December 28, 2018

Mr. David Hayes
Response & Remediation Program
Georgia Environmental Protection Division
2 Martin Luther King Jr. Drive, SE,
Suite 1054
Atlanta, Georgia 30334

RE: **Voluntary Remediation Program Semi-Annual Progress Report #13**
Tara Shopping Center
8564 Tara Boulevard, Jonesboro, Clayton County, Georgia
Tax Parcel ID 13242D B001; HSI Site No. 10798

Dear Mr. Hayes,

On behalf of Ashland LLC ("Ashland"), EHS Support LLC ("EHS Support") is submitting this Semi-Annual Progress Report #13 for the Site referenced above. Pursuant to the Voluntary Remediation Program (VRP) application conditional approved letter issued on June 28, 2012, semi-annual progress reports are submitted throughout the duration of the VRP program.

The purpose of this progress report is to provide a summary of corrective action (CA) activities completed between July and December 2018 in accordance with the *Groundwater Correction Action Plan* (Groundwater CAP) dated March 17, 2016. Activities performed during this monitoring period included:

- Semi-annual groundwater monitoring of both shallow and bedrock monitoring wells
- Soil vapor assessment activities
- Continued pursuit of Streamlined Uniform Environmental Covenants (SUECs)
- Continued access negotiations at Parcel 13242D A016 (to regain access to monitoring wells MW-15C, MW-24C; stormwater outfall OF-2; and surface water sample locations SS-1 and SS-2).

1.0 Groundwater Corrective Action Program

The Groundwater CAP was submitted on March 17, 2016 and was subsequently approved on August 22, 2016 by the Georgia Environmental Protection Division (GA EPD). The Groundwater CAP included an updated remediation schedule through 2019, established the CA monitoring program outlined below, and proposed SUECs as institutional controls at seven off-site properties. Minor revisions to the Groundwater CAP were submitted on November 4, 2016.

Groundwater CAP activities include semi-annual field-tasks performed in April and October of each year; and annual field-tasks performed in October as summarized below:

- Semi-annual groundwater monitoring of select bedrock monitoring wells (C and D Zone) via passive diffusion bags (PDBs) including MW-15C, MW-16C, MW-19B/C/D, MW-20C, and MW-24C.
- Semi-annual surface water sampling in the unnamed creek including, storm-water outfall location OF-2 and downgradient surface water locations SS-1, SS-2, and SS-3.

- Annual monitoring of select unconsolidated monitoring wells (A and B Zone) including MW13A/B, MW-15A/B, and MW-16A/B.
- Annual inspection and maintenance of the monitoring well network (36 monitoring wells and 3 creek survey points).
- Annual gauging of monitoring wells and stream gauge SG-1/SS-1 to verify groundwater flow direction.
- Execution of SUECs as institutional controls at seven off-site properties including Parcels 13242D A001, A012, A016/A018, B001A, B002/B002Z, B006/B006Z, and B007/B007Z.
- Assessment of surface water conditions of the unnamed creek originating north of the Flint River Shopping Center and flowing west into the adjacent residential neighborhood.

Groundwater and surface water samples are analyzed for volatile organic compounds (VOCs) using United States Environmental Protection Agency (USEPA) Method 8260B. Site-related constituents of potential concern (COPC) include chlorinated compounds such as tetrachloroethene (PCE), and reductive dechlorination daughter products trichloroethene (TCE) and cis-1,2-dichlorothene (cis-1,2-DCE). Results of groundwater CAP activities are summarized in semi-annual VRP progress reports reported to the GA EPD in June and December of each year.

The purpose of the CA monitoring program is to collect a minimum of eight rounds of additional groundwater data, such that a statistical evaluation can be completed on a robust set of historical and recent groundwater data. The existing CA monitoring program will be evaluated after the third (and final) annual event (April 2019), once the statistical trend analysis is complete, and a recommendation provided for path forward.

1.2 VRP Remediation Schedule

Groundwater CAP activities will continue to be conducted until it is appropriate to submit the Compliance Status Report (CSR), which is anticipated to be submitted to GA EPD in the fall of 2019. Submittal of the CSR will be dependent upon completion of CA activities including assessment of soil vapor and surface water. The current remediation schedule is presented as **Figure 2**.

1.3 Annual Groundwater Monitoring Event (April 2018)

The semi-annual corrective action monitoring event was conducted on October 3, 2018. Groundwater samples were collected from five (5) monitoring wells (MW-16C, MW-19B/C/D, and MW-20C). Due to ongoing property access negotiations, Ashland was unable to collect samples at monitoring wells MW-15C and MW-24C located on Parcel 13242D A016. Storm-water outfall location, OF-2, and downgradient surface water locations SS-1 and SS-2 are also located on Parcel 13242D A016 and were therefore not sampled during the October 2018 event. Ashland has continued to pursue property access at this parcel throughout the monitoring period.

A summary of the CA groundwater monitoring program is provided as **Table 1**. The monitoring well network and surface water sampling locations are depicted on **Figure 1**.

Groundwater samples were collected by decanting groundwater directly into laboratory supplied bottle ware from PDBs installed during the April 2018 monitoring event. Groundwater samples were packed

on ice and submitted to TestAmerica of Savannah, Georgia under chain-of-custody for analysis of VOCs using USEPA method 8260B.

At the completion of the October 2018 CA monitoring event, new PDB samplers and dedicated weight were installed within each of the sampled monitoring wells in preparation for the annual corrective action monitoring event scheduled for April 2019. Each sampler was assembled with a 24-inch long, 1.75-inch diameter, 500-milliliter volume, poly-mesh sampler and a stainless-steel weight (8 or 20-ounce) and suspended within the well screen interval prior to tethering the suspension cable to the expandable well cap at grade. PDB supplies, including laboratory grade de-ionized water, were obtained from EON Products, Inc. of Snellville, Georgia.

1.4 Groundwater Monitoring Results

Groundwater Analytical Results

Although the closure pathway for groundwater is through the Type 5 RRS, the groundwater analytical results from the October 2018 monitoring event were conservatively compared to their respective default GA EPD Type I Risk Reduction Standards (RRSs) for groundwater as provided in Rule 391-3-19-.07 of the Georgia Administrative Code dated October 12, 2018. Constituents exceeding their respective Type I RRS for groundwater include PCE, TCE and cis-1,2-DCE. PCE was the only constituent that exceeded the Type I RRS in every groundwater monitoring well sampled. Overall, groundwater concentrations appear to be consistent with historical results. A tabulated summary of the groundwater analytical results, by parcel ID, is provided in **Table 2** and **Table 3**.

1.5 Quality Control

All groundwater samples collected during the semi-annual monitoring event required laboratory dilution prior to analysis. Reporting limits for these samples were adjusted accordingly, and no other analytical or quality control issues were noted. An electronic copy of the October 2018 laboratory analytical report is provided in **Attachment A**.

3.0 Streamlined Uniform Environmental Covenants

Ashland continues to pursue execution of SUECs at seven off-site properties as noted in the Groundwater CAP. SUECs were submitted to property owners in early 2017; however due to lack of response from property owners, Ashland performed in-depth title reviews so the SUECs could be revised for resubmittal to the appropriate property owners. The revised SUECs were drafted using the current GA EPD format and submitted to GA EPD for review on December 28, 2018.

4.0 Vapor Intrusion Evaluation

Pursuant to the June 2018 GA EPD VRP approval letter and as summarized in the Groundwater CAP, four (4) parcels were identified for VI investigation/pathway evaluation. From October 2017 to March 2018, VI investigation activities were conducted at three (3) of the four (4) parcels (13242D B001, 13242D A001, and 13242D A012) and the results were summarized in the *Soil Vapor Investigation Report*

submitted to the GA EPD on June 28, 2018 (Appendix B of the *VRP Progress Report #12* [EHS Support, 2018a])(EHS Support, 2018b). VI investigation was not conducted at the fourth property, Parcel 13242D B006Z/6, due to property access. Parcel 13242D B006Z/6 is located south and side-gradient of the Tara Shopping Center (**Figure 1**).

A property access agreement was executed on June 4, 2018 at Parcel 13242D B006Z/6, and VI investigation activities were conducted in October and November 2018. This section of the report summarizes the VI investigation activities conducted at the fourth and final property identified for investigation (Parcel 13242D B006Z/6); and provides an in-depth evaluation and screening of the soil gas and indoor air data in accordance with current GA EPD and United States Environmental Protection Agency (USEPA) guidance.

4.1 Soil Gas Implant Probe Installation

On October 3, 2018, four (3) exterior soil gas implant probes (probes) were installed at Parcel 13242D B006Z/6. The probe locations were selected due to their proximity to buildings potentially susceptible to VI. Probes were installed via direct-push technology (DPT) by GeoLab Drilling, Inc. of Winder, GA and were installed within 5-feet of the target building foundation. The probes were installed as both single and nested completions, with two (2) shallow soil gas implants and one (1) deep (nested) soil gas implant probe installed at southern side of the target building. The location of the soil gas implants is shown on **Figure 3**.

The shallow soil gas implant probes were installed at an interval of 2.5 to 3.0 feet below ground surface (bgs) within the unsaturated, upper vadose zone. The deep soil gas implant probe was installed at an interval just above the top of the groundwater table. Soil gas implants were constructed in accordance with the Section D.4.2 of Interstate Technology & Regulatory Council Technical and Regulatory Guidance Supplement – Vapor Intrusion Pathway (ITRC, 2007). Construction details for each soil gas implant probe are provided on **Table 4** and boring logs are included as **Attachment B**.

4.2 Soil Gas Sampling

As part of exterior soil gas sampling activities, leak testing was performed prior to sampling using helium gas. No leaks were detected as part of the testing. Soil gas implant probes were sampled at Parcel 13242D B006Z/6 on November 26, 2018. Soil gas samples were collected using, clean, individually-certified six (6)-liter stainless-steel SUMMA™ canisters. The SUMMA™ canisters were equipped with a thirty (30)-minute flow regulator for soil gas sample collection. Samples were submitted to TestAmerica under proper chain of custody (COC) for analysis of volatile organic compounds (VOCs) via USEPA method TO-15. Field sampling forms are provided in **Attachment C** and the laboratory analytical report is included in **Attachment D**.

4.3 Data Usability

The laboratory analytical report for the November 26, 2018 soil gas samples was evaluated to ensure that it was usable for the intended purpose. This evaluation included the following components:

- Review of the laboratory certification to ensure that the laboratory is certified to perform the requested analysis.

- Review of the laboratory report to ensure that the samples were received and analyzed within appropriate holding times.
- Review of the initial and final canister vacuums to evaluate potential canister leakage during shipment from the laboratory, during sampling, or during shipment to the laboratory.
- Review of field duplicate results and relative percent difference (RPD) to confirm the results were within acceptable percentages/acceptance limits.
- Evaluation of laboratory quality control (QC) results including method blanks, initial and continuing calibrations, internal standards, linear control sample duplicates (LCSDs), and surrogate recoveries. Data evaluation to confirm that method blank results were non-detect, calibrations and internal standards were within acceptance criteria, and that surrogate recoveries, and percent recovery and RPDs for LCSDs were within control limits.

Based on these evaluations, no issues were noted with the laboratory data set and the data was determined usable for its intended purpose.

4.3 Data Evaluation

This section summarizes the screening of the November 2018 soil gas samples at Parcel 13242D B006Z/6 for the purpose of adequately evaluating the potential for VI into the target building. Exterior soil gas data was evaluated using the USEPA VISL Calculator Target Sub-Slab and Near-Source Soil Gas Concentrations (USEPA, 2018). The VISL Calculator provides a conservative estimate for target concentrations, incorporating a cumulative carcinogenic risk of 10^{-5} and a non-carcinogenic hazard quotient of 1.0. These risk levels are in accordance with the GA EPD Vapor Intrusion Technical Guidance, which defaults to the USEPA *Technical Guide for Assessing and Mitigating the Vapor Intrusion Pathway from Subsurface Vapor Sources to Indoor Air* (USEPA, 2015). The VISL calculator takes the lowest Worker Ambient Air USEPA regional screening levels (RSLs) (between cancer and non-cancer [USEPA, 2018]) and applies USEPA's generic attention factor of 0.03 to derive the target screening levels.

Five (5) constituents (benzene, ethylbenzene, xylenes, vinyl chloride, and carbon disulfide) were detected above their respective laboratory method detection limits within the exterior soil gas samples collected at Parcel 13242D B006Z/6. None of the constituents detected at Parcel 13242D B006Z/6 are site-related COPCs. Exterior soil gas data was screened against the Target Sub-Slab and Near-Source Soil Gas Concentrations derived from the VISL calculator and results indicated that no location exceeded their respective screening levels (shown on **Table 4**). Based on this assessment, no further evaluation is required at Parcel 13242D B006Z/6.

4.4 Conclusions

The potential for VI pathways has been assessed at all four (4) parcels identified in the 2016 Groundwater CAP. A summary of the historical VI assessments and findings to date are presented in the table below:

Parcel ID	Property Name/Owner	VI Assessment Activities	Summary of VI Findings[(1)]
13242D B001	Tara Shopping Center Tara Retail Holdings LLC (subject site)	Exterior soil-gas sampling, sub-slab sampling, and indoor air sampling.	Data evaluation indicates no additional VI evaluation is warranted.

Parcel ID	Property Name/Owner	VI Assessment Activities	Summary of VI Findings(1)
13242D A001	Flint River Shopping Center KOB Investments LLC & ETAL	Exterior soil-gas sampling.	Data evaluation indicates no additional VI evaluation is warranted.
13242D A012	Bail Bonds Aaron Amblik ETAL	Exterior soil-gas sampling.	No risks were identified at this property and no additional VI evaluation is warranted.
13242D B006Z/6	Prax Air Roger Lumsden	Exterior soil-gas sampling.	No risks were identified at this property and no additional VI evaluation is warranted.

Notes:

(1) Data evaluations were performed using the USEPA 2018 Vapor Intrusion Screening Level (VISL) Calculator and 2017 Johnson and Ettinger (J&E) modeling.

Based on the results of the historical VI investigation activities documented in the June 28, 2018 *Soil Vapor Investigation Report* (EHS Support, 2018b), and the recent VI investigation at Parcel 13242D B006Z/6 summarized herein, the potential risk of VI to buildings overlying the subject property (either located near to the former source area or located in the downgradient direction of the groundwater plume) are all below the unacceptable risk criteria for their current use. The magnitude of soil gas impacts resulting from the original source area and downgradient groundwater plume have been quantified, and as such, no further evaluation of the VI to indoor air pathway on these properties is warranted.

It should be also be noted that during the initial screening and selection of the parcels identified for VI investigation/pathway evaluations, a fifth location, Parcel 13242D A016/A016A/A108 or the "Former Hoops and Fitness Property" was selected for VI evaluation on a contingency basis only. Initial soil gas sample collection was proposed at the four (4) properties believed to represent the worst-case conditions for vapor intrusion based on elevated groundwater concentrations for site-related COPCs. The worst-case properties, listed in the table above, served as a "surrogate" for other surrounding properties, in a fashion similar to Scenario 3 described in Interstate Technology & Regulatory Council (ITRC, 2007). In this case, the Tara Shopping Center (Parcel 13242D B001), Flint River Shopping Center (Parcel 13242D A001), and Bail Bond Property (Parcel 13242D A012) all served as the surrogates for the Former Hoops and Fitness Property (Parcel 13242D A016/A016A/A108). Based on the absence of risk identified at these parcels for site-related COPCs (EHS Support, 2018), a VI investigation is not required at the Former Hoops and Fitness Property.

5.0 Upcoming Work

As outlined in the 2016 Groundwater CAP, three (3) years of groundwater monitoring would be performed at the site, at which time the sampling program would be re-evaluated based on statistical trend analysis. The upcoming annual groundwater sampling event, scheduled for April 2019, marks the third annual and final monitoring event under the Groundwater CAP. The groundwater sampling methodology to be employed for this monitoring event (i.e., PDB vs. low-flow sampling) is pending based on confirmation from the GA EPD; however, preliminary feedback from the GA EPD indicated PDBs were acceptable with the Type 5 closure pathway. Results from this event will be provided in the

VRP Progress Report #14 to be submitted by June 28, 2018. The statistical analysis of groundwater trends over the three-year monitoring period since the Groundwater CAP approval will be included in a CSR anticipated for submittal in the fall of 2019.

6.0 Professional Hours and Certification

A summary of professional hours from July 2018 to November 2018 is provided in **Attachment E,** along with a professional certification of the information provided in this progress report.

7.0 References

EHS Support, 2016. *Groundwater Correction Action Plan. Former Dry Cleaner Site, Tara Shopping Center, 8564 Tara Boulevard, Jonesboro, Clayton County, Georgia, HSI# 10798.* March 17.

EHS Support, 2018a. *VRP Progress Report #12*, *Former Dry Cleaner Site, Tara Shopping Center, 8564 Tara Boulevard, Jonesboro, Clayton County, Georgia, HSI# 10798.* June 28.

EHS Support, 2018b. *Soil Vapor Investigation Report*, *Former Dry Cleaner Site, Tara Shopping Center, 8564 Tara Boulevard, Jonesboro, Clayton County, Georgia, HSI# 10798.* June 28.

Georgia Environmental Protection Division (Georgia EPD). Vapor Intrusion Technical Guidance. https://epd.georgia.gov/vapor-intrusion-technical-guidance.

Interstate Technology Regulatory Council (ITRC), 2007. Technical and Regulatory Guidance Supplement – Vapor Intrusion Pathway: Investigative Approaches for Typical Scenarios – A Supplement to Vapor Intrusion Pathway: A Practical Guide. January.

USEPA, 2015. Office of Solid Waste and Emergency Response (OSWER). 2015. OSWER Technical Guide for Assessing and Mitigating the Vapor Intrusion Pathway from Subsurface Vapor Sources to Indoor Air. OSWER Publication 9200.2-154. June.

USEPA, 2018. Vapor Intrusion Screening Level Calculator User's Guide. May.

If you have any questions regarding the information presented herein, please contact me at kris.spikes@ehs-support.com or 678-522-6050.

Sincerely,

Kris Spikes
EHS Support LLC
Project Manager

Attachments

cc: Chrissy Piechoski, Ashland LLC (email)
Rich Williams, Esq., Ashland LLC (email)
Eric Nathan, Tara Retail Holdings, Inc.
Amy Magee, King and Spalding
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TABLES

Table 1
Groundater Sampling Program
Tara Shopping Center, HSI 10798, Jonesboro, GA

Well Identification	Location/Owner	Parcel Identification	Analysis	Semi-Annual Groundwater Monitoring Event (October)	Annual Groundwater Monitoring Event (April)
MW-13A	8660 TARA BLVD Roger Lumsden	13242D B006	USEPA 8260B PDB Samplers	-	X
MW-13B				-	X
MW-15A	Georgia Department of Transportation Right of Way	East of 13242D A012		-	X
MW-15B				-	X
MW-16A		East of 13242D A001		-	X
MW-16B				-	X
MW-16C				X	X
MW-15C	8557 TARA BLVD Cathy Morris	13242D A016		X(1)	X
MW-24C				X(1)	X
MW-19A	8639 TARA BLVD Flint River Shopping Center	13242D A001		-	-
MW-19B				X	X
MW-19C				X	X
MW-19D				X	X
MW-20C				X	X
OF-2	Unnamed Creek	-		X(1)	X
SS-1				X(1)	X
SS-2				X(1)	X
SS-3				X(1)	X

Notes:

(1) Due to ongoing access negotiations between Ashland and the current site owner, these sample locations have been inaccessible. Ashland is working to re-establish property access at which time groundwater and surface water monitoring will be resumed.

