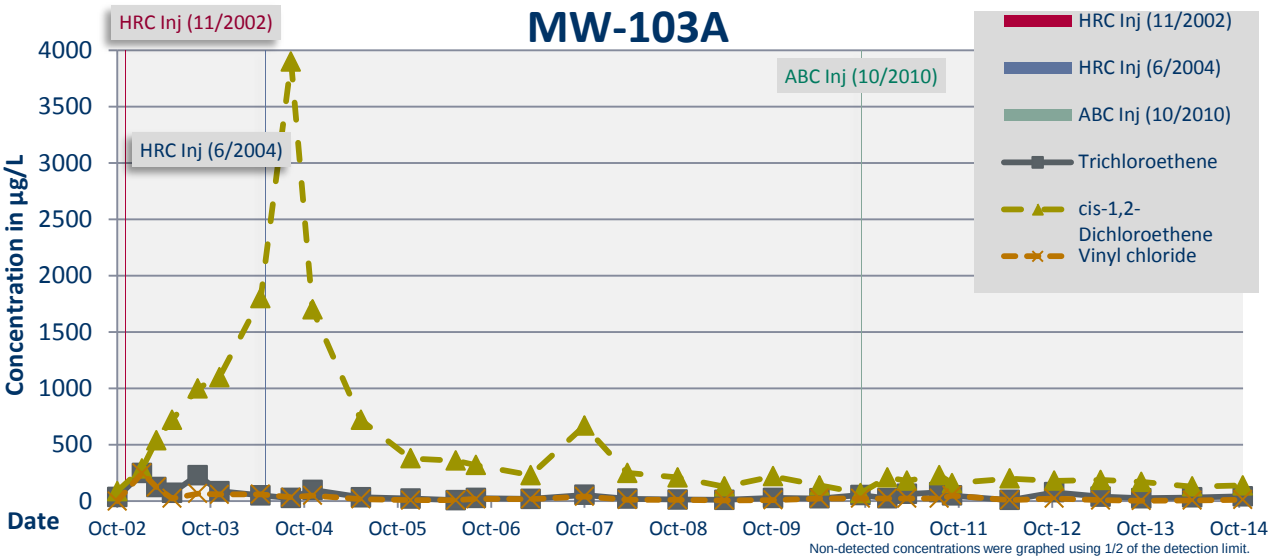

MW-101A
HRC Inj (11/2002)
HRC Inj (6/2004)
ABC Inj (10/2010)
Concentration in µg/L
400000
350000
300000
250000
200000
150000
100000
50000
0
Oct-02
Oct-03
Oct-04
Oct-05
Oct-06
Oct-07
Oct-08
Oct-09
Oct-10
Oct-11
Oct-12
Oct-13
Oct-14
Date
Trichloroethene
cis-1,2-Dichloroethene
Vinyl chloride
Non-detected concentrations were graphed using 1/2 of the detection limit.

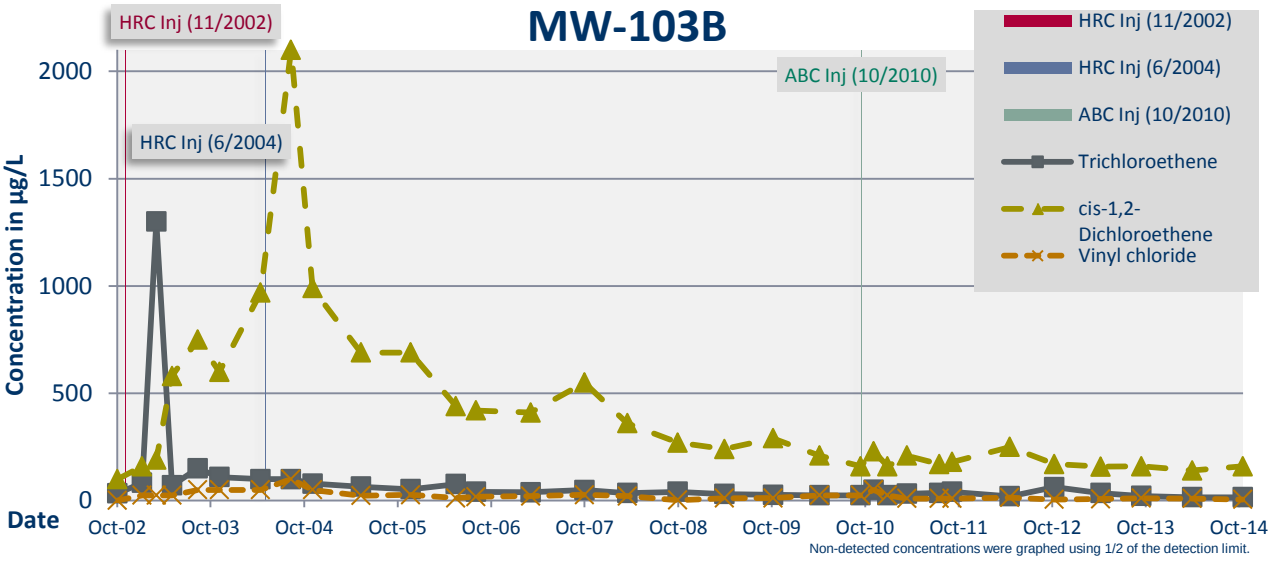

MW-101B
HRC Inj (11/2002)
HRC Inj (6/2004)
ABC Inj (10/2010)
Concentration in µg/L
400000
350000
300000
250000
200000
150000
100000
50000
0
Oct-02
Oct-03
Oct-04
Oct-05
Oct-06
Oct-07
Oct-08
Oct-09
Oct-10
Oct-11
Oct-12
Oct-13
Oct-14
Date
Trichloroethene
cis-1,2-Dichloroethene
Vinyl chloride
Non-detected concentrations were graphed using 1/2 of the detection limit.

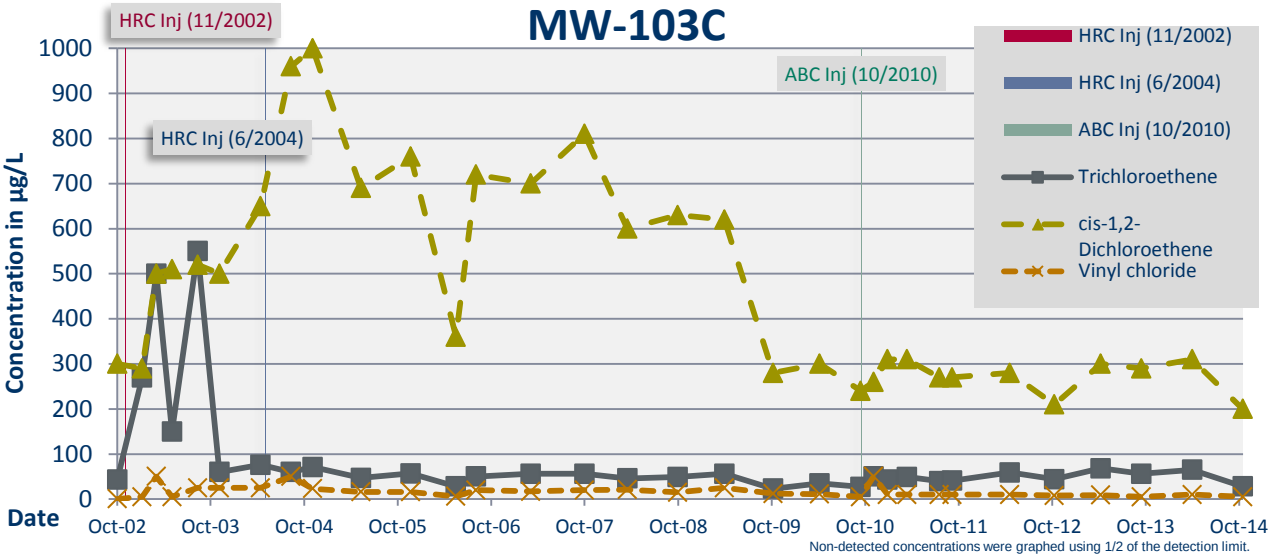

MW-102A
HRC Inj (11/2002)
HRC Inj (6/2004)
ABC Inj (10/2010)
Concentration in µg/L
6000
5000
4000
3000
2000
1000
0
Date
Oct-02
Oct-03
Oct-04
Oct-05
Oct-06
Oct-07
Oct-08
Oct-09
Oct-10
Oct-11
Oct-12
Oct-13
Oct-14
Trichloroethene
cis-1,2-Dichloroethene
Vinyl chloride
Non-detected concentrations were graphed using 1/2 of the detection limit.

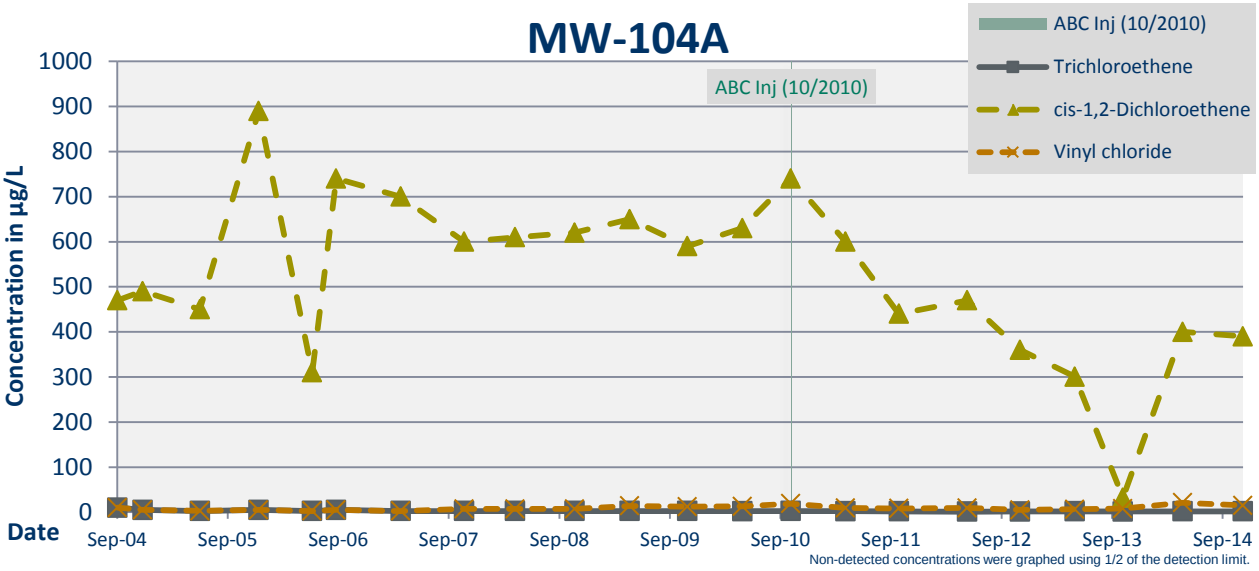

MW-102B
HRC Inj (11/2002)
HRC Inj (6/2004)
ABC Inj (10/2010)
Concentration in µg/L
30000
25000
20000
15000
10000
5000
0
Date
Oct-02
Oct-03
Oct-04
Oct-05
Oct-06
Oct-07
Oct-08
Oct-09
Oct-10
Oct-11
Oct-12
Oct-13
Oct-14
Trichloroethene
cis-1,2-Dichloroethene
Vinyl chloride
Non-detected concentrations were graphed using 1/2 of the detection limit.

