



Second Semi-Annual Progress Report
Georgia DOT - Gainesville District Office
2505 Athens Highway
Gainesville, Hall County, Georgia
S&ME Project No. 4468-14-073A

PREPARED FOR:

**Georgia Department of Natural Resources
Environmental Protection Division
Land Protection Branch - Response & Remediation Program
2 Martin Luther King Jr. Dr., SE
Suite 1054 East
Atlanta, Georgia 30334**

PREPARED BY:

**S&ME, Inc.
3380 Town Point Drive, Suite 140
Kennesaw, GA 30144**

December 3, 2018



December 3, 2018

Georgia Department of Natural Resources
Environmental Protection Division
Land Protection Branch - Response & Remediation Program
2 Martin Luther King Jr. Dr., SE
Suite 1054 East
Atlanta, Georgia 30334

Attention: Ms. Antonia Beavers

Reference: **Second Semi-Annual Progress Report**
Georgia DOT - Gainesville District Office
2505 Athens Highway
Gainesville, Hall County, Georgia
HSI No. 10759
S&ME Project No. 4468-14-073A

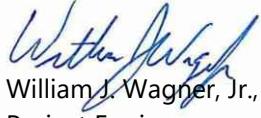
Dear Ms. Beavers:

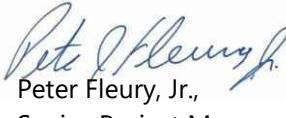
S&ME, Inc. (S&ME) is pleased to provide this Progress Report on behalf of Georgia Department of Transportation (GDOT) Office of Materials and Testing for the above-referenced site. Two paper copies and two (2) electronic copies of this report are provided in Portable Document Format (PDF) for your use.

Should you have any questions or concerns regarding this report, please contact any of the undersigned at (770) 919-0969.

Sincerely,

S&ME, Inc.


William J. Wagner, Jr., P.E.
Project Engineer


Peter Fleury, Jr.,
Senior Project Manager/Senior Reviewer

cc: Mr. Jim Clute, State Facilities Manager, GDOT
Mr. Reginald Murph, Environmental Testing Branch Supervisor, GDOT



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1.0 Introduction

The Georgia Department of Transportation (GDOT) - Gainesville District Office property, hereinafter referred to as the "subject property," is located at 2505 Athens Highway in Gainesville, Hall County, Georgia, and is currently owned and operated by the GDOT. A facility location map and a topographic map detailing the subject property location and surrounding areas are included as Figures 1 and 2, respectively.

The GDOT submitted a Hazardous Site Response Act (HSRA) Release Notification for the subject property in April 2002. Subsequently the Georgia Environmental Protection Division (EPD) assigned the subject property Hazardous Sites Inventory (HSI) No. 10759. The subject property was added to the HSI due to the confirmed release of 1,1,1-trichloroethane (TCA) and other chemical of concerns (COCs) to soil and groundwater at levels exceeding the respective reportable quantity. A site map depicting historical soil borings, groundwater monitoring wells, and injection wells installed during assessment activities is included as Figure 3.

S&ME, on behalf of GDOT, submitted a Voluntary Investigation and Remediation Plan (VIRP), dated November 11, 2015, to the EPD. The EPD responded with comments regarding the VIRP in a correspondence dated February 18, 2016. The First Semi-Annual Progress Report (Progress Report) was submitted to the EPD on January 30, 2017. The EPD responded with comments regarding the Progress Report in a correspondence dated January 12, 2018.

This Progress Report addresses the January 2018 EPD Comment Letter and the limited groundwater monitoring event that was performed in April 2018.

2.0 Response to EPD Comments

The EPD comments outlined in the EPD Comment letter, dated January 12, 2018, followed by the affiliated responses, is provided in Appendix I. A copy of the referenced EPD letter is also included in Appendix I.

Supplemental information is discussed in the following sections of this report. Specifically, information/findings associated with the comprehensive groundwater monitoring event.

3.0 Current Investigation

3.1 Groundwater Sampling

3.1.1 *Analytical Parameters Selected and Rationale*

3.1.1.1 Groundwater Samples

The contaminants detected in groundwater at the subject property are primarily halogenated VOCs. The groundwater samples collected during the most recent investigations conducted at the subject property by S&ME in April 2018 were analyzed for VOCs using EPA Method 8260B.



3.1.1.2 IDW Samples

Analytical results obtained from groundwater samples collected during the recent groundwater sampling event were used for waste characterization.

3.1.2 *Groundwater Depth Measurements*

Depths to groundwater were measured at various times during groundwater sampling activities using an electronic water level gauge. At a minimum, depths to groundwater were measured immediately prior to purging each well to determine minimum purge volumes.

The depth to groundwater data was used in constructing a potentiometric surface map for the respective aquifer (shallow and deep) at the subject property and estimating groundwater flow direction for the same aquifer. The groundwater flow direction at the site, based on the April 2018 gauging data, was generally to the northeast, which is consistent with historical events. Potentiometric Surface Maps for the April 2018 gauging event are included as Figures 4A (Shallow Aquifer) and Figure 4B (Deep Aquifer).

Historical and recent depths to groundwater measurements are summarized on Table 1.

3.1.3 *Groundwater Sampling Methodology and Locations*

3.1.3.1 Equipment and Collection Techniques-Groundwater Monitoring Wells

S&ME attempted to collect groundwater samples from the monitoring wells in general accordance with the low-flow purging method described in the U.S. SESD Athens, Georgia, Groundwater Sampling Operating Procedure (SESDPROC-301-R3, March 2013) guidance document.

During the April 2018 sampling event a Grundfos Redi-Flo 2, submersible, variable performance, pump with converter was used to conduct low-flow purging and sampling in each of the groundwater monitoring wells, if feasible. New, dedicated, Teflon-lined tubing was used to purge/sample groundwater at each monitoring well.

During the sampling and monitoring event, pump surfaces coming into contact with groundwater, were decontaminated prior to use at each monitoring well using the procedures discussed in Section 3.1.7 of this report.

Depth to groundwater was measured at each monitoring well prior to purging for sampling. Initially, the pump intake was placed mid-screen. Depth to water was measured frequently during the purging process. Temperature, specific conductivity, pH and turbidity were measured approximately every 5 to 20 minutes during purging. Instruments used to measure purging parameters were calibrated a minimum of once a day prior to use using standard calibration fluids prepared and supplied by the manufacturer.

When applicable, samples were collected after stabilization of the intrinsic parameters had occurred. Parameter stabilization consisted of three consecutive measurements with:

- Temperature within + 0.5 degree Celsius (oC),
- pH within + 0.1 Standard Units (SUs),



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- Specific conductance [milliseconds per centimeter (ms/cm)] within 10%, and
- Turbidity <10 NTUs (in some cases the turbidity did not reduce to this level).

If depth to groundwater could not be maintained within +0.3 feet or if a steady flow of water from the sampling tubing could not be maintained while maintaining a steady depth to groundwater, the well was either:

- Purged of three to five well volumes of water using the applicable pump and sampled with the pump and tubing once intrinsic parameters had stabilized. Parameters were measured after the removal of each well volume, or
- Pumped or bailed dry (due to slow recharge rates), and allowed to recharge before sampling with the purging pump or teflon bailer.

Groundwater samples were collected either immediately after purging (e.g. during low flow sampling) or by end of the purging day if the well was purged dry or a sufficient volume of water remained in the well for sampling after purging had occurred.

Copies of purging/sampling records and field notes are provided in Appendix II. Deviations from standard operating procedures were noted in purging/sampling records or field notes along with justification for deviations. Purge volumes are summarized on Table 2A. Intrinsic parameter readings collected during purging activities are summarized on Table 2B.

3.1.4 *Filling of Bottles for VOC Analysis*

Care was taken to insure that preservative was not lost due to overfilling of the vials. The vials were filled until a reverse meniscus was created at the top of each vial and the vial caps were placed directly over the vial opening and tightened. Vials were then visually checked for air bubbles by turning upside down and gently tapping against the arm.

3.1.5 *Groundwater Sample Analysis and Handling*

Groundwater samples were handled in general accordance with the U.S. EPA, Region 4, SESD, Athens, Georgia, Field Sampling Quality Control (SESDPROC-301-R4, April 2017) guidance document.

3.1.5.1 Chain-of-Custody Procedures

Samples were labeled with the name of the facility, sample date, sample time, sample location, and sampler's name. At the completion of the sampling event, the samples were transported in laboratory-supplied coolers to ESC in Mount Juliet, Tennessee. Each transfer of custody was documented with an appropriate signature, date, and time on the chain-of-custody.

3.1.5.2 Laboratory Analytical Techniques

Samples collected for VOC analyses were analyzed using EPA Methods 8260B.



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3.1.6 Field Quality Assurance/Quality Control Samples

The following Quality Assurance/Quality Control samples were collected and analyzed as follows.

3.1.6.1 Blind Duplicate Groundwater Samples

Duplicate groundwater samples were collected at approximately 10% of the sampling locations during the April 2018 sampling event.

Blind, duplicate, groundwater samples were collected by collecting twice as much material as normally collected for a sample from any one location/interval. The material was then apportioned into two sets of containers. One of the sets of containers was designated as the "original sample", and the second set of containers was designated as the "duplicate sample". "Duplicate samples" were labeled with a false name and sampling time. Actual sample locations, dates, and times were recorded in the investigation field book(s) for all the samples as well as the false names and sample times for the "duplicate samples". Both the "original samples" and the "duplicate samples" were analyzed by ESC in Mount Juliet, Tennessee. "Duplicate" groundwater samples were analyzed for the same constituents as the "original samples" in general accordance with the SESDPROC-011-R5 guidance document.

The duplicate samples were collected to measure sample handling variability, intra-laboratory precisions and to estimate the variability of a given characteristic or contaminant associated with a population.

3.1.6.2 Equipment Blanks

Equipment blanks were collected and analyzed in general accordance with the SESDPROC-011-R5 guidance document.

3.1.6.3 Temperature Blanks

A container of D.I. water, prepared by ESC, was placed in each sample cooler containing groundwater, or QA/QC samples at the time of sample collection and was submitted with the samples to the laboratory. The temperature blanks were tested for temperature by the laboratory upon sample receipt to determine if samples were maintained at the proper temperature.

QA/QC samples collected during the recent monitoring activities conducted by S&ME, along with analytical methods, are summarized on Table 3. Sample/cooler non-conformances and resolutions for the QA/QC samples are also summarized on Table 3.

3.1.7 Decontamination Procedures

Groundwater samples were collected using an electric submersible pump with Teflon-lined tubing. Reusable groundwater metal or glass sampling equipment was field decontaminated as follows:

- First stage: Scrubbing with a detergent and potable water (or distilled water) mixture;
- Second stage: Rinsing twice with potable water (or distilled water);
- Third stage: Rinsing twice with laboratory-grade, analyte-free, deionized water;



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Decontaminated equipment was then allowed to air dry completely. If the equipment was not to be used immediately after air drying, it was covered with plastic. All plastic (polyethylene) or Teflon® sampling equipment used during the investigation was new, dedicated, single use and factory-sealed.

3.1.8 *IDW Handling*

Purged groundwater and decontamination water were containerized in properly labeled 55-gallon DOT-approved steel drums (a total of 2 drums) and temporarily stored onsite until disposal. Drummed water was transported offsite and disposed of by Aqua-Terra on May 9, 2018. A copy of the Non-Hazardous Waste Manifest is included as Appendix III.

4.0 Groundwater Analytical Results

Groundwater was collected from monitoring wells MW-2D through MW-4D, MW-14D, MW-1, MW-2, MW-4, MW-7, MW-8, MW-9R, and MW-13 in April 2018. Monitoring wells MW-6 and MW-12 were not sampled because they were dry and/or an insufficient amount of water was available to collect a sample. Monitoring wells MW-1D, MW-10D, MW-5, MW-10, and MW-11 were not sampled due to a reduced sampling plan. The laboratory analytical reports are provided in Appendix IV.

Sample locations, laboratory used, requested analyses, and analytical results for the groundwater samples are summarized on Table 4; which also summarize historical groundwater analytical results. Current groundwater analytical results in relation to applicable RRSs are summarized in Table 5. Groundwater analytical results (VOCs) from the April 2018 sampling event are illustrated on Figure 5A (Shallow Aquifer) and Figure 5B (Deep Aquifer).

The VOCs TCE, PCE, 1,4-Dioxane, 1,1,2-TCA, 1,1-DCE, 1,1- DCA, and 1,1,1-TCA were detected in the groundwater samples collected during the April 2018 sampling event. 1,1-DCE was detected in monitoring well MW-9R above its Type 1 RRS; therefore, S&ME calculated a Type 2 RRS. S&ME Type 2 RRS calculations are included in Appendix V.

The following monitoring wells reported VOC constituents above the site-specific RRSs:

- MW-13: 1,4 Dioxane (0.0877 mg/L) - This exceeds the Type 3 RRS

5.0 Site Specific Exposure Pathways

Site specific exposure pathways are determined to be complete for soil based on soils being delineated to Type 1 RRSs.

Vapor intrusion risk was evaluated using EPA's Vapor Intrusion Screening Level (VISL) and no VOCs screened resulting in target cancer risk (TCR) levels greater than 1E-06 and/or the target hazard quotient (THQ) risk of 1.0; therefore, exposure pathway for vapor intrusion is determined to be complete.

Exposure pathways are determined complete for shallow and deep groundwater aquifers to the east based on monitoring wells MW-8 and MW-14D being delineated to below Type 1 and Type 3 RRSs.



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The exposure pathway is determined complete for shallow groundwater aquifer to the north based on monitoring well MW-9R being delineated to below Type 1 or Type 2 RRSs.

6.0 Point of Exposures

Monitoring wells MW-8 and MW-14D are designated as point of demonstration (POD) wells for the shallow and deep aquifers, respectively. The corresponding point of exposures (POEs) are considered to be the eastern property boundary. The POEs are depicted on Figure 2.

7.0 Conclusions

Groundwater at the site is delineated to either Type 1 or Type RRSs.

Compared to the previous groundwater monitoring event (October 2016), VOC concentrations in groundwater samples generally showed decreasing trends, with only 1,4 Dioxane (MW-13) exceeding RRSs.

Additionally, potentiometric data indicates the water table has dropped an average of 2.28 feet since the October 2016 event except in monitoring well MW-14D (rose an average of 0.38 feet).

8.0 Recommendations

Based on current data and previous EPD comments, S&ME recommends an additional limited groundwater sampling event be conducted within six months of the date of this report. The recommended groundwater sampling event will be limited to include monitoring wells MW-1, MW-2, MW-4, MW-6 through MW-8, MW-9R, MW-12, MW-13, MW-15 (if applicable), MW-2D, MW-4D, and MW-14D.

The milestone schedule is included in Appendix VI.

9.0 Groundwater Scientist and Certification Statement

We certify that we are qualified groundwater scientists who have received baccalaureate or post-graduate degrees in the natural sciences or engineering, and have sufficient training and experience in groundwater hydrology and related fields, as demonstrated by state registration and completion of accredited university courses, that enable us to make sound professional judgments regarding groundwater monitoring and contaminant fate and transport.

We further certify that this report (Progress Report for Georgia Department of Transportation, HSI Site No. 10759, 2505 Athens Highway, Gainesville, Hall County, Georgia) was prepared by us and appropriate qualified professionals working under our direction in accordance with a system designed to ensure that qualified personnel properly evaluated the information submitted. Based on our inquiry of the persons who prepared this report, the information submitted is, to the best of our knowledge and belief, true, accurate, and complete. We are aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

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Gainesville, Hall County, Georgia
S&ME Project No. 4468-14-073A





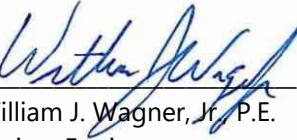
William J. Wagner, Jr., P.E.
State of Georgia Professional Engineer No. 031309

5/18/18

Date

10.0 Electronic Report Copy Certification

I certify that the enclosed report (Second Semi-Annual Progress Report for Georgia Department of Transportation, HSI Site No. 10759, 2505 Athens Highway, Gainesville, Hall County, Georgia) and associated data files, provided on two (2) compact discs (CDs) in Portable Document Format (PDF), are complete and identical to the paper copy of the report submitted concurrently with these CDs and are virus free.

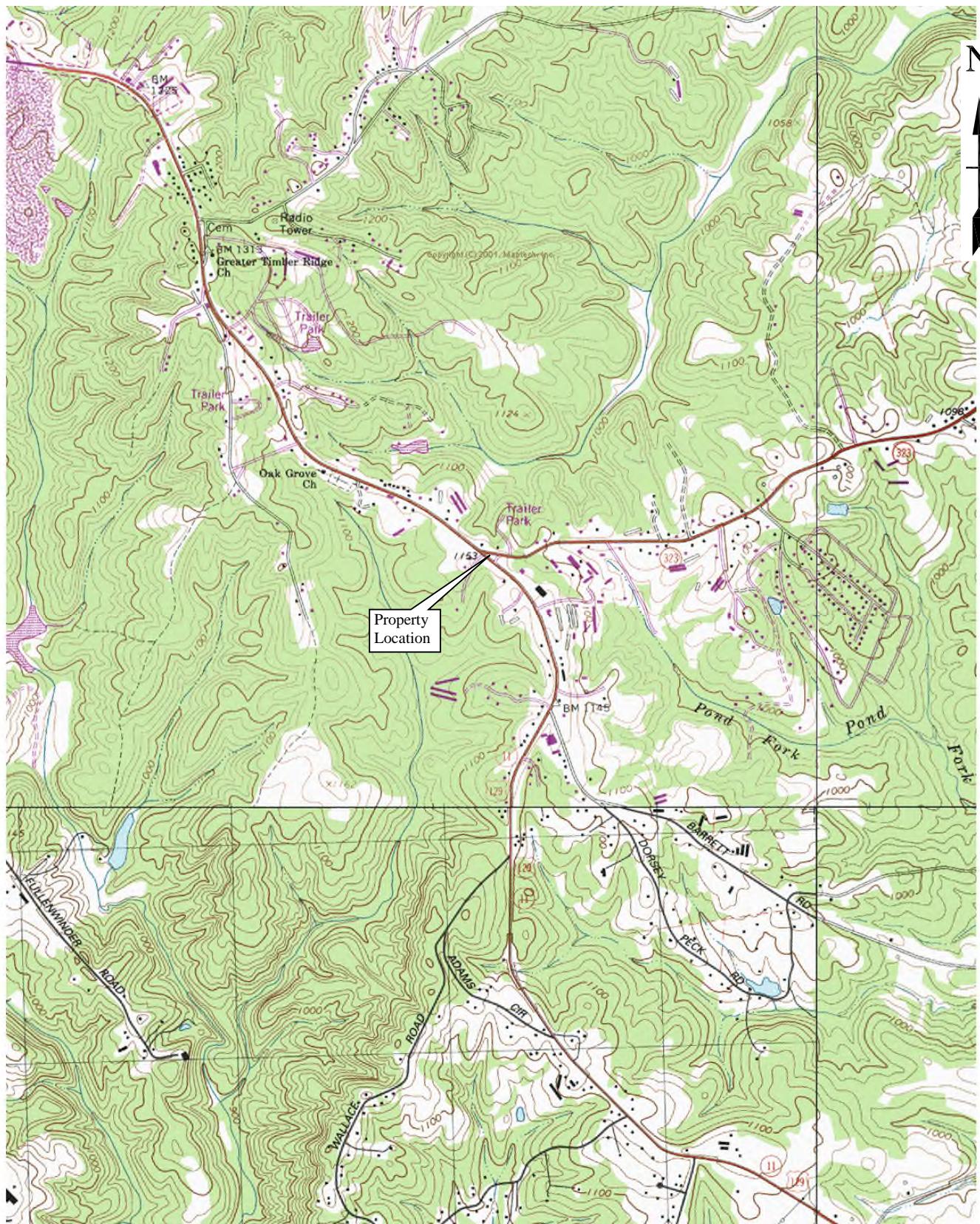


William J. Wagner, Jr., P.E.
Project Engineer

5/18/18

Date

Figures



Source: 1964 Gainesville, GA Quadrangle Map, Revised 1985

SCALE: 1:24000

CHECKED BY: PF

DRAWN BY: BJW

DATE: 4-11-18



USGS Topographic Map

Project: Georgia DOT-District Office

Location: 2505 Athens Hwy, Gainesville, Hall County, Georgia

Number: 4468-14-073A

Figure No.

1



SOURCE: GOOGLE EARTH IMAGE, 10/22/2014

LEGEND

- PROPERTY BOUNDARY
- POE POINT OF EXPOSURE LIMIT

SCALE
0 350 FT.

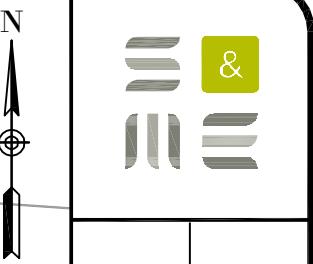


AERIAL MAP



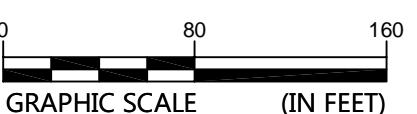
GEORGIA DOT - DISTRICT OFFICE
2505 ATHENS HIGHWAY (HWY 129)
GAINESVILLE, HALL COUNTY, GEORGIA

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AS SHOWN	2
DATE:	
4/17/18	
PROJECT NUMBER	
4468-14-037A	



SITE MAP

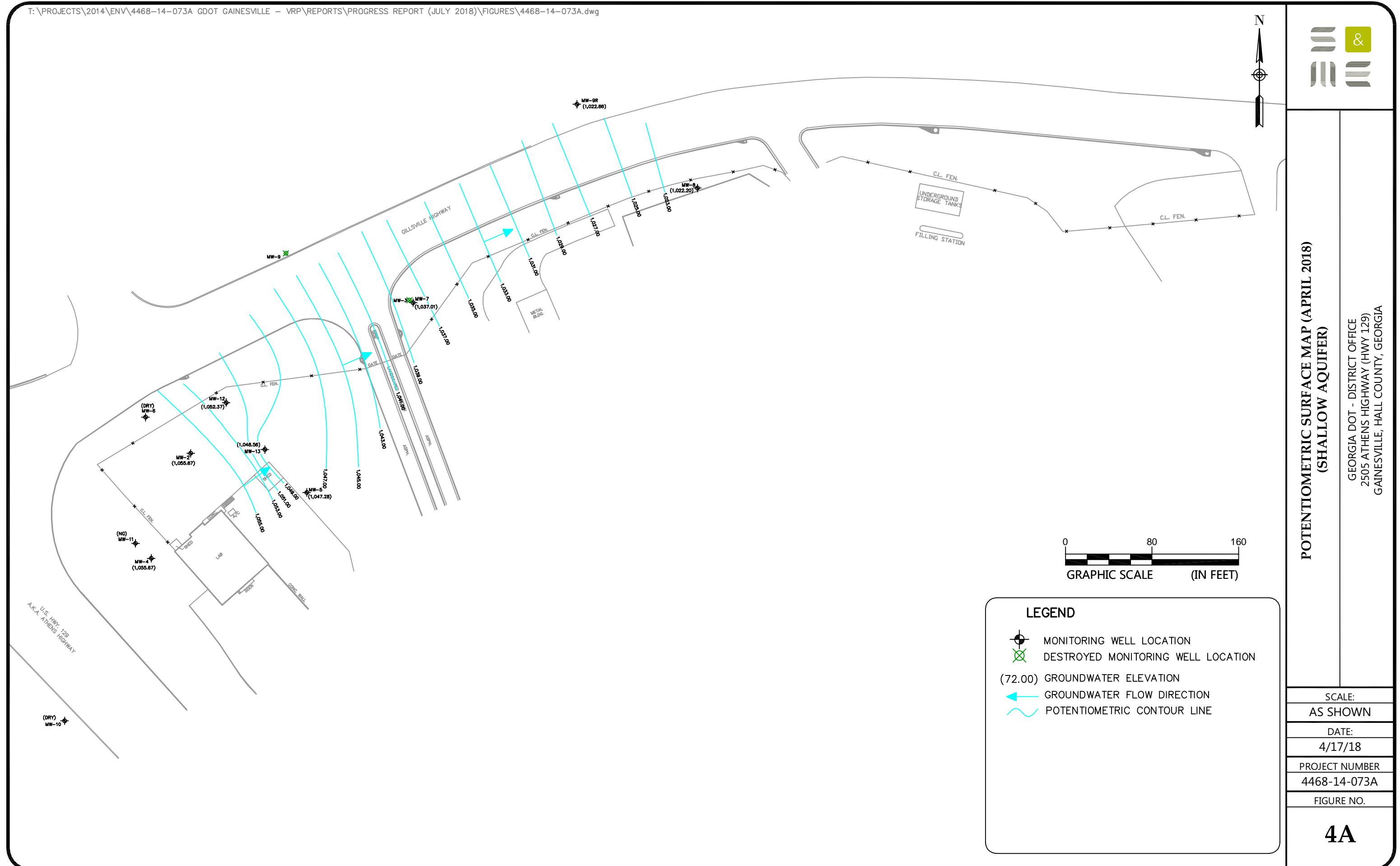
GEORGIA DOT - DISTRICT OFFICE
2505 ATHENS HIGHWAY (HWY 129)
GAINESVILLE, HALL COUNTY, GEORGIA

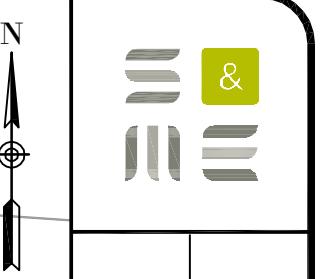


LEGEND

- MONITORING WELL LOCATION
- ☒ DESTROYED MONITORING WELL LOCATION
- DEEP MONITORING WELL LOCATION
- ✖ INJECTION WELL
- GEOPROBE BORING LOCATION
- SOIL BORING LOCATION

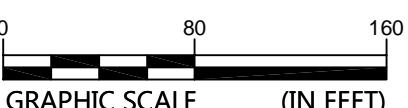
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4/17/18
PROJECT NUMBER
4468-14-073A
FIGURE NO.





**POTENIOMETRIC SURFACE MAP (APRIL 2018)
(DEEP AQUIFER)**

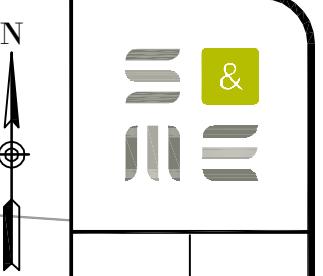
GEORGIA DOT - DISTRICT OFFICE
2505 ATHENS HIGHWAY (HWY 129)
GAINESVILLE, HALL COUNTY, GEORGIA