PDB = Passive Diffusion Bags

Table 2 - Groundwater Analytical Results
Flint River Shopping Center (Parcel #13424D A001)
Tara Shopping Center, HSI 10798, Jonesboro, GA

Well Sample ID	GA EPD Type I RRSs (µg/L)	MW-19B									MW-19C							
Installation Date		12/05/2012									12/4/2012							
Screen Interval (feet below grade)		50-60									75-85							
Water Bearing Unit		Lower Residuum									Bedrock							
Lab Sample Number		680-90099-8	680-107535-9	680-114574-10	680-133511-11	680-140434-5	680-146532-2	680-146532-9	680-151360-5	680-158818-2	680-90177-16	680-107535-8	680-114574-9	680-133511-8	680-140434-4	680-146532-3	680-151360-4	680-158818-1
Sampling Date		5/7/2013	11/19/2014	7/14/2015	12/19/2016	06/26/2017	12/5/2017	12/5/2017	4/19/2018	10/3/2018	5/8/2013	11/19/2014	7/14/2015	12/19/2016	06/26/2017	12/5/2017	4/19/2018	10/3/2018
Matrix		Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water
Units		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Sample Method		LFPS	LFPS	LFPS	PDB	PDB	PDB	PDB	PDB	PDB	LFPS	LFPS	LFPS	PDB	PDB	PDB	PDB	PDB
VOC Constituents of Concern																		
Tetrachloroethene	5	370	870	370 D	180	150	130	120	220 H	440	150	290	200	190	220	380	360	410
Trichloroethene	5	27	67	34	45	19	17	15	21	42	7.2	18	18	24	31	39	36	44
cis-1,2-Dichloroethene	70	44	100	47	110	33	39	37	47	90	14	33	32	51	44	70	72	90
Vinyl chloride	2	5 U	5 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	2.0 U	1 U	1 U	1 U	1 U	5 U	5 U
Other VOC Compounds																		
1,1,1-Trichloroethane	200	5 U	5 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	5 U	5 U
1,1,2,2-Tetrachloroethane	3.3	5 U	5 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	5 U	5 U
1,1,2-Trichloroethane	5	5 U	5 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	5 U	1 U	5 U	5 U
1,1-Dichloroethane	120	5 U	5 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	5 U	5 U
1,1-Dichloroethene	7	5 U	5 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	5 U	5 U
1,2-Dichloroethane	5	5 U	5 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	5 U	5 U
1,2-Dichloropropane	5	5 U	5 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	5 U	5 U
2-Butanone (MEK)	26,900	50 U	50 U	10 U	50 U	25 U	10 U	10 U	10 U	10 U	72	20 U	10 U	10 U	25 U	10 U	50 U	50 U
2-Hexanone	NA	50 U	50 U	10 U	50 U	25 U	10 U	10 U	10 U	10 U	10 U	20 U	10 U	10 U	25 U	10 U	50 U	50 U
4-Methyl-2-pentanone (MIBK)	NA	50 U	50 U	10 U	50 U	25 U	10 U	10 U	10 U	10 U	10 U	20 U	10 U	10 U	25 U	10 U	50 U	50 U
Acetone	75,600	130 U	50 U	10 U	50 U	25 U	10 U	10 U	10 U	21	25 U	20 U	10 U	10 U	25 U	16	50 U	50 U
Benzene	5	5 U	5 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	5 U	5 U
Bromoform	80	5 U	5 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	5 U	1 U	5 U	5 U
Bromomethane	34.5	25 U	25 U	5 U	25 U	1 U	5 U	5 U	5 U	5 U	5 U	10 U	5 U	5 U	1 U	5 U	25 U	25 U
Carbon disulfide	3960	10 U	10 U	2 U	10 U	1 U	2 U	2 U	2 U	2 U	2 U	4 U	2 U	2 U	1 U	2 U	10 U	10 U
Carbon tetrachloride	5	5 U	5 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	5 U	5 U
Chlorobenzene	100	5 U	5 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	5 U	5 U
Chlorodibromomethane	NA	5 U	5 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	5 U	5 U
Chloroethane	NA	25 U	25 U	5 U	25 U	1 U	5 U	5 U	5 U	5 U	5 U	10 U	5 U	5 U	1 U	5 U	25 U	25 U
Chloroform	80	5 U	5 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	5	2 U	1 U	1 U	1 U	1 U	5 U	5 U
Chloromethane	788	5 U	5 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	5 U	5 U
cis-1,3-Dichloropropene	NA	5 U	5 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	5 U	1 U	5 U	5 U
Dichlorobromomethane	80	5 U	5 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	5 U	5 U
Ethylbenzene	700	5 U	5 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	5 U	5 U
Methylene Chloride	5	25 U	25 U	5 U	25 U	5 U	5 U	5 U	5 U	5 U	5 U	10 U	5 U	5 U	5 U	5 U	25 U	25 U
Styrene	100	5 U	5 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	5 U	5 U
Toluene	1,000	5 U	5 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	5 U	5 U
trans-1,2-Dichloroethene	100	5 U	5 U	1	5 U	1 U	1 U	1 U	1 U	1.3	1 U	2 U	1.2	1 U	1 U	1 U	5 U	5 U
trans-1,3-Dichloropropene	NA	5 U	5 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	5 U	1 U	5 U	5 U
Xylenes, Total	10,000	10 U	10 U	1 U	5 U	10 U	1 U	1 U	1 U	1 U	2 U	4 U	1 U	1 U	10 U	1 U	5 U	5 U
Total VOCs		441	1037	452	335	202	186	172	288	594	248	341	251	265	295	489	468	544

Notes:

GA EPD Type I Risk Reduction Standards (RRSs) for groundwater as provided in Rule 391-3-19-.07 of the Georgia Administrative Code dated October 12, 2018.

Shaded - exceeds Type I RRs

Samples analyzed by USPA Method 8260C

H - Hold time issue noted by laboratory

LFPS - Low Flow Purging and Sampling

NA - Not available

PDB - Passive Diffusion Bag

U - value not detected above the laboratory reporting limit.

µg/L - micrograms per liter

VOC - Volatile organic compounds

Table 2 - Groundwater Analytical Results
Flint River Shopping Center (Parcel #13424D A001)
Tara Shopping Center, HSI 10798, Jonesboro, GA

Well Sample ID	GA EPD Type I RRSs (µg/L)	MW-19D							MW-20C						
Installation Date		9/2/2014							12/4/2012						
Screen Interval (feet below grade)		95.5-105.5							35-45						
Water Bearing Unit		Bedrock							Bedrock						
Lab Sample Number		680-107535-7	680-114574-11	680-133511-9	680-140434-3	680-146532-4	680-151360-3	680-158818-3	680-90201-17	680-114236-6	680-133511-4	680-140434-9	680-146532-5	680-151360-9	680-158818-6
Sampling Date		11/19/2014	7/14/2015	12/19/2016	06/26/2017	12/5/2017	4/19/2018	10/3/2018	5/9/2013	7/2/2015	12/19/2016	06/26/2017	12/5/2017	4/19/2018	10/3/2018
Matrix		Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water	Water
Units		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Sample Method		LFPS	LFPS	PDB	PDB	PDB	PDB	PDB	LFPS	LFPS	PDB	PDB	PDB	PDB	PDB
VOC Constituents of Concern															
Tetrachloroethene	5	94	12	190 H	310	290	76	320	18	53	100	250	170	120	110
Trichloroethene	5	7.1	1.2	31	30	28	15	31	1.1	5	31	29	23	14	13
cis-1,2-Dichloroethene	70	13	1.9	66	51	61	100	78	1.4	4.9	43	25	26	21	13
Vinyl chloride	2	1 U	1 U	1 U	2 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U
Other VOC Compounds															
1,1,1-Trichloroethane	200	1 U	1 U	1 U	2 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U
1,1,2,2-Tetrachloroethane	3.3	1 U	1 U	1 U	2 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U
1,1,2-Trichloroethane	5	1 U	1 U	1 U	10 U	1 U	5 U	5 U	1 U	1 U	1 U	5 U	1 U	2 U	2 U
1,1-Dichloroethane	120	1 U	1 U	1 U	2 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U
1,1-Dichloroethene	7	1 U	1 U	1 U	2 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U
1,2-Dichloroethane	5	1 U	1 U	1 U	2 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U
1,2-Dichloropropane	5	1 U	1 U	1 U	2 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U
2-Butanone (MEK)	26,900	10 U	10 U	10 U	50 U	10 U	50 U	50 U	10 U	10 U	10 U	25 U	10 U	20 U	20 U
2-Hexanone	NA	10 U	10 U	10 U	50 U	10 U	50 U	50 U	10 U	10 U	10 U	25 U	10 U	20 U	20 U
4-Methyl-2-pentanone (MIBK)	NA	10 U	10 U	10 U	50 U	10 U	50 U	50 U	10 U	10 U	10 U	25 U	10 U	20 U	20 U
Acetone	75,600	10 U	10 U	10 U	50 U	10 U	50 U	99	25 U	10 U	10 U	25 U	10 U	20 U	52
Benzene	5	1 U	1 U	1 U	2 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U
Bromoform	80	1 U	1 U	1 U	10 U	1 U	5 U	5 U	1 U	1 U	1 U	5 U	1 U	2 U	2 U
Bromomethane	34.5	5 U	5 U	5 U	2 U	5 U	25 U	25 U	5 U	5 U	5 U	1 U	5 U	10 U	10 U
Carbon disulfide	3960	2 U	2 U	2 U	2 U	2 U	10 U	10 U	2 U	2 U	2 U	1 U	2 U	4 U	4 U
Carbon tetrachloride	5	1 U	1 U	1 U	2 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U
Chlorobenzene	100	1 U	1 U	1 U	2 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U
Chlorodibromomethane	NA	1 U	1 U	1 U	2 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U
Chloroethane	NA	5 U	5 U	5 U	2 U	5 U	25 U	25 U	5 U	5 U	5 U	1 U	5 U	10 U	10 U
Chloroform	80	11	1 U	1 U	2 U	1 U	5 U	5 U	1.1	1 U	1 U	1 U	1 U	2 U	2 U
Chloromethane	788	1 U	1 U	1 U	2 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U
cis-1,3-Dichloropropene	NA	1 U	1 U	1 U	10 U	1 U	5 U	5 U	1 U	1 U	1 U	5 U	1 U	2 U	2 U
Dichlorobromomethane	80	1 U	1 U	1 U	2 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U
Ethylbenzene	700	1 U	1 U	1 U	2 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U
Methylene Chloride	5	5 U	5 U	5 U	10 U	5 U	25 U	25 U	5 U	5 U	5 U	5 U	5 U	10 U	10 U
Styrene	100	1 U	1 U	1 U	2 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U
Toluene	1,000	1 U	1 U	1 U	2 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U
trans-1,2-Dichloroethene	100	1 U	1 U	1 U	2 U	1 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	2 U	2 U
trans-1,3-Dichloropropene	NA	1 U	1 U	1 U	10 U	1 U	5 U	5 U	1 U	1 U	1 U	5 U	1 U	2 U	2 U
Xylenes, Total	10,000	2 U	1 U	1 U	20 U	1 U	5 U	5 U	2 U	1 U	1 U	10 U	1 U	2 U	2 U
Total VOCs		125	15	287	391	379	191	528	21	63	174	304	219	155	188

Notes:
GA EPD Type I Risk Reduction Standards (RRSs) for groundwater as provided in Rule 391-3-19-.07 of the Georgia Administrative Code dated October 12, 2018.
Shaded - exceeds Type I RRs
Samples analyzed by USPA Method 8260C
H - Hold time issue noted by laboratory
LFPS - Low Flow Purging and Sampling
NA - Not available
PDB - Passive Diffusion Bag
U - value not detected above the laboratory reporting limit.
µg/L - micrograms per liter
VOC - Volatile organic compounds

Table 3 - Groundwater Analytical Results
Georgia DOT Right-of-Way
Tara Shopping Center, HSI 10798, Jonesboro, GA

Well Sample ID		**MW-16C**								
Installation Date		10/14/08								
Screen Interval (feet below grade)		58-68								
Water Bearing Unit		Bedrock								
Lab Sample Number	**GA EPD Type I RRSs (µg/L)**	680-68627-3	680-90201-15	680-114574-20	680-133511-3	680-140434-7	680-146532-1	680-151360-7	680-158818-4	680-158818-5
Sampling Date		5/20/2011	5/9/2013	7/15/2015	12/19/2016	6/26/2017	12/5/2017	4/19/2018	10/3/2018	10/3/2018
Matrix		Water	Water	Water	Water	Water	Water	Water	Water	Water
Dilution Factor		5	5	1	10	5	5	5		
Units		µg/L	µg/L	µg/L	µg/L	µg/L	ug/L	µg/L	ug/L	ug/L
Sample Method		LFPS	LFPS	LFPS	LFPS	PDB	PDB	PDB	Low	Low
GC/MS VOA - 8260B		Low	Low	Low	Low	Low	Low	Low		
VOC Constituents of Concern										
Tetrachloroethene	5	780	840	820 D	800	800	780	820	820	880
Trichloroethene	5	61	58	72	80	86	100	74	83	91
cis-1,2-Dichloroethene	70	62	72	110	130	120	200	150	150	160
Vinyl chloride	2	5 U	5 U	1 U	10 U	5 U	5 U	5 U	1 U	10 U
Other VOC Compounds										
1,1,1-Trichloroethane	200	5 U	5 U	1 U	10 U	5 U	5 U	5 U	1 U	10 U
1,1,2,2-Tetrachloroethane	3.3	5 U	5 U	1 U	10 U	5 U	5 U	5 U	1 U	10 U
1,1,2-Trichloroethane	5	5 U	5 U	1 U	10 U	25 U	5 U	5 U	1 U	10 U
1,1-Dichloroethane	120	5 U	5 U	1 U	10 U	5 U	5 U	5 U	1 U	10 U
1,1-Dichloroethene	7	5 U	5 U	1 U	10 U	5 U	5 U	5 U	1 U	10 U
1,2-Dichloroethane	5	5 U	5 U	1 U	10 U	5 U	5 U	5 U	1 U	10 U
1,2-Dichloropropane	5	5 U	5 U	1 U	10 U	5 U	5 U	5 U	1 U	10 U
2-Butanone (MEK)	26,900	50 U	50 U	10 U	100 U	130 U	50 U	50 U	10 U	100 U
2-Hexanone	NA	50 U	50 U	10 U	100 U	130 U	50 U	50 U	10 U	100 U *
4-Methyl-2-pentanone (MIBK)	NA	50 U	50 U	10 U	100 U	130 U	50 U	50 U	10 U	100 U
Acetone	75,600	120 U	130 U	10 U	100 U	130 U	50 U	50 U	19	100 U
Benzene	5	5 U	5 U	1 U	10 U	5 U	5 U	5 U	1 U	10 U
Bromoform	80	5 U	5 U	1 U	10 U	25 U	5 U	5 U	1 U	10 U
Bromomethane	34.5	5 U	25 U	5 U	50 U	5 U	25 U	25 U	5 U *	50 U *
Carbon disulfide	3960	10 U	10 U	2 U	20 U	5 U	10 U	10 U	2 U	20 U
Carbon tetrachloride	5	5 U	5 U	1 U	10 U	5 U	5 U	5 U	1 U	10 U
Chlorobenzene	100	5 U	5 U	1 U	10 U	5 U	5 U	5 U	1 U	10 U
Chlorodibromomethane	NA	5 U	5 U	1 U	10 U	5 U	5 U	5 U	1 U	10 U
Chloroethane	NA	5 U	25 U	5 U	50 U	5 U	25 U	25 U	5 U	50 U
Chloroform	80	5 U	5 U	1 U	10 U	5 U	5 U	5 U	1 U	10 U
Chloromethane	788	5 U	5 U	1 U	10 U	5 U	5 U	5 U	1 U *	10 U
cis-1,3-Dichloropropene	NA	5 U	5 U	1 U	10 U	25 U	5 U	5 U	1 U	10 U
Dichlorobromomethane	80	5 U	5 U	1 U	10 U	5 U	5 U	5 U	1 U	10 U
Ethylbenzene	700	5 U	5 U	1 U	10 U	5 U	5 U	5 U	1 U	10 U
Methylene Chloride	5	25 U	25 U	5 U	50 U	25 U	25 U	25 U	5 U	50 U
Styrene	100	5 U	5 U	1 U	10 U	5 U	5 U	5 U	1 U	10 U
Toluene	1,000	5 U	5 U	1 U	10 U	5 U	5 U	5 U	1 U	10 U
trans-1,2-Dichloroethene	100	5 U	5 U	2	10 U	5 U	5 U	5 U	2.4	10 U
trans-1,3-Dichloropropene	NA	5 U	5 U	1 U	10 U	25 U	5 U	5 U	1 U	10 U
Xylenes, Total	10,000	10 U	10 U	1 U	10 U	50 U	5 U	5 U	1 U	10 U
Total VOCs		903	970	1004	1010	1006	300	1044	1074.4	1131

Notes:
GA EPD Type I Risk Reduction Standards (RRSs) for groundwater as provided in Rule 391-3-19-.07 of the Georgia Administrative Code dated October 12, 2018.
Shaded - exceeds Type I RRs
Samples analyzed by USPA Method 8260C
H - Hold time issue noted by laboratory
LFPS - Low Flow Purging and Sampling
NA - Not available
PDB - Passive Diffusion Bag
U - value not detected above the laboratory reporting limit.
µg/L - micrograms per liter
VOC - Volatile organic compounds

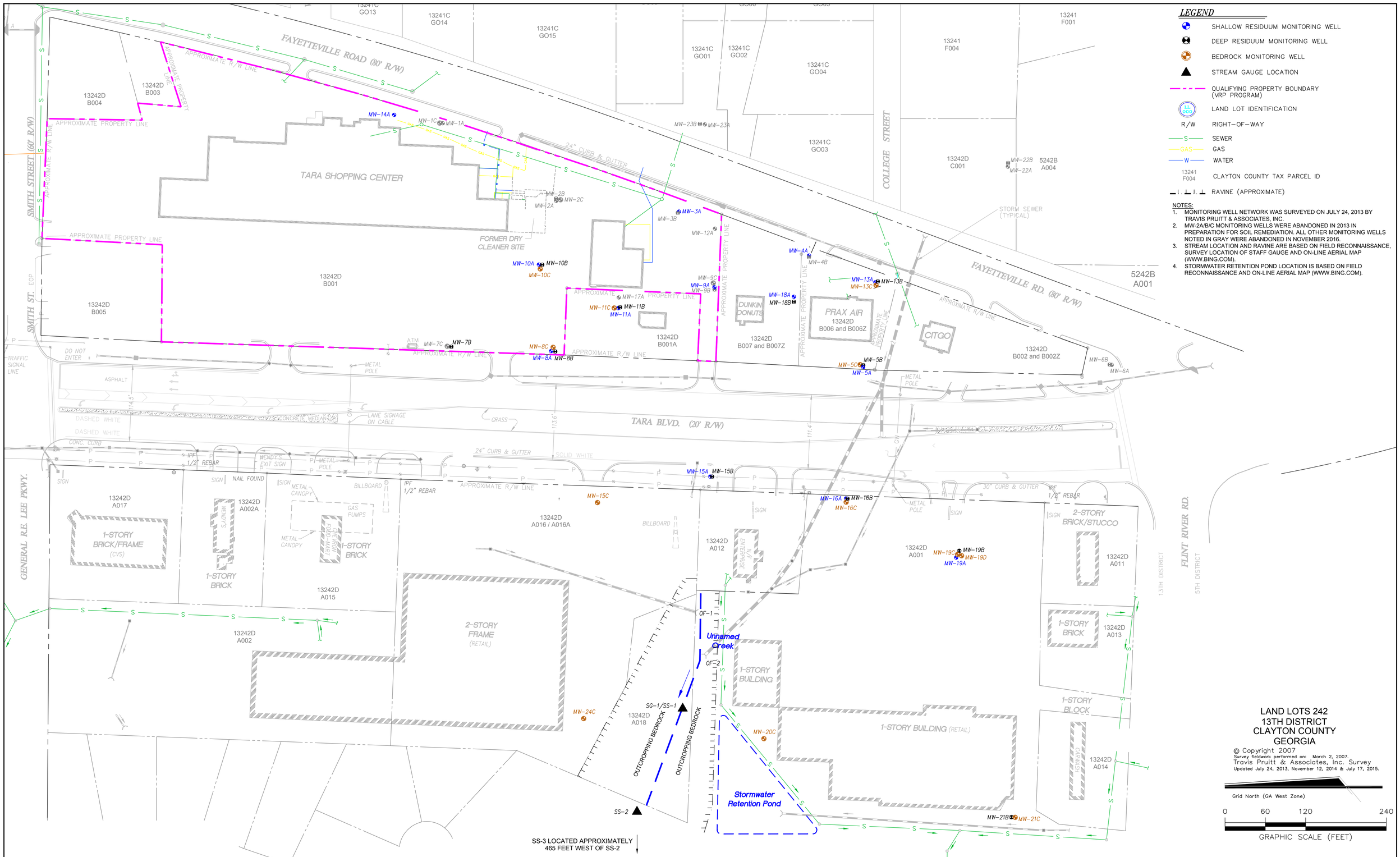
EHS Support

Table 4
Soil Gas Analytical Data
Parcel:13242D B006Z/6
Tara Shopping Center, HSI 10798, Jonesboro, GA

Sample ID	Soil Gas Screening Levels[1] ($\mu g/m^3$)	Parcel #13242D B006Z/6			
		SG-LUM -01	SG-LUM -01D	SG-LUM -02	SG-LUM -02DUP
Screened Interval (ft bgs)		2.5 - 3.0	8.5 - 9.0	2.5 - 3.0	-
Sampling Date		11/26/2018	11/26/2018	11/26/2018	11/26/2018
Units		$\mu g/m^3$	$\mu g/m^3$	$\mu g/m^3$	$\mu g/m^3$
Volatile Organic Compounds[2]					
Acetone	4510000	180 U	180 U	180 U	180 U
Benzene	524	**19**	6.4 U	**31**	**29**
Bromoform	3720	21 U	21 U	21 U	21 U
Bromomethane	730	7.8 U	7.8 U	7.8 U	7.7 U
2-Butanone (MEK)	730000	29 U	29 U	30 U	29 U
Carbon disulfide	102000	12 U	**41**	13 U	12 U
Carbon tetrachloride	681	13 U	13 U	13 U	13 U
Chlorobenzene	7300	9.2 U	9.2 U	9.3 U	9.2 U
Chlorodibromomethane	43800	17 U	17 U	17 U	17 U
Chloroethane	7300000	5.3 U	5.3 U	5.3 U	5.3 U
Chloroform	178	9.8 U	9.8 U	9.9 U	9.7 U
Chloromethane	13100	21 U	21 U	21 U	21 U
cis-1,2-Dichloroethene	-	7.9 U	7.9 U	8 U	7.9 U
cis-1,3-Dichloropropene	-	18 U	18 U	18 U	18 U
Dichlorobromomethane	-	13 U	13 U	14 U	13 U
1,1-Dichloroethane	2560	8.1 U	8.1 U	8.2 U	8.1 U
1,2-Dichloroethane	157	8.1 U	8.1 U	8.2 U	8.1 U
1,1-Dichloroethene	29200	7.9 U	7.9 U	8 U	7.9 U
1,2-Dichloropropane	584	9.2 U	9.2 U	9.3 U	9.2 U
Ethylbenzene	1640	**56**	**14**	**110**	**97**
2-Hexanone	4380	16 U	16 U	17 U	16 U
Methylene Chloride	438000	35 U	35 U	35 U	35 U
4-Methyl-2-pentanone (MIBK)	438000	41 U	41 U	41 U	41 U
Styrene	146000	8.5 U	8.5 U	8.6 U	8.5 U
1,1,2,2-Tetrachloroethane	29	14 U	14 U	14 U	14 U
Tetrachloroethene	71	14 U	14 U	14 U	14 U
Toluene	730000	38 U	38 U	38 U	38 U
trans-1,2-Dichloroethene	-	7.9 U	7.9 U	8 U	7.9 U
trans-1,3-Dichloropropene	-	9.1 U	9.1 U	9.2 U	9 U
1,1,1-Trichloroethane	730000	11 U	11 U	11 U	11 U
1,1,2-Trichloroethane	29	11 U	11 U	11 U	11 U
Trichloroethene	29	11 U	11 U	11 U	11 U
Vinyl chloride	929	**18**	**18**	**10**	10 U
Xylenes, Total	14600	**310**	**91**	**570**	**490**

(1) Soil Gas Screening Levels from the USEPA Vapor Intrusion Screening Level (VISL) Calculator - May 2018 - https://www.epa.gov/vaporintrusion/visl-users-guide
(2) Air samples analyzed by USEPA Method VOA-TO-15.
$\mu g/m^3$ = micrograms per cubic meter
U = not detected above laboratory reporting limits
Bold = exceeds the laboratory report limit
DUP = Duplicate sample of SG-LUM-02
ft bgs = feet below ground surface
- = Not available / Not applicable

FIGURES



LEGEND

- SHALLOW RESIDUUM MONITORING WELL
- DEEP RESIDUUM MONITORING WELL
- BEDROCK MONITORING WELL
- STREAM GAUGE LOCATION
- QUALIFYING PROPERTY BOUNDARY (VRP PROGRAM)
- LAND LOT IDENTIFICATION
- R/W — RIGHT-OF-WAY
- S — SEWER
- GAS — GAS
- W — WATER
- 13241 F004 — CLAYTON COUNTY TAX PARCEL ID
- RAVINE (APPROXIMATE)

NOTES:

1. MONITORING WELL NETWORK WAS SURVEYED ON JULY 24, 2013 BY TRAVIS PRUITT & ASSOCIATES, INC.
2. MW-2A/B/C MONITORING WELLS WERE ABANDONED IN 2013 IN PREPARATION FOR SOIL REMEDIATION. ALL OTHER MONITORING WELLS NOTED IN GRAY WERE ABANDONED IN NOVEMBER 2016.
3. STREAM LOCATION AND RAVINE ARE BASED ON FIELD RECONNAISSANCE, SURVEY LOCATION OF STAFF GAUGE AND ON-LINE AERIAL MAP (WWW.BING.COM).
4. STORMWATER RETENTION POND LOCATION IS BASED ON FIELD RECONNAISSANCE AND ON-LINE AERIAL MAP (WWW.BING.COM).