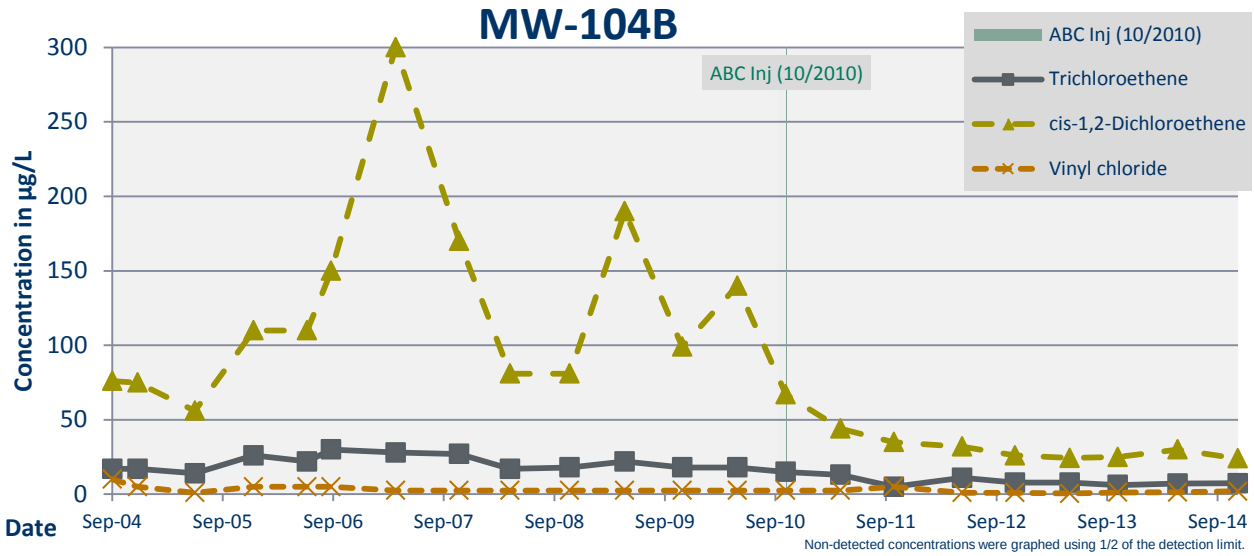

MW-102C
HRC Inj (11/2002)
HRC Inj (6/2004)
ABC Inj (10/2010)
Concentration in µg/L
50000
45000
40000
35000
30000
25000
20000
15000
10000
5000
0
Date
Oct-02
Oct-03
Oct-04
Oct-05
Oct-06
Oct-07
Oct-08
Oct-09
Oct-10
Oct-11
Oct-12
Oct-13
Oct-14
Trichloroethene
cis-1,2-Dichloroethene
Vinyl chloride
Non-detected concentrations were graphed using 1/2 of the detection limit.

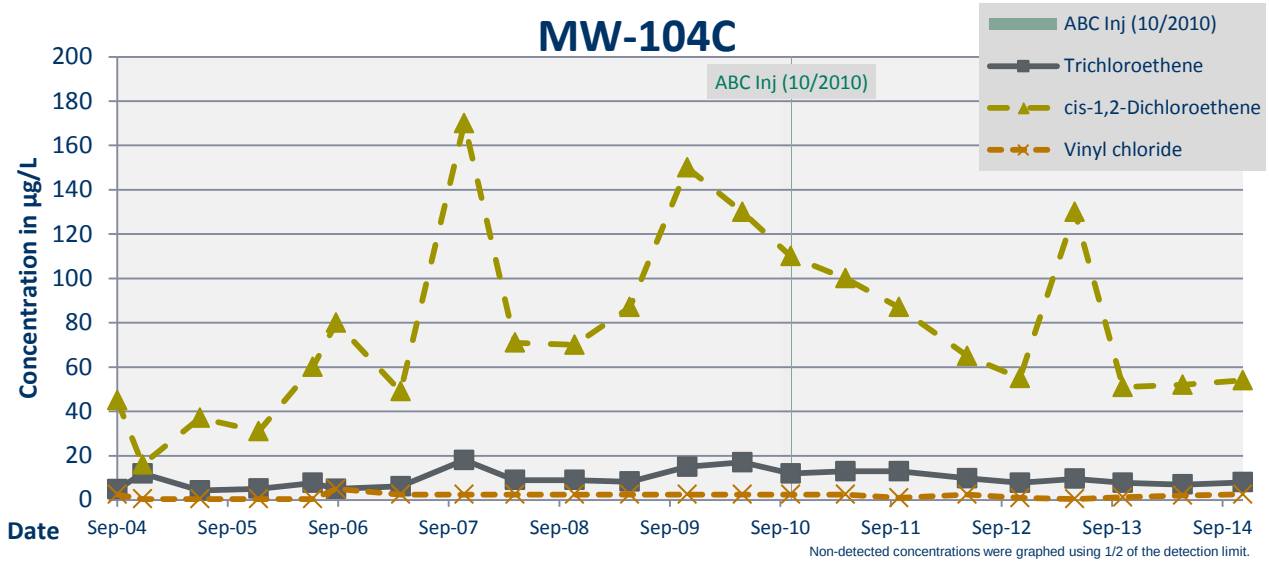

MW-103A
HRC Inj (11/2002)
HRC Inj (6/2004)
ABC Inj (10/2010)
Concentration in µg/L
Date
Trichloroethene
cis-1,2-Dichloroethene
Vinyl chloride
Oct-02
Oct-03
Oct-04
Oct-05
Oct-06
Oct-07
Oct-08
Oct-09
Oct-10
Oct-11
Oct-12
Oct-13
Oct-14
Non-detected concentrations were graphed using 1/2 of the detection limit.

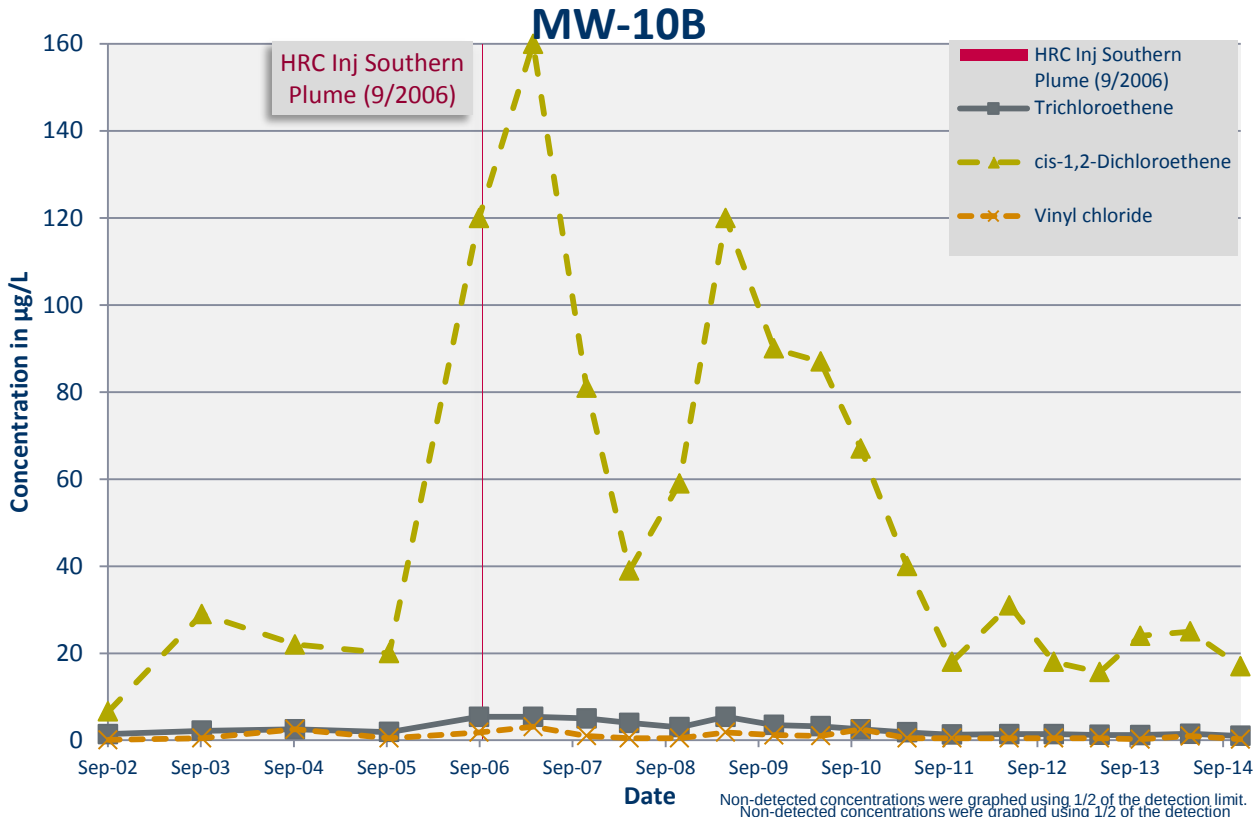

MW-103B
HRC Inj (11/2002)
HRC Inj (6/2004)
ABC Inj (10/2010)
Concentration in µg/L
Date
Trichloroethene
cis-1,2-Dichloroethene
Vinyl chloride
Oct-02
Oct-03
Oct-04
Oct-05
Oct-06
Oct-07
Oct-08
Oct-09
Oct-10
Oct-11
Oct-12
Oct-13
Oct-14
Non-detected concentrations were graphed using 1/2 of the detection limit.