LEGEND

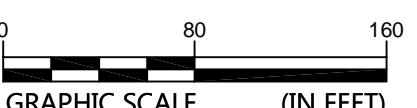
- DEEP MONITORING WELL LOCATION
- (72.00) GROUNDWATER ELEVATION
- ← GROUNDWATER FLOW DIRECTION
- ~~~~~ POTENIOMETRIC CONTOUR LINE

4B



GEORGIA DOT - DISTRICT OFFICE
2505 ATHENS HIGHWAY (HWY 129)
GAINESVILLE, HALL COUNTY, GEORGIA

GROUNDWATER QUALITY MAP (APRIL 2018) (SHALLOW AQUIFER)



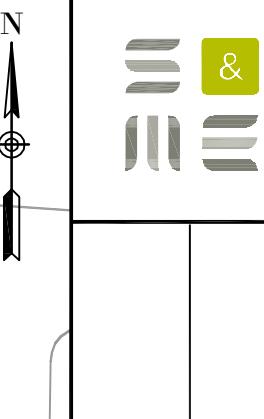
LEGEND

- MONITORING WELL LOCATION
- PCE TETRACHLOROETHENE (mg/L)
- TCE TRICHLOROETHENE (mg/L)
- DCE 1,1-DICHLOROETHENE (mg/L)
- CIS CIS-1,2-DICHLOROETHENE (mg/L)
- C 1,1,1 TRICHLOROETHANE (mg/L)
- D 1,1,2-TRICHLOROETHANE (mg/L)
- E 1,1-DICHLOROETHANE (mg/L)
- Dx 1,4-DIOXANE (mg/L)
- NEW NOT ENOUGH WATER
- <RL BELOW REPORTING LIMITS
- NS NOT SAMPLED

5A

**GROUNDWATER QUALITY MAP (APRIL 2018)
(DEEP AQUIFER)**

GEORGIA DOT - DISTRICT OFFICE
2505 ATHENS HIGHWAY (HWY 129)
GAINESVILLE, HALL COUNTY, GEORGIA

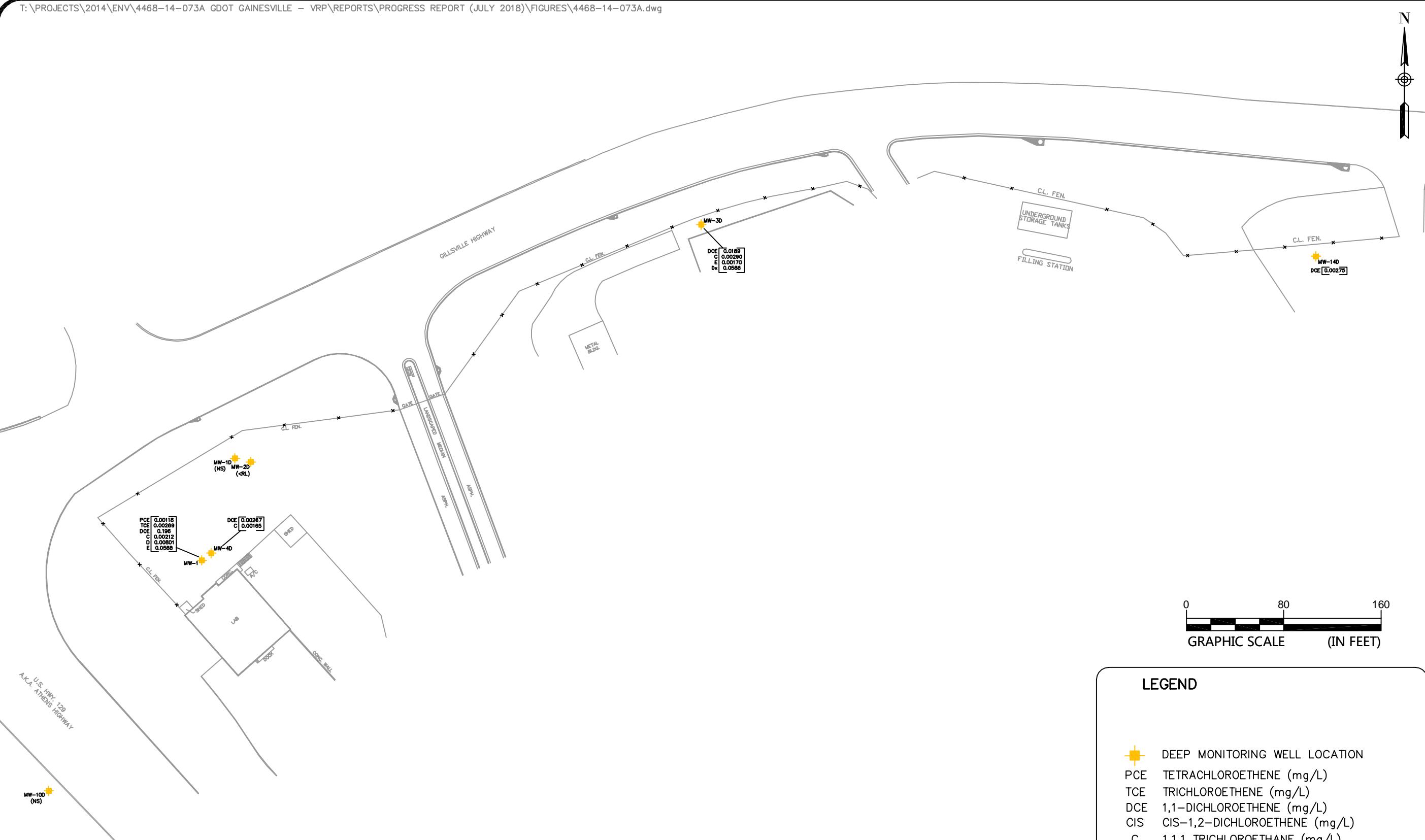


0 80 160
GRAPHIC SCALE (IN FEET)

LEGEND

- + DEEP MONITORING WELL LOCATION
- PCE TETRACHLOROETHENE (mg/L)
- TCE TRICHLOROETHENE (mg/L)
- DCE 1,1-DICHLOROETHENE (mg/L)
- CIS CIS-1,2-DICHLOROETHENE (mg/L)
- C 1,1,1 TRICHLOROETHANE (mg/L)
- D 1,1,2-TRICHLOROETHANE (mg/L)
- E 1,1-DICHLOROETHANE (mg/L)
- Dx 1,4-DIOXANE (mg/L)
- <RL BELOW REPORTING LIMITS
- NS NOT SAMPLED

5B



Tables

Table 1
Historical Groundwater Elevations

Georgia Department of Transportation-District Office
2505 Athens Highway (HWY 129)
Gainesville, Hall County, Georgia
HSI Site No. 10759

Monitoring Well ID	Date	TOC Elevation (ft.)	TOC Feet in Relation to Surface ⁽¹⁾	Surface Elevation (ft.)	Depth to Water (ft BTOC)	Depth to Water (ft BGS)	Screen Elevations (ft MSL)		Groundwater Elevation (ft.) ⁽³⁾
							Top	Bottom	
MW-1D ⁽²⁾	8/17/2006	1,087.80	-0.20	1,088.00	34.59	34.79	1,031.00	1,021.00	1,053.21
	1/20/2009				42.20	42.40			1,045.60
	1/18/2010				36.97	37.17			1,050.83
	4/12/2011				36.18	36.38			1,051.62
	8/2/2011				37.12	37.32			1,050.68
	1/23/2012				39.02	39.22			1,048.78
	10/27/2014				35.60	35.80			1,052.20
	10/24/2016				35.13	35.33			1,052.67
	4/2/2018				40.00	40.20			1,047.80
MW-2D ⁽²⁾	8/17/2006	1,086.08	-0.32	1,086.40	34.11	34.43	1,016.40	1,006.40	1,051.97
	1/20/2009				37.50	37.82			1,048.58
	1/18/2010				32.47	32.79			1,053.61
	4/12/2011				32.66	32.98			1,053.42
	8/2/2011				32.83	33.15			1,053.25
	1/23/2012				34.21	34.53			1,051.87
	10/27/2014				31.87	32.19			1,054.21
	10/24/2016				30.60	30.92			1,055.48
	4/2/2018				34.34	34.66			1,051.74
MW-3D ⁽²⁾	8/17/2006	1,050.13	2.83	1,047.30	46.48	43.65	1,006.30	996.30	1,003.65
	1/20/2009				30.98	28.15			1,019.15
	1/18/2010				23.02	20.19			1,027.11
	4/12/2011				24.55	21.72			1,025.58
	8/2/2011				25.94	23.11			1,024.19
	1/23/2012				29.00	26.17			1,021.13
	10/27/2014				21.43	18.60			1,028.70
	10/24/2016				25.21	22.38			1,024.92
	4/2/2018				26.81	23.98			1,023.32
MW-4D ⁽²⁾	1/18/2010	1,096.45	-0.10	1,096.55	39.69	39.79	1,036.55	1,026.55	1,056.76
	4/12/2011				40.93	41.03			1,055.52
	8/2/2011				41.25	41.35			1,055.20
	1/23/2012				42.76	42.86			1,053.69
	10/27/2014				39.57	39.67			1,056.88
	10/24/2016				39.78	39.88			1,056.67
	4/2/2018				42.95	43.05			1,053.50
	8/17/2006				31.48	31.89			1,065.41
	1/20/2009				39.79	40.20			1,057.10
MW-10D ⁽⁴⁾	1/18/2010	1,096.89	-0.41	1,097.30	34.12	34.53	1,057.30	1,047.30	1,062.77
	4/12/2011				36.25	36.66			1,060.64
	8/2/2011				36.38	36.79			1,060.51
	1/23/2012				37.36	37.77			1,059.53
	10/27/2014				35.10	35.51			1,061.79
	10/24/2016				34.96	35.37			1,061.93
	4/2/2018				36.91	37.32			1,059.98
MW-14D	10/24/2016 4/2/2018	1,017.78	-0.46	1,018.24	7.10 6.72	7.56 7.18	952.54	942.54	1,010.68 1,011.06
MW-1	9/26/2001	1,100.99	3.39	1,097.60	46.20	42.81	1,057.60	1,037.60	1,054.79
	8/17/2006				44.11	40.72			1,056.88
	1/20/2009				49.69	46.30			1,051.30
	1/18/2010				44.24	40.85			1,056.75
	1/19/2011				44.73	41.34			1,056.26
	4/12/2011				45.72	42.33			1,055.27
	8/2/2011				45.90	42.51			1,055.09
	1/23/2012				47.20	43.81			1,053.79
	10/27/2014				40.68	37.29			1,060.31
	10/24/2016				44.52	41.13			1,056.47
	4/2/2018				47.77	44.38			1,053.22

Table 1
Historical Groundwater Elevations

Georgia Department of Transportation-District Office
2505 Athens Highway (HWY 129)
Gainesville, Hall County, Georgia
HSI Site No. 10759

Monitoring Well ID	Date	TOC Elevation (ft.)	TOC Feet in Relation to Surface ⁽¹⁾	Surface Elevation (ft.)	Depth to Water (ft BTOS)	Depth to Water (ft BGS)	Screen Elevations (ft MSL)		Groundwater Elevation (ft.) ⁽³⁾		
							Top	Bottom			
MW-2	9/26/2001	1,094.94	2.84	1,092.10	42.05	39.21	1,042.10	1,032.10	1,052.89		
	8/17/2006				39.73	36.89			1,055.21		
	1/20/2009				45.45	42.61			1,049.49		
	1/18/2010				39.73	36.89			1,055.21		
	1/19/2011				39.88	37.04			1,055.06		
	4/12/2011				40.94	38.10			1,054.00		
	8/2/2011				41.15	38.31			1,053.79		
	1/23/2012				42.71	39.87			1,052.23		
	10/27/2014				30.05	27.21			1,064.89		
	10/24/2016				39.70	36.86			1,055.24		
	4/2/2018				43.60	40.76			1,051.34		
MW-3	9/26/2001	UNK			36.68	NA	43.00	53.00	NA		
	8/17/2006				ABANDONED						
MW-4	8/17/2006	1,099.32	-0.28	1,099.60	40.43	40.71	1,061.60	1,051.60	1,058.89		
	1/20/2009				46.09	46.37			1,053.23		
	1/18/2010				40.36	40.64			1,058.96		
	1/19/2011				41.24	41.52			1,058.08		
	4/12/2011				42.03	42.31			1,057.29		
	8/2/2011				42.19	42.47			1,057.13		
	1/23/2012				43.54	43.82			1,055.78		
	10/27/2014				40.45	40.73			1,058.87		
	10/24/2016				40.80	41.08			1,058.52		
	4/2/2018				43.65	43.93			1,055.67		
MW-5	8/17/2006	1,087.88	-0.12	1,088.00	40.52	40.64	1,057.50	1,047.50	1,047.36		
	1/20/2009				40.12	40.24			1,047.76		
	1/18/2010				36.55	36.67			1,051.33		
	1/19/2011				40.11	40.23			1,047.77		
	4/12/2011				40.25	40.37			1,047.63		
	8/2/2011				DRY	42.19			DRY		
	1/23/2012					40.18			1,047.70		
	10/27/2014					40.13			1,047.75		
	10/24/2016					40.14			1,047.74		
	4/2/2018					40.60			1,047.28		
	8/17/2006					42.76			1,052.64		
MW-6	1/20/2009	1,095.40	-0.20	1,095.60	42.76	42.96	1,057.60	1,047.60	DRY		
	1/18/2010				45.16	45.36			1,050.24		
	1/19/2011				43.37	43.57			1,052.03		
	4/12/2011				44.38	44.58			1,051.02		
	8/2/2011				45.04	45.24			1,050.36		
	1/23/2012				46.68	46.88			1,048.72		
	10/27/2014				42.76	42.96			1,052.64		
	10/24/2016				42.93	43.13			1,052.47		
	4/2/2018				DRY				DRY		
	8/17/2006				42.76	1,052.64					
	1/20/2009				45.16	DRY					
	1/18/2010				43.37	1,050.24					
	1/19/2011				44.38	1,052.03					
	4/12/2011				45.04	1,051.02					
MW-7	8/2/2011	1,072.75	-0.15	1,072.90	34.77	34.92	1,026.90	1,016.90	1,037.98		
	1/23/2012				37.79	37.94			1,034.96		
	10/27/2014				33.06	33.21			1,039.69		
	10/24/2016				35.10	35.25			1,037.65		
	4/2/2018				34.71	34.86			1,038.04		
	8/2/2011				35.78	35.93			1,036.97		
	1/23/2012				34.25	34.40			1,038.50		
	10/27/2014				34.54	34.69			1,038.21		
	10/24/2016				35.74	35.89			1,037.01		
	4/2/2018				DRY				DRY		
	8/17/2006				20.07	1,023.59					
	1/20/2009				25.56	1,018.10					
	1/18/2010				18.03	1,025.63					
	4/12/2011				18.95	1,024.71					
	8/2/2011				20.57	1,023.09					
MW-8	1/23/2012	1,043.66	-0.14	1,043.80	23.19	23.33	1,018.80	1,008.80	1,020.47		
	10/27/2014				19.18	19.32			1,024.48		
	10/24/2016				19.91	20.05			1,023.75		
	4/2/2018				21.46	21.60			1,022.20		

Table 1
Historical Groundwater Elevations

Georgia Department of Transportation-District Office
2505 Athens Highway (HWY 129)
Gainesville, Hall County, Georgia
HSI Site No. 10759

Monitoring Well ID	Date	TOC Elevation (ft.)	TOC Feet in Relation to Surface ⁽¹⁾	Surface Elevation (ft.)	Depth to Water (ft BTOC)	Depth to Water (ft BGS)	Screen Elevations (ft MSL)		Groundwater Elevation (ft.) ⁽³⁾
							Top	Bottom	
MW-9	8/17/2006 1/20/2009	1,081.91	-0.19	1,082.10	17.95	18.14	1,037.10	1,027.10	1,063.96
MW-9R	10/24/2016 4/2/2018	1,054.05	-0.21	1,054.26	29.93 31.19	30.14 31.40	1,025.48	1,015.48	1,024.12 1,022.86
MW-10	8/17/2006 1/20/2009 1/18/2010 4/12/2011 8/2/2011 1/23/2012 10/27/2014 10/24/2016 4/2/2018	1,096.92	-0.18	1,097.10	DRY 33.00 31.16 32.90 32.92 33.19 32.80	NA 33.18 31.34 33.08 33.10	1,071.10	1,063.10	NA 1,063.92 1,065.76 1,064.02 1,064.00 1,063.73 1,064.12 DRY DRY
MW-11	1/18/2010 1/19/2011 4/12/2011 8/2/2011 1/23/2012 10/27/2014 10/24/2016 4/2/2018	1,098.79	-0.61	1,099.40	40.93 41.25 41.56 41.82 43.39 40.39 40.80	41.54 41.86 42.17 42.43 44.00 41.00 41.41	1,063.40	1,048.40	1,057.86 1,057.54 1,057.23 1,056.97 1,055.40 1,058.40 1,057.99 NG
MW-12	1/18/2010 1/19/2011 4/12/2011 8/2/2011 1/23/2012 10/27/2014 10/24/2016 4/2/2018	1,086.30	-0.49	1,086.79	33.56 33.52 DRY DRY 33.86 33.55 33.56 33.93	34.05 34.01 34.35 34.04 34.05 34.42	1,066.79	1,051.79	1,052.74 1,052.78 DRY DRY 1,052.44 1,052.75 1,052.74 1,052.37
MW-13	1/18/2010 1/19/2011 4/12/2011 8/2/2011 1/23/2012 10/27/2014 10/24/2016 4/2/2018	1,087.15	-0.45	1,087.60	34.37 37.11 37.61 37.24 39.02 36.34 36.83 38.59	34.82 37.56 38.06 37.69 39.47 36.79 37.28 39.04	1,062.60	1,047.60	1,052.78 1,050.04 1,049.54 1,049.91 1,048.13 1,050.81 1,050.32 1,048.56

Notes:

TOC = Top of Well Casing

BGS = Below Ground Surface

NG = Not Gauged

(1) = Negative number indicates a flush-mounted well completion. Positive number indicates an aboveground well completion. Elevations surveyed relative to mean sea level by Barton Surveying, Inc. of Woodstock, GA.

(2) = Well completed in bedrock as an ASTM Type III deep aquifer well.

(3) = Elevations relative to TOC Elevation.

(4) = Well completed in bedrock as an ASTM Type II shallow aquifer well.

Table 2A
Recent Groundwater Monitoring Well Sampling Purge Volumes
Georgia Department of Transportation-District Office
2505 Athens Highway (HWY 129)
Gainesville, Hall County, Georgia
HSI Site No. 10759

Monitoring Well ID	Date Purged	Well Diameter (inches)	Depth to Groundwater (ft BTOC)	Well Total Depth (ft BTOC)	Height of Water Column (ft)	Water Volume per foot of height (gallons)	Water Volume in Well (gallons)	Three Well Volumes of Water (gallons)	Actual Purged Volume (gallons)
MW-1D ⁽²⁾	NA	2			NS				⁽⁸⁾
MW-2D ⁽²⁾	4/3/2018	2	30.60	75.05	44.45	0.163	7.2	21.7	8.0 ⁽⁶⁾
MW-3D ⁽²⁾	4/4/2018	2	25.21	52.63	27.42	0.163	4.5	13.4	2.5 ⁽⁶⁾
MW-4D ⁽²⁾	4/3/2018	2	39.78	69.81	30.03	0.163	4.9	14.7	1.0 ⁽⁶⁾
MW-10D ⁽⁴⁾	NA	2			NS				⁽⁸⁾
MW-14D ⁽²⁾	4/4/2018	2	7.10	75.24	68.14	0.163	11.1	33.3	11.5 ⁽⁶⁾
MW-1 ⁽⁴⁾	4/2/2018	2	47.77	63.38	15.61	0.163	2.5	7.6	7.7 ⁽⁶⁾
MW-2	4/2/2018	2	43.60	51.69	8.09	0.163	1.3	4.0	5.0 ⁽⁶⁾
MW-4	4/2/2018	2	43.65	47.44	3.79	0.163	0.6	1.9	0.5 ⁽³⁾
MW-5	NA	2			NS				⁽⁸⁾
MW-6	NA	2			NS				⁽⁵⁾
MW-7	4/4/2018	2	35.74	53.41	17.67	0.163	2.9	8.6	9.0 ⁽⁶⁾
MW-8	4/3/2018	2	21.46	33.42	11.96	0.163	1.9	5.8	9.5 ⁽⁷⁾
MW-9R	4/3/2018	2	31.19	38.36	7.17	0.163	1.2	3.5	4.0 ⁽⁶⁾
MW-10	NA	2			NS				⁽⁸⁾
MW-11	NA	2			NS				⁽⁸⁾
MW-12	NA	2			NS				⁽⁵⁾
MW-13	4/2/2018	2	38.59	39.55	0.96	0.163	0.2	0.5	NA ⁽¹⁾

Notes:

(1) = Purged and sampled using a dedicated, disposable Teflon® bailer, well went dry before three well volumes removed.

(2) = Monitoring well completed in bedrock as a ASTM Type III deep aquifer well.

(3) = Groundwater sample was collected following the first set of parameter readings due to the well going dry.

(4) = Monitoring well completed in bedrock as an ASTM Type II shallow aquifer well.

(5) = Not enough water, considered dry.

(6) = Sample taken based on three consecutive parameter readings

(7) = Sample taken after purging 5 well volumes (three consecutive parameter readings; however, turbidity still greater than 10)

(8) = Reduced Sampling Plan

ft BTOC = Feet below top of casing.

NS = Not Sampled

NA = Not Applicable

Table 2B
Intrinsic Groundwater Sampling Parameters
Georgia Department of Transportation-District Office
2505 Athens Highway (HWY 129)
Gainesville, Hall County, Georgia
HSI Site No. 10759

Monitoring Well ID	Well Diameter (inches)	Date Sampled	Equipment			Calculated Well Volume - in Field (gal)	Time	Purged Volume (gallons)	Readings							Comments
			Purging	Readings	Sample Collection				Depth to Water (ft BTOC)	pH (SUs)	Temperature (°C)	Conductivity (ms/cm)	Turbidity (NTUs)	ORP (mV)	DO (mg/L)	
MW-1D	2	4/2/2018	NA												Not Sampled - Reduced Sampling Plan	
MW-2D	2	4/3/2018	S&ME: Grundfos Redi-Flo 2 Pump: A1A106003 with Polyethylene Bladder/Teflon® -lined tubing	1. S&ME: Horiba U52 Water Quality Meter, #: U500 2. S&ME: Heron Water Level Meter, #: H01L	S&ME: Grundfos Redi-Flo 2 Pump: A1A106003 with Polyethylene Bladder/Teflon® -lined tubing	6.6	812	Initial	34.34	NM	NM	NM	NM	NM	NM	Depth to groundwater prior to installation of purging/sampling pump.
							1200	19.0	60.00	6.35	22.63	0.277	18.2	148	2.86	Parameters were collected prior to collection of groundwater to be submitted for analysis.
MW-3D	2	4/4/2018	Pine Equipment Rental: Grundfos Redi-Flo 2 Pump: 10754 with Polyethylene Bladder/Teflon® -lined tubing	1. Pine Rental: Horiba U52 Water Quality Meter, #: 17140 2. Pine Rental: Solinst Water Level Meter, #: 037356	Pine Equipment Rental: Grundfos Redi-Flo 2 Pump: 10754 with Polyethylene Bladder/Teflon® -lined tubing	4.1	825	Initial	26.81	NM	NM	NM	NM	NM	NM	Depth to groundwater prior to installation of purging/sampling pump.
							925	13.0	36.91	6.97	24.61	0.282	3.3	86	2.42	Parameters were collected prior to collection of groundwater to be submitted for analysis.
MW-4D	2	4/3/2018	Pine Equipment Rental: Grundfos Redi-Flo 2 Pump: 10754 with Polyethylene Bladder/Teflon® -lined tubing	1. Pine Rental: Horiba U52 Water Quality Meter, #: 17140 2. Pine Rental: Solinst Water Level Meter, #: 037356	Pine Equipment Rental: Grundfos Redi-Flo 2 Pump: 10754 with Polyethylene Bladder/Teflon® -lined tubing	4.3	835	Initial	42.95	NM	NM	NM	NM	NM	NM	Depth to groundwater prior to installation of purging/sampling pump.
							1010	3.5	56.71	8.09	24.41	2.49	24.4	-91	3.77	Parameters were collected prior to collection of groundwater to be submitted for analysis.
MW-10D	2	4/2/2018	NA												Not Sampled - Reduced Sampling Plan	
MW-14D	2	4/4/2018	S&ME: Grundfos Redi-Flo 2 Pump: A1A106003 with Polyethylene Bladder/Teflon® -lined tubing	1. S&ME: Horiba U52 Water Quality Meter, #: U500 2. S&ME: Heron Water Level Meter, #: H01L	S&ME: Grundfos Redi-Flo 2 Pump: A1A106003 with Polyethylene Bladder/Teflon® -lined tubing	10.9	830	Initial	6.72	NM	NM	NM	NM	NM	NM	Depth to groundwater prior to installation of purging/sampling pump.
							1022	33.0	7.12	5.35	18.81	0.134	0.0	269	1.58	Parameters were collected prior to collection of groundwater to be submitted for analysis.
MW-1	2	4/2/2018	Pine Equipment Rental: Grundfos Redi-Flo 2 Pump: 10754 with Polyethylene Bladder/Teflon® -lined tubing	1. Pine Rental: Horiba U52 Water Quality Meter, #: 17140 2. Pine Rental: Solinst Water Level Meter, #: 037356	Pine Equipment Rental: Grundfos Redi-Flo 2 Pump: 10754 with Polyethylene Bladder/Teflon® -lined tubing	2.5	1244	Initial	47.77	NM	NM	NM	NM	NM	NM	Depth to groundwater prior to installation of purging/sampling pump.
							1400	6.8	53.99	7.07	26.69	0.341	4.4	110	3.53	Parameters were collected prior to collection of groundwater to be submitted for analysis.
MW-2	2	4/2/2018	S&ME: Grundfos Redi-Flo 2 Pump: A1A106003 with Polyethylene Bladder/Teflon® -lined tubing	1. S&ME: Horiba U52 Water Quality Meter, #: U500 2. S&ME: Heron Water Level Meter, #: H01L	S&ME: Grundfos Redi-Flo 2 Pump: A1A106003 with Polyethylene Bladder/Teflon® -lined tubing	1.3	1235	Initial	43.60	NM	NM	NM	NM	NM	NM	Depth to groundwater prior to installation of purging/sampling pump.
							1400	5.0	46.55	8.02	26.30	0.402	5.2	188	4.61	Parameters were collected prior to collection of groundwater to be submitted for analysis.
MW-4	2	4/2/2018	S&ME: Grundfos Redi-Flo 2 Pump: A1A106003 with Polyethylene Bladder/Teflon® -lined tubing	1. S&ME: Horiba U52 Water Quality Meter, #: U500 2. S&ME: Heron Water Level Meter, #: H01L	Teflon Bailer	0.6	1010	Initial	43.65	NM	NM	NM	NM	NM	NM	Depth to groundwater prior to installation of purging/sampling pump.
							1115	0.5	46.51	6.13	21.90	0.195	216.0	161	9.30	Well went dry and/or not recharging. Parameters were collected prior to collection of groundwater to be submitted for analysis.

Table 2B
Intrinsic Groundwater Sampling Parameters
Georgia Department of Transportation-District Office
2505 Athens Highway (HWY 129)
Gainesville, Hall County, Georgia
HSI Site No. 10759

Monitoring Well ID	Well Diameter (inches)	Date Sampled	Equipment			Calculated Well Volume - in Field (gal)	Time	Purged Volume (gallons)	Readings							Comments				
			Purging	Readings	Sample Collection				Depth to Water (ft BTOC)	pH (SUs)	Temperature (°C)	Conductivity (ms/cm)	Turbidity (NTUs)	ORP (mV)	DO (mg/L)					
MW-5	2	4/2/2018	NA												Not Sampled - Reduced Sampling Plan					
MW-6	2	4/2/2018	NA												Not Sampled - Dry					
MW-7	2	4/4/2018	Pine Equipment Rental: Grundfos Redi-Flo 2 Pump: 10754 with Polyethylene Bladder/Teflon® -lined tubing	1. Pine Rental: Horiba U52 Water Quality Meter, #: 17140 2. Pine Rental: Solinst Water Level Meter, #: 037356	Pine Equipment Rental: Grundfos Redi-Flo 2 Pump: 10754 with Polyethylene Bladder/Teflon® -lined tubing	2.8	1037	Initial	35.74	NM	NM	NM	NM	NM	NM	Depth to groundwater prior to installation of purging/sampling pump.				
							1135	9.0	41.78	5.60	24.44	0.161	26.6	195	4.37	Parameters were collected prior to collection of groundwater to be submitted for analysis.				
MW-8	2	4/3/2018	Pine Equipment Rental: Grundfos Redi-Flo 2 Pump: 10754 with Polyethylene Bladder/Teflon® -lined tubing	1. Pine Rental: Horiba U52 Water Quality Meter, #: 17140 2. Pine Rental: Solinst Water Level Meter, #: 037356	Pine Equipment Rental: Grundfos Redi-Flo 2 Pump: 10754 with Polyethylene Bladder/Teflon® -lined tubing	1.9	1212	Initial	21.46	NM	NM	NM	NM	NM	NM	Depth to groundwater prior to installation of purging/sampling pump.				
							1245	9.5	21.62	5.27	25.20	0.13	14.4	221.0	1.38	Parameters were collected prior to collection of groundwater to be submitted for analysis.				
MW-9R	2	4/3/2018	S&ME: Grundfos Redi-Flo 2 Pump: A1A106003 with Polyethylene Bladder/Teflon® -lined tubing	1. S&ME: Horiba U52 Water Quality Meter, #: U500 2. S&ME: Heron Water Level Meter, #: H01L	S&ME: Grundfos Redi-Flo 2 Pump: A1A106003 with Polyethylene Bladder/Teflon® -lined tubing	1.1	1242	Initial	31.19	NM	NM	NM	NM	NM	NM	Depth to groundwater prior to installation of purging/sampling pump.				
							1320	4.0	31.39	4.93	21.71	0.185	23.5	285	2.98	Parameters were collected prior to collection of groundwater to be submitted for analysis.				
MW-10	2	4/2/2018	NA												Not Sampled - Reduced Sampling Plan					
MW-11	2	4/2/2018	NA												Not Sampled - Reduced Sampling Plan					
MW-12	2	4/2/2018	NA												Not Sampled - Not Enough Water					
MW-13	2	4/2/2018	NA	NA	Teflon Bailer	0.2	1230	Initial	38.59	NM	NM	NM	NM	NM	NM	Well was gauged; however, not enough water to operate pump or purge; therefore, a bailer was used sampling. No readings collected.				

Notes:

Table 3
Field QA/QC Sample Summary
Georgia Department of Transportation-District Office
2505 Athens Highway (HWY 129)
Gainesville, Hall County, Georgia
HSI Site No. 10759

Field QA/QC Sample ID	Date of Collection	Associated Soil and/or Groundwater Samples	Laboratory for the QA/QC Samples Only	Analyses (QA/QC Samples)		Containers	Detected Constituents	Sample/Sample QA/QC Non-Conformance	Sample/Sample QA/QC Non-Conformance Resolution
				VOCs					
Equipment Blanks									
Equip Blank	4/4/2018	MW-2, MW-4, MW-9R, MW-2D, MW-14D	ESC	X	4-40 ml VOA vials - HCL preservative	Acetone (0.323 mg/L), 2-Butanone (MEK) (0.132 mg/L), and Toluene (0.00113 mg/L)	Not Applicable	Not Applicable	Not Applicable
Split/Duplicates									
MW-22D	4/2/2018	MW-2	ESC	X	4-40 ml VOA vials - HCL preservative	See Table 6A	Not Applicable	Not Applicable	Not Applicable

Notes:

QA/QC = Quality Assurance/Quality Control

AES = Analytical Environmental Services, Inc.

NA = Not Applicable

Table 4
Historical Groundwater Analytical Results

Georgia Department of Transportation-District Office
2505 Athens Highway (HWY 129)
Gainesville, Hall County, Georgia
HSI Site No. 10759

Sample Location	Sample ID	Sampled By	Laboratory	Sample Date	Analytical Method	1,4-Dioxane (123911)	Vinyl Chloride (75014)	1,1-DCE (75354)	Acetone (67641)	Methylene Chloride (75092)	1,1-DCA (75343)	cis-1,2-DCE (156592)	Chloroform (67663)	1,1,1-TCA (71556)	Carbon Tetrachloride (56235)	1,2-DCA (107062)	TCE (79016)	1,1,2-TCA (79005)	PCE (127184)
Risk Reduction Standards						Type 3 - 0.019	Type 4 - 0.00327	Type 4 - 0.524	Type 4 - 45.6	Type 4 - 0.45	Type 3 - 4.00	Type 4 - 1.02	Type 3 - 0.100	Type 4 - 13.60	Type 3 - 0.005	Type 3 - 0.005	Type 4 - 0.0377	Type 4 - 0.0464	Type 3 - 0.005
G-9	G-9	GDOT	GDOT	2/5/1988	EPA 8260A	NA								0.761	NA				
G-10	G-10					NA								<0.0050	NA				
G-11	G-11					NA								<0.0050	NA				
G-12	G-12					NA								<0.0050	NA				
G-13	G-13					NA								<0.0050	NA				
MW-1D ⁽⁶⁾	MW-1D	S&ME	aquaFusion	AES	EPA 8260B	6/7/2006	NA	<0.0020	0.020	<0.050	<0.0050	<0.0050	<0.0050	0.093	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
						1/26/2009	<0.150	<0.0020	0.056	<0.050	<0.0050	<0.0050	<0.0050	0.032	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
						1/26/2010	<0.150	<0.0020	0.042	<0.050	<0.0050	<0.0050	<0.0050	0.039	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
						4/13/2011	<0.150	<0.0020	0.023	<0.050	<0.0050	<0.0050	<0.0050	0.013	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
						8/4/2011	<0.150	<0.0020	0.026	<0.050	<0.0050	<0.0050	<0.0050	0.018	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
			NA	ESC	EPA 8260B	1/24/2012	NA	NS											
						10/28/2014	<0.150	<0.0020	0.016	<0.050	<0.0050	<0.0050	<0.0050	0.0055	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
						10/25/2016	<0.100	<0.00200	0.00600	<0.0500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
						4/2/2018	NA	NS											
						1/24/2012	NA	NS											
MW-2D ⁽⁶⁾	MW-2D	S&ME	aquaFusion	AES	EPA 8260B	8/17/2006	NA	<0.0020	<0.0050	<0.050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
						1/27/2009	<0.150	<0.0020	<0.0050	<0.050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
						1/20/2010	<0.150	<0.0020	<0.0050	<0.050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
						4/13/2011	<0.150	<0.0020	<0.0050	<0.050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
						8/3/2011	<0.150	<0.0020	<0.0050	<0.050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
			NA	ESC	EPA 8260B	1/24/2012	NA	NS											
						10/27/2014	<0.150	<0.0020	<0.0050	<0.050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
						10/25/2016	<0.100	<0.00200	<0.00500	<0.0500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
						4/3/2018	<0.00300	<0.00100	<0.00100	<0.0500	<0.00500	<0.00100	<0.00100	<0.00500	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
						1/24/2012	NA	NS											

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2505 Athens Highway (HWY 129)
Gainesville, Hall County, Georgia
HSI Site No. 10759

Sample Location	Sample ID	Sampled By	Laboratory	Sample Date	Analytical Method	1,4-Dioxane (123911)	Vinyl Chloride (75014)	1,1-DCE (75354)	Acetone (67641)	Methylene Chloride (75092)	1,1-DCA (75343)	cis-1,2-DCE (156592)	Chloroform (67663)	1,1,1-TCA (71556)	Carbon Tetrachloride (56235)	1,2-DCA (107062)	TCE (79016)	1,1,2-TCA (79005)	PCE (127184)			
Risk Reduction Standards						Type 3 - 0.019	Type 4 - 0.00327	Type 4 - 0.524	Type 4 - 45.6	Type 4 - 0.45	Type 3 - 4.00	Type 4 - 1.02	Type 3 - 0.100	Type 4 - 13.60	Type 3 - 0.005	Type 3 - 0.005	Type 4 - 0.0377	Type 4 - 0.0464	Type 3 - 0.005			
MW-3D ⁽⁶⁾	MW-3D	aquaFusion	AES	EPA 8260B	8/17/2006	NA	<0.0020	<0.0050	<0.050	<0.0050	<0.0050	0.026	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050				
					1/28/2009	<0.150	0.0032	0.150	<0.050	<0.0050	0.014	<0.0050	<0.0050	0.039	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050			
					1/19/2010	<0.150	<0.0020	0.056	<0.050	<0.0050	0.0062	<0.0050	<0.0050	0.013	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050			
					4/14/2011	0.210	<0.0020	0.089	<0.050	<0.0050	0.0092	<0.0050	<0.0050	0.013	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050			
	MW-34D (Duplicate)				8/2/2011	0.210	<0.0020	0.094	<0.050	<0.0050	0.010	<0.0050	<0.0050	0.014	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050			
					1/26/2012	<0.150	<0.0020	0.053	<0.050	<0.0050	<0.0050	<0.0050	<0.0050	0.016	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050			
	MW-3D				10/30/2014	<0.150	<0.0020	0.140	<0.050	<0.0050	0.011	<0.0050	<0.0050	0.016	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050			
					10/26/2016	0.190	<0.0020	0.044	<0.050	<0.0050	0.0055	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050			