LAND LOTS 242
13TH DISTRICT
CLAYTON COUNTY
GEORGIA

Survey fieldwork performed on: March 2, 2007.
Travis Pruitt & Associates, Inc. Survey
Updated July 24, 2013, November 12, 2014 & July 17, 2015.

Grid North (GA West Zone)

0 60 120 240

GRAPHIC SCALE (FEET)

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REVISIONS				
Rev.		By:	Disc.:	Date:
Rev.		By:	Disc.:	Date:
Rev.		By:	Disc.:	Date:
Rev.		By:	Disc.:	Date:

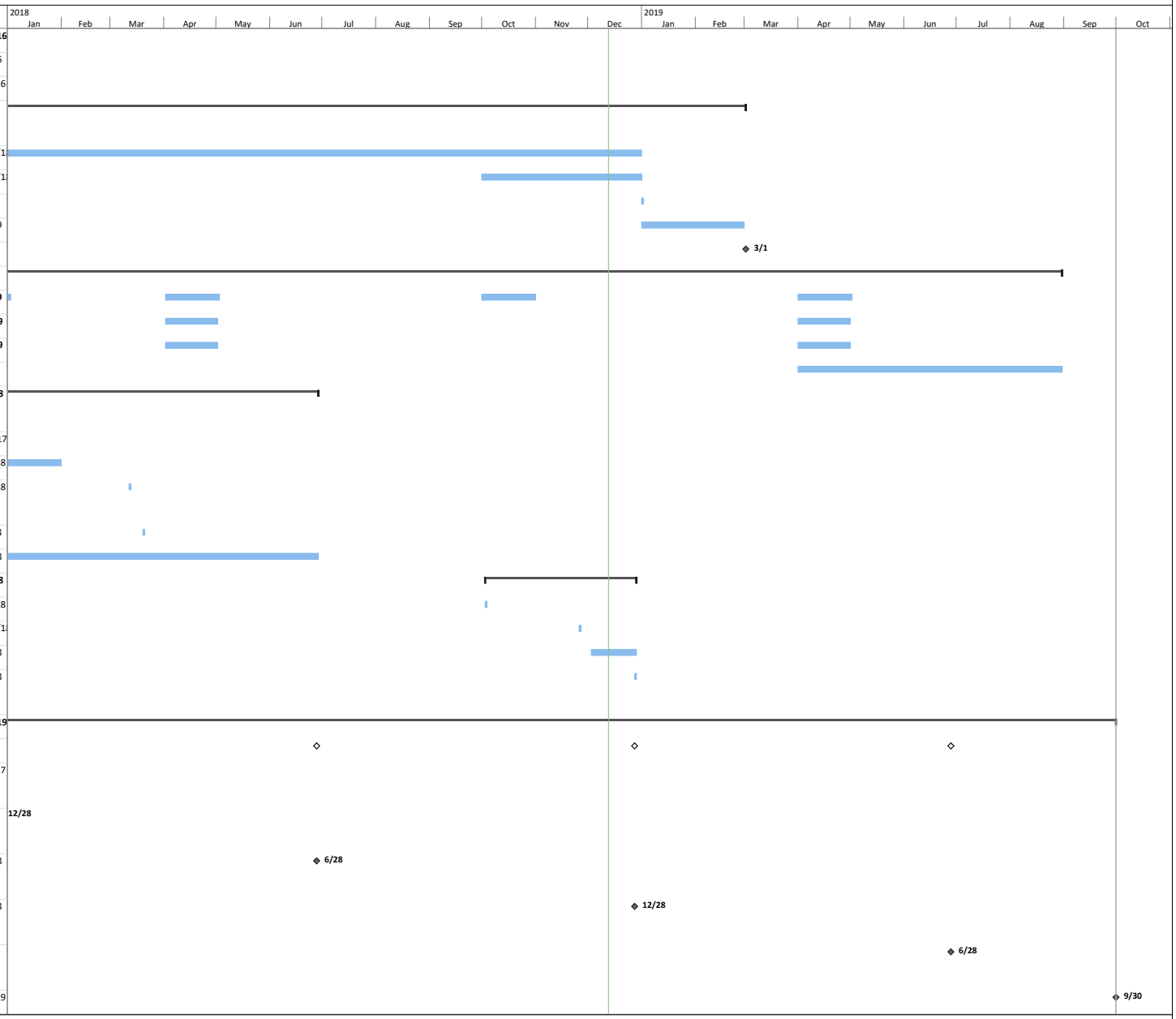
TARA HOLDINGS
8564 TARA BOULEVARD
JONESBORO, GEORGIA

FIGURE 1
MONITORING WELL NETWORK
HSI 10798

Drawn By:	MDO	Date Drawn:	01/2017
Reviewed By:	MSS	Date Reviewed:	01/2017
Scale:	1" = 60'	Plot Date:	01/2017
Project No.:	C00342	Figure 1	

Figure 2
Tara Shopping Center/ Alterman Enterprises (HSI 10798)
Remediation Schedule
Corrective Action Plan Implementation
Revised June 2018

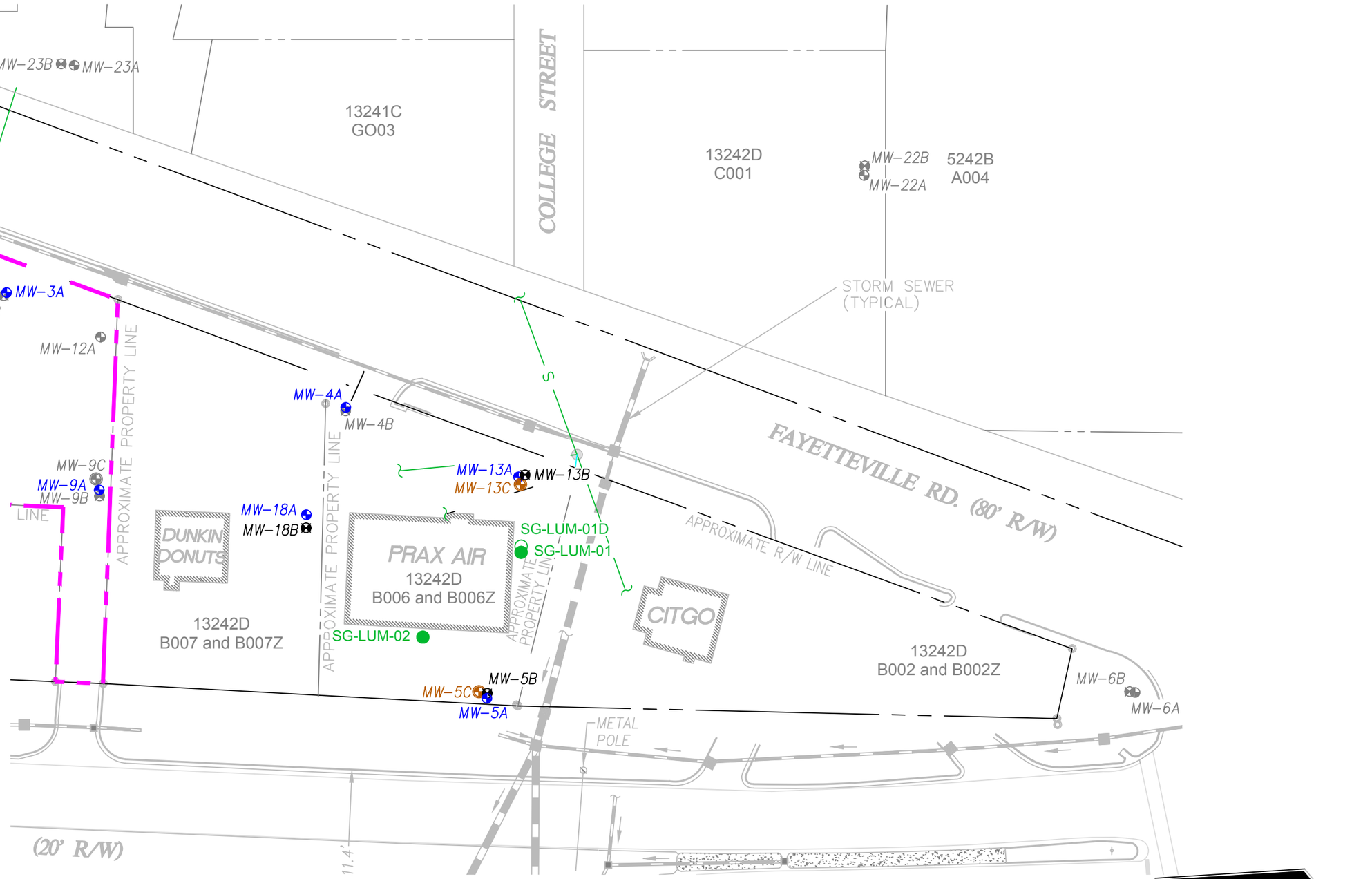
ID	Number	Task Name	Duration	Start	Finish
1	**1**	**Groundwater Corrective Action Plan**	**113 days**	**Thu 3/17/16**	**Mon 8/22/16**
2	1.1	Submittal - Mar 17, 2016	1 day	Thu 3/17/16	Thu 3/17/16
3	1.2	GA EPD Approval - Aug 22, 2016	1 day	Mon 8/22/16	Mon 8/22/16
4	**2**	**Streamlined Uniform Environmental Covenants**	**652 days**	**Thu 9/1/16**	**Fri 3/1/19**
5	2.1	Negotiation with Property Owners	608 days	Thu 9/1/16	Mon 12/31/1
6	2.2	Record with Clayton County	66 days	Mon 10/1/18	Mon 12/31/1
7	2.3	Final Distribution to GA EPD	1 day	Tue 1/1/19	Tue 1/1/19
8	2.4	GA EPD Review	43 days	Tue 1/1/19	Thu 2/28/19
9	2.5	GA EPD Approval	1 day	Fri 3/1/19	Fri 3/1/19
10	**3**	**Point of Demonstration Monitoring**	**717 days**	**Thu 12/1/16**	**Fri 8/30/19**
11	**3.1**	**Semi-Annual Monitoring**	**630 days**	**Thu 12/1/16**	**Wed 5/1/19**
18	**3.2**	**Annual Monitoring**	**499 days**	**Thu 6/1/17**	**Tue 4/30/19**
22	**3.3**	**Annual Well Inspection**	**499 days**	**Thu 6/1/17**	**Tue 4/30/19**
26	3.4	Evaluation of Monitoring Frequency	110 days	Mon 4/1/19	Fri 8/30/19
27	**4**	**VI Assessment - Tara, Flint River, Bail Bond Properties**	**177 days**	**Wed 10/25/17**	**Thu 6/28/18**
28	4.1	Soil Gas Probe Installation	2 days	Wed 10/25/1	Thu 10/26/17
29	4.2	Soil Gas Sampling	37 days	Tue 12/12/17	Wed 1/31/18
30	4.3	Sub-slab probe installation & sampling	1 day	Mon 3/12/18	Mon 3/12/18
31	4.4	Indoor & outdoor air sampling	1 day	Tue 3/20/18	Tue 3/20/18
32	4.5	Data Evaluation & presentation	140 days	Fri 12/15/17	Thu 6/28/18
33	**5**	**VI Assessment - Lumsden Property**	**63 days**	**Wed 10/3/18**	**Fri 12/28/18**
34	5.1	Installation of Soil Vapor Implants	1 day	Wed 10/3/18	Wed 10/3/18
35	5.2	Initial Soil Gas Sampling	1 day	Mon 11/26/1	Mon 11/26/1
36	5.3	Data Evaluation	20 days	Mon 12/3/18	Fri 12/28/18
37	5.4	Data Presentation/Conclusions and Recommendation	1 day	Fri 12/28/18	Fri 12/28/18
38	**6**	**Deliverables**	**589 days**	**Wed 6/28/17**	**Mon 9/30/19**
39	**6.1**	**VRP Semi-Annual Progress Reports**	**522 days**	**Wed 6/28/17**	**Fri 6/28/19**
40	0	VRP Semi-Annual Progress Reports 10	0 days	Wed 6/28/17	Wed 6/28/17
41	0	VRP Semi-Annual Progress Reports 11	0 days	Thu 12/28/17	Thu 12/28/17
42	0	VRP Semi-Annual Progress Reports 12	0 days	Thu 6/28/18	Thu 6/28/18
43	0	VRP Semi-Annual Progress Reports 13	0 days	Fri 12/28/18	Fri 12/28/18
44	0	VRP Semi-Annual Progress Reports 14	0 days	Fri 6/28/19	Fri 6/28/19
45	6.2	Compliance Status Report	1 day	Mon 9/30/19	Mon 9/30/19



Project: Groundwater CAP
Date: Thu 12/13/18

Task
Split
Milestone
Summary
Project Summary
External Tasks
External Milestone
Inactive Task
Inactive Milestone
Inactive Summary
Manual Task
Duration-only
Manual Summary Rollup
Manual Summary
Start-only
Finish-only
Deadline
Progress
Manual Progress

Note: Assumes POBs will be deployed at end of prior sampling event. Results of VI Assessment activities will be presented in semi-annual status report.



LEGEND

- SHALLOW RESIDUUM MONITORING WELL
- DEEP RESIDUUM MONITORING WELL
- BEDROCK MONITORING WELL
- SOIL GAS IMPLANT (SHALLOW)
- SOIL GAS IMPLANT (DEEP)
- ABANDONED WELL LOCATION
- QUALIFYING PROPERTY BOUNDARY (VRP PROGRAM)
- LAND LOT IDENTIFICATION
- R/W — RIGHT-OF-WAY
- S — SEWER
- GAS — GAS
- W — WATER
- 13241 F004 — CLAYTON COUNTY TAX PARCEL ID

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Rev.		By:	Disc.:	Date:
Rev.		By:	Disc.:	Date:
Rev.		By:	Disc.:	Date:
Rev.		By:	Disc.:	Date:

TARA HOLDINGS
8564 TARA BOULEVARD
JONESBORO, GEORGIA

FIGURE 3
SOIL GAS SAMPLE LOCATIONS
LUMSDEN PROPERTY, JONESBORO, GA.
PARCEL 13242D B006 AND 6Z

Drawn By:	MDO	Date Drawn:	11/2018
Reviewed By:	KS	Date Reviewed:	11/2018
Scale:	1" = 60'	Plot Date:	11/2018
Project Number.:	C00342		

ATTACHMENT A

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
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TestAmerica Job ID: 680-158818-1
Client Project/Site: Ashland Alterman (Jonesboro)
Revision: 1

For:
EHS Support, LLC
228 4th Avenue
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Attn: Kris Spikes

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Authorized for release by:
11/2/2018 12:19:50 PM

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Job ID: 680-158818-1

Laboratory: TestAmerica Savannah

Narrative

CASE NARRATIVE

Client: EHS Support, LLC

Project: Ashland Alterman (Jonesboro)

Report Number: 680-158818-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In the event of interference or analytes present at high concentrations, samples may be diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

RECEIPT

The samples were received on 10/05/2018; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 3.5 C.

The final report was corrected to edit the sample ID of MW-15C (680-158818-4), to MW-16C (680-158818-4) per client request.

VOLATILE ORGANIC COMPOUNDS (GC-MS)

Samples MW-19C (680-158818-1), MW-19B (680-158818-2), MW-19D (680-158818-3), MW-16C (680-158818-4), DUP-1 (680-158818-5), MW-20C (680-158818-6), EB-1 (680-158818-7) and Trip Blank (680-158818-8) were analyzed for Volatile Organic Compounds (GC-MS) in accordance with EPA SW-846 Method 8260B. The samples were analyzed on 10/10/2018, 10/11/2018 and 10/12/2018.

Surrogate recovery for the following sample was outside control limits: MW-19B (680-158818-2). Evidence of matrix interference due to high target analytes is present; therefore, re-extraction and/or re-analysis was not performed.

The laboratory control sample and the laboratory control sample duplicate (LCS/LCSD) for analytical batch 680-542836 recovered outside control limits for the following analyte(s): Bromomethane. Bromomethane has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed.

The laboratory control sample and the laboratory control sample duplicate (LCS/LCSD) for analytical batch 680-542883 recovered outside control limits for the following analyte(s): Bromomethane. Bromomethane has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed.

The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for batch analytical batch 680-542883 recovered outside control limits for the following analytes: 2-Hexanone.

Samples MW-19C (680-158818-1)[5X], MW-19B (680-158818-2)[5X], MW-19D (680-158818-3)[5X], MW-16C (680-158818-4)[10X], DUP-1 (680-158818-5)[10X] and MW-20C (680-158818-6)[2X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with analytical batch 680-542836, 680-542883, 680-542955, and 680-543042 .