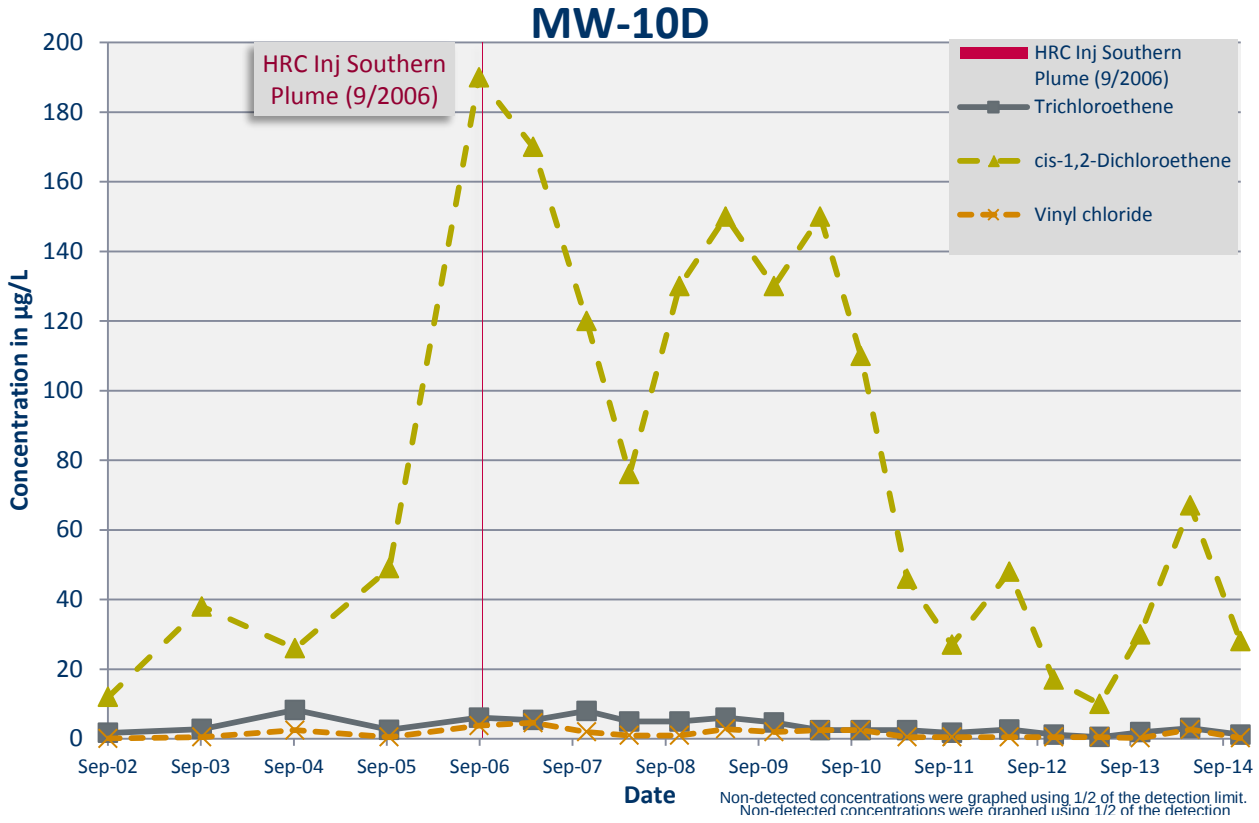

MW-103C
HRC Inj (11/2002)
HRC Inj (6/2004)
ABC Inj (10/2010)
Concentration in µg/L
Date
Trichloroethene
cis-1,2-Dichloroethene
Vinyl chloride
Oct-02
Oct-03
Oct-04
Oct-05
Oct-06
Oct-07
Oct-08
Oct-09
Oct-10
Oct-11
Oct-12
Oct-13
Oct-14
Non-detected concentrations were graphed using 1/2 of the detection limit.

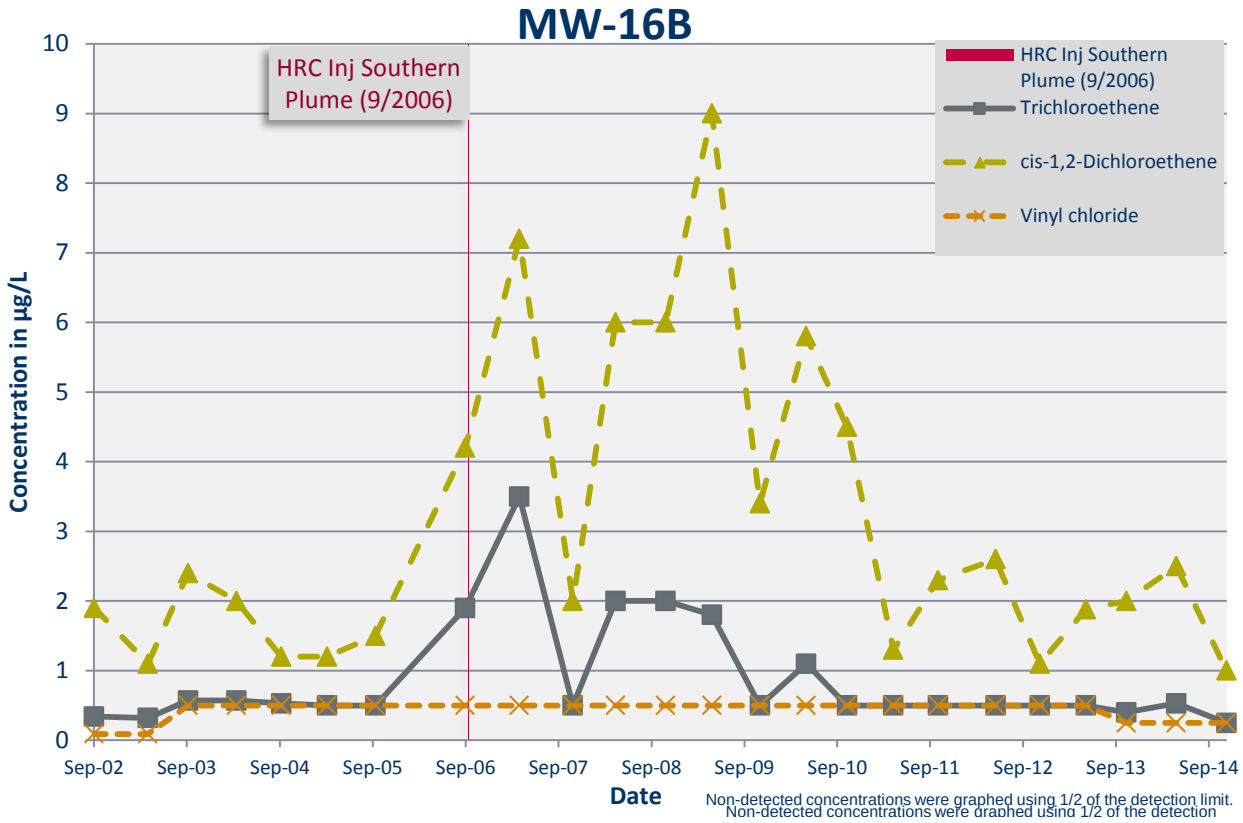

MW-104A
ABC Inj (10/2010)
ABC Inj (10/2010)
Trichloroethene
cis-1,2-Dichloroethene
Vinyl chloride
Concentration in µg/L
1000
900
800
700
600
500
400
300
200
100
0
Date
Sep-04
Sep-05
Sep-06
Sep-07
Sep-08
Sep-09
Sep-10
Sep-11
Sep-12
Sep-13
Sep-14
Non-detected concentrations were graphed using 1/2 of the detection limit.

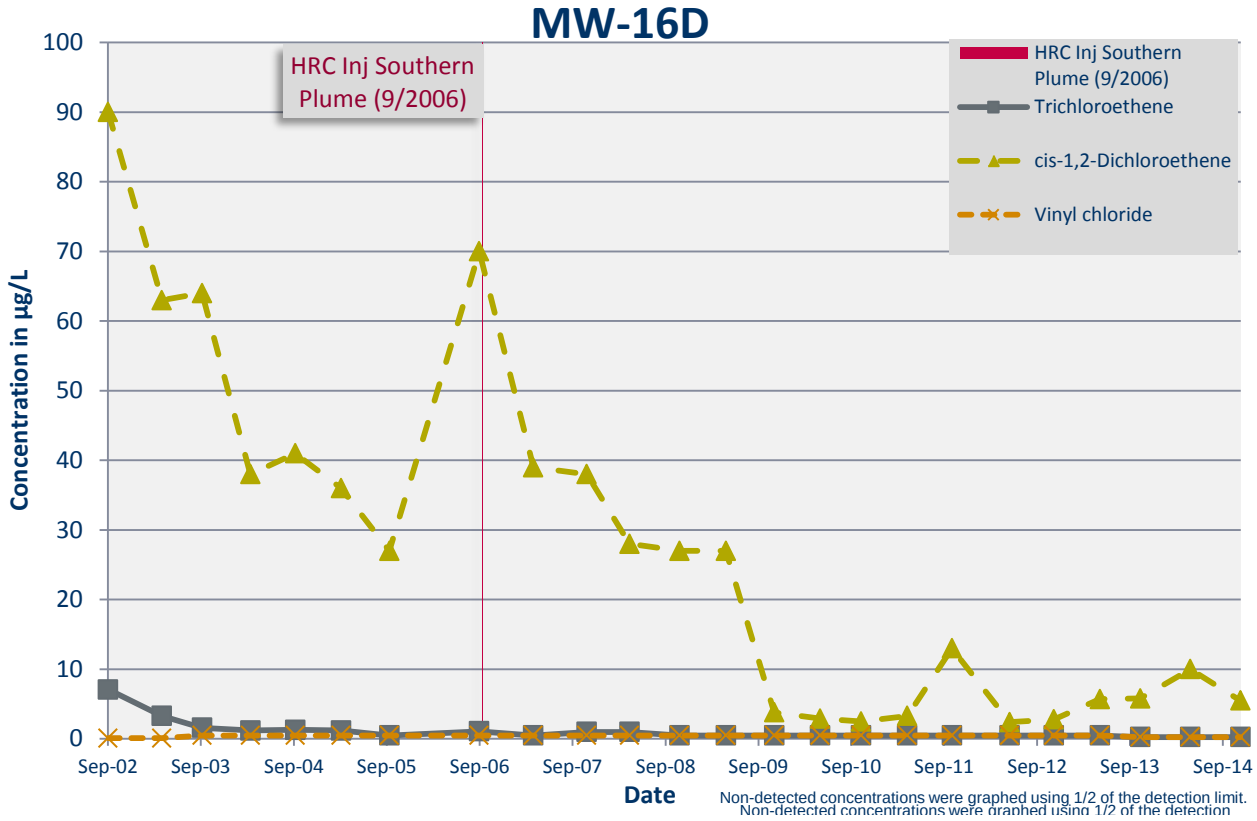

MW-104B
ABC Inj (10/2010)
ABC Inj (10/2010)
Trichloroethene
cis-1,2-Dichloroethene
Vinyl chloride
Concentration in µg/L
300
250
200
150
100
50
0
Date
Sep-04
Sep-05
Sep-06
Sep-07
Sep-08
Sep-09
Sep-10
Sep-11
Sep-12
Sep-13
Sep-14
Non-detected concentrations were graphed using 1/2 of the detection limit.