	MW-3D				4/4/2018	0.112	<0.00200	0.0375	<0.0500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500			
					10/26/2016	0.0586	<0.00100	0.0189	<0.0500	<0.00500	0.00170	<0.00100	<0.00500	0.00290	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100		
MW-4D	MW-4D	S&ME	AES	EPA 8260B	1/25/2010	<0.150	<0.0020	0.010	<0.050	<0.0050	<0.0050	<0.0050	0.020	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050			
					4/13/2011	<0.150	<0.0020	<0.0050	<0.050	<0.0050	<0.0050	<0.0050	0.0080	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050			
					8/4/2011	<0.150	<0.0020	<0.0050	<0.050	<0.0050	<0.0050	<0.0050	0.0076	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050			
			NA	1/24/2012	NA	NS																
			AES	10/28/2014	EPA 8260B	<0.150	<0.0020	0.0097	<0.050	<0.0050	<0.0050	<0.0050	0.031	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050			
			ESC	10/24/2016		<0.100	<0.00200	<0.00500	<0.0500	<0.00500	<0.00500	<0.00500	0.0162	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500			
						<0.00300	<0.00100	0.00267	<0.0500	<0.00500	<0.00100	<0.00100	<0.00500	0.00165	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100		

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Risk Reduction Standards						Type 3 - 0.019	Type 4 - 0.00327	Type 4 - 0.524	Type 4 - 45.6	Type 4 - 0.45	Type 3 - 4.00	Type 4 - 1.02	Type 3 - 0.100	Type 4 - 13.60	Type 3 - 0.005	Type 3 - 0.005	Type 4 - 0.0377	Type 4 - 0.0464	Type 3 - 0.005			
MW-10D ⁽⁶⁾	MW-10R	aquaFusion	AES	8/17/2006	EPA 8260B	NA	<0.0020	<0.0050	<0.050	<0.0050	<0.0050	<0.0050	0.022	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050			
	MW-10D	1/29/2009		<0.150		<0.0020	<0.0050	<0.050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050				
	MW-25D (Duplicate)	1/25/2010		<0.150		<0.0020	<0.0050	<0.050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050				
	MW-10D			4/14/2011		<0.150	<0.0020	<0.0050	<0.050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050			
				8/3/2011		<0.150	<0.0020	<0.0050	<0.050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050			
	S&ME			NA		NS																
				NA		<0.150	<0.0020	<0.0050	<0.050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		
				AES		<0.100	<0.00200	<0.00500	<0.0500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500		
				ESC		NA	1/24/2012	NA	NS													
MW-14D	MW-14D	S&ME	ESC	10/25/2016	EPA 8260B	<0.100	<0.00200	<0.00500	<0.0500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	
	MW-35D (duplicate)			11/16/2016		<0.100	<0.00200	<0.00500	<0.0500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
	MW-14D			4/4/2018		0.00344	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
						<0.00300	<0.00100	0.00275	<0.0500	<0.00500	<0.00100	<0.00100	<0.00500	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100

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Risk Reduction Standards				Type 3 - 0.019	Type 4 - 0.00327	Type 4 - 0.524	Type 4 - 45.6	Type 4 - 0.45	Type 3 - 4.00	Type 4 - 1.02	Type 3 - 0.100	Type 4 - 13.60	Type 3 - 0.005	Type 3 - 0.005	Type 4 - 0.0377	Type 4 - 0.0464	Type 3 - 0.005		
MW-1	MW-1	Earth Tech	Test America	9/26/2001	NA	<0.0020	1.9	<0.050	<0.0050	0.0212	0.0082	<0.0020	3.370	0.0038	0.0198	0.0479	0.0042	<0.0020	
	MW-1 (duplicate)				NA	<0.0020	2.01	<0.050	<0.0050	0.0221	0.0083	<0.0020	3.690	0.0040	0.0203	0.0499	0.0042	<0.0020	
	MW-1	aquaFusion	AES		NA	<0.0020	1.700	<0.050	<0.0050	0.0084	0.0099	<0.0050	2.800	<0.0050	<0.0050	0.068	0.0089	<0.0050	
					<0.150	<0.0020	1.100	<0.050	<0.0050	0.029	0.0046 (J)	0.0024 (J)	2.000	<0.0050	0.0072	0.0530	0.043	0.0057	
					<0.150	<0.0020	0.580	<0.050	<0.0050	0.010	<0.0050	<0.0050	0.920	0.0055	<0.0050	0.0360	0.014	<0.0050	
					<0.150	<0.0020	0.500	<0.050	<0.0050	0.0081	<0.0050	<0.0050	0.390	<0.0050	<0.0050	0.027	0.0080	<0.0050	
					<0.150	<0.0020	0.580	<0.050	<0.0050	0.0097	<0.0050	<0.0050	0.550	<0.0050	<0.0050	0.027	0.0087	<0.0050	
	MW-1	S&ME	EPA 8260B		<0.150	<0.0020	0.030	<0.050	<0.0050	0.011	<0.0050	<0.0050	0.900	<0.0050	<0.0050	<0.0050	0.023	<0.0050	
					<0.150	<0.0020	0.0095	<0.050	<0.0050	0.016	<0.0050	<0.0050	1.500	<0.0050	<0.0050	<0.0050	0.0092	<0.0050	
					<0.150	<0.0020	0.014	<0.050	<0.0050	0.023	<0.0050	<0.0050	0.880	<0.0050	<0.0050	<0.0050	0.015	<0.0050	
					<0.150	<0.0020	0.130	<0.050	<0.0050	0.007	<0.0050	<0.0050	0.150	<0.0050	<0.0050	0.0081	<0.0050	<0.0050	
					<0.100	<0.00200	0.0717	<0.0500	<0.00500	0.00553	<0.00500	<0.00500	0.106	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	
	MW-1	ESC			<0.00300	<0.00100	0.0568	<0.0500	<0.00500	0.00801	<0.00100	<0.00500	0.196	<0.00100	<0.00100	0.00269	0.00212	0.00118	

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		Risk Reduction Standards				Type 3 - 0.019	Type 4 - 0.00327	Type 4 - 0.524	Type 4 - 45.6	Type 4 - 0.45	Type 3 - 4.00	Type 4 - 1.02	Type 3 - 0.100	Type 4 - 13.60	Type 3 - 0.005	Type 3 - 0.005	Type 4 - 0.0377	Type 4 - 0.0464	Type 3 - 0.005	
MW-2	MW-2	Earth Tech	Test America	9/26/2001	EPA 8260B	NA	<0.0020	2.480	<0.050	<0.0050	0.0375	0.0205	0.0030	8.180	0.0058	0.0316	0.112	0.076	0.0047	
		aquaFusion		1/9/2006		NA	<0.0020	2.100	<0.050	<0.0050	0.012	0.011	<0.0050	3.100	0.0053	0.010	0.068	0.068	<0.0050	
						NA	<0.0020	2.700	<0.050	<0.0050	0.013	0.011	<0.0050	3.900	0.0054	0.011	0.074	0.074	<0.0050	
	MW-2	AES		1/22/2009		<0.150	<0.0020	0.320	<0.050	<0.0050	0.023	0.0018 (J)	0.0014 (J)	0.460	<0.0050	0.0013 (J)	0.015	0.0022 (J)	0.0011 (J)	
						<0.150	<0.0020	0.390	<0.050	<0.0050	0.280	0.0018 (J)	0.0014 (J)	1.900	<0.0050	0.0061	0.034	0.0027	0.0082	
						<0.150	<0.0020	0.360	<0.050	<0.0050	0.010	<0.0050	<0.0050	0.240	<0.0050	<0.0050	0.019	0.0054	<0.0050	
						<0.150	<0.0020	0.019	0.094	<0.0050	0.013	<0.0050	<0.0050	0.370	<0.0050	<0.0050	<0.0050	0.0070	<0.0050	
						<0.150	<0.0020	0.010	<0.050	<0.0050	0.061	<0.0050	<0.0050	0.940	<0.0050	0.0057	<0.0050	<0.0050	<0.0050	
						<0.150	<0.0020	0.014	<0.050	<0.0050	0.063	<0.0050	<0.0050	1.100	<0.0050	0.0060	<0.0050	<0.0050	<0.0050	
						<0.150	<0.0020	<0.0050	<0.050	<0.0050	0.023	<0.0050	<0.0050	0.290	<0.0050	<0.0050	<0.0050	0.0088	<0.0050	
						<0.150	<0.0020	0.100	<0.050	<0.0050	0.006	<0.0050	<0.0050	0.096	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
		MW-2	ESC	10/25/2016		<0.100	<0.00200	<0.00500	<0.0500	<0.00500	<0.00500	<0.00500	<0.00500	0.0410	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	
						<0.00300	<0.00100	0.0346	<0.0500	<0.00500	0.00314	<0.00100	<0.00500	0.0404	<0.00100	<0.00100	0.00140	<0.00100	<0.00100	
MW-3	MW-3	Earth Tech	Test America	9/26/2001	EPA 8260B	NA	<0.0020	1.170	<0.050	<0.0050	0.0130	0.0038	<0.0020	1.610	0.0022	0.0084	0.0302	0.0131	0.0026	
														ABANDONED						
		aquaFusion	NA	1/9/2006	NA															

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Risk Reduction Standards						Type 3 - 0.019	Type 4 - 0.00327	Type 4 - 0.524	Type 4 - 45.6	Type 4 - 0.45	Type 3 - 4.00	Type 4 - 1.02	Type 3 - 0.100	Type 4 - 13.60	Type 3 - 0.005	Type 3 - 0.005	Type 4 - 0.0377	Type 4 - 0.0464	Type 3 - 0.005	
MW-4																				
MW-4	MW-4	aquaFusion	AES	EPA 8260B	4/6/2006	NA	<0.0020	1.000	<0.050	<0.0050	0.006	<0.0050	<0.0050	1.600	<0.0050	<0.0050	0.025	<0.0050	<0.0050	
					1/29/2009	<0.150	<0.0020	0.110	<0.050	<0.0050	<0.0050	<0.0050	<0.0050	0.120	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
					1/20/2010	<0.150	<0.0020	0.370	<0.050	<0.0050	<0.0050	<0.0050	<0.0050	0.670	<0.0050	<0.0050	0.021	<0.0050	<0.0050	
					1/19/2011	<0.150	<0.0020	0.190	<0.050	<0.0050	<0.0050	<0.0050	<0.0050	0.220	<0.0050	<0.0050	0.0098	<0.0050	<0.0050	
					4/12/2011	<0.150	<0.0020	0.170	<0.050	<0.0050	<0.0050	<0.0050	<0.0050	0.190	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
					8/4/2011	<0.150	<0.0020	0.110	<0.050	<0.0050	<0.0050	<0.0050	<0.0050	0.120	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
					1/25/2012	<0.150	<0.0020	0.190	<0.050	<0.0050	<0.0050	<0.0050	<0.0050	0.100	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
					10/29/2014	<0.150	<0.0020	0.170	<0.050	<0.0050	<0.0050	<0.0050	<0.0050	0.190	<0.0050	<0.0050	0.0070	<0.0050	<0.0050	
					10/24/2016	<0.100	<0.00200	0.112	<0.0500	<0.00500	<0.00500	<0.00500	<0.00500	0.136	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	
					MW-25D (Duplicate)	<0.100	<0.00200	0.102	<0.0500	<0.00500	<0.00500	<0.00500	<0.00500	0.120	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	
		MW-4	S&ME	ESC	4/2/2018	<0.00300	<0.00100	0.0115	<0.0500	<0.00500	<0.00100	<0.00100	<0.00500	0.00872	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	
MW-5																				
MW-5	MW-5	aquaFusion	AES	4/18/2006	EPA 8260B	NA	<0.0020	<0.0050	<0.050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		
			S&ME	NA	NA	NA	1/27/2009	NA	DRY											
					AES	1/27/2010	AES	<0.150	<0.0020	0.011	<0.050	<0.0050	<0.0050	<0.0050	0.018	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
					4/12/2011	NA	DRY													
					8/2/2011		DRY													
					1/24/2012		DRY													
					10/28/2014		DRY													
					10/24/2016		DRY													
					4/2/2018		NS													

Table 4
Historical Groundwater Analytical Results

Georgia Department of Transportation-District Office
2505 Athens Highway (HWY 129)
Gainesville, Hall County, Georgia
HSI Site No. 10759

Sample Location	Sample ID	Sampled By	Laboratory	Sample Date	Analytical Method	1,4-Dioxane (123911)	Vinyl Chloride (75014)	1,1-DCE (75354)	Acetone (67641)	Methylene Chloride (75092)	1,1-DCA (75343)	cis-1,2-DCE (156592)	Chloroform (67663)	1,1,1-TCA (71556)	Carbon Tetrachloride (56235)	1,2-DCA (107062)	TCE (79016)	1,1,2-TCA (79005)	PCE (127184)
Risk Reduction Standards																			
Type 3 - 0.019 Type 4 - 0.00327 Type 4 - 0.524 Type 4 - 45.6 Type 4 - 0.45 Type 3 - 4.00 Type 4 - 1.02 Type 3 - 0.100 Type 4 - 13.60 Type 3 - 0.005 Type 3 - 0.005 Type 3 - 0.005 Type 4 - 0.0377 Type 4 - 0.0464 Type 3 - 0.005																			
MW-6	MW-6	aquaFusion	AES	4/6/2006	EPA 8260B	NA	<0.0020	0.043	<0.050	<0.0050	0.020	<0.0050	<0.0050	0.065	<0.0050	<0.0050	<0.0050	<0.0050	
			S&ME	NA	1/27/2009	NA	DRY												
				NA	1/27/2010	EPA 8260B	<0.150	<0.0020	0.039	<0.050	<0.0050	0.017	<0.0050	<0.0050	0.048	<0.0050	<0.0050	<0.0050	
				NA	1/20/2011		<0.150	<0.0020	0.038	<0.050	<0.0050	0.0066	<0.0050	<0.0050	0.034	<0.0050	<0.0050	<0.0050	
				NA	4/12/2011		<0.150	<0.0020	0.051	<0.050	<0.0050	0.020	<0.0050	<0.0050	0.57	<0.0050	<0.0050	<0.0050	
				NA	8/4/2011		<0.150	<0.0020	0.043	<0.050	<0.0050	0.012	<0.0050	<0.0050	0.039	<0.0050	<0.0050	<0.0050	
			AES	NA	1/24/2012	NA	DRY												
				NA	10/30/2014	EPA 8260B	<0.150	<0.0020	0.017	<0.050	<0.0050	0.0074	<0.0050	<0.0050	0.013	<0.0050	<0.0050	<0.0050	
				NA	10/26/2016		<0.100	<0.00200	0.0110	<0.0500	<0.00500	0.00755	<0.00500	<0.00500	0.00921	<0.00500	<0.00500	<0.00500	
			NA	4/2/2018	NA	NS - DRY													
MW-7	MW-7	aquaFusion	4/6/2006	EPA 8260B	NA	<0.0020	0.300	<0.050	<0.0050	<0.0050	<0.0050	0.360	<0.0050	<0.0050	0.0058	<0.0050	<0.0050	<0.0050	
	D-MW-7 (Duplicate)				NA	<0.0020	0.320	<0.050	<0.0050	<0.0050	<0.0050	0.390	<0.0050	<0.0050	0.0061	<0.0050	<0.0050	<0.0050	
	MW-7	AES	1/28/2009		<0.150	<0.0020	0.280	<0.050	<0.0050	0.0077	<0.0050	<0.0050	0.230	<0.0050	<0.0050	0.0076	<0.0050	<0.0050	
	MW-7		1/19/2010	<0.150	<0.0020	0.190	<0.050	<0.0050	0.0079	<0.0050	<0.0050	0.230	<0.0050	<0.0050	0.0078	<0.0050	<0.0050		
	MW-24D (Duplicate)			4/13/2011		<0.150	<0.0020	0.160	<0.050	<0.0050	0.0062	<0.0050	<0.0050	0.130	<0.0050	<0.0050	0.0050	<0.0050	<0.0050
	MW-7					<0.150	<0.0020	0.160	<0.050	<0.0050	0.0060	<0.0050	<0.0050	0.130	<0.0050	<0.0050	0.0050	<0.0050	<0.0050
	MW-7		NA	8/5/2011	NA	NS													
	MW-7	S&ME	NA	1/24/2012	NA	NS													
	MW-100 (Duplicate)		AES	10/30/2014	EPA 8260B	<0.150	<0.0020	0.046	<0.050	<0.0050	<0.0050	0.055	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
	MW-7		ESC			<0.150	<0.0020	0.045	<0.050	<0.0050	<0.0050	0.054	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
	MW-7		NA	10/25/2016		<0.100	<0.00200	0.0359	<0.0500	<0.00500	<0.00500	0.0322	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	
	MW-7		NA	4/4/2018		0.00722	<0.00100	0.0182	<0.0500	<0.00500	0.00256	<0.00100	<0.00500	0.0272	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100

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Risk Reduction Standards						Type 3 - 0.019	Type 4 - 0.00327	Type 4 - 0.524	Type 4 - 45.6	Type 4 - 0.45	Type 3 - 4.00	Type 4 - 1.02	Type 3 - 0.100	Type 4 - 13.60	Type 3 - 0.005	Type 3 - 0.005	Type 4 - 0.0377	Type 4 - 0.0464	Type 3 - 0.005
MW-8	MW-8	aquaFusion	AES	EPA 8260B	4/6/2006	NA	<0.0020	<0.0050	<0.050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
					1/27/2009	<0.150	<0.0020	<0.0050	<0.050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
					1/19/2010	<0.150	<0.0020	<0.0050	<0.050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
					4/14/2011	<0.150	<0.0020	<0.0050	<0.050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
					8/2/2011	<0.150	<0.0020	<0.0050	<0.050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
					NA	1/24/2012	NA											NS	
					AES	10/30/2014	<0.150	<0.0020	<0.0050	<0.050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
MW	MW-8	S&ME	ESC	EPA 8260B	10/26/2016	<0.100	<0.00200	<0.00500	<0.0500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	
					4/3/2018	<0.00300	<0.00100	<0.00100	<0.0500	<0.00500	<0.00100	<0.00500	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	
					NA	1/29/09	NA											DESTROYED	
MW-9R	MW-9R	S&ME	ESC	EPA 8260B	10/26/16	<0.100	<0.00200	0.0267	<0.0500	<0.00500	<0.00500	<0.00500	0.0281	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
					11/16/16	0.0154	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
					4/3/18	0.0223	<0.00100	0.0415	<0.0500	<0.00500	0.00357	<0.00100	<0.00500	0.0204	<0.00100	<0.00100	0.00105	<0.00100	<0.00100

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					Risk Reduction Standards	Type 3 - 0.019	Type 4 - 0.00327	Type 4 - 0.524	Type 4 - 45.6	Type 4 - 0.45	Type 3 - 4.00	Type 4 - 1.02	Type 3 - 0.100	Type 4 - 13.60	Type 3 - 0.005	Type 3 - 0.005	Type 4 - 0.0377	Type 4 - 0.0464	Type 3 - 0.005			
MW-10	MW-10	S&ME	aquaFusion	NA	4/19/2006	NA	DRY															
							DRY															
				AES	1/25/2010	EPA 8260B	<0.150	<0.0020	0.0056	<0.050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050		
				NA	4/12/2011	NA	DRY															
							DRY															
					8/3/2011		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
							DRY															
				NA	1/24/2012		DRY															
							DRY															
MW-11	MW-11	S&ME	AES	EPA 8260B	1/20/2010	EPA 8260B	<0.150	<0.0020	0.100	<0.050	<0.0050	<0.0050	<0.0050	0.130	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
							<0.150	<0.0020	0.200	<0.050	<0.0050	<0.0050	<0.0050	0.190	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
					4/12/2011		<0.150	<0.0020	0.033	<0.050	<0.0050	<0.0050	<0.0050	0.040	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
							<0.150	<0.0020	0.034	<0.050	<0.0050	<0.0050	<0.0050	0.049	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
					8/3/2011		<0.150	<0.0020	0.130	<0.050	<0.0050	<0.0050	<0.0050	0.094	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
							<0.150	<0.0020	0.060	<0.050	<0.0050	<0.0050	<0.0050	0.051	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
				ESC	10/24/2016		<0.100	<0.00200	0.0414	<0.0500	<0.00500	<0.00500	<0.00500	0.0403	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	
				NA	4/2/2018	NA	NS															

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					Risk Reduction Standards	Type 3 - 0.019	Type 4 - 0.00327	Type 4 - 0.524	Type 4 - 45.6	Type 4 - 0.45	Type 3 - 4.00	Type 4 - 1.02	Type 3 - 0.100	Type 4 - 13.60	Type 3 - 0.005	Type 3 - 0.005	Type 4 - 0.0377	Type 4 - 0.0464	Type 3 - 0.005
MW-12	MW-12	S&ME	NA	NA	1/20/2010														
					4/12/2011														
					8/2/2011														
					1/24/2012														
					10/28/2014														
			ESC	10/24/2016	EPA 8260B	<0.100	<0.00200	0.0223	<0.0500	<0.00500	0.0447	<0.00500	<0.00500	0.106	<0.00500	<0.00500	<0.00500	0.00614	<0.00500
			NA	4/2/2018	NA														
MW-13	MW-13	S&ME	AES	EPA 8260B	1/26/2010	0.610	<0.0020	0.510	<0.050	<0.0050	0.180	<0.0050	<0.0050	1.800	<0.0050	0.011	0.049	0.047	0.015
					1/19/2011	0.910	<0.0020	1.200	<0.050	0.0079	0.260	<0.0050	<0.0050	3.200	<0.0050	0.014	0.062	0.054	0.026
					4/12/2011	<0.150	<0.0020	0.032	<0.050	<0.0050	0.039	<0.0050	0.017	1.100	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
					8/4/2011	0.700	<0.0020	0.480	<0.050	0.0070	0.300	<0.0050	<0.0050	3.400	<0.0050	0.016	0.044	<0.0050	0.016
MW-13	DW-28 (Duplicate)	S&ME	NA	NA	0.640	<0.0020	0.420	<0.050	0.0080	0.310	<0.0050	<0.0050	3.600	<0.0050	0.016	0.044	<0.0050	0.016	
MW-13	MW-13	S&ME	AES	EPA 8260B	1/24/2012	NA													
					10/27/2014	<0.150	<0.0020	0.610	<0.050	<0.0050	0.220	<0.0050	<0.0050	2.000	<0.0050	0.0068	0.025	0.023	0.012
					10/24/2016	<0.100	<0.00200	0.326	<0.0500	<0.00500	0.145	<0.00500	<0.00500	0.978	<0.00500	<0.00500	0.0187	0.00614	0.0120
			ESC	4/2/2018		0.0877	<0.00500	0.116	<0.250	<0.0250	0.0397	<0.00500	<0.0250	0.402	<0.00500	<0.00500	0.00509	0.00920	<0.00500
I-2	I-2	S&ME	AES	1/24/2012	EPA 8260B	<.150	<0.0020	0.0070	<0.050	<0.0050	0.011	<0.0050	<0.0050	0.440	<0.0050	<0.0050	<0.0050	0.0063	<0.0050
	DW-67 (Duplicate)					<.150	<0.0020	0.0060	0.065	<0.0050	0.012	<0.0050	<0.0050	0.430	<0.0050	<0.0050	<0.0050	0.0073	<0.0050
I-5	I-5	S&ME	AES	1/24/2012	EPA 8260B	<.150	<0.0020	0.870	<0.050	<0.0050	0.240	0.0082	<0.0050	1.200	<0.0050	0.020	0.056	0.100	0.0086
I-6	I-6	S&ME	AES	1/26/2012	EPA 8260B	<.150	<0.0020	<0.0050	<0.050	<0.0050	<0.0050	<0.0050	<0.0050	0.190	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
I-7	I-7	S&ME	NA	1/26/2012	NA														

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Risk Reduction Standards						Type 3 - 0.019	Type 4 - 0.00327	Type 4 - 0.524	Type 4 - 45.6	Type 4 - 0.45	Type 3 - 4.00	Type 4 - 1.02	Type 3 - 0.100	Type 4 - 13.60	Type 3 - 0.005	Type 3 - 0.005	Type 4 - 0.0377	Type 4 - 0.0464	Type 3 - 0.005
I-9	I-9	S&ME	NA	1/26/2012	NA											DRY			

Notes: The above table presents VOC constituents detected in at least one sample.

Results reported on a dry weight basis.

Analysis of VOC constituents not presented in the above table were reported below the laboratory detection limit.

Results reported in milligram per Liter (mg/L)

DCE = Dichloroethene

DCA = Dichloroethane

TCA = Trichloroethane

TCE = Trichloroethene

PCE = Tetrachloroethene

NA = Not Analyzed/Not Applicable

NS = Not Sampled

results above laboratory reporting limits

results above the Applicable Risk Reduction Standard

Table 5
Current Groundwater Analytical Results vs. Risk Reduction Standards

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Risk Reduction Standards				Type 1 - 0.07 Type 3 - 0.019	Type 1 - 0.002 Type 4 - 0.00327	Type 2 - 0.107 Type 4 - 0.524	Type 1 - 4.00 Type 4 - 45.6	Type 1 - 0.005 Type 4 - 0.45	Type 1 - 4.00 Type 3 - 4.00	Type 1 - 0.07 Type 4 - 1.02	Type 1 - 0.08 Type 3 - 0.100	Type 1 - 0.2 Type 4 - 13.60	Type 1 - 0.005 Type 3 - 0.005	Type 1 - 0.005 Type 3 - 0.005	Type 1 - 0.005 Type 4 - 0.0377	Type 1 - 0.005 Type 4 - 0.0464	Type 1 - 0.005 Type 3 - 0.005
MW-2D ⁽⁶⁾	MW-2D	4/3/2018	EPA 8260B	<0.00300	<0.00100	<0.00100	<0.0500	<0.00500	<0.00100	<0.00100	<0.00500	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	
MW-3D ⁽⁶⁾	MW-3D	4/4/2018	EPA 8260B	0.0586	<0.00100	0.0189	<0.0500	<0.00500	0.00170	<0.00100	<0.00500	0.00290	<0.00100	<0.00100	<0.00100	<0.00100	
MW-4D	MW-4D	4/3/2018	EPA 8260B	<0.00300	<0.00100	0.00267	<0.0500	<0.00500	<0.00100	<0.00100	<0.00500	0.00165	<0.00100	<0.00100	<0.00100	<0.00100	
MW-14D	MW-14D	4/4/2018	EPA 8260B	<0.00300	<0.00100	0.00275	<0.0500	<0.00500	<0.00100	<0.00100	<0.00500	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	
MW-1	MW-1	4/2/2018	EPA 8260B	<0.00300	<0.00100	0.0568	<0.0500	<0.00500	0.00801	<0.00100	<0.00500	0.196	<0.00100	<0.00100	0.00269	0.00212	0.00118
MW-2	MW-2	4/2/2018	EPA 8260B	<0.00300	<0.00100	0.0346	<0.0500	<0.00500	0.00314	<0.00100	<0.00500	0.0404	<0.00100	<0.00100	0.00140	<0.00100	<0.00100
	MW-22D			<0.00300	<0.00100	0.0318	<0.0500	<0.00500	0.00274	<0.00100	<0.00500	0.0347	<0.00100	<0.00100	0.00126	<0.00100	<0.00100
MW-4	MW-4	4/2/2018	EPA 8260B	<0.00300	<0.00100	0.0115	<0.0500	<0.00500	<0.00100	<0.00100	<0.00500	0.00872	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-7	MW-7	4/4/2018	EPA 8260B	0.00722	<0.00100	0.0182	<0.0500	<0.00500	0.00256	<0.00100	<0.00500	0.0272	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-8	MW-8	4/3/2018	EPA 8260B	<0.00300	<0.00100	<0.00100	<0.0500	<0.00500	<0.00100	<0.00100	<0.00500	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-9R	MW-9R	4/3/2018	EPA 8260B	0.0223	<0.00100	0.0415	<0.0500	<0.00500	0.00357	<0.00100	<0.00500	0.0204	<0.00100	<0.00100	0.00105	<0.00100	<0.00100
MW-13	MW-13	4/2/2018	EPA 8260B	0.0877	<0.00500	0.116	<0.250	<0.0250	0.0397	<0.00500	<0.0250	0.402	<0.00500	<0.00500	0.00509	0.00920	<0.00500

Notes: The above table presents VOC constituents detected in at least one sample.

Results reported on a dry weight basis.

Analysis of VOC constituents not presented in the above table were reported below the laboratory detection limit.

Results reported in milligram per Liter (mg/L)

DCE = Dichloroethene

DCA = Dichloroethane

TCA = Trichloroethane

TCE = Trichloroethene

PCE = Tetrachloroethene

NA = Not Analyzed/Not Applicable

NS = Not Sampled

 results above the Type 1 or Type 2 Risk Reduction Standard

 results above the Type 1 and Type 3 or Type 4 Risk Reduction Standard

Appendices

Appendix I – EPD Comments

EPD Comments and Responses

Gainesville DOT District Office
2505 Athens Highway
Gainesville, Hall County, Georgia
S&ME Project No. 4468-14-073A



GEORGIA EPD RRP COMMENTS AND AFFILIATED RESPONSES

The following sections address the Georgia Environmental Protection Division (EPD) Response Remediation Program (RRP) comments outlined in the January 12, 2018 "First Semiannual Progress Report, January 30, 2017" letter. A copy of the January 12, 2018 letter is included as Exhibit A in this Appendix.

◆ Comment #1

Upon entering Georgia's Voluntary Remediation Program (VRP) on February 18, 2016, the Property was reclassified to Class V and designated as needing corrective action in accordance with 12-8-107 (b) of the Act. Because the Property's change in class, GDOT was required to file an Affidavit with the Superior Court of Hall County and submit a copy of the recorded Affidavit to EPD within 30 days of recording. EPD has not received a copy of the recorded Affidavit as of the date of this letter. Please submit a copy of the Affidavit or confirm any previous filings in the Hall County by no later than February 12, 2018.

Response

GDOT is in the process of completing the recorded Affidavit. As of March 23, 2018, correspondences between GDOT and the EPD have been on going to verify that the proper documentation was being prepared.

◆ Comment #2

Type 1 Groundwater RRS. *The Type 1 Groundwater risk reduction standards (RRS) provided on Table 6 of the Progress Report is acceptable for use at the site except for cis-1,2-dichloroethene and chloroform. The correct Type 1 RRS should be 0.07 mg/L and 0.08 mg/L, respectively. Please ensure that the RRS are revised in future text, tables, and figures that reference the Type 1 groundwater delineation standards.*

Response

The correct Type 1 RRS for cis-1,2-dichloroethene and chloroform is noted and corrected for future text, tables and figures.

◆ Comment #3

According to the data within the Progress Report, delineation to the established default residential RRS for 1,1-DCE to the north (i.e. MW-9R) is not complete. It is recommended that S&ME clearly identify the delineation objectives and illustrate the property boundary along with the extent of the plume with respect to the target RRS on Figures 6A and 6B in the next progress report. Should additional delineation location(s) be necessary to meet the delineation requirements in accordance with the Act, please include the proposed well location(s) on the noted revised Figure(s) in the next Progress Report. The vertical extent of contamination at MW-3D has been defined at MW-14D.



EPD Comments and Responses

Gainesville DOT District Office
2505 Athens Highway
Gainesville, Hall County, Georgia
S&ME Project No. 4468-14-073A

Response

Based on conversations with the EPD, a Type 2 RRS for 1,1-DCE was calculated. The RRS calculations are included in Appendix V of this Semi-Annual Progress Report. Based upon the analytical results, monitoring well MW-9R is in compliance with the Type 2 RRS for 1,1-DCE.

◆ Comment #4