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

Sample Summary

Client: EHS Support, LLC
Project/Site: Ashland Alterman (Jonesboro)

TestAmerica Job ID: 680-158818-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
680-158818-1	MW-19C	Water	10/03/18 11:20	10/05/18 07:10
680-158818-2	MW-19B	Water	10/03/18 11:30	10/05/18 07:10
680-158818-3	MW-19D	Water	10/03/18 11:40	10/05/18 07:10
680-158818-4	MW-16C	Water	10/03/18 12:40	10/05/18 07:10
680-158818-5	DUP-1	Water	10/03/18 12:45	10/05/18 07:10
680-158818-6	MW-20C	Water	10/03/18 13:05	10/05/18 07:10
680-158818-7	EB-1	Water	10/03/18 13:15	10/05/18 07:10
680-158818-8	Trip Blank	Water	10/03/18 00:00	10/05/18 07:10

Method Summary

Client: EHS Support, LLC
Project/Site: Ashland Alterman (Jonesboro)

TestAmerica Job ID: 680-158818-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL SAV
5030B	Purge and Trap	SW846	TAL SAV

Protocol References:

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

Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

Definitions/Glossary

Client: EHS Support, LLC
Project/Site: Ashland Alterman (Jonesboro)

TestAmerica Job ID: 680-158818-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
X	Surrogate is outside control limits
*	RPD of the LCS and LCSD exceeds the control limits

Glossary

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

Detection Summary

Client: EHS Support, LLC
Project/Site: Ashland Alterman (Jonesboro)

TestAmerica Job ID: 680-158818-1

Client Sample ID: MW-19C — Lab Sample ID: 680-158818-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	90		5.0		ug/L	5		8260B	Total/NA
Tetrachloroethene	410		5.0		ug/L	5		8260B	Total/NA
Trichloroethene	44		5.0		ug/L	5		8260B	Total/NA

Client Sample ID: MW-19B — Lab Sample ID: 680-158818-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	21		10		ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	90		1.0		ug/L	1		8260B	Total/NA
trans-1,2-Dichloroethene	1.3		1.0		ug/L	1		8260B	Total/NA
Trichloroethene	42		1.0		ug/L	1		8260B	Total/NA
Tetrachloroethene - DL	440		5.0		ug/L	5		8260B	Total/NA

Client Sample ID: MW-19D — Lab Sample ID: 680-158818-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	99		50		ug/L	5		8260B	Total/NA
cis-1,2-Dichloroethene	78		5.0		ug/L	5		8260B	Total/NA
Tetrachloroethene	320		5.0		ug/L	5		8260B	Total/NA
Trichloroethene	31		5.0		ug/L	5		8260B	Total/NA

Client Sample ID: MW-16C — Lab Sample ID: 680-158818-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	19		10		ug/L	1		8260B	Total/NA
cis-1,2-Dichloroethene	150		1.0		ug/L	1		8260B	Total/NA
trans-1,2-Dichloroethene	2.4		1.0		ug/L	1		8260B	Total/NA
Trichloroethene	83		1.0		ug/L	1		8260B	Total/NA
Tetrachloroethene - DL	820		10		ug/L	10		8260B	Total/NA

Client Sample ID: DUP-1 — Lab Sample ID: 680-158818-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	160		10		ug/L	10		8260B	Total/NA
Tetrachloroethene	880		10		ug/L	10		8260B	Total/NA
Trichloroethene	91		10		ug/L	10		8260B	Total/NA

Client Sample ID: MW-20C — Lab Sample ID: 680-158818-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	52		20		ug/L	2		8260B	Total/NA
cis-1,2-Dichloroethene	13		2.0		ug/L	2		8260B	Total/NA
Tetrachloroethene	110		2.0		ug/L	2		8260B	Total/NA
Trichloroethene	13		2.0		ug/L	2		8260B	Total/NA

Client Sample ID: EB-1 — Lab Sample ID: 680-158818-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	1.3		1.0		ug/L	1		8260B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: EHS Support, LLC
Project/Site: Ashland Alterman (Jonesboro)

TestAmerica Job ID: 680-158818-1

Client Sample ID: Trip Blank **Lab Sample ID: 680-158818-8**

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-19C

Lab Sample ID: 680-158818-1
Date Collected: 10/03/18 11:20
Matrix: Water
Date Received: 10/05/18 07:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<5.0		5.0		ug/L			10/11/18 01:06	5
1,1,2,2-Tetrachloroethane	<5.0		5.0		ug/L			10/11/18 01:06	5
1,1,2-Trichloroethane	<5.0		5.0		ug/L			10/11/18 01:06	5
1,1-Dichloroethane	<5.0		5.0		ug/L			10/11/18 01:06	5
1,1-Dichloroethene	<5.0		5.0		ug/L			10/11/18 01:06	5
1,2-Dichloroethane	<5.0		5.0		ug/L			10/11/18 01:06	5
1,2-Dichloropropane	<5.0		5.0		ug/L			10/11/18 01:06	5
2-Butanone (MEK)	<50		50		ug/L			10/11/18 01:06	5
2-Hexanone	<50		50		ug/L			10/11/18 01:06	5
4-Methyl-2-pentanone (MIBK)	<50		50		ug/L			10/11/18 01:06	5
Acetone	<50		50		ug/L			10/11/18 01:06	5
Benzene	<5.0		5.0		ug/L			10/11/18 01:06	5
Bromoform	<5.0		5.0		ug/L			10/11/18 01:06	5
Bromomethane	<25		25		ug/L			10/11/18 01:06	5
Carbon disulfide	<10		10		ug/L			10/11/18 01:06	5
Carbon tetrachloride	<5.0		5.0		ug/L			10/11/18 01:06	5
Chlorobenzene	<5.0		5.0		ug/L			10/11/18 01:06	5
Chlorodibromomethane	<5.0		5.0		ug/L			10/11/18 01:06	5
Chloroethane	<25		25		ug/L			10/11/18 01:06	5
Chloroform	<5.0		5.0		ug/L			10/11/18 01:06	5
Chloromethane	<5.0		5.0		ug/L			10/11/18 01:06	5
cis-1,2-Dichloroethene	**90**		5.0		ug/L			10/11/18 01:06	5
cis-1,3-Dichloropropene	<5.0		5.0		ug/L			10/11/18 01:06	5
Dichlorobromomethane	<5.0		5.0		ug/L			10/11/18 01:06	5
Ethylbenzene	<5.0		5.0		ug/L			10/11/18 01:06	5
Methylene Chloride	<25		25		ug/L			10/11/18 01:06	5
Styrene	<5.0		5.0		ug/L			10/11/18 01:06	5
Tetrachloroethene	**410**		5.0		ug/L			10/11/18 01:06	5
Toluene	<5.0		5.0		ug/L			10/11/18 01:06	5
trans-1,2-Dichloroethene	<5.0		5.0		ug/L			10/11/18 01:06	5
trans-1,3-Dichloropropene	<5.0		5.0		ug/L			10/11/18 01:06	5
Trichloroethene	**44**		5.0		ug/L			10/11/18 01:06	5
Vinyl chloride	<5.0		5.0		ug/L			10/11/18 01:06	5
Xylenes, Total	<5.0		5.0		ug/L			10/11/18 01:06	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*91*		*80 - 120*		*10/11/18 01:06*	*5*
1,2-Dichloroethane-d4 (Surr)	*105*		*73 - 131*		*10/11/18 01:06*	*5*
Dibromofluoromethane (Surr)	*104*		*80 - 122*		*10/11/18 01:06*	*5*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*		*10/11/18 01:06*	*5*

Client Sample ID: MW-19B

Lab Sample ID: 680-158818-2
Date Collected: 10/03/18 11:30
Matrix: Water
Date Received: 10/05/18 07:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<1.0		1.0		ug/L			10/10/18 16:29	1
1,1,2,2-Tetrachloroethane	<1.0		1.0		ug/L			10/10/18 16:29	1
1,1,2-Trichloroethane	<1.0		1.0		ug/L			10/10/18 16:29	1

Client: EHS Support, LLC
Project/Site: Ashland Alterman (Jonesboro)

TestAmerica Job ID: 680-158818-1

Client Sample ID: MW-19B
Date Collected: 10/03/18 11:30
Date Received: 10/05/18 07:10

Lab Sample ID: 680-158818-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	<1.0		1.0		ug/L			10/10/18 16:29	1
1,1-Dichloroethene	<1.0		1.0		ug/L			10/10/18 16:29	1
1,2-Dichloroethane	<1.0		1.0		ug/L			10/10/18 16:29	1
1,2-Dichloropropane	<1.0		1.0		ug/L			10/10/18 16:29	1
2-Butanone (MEK)	<10		10		ug/L			10/10/18 16:29	1
2-Hexanone	<10		10		ug/L			10/10/18 16:29	1
4-Methyl-2-pentanone (MIBK)	<10		10		ug/L			10/10/18 16:29	1
Acetone	**21**		10		ug/L			10/10/18 16:29	1
Benzene	<1.0		1.0		ug/L			10/10/18 16:29	1
Bromoform	<1.0		1.0		ug/L			10/10/18 16:29	1
Bromomethane	<5.0	*	5.0		ug/L			10/10/18 16:29	1
Carbon disulfide	<2.0		2.0		ug/L			10/10/18 16:29	1
Carbon tetrachloride	<1.0		1.0		ug/L			10/10/18 16:29	1
Chlorobenzene	<1.0		1.0		ug/L			10/10/18 16:29	1
Chlorodibromomethane	<1.0		1.0		ug/L			10/10/18 16:29	1
Chloroethane	<5.0		5.0		ug/L			10/10/18 16:29	1
Chloroform	<1.0		1.0		ug/L			10/10/18 16:29	1
Chloromethane	<1.0	*	1.0		ug/L			10/10/18 16:29	1
cis-1,2-Dichloroethene	**90**		1.0		ug/L			10/10/18 16:29	1
cis-1,3-Dichloropropene	<1.0		1.0		ug/L			10/10/18 16:29	1
Dichlorobromomethane	<1.0		1.0		ug/L			10/10/18 16:29	1
Ethylbenzene	<1.0		1.0		ug/L			10/10/18 16:29	1
Methylene Chloride	<5.0		5.0		ug/L			10/10/18 16:29	1
Styrene	<1.0		1.0		ug/L			10/10/18 16:29	1
Toluene	<1.0		1.0		ug/L			10/10/18 16:29	1
trans-1,2-Dichloroethene	**1.3**		1.0		ug/L			10/10/18 16:29	1
trans-1,3-Dichloropropene	<1.0		1.0		ug/L			10/10/18 16:29	1
Trichloroethene	**42**		1.0		ug/L			10/10/18 16:29	1
Vinyl chloride	<1.0		1.0		ug/L			10/10/18 16:29	1
Xylenes, Total	<1.0		1.0		ug/L			10/10/18 16:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*94*		*80 - 120*		*10/10/18 16:29*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*73 - 131*		*10/10/18 16:29*	*1*
Dibromofluoromethane (Surr)	*101*		*80 - 122*		*10/10/18 16:29*	*1*
4-Bromofluorobenzene (Surr)	*91*		*80 - 120*		*10/10/18 16:29*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	**440**		5.0		ug/L			10/12/18 14:12	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*97*		*80 - 120*		*10/12/18 14:12*	*5*
1,2-Dichloroethane-d4 (Surr)	*140*	*X*	*73 - 131*		*10/12/18 14:12*	*5*
Dibromofluoromethane (Surr)	*129*	*X*	*80 - 122*		*10/12/18 14:12*	*5*
4-Bromofluorobenzene (Surr)	*87*		*80 - 120*		*10/12/18 14:12*	*5*

Client Sample ID: MW-19D

Date Collected: 10/03/18 11:40
Date Received: 10/05/18 07:10

Lab Sample ID: 680-158818-3

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<5.0		5.0		ug/L			10/10/18 16:50	5
1,1,2,2-Tetrachloroethane	<5.0		5.0		ug/L			10/10/18 16:50	5
1,1,2-Trichloroethane	<5.0		5.0		ug/L			10/10/18 16:50	5
1,1-Dichloroethane	<5.0		5.0		ug/L			10/10/18 16:50	5
1,1-Dichloroethene	<5.0		5.0		ug/L			10/10/18 16:50	5
1,2-Dichloroethane	<5.0		5.0		ug/L			10/10/18 16:50	5
1,2-Dichloropropane	<5.0		5.0		ug/L			10/10/18 16:50	5
2-Butanone (MEK)	<50		50		ug/L			10/10/18 16:50	5
2-Hexanone	<50		50		ug/L			10/10/18 16:50	5
4-Methyl-2-pentanone (MIBK)	<50		50		ug/L			10/10/18 16:50	5
Acetone	**99**		50		ug/L			10/10/18 16:50	5
Benzene	<5.0		5.0		ug/L			10/10/18 16:50	5
Bromoform	<5.0		5.0		ug/L			10/10/18 16:50	5
Bromomethane	<25	*	25		ug/L			10/10/18 16:50	5
Carbon disulfide	<10		10		ug/L			10/10/18 16:50	5
Carbon tetrachloride	<5.0		5.0		ug/L			10/10/18 16:50	5
Chlorobenzene	<5.0		5.0		ug/L			10/10/18 16:50	5
Chlorodibromomethane	<5.0		5.0		ug/L			10/10/18 16:50	5
Chloroethane	<25		25		ug/L			10/10/18 16:50	5
Chloroform	<5.0		5.0		ug/L			10/10/18 16:50	5
Chloromethane	<5.0	*	5.0		ug/L			10/10/18 16:50	5
cis-1,2-Dichloroethene	**78**		5.0		ug/L			10/10/18 16:50	5
cis-1,3-Dichloropropene	<5.0		5.0		ug/L			10/10/18 16:50	5
Dichlorobromomethane	<5.0		5.0		ug/L			10/10/18 16:50	5
Ethylbenzene	<5.0		5.0		ug/L			10/10/18 16:50	5
Methylene Chloride	<25		25		ug/L			10/10/18 16:50	5
Styrene	<5.0		5.0		ug/L			10/10/18 16:50	5
Tetrachloroethene	**320**		5.0		ug/L			10/10/18 16:50	5
Toluene	<5.0		5.0		ug/L			10/10/18 16:50	5
trans-1,2-Dichloroethene	<5.0		5.0		ug/L			10/10/18 16:50	5
trans-1,3-Dichloropropene	<5.0		5.0		ug/L			10/10/18 16:50	5
Trichloroethene	**31**		5.0		ug/L			10/10/18 16:50	5
Vinyl chloride	<5.0		5.0		ug/L			10/10/18 16:50	5
Xylenes, Total	<5.0		5.0		ug/L			10/10/18 16:50	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*96*		*80 - 120*		*10/10/18 16:50*	*5*
1,2-Dichloroethane-d4 (Surr)	*106*		*73 - 131*		*10/10/18 16:50*	*5*
Dibromofluoromethane (Surr)	*106*		*80 - 122*		*10/10/18 16:50*	*5*
4-Bromofluorobenzene (Surr)	*90*		*80 - 120*		*10/10/18 16:50*	*5*

Client Sample ID: MW-16C

Date Collected: 10/03/18 12:40
Date Received: 10/05/18 07:10

Lab Sample ID: 680-158818-4

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<1.0		1.0		ug/L			10/10/18 13:55	1
1,1,2,2-Tetrachloroethane	<1.0		1.0		ug/L			10/10/18 13:55	1
1,1,2-Trichloroethane	<1.0		1.0		ug/L			10/10/18 13:55	1

Client Sample ID: MW-16C
Date Collected: 10/03/18 12:40
Date Received: 10/05/18 07:10

Lab Sample ID: 680-158818-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	<1.0		1.0		ug/L			10/10/18 13:55	1
1,1-Dichloroethene	<1.0		1.0		ug/L			10/10/18 13:55	1
1,2-Dichloroethane	<1.0		1.0		ug/L			10/10/18 13:55	1
1,2-Dichloropropane	<1.0		1.0		ug/L			10/10/18 13:55	1
2-Butanone (MEK)	<10		10		ug/L			10/10/18 13:55	1
2-Hexanone	<10		10		ug/L			10/10/18 13:55	1
4-Methyl-2-pentanone (MIBK)	<10		10		ug/L			10/10/18 13:55	1
Acetone	**19**		10		ug/L			10/10/18 13:55	1
Benzene	<1.0		1.0		ug/L			10/10/18 13:55	1
Bromoform	<1.0		1.0		ug/L			10/10/18 13:55	1
Bromomethane	<5.0	*	5.0		ug/L			10/10/18 13:55	1
Carbon disulfide	<2.0		2.0		ug/L			10/10/18 13:55	1
Carbon tetrachloride	<1.0		1.0		ug/L			10/10/18 13:55	1
Chlorobenzene	<1.0		1.0		ug/L			10/10/18 13:55	1
Chlorodibromomethane	<1.0		1.0		ug/L			10/10/18 13:55	1
Chloroethane	<5.0		5.0		ug/L			10/10/18 13:55	1
Chloroform	<1.0		1.0		ug/L			10/10/18 13:55	1
Chloromethane	<1.0	*	1.0		ug/L			10/10/18 13:55	1
cis-1,2-Dichloroethene	**150**		1.0		ug/L			10/10/18 13:55	1
cis-1,3-Dichloropropene	<1.0		1.0		ug/L			10/10/18 13:55	1
Dichlorobromomethane	<1.0		1.0		ug/L			10/10/18 13:55	1
Ethylbenzene	<1.0		1.0		ug/L			10/10/18 13:55	1
Methylene Chloride	<5.0		5.0		ug/L			10/10/18 13:55	1
Styrene	<1.0		1.0		ug/L			10/10/18 13:55	1
Toluene	<1.0		1.0		ug/L			10/10/18 13:55	1
trans-1,2-Dichloroethene	**2.4**		1.0		ug/L			10/10/18 13:55	1
trans-1,3-Dichloropropene	<1.0		1.0		ug/L			10/10/18 13:55	1
Trichloroethene	**83**		1.0		ug/L			10/10/18 13:55	1
Vinyl chloride	<1.0		1.0		ug/L			10/10/18 13:55	1
Xylenes, Total	<1.0		1.0		ug/L			10/10/18 13:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*96*		*80 - 120*		*10/10/18 13:55*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*73 - 131*		*10/10/18 13:55*	*1*
Dibromofluoromethane (Surr)	*98*		*80 - 122*		*10/10/18 13:55*	*1*
4-Bromofluorobenzene (Surr)	*88*		*80 - 120*		*10/10/18 13:55*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	**820**		10		ug/L			10/12/18 13:47	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*94*		*80 - 120*		*10/12/18 13:47*	*10*
1,2-Dichloroethane-d4 (Surr)	*126*		*73 - 131*		*10/12/18 13:47*	*10*
Dibromofluoromethane (Surr)	*108*		*80 - 122*		*10/12/18 13:47*	*10*
4-Bromofluorobenzene (Surr)	*89*		*80 - 120*		*10/12/18 13:47*	*10*

Client Sample ID: DUP-1

Lab Sample ID: 680-158818-5
Date Collected: 10/03/18 12:45
Matrix: Water
Date Received: 10/05/18 07:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<10		10		ug/L			10/10/18 19:52	10
1,1,2,2-Tetrachloroethane	<10		10		ug/L			10/10/18 19:52	10
1,1,2-Trichloroethane	<10		10		ug/L			10/10/18 19:52	10
1,1-Dichloroethane	<10		10		ug/L			10/10/18 19:52	10
1,1-Dichloroethene	<10		10		ug/L			10/10/18 19:52	10
1,2-Dichloroethane	<10		10		ug/L			10/10/18 19:52	10
1,2-Dichloropropane	<10		10		ug/L			10/10/18 19:52	10
2-Butanone (MEK)	<100		100		ug/L			10/10/18 19:52	10
2-Hexanone	<100	*	100		ug/L			10/10/18 19:52	10
4-Methyl-2-pentanone (MIBK)	<100		100		ug/L			10/10/18 19:52	10
Acetone	<100		100		ug/L			10/10/18 19:52	10
Benzene	<10		10		ug/L			10/10/18 19:52	10
Bromoform	<10		10		ug/L			10/10/18 19:52	10
Bromomethane	<50	*	50		ug/L			10/10/18 19:52	10
Carbon disulfide	<20		20		ug/L			10/10/18 19:52	10
Carbon tetrachloride	<10		10		ug/L			10/10/18 19:52	10
Chlorobenzene	<10		10		ug/L			10/10/18 19:52	10
Chlorodibromomethane	<10		10		ug/L			10/10/18 19:52	10
Chloroethane	<50		50		ug/L			10/10/18 19:52	10
Chloroform	<10		10		ug/L			10/10/18 19:52	10
Chloromethane	<10		10		ug/L			10/10/18 19:52	10
cis-1,2-Dichloroethene	**160**		10		ug/L			10/10/18 19:52	10
cis-1,3-Dichloropropene	<10		10		ug/L			10/10/18 19:52	10
Dichlorobromomethane	<10		10		ug/L			10/10/18 19:52	10
Ethylbenzene	<10		10		ug/L			10/10/18 19:52	10
Methylene Chloride	<50		50		ug/L			10/10/18 19:52	10
Styrene	<10		10		ug/L			10/10/18 19:52	10
Tetrachloroethene	**880**		10		ug/L			10/10/18 19:52	10
Toluene	<10		10		ug/L			10/10/18 19:52	10
trans-1,2-Dichloroethene	<10		10		ug/L			10/10/18 19:52	10
trans-1,3-Dichloropropene	<10		10		ug/L			10/10/18 19:52	10
Trichloroethene	**91**		10		ug/L			10/10/18 19:52	10
Vinyl chloride	<10		10		ug/L			10/10/18 19:52	10
Xylenes, Total	<10		10		ug/L			10/10/18 19:52	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*98*		*80 - 120*		*10/10/18 19:52*	*10*
1,2-Dichloroethane-d4 (Surr)	*117*		*73 - 131*		*10/10/18 19:52*	*10*
Dibromofluoromethane (Surr)	*110*		*80 - 122*		*10/10/18 19:52*	*10*
4-Bromofluorobenzene (Surr)	*92*		*80 - 120*		*10/10/18 19:52*	*10*

Client Sample ID: MW-20C

Lab Sample ID: 680-158818-6
Date Collected: 10/03/18 13:05
Matrix: Water
Date Received: 10/05/18 07:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<2.0		2.0		ug/L			10/10/18 17:34	2
1,1,2,2-Tetrachloroethane	<2.0		2.0		ug/L			10/10/18 17:34	2
1,1,2-Trichloroethane	<2.0		2.0		ug/L			10/10/18 17:34	2

Client Sample ID: MW-20C

Date Collected: 10/03/18 13:05
Date Received: 10/05/18 07:10

Lab Sample ID: 680-158818-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	<2.0		2.0		ug/L			10/10/18 17:34	2
1,1-Dichloroethene	<2.0		2.0		ug/L			10/10/18 17:34	2
1,2-Dichloroethane	<2.0		2.0		ug/L			10/10/18 17:34	2
1,2-Dichloropropane	<2.0		2.0		ug/L			10/10/18 17:34	2
2-Butanone (MEK)	<20		20		ug/L			10/10/18 17:34	2
2-Hexanone	<20		20		ug/L			10/10/18 17:34	2
4-Methyl-2-pentanone (MIBK)	<20		20		ug/L			10/10/18 17:34	2
Acetone	**52**		20		ug/L			10/10/18 17:34	2
Benzene	<2.0		2.0		ug/L			10/10/18 17:34	2
Bromoform	<2.0		2.0		ug/L			10/10/18 17:34	2
Bromomethane	<10	*	10		ug/L			10/10/18 17:34	2
Carbon disulfide	<4.0		4.0		ug/L			10/10/18 17:34	2
Carbon tetrachloride	<2.0		2.0		ug/L			10/10/18 17:34	2
Chlorobenzene	<2.0		2.0		ug/L			10/10/18 17:34	2
Chlorodibromomethane	<2.0		2.0		ug/L			10/10/18 17:34	2
Chloroethane	<10		10		ug/L			10/10/18 17:34	2
Chloroform	<2.0		2.0		ug/L			10/10/18 17:34	2
Chloromethane	<2.0	*	2.0		ug/L			10/10/18 17:34	2
cis-1,2-Dichloroethene	**13**		2.0		ug/L			10/10/18 17:34	2
cis-1,3-Dichloropropene	<2.0		2.0		ug/L			10/10/18 17:34	2
Dichlorobromomethane	<2.0		2.0		ug/L			10/10/18 17:34	2
Ethylbenzene	<2.0		2.0		ug/L			10/10/18 17:34	2
Methylene Chloride	<10		10		ug/L			10/10/18 17:34	2
Styrene	<2.0		2.0		ug/L			10/10/18 17:34	2
Tetrachloroethene	**110**		2.0		ug/L			10/10/18 17:34	2
Toluene	<2.0		2.0		ug/L			10/10/18 17:34	2
trans-1,2-Dichloroethene	<2.0		2.0		ug/L			10/10/18 17:34	2
trans-1,3-Dichloropropene	<2.0		2.0		ug/L			10/10/18 17:34	2
Trichloroethene	**13**		2.0		ug/L			10/10/18 17:34	2
Vinyl chloride	<2.0		2.0		ug/L			10/10/18 17:34	2
Xylenes, Total	<2.0		2.0		ug/L			10/10/18 17:34	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*95*		*80 - 120*		*10/10/18 17:34*	*2*
1,2-Dichloroethane-d4 (Surr)	*109*		*73 - 131*		*10/10/18 17:34*	*2*
Dibromofluoromethane (Surr)	*108*		*80 - 122*		*10/10/18 17:34*	*2*
4-Bromofluorobenzene (Surr)	*92*		*80 - 120*		*10/10/18 17:34*	*2*