MW-104C
ABC Inj (10/2010)
ABC Inj (10/2010)
Trichloroethene
cis-1,2-Dichloroethene
Vinyl chloride
Concentration in µg/L
200
180
160
140
120
100
80
60
40
20
0
Date
Sep-04
Sep-05
Sep-06
Sep-07
Sep-08
Sep-09
Sep-10
Sep-11
Sep-12
Sep-13
Sep-14
Non-detected concentrations were graphed using 1/2 of the detection limit.


MW-10B
HRC Inj Southern Plume (9/2006)
HRC Inj Southern Plume (9/2006)
Trichloroethene
cis-1,2-Dichloroethene
Vinyl chloride
Concentration in µg/L
160
140
120
100
80
60
40
20
0
Sep-02
Sep-03
Sep-04
Sep-05
Sep-06
Sep-07
Sep-08
Sep-09
Sep-10
Sep-11
Sep-12
Sep-13
Sep-14
Date
Non-detected concentrations were graphed using 1/2 of the detection limit.

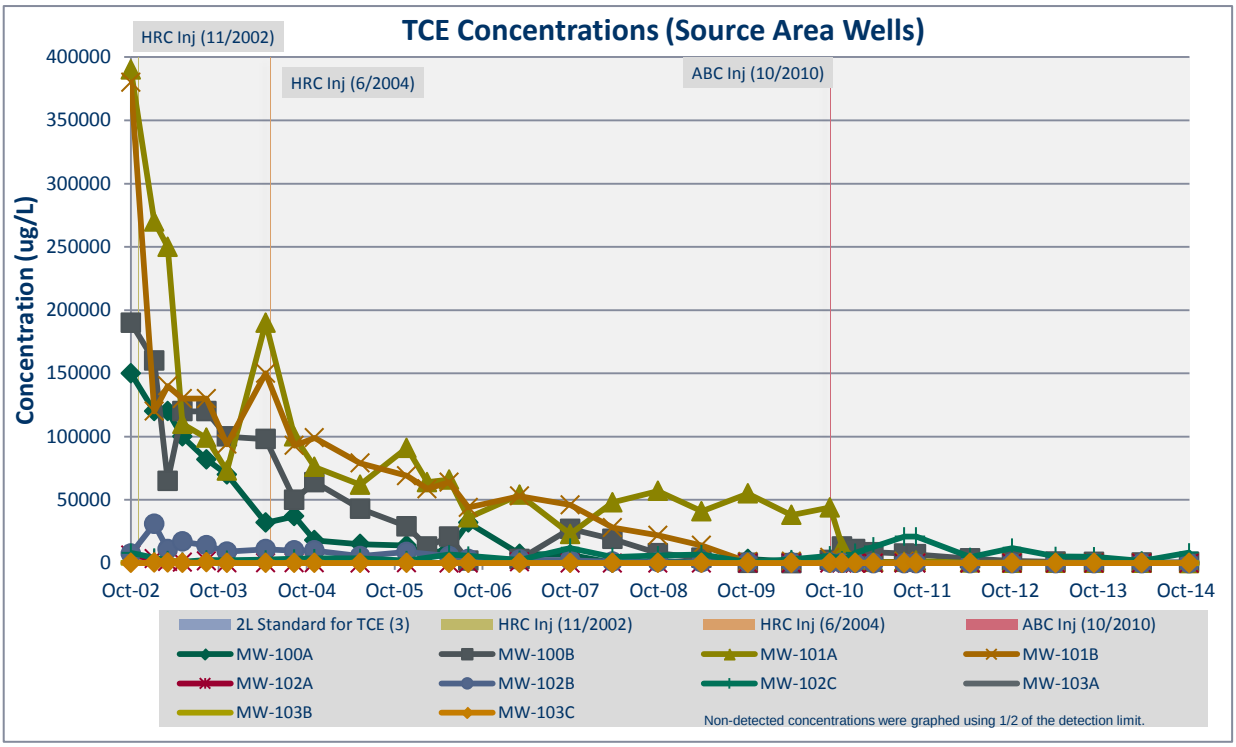

MW-10D
HRC Inj Southern Plume (9/2006)
HRC Inj Southern Plume (9/2006)
Trichloroethene
cis-1,2-Dichloroethene
Vinyl chloride
Concentration in µg/L
200
180
160
140
120
100
80
60
40
20
0
Sep-02
Sep-03
Sep-04
Sep-05
Sep-06
Sep-07
Sep-08
Sep-09
Sep-10
Sep-11
Sep-12
Sep-13
Sep-14
Date
Non-detected concentrations were graphed using 1/2 of the detection limit.

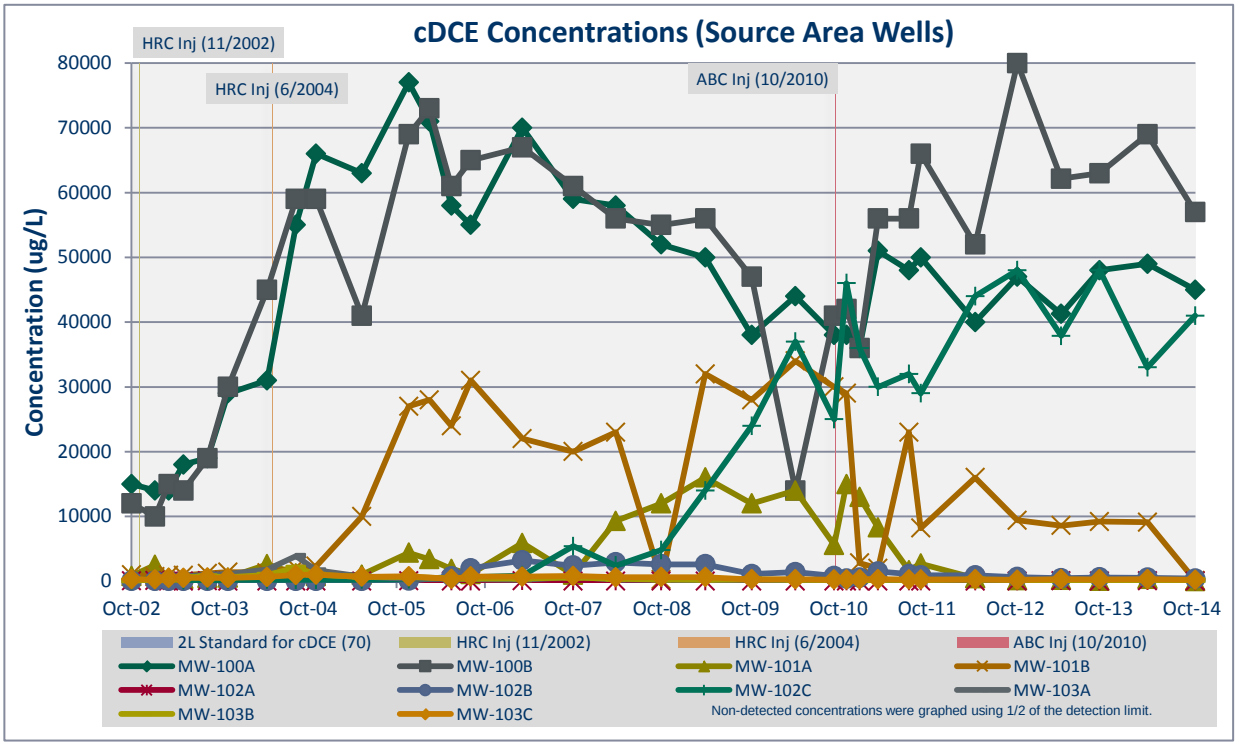

MW-16B
HRC Inj Southern Plume (9/2006)
HRC Inj Southern Plume (9/2006)
Trichloroethene
cis-1,2-Dichloroethene
Vinyl chloride
Concentration in µg/L
10
9
8
7
6
5
4
3
2
1
0
Sep-02
Sep-03
Sep-04
Sep-05
Sep-06
Sep-07
Sep-08
Sep-09
Sep-10
Sep-11
Sep-12
Sep-13
Sep-14
Date
Non-detected concentrations were graphed using 1/2 of the detection limit.

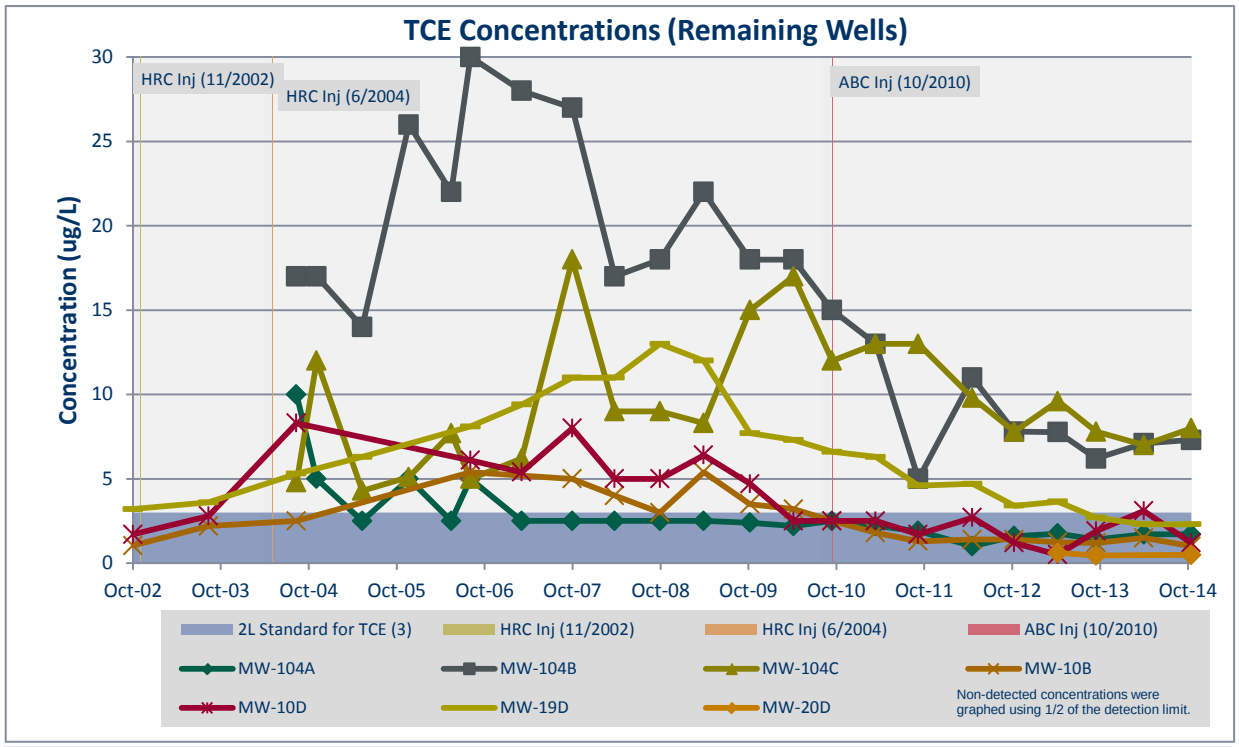

MW-16D
HRC Inj Southern Plume (9/2006)
HRC Inj Southern Plume (9/2006)
Trichloroethene
cis-1,2-Dichloroethene
Vinyl chloride
Concentration in µg/L
100
90
80
70
60
50
40
30
20
10
0
Sep-02
Sep-03
Sep-04
Sep-05
Sep-06
Sep-07
Sep-08
Sep-09
Sep-10
Sep-11
Sep-12
Sep-13
Sep-14
Date
Non-detected concentrations were graphed using 1/2 of the detection limit.