EPD agrees with the recommendation to conduct an additional limited sampling event as proposed in Section 6.0 of the Progress Report; however, please note that additional sampling events may be warranted pending sampling results. Considering that MW-9 has been destroyed and it was necessary to install the replacement well 260 feet downgradient from the original MW-9 location, please retain MW-12 as one of the wells proposed in Section 6.0 (and Response to Comment #4 in Appendix I) of the Progress Report to be sampled in the next sampling event. Please ensure that the lowest achievable laboratory detection limits for 1,4-dioxane are utilized so that the analytical results can be reported at or below the established RRS for this compound.

Response

The current sampling event was conducted in April 2018. An additional semi-annual sampling event is tentatively scheduled to be conducted before May 30, 2019. Monitoring well MW-12 was included as a well to be sampled; however, due to not enough water within the well and slow or no recharge, a sample was not able to be collected.

The samples were analyzed for 1,4-dioxane at a detection limit of 0.003 milligrams per liter (mg/L) which is below the Type 1 RRS of 0.07 mg/L.

◆ Comment #5

Type 4 Groundwater RRS for methylene chloride. *Based on a review of HSI #10759 files, the Type 4 RRS of 0.019 mg/L for methylene chloride was not approved by EPD. The Type 4 groundwater RRS for methylene chloride is 0.45 mg/L based on the non-carcinogenic RAGS Equation 2 value. Please revise future text, tables, and figures accordingly.*

Response

The correct Type 4 RRS for methylene chloride is noted and corrected for future text, tables and figures.

◆ Comment #6

Section 2.0 and Appendix I of the Progress Report provide responses to EPD's February 18, 2016 VRP Comment letter. Comments #1, #2, #7, and #8 have been satisfied. EPD has the following comments on the remaining responses:

- a. **Comment #3.** *Based on the results of GDOT's re-evaluation of 1,4-dioxane in soil, EPD continues to concur with the certification that the Property is in compliance with Type 1 RRS for soil.*

EPD Comments and Responses

Gainesville DOT District Office
2505 Athens Highway
Gainesville, Hall County, Georgia
S&ME Project No. 4468-14-073A



Type 1 Soil RRS for 1,4-Dioxane. The default Type 1 RRS for 1,4-dioxane is 1.9 mg/kg based on the non-carcinogenic Rags Equation 7 value rather than 0.07 mg/kg. Please revise appropriate text, tables, and figures to reflect the Type 1 RRS of 1.9 mg/kg for 1,4-dioxane in soil in future reports.

- b. **Comment #4.** GDOT did not provide a milestone schedule in Appendix VII as indicated in the Progress Report. Please include a revised milestone schedule (Gantt style format) in all future VRP progress reports.
- c. **Comment #5.** The cross section figures provided in Figures 1, 2, and 3 in Exhibit C of the Progress Report provided an adequate depiction of the Property's conceptual site model (CSM); however, the Progress Report does not include a discussion of the CSM and the status of the site specific exposure pathways (i.e. complete or incomplete) as required by Section 5 of the VRP Application Form and Checklist. Please ensure that the CSM is updated in each semiannual report as the corrective action progresses at the Property and in the final compliance status report (CSR). Additionally, GDOT must confirm water usage for the well pump observed at 2616 Gillsville Highway and the residences without water meters observed along Jack Bryant Circle within ¼-mile of the Property. EPD requested that a thorough well survey be completed by GDOT to a minimum of ½-mile, particularly at nearby downgradient residences during a December 1, 2016 meeting at EPD's offices.
- d. **Comment #6.** EPD concurs with the designation of MW-8 and MW-14D to serve as point of demonstration (POD) wells for the shallow and deep aquifers, respectively; however, GDOT should establish corresponding point of exposures (POEs) in accordance with Sections 12-8-102(11) and 12-8-108(3) of the Act.

Response

- a. The default Type 1 RRS for 1,4-dioxane of 1.9 mg/kg is noted and will be revised on future text, tables, and figures when applicable.
- b. A revised milestone schedule is included as part of this Semi-Annual Progress Report.

Site specific exposure pathways are determined to be complete for soil based on soils being delineated to Type 1 RRSs. Vapor intrusion risk was evaluated using Vapor Intrusion Screening Level (VISL) and no VOCs screened resulting in target cancer risk (TCR) levels greater than 1E-06 or the target hazard quotient (THQ) risk of 1.0; therefore, exposure pathway for vapor intrusion is determined to be complete. Exposure pathways are determined complete for shallow and deep groundwater aquifers to the east based on wells MW-8 and MW-14D being delineated to below Type 1 and Type 3 RRSs. The exposure pathway is determined complete for shallow groundwater aquifer to the north based on monitoring well MW-9R being delineated to below Type 1 or Type 2 RRSs.

Water meters were not observed at properties located at 2746 Jack Bryant Circle or 2734 Jack Bryant Circle; however, a water well house was observed at 2746 Jack Bryant Circle. Water well houses were observed at properties at 2616 Gillsville Highway and 2830 Jack Bryant Circle; however, water meters were also observed at these properties. S&ME contacted Gainesville Public Utilities on April 11, 2018 to verify if these addresses had active water usage accounts. The department informed S&ME that active accounts were set up for addresses 2616 Gillsville Highway and 2830 Jack Bryant Circle. No accounts were reported

EPD Comments and Responses

Gainesville DOT District Office
2505 Athens Highway
Gainesville, Hall County, Georgia
S&ME Project No. 4468-14-073A



for the two addresses where water meters were not observed (2746 and 2734 Jack Bryant Circle). Additional attempts to contact property owners were conducted; however, S&ME was not able to verify any additional information.

- c. Wells MW-8 and MW-14D are designated as point of demonstration (POD) wells for the shallow and deep aquifers, respectively. The corresponding point of exposures (POEs) is considered to be the eastern property boundary.

Exhibits

Exhibit A – EPD Comments



ENVIRONMENTAL PROTECTION DIVISION

Richard E. Dunn, Director

Land Protection Branch
2 Martin Luther King, Jr. Drive
Suite 1054, East Tower
Atlanta, Georgia 30334
404-657-8600

January 12, 2018

VIA E-MAIL AND REGULAR MAIL

Georgia Department of Transportation
c/o James Clute, State Facilities Manager
One Georgia Center
600 West Peachtree Street, NW10th Floor
Atlanta, Georgia 30308

Re: First Semiannual Progress Report, January 30, 2017
Georgia Department of Transportation-Gainesville District Office, HSI #10759
2505 Athens Highway, Gainesville, Hall County, Georgia
Tax Parcel 15023-000017

Dear Mr. Clute:

The Georgia Environmental Protection Division (EPD) has reviewed S&ME's January 30, 2017 First Semiannual Progress Report (Progress Report) submitted by the Georgia Department of Transportation (GDOT) for the subject tax parcel (the "Property") pursuant to the Georgia Voluntary Remediation Program Act (the Act). EPD offers the following comments, which should be addressed in accordance with the Act:

1. Upon entering Georgia's Voluntary Remediation Program (VRP) on February 18, 2016, the Property was reclassified to Class V and designated as needing corrective action in accordance with §12-8-107 (b) of the Act. Because of the Property's change in class, GDOT was required to file an Affidavit with the Superior Court of Hall County and submit a copy of the recorded Affidavit to EPD within 30 days of recording. EPD has not received a copy of the recorded Affidavit as of the date of this letter. Please submit a copy of the Affidavit or confirm any previous filings in Hall County by no later than February 12, 2018.
2. **Type 1 Groundwater RRS.** The Type 1 Groundwater risk reduction standards (RRS) provided on Table 6 of the Progress Report is acceptable for use at the site except for cis-1,2-dichloroethene and chloroform. The correct Type 1 RRS should be 0.07 mg/L and 0.08 mg/L, respectively. Please ensure that the RRS are revised in future text, tables, and figures that reference the Type 1 groundwater delineation standards.
3. According to the data within the Progress Report, delineation to the established default residential RRS for 1,1-DCE to the north (i.e. MW-9R) is not complete. It is recommended that S&ME clearly identify the delineation objectives and illustrate the property boundary along with the extent of the plume with respect to the target RRS on Figures 6A and 6B in the next Progress Report. Should additional delineation location(s) be necessary to meet the

delineation requirements in accordance with the Act, please include the proposed well location(s) on the noted revised Figure(s) in the next Progress Report. The vertical extent of contamination at MW-3D has been defined at MW-14D.

4. EPD agrees with the recommendation to conduct an additional limited sampling event as proposed in Section 6.0 of the Progress Report; however, please note that additional sampling events may be warranted pending the sampling results. Considering that MW-9 has been destroyed and it was necessary to install the replacement well 260 feet downgradient from the original MW-9 location, please retain MW-12 as one of the wells proposed in Section 6.0 (and Response to Comment #4 in Appendix I) of the Progress Report to be sampled in the next sampling event. Please ensure that the lowest achievable laboratory detection limits for 1,4-dioxane are utilized so that the analytical results can be reported at or below the established RRS for this compound.
5. **Type 4 Groundwater RRS for methylene chloride.** Based on a review of HSI# 10759 files, the Type 4 RRS of 0.019 mg/L for methylene chloride was not approved by EPD. The Type 4 groundwater RRS for methylene chloride is 0.45 mg/L based on the non-carcinogenic RAGS Equation 2 value. Please revise future text, tables, and figures accordingly.
6. Section 2.0 and Appendix I of the Progress Report provide responses to EPD's February 18, 2016 VRP Comment letter. Comments #1, #2, #7, and #8 have been satisfied. EPD has the following comments on the remaining responses:
 - a. **Comment #3.** Based on the results of GDOT's re-evaluation of 1,4-dioxane in soil, EPD continues to concur with the certification that the Property is in compliance with Type 1 RRS for soil.

Type 1 Soil RRS for 1,4-Dioxane. The default Type 1 RRS for 1,4-dioxane is 1.9 mg/kg based on the non-carcinogenic Rags Equation 7 value rather than 0.07 mg/kg. Please revise appropriate text, tables, and figures to reflect the Type 1 RRS of 1.9 mg/kg for 1,4-dioxane in soil in future reports.

- b. **Comment #4-** GDOT did not provide a milestone schedule in Appendix VII as indicated in the Progress Report. Please include a revised milestone schedule (Gantt style format) in all future VRP progress reports.
- c. **Comment #5-** The cross section figures provided in Figures 1, 2, and 3 in Exhibit C of the Progress Report provided an adequate depiction of the Property's conceptual site model (CSM); however, the Progress Report does not include a discussion of the CSM and the status of the site specific exposure pathways (i.e. complete or incomplete) as required by Section 5 of the VRP Application Form and Checklist. Please ensure that the CSM is updated in each semiannual report as the corrective action progresses at the Property and in the final compliance status report (CSR).

January 12, 2018

Page 3

Additionally, GDOT must confirm water usage for the well pump observed at 2616 Gillsville Highway and the residences without water meters observed along Jack Bryant Circle within $\frac{1}{4}$ -mile of the Property. EPD requested that a thorough well survey be completed by GDOT to a minimum of $\frac{1}{2}$ -mile, particularly at nearby downgradient residences during a December 1, 2016 meeting at EPD's offices.

- d. **Comment #6-** EPD concurs with the designation of MW-8 and MW-14D to serve as point of demonstration (POD) wells for the shallow and deep aquifers, respectively; however, GDOT should establish corresponding point of exposures (POEs) in accordance with Sections 12-8-102(11) and 12-8-108(3) of the Act.

Please address the comments listed above in the next VRP semiannual progress report, or as otherwise appropriate, which should be submitted to EPD by July 12, 2018. If you have any questions regarding this matter, please contact Ms. Antonia Beavers of the Response and Remediation Program at 404/657-0487.

Sincerely,



Kevin Collins
Unit Coordinator
Response and Remediation Program

c: S&ME, Inc., William J. Wagner, Jr., PG. and Peter J. Fleury (Via email)

File: HSI Site 10759, ID No. 256-0079

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Appendix II – Field Data Sheets

Monitoring Well Development
Field Data Sheet

SITE DATA

Project Name: Gainesville DOT Sampler: T. Gable
 Project Number: 4468 M073A Date: 4-2-18 Well ID: MW-1
 Field Conditions: Sunny 64°F
 Purge Method: Grundfos Pump Sample Method: Grundfos Pump

WELL DATA

1. Depth to Bottom of Well: 47.77 63.38 (ft)
2. Depth to Product: - (ft)
3. Depth to Water: 47.77 (ft)
4. Thickness of Product: - (ft)
5. Height of Water Column: 15.61 (ft)
(Line 1 - Line 3)
6. Water Volume in Well: 2.49 (gal)
(For a 2" well = Line 5 x 0.16)
(For a 4" well = Line 5 x 0.64)
7. Min. Purge Volume: 7.49 (gal)
(Line 6 x 3)
8. Volume Actually Purged: 7.70 (gal) Date/time: 4/2/18 : 1244 to 1400
9. Did Well Go Dry? No
10. Disposal of Purge Water: Down

Water Level	Volume	pH (SU)	Temp. (°C)	Cond. ()	Turb. (NTU)	ORP (mV)	DO (mg/L)	Time
47.50	0.00	7.04	25.89	.591	-	110	6.40	10:41 4/2/18
49.90	1 gal	7.54	25.00	.391	32.6	103	4.20	12:50
50.41	1.5 gal	7.29	25.01	.374	29.2	104	3.64	12:55
51.62	2 gal	7.20	25.41	.357	7.16	109	3.91	13:00
52.00	2.5 gal	7.16	25.47	.353	8.54	111	3.46	13:05
52.40	3.25 gal	7.12	25.92	.346	9.21	113	3.69	13:10
52.66	3.75 gal	7.11	25.64	.346	8.99	113	3.39	13:15
52.64	4.25 gal	7.07	26.22	.343	4.87	114	3.55	13:20
52.70	4.75 gal	7.13	25.74	.346	9.34	112	3.36	13:25
53.33	5.25 gal	7.12	25.71	.336	7.42	109	3.64	13:30
53.60	5.75 gal	7.11	26.48	.333	4.46	109	3.42	13:35
53.92	6.25 gal	7.09	26.41	.339	4.46	111	3.34	13:40
53.79	6.75 gal	7.07	26.69	.341	4.38	110	3.53	13:45

Comments: Sampled at 1405

Monitoring Well Development

Field Data Sheet

SITE DATA

Project Name: Gainesville DOT Sampler: T. Goble

Project Number: Date: 4-2-18 Well ID: MW-1

Field Conditions: Sunny 70°

Purge Method: Ground to Pump Sample Method: Pump / Tubing Page: 2 of 2

WELL DATA

Comments:

Monitoring Well Development Field Data Sheet

SITE DATA

Project Name: Calaveras Dot Sampler: BJ Wagner
Project Number: 4468190284 Date: 4/2/18 Well ID: MW-2
Field Conditions: Sunny 60-70
Purge Method: Redflow Sample Method: Redflow

WELL DATA

1. Depth to Bottom of Well: 51.67 (ft)
 2. Depth to Product: _____ (ft)
 3. Depth to Water: 43.60 (ft)
 4. Thickness of Product: _____ (ft)
 5. Height of Water Column: 8.09 (ft)
(Line 1 - Line 3)
 6. Water Volume in Well: 1.29 (gal)
(For a 2" well = Line 5 x 0.16)
(For a 4" well = Line 5 x 0.64)
 7. Min. Purge Volume: 3.87 (gal)
(Line 6 x 3)
 8. Volume Actually Purged: 5.0 (gal) Date/time: 12:35 to 14:00
 9. Did Well Go Dry? No
 10. Disposal of Purge Water: Drain

Comments: MW 220 °C 1402. Duplicate

Monitoring Well Development Field Data Sheet

SITE DATA

Project Name: Canyon 11c Dot Sampler: BJ Wagner
Project Number: 44621d023A Date: 4/18 Well ID: MW-4
Field Conditions: Sunny, 60°
Purge Method: Pump Sample Method: Teflon basket

WELL DATA

1. Depth to Bottom of Well: 4744 (ft)
 2. Depth to Product: - (ft)
 3. Depth to Water: 43.65 (ft)
 4. Thickness of Product: - (ft)
 5. Height of Water Column: 3.79 (ft)
(Line 1 - Line 3)
 6. Water Volume in Well: 0.6 (gal)
(For a 2" well = Line 5 x 0.16)
(For a 4" well = Line 5 x 0.64)
 7. Min. Purge Volume: 18 (gal)
(Line 6 x 3)
 8. Volume Actually Purged: 0.5 (gal) Date/time: 10:10 to 11:05
 9. Did Well Go Dry? yes
 10. Disposal of Purge Water: drain

Comments: Kept going dry Sample c. 1/20

Monitoring Well Development
Field Data Sheet

SITE DATA

Project Name: Gainesville DOT Sampler: T. Goblic
 Project Number: 446814073A Date: 4-4-18 Well ID: MW-7
 Field Conditions: Cloudy 60°F
 Purge Method: Gravitas Pump Sample Method: Tube /Pump

WELL DATA

1. Depth to Bottom of Well: 53.41 (ft)
2. Depth to Product: ~ (ft)
3. Depth to Water: 35.74 (ft)
4. Thickness of Product: ~ (ft)
5. Height of Water Column: 17.67 (ft)
(Line 1 - Line 3)
6. Water Volume in Well: 2.82 (gal)
(For a 2" well = Line 5 x 0.16)
(For a 4" well = Line 5 x 0.64)
7. Min. Purge Volume: 8.48 (gal)
(Line 6 x 3)
8. Volume Actually Purged: 9.0 (gal) Date/time: 4/4/18 : 1037 to 1135
9. Did Well Go Dry? No
10. Disposal of Purge Water: Drum

Water Level	Volume	pH (SU)	Temp. (°)	Cond. ()	Turb. (NTU)	ORP (mV)	DO (mg/L)	Time
38.60	0.25gal	6.97	21.62	.165	1000+	113	4.10	1037
39.08	0.75gal	5.92	23.01	.162	988	154	4.54	1040
39.52	1.25gal	5.92	23.79	.163	695	157	4.62	1045
40.33	1.75gal	6.00	24.34	.160	366	159	4.51	1050
41.14	2.25gal	6.04	24.36	.159	210	162	4.47	1055
41.20	2.75gal	5.89	24.35	.160	146	173	4.51	1100
41.12	3.15gal	5.73	24.45	.160	102	180	4.47	1105
41.80	5gal	5.89	24.59	.160	89.6	194	4.43	1110
41.96	6gal	5.61	24.26	.160	58.2	179	4.46	1115
41.85	7gal	5.67	24.32	.160	40.1	188	4.45	1120
42.07	7.75gal	5.70	24.39	.160	30.3	189	4.42	1125
41.70	8.5gal	5.59	24.42	.161	27.7	189	4.41	1130
41.78	9gal	5.60	24.44	.161	16.6	195	4.37	1135

Comments: Sampled at 1136

Monitoring Well Development Field Data Sheet

SITE DATA

Project Name: Gainesville DOT Sampler: T-Gable

Project Number: 946814073A Date: 4-3-18 Well ID: MW-8

Field Conditions: Sunny 70°F

Purge Method: Grounds Pump Sample Method: Pump/Tube

WELL DATA

1. Depth to Bottom of Well: 33.42 (ft)

2. Depth to Product: _____ (ft)

3. Depth to Water: 21.46 (ft)

4. Thickness of Product: _____ (in)

5. Height of Water Column: 11.96 (ft)
(Line 1 - Line 3)

6. Water Volume in Well: 1.91 (gal)
(For a 2" well = Line 5 x 0.16)
(For a 4" well = Line 5 x 0.64)

7. Min. Purge Volume: 5.74 (gal)
(Line 6 x 3)

3. Volume Actually Purged: 9.5 (gal) Date/time: 4/3/18 : 12:12 to 12:45
9. Did Well Go Dry? No

9. Did Well Go Dry? No

10. Disposal of Purge Water: Drum

Comments: Sampled at 1246

Monitoring Well Development Field Data Sheet

SITE DATA

Project Name: Gainesville DOT Sampler: B.J. Schlegler
Project Number: 44608 19623A Date: 4/3/18 Well ID: MW 9R
Field Conditions: Sunny, 70's
Purge Method: Reg. flow Sample Method: Reg. flow

WELL DATA

1. Depth to Bottom of Well: 38.36 (ft)
 2. Depth to Product: - (ft)
 3. Depth to Water: 31.19 (ft)
 4. Thickness of Product: - (ft)
 5. Height of Water Column: 7.17 (ft)
(Line 1 - Line 3)
 6. Water Volume in Well: 11 (gal)
(For a 2" well = Line 5 x 0.16)
(For a 4" well = Line 5 x 0.64)
 7. Min. Purge Volume: 3.3 (gal)
(Line 6 x 3)
 8. Volume Actually Purged: 4.0 (gal) Date/time: 12:42 to 1320
 9. Did Well Go Dry? No
 10. Disposal of Purge Water: Drain

Comments: Sample 1922

Monitoring Well Development Field Data Sheet

SITE DATA

Project Name: Careville DST Sampler: BJ Wagner
Project Number: 4148 11-07A Date: 4/2/18 Well ID: MW B
Field Conditions: Sunny, 65°
Purge Method: N/A Sample Method: 5mL Syringe

WELL DATA

1. Depth to Bottom of Well: 39.55 (ft)
 2. Depth to Product: - (ft)
 3. Depth to Water: 38.59 (ft)
 4. Thickness of Product: - (ft)
 5. Height of Water Column: 0.91 (ft)
(Line 1 - Line 3)
 6. Water Volume in Well: 0.15 (gal)
(For a 2" well = Line 5 x 0.16)
(For a 4" well = Line 5 x 0.64)
 7. Min. Purge Volume: 0.45 (gal)
(Line 6 x 3)
 8. Volume Actually Purged: NA (gal) Date/time: _____ to _____
 9. Did Well Go Dry? yes
 10. Disposal of Purge Water: _____

Comments: Not enough water - (bullet, be) first water
for sample c 1230

Monitoring Well Development
Field Data Sheet

SITE DATA

Project Name: Ginaukle DOT Sampler: BJ Wagner
 Project Number: 44684023A Date: 4/3/18 Well ID: MW-25
 Field Conditions: Sunny 60°
 Purge Method: Reflow Sample Method: Reflow

WELL DATA

1. Depth to Bottom of Well: 75.28 (ft)
2. Depth to Product: - (ft)
3. Depth to Water: 34.34 (ft)
4. Thickness of Product: - (ft)
5. Height of Water Column: 40.94 (ft)
(Line 1 - Line 3)
6. Water Volume in Well: 6.6 (gal)
(For a 2" well = Line 5 x 0.16)
(For a 4" well = Line 5 x 0.64)
7. Min. Purge Volume: 19.8 (gal)
(Line 6 x 3)
8. Volume Actually Purged: 20.0 (gal) Date/time: 8:12 to 12:00
9. Did Well Go Dry? No
10. Disposal of Purge Water: Drum

DTG 3947	pH (SU)	Temp. (°)	Cond. (μ)	Turb. (NTU)	ORP (mV)	DO (mg/L)
42.00	5.88	12.97	0.273	6.99	178	3.20
43.29	5.90	19.20	0.272	28.4	174	3.33
46.41	5.96	19.58	0.272	30.2	168	3.34
49.26	6.39	21.27	0.274	36.8	143	3.28
50.78	6.37	21.18	0.274	31.3	145	3.22
53.40	6.37	21.83	0.274	29.5	144	3.50
54.65	6.37	22.52	0.275	27.4	145	3.15
55.44	6.37	22.54	0.275	23.2	146	2.96
57.92	6.37	22.40	0.275	20.9	147	2.91
60.00	6.37	22.60	0.277	20.6	147	2.93
	6.35	22.63	0.277	18.2	148	2.86

Comments: Sample @ 12:00

Monitoring Well Development
Field Data Sheet

SITE DATA

Project Name: Gainesville DOT Sampler: T. Goble
 Project Number: 446814072A Date: 4-4-18 Well ID: MW-3D
 Field Conditions: Cloudy 60°F
 Purge Method: Grandfors Pump Sample Method: Pump / Tube

WELL DATA

1. Depth to Bottom of Well: 52.67 (ft)
2. Depth to Product: - (ft)
3. Depth to Water: 26.81 (ft)
4. Thickness of Product: - (ft)
5. Height of Water Column: 25.46 (ft)
(Line 1 - Line 3)
6. Water Volume in Well: 4.13 (gal)
(For a 2" well = Line 5 x 0.16)
(For a 4" well = Line 5 x 0.64)
7. Min. Purge Volume: 12.41 (gal)
(Line 6 x 3)
8. Volume Actually Purged: 13 (gal) Date/time: 4/4/18 : 0825 to 0925
9. Did Well Go Dry? No
10. Disposal of Purge Water: Drum

Water Level Volume	pH (SU)	Temp. (°)	Cond. ()	Turb. (NTU)	ORP (mV)	DO (mg/L)	Time
26.30 0 gal	7.60	22.69	.329	39.4	104	2.74	0825
30.50 2gal	7.43	23.11	.353	27.8	4	0.85	0830
30.42 3gal	7.38	23.37	.329	17.4	32	1.40	0835
32.01 4gal	6.85	24.13	.272	11.0	59	1.43	0840
32.54 5gal	6.54	23.91	.254	6.33	78	1.32	0845
32.72 6gal	6.63	23.94	.267	5.26	80	1.31	0850
32.89 7gal	6.71	23.88	.274	5.03	80	1.31	0855
33.52 8gal	6.62	24.33	.290	4.58	75	1.38	0900
34.74 9gal	6.91	24.46	.293	3.40	74	1.43	0905
35.18 10gal	6.96	24.36	.284	3.08	80	1.56	0910
35.60 11gal	6.96	24.34	.285	3.26	83	2.26	0914
35.98 12gal	6.97	24.52	.283	3.27	86	2.33	0920
36.91 13gal	6.97	24.61	.282	3.32	86	2.42	0925

Comments: Sampled at 0921

Monitoring Well Development
Field Data Sheet

SITE DATA

Project Name: Gainesville DOT Sampler: T. Goble
 Project Number: 446814073A Date: 4-3-16 Well ID: NW-4D
 Field Conditions: Sunny 65° 10°F
 Purge Method: Gravdes Pump Sample Method: Pump / Tote

WELL DATA

1. Depth to Bottom of Well: 69.60 (ft)
2. Depth to Product: — (ft)
3. Depth to Water: 42.95 (ft)
4. Thickness of Product: — (ft)
5. Height of Water Column: 26.65 (ft)
(Line 1 - Line 3)
6. Water Volume in Well: 4,296 (gal)
(For a 2" well = Line 5 x 0.16)
(For a 4" well = Line 5 x 0.64)
7. Min. Purge Volume: 12,888 (gal)
(Line 6 x 3)
8. Volume Actually Purged: 6,25 (gal) Date/time: 4/3/16 :0635 to 1010
9. Did Well Go Dry? Yes
10. Disposal of Purge Water: Drum

Water Level Volume	pH (SU)	Temp. (°)	Cond. (μ)	Turb. (NTU)	ORP (mV)	DO (mg/L)	Time
41.60	7.52	20.69	4.25	41.4	-31	5.93	0635
45.96	7.46	21.13	4.82	53.3	-41	2.12	0800
46.00	7.48	21.25	4.46	41.8	-48	1.53	0825
48.64	7.65	21.44	3.78	35.1	-56	1.51	0850
49.38	7.61	21.97	3.09	35.9 ⁷⁶	-68	1.72	0855
50.08	7.90	22.28	2.44	19.0	-72	1.75	0900
51.58	7.89	22.12	3.51	13.1	-76	1.91	0905
53.21	7.98	24.14	2.83	12.2	-87	1.79	0910
53.65	8.11	24.28	2.38	10.9	-92	1.84	0915
54.05	8.15	23.97	2.20	9.83	-90	1.82	0920
54.60	8.17	23.79	2.28	10.5 ⁷⁴	-89	2.02	0925
55.31	8.08	23.43	2.65	14.4	-88	1.46	0930
56.71	8.09	24.41	2.49	24.4	-91	3.77	0935

Comments: Sampled at 1020

Monitoring Well Development Field Data Sheet

SITE DATA

Project Name: Gainesville SOT Sampler: T. Gobie

Project Number: _____ Date: 4-3-18 Well ID: MW-4D

Field Conditions: Sunny 65-70°F

Purge Method: Pump Sample Method: Pump Page: L05 2

WELL DATA

Comments: _____

Monitoring Well Development
Field Data Sheet

SITE DATA

Project Name: Crownville D-5 Sampler: BJS Wagon
 Project Number: 4468 14073A Date: 4/4/18 Well ID: MW 140
 Field Conditions: Cloudy, hazy,
 Purge Method: Reflux Sample Method: Reflux

WELL DATA

1. Depth to Bottom of Well: 75.08 (ft)
2. Depth to Product: - (ft)
3. Depth to Water: 6.72 (ft)
4. Thickness of Product: - (ft)
5. Height of Water Column: 68.36 (ft)