Client Sample ID: EB-1

Date Collected: 10/03/18 13:15
Date Received: 10/05/18 07:10

Lab Sample ID: 680-158818-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<1.0		1.0		ug/L			10/12/18 11:20	1
1,1,2,2-Tetrachloroethane	<1.0		1.0		ug/L			10/12/18 11:20	1
1,1,2-Trichloroethane	<1.0		1.0		ug/L			10/12/18 11:20	1
1,1-Dichloroethane	<1.0		1.0		ug/L			10/12/18 11:20	1
1,1-Dichloroethene	<1.0		1.0		ug/L			10/12/18 11:20	1
1,2-Dichloroethane	<1.0		1.0		ug/L			10/12/18 11:20	1

Client Sample ID: EB-1

Lab Sample ID: 680-158818-7
Date Collected: 10/03/18 13:15
Matrix: Water
Date Received: 10/05/18 07:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloropropane	<1.0		1.0		ug/L			10/12/18 11:20	1
2-Butanone (MEK)	<10		10		ug/L			10/12/18 11:20	1
2-Hexanone	<10		10		ug/L			10/12/18 11:20	1
4-Methyl-2-pentanone (MIBK)	<10		10		ug/L			10/12/18 11:20	1
Acetone	<10		10		ug/L			10/12/18 11:20	1
Benzene	<1.0		1.0		ug/L			10/12/18 11:20	1
Bromoform	<1.0		1.0		ug/L			10/12/18 11:20	1
Bromomethane	<5.0		5.0		ug/L			10/12/18 11:20	1
Carbon disulfide	<2.0		2.0		ug/L			10/12/18 11:20	1
Carbon tetrachloride	<1.0		1.0		ug/L			10/12/18 11:20	1
Chlorobenzene	<1.0		1.0		ug/L			10/12/18 11:20	1
Chlorodibromomethane	<1.0		1.0		ug/L			10/12/18 11:20	1
Chloroethane	<5.0		5.0		ug/L			10/12/18 11:20	1
Chloroform	**1.3**		1.0		ug/L			10/12/18 11:20	1
Chloromethane	<1.0		1.0		ug/L			10/12/18 11:20	1
cis-1,2-Dichloroethene	<1.0		1.0		ug/L			10/12/18 11:20	1
cis-1,3-Dichloropropene	<1.0		1.0		ug/L			10/12/18 11:20	1
Dichlorobromomethane	<1.0		1.0		ug/L			10/12/18 11:20	1
Ethylbenzene	<1.0		1.0		ug/L			10/12/18 11:20	1
Methylene Chloride	<5.0		5.0		ug/L			10/12/18 11:20	1
Styrene	<1.0		1.0		ug/L			10/12/18 11:20	1
Tetrachloroethene	<1.0		1.0		ug/L			10/12/18 11:20	1
Toluene	<1.0		1.0		ug/L			10/12/18 11:20	1
trans-1,2-Dichloroethene	<1.0		1.0		ug/L			10/12/18 11:20	1
trans-1,3-Dichloropropene	<1.0		1.0		ug/L			10/12/18 11:20	1
Trichloroethene	<1.0		1.0		ug/L			10/12/18 11:20	1
Vinyl chloride	<1.0		1.0		ug/L			10/12/18 11:20	1
Xylenes, Total	<1.0		1.0		ug/L			10/12/18 11:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*95*		*80 - 120*		*10/12/18 11:20*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*73 - 131*		*10/12/18 11:20*	*1*
Dibromofluoromethane (Surr)	*110*		*80 - 122*		*10/12/18 11:20*	*1*
4-Bromofluorobenzene (Surr)	*84*		*80 - 120*		*10/12/18 11:20*	*1*

Client Sample ID: Trip Blank

Lab Sample ID: 680-158818-8
Date Collected: 10/03/18 00:00
Matrix: Water
Date Received: 10/05/18 07:10

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<1.0		1.0		ug/L			10/10/18 14:39	1
1,1,2,2-Tetrachloroethane	<1.0		1.0		ug/L			10/10/18 14:39	1
1,1,2-Trichloroethane	<1.0		1.0		ug/L			10/10/18 14:39	1
1,1-Dichloroethane	<1.0		1.0		ug/L			10/10/18 14:39	1
1,1-Dichloroethene	<1.0		1.0		ug/L			10/10/18 14:39	1
1,2-Dichloroethane	<1.0		1.0		ug/L			10/10/18 14:39	1
1,2-Dichloropropane	<1.0		1.0		ug/L			10/10/18 14:39	1
2-Butanone (MEK)	<10		10		ug/L			10/10/18 14:39	1
2-Hexanone	<10		10		ug/L			10/10/18 14:39	1

Client Sample ID: Trip Blank
Date Collected: 10/03/18 00:00
Date Received: 10/05/18 07:10

Lab Sample ID: 680-158818-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methyl-2-pentanone (MIBK)	<10		10		ug/L			10/10/18 14:39	1
Acetone	<10		10		ug/L			10/10/18 14:39	1
Benzene	<1.0		1.0		ug/L			10/10/18 14:39	1
Bromoform	<1.0		1.0		ug/L			10/10/18 14:39	1
Bromomethane	<5.0	*	5.0		ug/L			10/10/18 14:39	1
Carbon disulfide	<2.0		2.0		ug/L			10/10/18 14:39	1
Carbon tetrachloride	<1.0		1.0		ug/L			10/10/18 14:39	1
Chlorobenzene	<1.0		1.0		ug/L			10/10/18 14:39	1
Chlorodibromomethane	<1.0		1.0		ug/L			10/10/18 14:39	1
Chloroethane	<5.0		5.0		ug/L			10/10/18 14:39	1
Chloroform	<1.0		1.0		ug/L			10/10/18 14:39	1
Chloromethane	<1.0	*	1.0		ug/L			10/10/18 14:39	1
cis-1,2-Dichloroethene	<1.0		1.0		ug/L			10/10/18 14:39	1
cis-1,3-Dichloropropene	<1.0		1.0		ug/L			10/10/18 14:39	1
Dichlorobromomethane	<1.0		1.0		ug/L			10/10/18 14:39	1
Ethylbenzene	<1.0		1.0		ug/L			10/10/18 14:39	1
Methylene Chloride	<5.0		5.0		ug/L			10/10/18 14:39	1
Styrene	<1.0		1.0		ug/L			10/10/18 14:39	1
Tetrachloroethene	<1.0		1.0		ug/L			10/10/18 14:39	1
Toluene	<1.0		1.0		ug/L			10/10/18 14:39	1
trans-1,2-Dichloroethene	<1.0		1.0		ug/L			10/10/18 14:39	1
trans-1,3-Dichloropropene	<1.0		1.0		ug/L			10/10/18 14:39	1
Trichloroethene	<1.0		1.0		ug/L			10/10/18 14:39	1
Vinyl chloride	<1.0		1.0		ug/L			10/10/18 14:39	1
Xylenes, Total	<1.0		1.0		ug/L			10/10/18 14:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*94*		*80 - 120*		*10/10/18 14:39*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*73 - 131*		*10/10/18 14:39*	*1*
Dibromofluoromethane (Surr)	*103*		*80 - 122*		*10/10/18 14:39*	*1*
4-Bromofluorobenzene (Surr)	*92*		*80 - 120*		*10/10/18 14:39*	*1*

Surrogate Summary

Client: EHS Support, LLC
Project/Site: Ashland Alterman (Jonesboro)

TestAmerica Job ID: 680-158818-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		TOL	DCA	DBFM	BFB
Lab Sample ID	Client Sample ID	(80-120)	(73-131)	(80-122)	(80-120)
680-158818-1	MW-19C	91	105	104	103
680-158818-2	MW-19B	94	102	101	91
680-158818-2 - DL	MW-19B	97	140 X	129 X	87
680-158818-3	MW-19D	96	106	106	90
680-158818-4	MW-16C	96	99	98	88
680-158818-4 - DL	MW-16C	94	126	108	89
680-158818-5	DUP-1	98	117	110	92
680-158818-6	MW-20C	95	109	108	92
680-158818-7	EB-1	95	104	110	84
680-158818-8	Trip Blank	94	102	103	92
LCS 680-542836/4	Lab Control Sample	93	97	97	90
LCS 680-542883/3	Lab Control Sample	95	99	104	108
LCS 680-542955/5	Lab Control Sample	92	97	99	101
LCS 680-543042/3	Lab Control Sample	98	104	106	92
LCSD 680-542836/5	Lab Control Sample Dup	92	99	101	95
LCSD 680-542883/4	Lab Control Sample Dup	108	96	101	86
LCSD 680-542955/6	Lab Control Sample Dup	93	98	100	100
LCSD 680-543042/4	Lab Control Sample Dup	99	103	106	85
MB 680-542836/10	Method Blank	92	99	102	95
MB 680-542883/9	Method Blank	103	103	109	90
MB 680-542955/10	Method Blank	94	92	96	100
MB 680-543042/9	Method Blank	91	115	113	90

Surrogate Legend

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

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

Lab Sample ID: MB 680-542836/10
Matrix: Water
Analysis Batch: 542836

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<1.0		1.0		ug/L			10/10/18 11:23	1
1,1,2,2-Tetrachloroethane	<1.0		1.0		ug/L			10/10/18 11:23	1
1,1,2-Trichloroethane	<1.0		1.0		ug/L			10/10/18 11:23	1
1,1-Dichloroethane	<1.0		1.0		ug/L			10/10/18 11:23	1
1,1-Dichloroethene	<1.0		1.0		ug/L			10/10/18 11:23	1
1,2-Dichloroethane	<1.0		1.0		ug/L			10/10/18 11:23	1
1,2-Dichloropropane	<1.0		1.0		ug/L			10/10/18 11:23	1
2-Butanone (MEK)	<10		10		ug/L			10/10/18 11:23	1
2-Hexanone	<10		10		ug/L			10/10/18 11:23	1
4-Methyl-2-pentanone (MIBK)	<10		10		ug/L			10/10/18 11:23	1
Acetone	<10		10		ug/L			10/10/18 11:23	1
Benzene	<1.0		1.0		ug/L			10/10/18 11:23	1
Bromoform	<1.0		1.0		ug/L			10/10/18 11:23	1
Bromomethane	<5.0		5.0		ug/L			10/10/18 11:23	1
Carbon disulfide	<2.0		2.0		ug/L			10/10/18 11:23	1
Carbon tetrachloride	<1.0		1.0		ug/L			10/10/18 11:23	1
Chlorobenzene	<1.0		1.0		ug/L			10/10/18 11:23	1
Chlorodibromomethane	<1.0		1.0		ug/L			10/10/18 11:23	1
Chloroethane	<5.0		5.0		ug/L			10/10/18 11:23	1
Chloroform	<1.0		1.0		ug/L			10/10/18 11:23	1
Chloromethane	<1.0		1.0		ug/L			10/10/18 11:23	1
cis-1,2-Dichloroethene	<1.0		1.0		ug/L			10/10/18 11:23	1
cis-1,3-Dichloropropene	<1.0		1.0		ug/L			10/10/18 11:23	1
Dichlorobromomethane	<1.0		1.0		ug/L			10/10/18 11:23	1
Ethylbenzene	<1.0		1.0		ug/L			10/10/18 11:23	1
Methylene Chloride	<5.0		5.0		ug/L			10/10/18 11:23	1
Styrene	<1.0		1.0		ug/L			10/10/18 11:23	1
Tetrachloroethene	<1.0		1.0		ug/L			10/10/18 11:23	1
Toluene	<1.0		1.0		ug/L			10/10/18 11:23	1
trans-1,2-Dichloroethene	<1.0		1.0		ug/L			10/10/18 11:23	1
trans-1,3-Dichloropropene	<1.0		1.0		ug/L			10/10/18 11:23	1
Trichloroethene	<1.0		1.0		ug/L			10/10/18 11:23	1
Vinyl chloride	<1.0		1.0		ug/L			10/10/18 11:23	1
Xylenes, Total	<1.0		1.0		ug/L			10/10/18 11:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*92*		*80 - 120*		*10/10/18 11:23*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*73 - 131*		*10/10/18 11:23*	*1*
Dibromofluoromethane (Surr)	*102*		*80 - 122*		*10/10/18 11:23*	*1*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*		*10/10/18 11:23*	*1*

Lab Sample ID: LCS 680-542836/4
Matrix: Water
Analysis Batch: 542836

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1,1-Trichloroethane			50.0	52.8		ug/L		106	80 - 120		
1,1,2,2-Tetrachloroethane			50.0	43.5		ug/L		87	80 - 120		

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

Lab Sample ID: LCS 680-542836/4
Matrix: Water
Analysis Batch: 542836

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,2-Trichloroethane	50.0	44.6		ug/L		89	80 - 120
1,1-Dichloroethane	50.0	46.9		ug/L		94	80 - 120
1,1-Dichloroethene	50.0	43.7		ug/L		87	76 - 120
1,2-Dichloroethane	50.0	50.7		ug/L		101	80 - 120
1,2-Dichloropropane	50.0	43.6		ug/L		87	80 - 120
2-Butanone (MEK)	250	209		ug/L		83	80 - 131
2-Hexanone	250	200		ug/L		80	74 - 127
4-Methyl-2-pentanone (MIBK)	250	203		ug/L		81	76 - 124
Acetone	250	238		ug/L		95	70 - 135
Benzene	50.0	46.7		ug/L		93	80 - 120
Bromoform	50.0	48.6		ug/L		97	74 - 126
Bromomethane	50.0	15.9	*	ug/L		32	62 - 130
Carbon disulfide	50.0	47.0		ug/L		94	80 - 120
Carbon tetrachloride	50.0	54.7		ug/L		109	76 - 123
Chlorobenzene	50.0	48.1		ug/L		96	80 - 120
Chlorodibromomethane	50.0	46.9		ug/L		94	80 - 121
Chloroethane	50.0	38.3		ug/L		77	66 - 135
Chloroform	50.0	48.8		ug/L		98	80 - 120
Chloromethane	50.0	33.9	*	ug/L		68	69 - 131
cis-1,2-Dichloroethene	50.0	47.9		ug/L		96	80 - 120
cis-1,3-Dichloropropene	50.0	46.3		ug/L		93	80 - 120
Dichlorobromomethane	50.0	48.2		ug/L		96	80 - 120
Ethylbenzene	50.0	47.6		ug/L		95	80 - 120
Methylene Chloride	50.0	47.7		ug/L		95	80 - 120
Styrene	50.0	46.8		ug/L		94	80 - 120
Tetrachloroethene	50.0	49.0		ug/L		98	80 - 121
Toluene	50.0	45.8		ug/L		92	80 - 113
trans-1,2-Dichloroethene	50.0	50.5		ug/L		101	80 - 120
trans-1,3-Dichloropropene	50.0	47.4		ug/L		95	80 - 120
Trichloroethene	50.0	51.4		ug/L		103	80 - 120
Vinyl chloride	50.0	42.3		ug/L		85	71 - 128
Xylenes, Total	100	95.5		ug/L		96	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*93*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*97*		*73 - 131*
Dibromofluoromethane (Surr)	*97*		*80 - 122*
4-Bromofluorobenzene (Surr)	*90*		*80 - 120*

Lab Sample ID: LCSD 680-542836/5
Matrix: Water
Analysis Batch: 542836

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	50.0	55.4		ug/L		111	80 - 120	5	20
1,1,2,2-Tetrachloroethane	50.0	48.4		ug/L		97	80 - 120	11	20
1,1,2-Trichloroethane	50.0	45.1		ug/L		90	80 - 120	1	20
1,1-Dichloroethane	50.0	50.5		ug/L		101	80 - 120	7	20

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

Lab Sample ID: LCSD 680-542836/5
Matrix: Water
Analysis Batch: 542836

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethene	50.0	47.4		ug/L		95	76 - 120	8	20
1,2-Dichloroethane	50.0	52.5		ug/L		105	80 - 120	4	50
1,2-Dichloropropane	50.0	45.2		ug/L		90	80 - 120	4	20
2-Butanone (MEK)	250	215		ug/L		86	80 - 131	3	20
2-Hexanone	250	210		ug/L		84	74 - 127	5	20
4-Methyl-2-pentanone (MIBK)	250	209		ug/L		83	76 - 124	3	20
Acetone	250	246		ug/L		98	70 - 135	3	30
Benzene	50.0	48.4		ug/L		97	80 - 120	4	20
Bromoform	50.0	53.3		ug/L		107	74 - 126	9	20
Bromomethane	50.0	17.7	*	ug/L		35	62 - 130	11	20
Carbon disulfide	50.0	50.3		ug/L		101	80 - 120	7	20
Carbon tetrachloride	50.0	57.6		ug/L		115	76 - 123	5	20
Chlorobenzene	50.0	50.4		ug/L		101	80 - 120	5	20
Chlorodibromomethane	50.0	47.4		ug/L		95	80 - 121	1	20
Chloroethane	50.0	40.8		ug/L		82	66 - 135	6	20
Chloroform	50.0	50.7		ug/L		101	80 - 120	4	20
Chloromethane	50.0	37.3		ug/L		75	69 - 131	10	30
cis-1,2-Dichloroethene	50.0	49.9		ug/L		100	80 - 120	4	20
cis-1,3-Dichloropropene	50.0	46.7		ug/L		93	80 - 120	1	20
Dichlorobromomethane	50.0	48.6		ug/L		97	80 - 120	1	20
Ethylbenzene	50.0	51.4		ug/L		103	80 - 120	8	20
Methylene Chloride	50.0	50.6		ug/L		101	80 - 120	6	20
Styrene	50.0	51.4		ug/L		103	80 - 120	9	20
Tetrachloroethene	50.0	49.2		ug/L		98	80 - 121	0	20
Toluene	50.0	46.5		ug/L		93	80 - 113	1	20
trans-1,2-Dichloroethene	50.0	54.7		ug/L		109	80 - 120	8	20
trans-1,3-Dichloropropene	50.0	46.1		ug/L		92	80 - 120	3	30
Trichloroethene	50.0	53.3		ug/L		107	80 - 120	4	20
Vinyl chloride	50.0	44.8		ug/L		90	71 - 128	6	20
Xylenes, Total	100	106		ug/L		106	80 - 120	10	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*92*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*99*		*73 - 131*
Dibromofluoromethane (Surr)	*101*		*80 - 122*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*

Lab Sample ID: MB 680-542883/9
Matrix: Water
Analysis Batch: 542883

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<1.0		1.0		ug/L			10/10/18 14:07	1
1,1,2,2-Tetrachloroethane	<1.0		1.0		ug/L			10/10/18 14:07	1
1,1,2-Trichloroethane	<1.0		1.0		ug/L			10/10/18 14:07	1
1,1-Dichloroethane	<1.0		1.0		ug/L			10/10/18 14:07	1
1,1-Dichloroethene	<1.0		1.0		ug/L			10/10/18 14:07	1
1,2-Dichloroethane	<1.0		1.0		ug/L			10/10/18 14:07	1

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

Lab Sample ID: MB 680-542883/9
Matrix: Water
Analysis Batch: 542883

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloropropane	<1.0		1.0		ug/L			10/10/18 14:07	1
2-Butanone (MEK)	<10		10		ug/L			10/10/18 14:07	1
2-Hexanone	<10		10		ug/L			10/10/18 14:07	1
4-Methyl-2-pentanone (MIBK)	<10		10		ug/L			10/10/18 14:07	1
Acetone	<10		10		ug/L			10/10/18 14:07	1
Benzene	<1.0		1.0		ug/L			10/10/18 14:07	1
Bromoform	<1.0		1.0		ug/L			10/10/18 14:07	1
Bromomethane	<5.0		5.0		ug/L			10/10/18 14:07	1
Carbon disulfide	<2.0		2.0		ug/L			10/10/18 14:07	1
Carbon tetrachloride	<1.0		1.0		ug/L			10/10/18 14:07	1
Chlorobenzene	<1.0		1.0		ug/L			10/10/18 14:07	1
Chlorodibromomethane	<1.0		1.0		ug/L			10/10/18 14:07	1
Chloroethane	<5.0		5.0		ug/L			10/10/18 14:07	1
Chloroform	<1.0		1.0		ug/L			10/10/18 14:07	1
Chloromethane	<1.0		1.0		ug/L			10/10/18 14:07	1
cis-1,2-Dichloroethene	<1.0		1.0		ug/L			10/10/18 14:07	1
cis-1,3-Dichloropropene	<1.0		1.0		ug/L			10/10/18 14:07	1
Dichlorobromomethane	<1.0		1.0		ug/L			10/10/18 14:07	1
Ethylbenzene	<1.0		1.0		ug/L			10/10/18 14:07	1
Methylene Chloride	<5.0		5.0		ug/L			10/10/18 14:07	1
Styrene	<1.0		1.0		ug/L			10/10/18 14:07	1
Tetrachloroethene	<1.0		1.0		ug/L			10/10/18 14:07	1
Toluene	<1.0		1.0		ug/L			10/10/18 14:07	1
trans-1,2-Dichloroethene	<1.0		1.0		ug/L			10/10/18 14:07	1
trans-1,3-Dichloropropene	<1.0		1.0		ug/L			10/10/18 14:07	1
Trichloroethene	<1.0		1.0		ug/L			10/10/18 14:07	1
Vinyl chloride	<1.0		1.0		ug/L			10/10/18 14:07	1
Xylenes, Total	<1.0		1.0		ug/L			10/10/18 14:07	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*103*		*80 - 120*		*10/10/18 14:07*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*73 - 131*		*10/10/18 14:07*	*1*
Dibromofluoromethane (Surr)	*109*		*80 - 122*		*10/10/18 14:07*	*1*
4-Bromofluorobenzene (Surr)	*90*		*80 - 120*		*10/10/18 14:07*	*1*