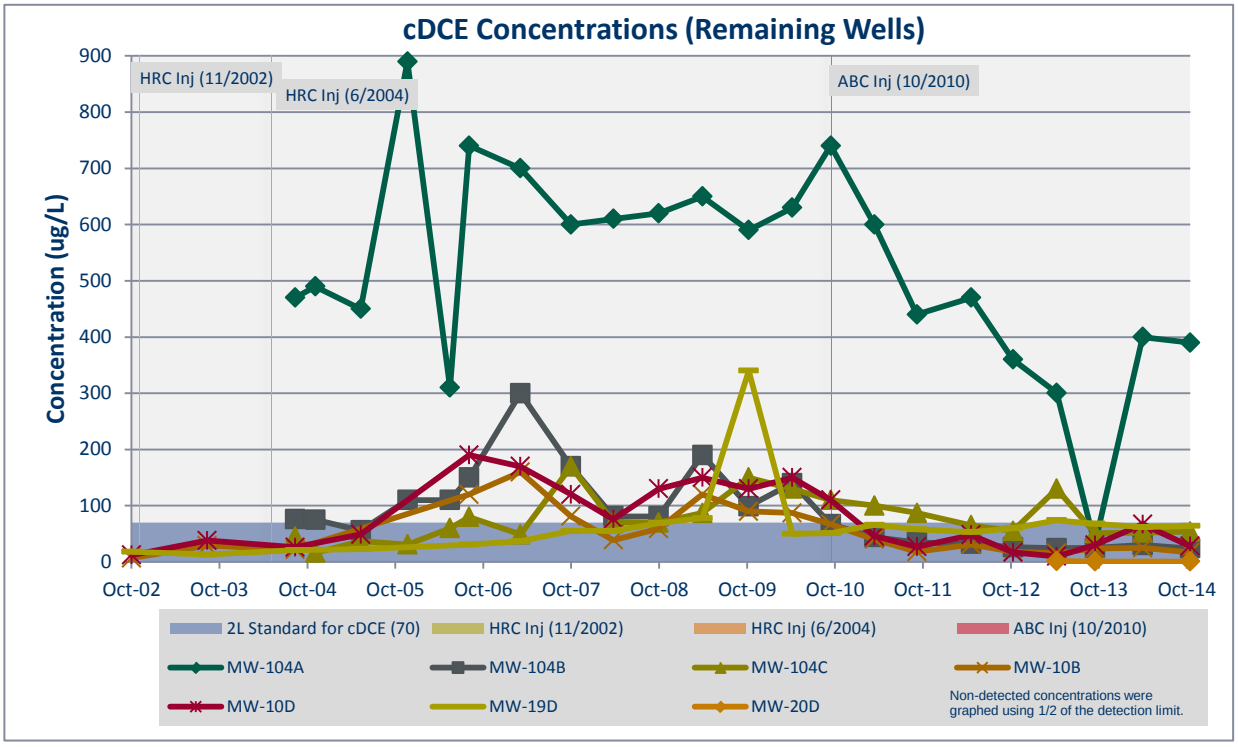
Appendix E

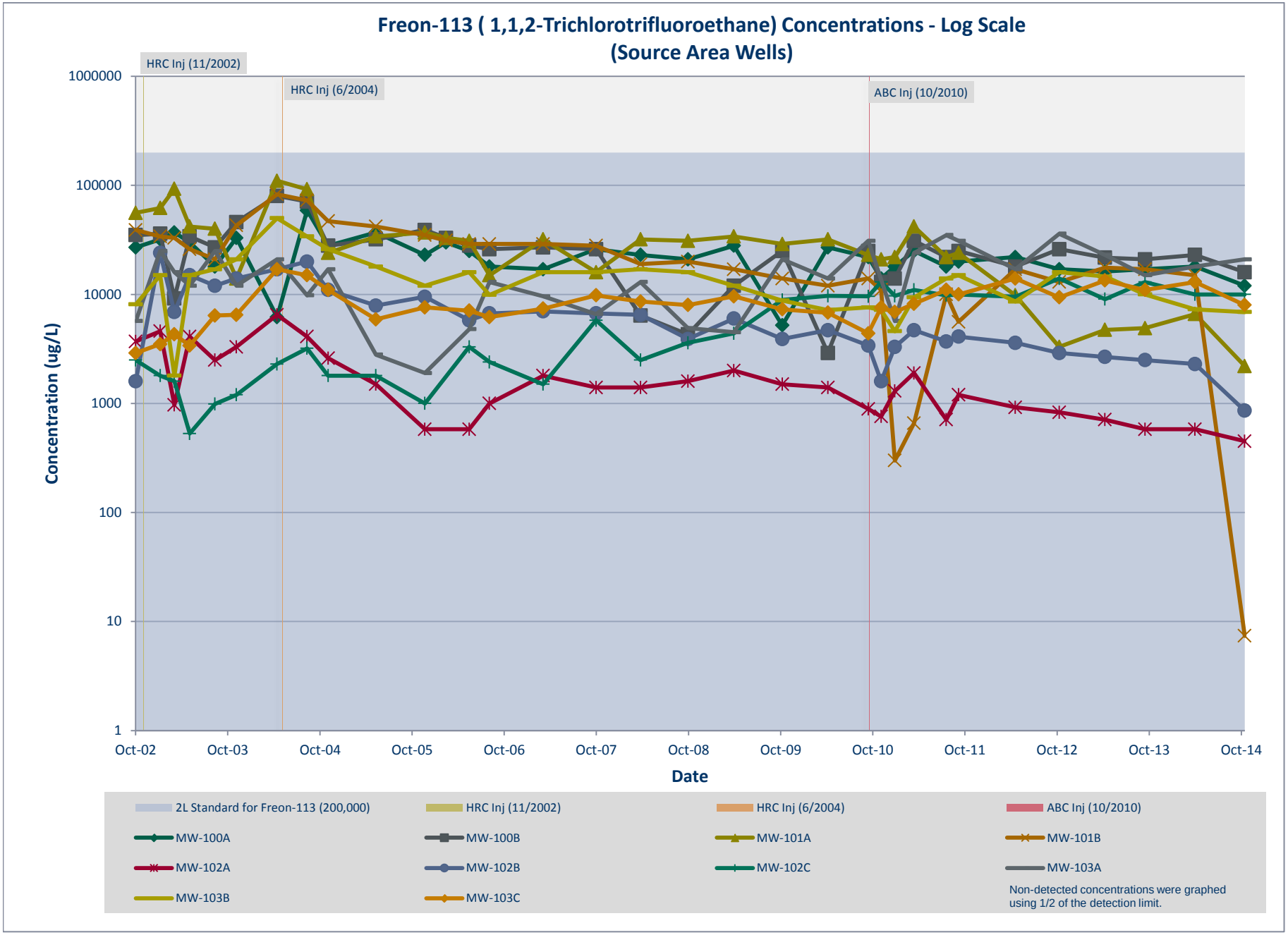
Historical Cumulative Trend Plots for Trichloroethene, cis-1,2-DCE, Freon 113, 1,1,1,-Trichloroethane, and Methylene Chloride