(Line 1 - Line 3)
6. Water Volume in Well: 10.9 (gal)
(For a 2" well = Line 5 x 0.16)
(For a 4" well = Line 5 x 0.64)
7. Min. Purge Volume: 32.7 (gal)
(Line 6 x 3)
8. Volume Actually Purged: 33.0 (gal) Date/time: 8:30 to 10:22
9. Did Well Go Dry? No
10. Disposal of Purge Water: Drum

DTW	Volume	pH (SU)	Temp. (°)	Cond. ()	Turb. (NTU)	ORP (mV)	DO (mg/L)
6.88	1.0	5.41	18.28	0.133	45.1	252	2.18
6.92	2.0	5.44	18.54	0.133	2.0	253	2.21
6.94	3.0	5.44	18.61	0.133	0.0	254	1.97
6.95	5.0	5.42	18.45	0.133	0.0	257	1.86
6.96	7.0	5.35	18.67	0.134	0.0	264	1.79
7.00	9.0	5.32	18.67	0.134	0.0	267	1.74
7.01	11.0	5.28	18.66	0.134	0.0	270	1.71
7.01	13.0	5.29	18.67	0.134	0.0	268	1.68
7.03	15.0	5.22	18.63	0.134	0.0	272	1.66
7.05	17.0	5.21	18.71	0.135	0.0	273	1.70
7.06	19.0	5.25	18.71	0.135	0.0	274	1.65
7.07	21.0	5.28	18.72	0.135	0.0	272	1.63
7.08	23.0	5.23	18.73	0.135	0.0	273	1.63

Comments: Sampled c 10:22

Monitoring Well Development Field Data Sheet

SITE DATA

Project Name: Curve 16 Dot Sampler: B5 Wiper

Project Number: 446314623A Date: 4/7/08 Well ID: M14D

Field Conditions: Cloudy, 60°

Purge Method: Red Line Sample Method: Red Line Page: 2

WELL DATA

Comments: _____

Appendix III – Manifest

Aqua-Terra

Recycling and Treatment

710 Moore Street • P.O. Box 98
 Oxford, Georgia 30054
Phone: (678) 625-4025
Fax: (678) 625-4944

NON-HAZARDOUS WASTE MANIFEST

No 06341

Section I

GENERATOR (Generator completes all of Section I)

- a. Generator Name: GA Dept. of Transportation
 b. Address: 25 Research Dr.
Forest Park, GA
- c. Phone No.: _____
 If owner generating facility differs from the generator, provide:
 d. Owner's Name: _____
- e. Description of Waste: Purge Water - 2
Empty

- g. Generating Location: CDOT - Gainesville
 h. Address: 2505 Atherton Way
Gainesville, GA
- i. Phone No.: _____
 j. Owner's Phone No.: _____

Quantity	Gallons	Type	TYPE
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	DM - METAL DRUM
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	DP - PLASTIC DRUM
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	T - TRUCK

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations.

BJ Wagner
 Generator Authorized Agent Name

B Wagner
 Signature

050918
 Shipping Date

Section II

TRANSPORTER (Generator completes a-d; Transporter I completes e-g; Transporter II completes h-n)

- a. Name: Aqua-Terra
 b. Address: 710 Moore Street
Oxford, Georgia 30054
 c. Drive Name/Title: 7109 Womack
 d. Phone No.: (678) 625-4025 e. Truck No.: TK-2
 f. Vehicle License No/State: TF 33071 GA
 Acknowledgment of Receipt of Materials.
 g. 7109 Womack 050918
 Driver Signature Shipping Date

- h. Name: _____
 i. Address: _____
 j. Drive Name/Title: _____
 k. Phone No.: _____ l. Truck No.: _____
 m. Vehicle License No/State: _____
 Acknowledgment of Receipt of Materials.
 n. _____
 Driver Signature Shipping Date

Section III

DESTINATION

- a. Site Name: Aqua-Terra
 b. Physical Address: 710 Moore Street
Oxford, Georgia 30054
 e. Discrepancy Indication Space: _____

- c. Phone No.: (678) 625-4025
 d. Mailing Address: P.O. Box 98
Oxford, Georgia 30054

I hereby certify that the above material has been accepted and to the best of my knowledge the foregoing is true and accurate.

Misty Lefebvre
 Name of Authorized Agent

D. Lee
 Signature

050918
 Shipping Date

Appendix IV – Groundwater Laboratory Analytical Report

April 13, 2018

S&ME Inc. - Kennesaw GA

Sample Delivery Group: L983870
Samples Received: 04/06/2018
Project Number: 4468-14-073A
Description: Gainesville DOT

Report To: Peter Fleury
3380 Town Point Drive Suite 140
Kennesaw, GA 30144

Entire Report Reviewed By:



Jeff Carr
Technical Service Representative

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.

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SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



MW-1 L983870-01 GW

			Collected by BW/TG	Collected date/time 04/02/18 14:05	Received date/time 04/06/18 08:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1095255	1	04/08/18 01:19	04/08/18 01:19	JBE
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1095255	1	04/12/18 06:29	04/12/18 06:29	RAS
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG1095628	1	04/09/18 19:21	04/09/18 19:21	RAS

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

MW-2 L983870-02 GW

			Collected by BW/TG	Collected date/time 04/02/18 14:10	Received date/time 04/06/18 08:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1095255	1	04/08/18 01:39	04/08/18 01:39	JBE
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1095255	1	04/12/18 06:48	04/12/18 06:48	RAS
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG1095628	1	04/09/18 19:41	04/09/18 19:41	RAS

MW-4 L983870-03 GW

			Collected by BW/TG	Collected date/time 04/02/18 11:20	Received date/time 04/06/18 08:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1095255	1	04/08/18 01:59	04/08/18 01:59	JBE
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1095255	1	04/12/18 07:08	04/12/18 07:08	RAS
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG1095628	1	04/09/18 20:00	04/09/18 20:00	RAS

MW-8 L983870-04 GW

			Collected by BW/TG	Collected date/time 04/03/18 12:46	Received date/time 04/06/18 08:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1095255	1	04/08/18 02:18	04/08/18 02:18	JBE
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1095255	1	04/12/18 07:27	04/12/18 07:27	RAS
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG1095628	1	04/09/18 20:20	04/09/18 20:20	RAS

MW-9R L983870-05 GW

			Collected by BW/TG	Collected date/time 04/03/18 13:22	Received date/time 04/06/18 08:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1095255	1	04/08/18 02:37	04/08/18 02:37	JBE
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1095255	1	04/12/18 09:42	04/12/18 09:42	RAS
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG1095628	1	04/09/18 20:39	04/09/18 20:39	RAS

MW-13 L983870-06 GW

			Collected by BW/TG	Collected date/time 04/02/18 12:30	Received date/time 04/06/18 08:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1095255	1	04/12/18 10:01	04/12/18 10:01	RAS
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1095255	5	04/12/18 01:06	04/12/18 01:06	BMB
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG1096509	1	04/12/18 19:41	04/12/18 19:41	RAS

SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



				Collected by BW/TG	Collected date/time 04/03/18 12:05	Received date/time 04/06/18 08:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1095255	1	04/08/18 03:16	04/08/18 03:16	JBE	
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1095255	1	04/12/18 10:21	04/12/18 10:21	RAS	
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG1096509	1	04/11/18 12:38	04/11/18 12:38	RAS	
				Collected by BW/TG	Collected date/time 04/04/18 09:27	
					Received date/time 04/06/18 08:45	
MW-3D L983870-08 GW						
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1095255	1	04/08/18 03:35	04/08/18 03:35	JBE	
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1095255	1	04/12/18 10:40	04/12/18 10:40	RAS	
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG1096509	1	04/11/18 12:58	04/11/18 12:58	RAS	
				Collected by BW/TG	Collected date/time 04/03/18 10:20	
					Received date/time 04/06/18 08:45	
MW-4D L983870-09 GW						
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1095255	1	04/08/18 03:54	04/08/18 03:54	JBE	
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1095255	1	04/12/18 11:00	04/12/18 11:00	RAS	
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG1096509	1	04/11/18 13:17	04/11/18 13:17	RAS	
				Collected by BW/TG	Collected date/time 04/04/18 10:22	
					Received date/time 04/06/18 08:45	
MW-14D L983870-10 GW						
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1095255	1	04/08/18 04:13	04/08/18 04:13	JBE	
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1095255	1	04/12/18 11:19	04/12/18 11:19	RAS	
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG1096509	1	04/11/18 13:37	04/11/18 13:37	RAS	
				Collected by BW/TG	Collected date/time 04/02/18 14:02	
					Received date/time 04/06/18 08:45	
MW-22D L983870-11 GW						
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1095255	1	04/08/18 04:33	04/08/18 04:33	JBE	
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1095255	1	04/12/18 11:38	04/12/18 11:38	RAS	
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG1096509	1	04/11/18 13:56	04/11/18 13:56	RAS	
				Collected by BW/TG	Collected date/time 04/04/18 11:00	
					Received date/time 04/06/18 08:45	
EQUIP BLANK 1 L983870-12 GW						
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1095255	1	04/08/18 00:41	04/08/18 00:41	JBE	
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1095255	1	04/12/18 05:52	04/12/18 05:52	RAS	
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG1096509	1	04/11/18 11:40	04/11/18 11:40	RAS	



SAMPLE SUMMARY

ONE LAB. NATIONWIDE.



TRIP BLANK L983870-13 GW

Collected by
BW/TG Collected date/time
04/04/18 00:00 Received date/time
04/06/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1095255	1	04/08/18 01:00	04/08/18 01:00	JBE
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1095255	1	04/12/18 06:10	04/12/18 06:10	RAS
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG1096509	1	04/11/18 12:00	04/11/18 12:00	RAS

MW-7 L983870-14 GW

Collected by
BW/TG Collected date/time
04/04/18 11:36 Received date/time
04/06/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1095255	1	04/08/18 04:52	04/08/18 04:52	JBE
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1095255	1	04/12/18 11:58	04/12/18 11:58	RAS
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG1096509	1	04/11/18 14:16	04/11/18 14:16	RAS

- ¹ Cp
- ² Tc
- ³ Ss
- ⁴ Cn
- ⁵ Sr
- ⁶ Qc
- ⁷ Gl
- ⁸ Al
- ⁹ Sc



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All radiochemical sample results for solids are reported on a dry weight basis with the exception of tritium, carbon-14 and radon, unless wet weight was requested by the client. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Jeff Carr
Technical Service Representative

- ¹ Cp
- ² Tc
- ³ Ss
- ⁴ Cn
- ⁵ Sr
- ⁶ Qc
- ⁷ GI
- ⁸ AI
- ⁹ SC



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch	
Acetone	ND		0.0500	1	04/08/2018 01:19	WG1095255	¹ Cp
Acrolein	ND		0.0500	1	04/08/2018 01:19	WG1095255	² Tc
Acrylonitrile	ND		0.0100	1	04/08/2018 01:19	WG1095255	³ Ss
Benzene	ND		0.00100	1	04/08/2018 01:19	WG1095255	⁴ Cn
Bromobenzene	ND		0.00100	1	04/08/2018 01:19	WG1095255	⁵ Sr
Bromodichloromethane	ND		0.00100	1	04/08/2018 01:19	WG1095255	⁶ Qc
Bromoform	ND		0.00100	1	04/08/2018 01:19	WG1095255	⁷ Gl
Bromomethane	ND		0.00500	1	04/08/2018 01:19	WG1095255	⁸ Al
n-Butylbenzene	ND		0.00100	1	04/08/2018 01:19	WG1095255	
sec-Butylbenzene	ND		0.00100	1	04/08/2018 01:19	WG1095255	
tert-Butylbenzene	ND		0.00100	1	04/08/2018 01:19	WG1095255	
Carbon tetrachloride	ND		0.00100	1	04/08/2018 01:19	WG1095255	
Chlorobenzene	ND		0.00100	1	04/08/2018 01:19	WG1095255	
Chlorodibromomethane	ND		0.00100	1	04/08/2018 01:19	WG1095255	
Chloroethane	ND		0.00500	1	04/08/2018 01:19	WG1095255	
2-Chloroethyl vinyl ether	ND		0.0500	1	04/08/2018 01:19	WG1095255	
Chloroform	ND		0.00500	1	04/08/2018 01:19	WG1095255	
Chloromethane	ND		0.00250	1	04/08/2018 01:19	WG1095255	
2-Chlorotoluene	ND		0.00100	1	04/08/2018 01:19	WG1095255	
4-Chlorotoluene	ND		0.00100	1	04/08/2018 01:19	WG1095255	
1,2-Dibromo-3-Chloropropane	ND		0.00500	1	04/08/2018 01:19	WG1095255	
1,2-Dibromoethane	ND		0.00100	1	04/08/2018 01:19	WG1095255	
Dibromomethane	ND		0.00100	1	04/08/2018 01:19	WG1095255	
1,2-Dichlorobenzene	ND		0.00100	1	04/08/2018 01:19	WG1095255	
1,3-Dichlorobenzene	ND		0.00100	1	04/08/2018 01:19	WG1095255	
1,4-Dichlorobenzene	ND		0.00100	1	04/08/2018 01:19	WG1095255	
Dichlorodifluoromethane	ND		0.00500	1	04/08/2018 01:19	WG1095255	
1,1-Dichloroethane	0.00801		0.00100	1	04/08/2018 01:19	WG1095255	
1,2-Dichloroethane	ND		0.00100	1	04/08/2018 01:19	WG1095255	
1,1-Dichloroethene	0.0568		0.00100	1	04/08/2018 01:19	WG1095255	
cis-1,2-Dichloroethene	ND		0.00100	1	04/08/2018 01:19	WG1095255	
trans-1,2-Dichloroethene	ND		0.00100	1	04/08/2018 01:19	WG1095255	
1,2-Dichloropropane	ND		0.00100	1	04/08/2018 01:19	WG1095255	
1,1-Dichloropropene	ND		0.00100	1	04/08/2018 01:19	WG1095255	
1,3-Dichloropropane	ND		0.00100	1	04/08/2018 01:19	WG1095255	
cis-1,3-Dichloropropene	ND		0.00100	1	04/08/2018 01:19	WG1095255	
trans-1,3-Dichloropropene	ND		0.00100	1	04/08/2018 01:19	WG1095255	
2,2-Dichloropropane	ND		0.00100	1	04/08/2018 01:19	WG1095255	
Di-isopropyl ether	ND		0.00100	1	04/08/2018 01:19	WG1095255	
1,4-Dioxane	ND		0.100	1	04/12/2018 06:29	WG1095255	
Ethylbenzene	ND		0.00100	1	04/08/2018 01:19	WG1095255	
Hexachloro-1,3-butadiene	ND		0.00100	1	04/08/2018 01:19	WG1095255	
Isopropylbenzene	ND		0.00100	1	04/08/2018 01:19	WG1095255	
p-Isopropyltoluene	ND		0.00100	1	04/08/2018 01:19	WG1095255	
2-Butanone (MEK)	ND		0.0100	1	04/08/2018 01:19	WG1095255	
Methylene Chloride	ND		0.00500	1	04/08/2018 01:19	WG1095255	
4-Methyl-2-pentanone (MIBK)	ND		0.0100	1	04/08/2018 01:19	WG1095255	
Methyl tert-butyl ether	ND		0.00100	1	04/08/2018 01:19	WG1095255	
Naphthalene	ND		0.00500	1	04/08/2018 01:19	WG1095255	
n-Propylbenzene	ND		0.00100	1	04/08/2018 01:19	WG1095255	
Styrene	ND		0.00100	1	04/08/2018 01:19	WG1095255	
1,1,2-Tetrachloroethane	ND		0.00100	1	04/08/2018 01:19	WG1095255	
1,1,2,2-Tetrachloroethane	ND		0.00100	1	04/08/2018 01:19	WG1095255	
Tetrachloroethene	0.00118		0.00100	1	04/08/2018 01:19	WG1095255	
Toluene	ND		0.00100	1	04/08/2018 01:19	WG1095255	
1,2,3-Trichlorobenzene	ND		0.00100	1	04/08/2018 01:19	WG1095255	



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch	
	mg/l		mg/l				¹ Cp
1,2,4-Trichlorobenzene	ND		0.00100	1	04/08/2018 01:19	WG1095255	
1,1,1-Trichloroethane	0.196		0.00100	1	04/08/2018 01:19	WG1095255	
1,1,2-Trichloroethane	0.00212		0.00100	1	04/08/2018 01:19	WG1095255	
Trichloroethene	0.00269		0.00100	1	04/08/2018 01:19	WG1095255	
Trichlorofluoromethane	ND		0.00500	1	04/08/2018 01:19	WG1095255	
1,2,3-Trichloropropane	ND		0.00250	1	04/08/2018 01:19	WG1095255	
1,2,4-Trimethylbenzene	ND		0.00100	1	04/08/2018 01:19	WG1095255	
1,3,5-Trimethylbenzene	ND		0.00100	1	04/08/2018 01:19	WG1095255	
Vinyl chloride	ND		0.00100	1	04/08/2018 01:19	WG1095255	
Xylenes, Total	ND		0.00300	1	04/08/2018 01:19	WG1095255	
(S) Toluene-d8	101		80.0-120		04/08/2018 01:19	WG1095255	
(S) Toluene-d8	103		80.0-120		04/12/2018 06:29	WG1095255	⁶ Qc
(S) Dibromofluoromethane	92.3		76.0-123		04/08/2018 01:19	WG1095255	
(S) Dibromofluoromethane	91.2		76.0-123		04/12/2018 06:29	WG1095255	
(S) 4-Bromofluorobenzene	101		80.0-120		04/08/2018 01:19	WG1095255	
(S) 4-Bromofluorobenzene	91.8		80.0-120		04/12/2018 06:29	WG1095255	⁸ AI

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch	
	mg/l		mg/l				⁹ Sc
1,4-Dioxane	ND		0.00300	1	04/09/2018 19:21	WG1095628	
(S) Toluene-d8	102		78.0-122		04/09/2018 19:21	WG1095628	



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch	
Acetone	ND		0.0500	1	04/08/2018 01:39	WG1095255	¹ Cp
Acrolein	ND		0.0500	1	04/08/2018 01:39	WG1095255	² Tc
Acrylonitrile	ND		0.0100	1	04/08/2018 01:39	WG1095255	³ Ss
Benzene	ND		0.00100	1	04/08/2018 01:39	WG1095255	⁴ Cn
Bromobenzene	ND		0.00100	1	04/08/2018 01:39	WG1095255	⁵ Sr
Bromodichloromethane	ND		0.00100	1	04/08/2018 01:39	WG1095255	⁶ Qc
Bromoform	ND		0.00100	1	04/08/2018 01:39	WG1095255	⁷ Gl
Bromomethane	ND		0.00500	1	04/08/2018 01:39	WG1095255	⁸ Al
n-Butylbenzene	ND		0.00100	1	04/08/2018 01:39	WG1095255	
sec-Butylbenzene	ND		0.00100	1	04/08/2018 01:39	WG1095255	
tert-Butylbenzene	ND		0.00100	1	04/08/2018 01:39	WG1095255	
Carbon tetrachloride	ND		0.00100	1	04/08/2018 01:39	WG1095255	
Chlorobenzene	ND		0.00100	1	04/08/2018 01:39	WG1095255	
Chlorodibromomethane	ND		0.00100	1	04/08/2018 01:39	WG1095255	
Chloroethane	ND		0.00500	1	04/08/2018 01:39	WG1095255	
2-Chloroethyl vinyl ether	ND		0.0500	1	04/08/2018 01:39	WG1095255	
Chloroform	ND		0.00500	1	04/08/2018 01:39	WG1095255	
Chloromethane	ND		0.00250	1	04/08/2018 01:39	WG1095255	
2-Chlorotoluene	ND		0.00100	1	04/08/2018 01:39	WG1095255	
4-Chlorotoluene	ND		0.00100	1	04/08/2018 01:39	WG1095255	
1,2-Dibromo-3-Chloropropane	ND		0.00500	1	04/08/2018 01:39	WG1095255	
1,2-Dibromoethane	ND		0.00100	1	04/08/2018 01:39	WG1095255	
Dibromomethane	ND		0.00100	1	04/08/2018 01:39	WG1095255	
1,2-Dichlorobenzene	ND		0.00100	1	04/08/2018 01:39	WG1095255	
1,3-Dichlorobenzene	ND		0.00100	1	04/08/2018 01:39	WG1095255	
1,4-Dichlorobenzene	ND		0.00100	1	04/08/2018 01:39	WG1095255	
Dichlorodifluoromethane	ND		0.00500	1	04/08/2018 01:39	WG1095255	
1,1-Dichloroethane	0.00314		0.00100	1	04/08/2018 01:39	WG1095255	
1,2-Dichloroethane	ND		0.00100	1	04/08/2018 01:39	WG1095255	
1,1-Dichloroethene	0.0346		0.00100	1	04/08/2018 01:39	WG1095255	
cis-1,2-Dichloroethene	ND		0.00100	1	04/08/2018 01:39	WG1095255	
trans-1,2-Dichloroethene	ND		0.00100	1	04/08/2018 01:39	WG1095255	
1,2-Dichloropropane	ND		0.00100	1	04/08/2018 01:39	WG1095255	
1,1-Dichloropropene	ND		0.00100	1	04/08/2018 01:39	WG1095255	
1,3-Dichloropropane	ND		0.00100	1	04/08/2018 01:39	WG1095255	
cis-1,3-Dichloropropene	ND		0.00100	1	04/08/2018 01:39	WG1095255	
trans-1,3-Dichloropropene	ND		0.00100	1	04/08/2018 01:39	WG1095255	
2,2-Dichloropropane	ND		0.00100	1	04/08/2018 01:39	WG1095255	
Di-isopropyl ether	ND		0.00100	1	04/08/2018 01:39	WG1095255	
1,4-Dioxane	ND		0.100	1	04/12/2018 06:48	WG1095255	
Ethylbenzene	ND		0.00100	1	04/08/2018 01:39	WG1095255	
Hexachloro-1,3-butadiene	ND		0.00100	1	04/08/2018 01:39	WG1095255	
Isopropylbenzene	ND		0.00100	1	04/08/2018 01:39	WG1095255	
p-Isopropyltoluene	ND		0.00100	1	04/08/2018 01:39	WG1095255	
2-Butanone (MEK)	ND		0.0100	1	04/08/2018 01:39	WG1095255	
Methylene Chloride	ND		0.00500	1	04/08/2018 01:39	WG1095255	
4-Methyl-2-pentanone (MIBK)	ND		0.0100	1	04/08/2018 01:39	WG1095255	
Methyl tert-butyl ether	ND		0.00100	1	04/08/2018 01:39	WG1095255	
Naphthalene	ND		0.00500	1	04/08/2018 01:39	WG1095255	
n-Propylbenzene	ND		0.00100	1	04/08/2018 01:39	WG1095255	
Styrene	ND		0.00100	1	04/08/2018 01:39	WG1095255	
1,1,2-Tetrachloroethane	ND		0.00100	1	04/08/2018 01:39	WG1095255	
1,1,2,2-Tetrachloroethane	ND		0.00100	1	04/08/2018 01:39	WG1095255	
Tetrachloroethene	ND		0.00100	1	04/08/2018 01:39	WG1095255	
Toluene	ND		0.00100	1	04/08/2018 01:39	WG1095255	
1,2,3-Trichlorobenzene	ND		0.00100	1	04/08/2018 01:39	WG1095255	



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch	
	mg/l		mg/l				¹ Cp
1,2,4-Trichlorobenzene	ND		0.00100	1	04/08/2018 01:39	WG1095255	² Tc
1,1,1-Trichloroethane	0.0404		0.00100	1	04/08/2018 01:39	WG1095255	³ Ss
1,1,2-Trichloroethane	ND		0.00100	1	04/08/2018 01:39	WG1095255	⁴ Cn
Trichloroethene	0.00140		0.00100	1	04/08/2018 01:39	WG1095255	⁵ Sr
Trichlorofluoromethane	ND		0.00500	1	04/08/2018 01:39	WG1095255	⁶ Qc
1,2,3-Trichloropropane	ND		0.00250	1	04/08/2018 01:39	WG1095255	⁷ Gl
1,2,4-Trimethylbenzene	ND		0.00100	1	04/08/2018 01:39	WG1095255	⁸ Al
1,3,5-Trimethylbenzene	ND		0.00100	1	04/08/2018 01:39	WG1095255	⁹ Sc
Vinyl chloride	ND		0.00100	1	04/08/2018 01:39	WG1095255	
Xylenes, Total	ND		0.00300	1	04/08/2018 01:39	WG1095255	
(S) Toluene-d8	101		80.0-120		04/08/2018 01:39	WG1095255	
(S) Toluene-d8	101		80.0-120		04/12/2018 06:48	WG1095255	
(S) Dibromofluoromethane	92.7		76.0-123		04/08/2018 01:39	WG1095255	
(S) Dibromofluoromethane	91.2		76.0-123		04/12/2018 06:48	WG1095255	
(S) 4-Bromofluorobenzene	102		80.0-120		04/08/2018 01:39	WG1095255	
(S) 4-Bromofluorobenzene	94.5		80.0-120		04/12/2018 06:48	WG1095255	

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/l		mg/l			
1,4-Dioxane	ND		0.00300	1	04/09/2018 19:41	WG1095628
(S) Toluene-d8	102		78.0-122		04/09/2018 19:41	WG1095628



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch	
Acetone	ND		0.0500	1	04/08/2018 01:59	WG1095255	¹ Cp
Acrolein	ND		0.0500	1	04/08/2018 01:59	WG1095255	² Tc
Acrylonitrile	ND		0.0100	1	04/08/2018 01:59	WG1095255	³ Ss
Benzene	ND		0.00100	1	04/08/2018 01:59	WG1095255	⁴ Cn
Bromobenzene	ND		0.00100	1	04/08/2018 01:59	WG1095255	⁵ Sr
Bromodichloromethane	ND		0.00100	1	04/08/2018 01:59	WG1095255	⁶ Qc
Bromoform	ND		0.00100	1	04/08/2018 01:59	WG1095255	⁷ Gl
Bromomethane	ND		0.00500	1	04/08/2018 01:59	WG1095255	⁸ Al
n-Butylbenzene	ND		0.00100	1	04/08/2018 01:59	WG1095255	
sec-Butylbenzene	ND		0.00100	1	04/08/2018 01:59	WG1095255	
tert-Butylbenzene	ND		0.00100	1	04/08/2018 01:59	WG1095255	
Carbon tetrachloride	ND		0.00100	1	04/08/2018 01:59	WG1095255	
Chlorobenzene	ND		0.00100	1	04/08/2018 01:59	WG1095255	
Chlorodibromomethane	ND		0.00100	1	04/08/2018 01:59	WG1095255	
Chloroethane	ND		0.00500	1	04/08/2018 01:59	WG1095255	
2-Chloroethyl vinyl ether	ND		0.0500	1	04/08/2018 01:59	WG1095255	
Chloroform	ND		0.00500	1	04/08/2018 01:59	WG1095255	
Chloromethane	ND		0.00250	1	04/08/2018 01:59	WG1095255	
2-Chlorotoluene	ND		0.00100	1	04/08/2018 01:59	WG1095255	
4-Chlorotoluene	ND		0.00100	1	04/08/2018 01:59	WG1095255	
1,2-Dibromo-3-Chloropropane	ND		0.00500	1	04/08/2018 01:59	WG1095255	
1,2-Dibromoethane	ND		0.00100	1	04/08/2018 01:59	WG1095255	
Dibromomethane	ND		0.00100	1	04/08/2018 01:59	WG1095255	
1,2-Dichlorobenzene	ND		0.00100	1	04/08/2018 01:59	WG1095255	
1,3-Dichlorobenzene	ND		0.00100	1	04/08/2018 01:59	WG1095255	
1,4-Dichlorobenzene	ND		0.00100	1	04/08/2018 01:59	WG1095255	
Dichlorodifluoromethane	ND		0.00500	1	04/08/2018 01:59	WG1095255	
1,1-Dichloroethane	ND		0.00100	1	04/08/2018 01:59	WG1095255	
1,2-Dichloroethane	ND		0.00100	1	04/08/2018 01:59	WG1095255	
1,1-Dichloroethene	0.0115		0.00100	1	04/08/2018 01:59	WG1095255	
cis-1,2-Dichloroethene	ND		0.00100	1	04/08/2018 01:59	WG1095255	
trans-1,2-Dichloroethene	ND		0.00100	1	04/08/2018 01:59	WG1095255	
1,2-Dichloropropane	ND		0.00100	1	04/08/2018 01:59	WG1095255	
1,1-Dichloropropene	ND		0.00100	1	04/08/2018 01:59	WG1095255	
1,3-Dichloropropane	ND		0.00100	1	04/08/2018 01:59	WG1095255	
cis-1,3-Dichloropropene	ND		0.00100	1	04/08/2018 01:59	WG1095255	
trans-1,3-Dichloropropene	ND		0.00100	1	04/08/2018 01:59	WG1095255	
2,2-Dichloropropane	ND		0.00100	1	04/08/2018 01:59	WG1095255	
Di-isopropyl ether	ND		0.00100	1	04/08/2018 01:59	WG1095255	
1,4-Dioxane	ND		0.100	1	04/12/2018 07:08	WG1095255	
Ethylbenzene	ND		0.00100	1	04/08/2018 01:59	WG1095255	
Hexachloro-1,3-butadiene	ND		0.00100	1	04/08/2018 01:59	WG1095255	
Isopropylbenzene	ND		0.00100	1	04/08/2018 01:59	WG1095255	
p-Isopropyltoluene	ND		0.00100	1	04/08/2018 01:59	WG1095255	
2-Butanone (MEK)	ND		0.0100	1	04/08/2018 01:59	WG1095255	
Methylene Chloride	ND		0.00500	1	04/08/2018 01:59	WG1095255	
4-Methyl-2-pentanone (MIBK)	ND		0.0100	1	04/08/2018 01:59	WG1095255	
Methyl tert-butyl ether	ND		0.00100	1	04/08/2018 01:59	WG1095255	
Naphthalene	ND		0.00500	1	04/08/2018 01:59	WG1095255	
n-Propylbenzene	ND		0.00100	1	04/08/2018 01:59	WG1095255	
Styrene	ND		0.00100	1	04/08/2018 01:59	WG1095255	
1,1,2-Tetrachloroethane	ND		0.00100	1	04/08/2018 01:59	WG1095255	
1,1,2,2-Tetrachloroethane	ND		0.00100	1	04/08/2018 01:59	WG1095255	
Tetrachloroethene	ND		0.00100	1	04/08/2018 01:59	WG1095255	
Toluene	ND		0.00100	1	04/08/2018 01:59	WG1095255	
1,2,3-Trichlorobenzene	ND		0.00100	1	04/08/2018 01:59	WG1095255	



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch	
1,2,4-Trichlorobenzene	ND		0.00100	1	04/08/2018 01:59	WG1095255	¹ Cp
1,1,1-Trichloroethane	0.00872		0.00100	1	04/08/2018 01:59	WG1095255	² Tc
1,1,2-Trichloroethane	ND		0.00100	1	04/08/2018 01:59	WG1095255	³ Ss
Trichloroethene	ND		0.00100	1	04/08/2018 01:59	WG1095255	⁴ Cn
Trichlorofluoromethane	ND		0.00500	1	04/08/2018 01:59	WG1095255	⁵ Sr
1,2,3-Trichloropropane	ND		0.00250	1	04/08/2018 01:59	WG1095255	⁶ Qc
1,2,4-Trimethylbenzene	ND		0.00100	1	04/08/2018 01:59	WG1095255	⁷ Gl
1,3,5-Trimethylbenzene	ND		0.00100	1	04/08/2018 01:59	WG1095255	⁸ Al
Vinyl chloride	ND		0.00100	1	04/08/2018 01:59	WG1095255	
Xylenes, Total	ND		0.00300	1	04/08/2018 01:59	WG1095255	
(S) Toluene-d8	98.4		80.0-120		04/12/2018 07:08	WG1095255	
(S) Toluene-d8	104		80.0-120		04/08/2018 01:59	WG1095255	
(S) Dibromofluoromethane	89.7		76.0-123		04/12/2018 07:08	WG1095255	
(S) Dibromofluoromethane	95.0		76.0-123		04/08/2018 01:59	WG1095255	
(S) 4-Bromofluorobenzene	103		80.0-120		04/08/2018 01:59	WG1095255	
(S) 4-Bromofluorobenzene	93.0		80.0-120		04/12/2018 07:08	WG1095255	

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch	
1,4-Dioxane	ND		0.00300	1	04/09/2018 20:00	WG1095628	
(S) Toluene-d8	94.8		78.0-122		04/09/2018 20:00	WG1095628	



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch	
Acetone	ND		0.0500	1	04/08/2018 02:18	WG1095255	¹ Cp
Acrolein	ND		0.0500	1	04/08/2018 02:18	WG1095255	² Tc
Acrylonitrile	ND		0.0100	1	04/08/2018 02:18	WG1095255	³ Ss
Benzene	ND		0.00100	1	04/08/2018 02:18	WG1095255	⁴ Cn