Lab Sample ID: LCS 680-542883/3
Matrix: Water
Analysis Batch: 542883

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	50.0	52.5		ug/L		105	80 - 120
1,1,2,2-Tetrachloroethane	50.0	54.1		ug/L		108	80 - 120
1,1,2-Trichloroethane	50.0	49.3		ug/L		99	80 - 120
1,1-Dichloroethane	50.0	52.1		ug/L		104	80 - 120
1,1-Dichloroethene	50.0	53.5		ug/L		107	76 - 120
1,2-Dichloroethane	50.0	52.3		ug/L		105	80 - 120
1,2-Dichloropropane	50.0	53.5		ug/L		107	80 - 120
2-Butanone (MEK)	250	232		ug/L		93	80 - 131

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

Lab Sample ID: LCS 680-542883/3
Matrix: Water
Analysis Batch: 542883

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Hexanone	250	214		ug/L		86	74 - 127
4-Methyl-2-pentanone (MIBK)	250	243		ug/L		97	76 - 124
Acetone	250	225		ug/L		90	70 - 135
Benzene	50.0	49.5		ug/L		99	80 - 120
Bromoform	50.0	54.7		ug/L		109	74 - 126
Bromomethane	50.0	72.1	*	ug/L		144	62 - 130
Carbon disulfide	50.0	51.9		ug/L		104	80 - 120
Carbon tetrachloride	50.0	52.8		ug/L		106	76 - 123
Chlorobenzene	50.0	52.1		ug/L		104	80 - 120
Chlorodibromomethane	50.0	48.8		ug/L		98	80 - 121
Chloroethane	50.0	56.4		ug/L		113	66 - 135
Chloroform	50.0	53.5		ug/L		107	80 - 120
Chloromethane	50.0	47.6		ug/L		95	69 - 131
cis-1,2-Dichloroethene	50.0	54.6		ug/L		109	80 - 120
cis-1,3-Dichloropropene	50.0	51.0		ug/L		102	80 - 120
Dichlorobromomethane	50.0	49.2		ug/L		98	80 - 120
Ethylbenzene	50.0	50.4		ug/L		101	80 - 120
Methylene Chloride	50.0	47.6		ug/L		95	80 - 120
Styrene	50.0	51.7		ug/L		103	80 - 120
Tetrachloroethene	50.0	49.7		ug/L		99	80 - 121
Toluene	50.0	47.3		ug/L		95	80 - 113
trans-1,2-Dichloroethene	50.0	50.1		ug/L		100	80 - 120
trans-1,3-Dichloropropene	50.0	41.9		ug/L		84	80 - 120
Trichloroethene	50.0	54.8		ug/L		110	80 - 120
Vinyl chloride	50.0	45.4		ug/L		91	71 - 128
Xylenes, Total	100	101		ug/L		101	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*95*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*99*		*73 - 131*
Dibromofluoromethane (Surr)	*104*		*80 - 122*
4-Bromofluorobenzene (Surr)	*108*		*80 - 120*

Lab Sample ID: LCSD 680-542883/4
Matrix: Water
Analysis Batch: 542883

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	50.0	54.2		ug/L		108	80 - 120	3	20
1,1,2,2-Tetrachloroethane	50.0	47.1		ug/L		94	80 - 120	14	20
1,1,2-Trichloroethane	50.0	56.3		ug/L		113	80 - 120	13	20
1,1-Dichloroethane	50.0	51.7		ug/L		103	80 - 120	1	20
1,1-Dichloroethene	50.0	46.4		ug/L		93	76 - 120	14	20
1,2-Dichloroethane	50.0	50.5		ug/L		101	80 - 120	3	50
1,2-Dichloropropane	50.0	51.0		ug/L		102	80 - 120	5	20
2-Butanone (MEK)	250	243		ug/L		97	80 - 131	5	20
2-Hexanone	250	266	*	ug/L		106	74 - 127	22	20
4-Methyl-2-pentanone (MIBK)	250	293		ug/L		117	76 - 124	19	20

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

Lab Sample ID: LCSD 680-542883/4
Matrix: Water
Analysis Batch: 542883

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone			250	202		ug/L		81	70 - 135	11	30
Benzene			50.0	49.3		ug/L		99	80 - 120	0	20
Bromoform			50.0	48.7		ug/L		97	74 - 126	12	20
Bromomethane			50.0	72.9	*	ug/L		146	62 - 130	1	20
Carbon disulfide			50.0	53.4		ug/L		107	80 - 120	3	20
Carbon tetrachloride			50.0	54.3		ug/L		109	76 - 123	3	20
Chlorobenzene			50.0	49.6		ug/L		99	80 - 120	5	20
Chlorodibromomethane			50.0	55.4		ug/L		111	80 - 121	13	20
Chloroethane			50.0	54.9		ug/L		110	66 - 135	3	20
Chloroform			50.0	52.1		ug/L		104	80 - 120	3	20
Chloromethane			50.0	49.8		ug/L		100	69 - 131	4	30
cis-1,2-Dichloroethene			50.0	53.0		ug/L		106	80 - 120	3	20
cis-1,3-Dichloropropene			50.0	60.1		ug/L		120	80 - 120	16	20
Dichlorobromomethane			50.0	58.6		ug/L		117	80 - 120	17	20
Ethylbenzene			50.0	46.4		ug/L		93	80 - 120	8	20
Methylene Chloride			50.0	45.4		ug/L		91	80 - 120	5	20
Styrene			50.0	46.1		ug/L		92	80 - 120	11	20
Tetrachloroethene			50.0	57.6		ug/L		115	80 - 121	15	20
Toluene			50.0	55.3		ug/L		111	80 - 113	16	20
trans-1,2-Dichloroethene			50.0	50.2		ug/L		100	80 - 120	0	20
trans-1,3-Dichloropropene			50.0	49.7		ug/L		99	80 - 120	17	30
Trichloroethene			50.0	55.0		ug/L		110	80 - 120	0	20
Vinyl chloride			50.0	49.2		ug/L		98	71 - 128	8	20
Xylenes, Total			100	88.0		ug/L		88	80 - 120	14	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*108*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*96*		*73 - 131*
Dibromofluoromethane (Surr)	*101*		*80 - 122*
4-Bromofluorobenzene (Surr)	*86*		*80 - 120*

Lab Sample ID: MB 680-542955/10
Matrix: Water
Analysis Batch: 542955

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<1.0		1.0		ug/L			10/10/18 23:27	1
1,1,2,2-Tetrachloroethane	<1.0		1.0		ug/L			10/10/18 23:27	1
1,1,2-Trichloroethane	<1.0		1.0		ug/L			10/10/18 23:27	1
1,1-Dichloroethane	<1.0		1.0		ug/L			10/10/18 23:27	1
1,1-Dichloroethene	<1.0		1.0		ug/L			10/10/18 23:27	1
1,2-Dichloroethane	<1.0		1.0		ug/L			10/10/18 23:27	1
1,2-Dichloropropane	<1.0		1.0		ug/L			10/10/18 23:27	1
2-Butanone (MEK)	<10		10		ug/L			10/10/18 23:27	1
2-Hexanone	<10		10		ug/L			10/10/18 23:27	1
4-Methyl-2-pentanone (MIBK)	<10		10		ug/L			10/10/18 23:27	1
Acetone	<10		10		ug/L			10/10/18 23:27	1
Benzene	<1.0		1.0		ug/L			10/10/18 23:27	1

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

Lab Sample ID: MB 680-542955/10
Matrix: Water
Analysis Batch: 542955

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromoform	<1.0		1.0		ug/L			10/10/18 23:27	1
Bromomethane	<5.0		5.0		ug/L			10/10/18 23:27	1
Carbon disulfide	<2.0		2.0		ug/L			10/10/18 23:27	1
Carbon tetrachloride	<1.0		1.0		ug/L			10/10/18 23:27	1
Chlorobenzene	<1.0		1.0		ug/L			10/10/18 23:27	1
Chlorodibromomethane	<1.0		1.0		ug/L			10/10/18 23:27	1
Chloroethane	<5.0		5.0		ug/L			10/10/18 23:27	1
Chloroform	<1.0		1.0		ug/L			10/10/18 23:27	1
Chloromethane	<1.0		1.0		ug/L			10/10/18 23:27	1
cis-1,2-Dichloroethene	<1.0		1.0		ug/L			10/10/18 23:27	1
cis-1,3-Dichloropropene	<1.0		1.0		ug/L			10/10/18 23:27	1
Dichlorobromomethane	<1.0		1.0		ug/L			10/10/18 23:27	1
Ethylbenzene	<1.0		1.0		ug/L			10/10/18 23:27	1
Methylene Chloride	<5.0		5.0		ug/L			10/10/18 23:27	1
Styrene	<1.0		1.0		ug/L			10/10/18 23:27	1
Tetrachloroethene	<1.0		1.0		ug/L			10/10/18 23:27	1
Toluene	<1.0		1.0		ug/L			10/10/18 23:27	1
trans-1,2-Dichloroethene	<1.0		1.0		ug/L			10/10/18 23:27	1
trans-1,3-Dichloropropene	<1.0		1.0		ug/L			10/10/18 23:27	1
Trichloroethene	<1.0		1.0		ug/L			10/10/18 23:27	1
Vinyl chloride	<1.0		1.0		ug/L			10/10/18 23:27	1
Xylenes, Total	<1.0		1.0		ug/L			10/10/18 23:27	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*94*		*80 - 120*		*10/10/18 23:27*	*1*
1,2-Dichloroethane-d4 (Surr)	*92*		*73 - 131*		*10/10/18 23:27*	*1*
Dibromofluoromethane (Surr)	*96*		*80 - 122*		*10/10/18 23:27*	*1*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*10/10/18 23:27*	*1*

Lab Sample ID: LCS 680-542955/5
Matrix: Water
Analysis Batch: 542955

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	50.0	51.2		ug/L		102	80 - 120
1,1,2,2-Tetrachloroethane	50.0	53.3		ug/L		107	80 - 120
1,1,2-Trichloroethane	50.0	54.3		ug/L		109	80 - 120
1,1-Dichloroethane	50.0	50.7		ug/L		101	80 - 120
1,1-Dichloroethene	50.0	50.2		ug/L		100	76 - 120
1,2-Dichloroethane	50.0	53.4		ug/L		107	80 - 120
1,2-Dichloropropane	50.0	53.5		ug/L		107	80 - 120
2-Butanone (MEK)	250	281		ug/L		112	80 - 131
2-Hexanone	250	288		ug/L		115	74 - 127
4-Methyl-2-pentanone (MIBK)	250	282		ug/L		113	76 - 124
Acetone	250	272		ug/L		109	70 - 135
Benzene	50.0	48.4		ug/L		97	80 - 120
Bromoform	50.0	56.4		ug/L		113	74 - 126
Bromomethane	50.0	41.7		ug/L		83	62 - 130

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

Lab Sample ID: LCS 680-542955/5
Matrix: Water
Analysis Batch: 542955

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Carbon disulfide	50.0	47.1		ug/L		94	80 - 120
Carbon tetrachloride	50.0	50.2		ug/L		100	76 - 123
Chlorobenzene	50.0	48.2		ug/L		96	80 - 120
Chlorodibromomethane	50.0	52.4		ug/L		105	80 - 121
Chloroethane	50.0	46.2		ug/L		92	66 - 135
Chloroform	50.0	50.7		ug/L		101	80 - 120
Chloromethane	50.0	47.7		ug/L		95	69 - 131
cis-1,2-Dichloroethene	50.0	51.7		ug/L		103	80 - 120
cis-1,3-Dichloropropene	50.0	55.5		ug/L		111	80 - 120
Dichlorobromomethane	50.0	52.2		ug/L		104	80 - 120
Ethylbenzene	50.0	48.8		ug/L		98	80 - 120
Methylene Chloride	50.0	49.0		ug/L		98	80 - 120
Styrene	50.0	49.9		ug/L		100	80 - 120
Tetrachloroethene	50.0	48.6		ug/L		97	80 - 121
Toluene	50.0	50.3		ug/L		101	80 - 113
trans-1,2-Dichloroethene	50.0	50.9		ug/L		102	80 - 120
trans-1,3-Dichloropropene	50.0	55.1		ug/L		110	80 - 120
Trichloroethene	50.0	49.0		ug/L		98	80 - 120
Vinyl chloride	50.0	51.2		ug/L		102	71 - 128
Xylenes, Total	100	99.6		ug/L		100	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*92*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*97*		*73 - 131*
Dibromofluoromethane (Surr)	*99*		*80 - 122*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*

Lab Sample ID: LCSD 680-542955/6
Matrix: Water
Analysis Batch: 542955

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	50.0	51.9		ug/L		104	80 - 120	1	20
1,1,2,2-Tetrachloroethane	50.0	52.5		ug/L		105	80 - 120	1	20
1,1,2-Trichloroethane	50.0	52.8		ug/L		106	80 - 120	3	20
1,1-Dichloroethane	50.0	51.3		ug/L		103	80 - 120	1	20
1,1-Dichloroethene	50.0	51.0		ug/L		102	76 - 120	2	20
1,2-Dichloroethane	50.0	52.7		ug/L		105	80 - 120	1	50
1,2-Dichloropropane	50.0	53.0		ug/L		106	80 - 120	1	20
2-Butanone (MEK)	250	279		ug/L		111	80 - 131	1	20
2-Hexanone	250	281		ug/L		112	74 - 127	2	20
4-Methyl-2-pentanone (MIBK)	250	276		ug/L		110	76 - 124	2	20
Acetone	250	266		ug/L		106	70 - 135	2	30
Benzene	50.0	48.9		ug/L		98	80 - 120	1	20
Bromoform	50.0	55.5		ug/L		111	74 - 126	2	20
Bromomethane	50.0	42.1		ug/L		84	62 - 130	1	20
Carbon disulfide	50.0	47.8		ug/L		96	80 - 120	2	20
Carbon tetrachloride	50.0	51.7		ug/L		103	76 - 123	3	20

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

Lab Sample ID: LCSD 680-542955/6
Matrix: Water
Analysis Batch: 542955

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chlorobenzene			50.0	48.5		ug/L		97	80 - 120	0	20
Chlorodibromomethane			50.0	51.5		ug/L		103	80 - 121	2	20
Chloroethane			50.0	47.1		ug/L		94	66 - 135	2	20
Chloroform			50.0	50.5		ug/L		101	80 - 120	0	20
Chloromethane			50.0	48.8		ug/L		98	69 - 131	2	30
cis-1,2-Dichloroethene			50.0	51.8		ug/L		104	80 - 120	0	20
cis-1,3-Dichloropropene			50.0	54.4		ug/L		109	80 - 120	2	20
Dichlorobromomethane			50.0	52.3		ug/L		105	80 - 120	0	20
Ethylbenzene			50.0	49.1		ug/L		98	80 - 120	1	20
Methylene Chloride			50.0	48.4		ug/L		97	80 - 120	1	20
Styrene			50.0	49.6		ug/L		99	80 - 120	1	20
Tetrachloroethene			50.0	49.7		ug/L		99	80 - 121	2	20
Toluene			50.0	51.0		ug/L		102	80 - 113	1	20
trans-1,2-Dichloroethene			50.0	51.6		ug/L		103	80 - 120	1	20
trans-1,3-Dichloropropene			50.0	53.9		ug/L		108	80 - 120	2	30
Trichloroethene			50.0	49.4		ug/L		99	80 - 120	1	20
Vinyl chloride			50.0	52.5		ug/L		105	71 - 128	2	20
Xylenes, Total			100	100		ug/L		100	80 - 120	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*93*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*98*		*73 - 131*
Dibromofluoromethane (Surr)	*100*		*80 - 122*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*

Lab Sample ID: MB 680-543042/9
Matrix: Water
Analysis Batch: 543042

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<1.0		1.0		ug/L			10/12/18 10:55	1
1,1,2,2-Tetrachloroethane	<1.0		1.0		ug/L			10/12/18 10:55	1
1,1,2-Trichloroethane	<1.0		1.0		ug/L			10/12/18 10:55	1
1,1-Dichloroethane	<1.0		1.0		ug/L			10/12/18 10:55	1
1,1-Dichloroethene	<1.0		1.0		ug/L			10/12/18 10:55	1
1,2-Dichloroethane	<1.0		1.0		ug/L			10/12/18 10:55	1
1,2-Dichloropropane	<1.0		1.0		ug/L			10/12/18 10:55	1
2-Butanone (MEK)	<10		10		ug/L			10/12/18 10:55	1
2-Hexanone	<10		10		ug/L			10/12/18 10:55	1
4-Methyl-2-pentanone (MIBK)	<10		10		ug/L			10/12/18 10:55	1
Acetone	<10		10		ug/L			10/12/18 10:55	1
Benzene	<1.0		1.0		ug/L			10/12/18 10:55	1
Bromoform	<1.0		1.0		ug/L			10/12/18 10:55	1
Bromomethane	<5.0		5.0		ug/L			10/12/18 10:55	1
Carbon disulfide	<2.0		2.0		ug/L			10/12/18 10:55	1
Carbon tetrachloride	<1.0		1.0		ug/L			10/12/18 10:55	1
Chlorobenzene	<1.0		1.0		ug/L			10/12/18 10:55	1
Chlorodibromomethane	<1.0		1.0		ug/L			10/12/18 10:55	1

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

Lab Sample ID: MB 680-543042/9
Matrix: Water
Analysis Batch: 543042

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	<5.0		5.0		ug/L			10/12/18 10:55	1
Chloroform	<1.0		1.0		ug/L			10/12/18 10:55	1
Chloromethane	<1.0		1.0		ug/L			10/12/18 10:55	1
cis-1,2-Dichloroethene	<1.0		1.0		ug/L			10/12/18 10:55	1
cis-1,3-Dichloropropene	<1.0		1.0		ug/L			10/12/18 10:55	1
Dichlorobromomethane	<1.0		1.0		ug/L			10/12/18 10:55	1
Ethylbenzene	<1.0		1.0		ug/L			10/12/18 10:55	1
Methylene Chloride	<5.0		5.0		ug/L			10/12/18 10:55	1
Styrene	<1.0		1.0		ug/L			10/12/18 10:55	1
Tetrachloroethene	<1.0		1.0		ug/L			10/12/18 10:55	1
Toluene	<1.0		1.0		ug/L			10/12/18 10:55	1
trans-1,2-Dichloroethene	<1.0		1.0		ug/L			10/12/18 10:55	1
trans-1,3-Dichloropropene	<1.0		1.0		ug/L			10/12/18 10:55	1
Trichloroethene	<1.0		1.0		ug/L			10/12/18 10:55	1
Vinyl chloride	<1.0		1.0		ug/L			10/12/18 10:55	1
Xylenes, Total	<1.0		1.0		ug/L			10/12/18 10:55	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*91*		*80 - 120*		*10/12/18 10:55*	*1*
1,2-Dichloroethane-d4 (Surr)	*115*		*73 - 131*		*10/12/18 10:55*	*1*
Dibromofluoromethane (Surr)	*113*		*80 - 122*		*10/12/18 10:55*	*1*
4-Bromofluorobenzene (Surr)	*90*		*80 - 120*		*10/12/18 10:55*	*1*

Lab Sample ID: LCS 680-543042/3
Matrix: Water
Analysis Batch: 543042

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	50.0	53.1		ug/L		106	80 - 120
1,1,2,2-Tetrachloroethane	50.0	51.8		ug/L		104	80 - 120
1,1,2-Trichloroethane	50.0	50.2		ug/L		100	80 - 120
1,1-Dichloroethane	50.0	53.6		ug/L		107	80 - 120
1,1-Dichloroethene	50.0	45.3		ug/L		91	76 - 120
1,2-Dichloroethane	50.0	53.8		ug/L		108	80 - 120
1,2-Dichloropropane	50.0	52.9		ug/L		106	80 - 120
2-Butanone (MEK)	250	220		ug/L		88	80 - 131
2-Hexanone	250	212		ug/L		85	74 - 127
4-Methyl-2-pentanone (MIBK)	250	238		ug/L		95	76 - 124
Acetone	250	186		ug/L		75	70 - 135
Benzene	50.0	50.1		ug/L		100	80 - 120
Bromoform	50.0	54.1		ug/L		108	74 - 126
Bromomethane	50.0	55.2		ug/L		110	62 - 130
Carbon disulfide	50.0	55.3		ug/L		111	80 - 120
Carbon tetrachloride	50.0	52.4		ug/L		105	76 - 123
Chlorobenzene	50.0	52.4		ug/L		105	80 - 120
Chlorodibromomethane	50.0	52.1		ug/L		104	80 - 121
Chloroethane	50.0	50.8		ug/L		102	66 - 135
Chloroform	50.0	54.6		ug/L		109	80 - 120