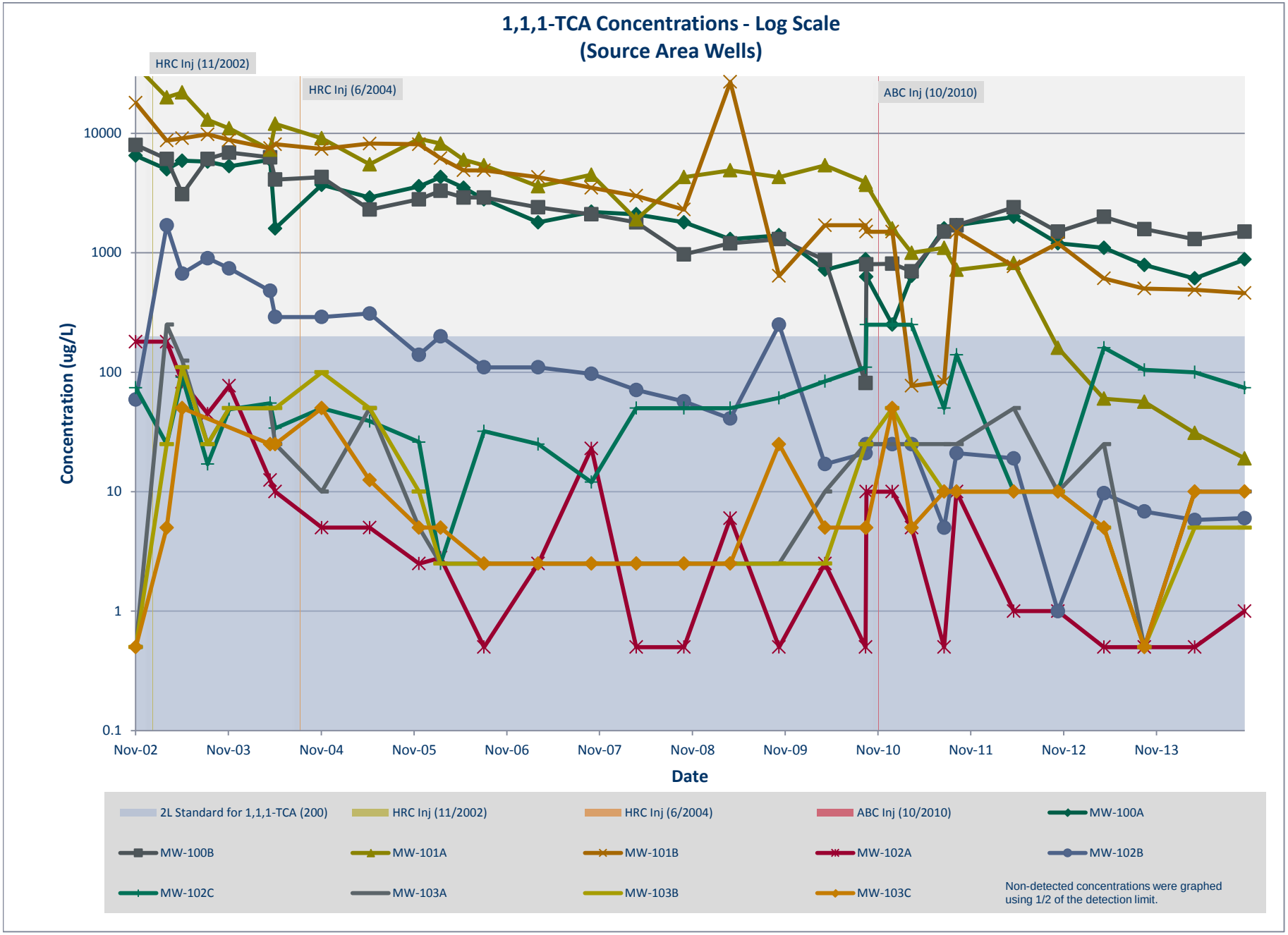

TCE Concentrations (Source Area Wells)
HRC Inj (11/2002)
HRC Inj (6/2004)
ABC Inj (10/2010)
Concentration (ug/L)
400000
350000
300000
250000
200000
150000
100000
50000
0
Oct-02
Oct-03
Oct-04
Oct-05
Oct-06
Oct-07
Oct-08
Oct-09
Oct-10
Oct-11
Oct-12
Oct-13
Oct-14
2L Standard for TCE (3)
HRC Inj (11/2002)
HRC Inj (6/2004)
ABC Inj (10/2010)
MW-100A
MW-100B
MW-101A
MW-101B
MW-102A
MW-102B
MW-102C
MW-103A
MW-103B
MW-103C
Non-detected concentrations were graphed using 1/2 of the detection limit.

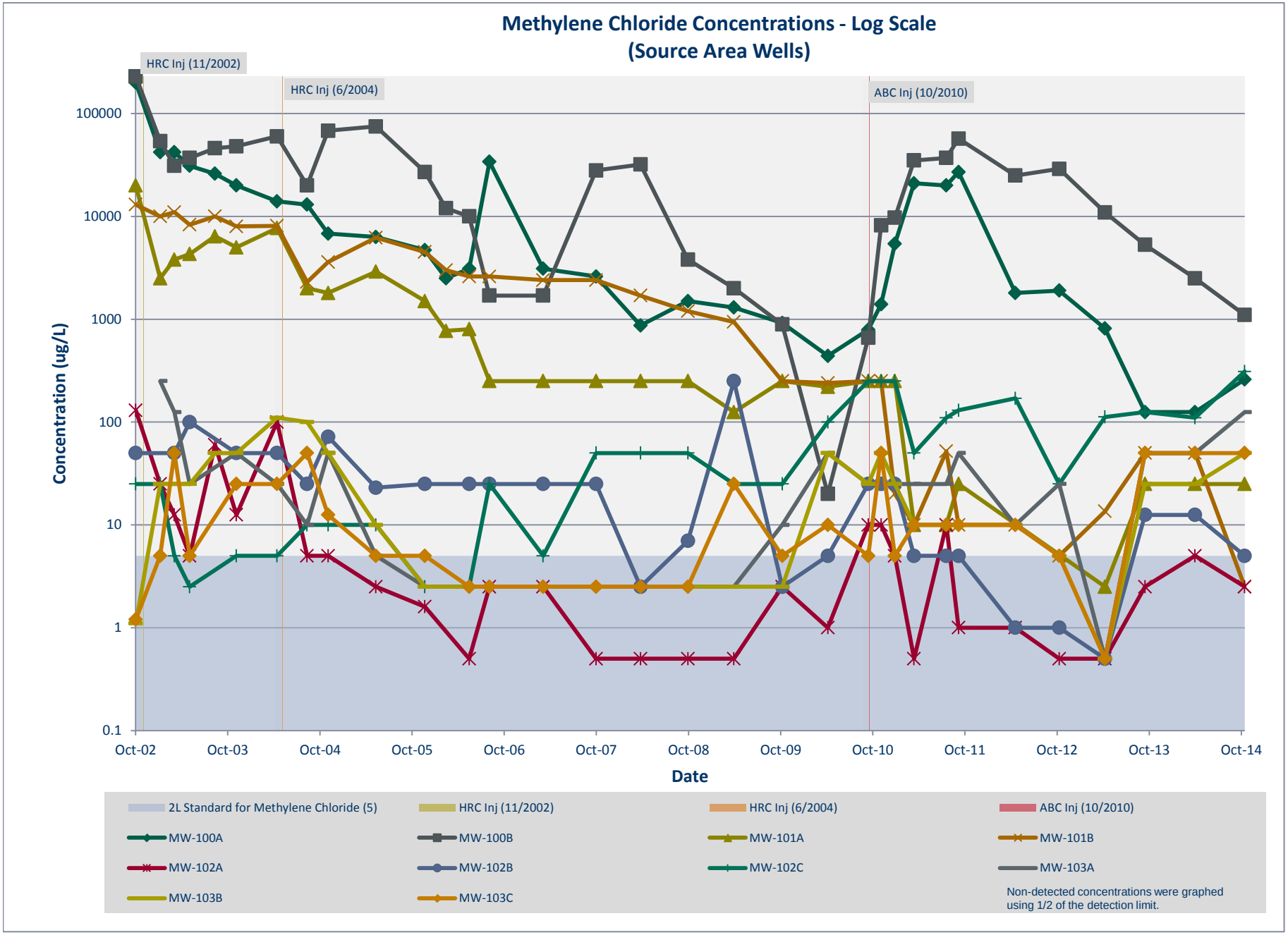

cDCE Concentrations (Source Area Wells)
HRC Inj (11/2002)
HRC Inj (6/2004)
ABC Inj (10/2010)
Concentration (ug/L)
80000
70000
60000
50000
40000
30000
20000
10000
0
Oct-02
Oct-03
Oct-04
Oct-05
Oct-06
Oct-07
Oct-08
Oct-09
Oct-10
Oct-11
Oct-12
Oct-13
Oct-14
2L Standard for cDCE (70)
HRC Inj (11/2002)
HRC Inj (6/2004)
ABC Inj (10/2010)
MW-100A
MW-100B
MW-101A
MW-101B
MW-102A
MW-102B
MW-102C
MW-103A
MW-103B
MW-103C
Non-detected concentrations were graphed using 1/2 of the detection limit.


TCE Concentrations (Remaining Wells)
Concentration (ug/L)
30
25
20
15
10
5
0
HRC Inj (11/2002)
HRC Inj (6/2004)
ABC Inj (10/2010)
Oct-02
Oct-03
Oct-04
Oct-05
Oct-06
Oct-07
Oct-08
Oct-09
Oct-10
Oct-11
Oct-12
Oct-13
Oct-14
2L Standard for TCE (3)
HRC Inj (11/2002)
HRC Inj (6/2004)
ABC Inj (10/2010)
MW-104A
MW-104B
MW-104C
MW-10B
MW-10D
MW-19D
MW-20D
Non-detected concentrations were graphed using 1/2 of the detection limit.


cDCE Concentrations (Remaining Wells)
Concentration (ug/L)
900
800
700
600
500
400
300
200
100
0
HRC Inj (11/2002)
HRC Inj (6/2004)
ABC Inj (10/2010)
Oct-02
Oct-03
Oct-04
Oct-05
Oct-06
Oct-07
Oct-08
Oct-09
Oct-10
Oct-11
Oct-12
Oct-13
Oct-14
2L Standard for cDCE (70)
HRC Inj (11/2002)
HRC Inj (6/2004)
ABC Inj (10/2010)
MW-104A
MW-104B
MW-104C
MW-10B
MW-10D
MW-19D
MW-20D
Non-detected concentrations were graphed using 1/2 of the detection limit.