Bromobenzene	ND		0.00100	1	04/08/2018 02:18	WG1095255	⁵ Sr
Bromodichloromethane	ND		0.00100	1	04/08/2018 02:18	WG1095255	⁶ Qc
Bromoform	ND		0.00100	1	04/08/2018 02:18	WG1095255	⁷ Gl
Bromomethane	ND		0.00500	1	04/08/2018 02:18	WG1095255	⁸ Al
n-Butylbenzene	ND		0.00100	1	04/08/2018 02:18	WG1095255	
sec-Butylbenzene	ND		0.00100	1	04/08/2018 02:18	WG1095255	
tert-Butylbenzene	ND		0.00100	1	04/08/2018 02:18	WG1095255	
Carbon tetrachloride	ND		0.00100	1	04/08/2018 02:18	WG1095255	
Chlorobenzene	ND		0.00100	1	04/08/2018 02:18	WG1095255	
Chlorodibromomethane	ND		0.00100	1	04/08/2018 02:18	WG1095255	
Chloroethane	ND		0.00500	1	04/08/2018 02:18	WG1095255	
2-Chloroethyl vinyl ether	ND		0.0500	1	04/08/2018 02:18	WG1095255	
Chloroform	ND		0.00500	1	04/08/2018 02:18	WG1095255	
Chloromethane	ND		0.00250	1	04/08/2018 02:18	WG1095255	
2-Chlorotoluene	ND		0.00100	1	04/08/2018 02:18	WG1095255	
4-Chlorotoluene	ND		0.00100	1	04/08/2018 02:18	WG1095255	
1,2-Dibromo-3-Chloropropane	ND		0.00500	1	04/08/2018 02:18	WG1095255	
1,2-Dibromoethane	ND		0.00100	1	04/08/2018 02:18	WG1095255	
Dibromomethane	ND		0.00100	1	04/08/2018 02:18	WG1095255	
1,2-Dichlorobenzene	ND		0.00100	1	04/08/2018 02:18	WG1095255	
1,3-Dichlorobenzene	ND		0.00100	1	04/08/2018 02:18	WG1095255	
1,4-Dichlorobenzene	ND		0.00100	1	04/08/2018 02:18	WG1095255	
Dichlorodifluoromethane	ND		0.00500	1	04/08/2018 02:18	WG1095255	
1,1-Dichloroethane	ND		0.00100	1	04/08/2018 02:18	WG1095255	
1,2-Dichloroethane	ND		0.00100	1	04/08/2018 02:18	WG1095255	
1,1-Dichloroethene	ND		0.00100	1	04/08/2018 02:18	WG1095255	
cis-1,2-Dichloroethene	ND		0.00100	1	04/08/2018 02:18	WG1095255	
trans-1,2-Dichloroethene	ND		0.00100	1	04/08/2018 02:18	WG1095255	
1,2-Dichloropropane	ND		0.00100	1	04/08/2018 02:18	WG1095255	
1,1-Dichloropropene	ND		0.00100	1	04/08/2018 02:18	WG1095255	
1,3-Dichloropropane	ND		0.00100	1	04/08/2018 02:18	WG1095255	
cis-1,3-Dichloropropene	ND		0.00100	1	04/08/2018 02:18	WG1095255	
trans-1,3-Dichloropropene	ND		0.00100	1	04/08/2018 02:18	WG1095255	
2,2-Dichloropropane	ND		0.00100	1	04/08/2018 02:18	WG1095255	
Di-isopropyl ether	ND		0.00100	1	04/08/2018 02:18	WG1095255	
1,4-Dioxane	ND		0.100	1	04/12/2018 07:27	WG1095255	
Ethylbenzene	ND		0.00100	1	04/08/2018 02:18	WG1095255	
Hexachloro-1,3-butadiene	ND		0.00100	1	04/08/2018 02:18	WG1095255	
Isopropylbenzene	ND		0.00100	1	04/08/2018 02:18	WG1095255	
p-Isopropyltoluene	ND		0.00100	1	04/08/2018 02:18	WG1095255	
2-Butanone (MEK)	ND		0.0100	1	04/08/2018 02:18	WG1095255	
Methylene Chloride	ND		0.00500	1	04/08/2018 02:18	WG1095255	
4-Methyl-2-pentanone (MIBK)	ND		0.0100	1	04/08/2018 02:18	WG1095255	
Methyl tert-butyl ether	ND		0.00100	1	04/08/2018 02:18	WG1095255	
Naphthalene	ND		0.00500	1	04/08/2018 02:18	WG1095255	
n-Propylbenzene	ND		0.00100	1	04/08/2018 02:18	WG1095255	
Styrene	ND		0.00100	1	04/08/2018 02:18	WG1095255	
1,1,1,2-Tetrachloroethane	ND		0.00100	1	04/08/2018 02:18	WG1095255	
1,1,2,2-Tetrachloroethane	ND		0.00100	1	04/08/2018 02:18	WG1095255	
Tetrachloroethene	ND		0.00100	1	04/08/2018 02:18	WG1095255	
Toluene	ND		0.00100	1	04/08/2018 02:18	WG1095255	
1,2,3-Trichlorobenzene	ND		0.00100	1	04/08/2018 02:18	WG1095255	



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch	
1,2,4-Trichlorobenzene	ND		0.00100	1	04/08/2018 02:18	WG1095255	¹ Cp
1,1,1-Trichloroethane	ND		0.00100	1	04/08/2018 02:18	WG1095255	² Tc
1,1,2-Trichloroethane	ND		0.00100	1	04/08/2018 02:18	WG1095255	³ Ss
Trichloroethene	ND		0.00100	1	04/08/2018 02:18	WG1095255	⁴ Cn
Trichlorofluoromethane	ND		0.00500	1	04/08/2018 02:18	WG1095255	⁵ Sr
1,2,3-Trichloropropane	ND		0.00250	1	04/08/2018 02:18	WG1095255	⁶ Qc
1,2,4-Trimethylbenzene	ND		0.00100	1	04/08/2018 02:18	WG1095255	⁷ Gl
1,3,5-Trimethylbenzene	ND		0.00100	1	04/08/2018 02:18	WG1095255	⁸ Al
Vinyl chloride	ND		0.00100	1	04/08/2018 02:18	WG1095255	
Xylenes, Total	ND		0.00300	1	04/08/2018 02:18	WG1095255	
(S) Toluene-d8	101		80.0-120		04/08/2018 02:18	WG1095255	
(S) Toluene-d8	102		80.0-120		04/12/2018 07:27	WG1095255	
(S) Dibromofluoromethane	89.4		76.0-123		04/12/2018 07:27	WG1095255	
(S) Dibromofluoromethane	90.5		76.0-123		04/08/2018 02:18	WG1095255	
(S) 4-Bromofluorobenzene	92.9		80.0-120		04/12/2018 07:27	WG1095255	
(S) 4-Bromofluorobenzene	103		80.0-120		04/08/2018 02:18	WG1095255	

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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch	
1,4-Dioxane	ND		0.00300	1	04/09/2018 20:20	WG1095628	
(S) Toluene-d8	102		78.0-122		04/09/2018 20:20	WG1095628	



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch	
Acetone	ND		0.0500	1	04/08/2018 02:37	WG1095255	¹ Cp
Acrolein	ND		0.0500	1	04/08/2018 02:37	WG1095255	² Tc
Acrylonitrile	ND		0.0100	1	04/08/2018 02:37	WG1095255	³ Ss
Benzene	ND		0.00100	1	04/08/2018 02:37	WG1095255	⁴ Cn
Bromobenzene	ND		0.00100	1	04/08/2018 02:37	WG1095255	⁵ Sr
Bromodichloromethane	ND		0.00100	1	04/08/2018 02:37	WG1095255	⁶ Qc
Bromoform	ND		0.00100	1	04/08/2018 02:37	WG1095255	⁷ Gl
Bromomethane	ND		0.00500	1	04/08/2018 02:37	WG1095255	⁸ Al
n-Butylbenzene	ND		0.00100	1	04/08/2018 02:37	WG1095255	
sec-Butylbenzene	ND		0.00100	1	04/08/2018 02:37	WG1095255	
tert-Butylbenzene	ND		0.00100	1	04/08/2018 02:37	WG1095255	
Carbon tetrachloride	ND		0.00100	1	04/08/2018 02:37	WG1095255	
Chlorobenzene	ND		0.00100	1	04/08/2018 02:37	WG1095255	
Chlorodibromomethane	ND		0.00100	1	04/08/2018 02:37	WG1095255	
Chloroethane	ND		0.00500	1	04/08/2018 02:37	WG1095255	
2-Chloroethyl vinyl ether	ND		0.0500	1	04/08/2018 02:37	WG1095255	
Chloroform	ND		0.00500	1	04/08/2018 02:37	WG1095255	
Chloromethane	ND		0.00250	1	04/08/2018 02:37	WG1095255	
2-Chlorotoluene	ND		0.00100	1	04/08/2018 02:37	WG1095255	
4-Chlorotoluene	ND		0.00100	1	04/08/2018 02:37	WG1095255	
1,2-Dibromo-3-Chloropropane	ND		0.00500	1	04/08/2018 02:37	WG1095255	
1,2-Dibromoethane	ND		0.00100	1	04/08/2018 02:37	WG1095255	
Dibromomethane	ND		0.00100	1	04/08/2018 02:37	WG1095255	
1,2-Dichlorobenzene	ND		0.00100	1	04/08/2018 02:37	WG1095255	
1,3-Dichlorobenzene	ND		0.00100	1	04/08/2018 02:37	WG1095255	
1,4-Dichlorobenzene	ND		0.00100	1	04/08/2018 02:37	WG1095255	
Dichlorodifluoromethane	ND		0.00500	1	04/08/2018 02:37	WG1095255	
1,1-Dichloroethane	0.00357		0.00100	1	04/08/2018 02:37	WG1095255	
1,2-Dichloroethane	ND		0.00100	1	04/08/2018 02:37	WG1095255	
1,1-Dichloroethene	0.0415		0.00100	1	04/08/2018 02:37	WG1095255	
cis-1,2-Dichloroethene	ND		0.00100	1	04/08/2018 02:37	WG1095255	
trans-1,2-Dichloroethene	ND		0.00100	1	04/08/2018 02:37	WG1095255	
1,2-Dichloropropane	ND		0.00100	1	04/08/2018 02:37	WG1095255	
1,1-Dichloropropene	ND		0.00100	1	04/08/2018 02:37	WG1095255	
1,3-Dichloropropane	ND		0.00100	1	04/08/2018 02:37	WG1095255	
cis-1,3-Dichloropropene	ND		0.00100	1	04/08/2018 02:37	WG1095255	
trans-1,3-Dichloropropene	ND		0.00100	1	04/08/2018 02:37	WG1095255	
2,2-Dichloropropane	ND		0.00100	1	04/08/2018 02:37	WG1095255	
Di-isopropyl ether	ND		0.00100	1	04/08/2018 02:37	WG1095255	
1,4-Dioxane	ND		0.100	1	04/12/2018 09:42	WG1095255	
Ethylbenzene	ND		0.00100	1	04/08/2018 02:37	WG1095255	
Hexachloro-1,3-butadiene	ND		0.00100	1	04/08/2018 02:37	WG1095255	
Isopropylbenzene	ND		0.00100	1	04/08/2018 02:37	WG1095255	
p-Isopropyltoluene	ND		0.00100	1	04/08/2018 02:37	WG1095255	
2-Butanone (MEK)	ND		0.0100	1	04/08/2018 02:37	WG1095255	
Methylene Chloride	ND		0.00500	1	04/08/2018 02:37	WG1095255	
4-Methyl-2-pentanone (MIBK)	ND		0.0100	1	04/08/2018 02:37	WG1095255	
Methyl tert-butyl ether	ND		0.00100	1	04/08/2018 02:37	WG1095255	
Naphthalene	ND		0.00500	1	04/08/2018 02:37	WG1095255	
n-Propylbenzene	ND		0.00100	1	04/08/2018 02:37	WG1095255	
Styrene	ND		0.00100	1	04/08/2018 02:37	WG1095255	
1,1,1,2-Tetrachloroethane	ND		0.00100	1	04/08/2018 02:37	WG1095255	
1,1,2,2-Tetrachloroethane	ND		0.00100	1	04/08/2018 02:37	WG1095255	
Tetrachloroethene	ND		0.00100	1	04/08/2018 02:37	WG1095255	
Toluene	ND		0.00100	1	04/08/2018 02:37	WG1095255	
1,2,3-Trichlorobenzene	ND		0.00100	1	04/08/2018 02:37	WG1095255	



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch	
1,2,4-Trichlorobenzene	ND		0.00100	1	04/08/2018 02:37	WG1095255	¹ Cp
1,1,1-Trichloroethane	0.0204		0.00100	1	04/08/2018 02:37	WG1095255	² Tc
1,1,2-Trichloroethane	ND		0.00100	1	04/08/2018 02:37	WG1095255	³ Ss
Trichloroethene	0.00105		0.00100	1	04/08/2018 02:37	WG1095255	⁴ Cn
Trichlorofluoromethane	ND		0.00500	1	04/08/2018 02:37	WG1095255	⁵ Sr
1,2,3-Trichloropropane	ND		0.00250	1	04/08/2018 02:37	WG1095255	⁶ Qc
1,2,4-Trimethylbenzene	ND		0.00100	1	04/08/2018 02:37	WG1095255	⁷ Gl
1,3,5-Trimethylbenzene	ND		0.00100	1	04/08/2018 02:37	WG1095255	⁸ Al
Vinyl chloride	ND		0.00100	1	04/08/2018 02:37	WG1095255	
Xylenes, Total	ND		0.00300	1	04/08/2018 02:37	WG1095255	
(S) Toluene-d8	104		80.0-120		04/08/2018 02:37	WG1095255	
(S) Toluene-d8	102		80.0-120		04/12/2018 09:42	WG1095255	
(S) Dibromofluoromethane	90.7		76.0-123		04/12/2018 09:42	WG1095255	
(S) Dibromofluoromethane	94.3		76.0-123		04/08/2018 02:37	WG1095255	
(S) 4-Bromofluorobenzene	93.7		80.0-120		04/12/2018 09:42	WG1095255	
(S) 4-Bromofluorobenzene	99.4		80.0-120		04/08/2018 02:37	WG1095255	

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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
1,4-Dioxane	0.0223		0.00300	1	04/09/2018 20:39	WG1095628
(S) Toluene-d8	101		78.0-122		04/09/2018 20:39	WG1095628



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch	
Acetone	ND		0.250	5	04/12/2018 01:06	WG1095255	¹ Cp
Acrolein	ND		0.250	5	04/12/2018 01:06	WG1095255	² Tc
Acrylonitrile	ND		0.0500	5	04/12/2018 01:06	WG1095255	³ Ss
Benzene	ND		0.00500	5	04/12/2018 01:06	WG1095255	⁴ Cn
Bromobenzene	ND		0.00500	5	04/12/2018 01:06	WG1095255	⁵ Sr
Bromodichloromethane	ND		0.00500	5	04/12/2018 01:06	WG1095255	⁶ Qc
Bromoform	ND		0.00500	5	04/12/2018 01:06	WG1095255	⁷ Gl
Bromomethane	ND		0.0250	5	04/12/2018 01:06	WG1095255	⁸ Al
n-Butylbenzene	ND		0.00500	5	04/12/2018 01:06	WG1095255	⁹ Sc
sec-Butylbenzene	ND		0.00500	5	04/12/2018 01:06	WG1095255	
tert-Butylbenzene	ND		0.00500	5	04/12/2018 01:06	WG1095255	
Carbon tetrachloride	ND		0.00500	5	04/12/2018 01:06	WG1095255	
Chlorobenzene	ND		0.00500	5	04/12/2018 01:06	WG1095255	
Chlorodibromomethane	ND		0.00500	5	04/12/2018 01:06	WG1095255	
Chloroethane	ND		0.0250	5	04/12/2018 01:06	WG1095255	
2-Chloroethyl vinyl ether	ND		0.250	5	04/12/2018 01:06	WG1095255	
Chloroform	ND		0.0250	5	04/12/2018 01:06	WG1095255	
Chloromethane	ND		0.0125	5	04/12/2018 01:06	WG1095255	
2-Chlorotoluene	ND		0.00500	5	04/12/2018 01:06	WG1095255	
4-Chlorotoluene	ND		0.00500	5	04/12/2018 01:06	WG1095255	
1,2-Dibromo-3-Chloropropane	ND		0.0250	5	04/12/2018 01:06	WG1095255	
1,2-Dibromoethane	ND		0.00500	5	04/12/2018 01:06	WG1095255	
Dibromomethane	ND		0.00500	5	04/12/2018 01:06	WG1095255	
1,2-Dichlorobenzene	ND		0.00500	5	04/12/2018 01:06	WG1095255	
1,3-Dichlorobenzene	ND		0.00500	5	04/12/2018 01:06	WG1095255	
1,4-Dichlorobenzene	ND		0.00500	5	04/12/2018 01:06	WG1095255	
Dichlorodifluoromethane	ND		0.0250	5	04/12/2018 01:06	WG1095255	
1,1-Dichloroethane	0.0397		0.00500	5	04/12/2018 01:06	WG1095255	
1,2-Dichloroethane	ND		0.00500	5	04/12/2018 01:06	WG1095255	
1,1-Dichloroethene	0.116		0.00500	5	04/12/2018 01:06	WG1095255	
cis-1,2-Dichloroethene	ND		0.00500	5	04/12/2018 01:06	WG1095255	
trans-1,2-Dichloroethene	ND		0.00500	5	04/12/2018 01:06	WG1095255	
1,2-Dichloropropane	ND		0.00500	5	04/12/2018 01:06	WG1095255	
1,1-Dichloropropene	ND		0.00500	5	04/12/2018 01:06	WG1095255	
1,3-Dichloropropane	ND		0.00500	5	04/12/2018 01:06	WG1095255	
cis-1,3-Dichloropropene	ND		0.00500	5	04/12/2018 01:06	WG1095255	
trans-1,3-Dichloropropene	ND		0.00500	5	04/12/2018 01:06	WG1095255	
2,2-Dichloropropane	ND		0.00500	5	04/12/2018 01:06	WG1095255	
Di-isopropyl ether	ND		0.00500	5	04/12/2018 01:06	WG1095255	
1,4-Dioxane	ND		0.100	1	04/12/2018 10:01	WG1095255	
Ethylbenzene	ND		0.00500	5	04/12/2018 01:06	WG1095255	
Hexachloro-1,3-butadiene	ND		0.00500	5	04/12/2018 01:06	WG1095255	
Isopropylbenzene	ND		0.00500	5	04/12/2018 01:06	WG1095255	
p-Isopropyltoluene	ND		0.00500	5	04/12/2018 01:06	WG1095255	
2-Butanone (MEK)	ND		0.0500	5	04/12/2018 01:06	WG1095255	
Methylene Chloride	ND		0.0250	5	04/12/2018 01:06	WG1095255	
4-Methyl-2-pentanone (MIBK)	ND		0.0500	5	04/12/2018 01:06	WG1095255	
Methyl tert-butyl ether	ND		0.00500	5	04/12/2018 01:06	WG1095255	
Naphthalene	ND		0.0250	5	04/12/2018 01:06	WG1095255	
n-Propylbenzene	ND		0.00500	5	04/12/2018 01:06	WG1095255	
Styrene	ND		0.00500	5	04/12/2018 01:06	WG1095255	
1,1,1,2-Tetrachloroethane	ND		0.00500	5	04/12/2018 01:06	WG1095255	
1,1,2,2-Tetrachloroethane	ND		0.00500	5	04/12/2018 01:06	WG1095255	
Tetrachloroethene	ND		0.00500	5	04/12/2018 01:06	WG1095255	
Toluene	ND		0.00500	5	04/12/2018 01:06	WG1095255	
1,2,3-Trichlorobenzene	ND		0.00500	5	04/12/2018 01:06	WG1095255	



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch	
1,2,4-Trichlorobenzene	ND		0.00500	5	04/12/2018 01:06	WG1095255	¹ Cp
1,1,1-Trichloroethane	0.402		0.00500	5	04/12/2018 01:06	WG1095255	² Tc
1,1,2-Trichloroethane	0.00920		0.00500	5	04/12/2018 01:06	WG1095255	³ Ss
Trichloroethene	0.00509		0.00500	5	04/12/2018 01:06	WG1095255	⁴ Cn
Trichlorofluoromethane	ND		0.0250	5	04/12/2018 01:06	WG1095255	⁵ Sr
1,2,3-Trichloropropane	ND		0.0125	5	04/12/2018 01:06	WG1095255	⁶ Qc
1,2,4-Trimethylbenzene	ND		0.00500	5	04/12/2018 01:06	WG1095255	⁷ Gl
1,3,5-Trimethylbenzene	ND		0.00500	5	04/12/2018 01:06	WG1095255	⁸ Al
Vinyl chloride	ND		0.00500	5	04/12/2018 01:06	WG1095255	
Xylenes, Total	ND		0.0150	5	04/12/2018 01:06	WG1095255	
(S) Toluene-d8	107		80.0-120		04/12/2018 01:06	WG1095255	
(S) Toluene-d8	101		80.0-120		04/12/2018 10:01	WG1095255	
(S) Dibromofluoromethane	94.8		76.0-123		04/12/2018 10:01	WG1095255	
(S) Dibromofluoromethane	92.3		76.0-123		04/12/2018 01:06	WG1095255	
(S) 4-Bromofluorobenzene	94.1		80.0-120		04/12/2018 10:01	WG1095255	
(S) 4-Bromofluorobenzene	103		80.0-120		04/12/2018 01:06	WG1095255	

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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch	
1,4-Dioxane	0.0877		0.00300	1	04/12/2018 19:41	WG1096509	
(S) Toluene-d8	95.4		78.0-122		04/12/2018 19:41	WG1096509	



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch	
Acetone	ND		0.0500	1	04/08/2018 03:16	WG1095255	¹ Cp
Acrolein	ND		0.0500	1	04/08/2018 03:16	WG1095255	² Tc
Acrylonitrile	ND		0.0100	1	04/08/2018 03:16	WG1095255	³ Ss
Benzene	ND		0.00100	1	04/08/2018 03:16	WG1095255	⁴ Cn
Bromobenzene	ND		0.00100	1	04/08/2018 03:16	WG1095255	⁵ Sr
Bromodichloromethane	ND		0.00100	1	04/08/2018 03:16	WG1095255	⁶ Qc
Bromoform	ND		0.00100	1	04/08/2018 03:16	WG1095255	⁷ Gl
Bromomethane	ND		0.00500	1	04/08/2018 03:16	WG1095255	⁸ Al
n-Butylbenzene	ND		0.00100	1	04/08/2018 03:16	WG1095255	
sec-Butylbenzene	ND		0.00100	1	04/08/2018 03:16	WG1095255	
tert-Butylbenzene	ND		0.00100	1	04/08/2018 03:16	WG1095255	
Carbon tetrachloride	ND		0.00100	1	04/08/2018 03:16	WG1095255	
Chlorobenzene	ND		0.00100	1	04/08/2018 03:16	WG1095255	
Chlorodibromomethane	ND		0.00100	1	04/08/2018 03:16	WG1095255	
Chloroethane	ND		0.00500	1	04/08/2018 03:16	WG1095255	
2-Chloroethyl vinyl ether	ND		0.0500	1	04/08/2018 03:16	WG1095255	
Chloroform	ND		0.00500	1	04/08/2018 03:16	WG1095255	
Chloromethane	ND		0.00250	1	04/08/2018 03:16	WG1095255	
2-Chlorotoluene	ND		0.00100	1	04/08/2018 03:16	WG1095255	
4-Chlorotoluene	ND		0.00100	1	04/08/2018 03:16	WG1095255	
1,2-Dibromo-3-Chloropropane	ND		0.00500	1	04/08/2018 03:16	WG1095255	
1,2-Dibromoethane	ND		0.00100	1	04/08/2018 03:16	WG1095255	
Dibromomethane	ND		0.00100	1	04/08/2018 03:16	WG1095255	
1,2-Dichlorobenzene	ND		0.00100	1	04/08/2018 03:16	WG1095255	
1,3-Dichlorobenzene	ND		0.00100	1	04/08/2018 03:16	WG1095255	
1,4-Dichlorobenzene	ND		0.00100	1	04/08/2018 03:16	WG1095255	
Dichlorodifluoromethane	ND		0.00500	1	04/08/2018 03:16	WG1095255	
1,1-Dichloroethane	ND		0.00100	1	04/08/2018 03:16	WG1095255	
1,2-Dichloroethane	ND		0.00100	1	04/08/2018 03:16	WG1095255	
1,1-Dichloroethene	ND		0.00100	1	04/08/2018 03:16	WG1095255	
cis-1,2-Dichloroethene	ND		0.00100	1	04/08/2018 03:16	WG1095255	
trans-1,2-Dichloroethene	ND		0.00100	1	04/08/2018 03:16	WG1095255	
1,2-Dichloropropane	ND		0.00100	1	04/08/2018 03:16	WG1095255	
1,1-Dichloropropene	ND		0.00100	1	04/08/2018 03:16	WG1095255	
1,3-Dichloropropane	ND		0.00100	1	04/08/2018 03:16	WG1095255	
cis-1,3-Dichloropropene	ND		0.00100	1	04/08/2018 03:16	WG1095255	
trans-1,3-Dichloropropene	ND		0.00100	1	04/08/2018 03:16	WG1095255	
2,2-Dichloropropane	ND		0.00100	1	04/08/2018 03:16	WG1095255	
Di-isopropyl ether	ND		0.00100	1	04/08/2018 03:16	WG1095255	
1,4-Dioxane	ND		0.100	1	04/12/2018 10:21	WG1095255	
Ethylbenzene	ND		0.00100	1	04/08/2018 03:16	WG1095255	
Hexachloro-1,3-butadiene	ND		0.00100	1	04/08/2018 03:16	WG1095255	
Isopropylbenzene	ND		0.00100	1	04/08/2018 03:16	WG1095255	
p-Isopropyltoluene	ND		0.00100	1	04/08/2018 03:16	WG1095255	
2-Butanone (MEK)	ND		0.0100	1	04/08/2018 03:16	WG1095255	
Methylene Chloride	ND		0.00500	1	04/08/2018 03:16	WG1095255	
4-Methyl-2-pentanone (MIBK)	ND		0.0100	1	04/08/2018 03:16	WG1095255	
Methyl tert-butyl ether	ND		0.00100	1	04/08/2018 03:16	WG1095255	
Naphthalene	ND		0.00500	1	04/08/2018 03:16	WG1095255	
n-Propylbenzene	ND		0.00100	1	04/08/2018 03:16	WG1095255	
Styrene	ND		0.00100	1	04/08/2018 03:16	WG1095255	
1,1,2-Tetrachloroethane	ND		0.00100	1	04/08/2018 03:16	WG1095255	
1,1,2,2-Tetrachloroethane	ND		0.00100	1	04/08/2018 03:16	WG1095255	
Tetrachloroethene	ND		0.00100	1	04/08/2018 03:16	WG1095255	
Toluene	ND		0.00100	1	04/08/2018 03:16	WG1095255	
1,2,3-Trichlorobenzene	ND		0.00100	1	04/08/2018 03:16	WG1095255	



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch	
1,2,4-Trichlorobenzene	ND		0.00100	1	04/08/2018 03:16	WG1095255	¹ Cp
1,1,1-Trichloroethane	ND		0.00100	1	04/08/2018 03:16	WG1095255	² Tc
1,1,2-Trichloroethane	ND		0.00100	1	04/08/2018 03:16	WG1095255	³ Ss
Trichloroethene	ND		0.00100	1	04/08/2018 03:16	WG1095255	⁴ Cn
Trichlorofluoromethane	ND		0.00500	1	04/08/2018 03:16	WG1095255	⁵ Sr
1,2,3-Trichloropropane	ND		0.00250	1	04/08/2018 03:16	WG1095255	⁶ Qc
1,2,4-Trimethylbenzene	ND		0.00100	1	04/08/2018 03:16	WG1095255	⁷ Gl
1,3,5-Trimethylbenzene	ND		0.00100	1	04/08/2018 03:16	WG1095255	⁸ Al
Vinyl chloride	ND		0.00100	1	04/08/2018 03:16	WG1095255	
Xylenes, Total	ND		0.00300	1	04/08/2018 03:16	WG1095255	
(S) Toluene-d8	100		80.0-120		04/08/2018 03:16	WG1095255	
(S) Toluene-d8	103		80.0-120		04/12/2018 10:21	WG1095255	
(S) Dibromofluoromethane	97.3		76.0-123		04/08/2018 03:16	WG1095255	
(S) Dibromofluoromethane	93.3		76.0-123		04/12/2018 10:21	WG1095255	
(S) 4-Bromofluorobenzene	96.1		80.0-120		04/12/2018 10:21	WG1095255	
(S) 4-Bromofluorobenzene	99.2		80.0-120		04/08/2018 03:16	WG1095255	

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch	
1,4-Dioxane	ND		0.00300	1	04/11/2018 12:38	WG1096509	
(S) Toluene-d8	103		78.0-122		04/11/2018 12:38	WG1096509	



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch	
Acetone	ND		0.0500	1	04/08/2018 03:35	WG1095255	¹ Cp
Acrolein	ND		0.0500	1	04/08/2018 03:35	WG1095255	² Tc
Acrylonitrile	ND		0.0100	1	04/08/2018 03:35	WG1095255	³ Ss
Benzene	ND		0.00100	1	04/08/2018 03:35	WG1095255	⁴ Cn
Bromobenzene	ND		0.00100	1	04/08/2018 03:35	WG1095255	⁵ Sr
Bromodichloromethane	ND		0.00100	1	04/08/2018 03:35	WG1095255	⁶ Qc
Bromoform	ND		0.00100	1	04/08/2018 03:35	WG1095255	⁷ Gl
Bromomethane	ND		0.00500	1	04/08/2018 03:35	WG1095255	⁸ Al
n-Butylbenzene	ND		0.00100	1	04/08/2018 03:35	WG1095255	⁹ Sc
sec-Butylbenzene	ND		0.00100	1	04/08/2018 03:35	WG1095255	
tert-Butylbenzene	ND		0.00100	1	04/08/2018 03:35	WG1095255	
Carbon tetrachloride	ND		0.00100	1	04/08/2018 03:35	WG1095255	
Chlorobenzene	ND		0.00100	1	04/08/2018 03:35	WG1095255	
Chlorodibromomethane	ND		0.00100	1	04/08/2018 03:35	WG1095255	
Chloroethane	ND		0.00500	1	04/08/2018 03:35	WG1095255	
2-Chloroethyl vinyl ether	ND		0.0500	1	04/08/2018 03:35	WG1095255	
Chloroform	ND		0.00500	1	04/08/2018 03:35	WG1095255	
Chloromethane	ND		0.00250	1	04/08/2018 03:35	WG1095255	
2-Chlorotoluene	ND		0.00100	1	04/08/2018 03:35	WG1095255	
4-Chlorotoluene	ND		0.00100	1	04/08/2018 03:35	WG1095255	
1,2-Dibromo-3-Chloropropane	ND		0.00500	1	04/08/2018 03:35	WG1095255	
1,2-Dibromoethane	ND		0.00100	1	04/08/2018 03:35	WG1095255	
Dibromomethane	ND		0.00100	1	04/08/2018 03:35	WG1095255	
1,2-Dichlorobenzene	ND		0.00100	1	04/08/2018 03:35	WG1095255	
1,3-Dichlorobenzene	ND		0.00100	1	04/08/2018 03:35	WG1095255	
1,4-Dichlorobenzene	ND		0.00100	1	04/08/2018 03:35	WG1095255	
Dichlorodifluoromethane	ND		0.00500	1	04/08/2018 03:35	WG1095255	
1,1-Dichloroethane	0.00170		0.00100	1	04/08/2018 03:35	WG1095255	
1,2-Dichloroethane	ND		0.00100	1	04/08/2018 03:35	WG1095255	
1,1-Dichloroethene	0.0189		0.00100	1	04/08/2018 03:35	WG1095255	
cis-1,2-Dichloroethene	ND		0.00100	1	04/08/2018 03:35	WG1095255	
trans-1,2-Dichloroethene	ND		0.00100	1	04/08/2018 03:35	WG1095255	
1,2-Dichloropropane	ND		0.00100	1	04/08/2018 03:35	WG1095255	
1,1-Dichloropropene	ND		0.00100	1	04/08/2018 03:35	WG1095255	
1,3-Dichloropropane	ND		0.00100	1	04/08/2018 03:35	WG1095255	
cis-1,3-Dichloropropene	ND		0.00100	1	04/08/2018 03:35	WG1095255	
trans-1,3-Dichloropropene	ND		0.00100	1	04/08/2018 03:35	WG1095255	
2,2-Dichloropropane	ND		0.00100	1	04/08/2018 03:35	WG1095255	
Di-isopropyl ether	ND		0.00100	1	04/08/2018 03:35	WG1095255	
1,4-Dioxane	ND		0.100	1	04/12/2018 10:40	WG1095255	
Ethylbenzene	ND		0.00100	1	04/08/2018 03:35	WG1095255	
Hexachloro-1,3-butadiene	ND		0.00100	1	04/08/2018 03:35	WG1095255	
Isopropylbenzene	ND		0.00100	1	04/08/2018 03:35	WG1095255	
p-Isopropyltoluene	ND		0.00100	1	04/08/2018 03:35	WG1095255	
2-Butanone (MEK)	ND		0.0100	1	04/08/2018 03:35	WG1095255	
Methylene Chloride	ND		0.00500	1	04/08/2018 03:35	WG1095255	
4-Methyl-2-pentanone (MIBK)	ND		0.0100	1	04/08/2018 03:35	WG1095255	
Methyl tert-butyl ether	ND		0.00100	1	04/08/2018 03:35	WG1095255	
Naphthalene	ND		0.00500	1	04/08/2018 03:35	WG1095255	
n-Propylbenzene	ND		0.00100	1	04/08/2018 03:35	WG1095255	
Styrene	ND		0.00100	1	04/08/2018 03:35	WG1095255	
1,1,2-Tetrachloroethane	ND		0.00100	1	04/08/2018 03:35	WG1095255	
1,1,2,2-Tetrachloroethane	ND		0.00100	1	04/08/2018 03:35	WG1095255	
Tetrachloroethene	ND		0.00100	1	04/08/2018 03:35	WG1095255	
Toluene	ND		0.00100	1	04/08/2018 03:35	WG1095255	
1,2,3-Trichlorobenzene	ND		0.00100	1	04/08/2018 03:35	WG1095255	



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch	
1,2,4-Trichlorobenzene	ND		0.00100	1	04/08/2018 03:35	WG1095255	¹ Cp
1,1,1-Trichloroethane	0.00290		0.00100	1	04/08/2018 03:35	WG1095255	² Tc
1,1,2-Trichloroethane	ND		0.00100	1	04/08/2018 03:35	WG1095255	³ Ss
Trichloroethene	ND		0.00100	1	04/08/2018 03:35	WG1095255	⁴ Cn
Trichlorofluoromethane	ND		0.00500	1	04/08/2018 03:35	WG1095255	⁵ Sr
1,2,3-Trichloropropane	ND		0.00250	1	04/08/2018 03:35	WG1095255	⁶ Qc
1,2,4-Trimethylbenzene	ND		0.00100	1	04/08/2018 03:35	WG1095255	⁷ Gl
1,3,5-Trimethylbenzene	ND		0.00100	1	04/08/2018 03:35	WG1095255	⁸ Al
Vinyl chloride	ND		0.00100	1	04/08/2018 03:35	WG1095255	
Xylenes, Total	ND		0.00300	1	04/08/2018 03:35	WG1095255	
(S) Toluene-d8	101		80.0-120		04/08/2018 03:35	WG1095255	
(S) Toluene-d8	102		80.0-120		04/12/2018 10:40	WG1095255	
(S) Dibromofluoromethane	93.5		76.0-123		04/12/2018 10:40	WG1095255	
(S) Dibromofluoromethane	94.5		76.0-123		04/08/2018 03:35	WG1095255	
(S) 4-Bromofluorobenzene	101		80.0-120		04/08/2018 03:35	WG1095255	
(S) 4-Bromofluorobenzene	94.4		80.0-120		04/12/2018 10:40	WG1095255	

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch	
1,4-Dioxane	0.0586		0.00300	1	04/11/2018 12:58	WG1096509	
(S) Toluene-d8	102		78.0-122		04/11/2018 12:58	WG1096509	



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch	
Acetone	ND		0.0500	1	04/08/2018 03:54	WG1095255	¹ Cp
Acrolein	ND		0.0500	1	04/08/2018 03:54	WG1095255	² Tc
Acrylonitrile	ND		0.0100	1	04/08/2018 03:54	WG1095255	³ Ss
Benzene	ND		0.00100	1	04/08/2018 03:54	WG1095255	⁴ Cn
Bromobenzene	ND		0.00100	1	04/08/2018 03:54	WG1095255	⁵ Sr
Bromodichloromethane	ND		0.00100	1	04/08/2018 03:54	WG1095255	⁶ Qc
Bromoform	ND		0.00100	1	04/08/2018 03:54	WG1095255	⁷ Gl
Bromomethane	ND		0.00500	1	04/08/2018 03:54	WG1095255	⁸ Al
n-Butylbenzene	ND		0.00100	1	04/08/2018 03:54	WG1095255	
sec-Butylbenzene	ND		0.00100	1	04/08/2018 03:54	WG1095255	
tert-Butylbenzene	ND		0.00100	1	04/08/2018 03:54	WG1095255	
Carbon tetrachloride	ND		0.00100	1	04/08/2018 03:54	WG1095255	
Chlorobenzene	ND		0.00100	1	04/08/2018 03:54	WG1095255	
Chlorodibromomethane	ND		0.00100	1	04/08/2018 03:54	WG1095255	
Chloroethane	ND		0.00500	1	04/08/2018 03:54	WG1095255	
2-Chloroethyl vinyl ether	ND		0.0500	1	04/08/2018 03:54	WG1095255	
Chloroform	ND		0.00500	1	04/08/2018 03:54	WG1095255	
Chloromethane	ND		0.00250	1	04/08/2018 03:54	WG1095255	