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

Lab Sample ID: LCS 680-543042/3
Matrix: Water
Analysis Batch: 543042

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloromethane	50.0	43.2		ug/L		86	69 - 131
cis-1,2-Dichloroethene	50.0	53.9		ug/L		108	80 - 120
cis-1,3-Dichloropropene	50.0	56.0		ug/L		112	80 - 120
Dichlorobromomethane	50.0	56.3		ug/L		113	80 - 120
Ethylbenzene	50.0	51.7		ug/L		103	80 - 120
Methylene Chloride	50.0	50.9		ug/L		102	80 - 120
Styrene	50.0	51.1		ug/L		102	80 - 120
Tetrachloroethene	50.0	48.5		ug/L		97	80 - 121
Toluene	50.0	48.6		ug/L		97	80 - 113
trans-1,2-Dichloroethene	50.0	51.4		ug/L		103	80 - 120
trans-1,3-Dichloropropene	50.0	45.5		ug/L		91	80 - 120
Trichloroethene	50.0	54.5		ug/L		109	80 - 120
Vinyl chloride	50.0	42.7		ug/L		85	71 - 128
Xylenes, Total	100	99.5		ug/L		100	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*98*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*104*		*73 - 131*
Dibromofluoromethane (Surr)	*106*		*80 - 122*
4-Bromofluorobenzene (Surr)	*92*		*80 - 120*

Lab Sample ID: LCSD 680-543042/4
Matrix: Water
Analysis Batch: 543042

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	50.0	52.6		ug/L		105	80 - 120	1	20
1,1,2,2-Tetrachloroethane	50.0	54.9		ug/L		110	80 - 120	6	20
1,1,2-Trichloroethane	50.0	50.7		ug/L		101	80 - 120	1	20
1,1-Dichloroethane	50.0	51.9		ug/L		104	80 - 120	3	20
1,1-Dichloroethene	50.0	43.8		ug/L		88	76 - 120	3	20
1,2-Dichloroethane	50.0	53.1		ug/L		106	80 - 120	1	50
1,2-Dichloropropane	50.0	54.1		ug/L		108	80 - 120	2	20
2-Butanone (MEK)	250	232		ug/L		93	80 - 131	5	20
2-Hexanone	250	209		ug/L		84	74 - 127	1	20
4-Methyl-2-pentanone (MIBK)	250	246		ug/L		99	76 - 124	4	20
Acetone	250	194		ug/L		77	70 - 135	4	30
Benzene	50.0	49.3		ug/L		99	80 - 120	2	20
Bromoform	50.0	54.8		ug/L		110	74 - 126	1	20
Bromomethane	50.0	57.2		ug/L		114	62 - 130	4	20
Carbon disulfide	50.0	53.4		ug/L		107	80 - 120	3	20
Carbon tetrachloride	50.0	51.3		ug/L		103	76 - 123	2	20
Chlorobenzene	50.0	54.5		ug/L		109	80 - 120	4	20
Chlorodibromomethane	50.0	49.8		ug/L		100	80 - 121	4	20
Chloroethane	50.0	50.0		ug/L		100	66 - 135	2	20
Chloroform	50.0	56.2		ug/L		112	80 - 120	3	20
Chloromethane	50.0	42.9		ug/L		86	69 - 131	1	30
cis-1,2-Dichloroethene	50.0	52.6		ug/L		105	80 - 120	2	20

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

Lab Sample ID: LCSD 680-543042/4
Matrix: Water
Analysis Batch: 543042

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
cis-1,3-Dichloropropene			50.0	56.6		ug/L		113	80 - 120	1	20
Dichlorobromomethane			50.0	55.2		ug/L		110	80 - 120	2	20
Ethylbenzene			50.0	52.4		ug/L		105	80 - 120	1	20
Methylene Chloride			50.0	48.3		ug/L		97	80 - 120	5	20
Styrene			50.0	52.8		ug/L		106	80 - 120	3	20
Tetrachloroethene			50.0	47.4		ug/L		95	80 - 121	2	20
Toluene			50.0	49.1		ug/L		98	80 - 113	1	20
trans-1,2-Dichloroethene			50.0	50.5		ug/L		101	80 - 120	2	20
trans-1,3-Dichloropropene			50.0	45.9		ug/L		92	80 - 120	1	30
Trichloroethene			50.0	55.2		ug/L		110	80 - 120	1	20
Vinyl chloride			50.0	41.4		ug/L		83	71 - 128	3	20
Xylenes, Total			100	102		ug/L		102	80 - 120	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*99*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*103*		*73 - 131*
Dibromofluoromethane (Surr)	*106*		*80 - 122*
4-Bromofluorobenzene (Surr)	*85*		*80 - 120*

QC Association Summary

Client: EHS Support, LLC
Project/Site: Ashland Alterman (Jonesboro)

TestAmerica Job ID: 680-158818-1

GC/MS VOA

Analysis Batch: 542836

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-158818-2	MW-19B	Total/NA	Water	8260B	
680-158818-3	MW-19D	Total/NA	Water	8260B	
680-158818-4	MW-16C	Total/NA	Water	8260B	
680-158818-6	MW-20C	Total/NA	Water	8260B	
680-158818-8	Trip Blank	Total/NA	Water	8260B	
MB 680-542836/10	Method Blank	Total/NA	Water	8260B	
LCS 680-542836/4	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-542836/5	Lab Control Sample Dup	Total/NA	Water	8260B	

Analysis Batch: 542883

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-158818-5	DUP-1	Total/NA	Water	8260B	
MB 680-542883/9	Method Blank	Total/NA	Water	8260B	
LCS 680-542883/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-542883/4	Lab Control Sample Dup	Total/NA	Water	8260B	

Analysis Batch: 542955

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-158818-1	MW-19C	Total/NA	Water	8260B	
MB 680-542955/10	Method Blank	Total/NA	Water	8260B	
LCS 680-542955/5	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-542955/6	Lab Control Sample Dup	Total/NA	Water	8260B	

Analysis Batch: 543042

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
680-158818-2 - DL	MW-19B	Total/NA	Water	8260B	
680-158818-4 - DL	MW-16C	Total/NA	Water	8260B	
680-158818-7	EB-1	Total/NA	Water	8260B	
MB 680-543042/9	Method Blank	Total/NA	Water	8260B	
LCS 680-543042/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 680-543042/4	Lab Control Sample Dup	Total/NA	Water	8260B	

Lab Chronicle

Client: EHS Support, LLC
Project/Site: Ashland Alterman (Jonesboro)

TestAmerica Job ID: 680-158818-1

Client Sample ID: MW-19C
Date Collected: 10/03/18 11:20
Date Received: 10/05/18 07:10

Lab Sample ID: 680-158818-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	5 mL	5 mL	542955	10/11/18 01:06	Y1S	TAL SAV
	Instrument ID: CMSP2									

Client Sample ID: MW-19B
Date Collected: 10/03/18 11:30
Date Received: 10/05/18 07:10

Lab Sample ID: 680-158818-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	542836	10/10/18 16:29	JLK	TAL SAV
	Instrument ID: CMSA2									
Total/NA	Analysis	8260B	DL	5	5 mL	5 mL	543042	10/12/18 14:12	Y1S	TAL SAV
	Instrument ID: CMSO2									

Client Sample ID: MW-19D
Date Collected: 10/03/18 11:40
Date Received: 10/05/18 07:10

Lab Sample ID: 680-158818-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	5 mL	5 mL	542836	10/10/18 16:50	JLK	TAL SAV
	Instrument ID: CMSA2									

Client Sample ID: MW-16C
Date Collected: 10/03/18 12:40
Date Received: 10/05/18 07:10

Lab Sample ID: 680-158818-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	542836	10/10/18 13:55	JLK	TAL SAV
	Instrument ID: CMSA2									
Total/NA	Analysis	8260B	DL	10	5 mL	5 mL	543042	10/12/18 13:47	Y1S	TAL SAV
	Instrument ID: CMSO2									

Client Sample ID: DUP-1
Date Collected: 10/03/18 12:45
Date Received: 10/05/18 07:10

Lab Sample ID: 680-158818-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		10	5 mL	5 mL	542883	10/10/18 19:52	Y1S	TAL SAV
	Instrument ID: CMSO2									

Lab Chronicle

Client: EHS Support, LLC
Project/Site: Ashland Alterman (Jonesboro)

TestAmerica Job ID: 680-158818-1

Client Sample ID: MW-20C

Lab Sample ID: 680-158818-6

Date Collected: 10/03/18 13:05
Matrix: Water
Date Received: 10/05/18 07:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		2	5 mL	5 mL	542836	10/10/18 17:34	JLK	TAL SAV
	Instrument ID: CMSA2									

Client Sample ID: EB-1

Lab Sample ID: 680-158818-7

Date Collected: 10/03/18 13:15
Matrix: Water
Date Received: 10/05/18 07:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	543042	10/12/18 11:20	Y1S	TAL SAV
	Instrument ID: CMSO2									

Client Sample ID: Trip Blank

Lab Sample ID: 680-158818-8

Date Collected: 10/03/18 00:00
Matrix: Water
Date Received: 10/05/18 07:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	5 mL	5 mL	542836	10/10/18 14:39	JLK	TAL SAV
	Instrument ID: CMSA2									

Laboratory References:

TAL SAV = TestAmerica Savannah, 5102 LaRoche Avenue, Savannah, GA 31404, TEL (912)354-7858

TestAmerica Savannah
5102 LaRoche Avenue
Savannah, GA 31404
Phone: 912.354.7858 Fax:

681-Atlanta

Chain of Custody Record

263595

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☒ Other: VRP

Client Contact	Project Manager: Chrissy Pechoski	Site Contact: Kris Spikes	Date: 10/03/18	COC No:
Company Name: Ashland	Tel/Fax: 302-995-3484	Lab Contact: Jerry Lanier	Carrier:	1 of 1 COCs
Address: 500 Hercules Rd	Analysis Turnaround Time			Sampler:
City/State/Zip: Wilmington, DE 19808	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 302-995-3484	TAT if different from Below			Walk-in Client:
Fax: —	☐ 2 weeks			Lab Sampling:
Project Name: Tara/Alterman	☐ 1 week			
Site: Jonesboro, GA	☐ 2 days			Job / SDG No.:
PO# [redacted] PRP-C00342	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS/MSD (Y/N)	VOCs - 8260B	Sample Specific Notes:
MW-19C	10/03/18	1120	G	W	3	N	N	X	
MW-19B		1130	G	W	3			X	
MW-19D		1140	G	W	3			X	
MW-15C		1240	G	W	3			X	
DUP-1		1245	G	W	3			X	
MW-20C		1305	G	W	3			X	
EB-1		1315	G	W	3			X	
Trip Blank			G	W	2			X	

680-158818 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other 2

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for ____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: ____ Corr'd: ____ | Therm ID No.: ____

	Company	Date/Time		Company	Date/Time
Relinquished by:	EHS Support	10/4/18 1100	Received by:	TA	10/4/18 11:25
Relinquished by: 10/4/18	Gilo		Received by:		
Relinquished by:			Received in Laboratory by:		10-05-18 0710

3.6 (CF) 3.5°C

Login Sample Receipt Checklist

Client: EHS Support, LLC

Job Number: 680-158818-1

Login Number: 158818
List Number: 1
Creator: Banda, Christy S

List Source: TestAmerica Savannah

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: EHS Support, LLC
Project/Site: Ashland Alterman (Jonesboro)

TestAmerica Job ID: 680-158818-1

Laboratory: TestAmerica Savannah

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
	AFCEE		SAVLAB	
Alabama	State Program	4	41450	06-30-19
Alaska	State Program	10		06-30-19
Alaska (UST)	State Program	10	UST-104	09-22-19
ANAB	DoD ELAP		L2463	09-22-19
ANAB	ISO/IEC 17025		L2463.01	09-22-19
Arizona	State Program	9	AZ0808	12-14-18
Arkansas DEQ	State Program	6	88-0692	02-01-19
California	State Program	9	2939	06-30-19
Colorado	State Program	8	N/A	12-31-18
Connecticut	State Program	1	PH-0161	03-31-19
Florida	NELAP	4	E87052	06-30-19
GA Dept. of Agriculture	State Program	4	N/A	06-12-19
Georgia	State Program	4	N/A	06-30-19
Guam	State Program	9	15-005r	04-17-19
Hawaii	State Program	9	N/A	06-30-19
Illinois	NELAP	5	200022	11-30-18
Indiana	State Program	5	N/A	06-30-19
Iowa	State Program	7	353	06-30-19
Kentucky (DW)	State Program	4	90084	12-31-18
Kentucky (UST)	State Program	4	18	06-30-19
Kentucky (WW)	State Program	4	90084	12-31-18 *
Louisiana	NELAP	6	30690	06-30-19
Louisiana (DW)	NELAP	6	LA160019	12-31-18
Maine	State Program	1	GA00006	09-25-20
Maryland	State Program	3	250	12-31-18
Massachusetts	State Program	1	M-GA006	06-30-19
Michigan	State Program	5	9925	03-05-19
Mississippi	State Program	4	N/A	06-30-19
Nebraska	State Program	7	TestAmerica-Savannah	06-30-19
New Jersey	NELAP	2	GA769	06-30-19
New Mexico	State Program	6	N/A	06-30-19
New York	NELAP	2	10842	03-31-19
North Carolina (DW)	State Program	4	13701	07-31-19
North Carolina (WW/SW)	State Program	4	269	12-31-18
Oklahoma	State Program	6	9984	08-31-19
Pennsylvania	NELAP	3	68-00474	06-30-19
Puerto Rico	State Program	2	GA00006	12-31-18
South Carolina	State Program	4	98001	06-30-18 *
Tennessee	State Program	4	TN02961	06-30-19
Texas	NELAP	6	T104704185-16-9	11-30-18
Texas (DW)	State Program	1	T104704185	06-30-19
US Fish & Wildlife	Federal		LE058448-0	07-31-19
Virginia	NELAP	3	460161	06-14-19
Washington	State Program	10	C805	06-10-19
West Virginia (DW)	State Program	3	9950C	12-31-18
West Virginia DEP	State Program	3	094	06-30-19
Wisconsin	State Program	5	999819810	08-31-19
Wyoming	State Program	8	8TMS-L	06-30-16 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

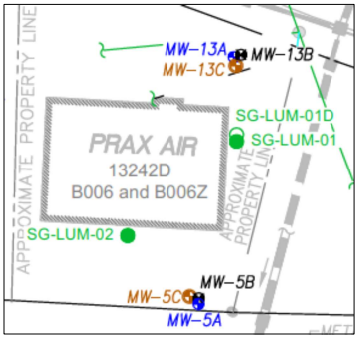
ATTACHMENT B

EHS Support

Boring: SG-LUM-01/01D

Project / Site: Alterman Enterprises / Tara Shopping Center HSI 10798		
Location / Address: 8660 Tara Boulevard, Jonesboro, Clayton County, Georgia		
Date Started: 10/3/2018	Date Finished: 10/3/2018	
Ground Surface Elevation (ft msl): 881.66	Top of Casing Elevation (ft msl): Not Applicable	
GA SP West Easting: 2236752.24 Northing: 1280080.78	Total Depth (ft): 9	
Drilling Method: Direct Push	Borehole Diameter (in): 2.25	
Rig Type: Geoprobe 66DTR	Drilll Bit Diameter (in) / Type: 2.25 Cutting Shoe	Client: Ashland LLC
Drilling Co.: Geo Lab Drilling	Sampler Diameter (in) / Type: 2 PVC Sleeve	Project Number: C00342
Drilled by: L. Sorenson	Logged by: R. Henterly	EHS Support PM: K. Spikes

Sketch Map



Elevation (ft msl)	Depth (ft)	Lithologic Column	Lithologic Description	Sample Number	Sampler Type	Recovery (ft)	Implant Diagram	Notes
	0		CONCRETE					First attempt about 2 feet from building. Encountered refusal on concrete at about 4 feet bgs. Moved out from building to advance second bore.
			Gray FINE SAND AND GRAVEL (GP-FILL), dry, trace to with silt.					
	1		Dark olive brown (2.5Y3/3) SILT (ML-FILL), soft, dry, minor clay. May be reworked natural soil and natural soil.					
880	2							
	3			1	HA	5.0		SG-LUM-01: Screen from 2.5-3.0 feet bgs.
878	4							
	5		Dark olive brown (2.5Y3/3) SILTY CLAY (CL), stiff, moist.					
876	6							
	7		Gray (10YR6/1) and yellowish brown (10YR5/6) CLAY (CL), very stiff, dry. At 9.8 ft bgs, becomes soft, moist to wet.	2	GP	4.0		Soil vapor implant constructed of 1/2-inch diameter Teflon tubing attached to a 6-inch long, 1/2-inch diameter Geoprobe stainless steel vapor point.
874	8							SG-LUM-01D: Screen from 8.5-9.0 feet bgs.
	9							

Notes:
Depth to water in borehole during drilling (ft bgs): Not encountered
Soil classification based on the Unified Soil Classification System (USCS)
Elevation surveyed to NAVD88

SOIL VAPOR IMPLANT CONSTRUCTION

Bentonite Powder | Tubing
Sand | Screen

Boring: SG-LUM-01/01D

Page: 1 of 1

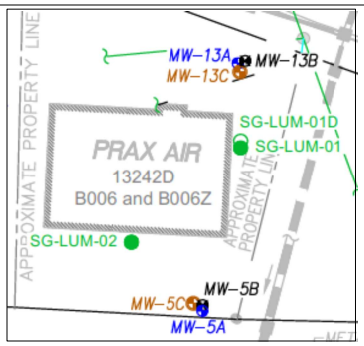
EHS Support

EHS Support

Boring: SG-LUM-02

Project / Site: Alterman Enterprises / Tara Shopping Center HSI 10798		
Location / Address: 8660 Tara Boulevard, Jonesboro, Clayton County, Georgia		
Date Started: 10/3/2018	Date Finished: 10/3/2018	
Ground Surface Elevation (ft msl): 885.34	Top of Casing Elevation (ft msl): Not Applicable	
GA SP West Easting: 2236703.61 Northing: 1280137.00	Total Depth (ft): 3	
Drilling Method: Hand Auger	Borehole Diameter (in): 2	
Rig Type: Not Applicable	Drilll Bit Diameter (in) / Type: 2 Auger bucket	Client: Ashland LLC
Drilling Co.: Geo Lab Drilling	Sampler Diameter (in) / Type: 2 Auger bucket	Project Number: C00342
Drilled by: L. Sorenson	Logged by: R. Henterly	EHS Support PM: K. Spikes

Sketch Map



Elevation (ft msl)	Depth (ft)	Lithologic Column	Lithologic Description	Sample Number	Sampler Type	Recovery (ft)	Implant Diagram	Notes
884	0		Asphalt	1	HA	3.0		First attempt - refusal at 2.8 feet bgs.
	1		Dark gray SILTY FINE SAND (SM-FILL), loose, dry.					Soil vapor implant constructed of 1/2-inch diameter Teflon tubing attached to a 6-inch long, 1/2-inch diameter Geoprobe stainless steel vapor point.
	2		Dark reddish brown SILT (ML-FILL), soft, dry.					SG-LUM-02: Screen from 2.5-3.0 feet bgs.
	3							

Notes:
Depth to water in borehole during drilling (ft bgs): Not encountered
Soil classification based on the Unified Soil Classification System (USCS)
Elevation surveyed to NAVD88

SOIL VAPOR IMPLANT CONSTRUCTION

Bentonite Powder | Tubing
Sand | Screen

Boring: SG-LUM-02

EHS Support

ATTACHMENT C

METHOD TO-15 CANISTER SAMPLING FIELD TEST DATA SHEET

A. GENERAL INFORMATION

Site Location: Lumsden Property
Site Address: 8660 Tara Blvd
Field ID No: SG-LUM-01
Sampling Date(s): 11/26/18
Shipping Date: 11/27/18

Size of Canister: 6L
Canister Serial No: 09783
Flow Controller No: 11785

B. SAMPLING INFORMATION

TEMPERATURE (Fahrenheit)

	Interior	Ambient	Maximum	Minimum
Start	N/A	43°F	—	—
Stop	N/A	42°F	—	—

PRESSURE (inches of Hg)

	Ambient	Maximum	Minimum
Start	29.9	—	—
Stop	29.9	—	—

CANISTER PRESSURE (inches of Hg) FROM GAUGE

Start	29	
Stop	3	

SAMPLING TIMES (24 hour clock)

	Local Times	Elapsed Time Meter Reading
Start	1230	30 min
Stop	1300	—

Signature/Title of Investigator

C. LABORATORY INFORMATION

FLOW RATES (ml/min)

	Flow Controller Readout	
Shipping out from Lab	—	required (from lab record log) after return
Receiving in Lab	—	(if applicable)

CANISTER PRESSURE

	Inches of Hg	
Initial Pressure (to field)	—	required (from lab record log) after return
Final Pressure (from field)	—	required (from lab record log) after return

Data Shipped: _____
Date Received: _____
Individual Canister Certification (provide File #): _____
Batch Certification (provide Batch ID#): _____

Signature/Title
GC/MS Analyst for TO-15

METHOD TO-15 CANISTER SAMPLING FIELD TEST DATA SHEET

A. GENERAL INFORMATION

Site Location: Lumsden Property
Site Address: 8660 Tara Blvd
Field ID No: SG-LUM-01D
Sampling Date(s): 11/26/18
Shipping Date: 11/27/18