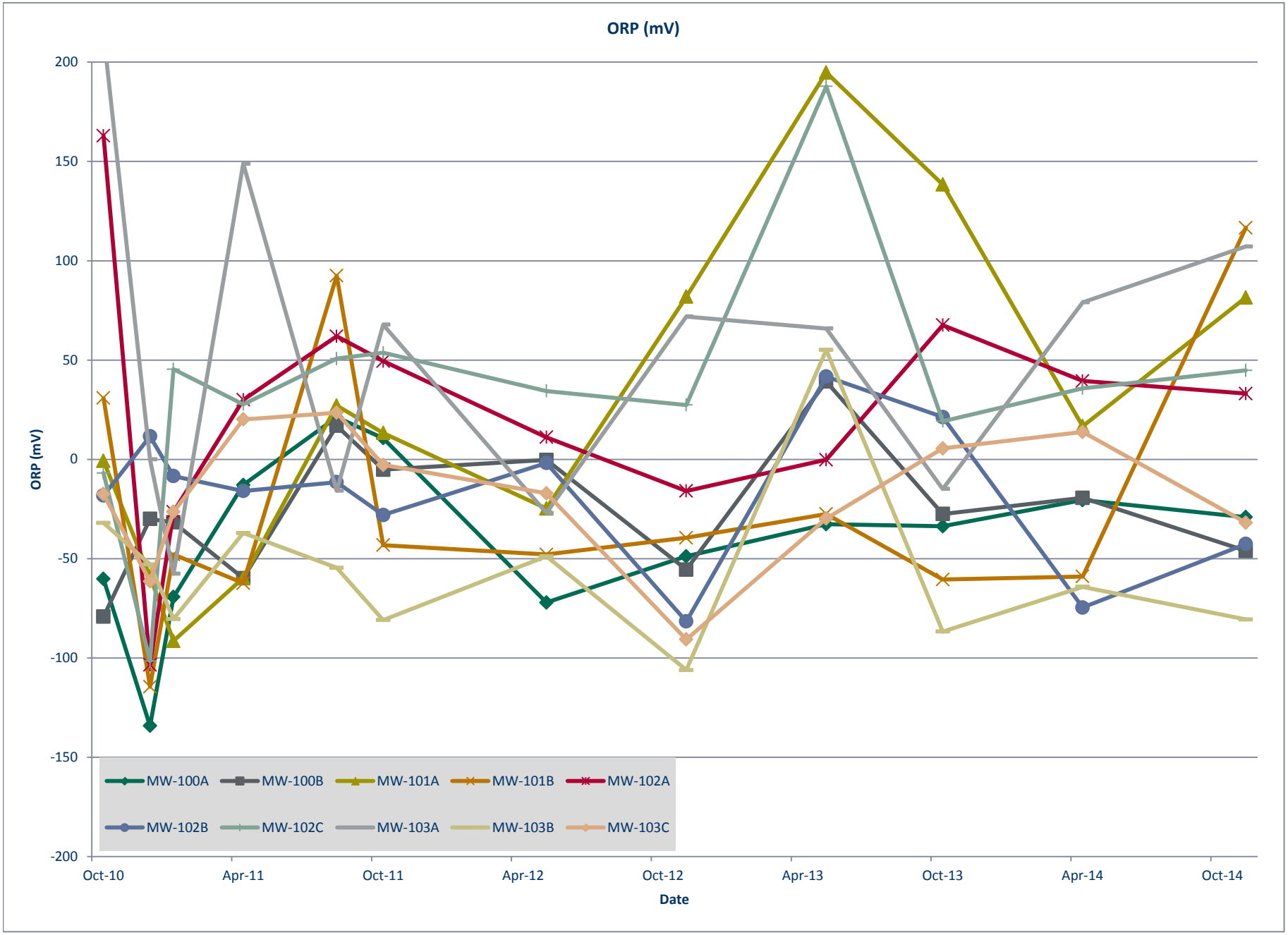

Freon-113 (1,1,2-Trichlorotrifluoroethane) Concentrations - Log Scale
(Source Area Wells)
HRC Inj (11/2002)
HRC Inj (6/2004)
ABC Inj (10/2010)
1000000
100000
10000
1000
100
10
1
Concentration (ug/L)
Oct-02
Oct-03
Oct-04
Oct-05
Oct-06
Oct-07
Oct-08
Oct-09
Oct-10
Oct-11
Oct-12
Oct-13
Oct-14
Date
2L Standard for Freon-113 (200,000)
HRC Inj (11/2002)
HRC Inj (6/2004)
ABC Inj (10/2010)
MW-100A
MW-100B
MW-101A
MW-101B
MW-102A
MW-102B
MW-102C
MW-103A
MW-103B
MW-103C
Non-detected concentrations were graphed using 1/2 of the detection limit.

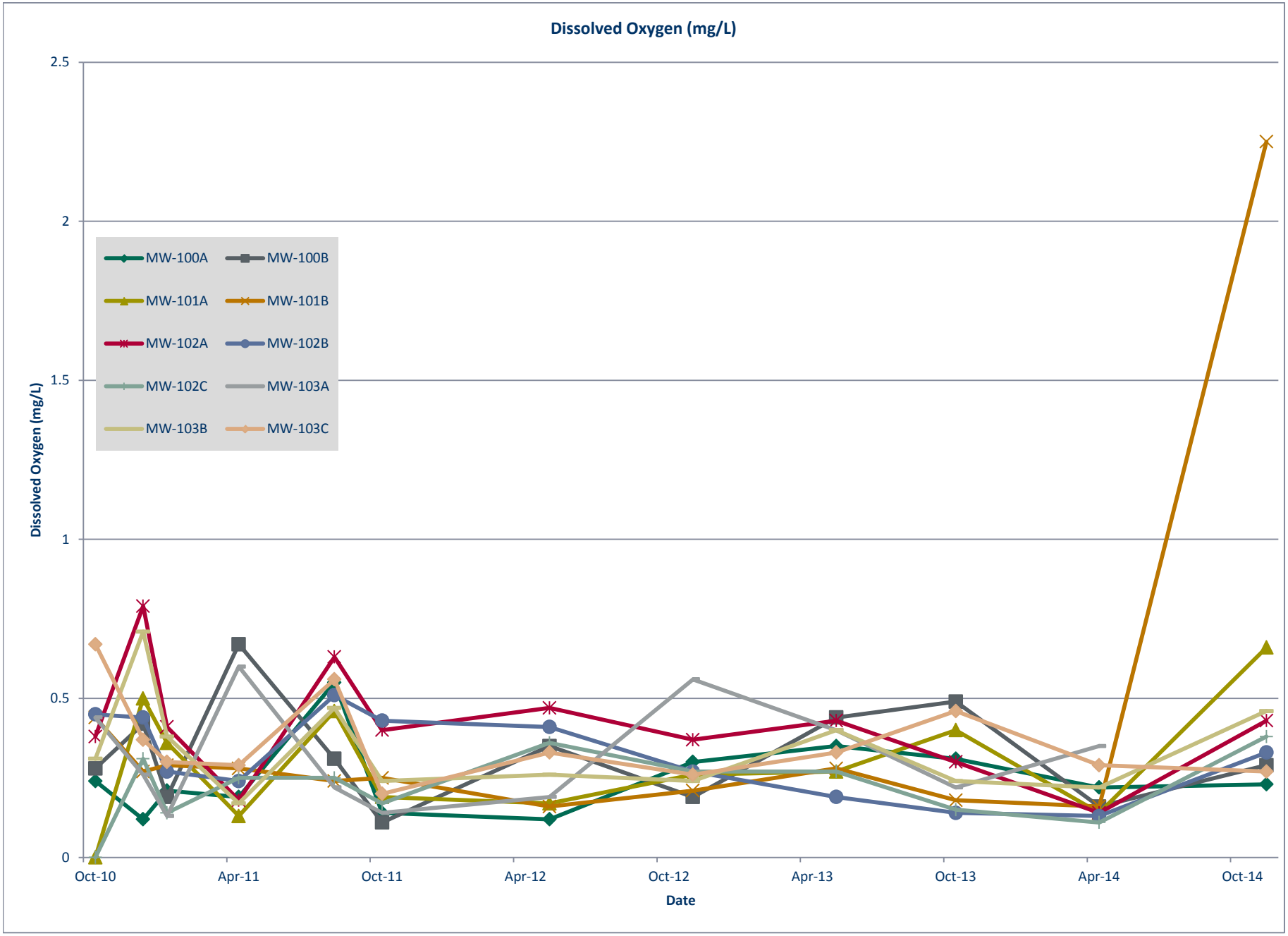

1,1,1-TCA Concentrations - Log Scale
(Source Area Wells)
HRC Inj (11/2002)
HRC Inj (6/2004)
ABC Inj (10/2010)
Concentration (ug/L)
10000
1000
100
10
1
0.1
Nov-02
Nov-03
Nov-04
Nov-05
Nov-06
Nov-07
Nov-08
Nov-09
Nov-10
Nov-11
Nov-12
Nov-13
Date
2L Standard for 1,1,1-TCA (200)
HRC Inj (11/2002)
HRC Inj (6/2004)
ABC Inj (10/2010)
MW-100A
MW-100B
MW-101A
MW-101B
MW-102A
MW-102B
MW-102C
MW-103A
MW-103B
MW-103C
Non-detected concentrations were graphed using 1/2 of the detection limit.

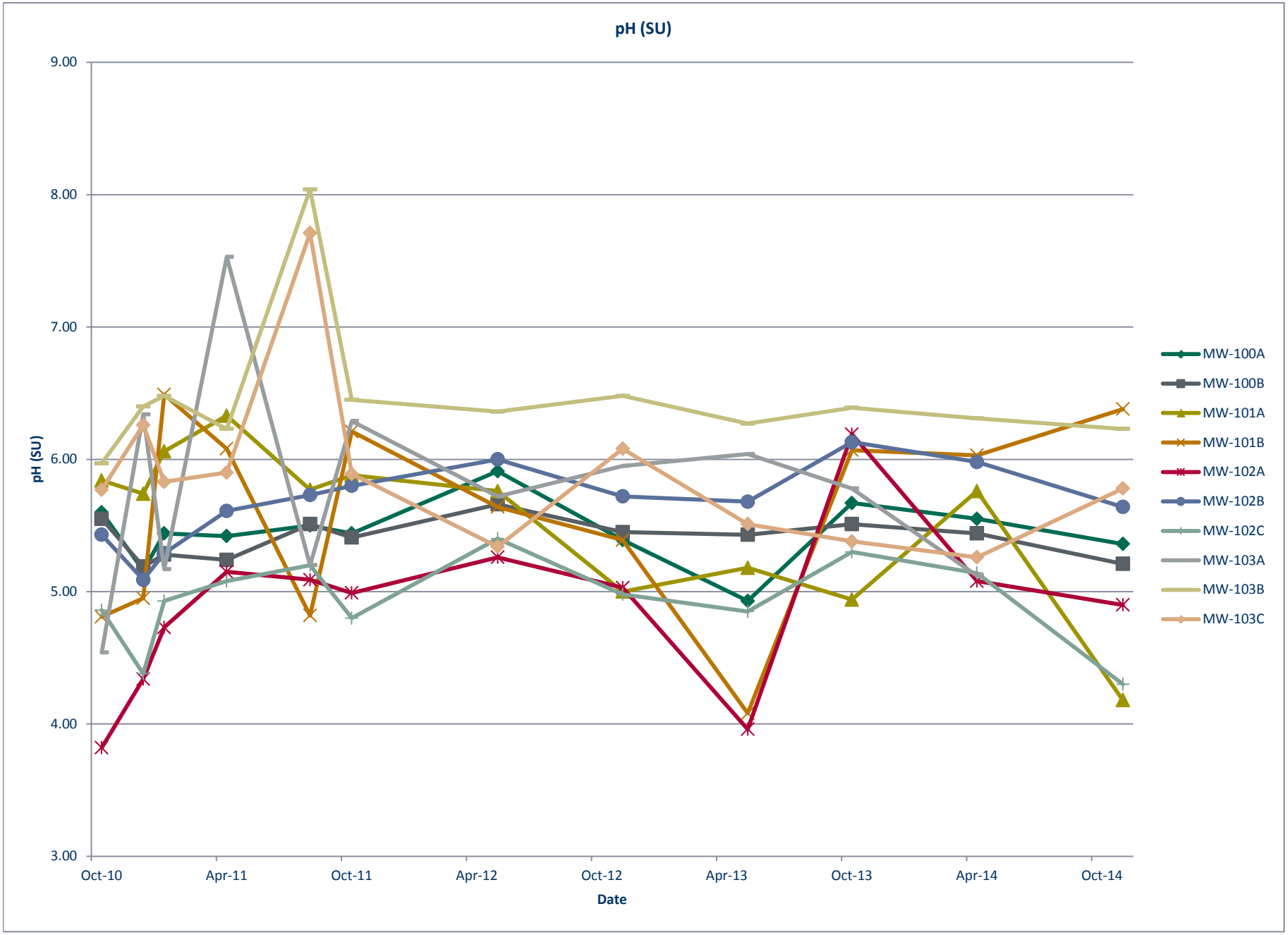

Methylene Chloride Concentrations - Log Scale
(Source Area Wells)
HRC Inj (11/2002)
HRC Inj (6/2004)
ABC Inj (10/2010)
Concentration (ug/L)
100000
10000
1000
100
10
1
0.1
Oct-02
Oct-03
Oct-04
Oct-05
Oct-06
Oct-07
Oct-08
Oct-09
Oct-10
Oct-11
Oct-12
Oct-13
Oct-14
Date
2L Standard for Methylene Chloride (5)
HRC Inj (11/2002)
HRC Inj (6/2004)
ABC Inj (10/2010)
MW-100A
MW-100B
MW-101A
MW-101B
MW-102A
MW-102B
MW-102C
MW-103A
MW-103B
MW-103C
Non-detected concentrations were graphed using 1/2 of the detection limit.