2-Chlorotoluene	ND		0.00100	1	04/08/2018 03:54	WG1095255	
4-Chlorotoluene	ND		0.00100	1	04/08/2018 03:54	WG1095255	
1,2-Dibromo-3-Chloropropane	ND		0.00500	1	04/08/2018 03:54	WG1095255	
1,2-Dibromoethane	ND		0.00100	1	04/08/2018 03:54	WG1095255	
Dibromomethane	ND		0.00100	1	04/08/2018 03:54	WG1095255	
1,2-Dichlorobenzene	ND		0.00100	1	04/08/2018 03:54	WG1095255	
1,3-Dichlorobenzene	ND		0.00100	1	04/08/2018 03:54	WG1095255	
1,4-Dichlorobenzene	ND		0.00100	1	04/08/2018 03:54	WG1095255	
Dichlorodifluoromethane	ND		0.00500	1	04/08/2018 03:54	WG1095255	
1,1-Dichloroethane	ND		0.00100	1	04/08/2018 03:54	WG1095255	
1,2-Dichloroethane	ND		0.00100	1	04/08/2018 03:54	WG1095255	
1,1-Dichloroethene	0.00267		0.00100	1	04/08/2018 03:54	WG1095255	
cis-1,2-Dichloroethene	ND		0.00100	1	04/08/2018 03:54	WG1095255	
trans-1,2-Dichloroethene	ND		0.00100	1	04/08/2018 03:54	WG1095255	
1,2-Dichloropropane	ND		0.00100	1	04/08/2018 03:54	WG1095255	
1,1-Dichloropropene	ND		0.00100	1	04/08/2018 03:54	WG1095255	
1,3-Dichloropropane	ND		0.00100	1	04/08/2018 03:54	WG1095255	
cis-1,3-Dichloropropene	ND		0.00100	1	04/08/2018 03:54	WG1095255	
trans-1,3-Dichloropropene	ND		0.00100	1	04/08/2018 03:54	WG1095255	
2,2-Dichloropropane	ND		0.00100	1	04/08/2018 03:54	WG1095255	
Di-isopropyl ether	ND		0.00100	1	04/08/2018 03:54	WG1095255	
1,4-Dioxane	ND		0.100	1	04/12/2018 11:00	WG1095255	
Ethylbenzene	ND		0.00100	1	04/08/2018 03:54	WG1095255	
Hexachloro-1,3-butadiene	ND		0.00100	1	04/08/2018 03:54	WG1095255	
Isopropylbenzene	ND		0.00100	1	04/08/2018 03:54	WG1095255	
p-Isopropyltoluene	ND		0.00100	1	04/08/2018 03:54	WG1095255	
2-Butanone (MEK)	ND		0.0100	1	04/08/2018 03:54	WG1095255	
Methylene Chloride	ND		0.00500	1	04/08/2018 03:54	WG1095255	
4-Methyl-2-pentanone (MIBK)	ND		0.0100	1	04/08/2018 03:54	WG1095255	
Methyl tert-butyl ether	ND		0.00100	1	04/08/2018 03:54	WG1095255	
Naphthalene	ND		0.00500	1	04/08/2018 03:54	WG1095255	
n-Propylbenzene	ND		0.00100	1	04/08/2018 03:54	WG1095255	
Styrene	ND		0.00100	1	04/08/2018 03:54	WG1095255	
1,1,2-Tetrachloroethane	ND		0.00100	1	04/08/2018 03:54	WG1095255	
1,1,2,2-Tetrachloroethane	ND		0.00100	1	04/08/2018 03:54	WG1095255	
Tetrachloroethene	ND		0.00100	1	04/08/2018 03:54	WG1095255	
Toluene	ND		0.00100	1	04/08/2018 03:54	WG1095255	
1,2,3-Trichlorobenzene	ND		0.00100	1	04/08/2018 03:54	WG1095255	



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch	
1,2,4-Trichlorobenzene	ND		0.00100	1	04/08/2018 03:54	WG1095255	¹ Cp
1,1,1-Trichloroethane	0.00165		0.00100	1	04/08/2018 03:54	WG1095255	² Tc
1,1,2-Trichloroethane	ND		0.00100	1	04/08/2018 03:54	WG1095255	³ Ss
Trichloroethene	ND		0.00100	1	04/08/2018 03:54	WG1095255	⁴ Cn
Trichlorofluoromethane	ND		0.00500	1	04/08/2018 03:54	WG1095255	⁵ Sr
1,2,3-Trichloropropane	ND		0.00250	1	04/08/2018 03:54	WG1095255	⁶ Qc
1,2,4-Trimethylbenzene	ND		0.00100	1	04/08/2018 03:54	WG1095255	⁷ Gl
1,3,5-Trimethylbenzene	ND		0.00100	1	04/08/2018 03:54	WG1095255	⁸ Al
Vinyl chloride	ND		0.00100	1	04/08/2018 03:54	WG1095255	
Xylenes, Total	ND		0.00300	1	04/08/2018 03:54	WG1095255	
(S) Toluene-d8	102		80.0-120		04/12/2018 11:00	WG1095255	
(S) Toluene-d8	101		80.0-120		04/08/2018 03:54	WG1095255	
(S) Dibromofluoromethane	95.1		76.0-123		04/08/2018 03:54	WG1095255	
(S) Dibromofluoromethane	91.5		76.0-123		04/12/2018 11:00	WG1095255	
(S) 4-Bromofluorobenzene	96.9		80.0-120		04/12/2018 11:00	WG1095255	
(S) 4-Bromofluorobenzene	105		80.0-120		04/08/2018 03:54	WG1095255	

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch	
1,4-Dioxane	ND		0.00300	1	04/11/2018 13:17	WG1096509	
(S) Toluene-d8	102		78.0-122		04/11/2018 13:17	WG1096509	



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch	
Acetone	ND		0.0500	1	04/08/2018 04:13	WG1095255	¹ Cp
Acrolein	ND		0.0500	1	04/08/2018 04:13	WG1095255	² Tc
Acrylonitrile	ND		0.0100	1	04/08/2018 04:13	WG1095255	³ Ss
Benzene	ND		0.00100	1	04/08/2018 04:13	WG1095255	⁴ Cn
Bromobenzene	ND		0.00100	1	04/08/2018 04:13	WG1095255	⁵ Sr
Bromodichloromethane	ND		0.00100	1	04/08/2018 04:13	WG1095255	⁶ Qc
Bromoform	ND		0.00100	1	04/08/2018 04:13	WG1095255	⁷ Gl
Bromomethane	ND		0.00500	1	04/08/2018 04:13	WG1095255	⁸ Al
n-Butylbenzene	ND		0.00100	1	04/08/2018 04:13	WG1095255	
sec-Butylbenzene	ND		0.00100	1	04/08/2018 04:13	WG1095255	
tert-Butylbenzene	ND		0.00100	1	04/08/2018 04:13	WG1095255	
Carbon tetrachloride	ND		0.00100	1	04/08/2018 04:13	WG1095255	
Chlorobenzene	ND		0.00100	1	04/08/2018 04:13	WG1095255	
Chlorodibromomethane	ND		0.00100	1	04/08/2018 04:13	WG1095255	
Chloroethane	ND		0.00500	1	04/08/2018 04:13	WG1095255	
2-Chloroethyl vinyl ether	ND		0.0500	1	04/08/2018 04:13	WG1095255	
Chloroform	ND		0.00500	1	04/08/2018 04:13	WG1095255	
Chloromethane	ND		0.00250	1	04/08/2018 04:13	WG1095255	
2-Chlorotoluene	ND		0.00100	1	04/08/2018 04:13	WG1095255	
4-Chlorotoluene	ND		0.00100	1	04/08/2018 04:13	WG1095255	
1,2-Dibromo-3-Chloropropane	ND		0.00500	1	04/08/2018 04:13	WG1095255	
1,2-Dibromoethane	ND		0.00100	1	04/08/2018 04:13	WG1095255	
Dibromomethane	ND		0.00100	1	04/08/2018 04:13	WG1095255	
1,2-Dichlorobenzene	ND		0.00100	1	04/08/2018 04:13	WG1095255	
1,3-Dichlorobenzene	ND		0.00100	1	04/08/2018 04:13	WG1095255	
1,4-Dichlorobenzene	ND		0.00100	1	04/08/2018 04:13	WG1095255	
Dichlorodifluoromethane	ND		0.00500	1	04/08/2018 04:13	WG1095255	
1,1-Dichloroethane	ND		0.00100	1	04/08/2018 04:13	WG1095255	
1,2-Dichloroethane	ND		0.00100	1	04/08/2018 04:13	WG1095255	
1,1-Dichloroethene	0.00275		0.00100	1	04/08/2018 04:13	WG1095255	
cis-1,2-Dichloroethene	ND		0.00100	1	04/08/2018 04:13	WG1095255	
trans-1,2-Dichloroethene	ND		0.00100	1	04/08/2018 04:13	WG1095255	
1,2-Dichloropropane	ND		0.00100	1	04/08/2018 04:13	WG1095255	
1,1-Dichloropropene	ND		0.00100	1	04/08/2018 04:13	WG1095255	
1,3-Dichloropropane	ND		0.00100	1	04/08/2018 04:13	WG1095255	
cis-1,3-Dichloropropene	ND		0.00100	1	04/08/2018 04:13	WG1095255	
trans-1,3-Dichloropropene	ND		0.00100	1	04/08/2018 04:13	WG1095255	
2,2-Dichloropropane	ND		0.00100	1	04/08/2018 04:13	WG1095255	
Di-isopropyl ether	ND		0.00100	1	04/08/2018 04:13	WG1095255	
1,4-Dioxane	ND		0.100	1	04/12/2018 11:19	WG1095255	
Ethylbenzene	ND		0.00100	1	04/08/2018 04:13	WG1095255	
Hexachloro-1,3-butadiene	ND		0.00100	1	04/08/2018 04:13	WG1095255	
Isopropylbenzene	ND		0.00100	1	04/08/2018 04:13	WG1095255	
p-Isopropyltoluene	ND		0.00100	1	04/08/2018 04:13	WG1095255	
2-Butanone (MEK)	ND		0.0100	1	04/08/2018 04:13	WG1095255	
Methylene Chloride	ND		0.00500	1	04/08/2018 04:13	WG1095255	
4-Methyl-2-pentanone (MIBK)	ND		0.0100	1	04/08/2018 04:13	WG1095255	
Methyl tert-butyl ether	ND		0.00100	1	04/08/2018 04:13	WG1095255	
Naphthalene	ND		0.00500	1	04/08/2018 04:13	WG1095255	
n-Propylbenzene	ND		0.00100	1	04/08/2018 04:13	WG1095255	
Styrene	ND		0.00100	1	04/08/2018 04:13	WG1095255	
1,1,2-Tetrachloroethane	ND		0.00100	1	04/08/2018 04:13	WG1095255	
1,1,2,2-Tetrachloroethane	ND		0.00100	1	04/08/2018 04:13	WG1095255	
Tetrachloroethene	ND		0.00100	1	04/08/2018 04:13	WG1095255	
Toluene	ND		0.00100	1	04/08/2018 04:13	WG1095255	
1,2,3-Trichlorobenzene	ND		0.00100	1	04/08/2018 04:13	WG1095255	



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch	
1,2,4-Trichlorobenzene	ND		0.00100	1	04/08/2018 04:13	WG1095255	¹ Cp
1,1,1-Trichloroethane	ND		0.00100	1	04/08/2018 04:13	WG1095255	² Tc
1,1,2-Trichloroethane	ND		0.00100	1	04/08/2018 04:13	WG1095255	³ Ss
Trichloroethene	ND		0.00100	1	04/08/2018 04:13	WG1095255	⁴ Cn
Trichlorofluoromethane	ND		0.00500	1	04/08/2018 04:13	WG1095255	⁵ Sr
1,2,3-Trichloropropane	ND		0.00250	1	04/08/2018 04:13	WG1095255	⁶ Qc
1,2,4-Trimethylbenzene	ND		0.00100	1	04/08/2018 04:13	WG1095255	⁷ Gl
1,3,5-Trimethylbenzene	ND		0.00100	1	04/08/2018 04:13	WG1095255	⁸ Al
Vinyl chloride	ND		0.00100	1	04/08/2018 04:13	WG1095255	
Xylenes, Total	ND		0.00300	1	04/08/2018 04:13	WG1095255	
(S) Toluene-d8	101		80.0-120		04/12/2018 11:19	WG1095255	
(S) Toluene-d8	100		80.0-120		04/08/2018 04:13	WG1095255	
(S) Dibromofluoromethane	93.5		76.0-123		04/08/2018 04:13	WG1095255	
(S) Dibromofluoromethane	93.9		76.0-123		04/12/2018 11:19	WG1095255	
(S) 4-Bromofluorobenzene	95.3		80.0-120		04/12/2018 11:19	WG1095255	
(S) 4-Bromofluorobenzene	96.3		80.0-120		04/08/2018 04:13	WG1095255	

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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch	
1,4-Dioxane	ND		0.00300	1	04/11/2018 13:37	WG1096509	
(S) Toluene-d8	102		78.0-122		04/11/2018 13:37	WG1096509	



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch	
Acetone	ND		0.0500	1	04/08/2018 04:33	WG1095255	¹ Cp
Acrolein	ND		0.0500	1	04/08/2018 04:33	WG1095255	² Tc
Acrylonitrile	ND		0.0100	1	04/08/2018 04:33	WG1095255	³ Ss
Benzene	ND		0.00100	1	04/08/2018 04:33	WG1095255	⁴ Cn
Bromobenzene	ND		0.00100	1	04/08/2018 04:33	WG1095255	⁵ Sr
Bromodichloromethane	ND		0.00100	1	04/08/2018 04:33	WG1095255	⁶ Qc
Bromoform	ND		0.00100	1	04/08/2018 04:33	WG1095255	⁷ Gl
Bromomethane	ND		0.00500	1	04/08/2018 04:33	WG1095255	⁸ Al
n-Butylbenzene	ND		0.00100	1	04/08/2018 04:33	WG1095255	
sec-Butylbenzene	ND		0.00100	1	04/08/2018 04:33	WG1095255	
tert-Butylbenzene	ND		0.00100	1	04/08/2018 04:33	WG1095255	
Carbon tetrachloride	ND		0.00100	1	04/08/2018 04:33	WG1095255	
Chlorobenzene	ND		0.00100	1	04/08/2018 04:33	WG1095255	
Chlorodibromomethane	ND		0.00100	1	04/08/2018 04:33	WG1095255	
Chloroethane	ND		0.00500	1	04/08/2018 04:33	WG1095255	
2-Chloroethyl vinyl ether	ND		0.0500	1	04/08/2018 04:33	WG1095255	
Chloroform	ND		0.00500	1	04/08/2018 04:33	WG1095255	
Chloromethane	ND		0.00250	1	04/08/2018 04:33	WG1095255	
2-Chlorotoluene	ND		0.00100	1	04/08/2018 04:33	WG1095255	
4-Chlorotoluene	ND		0.00100	1	04/08/2018 04:33	WG1095255	
1,2-Dibromo-3-Chloropropane	ND		0.00500	1	04/08/2018 04:33	WG1095255	
1,2-Dibromoethane	ND		0.00100	1	04/08/2018 04:33	WG1095255	
Dibromomethane	ND		0.00100	1	04/08/2018 04:33	WG1095255	
1,2-Dichlorobenzene	ND		0.00100	1	04/08/2018 04:33	WG1095255	
1,3-Dichlorobenzene	ND		0.00100	1	04/08/2018 04:33	WG1095255	
1,4-Dichlorobenzene	ND		0.00100	1	04/08/2018 04:33	WG1095255	
Dichlorodifluoromethane	ND		0.00500	1	04/08/2018 04:33	WG1095255	
1,1-Dichloroethane	0.00274		0.00100	1	04/08/2018 04:33	WG1095255	
1,2-Dichloroethane	ND		0.00100	1	04/08/2018 04:33	WG1095255	
1,1-Dichloroethene	0.0318		0.00100	1	04/08/2018 04:33	WG1095255	
cis-1,2-Dichloroethene	ND		0.00100	1	04/08/2018 04:33	WG1095255	
trans-1,2-Dichloroethene	ND		0.00100	1	04/08/2018 04:33	WG1095255	
1,2-Dichloropropane	ND		0.00100	1	04/08/2018 04:33	WG1095255	
1,1-Dichloropropene	ND		0.00100	1	04/08/2018 04:33	WG1095255	
1,3-Dichloropropane	ND		0.00100	1	04/08/2018 04:33	WG1095255	
cis-1,3-Dichloropropene	ND		0.00100	1	04/08/2018 04:33	WG1095255	
trans-1,3-Dichloropropene	ND		0.00100	1	04/08/2018 04:33	WG1095255	
2,2-Dichloropropane	ND		0.00100	1	04/08/2018 04:33	WG1095255	
Di-isopropyl ether	ND		0.00100	1	04/08/2018 04:33	WG1095255	
1,4-Dioxane	ND		0.100	1	04/12/2018 11:38	WG1095255	
Ethylbenzene	ND		0.00100	1	04/08/2018 04:33	WG1095255	
Hexachloro-1,3-butadiene	ND		0.00100	1	04/08/2018 04:33	WG1095255	
Isopropylbenzene	ND		0.00100	1	04/08/2018 04:33	WG1095255	
p-Isopropyltoluene	ND		0.00100	1	04/08/2018 04:33	WG1095255	
2-Butanone (MEK)	ND		0.0100	1	04/08/2018 04:33	WG1095255	
Methylene Chloride	ND		0.00500	1	04/08/2018 04:33	WG1095255	
4-Methyl-2-pentanone (MIBK)	ND		0.0100	1	04/08/2018 04:33	WG1095255	
Methyl tert-butyl ether	ND		0.00100	1	04/08/2018 04:33	WG1095255	
Naphthalene	ND		0.00500	1	04/08/2018 04:33	WG1095255	
n-Propylbenzene	ND		0.00100	1	04/08/2018 04:33	WG1095255	
Styrene	ND		0.00100	1	04/08/2018 04:33	WG1095255	
1,1,2-Tetrachloroethane	ND		0.00100	1	04/08/2018 04:33	WG1095255	
1,1,2,2-Tetrachloroethane	ND		0.00100	1	04/08/2018 04:33	WG1095255	
Tetrachloroethene	ND		0.00100	1	04/08/2018 04:33	WG1095255	
Toluene	ND		0.00100	1	04/08/2018 04:33	WG1095255	
1,2,3-Trichlorobenzene	ND		0.00100	1	04/08/2018 04:33	WG1095255	



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch	
1,2,4-Trichlorobenzene	ND		0.00100	1	04/08/2018 04:33	WG1095255	¹ Cp
1,1,1-Trichloroethane	0.0347		0.00100	1	04/08/2018 04:33	WG1095255	² Tc
1,1,2-Trichloroethane	ND		0.00100	1	04/08/2018 04:33	WG1095255	³ Ss
Trichloroethene	0.00126		0.00100	1	04/08/2018 04:33	WG1095255	⁴ Cn
Trichlorofluoromethane	ND		0.00500	1	04/08/2018 04:33	WG1095255	⁵ Sr
1,2,3-Trichloropropane	ND		0.00250	1	04/08/2018 04:33	WG1095255	⁶ Qc
1,2,4-Trimethylbenzene	ND		0.00100	1	04/08/2018 04:33	WG1095255	⁷ Gl
1,3,5-Trimethylbenzene	ND		0.00100	1	04/08/2018 04:33	WG1095255	⁸ Al
Vinyl chloride	ND		0.00100	1	04/08/2018 04:33	WG1095255	
Xylenes, Total	ND		0.00300	1	04/08/2018 04:33	WG1095255	
(S) Toluene-d8	100		80.0-120		04/12/2018 11:38	WG1095255	
(S) Toluene-d8	103		80.0-120		04/08/2018 04:33	WG1095255	
(S) Dibromofluoromethane	94.8		76.0-123		04/08/2018 04:33	WG1095255	
(S) Dibromofluoromethane	94.4		76.0-123		04/12/2018 11:38	WG1095255	
(S) 4-Bromofluorobenzene	101		80.0-120		04/08/2018 04:33	WG1095255	
(S) 4-Bromofluorobenzene	96.9		80.0-120		04/12/2018 11:38	WG1095255	

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch	
1,4-Dioxane	ND		0.00300	1	04/11/2018 13:56	WG1096509	
(S) Toluene-d8	102		78.0-122		04/11/2018 13:56	WG1096509	



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch	
Acetone	0.323		0.0500	1	04/08/2018 00:41	WG1095255	¹ Cp
Acrolein	ND		0.0500	1	04/08/2018 00:41	WG1095255	² Tc
Acrylonitrile	ND		0.0100	1	04/08/2018 00:41	WG1095255	³ Ss
Benzene	ND		0.00100	1	04/08/2018 00:41	WG1095255	⁴ Cn
Bromobenzene	ND		0.00100	1	04/08/2018 00:41	WG1095255	⁵ Sr
Bromodichloromethane	ND		0.00100	1	04/08/2018 00:41	WG1095255	⁶ Qc
Bromoform	ND		0.00100	1	04/08/2018 00:41	WG1095255	⁷ Gl
Bromomethane	ND		0.00500	1	04/08/2018 00:41	WG1095255	⁸ Al
n-Butylbenzene	ND		0.00100	1	04/08/2018 00:41	WG1095255	⁹ Sc
sec-Butylbenzene	ND		0.00100	1	04/08/2018 00:41	WG1095255	
tert-Butylbenzene	ND		0.00100	1	04/08/2018 00:41	WG1095255	
Carbon tetrachloride	ND		0.00100	1	04/08/2018 00:41	WG1095255	
Chlorobenzene	ND		0.00100	1	04/08/2018 00:41	WG1095255	
Chlorodibromomethane	ND		0.00100	1	04/08/2018 00:41	WG1095255	
Chloroethane	ND		0.00500	1	04/08/2018 00:41	WG1095255	
2-Chloroethyl vinyl ether	ND		0.0500	1	04/08/2018 00:41	WG1095255	
Chloroform	ND		0.00500	1	04/08/2018 00:41	WG1095255	
Chloromethane	ND		0.00250	1	04/08/2018 00:41	WG1095255	
2-Chlorotoluene	ND		0.00100	1	04/08/2018 00:41	WG1095255	
4-Chlorotoluene	ND		0.00100	1	04/08/2018 00:41	WG1095255	
1,2-Dibromo-3-Chloropropane	ND		0.00500	1	04/08/2018 00:41	WG1095255	
1,2-Dibromoethane	ND		0.00100	1	04/08/2018 00:41	WG1095255	
Dibromomethane	ND		0.00100	1	04/08/2018 00:41	WG1095255	
1,2-Dichlorobenzene	ND		0.00100	1	04/08/2018 00:41	WG1095255	
1,3-Dichlorobenzene	ND		0.00100	1	04/08/2018 00:41	WG1095255	
1,4-Dichlorobenzene	ND		0.00100	1	04/08/2018 00:41	WG1095255	
Dichlorodifluoromethane	ND		0.00500	1	04/08/2018 00:41	WG1095255	
1,1-Dichloroethane	ND		0.00100	1	04/08/2018 00:41	WG1095255	
1,2-Dichloroethane	ND		0.00100	1	04/08/2018 00:41	WG1095255	
1,1-Dichloroethene	ND		0.00100	1	04/08/2018 00:41	WG1095255	
cis-1,2-Dichloroethene	ND		0.00100	1	04/08/2018 00:41	WG1095255	
trans-1,2-Dichloroethene	ND		0.00100	1	04/08/2018 00:41	WG1095255	
1,2-Dichloropropane	ND		0.00100	1	04/08/2018 00:41	WG1095255	
1,1-Dichloropropene	ND		0.00100	1	04/08/2018 00:41	WG1095255	
1,3-Dichloropropane	ND		0.00100	1	04/08/2018 00:41	WG1095255	
cis-1,3-Dichloropropene	ND		0.00100	1	04/08/2018 00:41	WG1095255	
trans-1,3-Dichloropropene	ND		0.00100	1	04/08/2018 00:41	WG1095255	
2,2-Dichloropropane	ND		0.00100	1	04/08/2018 00:41	WG1095255	
Di-isopropyl ether	ND		0.00100	1	04/08/2018 00:41	WG1095255	
1,4-Dioxane	ND		0.100	1	04/12/2018 05:52	WG1095255	
Ethylbenzene	ND		0.00100	1	04/08/2018 00:41	WG1095255	
Hexachloro-1,3-butadiene	ND		0.00100	1	04/08/2018 00:41	WG1095255	
Isopropylbenzene	ND		0.00100	1	04/08/2018 00:41	WG1095255	
p-Isopropyltoluene	ND		0.00100	1	04/08/2018 00:41	WG1095255	
2-Butanone (MEK)	0.132		0.0100	1	04/08/2018 00:41	WG1095255	
Methylene Chloride	ND		0.00500	1	04/08/2018 00:41	WG1095255	
4-Methyl-2-pentanone (MIBK)	ND		0.0100	1	04/08/2018 00:41	WG1095255	
Methyl tert-butyl ether	ND		0.00100	1	04/08/2018 00:41	WG1095255	
Naphthalene	ND		0.00500	1	04/08/2018 00:41	WG1095255	
n-Propylbenzene	ND		0.00100	1	04/08/2018 00:41	WG1095255	
Styrene	ND		0.00100	1	04/08/2018 00:41	WG1095255	
1,1,2-Tetrachloroethane	ND		0.00100	1	04/08/2018 00:41	WG1095255	
1,1,2,2-Tetrachloroethane	ND		0.00100	1	04/08/2018 00:41	WG1095255	
Tetrachloroethene	ND		0.00100	1	04/08/2018 00:41	WG1095255	
Toluene	0.00113		0.00100	1	04/08/2018 00:41	WG1095255	
1,2,3-Trichlorobenzene	ND		0.00100	1	04/08/2018 00:41	WG1095255	



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch	
1,2,4-Trichlorobenzene	ND		0.00100	1	04/08/2018 00:41	WG1095255	¹ Cp
1,1,1-Trichloroethane	ND		0.00100	1	04/08/2018 00:41	WG1095255	² Tc
1,1,2-Trichloroethane	ND		0.00100	1	04/08/2018 00:41	WG1095255	³ Ss
Trichloroethene	ND		0.00100	1	04/08/2018 00:41	WG1095255	⁴ Cn
Trichlorofluoromethane	ND		0.00500	1	04/08/2018 00:41	WG1095255	⁵ Sr
1,2,3-Trichloropropane	ND		0.00250	1	04/08/2018 00:41	WG1095255	⁶ Qc
1,2,4-Trimethylbenzene	ND		0.00100	1	04/08/2018 00:41	WG1095255	⁷ Gl
1,3,5-Trimethylbenzene	ND		0.00100	1	04/08/2018 00:41	WG1095255	⁸ Al
Vinyl chloride	ND		0.00100	1	04/08/2018 00:41	WG1095255	
Xylenes, Total	ND		0.00300	1	04/08/2018 00:41	WG1095255	
(S) Toluene-d8	101		80.0-120		04/08/2018 00:41	WG1095255	
(S) Toluene-d8	102		80.0-120		04/12/2018 05:52	WG1095255	
(S) Dibromofluoromethane	94.8		76.0-123		04/08/2018 00:41	WG1095255	
(S) Dibromofluoromethane	90.2		76.0-123		04/12/2018 05:52	WG1095255	
(S) 4-Bromofluorobenzene	102		80.0-120		04/08/2018 00:41	WG1095255	
(S) 4-Bromofluorobenzene	93.7		80.0-120		04/12/2018 05:52	WG1095255	

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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch	
1,4-Dioxane	ND		0.00300	1	04/11/2018 11:40	WG1096509	
(S) Toluene-d8	104		78.0-122		04/11/2018 11:40	WG1096509	



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch	
Acetone	ND		0.0500	1	04/08/2018 01:00	WG1095255	¹ Cp
Acrolein	ND		0.0500	1	04/08/2018 01:00	WG1095255	² Tc
Acrylonitrile	ND		0.0100	1	04/08/2018 01:00	WG1095255	³ Ss
Benzene	ND		0.00100	1	04/08/2018 01:00	WG1095255	⁴ Cn
Bromobenzene	ND		0.00100	1	04/08/2018 01:00	WG1095255	⁵ Sr
Bromodichloromethane	ND		0.00100	1	04/08/2018 01:00	WG1095255	⁶ Qc
Bromoform	ND		0.00100	1	04/08/2018 01:00	WG1095255	⁷ Gl
Bromomethane	ND		0.00500	1	04/08/2018 01:00	WG1095255	⁸ Al
n-Butylbenzene	ND		0.00100	1	04/08/2018 01:00	WG1095255	⁹ Sc
sec-Butylbenzene	ND		0.00100	1	04/08/2018 01:00	WG1095255	
tert-Butylbenzene	ND		0.00100	1	04/08/2018 01:00	WG1095255	
Carbon tetrachloride	ND		0.00100	1	04/08/2018 01:00	WG1095255	
Chlorobenzene	ND		0.00100	1	04/08/2018 01:00	WG1095255	
Chlorodibromomethane	ND		0.00100	1	04/08/2018 01:00	WG1095255	
Chloroethane	ND		0.00500	1	04/08/2018 01:00	WG1095255	
2-Chloroethyl vinyl ether	ND		0.0500	1	04/08/2018 01:00	WG1095255	
Chloroform	ND		0.00500	1	04/08/2018 01:00	WG1095255	
Chloromethane	ND		0.00250	1	04/08/2018 01:00	WG1095255	
2-Chlorotoluene	ND		0.00100	1	04/08/2018 01:00	WG1095255	
4-Chlorotoluene	ND		0.00100	1	04/08/2018 01:00	WG1095255	
1,2-Dibromo-3-Chloropropane	ND		0.00500	1	04/08/2018 01:00	WG1095255	
1,2-Dibromoethane	ND		0.00100	1	04/08/2018 01:00	WG1095255	
Dibromomethane	ND		0.00100	1	04/08/2018 01:00	WG1095255	
1,2-Dichlorobenzene	ND		0.00100	1	04/08/2018 01:00	WG1095255	
1,3-Dichlorobenzene	ND		0.00100	1	04/08/2018 01:00	WG1095255	
1,4-Dichlorobenzene	ND		0.00100	1	04/08/2018 01:00	WG1095255	
Dichlorodifluoromethane	ND		0.00500	1	04/08/2018 01:00	WG1095255	
1,1-Dichloroethane	ND		0.00100	1	04/08/2018 01:00	WG1095255	
1,2-Dichloroethane	ND		0.00100	1	04/08/2018 01:00	WG1095255	
1,1-Dichloroethene	ND		0.00100	1	04/08/2018 01:00	WG1095255	
cis-1,2-Dichloroethene	ND		0.00100	1	04/08/2018 01:00	WG1095255	
trans-1,2-Dichloroethene	ND		0.00100	1	04/08/2018 01:00	WG1095255	
1,2-Dichloropropane	ND		0.00100	1	04/08/2018 01:00	WG1095255	
1,1-Dichloropropene	ND		0.00100	1	04/08/2018 01:00	WG1095255	
1,3-Dichloropropane	ND		0.00100	1	04/08/2018 01:00	WG1095255	
cis-1,3-Dichloropropene	ND		0.00100	1	04/08/2018 01:00	WG1095255	
trans-1,3-Dichloropropene	ND		0.00100	1	04/08/2018 01:00	WG1095255	
2,2-Dichloropropane	ND		0.00100	1	04/08/2018 01:00	WG1095255	
Di-isopropyl ether	ND		0.00100	1	04/08/2018 01:00	WG1095255	
1,4-Dioxane	ND		0.100	1	04/12/2018 06:10	WG1095255	
Ethylbenzene	ND		0.00100	1	04/08/2018 01:00	WG1095255	
Hexachloro-1,3-butadiene	ND		0.00100	1	04/08/2018 01:00	WG1095255	
Isopropylbenzene	ND		0.00100	1	04/08/2018 01:00	WG1095255	
p-Isopropyltoluene	ND		0.00100	1	04/08/2018 01:00	WG1095255	
2-Butanone (MEK)	ND		0.0100	1	04/08/2018 01:00	WG1095255	
Methylene Chloride	ND		0.00500	1	04/08/2018 01:00	WG1095255	
4-Methyl-2-pentanone (MIBK)	ND		0.0100	1	04/08/2018 01:00	WG1095255	
Methyl tert-butyl ether	ND		0.00100	1	04/08/2018 01:00	WG1095255	
Naphthalene	ND		0.00500	1	04/08/2018 01:00	WG1095255	
n-Propylbenzene	ND		0.00100	1	04/08/2018 01:00	WG1095255	
Styrene	ND		0.00100	1	04/08/2018 01:00	WG1095255	
1,1,1,2-Tetrachloroethane	ND		0.00100	1	04/08/2018 01:00	WG1095255	
1,1,2,2-Tetrachloroethane	ND		0.00100	1	04/08/2018 01:00	WG1095255	
Tetrachloroethene	ND		0.00100	1	04/08/2018 01:00	WG1095255	
Toluene	ND		0.00100	1	04/08/2018 01:00	WG1095255	
1,2,3-Trichlorobenzene	ND		0.00100	1	04/08/2018 01:00	WG1095255	



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch	
1,2,4-Trichlorobenzene	ND		0.00100	1	04/08/2018 01:00	WG1095255	¹ Cp
1,1,1-Trichloroethane	ND		0.00100	1	04/08/2018 01:00	WG1095255	² Tc
1,1,2-Trichloroethane	ND		0.00100	1	04/08/2018 01:00	WG1095255	³ Ss
Trichloroethene	ND		0.00100	1	04/08/2018 01:00	WG1095255	⁴ Cn
Trichlorofluoromethane	ND		0.00500	1	04/08/2018 01:00	WG1095255	⁵ Sr
1,2,3-Trichloropropane	ND		0.00250	1	04/08/2018 01:00	WG1095255	⁶ Qc
1,2,4-Trimethylbenzene	ND		0.00100	1	04/08/2018 01:00	WG1095255	⁷ Gl
1,3,5-Trimethylbenzene	ND		0.00100	1	04/08/2018 01:00	WG1095255	⁸ Al
Vinyl chloride	ND		0.00100	1	04/08/2018 01:00	WG1095255	
Xylenes, Total	ND		0.00300	1	04/08/2018 01:00	WG1095255	
(S) Toluene-d8	98.8		80.0-120		04/08/2018 01:00	WG1095255	
(S) Toluene-d8	99.9		80.0-120		04/12/2018 06:10	WG1095255	
(S) Dibromofluoromethane	90.1		76.0-123		04/12/2018 06:10	WG1095255	
(S) Dibromofluoromethane	93.1		76.0-123		04/08/2018 01:00	WG1095255	
(S) 4-Bromofluorobenzene	93.0		80.0-120		04/12/2018 06:10	WG1095255	
(S) 4-Bromofluorobenzene	101		80.0-120		04/08/2018 01:00	WG1095255	

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch	
1,4-Dioxane	ND		0.00300	1	04/11/2018 12:00	WG1096509	
(S) Toluene-d8	95.3		78.0-122		04/11/2018 12:00	WG1096509	



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch	
Acetone	ND		0.0500	1	04/08/2018 04:52	WG1095255	¹ Cp
Acrolein	ND		0.0500	1	04/08/2018 04:52	WG1095255	² Tc
Acrylonitrile	ND		0.0100	1	04/08/2018 04:52	WG1095255	³ Ss
Benzene	ND		0.00100	1	04/08/2018 04:52	WG1095255	⁴ Cn
Bromobenzene	ND		0.00100	1	04/08/2018 04:52	WG1095255	⁵ Sr
Bromodichloromethane	ND		0.00100	1	04/08/2018 04:52	WG1095255	⁶ Qc
Bromoform	ND		0.00100	1	04/08/2018 04:52	WG1095255	⁷ Gl
Bromomethane	ND		0.00500	1	04/08/2018 04:52	WG1095255	⁸ Al
n-Butylbenzene	ND		0.00100	1	04/08/2018 04:52	WG1095255	⁹ Sc
sec-Butylbenzene	ND		0.00100	1	04/08/2018 04:52	WG1095255	
tert-Butylbenzene	ND		0.00100	1	04/08/2018 04:52	WG1095255	
Carbon tetrachloride	ND		0.00100	1	04/08/2018 04:52	WG1095255	
Chlorobenzene	ND		0.00100	1	04/08/2018 04:52	WG1095255	
Chlorodibromomethane	ND		0.00100	1	04/08/2018 04:52	WG1095255	
Chloroethane	ND		0.00500	1	04/08/2018 04:52	WG1095255	
2-Chloroethyl vinyl ether	ND		0.0500	1	04/08/2018 04:52	WG1095255	
Chloroform	ND		0.00500	1	04/08/2018 04:52	WG1095255	
Chloromethane	ND		0.00250	1	04/08/2018 04:52	WG1095255	
2-Chlorotoluene	ND		0.00100	1	04/08/2018 04:52	WG1095255	
4-Chlorotoluene	ND		0.00100	1	04/08/2018 04:52	WG1095255	
1,2-Dibromo-3-Chloropropane	ND		0.00500	1	04/08/2018 04:52	WG1095255	
1,2-Dibromoethane	ND		0.00100	1	04/08/2018 04:52	WG1095255	
Dibromomethane	ND		0.00100	1	04/08/2018 04:52	WG1095255	
1,2-Dichlorobenzene	ND		0.00100	1	04/08/2018 04:52	WG1095255	
1,3-Dichlorobenzene	ND		0.00100	1	04/08/2018 04:52	WG1095255	
1,4-Dichlorobenzene	ND		0.00100	1	04/08/2018 04:52	WG1095255	
Dichlorodifluoromethane	ND		0.00500	1	04/08/2018 04:52	WG1095255	
1,1-Dichloroethane	0.00256		0.00100	1	04/08/2018 04:52	WG1095255	
1,2-Dichloroethane	ND		0.00100	1	04/08/2018 04:52	WG1095255	
1,1-Dichloroethene	0.0182		0.00100	1	04/08/2018 04:52	WG1095255	
cis-1,2-Dichloroethene	ND		0.00100	1	04/08/2018 04:52	WG1095255	
trans-1,2-Dichloroethene	ND		0.00100	1	04/08/2018 04:52	WG1095255	
1,2-Dichloropropane	ND		0.00100	1	04/08/2018 04:52	WG1095255	
1,1-Dichloropropene	ND		0.00100	1	04/08/2018 04:52	WG1095255	
1,3-Dichloropropane	ND		0.00100	1	04/08/2018 04:52	WG1095255	
cis-1,3-Dichloropropene	ND		0.00100	1	04/08/2018 04:52	WG1095255	
trans-1,3-Dichloropropene	ND		0.00100	1	04/08/2018 04:52	WG1095255	
2,2-Dichloropropane	ND		0.00100	1	04/08/2018 04:52	WG1095255	
Di-isopropyl ether	ND		0.00100	1	04/08/2018 04:52	WG1095255	
1,4-Dioxane	ND		0.100	1	04/12/2018 11:58	WG1095255	
Ethylbenzene	ND		0.00100	1	04/08/2018 04:52	WG1095255	
Hexachloro-1,3-butadiene	ND		0.00100	1	04/08/2018 04:52	WG1095255	
Isopropylbenzene	ND		0.00100	1	04/08/2018 04:52	WG1095255	
p-Isopropyltoluene	ND		0.00100	1	04/08/2018 04:52	WG1095255	
2-Butanone (MEK)	ND		0.0100	1	04/08/2018 04:52	WG1095255	
Methylene Chloride	ND		0.00500	1	04/08/2018 04:52	WG1095255	
4-Methyl-2-pentanone (MIBK)	ND		0.0100	1	04/08/2018 04:52	WG1095255	
Methyl tert-butyl ether	ND		0.00100	1	04/08/2018 04:52	WG1095255	
Naphthalene	ND		0.00500	1	04/08/2018 04:52	WG1095255	
n-Propylbenzene	ND		0.00100	1	04/08/2018 04:52	WG1095255	
Styrene	ND		0.00100	1	04/08/2018 04:52	WG1095255	
1,1,2-Tetrachloroethane	ND		0.00100	1	04/08/2018 04:52	WG1095255	
1,1,2,2-Tetrachloroethane	ND		0.00100	1	04/08/2018 04:52	WG1095255	
Tetrachloroethene	ND		0.00100	1	04/08/2018 04:52	WG1095255	
Toluene	ND		0.00100	1	04/08/2018 04:52	WG1095255	
1,2,3-Trichlorobenzene	ND		0.00100	1	04/08/2018 04:52	WG1095255	



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch	
1,2,4-Trichlorobenzene	ND		0.00100	1	04/08/2018 04:52	WG1095255	¹ Cp
1,1,1-Trichloroethane	0.0272		0.00100	1	04/08/2018 04:52	WG1095255	² Tc
1,1,2-Trichloroethane	ND		0.00100	1	04/08/2018 04:52	WG1095255	³ Ss
Trichloroethene	ND		0.00100	1	04/08/2018 04:52	WG1095255	⁴ Cn
Trichlorofluoromethane	ND		0.00500	1	04/08/2018 04:52	WG1095255	⁵ Sr
1,2,3-Trichloropropane	ND		0.00250	1	04/08/2018 04:52	WG1095255	⁶ Qc
1,2,4-Trimethylbenzene	ND		0.00100	1	04/08/2018 04:52	WG1095255	⁷ Gl
1,3,5-Trimethylbenzene	ND		0.00100	1	04/08/2018 04:52	WG1095255	⁸ Al
Vinyl chloride	ND		0.00100	1	04/08/2018 04:52	WG1095255	
Xylenes, Total	ND		0.00300	1	04/08/2018 04:52	WG1095255	
(S) Toluene-d8	101		80.0-120		04/12/2018 11:58	WG1095255	
(S) Toluene-d8	103		80.0-120		04/08/2018 04:52	WG1095255	
(S) Dibromofluoromethane	94.7		76.0-123		04/12/2018 11:58	WG1095255	
(S) Dibromofluoromethane	98.0		76.0-123		04/08/2018 04:52	WG1095255	
(S) 4-Bromofluorobenzene	101		80.0-120		04/08/2018 04:52	WG1095255	
(S) 4-Bromofluorobenzene	95.1		80.0-120		04/12/2018 11:58	WG1095255	

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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch	
1,4-Dioxane	0.00722		0.00300	1	04/11/2018 14:16	WG1096509	
(S) Toluene-d8	95.2		78.0-122		04/11/2018 14:16	WG1096509	

L983870-01,02,03,04,05,06,07,08,09,10,11,12,13,14

Method Blank (MB)

(MB) R3300995-3 04/08/18 00:21

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l	
Acetone	U		0.0100	0.0500	¹ Cp
Acrolein	U		0.00887	0.0500	² Tc
Acrylonitrile	U		0.00187	0.0100	³ Ss
Benzene	U		0.000331	0.00100	⁴ Cn
Bromobenzene	U		0.000352	0.00100	⁵ Sr
Bromodichloromethane	U		0.000380	0.00100	⁶ Qc
Bromoform	U		0.000469	0.00100	⁷ Gl
Bromomethane	U		0.000866	0.00500	⁸ Al
n-Butylbenzene	U		0.000361	0.00100	⁹ Sc
sec-Butylbenzene	U		0.000365	0.00100	
tert-Butylbenzene	U		0.000399	0.00100	
Carbon tetrachloride	U		0.000379	0.00100	
Chlorobenzene	U		0.000348	0.00100	
Chlorodibromomethane	U		0.000327	0.00100	
Chloroethane	U		0.000453	0.00500	
2-Chloroethyl vinyl ether	U		0.00301	0.0500	
Chloroform	U		0.000324	0.00500	
Chloromethane	U		0.000276	0.00250	
2-Chlorotoluene	U		0.000375	0.00100	
4-Chlorotoluene	U		0.000351	0.00100	
1,2-Dibromo-3-Chloropropane	U		0.00133	0.00500	
1,2-Dibromoethane	U		0.000381	0.00100	
Dibromomethane	U		0.000346	0.00100	
1,2-Dichlorobenzene	U		0.000349	0.00100	
1,3-Dichlorobenzene	U		0.000220	0.00100	
1,4-Dichlorobenzene	U		0.000274	0.00100	
Dichlorodifluoromethane	U		0.000551	0.00500	
1,1-Dichloroethane	U		0.000259	0.00100	
1,2-Dichloroethane	U		0.000361	0.00100	
1,1-Dichloroethene	U		0.000398	0.00100	
cis-1,2-Dichloroethene	U		0.000260	0.00100	
trans-1,2-Dichloroethene	U		0.000396	0.00100	
1,2-Dichloropropane	U		0.000306	0.00100	
1,1-Dichloropropene	U		0.000352	0.00100	
1,3-Dichloropropane	U		0.000366	0.00100	
cis-1,3-Dichloropropene	U		0.000418	0.00100	
trans-1,3-Dichloropropene	U		0.000419	0.00100	
2,2-Dichloropropane	U		0.000321	0.00100	
Di-isopropyl ether	U		0.000320	0.00100	
Ethylbenzene	U		0.000384	0.00100	



Method Blank (MB)

(MB) R3300995-3 04/08/18 00:21

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l													
Hexachloro-1,3-butadiene	U		0.000256	0.00100													¹ Cp
Isopropylbenzene	U		0.000326	0.00100													² Tc
p-Isopropyltoluene	U		0.000350	0.00100													³ Ss
2-Butanone (MEK)	U		0.00393	0.0100													⁴ Cn
Methylene Chloride	U		0.00100	0.00500													⁵ Sr
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0100													⁶ Qc
Methyl tert-butyl ether	U		0.000367	0.00100													⁷ Gl
Naphthalene	U		0.00100	0.00500													⁸ Al
n-Propylbenzene	U		0.000349	0.00100													⁹ Sc
Styrene	U		0.000307	0.00100													
1,1,1,2-Tetrachloroethane	U		0.000385	0.00100													
1,1,2,2-Tetrachloroethane	U		0.000130	0.00100													
Tetrachloroethene	U		0.000372	0.00100													
1,2,3-Trichlorobenzene	U		0.000230	0.00100													
Toluene	U		0.000412	0.00100													
1,2,4-Trichlorobenzene	U		0.000355	0.00100													
1,1,1-Trichloroethane	U		0.000319	0.00100													
1,1,2-Trichloroethane	U		0.000383	0.00100													
Trichloroethene	U		0.000398	0.00100													
Trichlorofluoromethane	U		0.00120	0.00500													
1,2,3-Trichloropropane	U		0.000807	0.00250													
1,2,4-Trimethylbenzene	U		0.000373	0.00100													
1,3,5-Trimethylbenzene	U		0.000387	0.00100													
Vinyl chloride	U		0.000259	0.00100													
Xylenes, Total	U		0.00106	0.00300													
1,4-Dioxane	U		0.0360	0.100													
(S) Toluene-d8	103			80.0-120													
(S) Dibromofluoromethane	93.0			76.0-123													
(S) 4-Bromofluorobenzene	101			80.0-120													

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3300995-1 04/07/18 23:22 • (LCSD) R3300995-2 04/07/18 23:42

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Acetone	0.125	0.150	0.146	120	117	10.0-160			2.52	23
Acrolein	0.125	0.140	0.131	112	105	10.0-160			6.59	20
Acrylonitrile	0.125	0.121	0.110	97.1	88.4	60.0-142			9.44	20
Bromobenzene	0.0250	0.0253	0.0261	101	104	79.0-120			2.89	20



Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3300995-1 04/07/18 23:22 • (LCSD) R3300995-2 04/07/18 23:42

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Bromodichloromethane	0.0250	0.0254	0.0262	102	105	76.0-120			3.25	20
Bromoform	0.0250	0.0284	0.0302	114	121	67.0-132			6.17	20
Bromomethane	0.0250	0.0284	0.0340	114	136	18.0-160			17.8	20
n-Butylbenzene	0.0250	0.0257	0.0285	103	114	72.0-126			10.3	20
sec-Butylbenzene	0.0250	0.0244	0.0270	97.5	108	74.0-121			10.1	20
tert-Butylbenzene	0.0250	0.0249	0.0271	99.6	109	75.0-122			8.57	20
Carbon tetrachloride	0.0250	0.0222	0.0243	88.8	97.3	63.0-122			9.08	20
Benzene	0.0250	0.0236	0.0244	94.4	97.4	69.0-123			3.15	20
Chlorobenzene	0.0250	0.0246	0.0277	98.3	111	79.0-121			11.9	20
Chlorodibromomethane	0.0250	0.0266	0.0298	107	119	75.0-125			11.1	20
Chloroethane	0.0250	0.0288	0.0335	115	134	47.0-152			15.2	20
2-Chloroethyl vinyl ether	0.125	0.132	0.133	105	107	10.0-160			1.29	22
Chloroform	0.0250	0.0243	0.0256	97.4	102	72.0-121			4.98	20
Chloromethane	0.0250	0.0201	0.0240	80.2	96.2	48.0-139			18.1	20
2-Chlorotoluene	0.0250	0.0238	0.0261	95.2	105	74.0-122			9.42	20
4-Chlorotoluene	0.0250	0.0244	0.0263	97.4	105	79.0-120			7.57	20
1,2-Dibromo-3-Chloropropane	0.0250	0.0277	0.0277	111	111	64.0-127			0.0113	20
1,2-Dibromoethane	0.0250	0.0260	0.0278	104	111	77.0-123			6.51	20
Dibromomethane	0.0250	0.0254	0.0258	101	103	78.0-120			1.63	20
1,2-Dichlorobenzene	0.0250	0.0255	0.0275	102	110	80.0-120			7.68	20
1,3-Dichlorobenzene	0.0250	0.0259	0.0271	104	109	72.0-123			4.59	20
1,4-Dichlorobenzene	0.0250	0.0252	0.0269	101	108	77.0-120			6.49	20
Dichlorodifluoromethane	0.0250	0.0224	0.0227	89.6	90.6	49.0-155			1.16	20
1,1-Dichloroethane	0.0250	0.0243	0.0250	97.2	99.8	70.0-126			2.65	20
1,2-Dichloroethane	0.0250	0.0253	0.0256	101	102	67.0-126			1.25	20
1,1-Dichloroethene	0.0250	0.0232	0.0248	92.9	99.1	64.0-129			6.52	20
cis-1,2-Dichloroethene	0.0250	0.0242	0.0254	96.8	102	73.0-120			4.92	20
trans-1,2-Dichloroethene	0.0250	0.0244	0.0255	97.4	102	71.0-121			4.43	20
1,2-Dichloropropane	0.0250	0.0245	0.0247	98.2	98.6	75.0-125			0.435	20
1,1-Dichloropropene	0.0250	0.0230	0.0254	92.1	102	71.0-129			9.81	20
1,3-Dichloropropane	0.0250	0.0255	0.0272	102	109	80.0-121			6.41	20
cis-1,3-Dichloropropene	0.0250	0.0261	0.0285	105	114	79.0-123			8.61	20
trans-1,3-Dichloropropene	0.0250	0.0260	0.0288	104	115	74.0-127			10.2	20
2,2-Dichloropropane	0.0250	0.0232	0.0248	92.6	99.0	60.0-125			6.67	20
Di-isopropyl ether	0.0250	0.0247	0.0227	98.7	90.9	59.0-133			8.23	20
Hexachloro-1,3-butadiene	0.0250	0.0270	0.0318	108	127	64.0-131			16.2	20
Isopropylbenzene	0.0250	0.0239	0.0267	95.7	107	75.0-120			11.1	20
p-Isopropyltoluene	0.0250	0.0257	0.0287	103	115	74.0-126			11.0	20
2-Butanone (MEK)	0.125	0.169	0.154	135	123	37.0-158			9.29	20
Methylene Chloride	0.0250	0.0235	0.0245	93.9	97.8	66.0-121			4.03	20

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3300995-1 04/07/18 23:22 • (LCSD) R3300995-2 04/07/18 23:42

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
4-Methyl-2-pentanone (MIBK)	0.125	0.125	0.121	100	97.2	59.0-143			3.00	20
Ethylbenzene	0.0250	0.0245	0.0280	98.1	112	77.0-120			13.2	20
Naphthalene	0.0250	0.0262	0.0269	105	108	62.0-128			2.76	20
n-Propylbenzene	0.0250	0.0239	0.0264	95.4	106	79.0-120			10.2	20
Styrene	0.0250	0.0262	0.0280	105	112	78.0-124			6.60	20
1,1,1,2-Tetrachloroethane	0.0250	0.0251	0.0280	100	112	75.0-122			11.0	20
1,1,2,2-Tetrachloroethane	0.0250	0.0266	0.0262	106	105	71.0-122			1.52	20
Tetrachloroethene	0.0250	0.0240	0.0283	95.8	113	70.0-127			16.5	20
1,2,3-Trichlorobenzene	0.0250	0.0258	0.0285	103	114	61.0-133			9.74	20
1,2,4-Trichlorobenzene	0.0250	0.0269	0.0283	108	113	69.0-129			5.25	20
1,1,1-Trichloroethane	0.0250	0.0231	0.0255	92.3	102	68.0-122			9.91	20
Methyl tert-butyl ether	0.0250	0.0247	0.0249	98.7	99.7	64.0-123			1.05	20
1,1,2-Trichloroethane	0.0250	0.0260	0.0283	104	113	78.0-120			8.40	20
Trichloroethene	0.0250	0.0241	0.0263	96.4	105	78.0-120			8.82	20
Trichlorofluoromethane	0.0250	0.0231	0.0267	92.5	107	56.0-137			14.2	20
1,2,3-Trichloropropane	0.0250	0.0256	0.0262	102	105	72.0-124			2.29	20
1,2,4-Trimethylbenzene	0.0250	0.0252	0.0273	101	109	75.0-120			8.20	20
1,3,5-Trimethylbenzene	0.0250	0.0240	0.0267	96.0	107	75.0-120			10.5	20
Vinyl chloride	0.0250	0.0223	0.0256	89.4	103	64.0-133			13.8	20
Toluene	0.0250	0.0240	0.0273	96.1	109	77.0-120			12.7	20
Xylenes, Total	0.0750	0.0718	0.0822	95.7	110	77.0-120			13.5	20
(S) Toluene-d8				96.2	99.7	80.0-120				
(S) Dibromofluoromethane				92.7	93.5	76.0-123				
(S) 4-Bromofluorobenzene				97.9	98.2	80.0-120				

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3301596-1 04/11/18 21:30

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
1,4-Dioxane	1.00	0.711	71.1	50.0-150	
(S) Toluene-d8			101	80.0-120	
(S) Dibromofluoromethane			91.7	76.0-123	
(S) 4-Bromofluorobenzene			95.2	80.0-120	



Method Blank (MB)

(MB) R3300249-2 04/09/18 10:42

Analyte	MB Result mg/l	<u>MB Qualifier</u>	MB MDL mg/l	MB RDL mg/l
1,4-Dioxane	U		0.000597	0.00300
(S) Toluene-d8	103			78.0-122

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3300249-1 04/09/18 09:43 • (LCSD) R3300249-3 04/09/18 16:04

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
1,4-Dioxane	0.0500	0.0398	0.0417	79.6	83.3	56.0-136			4.55	28
(S) Toluene-d8				103	95.4	78.0-122				

L983870-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L983870-05 04/09/18 20:39 • (MS) R3300249-4 04/09/18 20:59 • (MSD) R3300249-5 04/09/18 21:19

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
1,4-Dioxane	0.0500	0.0223	0.0668	0.0691	88.9	93.6	1	35.0-160			3.45	29
(S) Toluene-d8					102	102		78.0-122				



L983870-06,07,08,09,10,11,12,13,14

Method Blank (MB)

(MB) R3301358-2 04/11/18 10:34

Analyte	MB Result mg/l	<u>MB Qualifier</u>	MB MDL mg/l	MB RDL mg/l
1,4-Dioxane	U		0.000597	0.00300
(S) Toluene-d8	103			78.0-122

¹Cp²Tc³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Laboratory Control Sample (LCS)

(LCS) R3301358-1 04/11/18 09:35

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
1,4-Dioxane	0.0500	0.0420	84.0	56.0-136	
(S) Toluene-d8		103		78.0-122	

L983870-14 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L983870-14 04/11/18 14:16 • (MS) R3301358-3 04/11/18 14:35 • (MSD) R3301358-4 04/11/18 14:55

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution %	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
1,4-Dioxane	0.0500	0.00722	0.0528	0.0564	91.1	98.4	1	35.0-160			6.66	29
(S) Toluene-d8				102		102		78.0-122				



Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Abbreviations and Definitions

MDL	Method Detection Limit.	¹ Cp
ND	Not detected at the Reporting Limit (or MDL where applicable).	² Tc
RDL	Reported Detection Limit.	³ Ss
Rec.	Recovery.	⁴ Cn
RPD	Relative Percent Difference.	⁵ Sr
SDG	Sample Delivery Group.	⁶ Qc
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.	⁷ GI
U	Not detected at the Reporting Limit (or MDL where applicable).	⁸ AI
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.	⁹ Sc
Dilution	If the sample matrix contains an interfering material, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.	
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.	
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.	
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.	
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.	
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.	
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.	
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.	
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.	
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.	

Qualifier Description

The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.



ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

State Accreditations

Alabama	40660
Alaska	17-026
Arizona	AZ0612
Arkansas	88-0469
California	2932
Colorado	TN00003
Connecticut	PH-0197
Florida	E87487
Georgia	NELAP
Georgia ¹	923
Idaho	TN00003
Illinois	200008
Indiana	C-TN-01
Iowa	364
Kansas	E-10277
Kentucky ^{1,6}	90010
Kentucky ²	16
Louisiana	AI30792
Louisiana ¹	LA180010
Maine	TN0002
Maryland	324
Massachusetts	M-TN003
Michigan	9958
Minnesota	047-999-395
Mississippi	TN00003
Missouri	340
Montana	CERT0086

Nebraska	NE-OS-15-05
Nevada	TN-03-2002-34
New Hampshire	2975
New Jersey-NELAP	TN002
New Mexico ¹	n/a
New York	11742
North Carolina	Env375
North Carolina ¹	DW21704
North Carolina ³	41
North Dakota	R-140
Ohio-VAP	CL0069
Oklahoma	9915
Oregon	TN200002
Pennsylvania	68-02979
Rhode Island	LA000356
South Carolina	84004
South Dakota	n/a
Tennessee ^{1,4}	2006
Texas	T 104704245-17-14
Texas ⁵	LAB0152
Utah	TN00003
Vermont	VT2006
Virginia	460132
Washington	C847
West Virginia	233
Wisconsin	9980939910
Wyoming	A2LA

Third Party Federal Accreditations

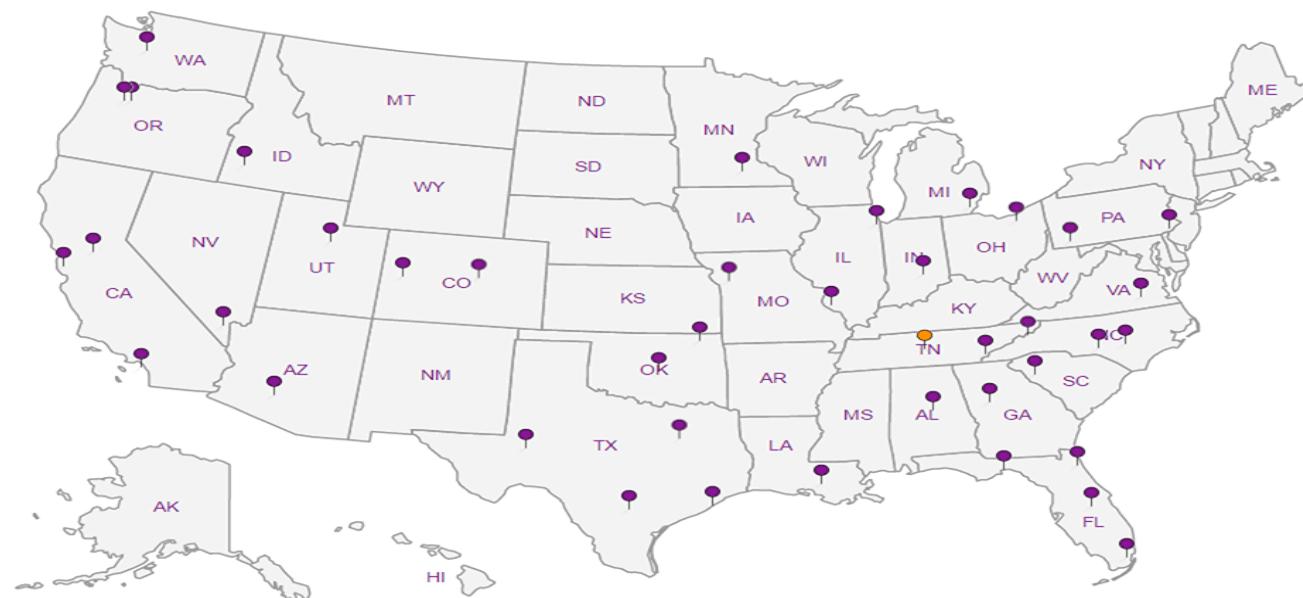
A2LA – ISO 17025	1461.01
A2LA – ISO 17025 ⁵	1461.02
Canada	1461.01
EPA-Crypto	TN00003

AIHA-LAP,LLC EMLAP	100789
DOD	1461.01
USDA	P330-15-00234

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. ESC Lab Sciences performs all testing at our central laboratory.

¹ Cp² Tc³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

S&ME Inc. - Kennesaw GA 3380 Town Point Drive Suite 140 Kennesaw, GA 30144			Billing Information			Pres (chk)	Analysis / Container / Preservative						Chain of Custody	
			Accounts Payable 3380 Town Point Drive Suite 140 Kennesaw, GA 30144										Page _____ of _____	
Report To: Peter Fleury			Email To: pffleury@smeinc.com									13065 Lebanon Rd Mount Juliet, TN 37122 Phone: 615-758-5858 Phone: 800-767-5859 Fax: 615-758-5859		
Project Description: Gainesville DOT			City/State Collected											
Phone: 770-919-0969 Fax: 770-919-2360	Client Project # 4468-14-073A		Lab Project # SMEKEN-446814073								Lab L483870 Tel A087			
Collected by (print) <i>BJ Wagner/Taylor Goble</i>	Site/Facility ID #		P.O. # <i>4468 14073-A</i>											
Collected by (signature) <i>BJ Wagner</i>	Rush? (Lab MUST Be Notified)		Quote #								Acctnum: SMEKEN Template: T134379 Preflogin: P645832 TSR: 206 - Jeff Carr PB: 3-28-18 CM			
Immediately Packed on Ice N <input checked="" type="checkbox"/>	Same Day	Five Day	Date Results Needed		N. of Ents									
	Next Day	S Day (Red Only)										Remarks	Sample # (lab only)	
	Two Day	10 Day (Red Only)												
	Three Day													
Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	1,4-dioxane - 8260 40mL Amb-HCl	VOCS - 8260 40mL Amb-HCl							
MW-1	6iab	GW		4/2/18	1400	X	X						-01	
MW-2	6rab	GW		4/2/18	1400	X	X						-02	
MW-4	6rab	GW		4/2/18	1120	X	X						-03	
MW-8	6ab	GW		4/3/18	1246	X	X						-04	
MW-9R	6rab	GW		4/3/18	1322	X	X						-05	
MW-13	6rab	GW		4/2/18	1230	X	X						-06	
MW-20	6ab	GW		4/2/18	1200	X	X						-07	
MW-30	6rab	GW		4/4/18	922	X	X						-08	
MW-40	6rab	GW		4/3/18	1020	X	X						-09	
MW-14D	6rab	GW		4/4/18	1022	X	X						-10	
* Matrix: SS - Sed Air - Air F - Filter GW - Groundwater B - Bioassay WW - WasteWater DW - Drinking Water OT - Other _____	Remarks:			pH _____ Temp _____			Flow _____ Other _____			Sample Receipt Char.				
										COC Seal Present/Intact: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N COC Signed/Accurate: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Bottles arrive intact: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Correct bottles used: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Sufficient volume sent: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <small>If Applicable</small> VOA Zero Headspace <input checked="" type="checkbox"/> Y <input type="checkbox"/> N Preservation Direct/Checked: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N				
Samples returned via: UPS FedEx Courier			Tracking # 4196 3260 6061											
Relinquished by: (Signature) <i>Taylor Goble</i>	Date 4/4/18	Time 1700	Received by (Signature) <i>Jerry Shur</i>	Top Blank Received <input checked="" type="checkbox"/> Y <input type="checkbox"/> N										
Relinquished by: (Signature) <i>Jerry Shur</i>	Date 4/5/18	Time 1330	Received by (Signature)	Temp: 4.0m °C Bottles Received: 78					If preservation required by Login: Date/Time					
Relinquished by: (Signature)	Date	Time	Received for lab by: (Signature) <i>Randy Shur</i>	Date 4/6/18	Time 845	Hold:			Condition: <input checked="" type="checkbox"/> NO / OK					

S&ME Inc. - Kennesaw GA

**3380 Town Point Drive Suite 140
Kennesaw, GA 30144**

**Report to
Peter Fleury**

Project Gainesville DOT **City/State** Collected

Phone 770-919-0969
Fax 770-919-2360

Collected by (print):

Collected by [signature]

[Signature]
Immediately
Packed on ice N Y

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time
-----------	-----------	----------	-------	------	------

- * Matrix
- SS - Soil AIR - Air F - Filter
- GW - Groundwater B - Bioassay
- WW - WasteWater
- DW - Drinking Water
- OT - Other

Remarks

Samples returned via:

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pH _____ Temp

flow _____ Other _____

<u>Sample Receipt Checklist</u>	
COC Seal Present/Intact:	<input checked="" type="checkbox"/> N <input type="checkbox"/> Y
COC Signed/Accurate:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Bottles arrive intact:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Correct bottles used:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Sufficient volume sent:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
If Applicable	
VCA Zero Headspace:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Preservation Correct/Checked:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N

Belowawshed by - (Signature)

| Page 1 of 1 |

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2000-00000000000000000000000000000000

Price

Date: _____

Published by EspanolTel

Date _____

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ESC Lab Sciences
Non-Conformance Form

Login #: L983870	Client: SMEKEN	Date: 4/6/18	Evaluated by: Troy Dunlap
------------------	----------------	--------------	---------------------------

Non-Conformance (check applicable items)

Sample Integrity	Chain of Custody Clarification	
Parameter(s) past holding time	Login Clarification Needed	If Broken Container:
Improper temperature	Chain of custody is incomplete	Insufficient packing material around container
Improper container type	Please specify Metals requested.	Insufficient packing material inside cooler
Improper preservation	Please specify TCLP requested.	Improper handling by carrier (FedEx / UPS / Courier)
Insufficient sample volume	Received additional samples not listed on coc	Sample was frozen
Sample is biphasic.	Sample ids on containers do not match ids on coc	Container lid not intact
Vials received with headspace	Trip Blank not received	If no Chain of Custody
Broken container	Client did not "X" analysis	Received by:
Broken container	Chain of Custody is missing	Date/Time
Sufficient sample remains		Temp / Cont. Rec./pH
		Carrier:
		Tracking#

Login Comments: Received ID MW-7 collected at 4/4/18 at 1136 not listed on the COC.

Client informed by	Call	Email	Voice Mail	Date: 4/18	Time: 0813
TSR Initials: JC	Client Contact: V. C.				

Login Instructions: Log MW-7 for V8260LL14D.

This E-mail and any attached files are confidential, and may be copyright protected. If you are not the addressee, any dissemination of this communication is strictly prohibited. If you have received this message in error, please contact the sender immediately and delete/destroy all information received.

Appendix V – Type 2 Groundwater RRS Calculations

GA HSRA Risk Reduction Standards - Type 2 Groundwater
Georgia Department of Transportation-Gainesville District Office
Gainesville, Georgia
S&ME Project No. 4468-14-073A
May 2018

Constituent	Item 1		Item 2		Type 2 RRS for Groundwater Lowest of Items 1-2 mg/L	
	Non-Cancer Based		Cancer Based			
	EPA RAGS B	Equation 2	EPA RAGS B	Equation 1		
	Child mg/L	Adult mg/L	Child mg/L	Adult mg/L		
1,1-Dichloroethylene	1.07E-01	3.71E-01	NC	NC	1.07E-01	

Notes:

GA HSRA = Georgia Hazardous Site Response Act

RRS = Risk Reduction Standard

RAGS B = Risk Assessment Guidance for Superfund Part B

NC = Not Calculated (either not appropriate or data not available)

mg/L=milligrams per liter

			Child	Adult
Chemical Concentration	C	mg/L	***	***
Target Hazard Index	THI	unitless	1	1
Target Risk	TR	unitless	1.E-05	1.E-05
Oral Reference Dose	RfDo	mg/kg-Day	chemical specific	chemical specific
Inhalation Reference Dose	RfDi	mg/kg-Day	chemical specific	chemical specific
Oral Slope Factor	Sfo	(mg/kg-Day) ⁻¹	chemical specific	chemical specific
Inhalation Slope Factor	SFi	(mg/kg-Day) ⁻¹	chemical specific	chemical specific
Body Weight	BW	kg	15	80
Averaging Time (nc)	ATnc	yr	6	26
Averaging Time (c)	ATc	yr	70	70
Exposure Frequency	EF	Days/yr	350	350
Exposure Duration	ED	years	6	26
Intake Rate - Air	IRa	m ³ /Day	15	20
Water Ingestion Rate	IRw	L/Day	0.78	2.5
Water to air Volatilization Factor	K	L/m ³	0.5	0.5

GA HSRA Risk Reduction Standards -Toxicity Factors
Georgia Department of Transportation-Gainesville District Office
Gainesville, Georgia
S&ME Project No. 4468-14-073A
May 2018

Constituent	CAS Number	Chronic Reference Doses		Cancer Slope Factors	
		Oral mg/kg-day	Inhalation mg/m ³	Oral mg/kg-day (mg/kg-day) ⁻¹	Inhalation (μ g/m ³) ⁻¹ (mg/kg-day) ⁻¹
1,1-Dichloroethylene	75-35-4	5.0E-02	2.0E-01	5.7E-02	NA

Notes:

Toxicity Data acquired from Regional Screening Level (RSL) Summary Table May 2018.

<https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables>

GA HSRA = Georgia Hazardous Site Response Act

NA = Not Available or Not Applicable

Appendix VI - Milestone Schedule

Voluntary Remediation Program Milestone Schedule

Site Name: Georgia DOT - Gainesville District Office
Site Address: 2505 Athens Highway, Gainesville Hall County, Georgia
HSI Site No: 10759

Task:	Month														
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Groundwater Environmental Covenant*															
Groundwater Sampling*															
Compliance Status Report Submittal															
HSI Delisting															

* = Months beginning after submittal of current Progress Report