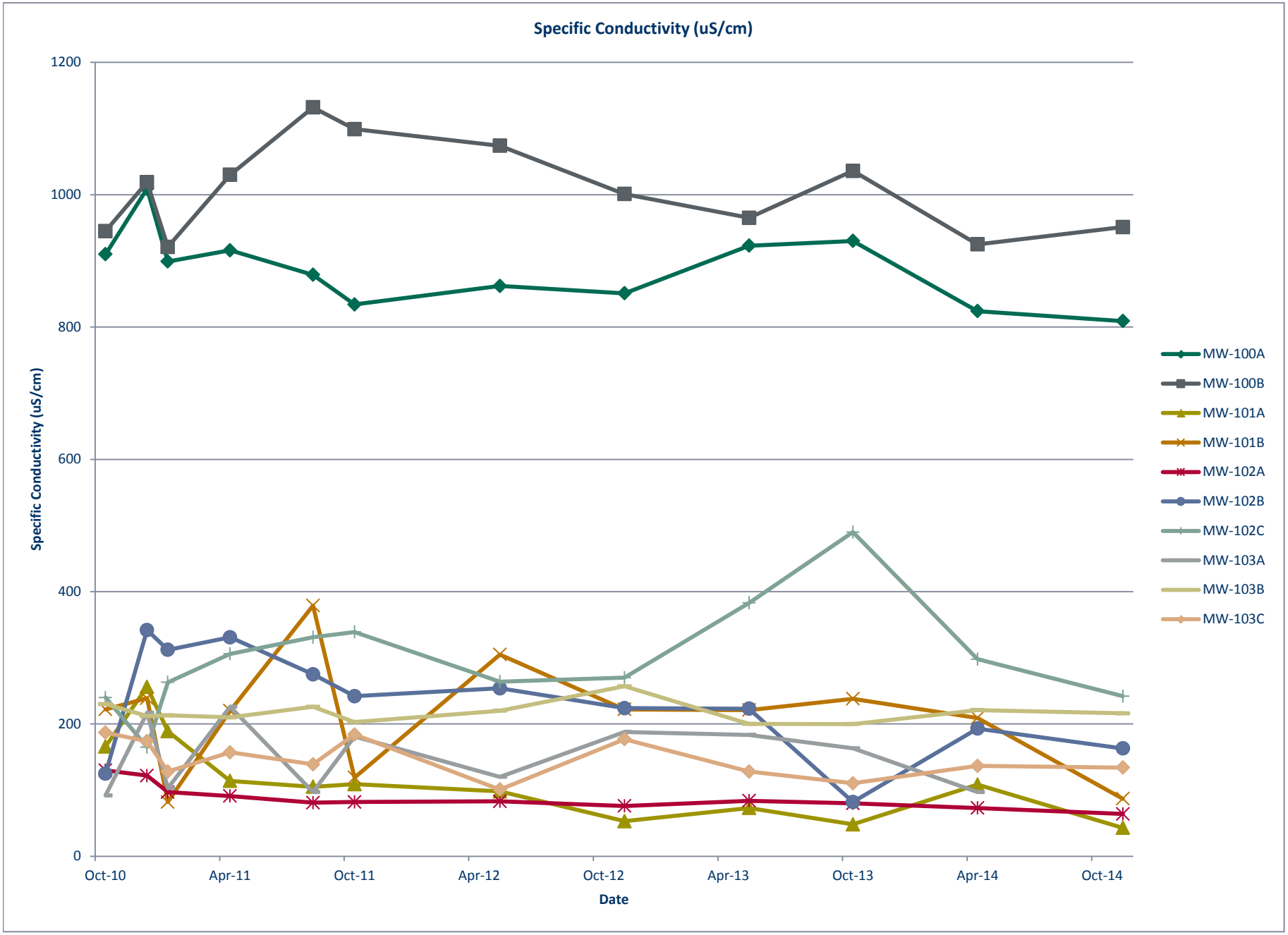
Appendix F

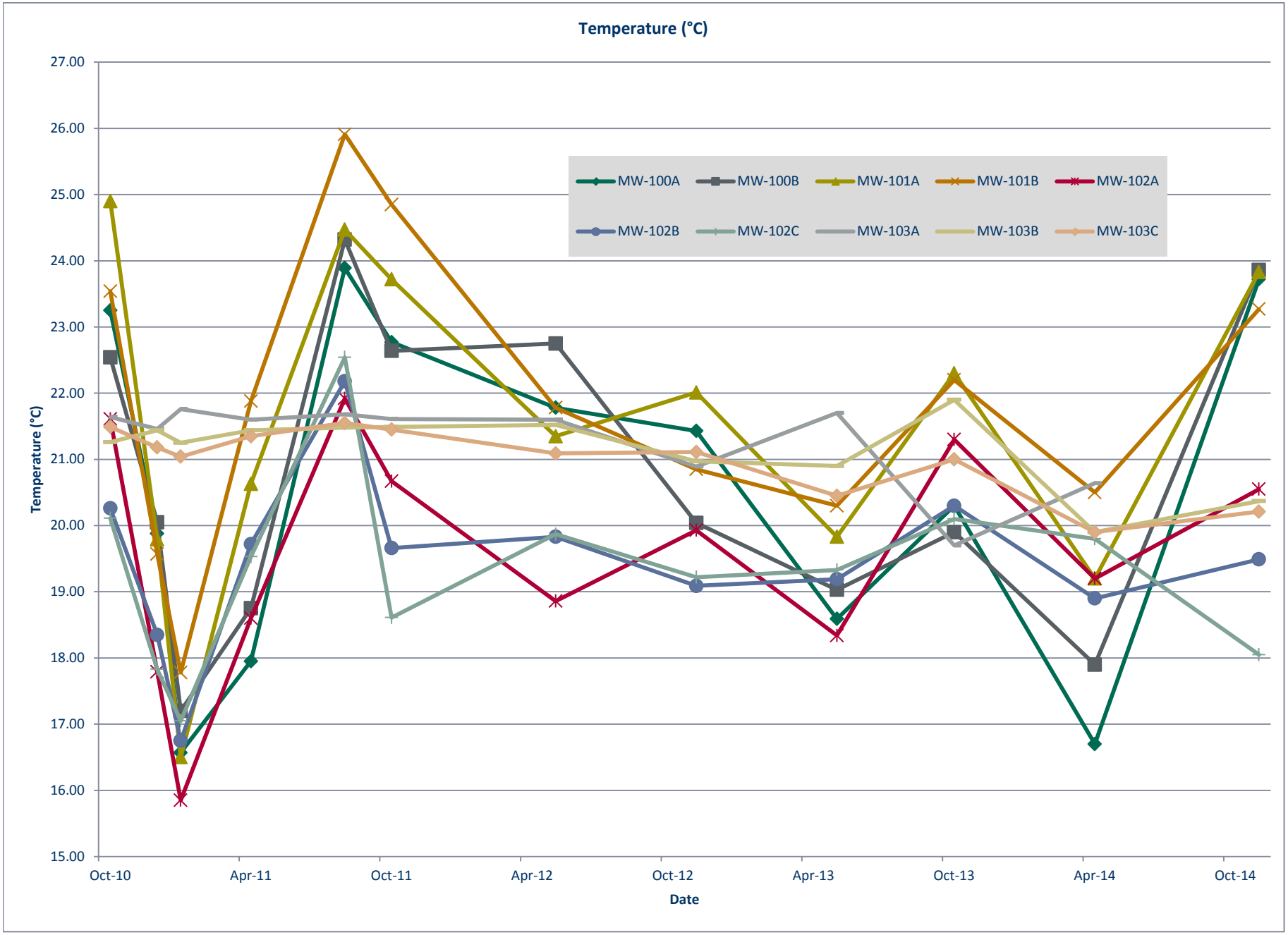
Field Parameter Plots for Selected Wells: October 2010 to November 2014


ORP (mV)
200
150
100
50
0
-50
-100
-150
-200
ORP (mV)
Oct-10
Apr-11
Oct-11
Apr-12
Oct-12
Apr-13
Oct-13
Apr-14
Oct-14
Date
MW-100A
MW-100B
MW-101A
MW-101B
MW-102A
MW-102B
MW-102C
MW-103A
MW-103B
MW-103C


Dissolved Oxygen (mg/L)
2.5
2
1.5
1
0.5
0
Dissolved Oxygen (mg/L)
MW-100A
MW-100B
MW-101A
MW-101B
MW-102A
MW-102B
MW-102C
MW-103A
MW-103B
MW-103C
Oct-10
Apr-11
Oct-11
Apr-12
Oct-12
Apr-13
Oct-13
Apr-14
Oct-14
Date


pH (SU)
9.00
8.00
7.00
6.00
5.00
4.00
3.00
pH (SU)
Oct-10
Apr-11
Oct-11
Apr-12
Oct-12
Apr-13
Oct-13
Apr-14
Oct-14
Date
MW-100A
MW-100B
MW-101A
MW-101B
MW-102A
MW-102B
MW-102C
MW-103A
MW-103B
MW-103C


Specific Conductivity (uS/cm)
1200
1000
800
600
400
200
0
Specific Conductivity (uS/cm)
Oct-10
Apr-11
Oct-11
Apr-12
Oct-12
Apr-13
Oct-13
Apr-14
Oct-14
Date
MW-100A
MW-100B
MW-101A
MW-101B
MW-102A
MW-102B
MW-102C
MW-103A
MW-103B
MW-103C


Temperature (°C)
27.00
26.00
25.00
24.00
23.00
22.00
21.00
20.00
19.00
18.00
17.00
16.00
15.00
Temperature (°C)
MW-100A
MW-100B
MW-101A
MW-101B
MW-102A
MW-102B
MW-102C
MW-103A
MW-103B
MW-103C
Oct-10
Apr-11
Oct-11
Apr-12
Oct-12
Apr-13
Oct-13
Apr-14
Oct-14
Date