Size of Canister: 6L
Canister Serial No: 10237
Flow Controller No: 11917

B. SAMPLING INFORMATION

TEMPERATURE (Fahrenheit)

	Interior	Ambient	Maximum	Minimum
Start	N/A	43°F	—	—
Stop	N/A	42°F	—	—

PRESSURE (inches of Hg)

	Ambient	Maximum	Minimum
Start	29.9	—	—
Stop	29.9	—	—

CANISTER PRESSURE (inches of Hg) FROM GAUGE

Start	29	—
Stop	17	—

SAMPLING TIMES (24 hour clock)

	Local Times	Elapsed Time Meter Reading
Start	1235	30 min
Stop	1305	—

Signature/Title of Investigator

C. LABORATORY INFORMATION

FLOW RATES (ml/min)

	Flow Controller Readout	
Shipping out from Lab	—	required (from lab record log) after return
Receiving in Lab	—	(if applicable)

CANISTER PRESSURE

	Inches of Hg	
Initial Pressure (to field)	—	required (from lab record log) after return
Final Pressure (from field)	—	required (from lab record log) after return

Data Shipped: _____
Date Received: _____
Individual Canister Certification (provide File #): _____
Batch Certification (provide Batch ID#): _____

Signature/Title
GC/MS Analyst for TO-15

METHOD TO-15 CANISTER SAMPLING FIELD TEST DATA SHEET

A. GENERAL INFORMATION

Site Location: Lumsden Property
Site Address: 8660 Tara Blvd
Field ID No: SG-LUM-02 Size of Canister: 6L
Sampling Date(s): 11/26/18 Canister Serial No: 10374
Shipping Date: 11/27/18 Flow Controller No: 12767

B. SAMPLING INFORMATION

TEMPERATURE (Fahrenheit)

	Interior	Ambient	Maximum	Minimum
Start	N/A	43°F	—	—
Stop	N/A	42°F	—	—

PRESSURE (inches of Hg)

	Ambient	Maximum	Minimum
Start	29.9	—	—
Stop	29.9	—	—

CANISTER PRESSURE (inches of Hg) FROM GAUGE

Start	29	
Stop	15	

SAMPLING TIMES (24 hour clock)

	Local Times	Elapsed Time Meter Reading
Start	1320	30 min
Stop	1350	—

Signature/Title of Investigator

C. LABORATORY INFORMATION

FLOW RATES (ml/min)

	Flow Controller Readout	
Shipping out from Lab	—	required (from lab record log) after return
Receiving in Lab	—	(if applicable)

CANISTER PRESSURE

	Inches of Hg	
Initial Pressure (to field)	—	required (from lab record log) after return
Final Pressure (from field)	—	required (from lab record log) after return

Data Shipped: _____
Date Received: _____
Individual Canister Certification (provide File #): _____
Batch Certification (provide Batch ID#): _____

Signature/Title
GC/MS Analyst for TO-15

METHOD TO-15 CANISTER SAMPLING FIELD TEST DATA SHEET

A. GENERAL INFORMATION

Site Location: Lumsden Property
Site Address: 8660 Tara Blvd
Field ID No: * SG-LUM-02 Dup
Sampling Date(s): 11/26/18
Shipping Date: 11/27/18

Size of Canister: 6L
Canister Serial No: 09764
Flow Controller No: 11958

B. SAMPLING INFORMATION

* Duplicate sample to SG-LUM-02

TEMPERATURE (Fahrenheit)

	Interior	Ambient	Maximum	Minimum
Start	N/A	43°F	—	—
Stop	N/A	42°F	—	—

PRESSURE (inches of Hg)

	Ambient	Maximum	Minimum
Start	29.9	—	—
Stop	29.9	—	—

CANISTER PRESSURE (inches of Hg) FROM GAUGE

Start	29	
Stop	9	

SAMPLING TIMES (24 hour clock)

	Local Times	Elapsed Time Meter Reading
Start	1320	30 min
Stop	1350	—

Signature/Title of Investigator

C. LABORATORY INFORMATION

FLOW RATES (ml/min)

	Flow Controller Readout	
Shipping out from Lab	—	required (from lab record log) after return
Receiving in Lab	—	(if applicable)

CANISTER PRESSURE

	Inches of Hg	
Initial Pressure (to field)	—	required (from lab record log) after return
Final Pressure (from field)	—	required (from lab record log) after return

Data Shipped: _____
Date Received: _____
Individual Canister Certification (provide File #): _____
Batch Certification (provide Batch ID#): _____

Signature/Title
GC/MS Analyst for TO-15

ATTACHMENT D

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Knoxville
5815 Middlebrook Pike
Knoxville, TN 37921
Tel: (865)291-3000

TestAmerica Job ID: 140-13463-1
Client Project/Site: Ashland Alterman (Jonesboro)

For:
EHS Support, LLC
228 4th Avenue
Decatur, Georgia 30033

Attn: Kris Spikes

Kathryn Smith

Authorized for release by:
11/30/2018 9:54:43 AM
Kathryn Smith, Manager of Project Management
(912)250-0275
kathy.smith@testamericainc.com

Designee for

Jerry Lanier, Project Manager I
(912)250-0281
jerry.lanier@testamericainc.com

Table of Contents

Glossary

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

Job ID: 140-13463-1

Laboratory: TestAmerica Knoxville

Narrative

CASE NARRATIVE

Client: EHS Support, LLC

Project: Ashland Alterman (Jonesboro)

Report Number: 140-13463-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In the event of interference or analytes present at high concentrations, samples may be diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

RECEIPT

The samples were received on 11/27/2018; the samples arrived in good condition.

Receipt Exceptions

The container label for the following sample did not match the information listed on the Chain-of-Custody (COC): SG-LUM-02DUP (140-13463-4). The container labels list SG-LUM-02, while the COC lists SG-LUM-02DUP. The sample was matched by the canister asset number listed on the COC.

VOLATILE ORGANIC COMPOUNDS IN AMBIENT AIR

Samples SG-LUM-01 (140-13463-1), SG-LUM-01D (140-13463-2), SG-LUM-02 (140-13463-3) and SG-LUM-02DUP (140-13463-4) were analyzed for Volatile Organic Compounds in Ambient Air in accordance with EPA Method TO-15. The samples were analyzed on 11/27/2018 and 11/28/2018.

Samples SG-LUM-01D (140-13463-2)[1.5X], SG-LUM-02 (140-13463-3)[1.97X] and SG-LUM-02DUP (140-13463-4)[2.14X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

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

Detection Summary

Client: EHS Support, LLC
Project/Site: Ashland Alterman (Jonesboro)

TestAmerica Job ID: 140-13463-1

Client Sample ID: SG-LUM-01 — Lab Sample ID: 140-13463-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	19		6.4		ug/m3	1		TO-15	Total/NA
Ethylbenzene	56		8.7		ug/m3	1		TO-15	Total/NA
Vinyl chloride	18		10		ug/m3	1		TO-15	Total/NA
Xylenes, Total	310		17		ug/m3	1		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	5.9		2.0		ppb v/v	1		TO-15	Total/NA
Ethylbenzene	13		2.0		ppb v/v	1		TO-15	Total/NA
Vinyl chloride	7.0		4.0		ppb v/v	1		TO-15	Total/NA
Xylenes, Total	71		4.0		ppb v/v	1		TO-15	Total/NA

Client Sample ID: SG-LUM-01D — Lab Sample ID: 140-13463-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide	41		12		ug/m3	1.5		TO-15	Total/NA
Ethylbenzene	14		8.7		ug/m3	1.5		TO-15	Total/NA
Vinyl chloride	18		10		ug/m3	1.5		TO-15	Total/NA
Xylenes, Total	91		17		ug/m3	1.5		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide	13		4.0		ppb v/v	1.5		TO-15	Total/NA
Ethylbenzene	3.2		2.0		ppb v/v	1.5		TO-15	Total/NA
Vinyl chloride	7.2		4.0		ppb v/v	1.5		TO-15	Total/NA
Xylenes, Total	21		4.0		ppb v/v	1.5		TO-15	Total/NA

Client Sample ID: SG-LUM-02 — Lab Sample ID: 140-13463-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	31		6.5		ug/m3	1.97		TO-15	Total/NA
Ethylbenzene	110		8.8		ug/m3	1.97		TO-15	Total/NA
Vinyl chloride	10		10		ug/m3	1.97		TO-15	Total/NA
Xylenes, Total	570		18		ug/m3	1.97		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	9.6		2.0		ppb v/v	1.97		TO-15	Total/NA
Ethylbenzene	25		2.0		ppb v/v	1.97		TO-15	Total/NA
Vinyl chloride	4.0		4.0		ppb v/v	1.97		TO-15	Total/NA
Xylenes, Total	130		4.0		ppb v/v	1.97		TO-15	Total/NA

Client Sample ID: SG-LUM-02DUP — Lab Sample ID: 140-13463-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	29		6.4		ug/m3	2.14		TO-15	Total/NA
Ethylbenzene	97		8.6		ug/m3	2.14		TO-15	Total/NA
Xylenes, Total	490		17		ug/m3	2.14		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	9.1		2.0		ppb v/v	2.14		TO-15	Total/NA
Ethylbenzene	22		2.0		ppb v/v	2.14		TO-15	Total/NA
Xylenes, Total	110		4.0		ppb v/v	2.14		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

Client: EHS Support, LLC
Project/Site: Ashland Alterman (Jonesboro)

TestAmerica Job ID: 140-13463-1

Client Sample ID: SG-LUM-01
Date Collected: 11/26/18 13:00
Date Received: 11/27/18 10:00
Sample Container: Summa Canister 6L

Lab Sample ID: 140-13463-1
Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<180		180		ug/m3			11/27/18 23:21	1
Benzene	**19**		6.4		ug/m3			11/27/18 23:21	1
Bromoform	<21		21		ug/m3			11/27/18 23:21	1
Bromomethane	<7.8		7.8		ug/m3			11/27/18 23:21	1
2-Butanone (MEK)	<29		29		ug/m3			11/27/18 23:21	1
Carbon disulfide	<12		12		ug/m3			11/27/18 23:21	1
Carbon tetrachloride	<13		13		ug/m3			11/27/18 23:21	1
Chlorobenzene	<9.2		9.2		ug/m3			11/27/18 23:21	1
Chlorodibromomethane	<17		17		ug/m3			11/27/18 23:21	1
Chloroethane	<5.3		5.3		ug/m3			11/27/18 23:21	1
Chloroform	<9.8		9.8		ug/m3			11/27/18 23:21	1
Chloromethane	<21		21		ug/m3			11/27/18 23:21	1
cis-1,2-Dichloroethene	<7.9		7.9		ug/m3			11/27/18 23:21	1
cis-1,3-Dichloropropene	<18		18		ug/m3			11/27/18 23:21	1
Dichlorobromomethane	<13		13		ug/m3			11/27/18 23:21	1
1,1-Dichloroethane	<8.1		8.1		ug/m3			11/27/18 23:21	1
1,2-Dichloroethane	<8.1		8.1		ug/m3			11/27/18 23:21	1
1,1-Dichloroethene	<7.9		7.9		ug/m3			11/27/18 23:21	1
1,2-Dichloropropane	<9.2		9.2		ug/m3			11/27/18 23:21	1
Ethylbenzene	**56**		8.7		ug/m3			11/27/18 23:21	1
2-Hexanone	<16		16		ug/m3			11/27/18 23:21	1
Methylene Chloride	<35		35		ug/m3			11/27/18 23:21	1
4-Methyl-2-pentanone (MIBK)	<41		41		ug/m3			11/27/18 23:21	1
Styrene	<8.5		8.5		ug/m3			11/27/18 23:21	1
1,1,2,2-Tetrachloroethane	<14		14		ug/m3			11/27/18 23:21	1
Tetrachloroethene	<14		14		ug/m3			11/27/18 23:21	1
Toluene	<38		38		ug/m3			11/27/18 23:21	1
trans-1,2-Dichloroethene	<7.9		7.9		ug/m3			11/27/18 23:21	1
trans-1,3-Dichloropropene	<9.1		9.1		ug/m3			11/27/18 23:21	1
1,1,1-Trichloroethane	<11		11		ug/m3			11/27/18 23:21	1
1,1,2-Trichloroethane	<11		11		ug/m3			11/27/18 23:21	1
Trichloroethene	<11		11		ug/m3			11/27/18 23:21	1
Vinyl chloride	**18**		10		ug/m3			11/27/18 23:21	1
Xylenes, Total	**310**		17		ug/m3			11/27/18 23:21	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<75		75		ppb v/v			11/27/18 23:21	1
Benzene	**5.9**		2.0		ppb v/v			11/27/18 23:21	1
Bromoform	<2.0		2.0		ppb v/v			11/27/18 23:21	1
Bromomethane	<2.0		2.0		ppb v/v			11/27/18 23:21	1
2-Butanone (MEK)	<10		10		ppb v/v			11/27/18 23:21	1
Carbon disulfide	<4.0		4.0		ppb v/v			11/27/18 23:21	1
Carbon tetrachloride	<2.0		2.0		ppb v/v			11/27/18 23:21	1
Chlorobenzene	<2.0		2.0		ppb v/v			11/27/18 23:21	1
Chlorodibromomethane	<2.0		2.0		ppb v/v			11/27/18 23:21	1
Chloroethane	<2.0		2.0		ppb v/v			11/27/18 23:21	1
Chloroform	<2.0		2.0		ppb v/v			11/27/18 23:21	1
Chloromethane	<10		10		ppb v/v			11/27/18 23:21	1
cis-1,2-Dichloroethene	<2.0		2.0		ppb v/v			11/27/18 23:21	1

Client Sample ID: SG-LUM-01

Lab Sample ID: 140-13463-1

Date Collected: 11/26/18 13:00
Matrix: Air
Date Received: 11/27/18 10:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	<4.0		4.0		ppb v/v			11/27/18 23:21	1
Dichlorobromomethane	<2.0		2.0		ppb v/v			11/27/18 23:21	1
1,1-Dichloroethane	<2.0		2.0		ppb v/v			11/27/18 23:21	1
1,2-Dichloroethane	<2.0		2.0		ppb v/v			11/27/18 23:21	1
1,1-Dichloroethene	<2.0		2.0		ppb v/v			11/27/18 23:21	1
1,2-Dichloropropane	<2.0		2.0		ppb v/v			11/27/18 23:21	1
Ethylbenzene	**13**		2.0		ppb v/v			11/27/18 23:21	1
2-Hexanone	<4.0		4.0		ppb v/v			11/27/18 23:21	1
Methylene Chloride	<10		10		ppb v/v			11/27/18 23:21	1
4-Methyl-2-pentanone (MIBK)	<10		10		ppb v/v			11/27/18 23:21	1
Styrene	<2.0		2.0		ppb v/v			11/27/18 23:21	1
1,1,2,2-Tetrachloroethane	<2.0		2.0		ppb v/v			11/27/18 23:21	1
Tetrachloroethene	<2.0		2.0		ppb v/v			11/27/18 23:21	1
Toluene	<10		10		ppb v/v			11/27/18 23:21	1
trans-1,2-Dichloroethene	<2.0		2.0		ppb v/v			11/27/18 23:21	1
trans-1,3-Dichloropropene	<2.0		2.0		ppb v/v			11/27/18 23:21	1
1,1,1-Trichloroethane	<2.0		2.0		ppb v/v			11/27/18 23:21	1
1,1,2-Trichloroethane	<2.0		2.0		ppb v/v			11/27/18 23:21	1
Trichloroethene	<2.0		2.0		ppb v/v			11/27/18 23:21	1
Vinyl chloride	**7.0**		4.0		ppb v/v			11/27/18 23:21	1
Xylenes, Total	**71**		4.0		ppb v/v			11/27/18 23:21	1

Client Sample ID: SG-LUM-01D

Lab Sample ID: 140-13463-2

Date Collected: 11/26/18 13:05
Matrix: Air
Date Received: 11/27/18 10:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<180		180		ug/m3			11/28/18 00:13	1.5
Benzene	<6.4		6.4		ug/m3			11/28/18 00:13	1.5
Bromoform	<21		21		ug/m3			11/28/18 00:13	1.5
Bromomethane	<7.8		7.8		ug/m3			11/28/18 00:13	1.5
2-Butanone (MEK)	<29		29		ug/m3			11/28/18 00:13	1.5
Carbon disulfide	**41**		12		ug/m3			11/28/18 00:13	1.5
Carbon tetrachloride	<13		13		ug/m3			11/28/18 00:13	1.5
Chlorobenzene	<9.2		9.2		ug/m3			11/28/18 00:13	1.5
Chlorodibromomethane	<17		17		ug/m3			11/28/18 00:13	1.5
Chloroethane	<5.3		5.3		ug/m3			11/28/18 00:13	1.5
Chloroform	<9.8		9.8		ug/m3			11/28/18 00:13	1.5
Chloromethane	<21		21		ug/m3			11/28/18 00:13	1.5
cis-1,2-Dichloroethene	<7.9		7.9		ug/m3			11/28/18 00:13	1.5
cis-1,3-Dichloropropene	<18		18		ug/m3			11/28/18 00:13	1.5
Dichlorobromomethane	<13		13		ug/m3			11/28/18 00:13	1.5
1,1-Dichloroethane	<8.1		8.1		ug/m3			11/28/18 00:13	1.5
1,2-Dichloroethane	<8.1		8.1		ug/m3			11/28/18 00:13	1.5
1,1-Dichloroethene	<7.9		7.9		ug/m3			11/28/18 00:13	1.5
1,2-Dichloropropane	<9.2		9.2		ug/m3			11/28/18 00:13	1.5
Ethylbenzene	**14**		8.7		ug/m3			11/28/18 00:13	1.5

Client Sample ID: SG-LUM-01D
Date Collected: 11/26/18 13:05
Date Received: 11/27/18 10:00
Sample Container: Summa Canister 6L

Lab Sample ID: 140-13463-2
Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Hexanone	<16		16		ug/m3			11/28/18 00:13	1.5
Methylene Chloride	<35		35		ug/m3			11/28/18 00:13	1.5
4-Methyl-2-pentanone (MIBK)	<41		41		ug/m3			11/28/18 00:13	1.5
Styrene	<8.5		8.5		ug/m3			11/28/18 00:13	1.5
1,1,2,2-Tetrachloroethane	<14		14		ug/m3			11/28/18 00:13	1.5
Tetrachloroethene	<14		14		ug/m3			11/28/18 00:13	1.5
Toluene	<38		38		ug/m3			11/28/18 00:13	1.5
trans-1,2-Dichloroethene	<7.9		7.9		ug/m3			11/28/18 00:13	1.5
trans-1,3-Dichloropropene	<9.1		9.1		ug/m3			11/28/18 00:13	1.5
1,1,1-Trichloroethane	<11		11		ug/m3			11/28/18 00:13	1.5
1,1,2-Trichloroethane	<11		11		ug/m3			11/28/18 00:13	1.5
Trichloroethene	<11		11		ug/m3			11/28/18 00:13	1.5
Vinyl chloride	**18**		10		ug/m3			11/28/18 00:13	1.5
Xylenes, Total	**91**		17		ug/m3			11/28/18 00:13	1.5

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<75		75		ppb v/v			11/28/18 00:13	1.5
Benzene	<2.0		2.0		ppb v/v			11/28/18 00:13	1.5
Bromoform	<2.0		2.0		ppb v/v			11/28/18 00:13	1.5
Bromomethane	<2.0		2.0		ppb v/v			11/28/18 00:13	1.5
2-Butanone (MEK)	<10		10		ppb v/v			11/28/18 00:13	1.5
Carbon disulfide	**13**		4.0		ppb v/v			11/28/18 00:13	1.5
Carbon tetrachloride	<2.0		2.0		ppb v/v			11/28/18 00:13	1.5
Chlorobenzene	<2.0		2.0		ppb v/v			11/28/18 00:13	1.5
Chlorodibromomethane	<2.0		2.0		ppb v/v			11/28/18 00:13	1.5
Chloroethane	<2.0		2.0		ppb v/v			11/28/18 00:13	1.5
Chloroform	<2.0		2.0		ppb v/v			11/28/18 00:13	1.5
Chloromethane	<10		10		ppb v/v			11/28/18 00:13	1.5
cis-1,2-Dichloroethene	<2.0		2.0		ppb v/v			11/28/18 00:13	1.5
cis-1,3-Dichloropropene	<4.0		4.0		ppb v/v			11/28/18 00:13	1.5
Dichlorobromomethane	<2.0		2.0		ppb v/v			11/28/18 00:13	1.5
1,1-Dichloroethane	<2.0		2.0		ppb v/v			11/28/18 00:13	1.5
1,2-Dichloroethane	<2.0		2.0		ppb v/v			11/28/18 00:13	1.5
1,1-Dichloroethene	<2.0		2.0		ppb v/v			11/28/18 00:13	1.5
1,2-Dichloropropane	<2.0		2.0		ppb v/v			11/28/18 00:13	1.5
Ethylbenzene	**3.2**		2.0		ppb v/v			11/28/18 00:13	1.5
2-Hexanone	<4.0		4.0		ppb v/v			11/28/18 00:13	1.5
Methylene Chloride	<10		10		ppb v/v			11/28/18 00:13	1.5
4-Methyl-2-pentanone (MIBK)	<10		10		ppb v/v			11/28/18 00:13	1.5
Styrene	<2.0		2.0		ppb v/v			11/28/18 00:13	1.5
1,1,2,2-Tetrachloroethane	<2.0		2.0		ppb v/v			11/28/18 00:13	1.5
Tetrachloroethene	<2.0		2.0		ppb v/v			11/28/18 00:13	1.5
Toluene	<10		10		ppb v/v			11/28/18 00:13	1.5
trans-1,2-Dichloroethene	<2.0		2.0		ppb v/v			11/28/18 00:13	1.5
trans-1,3-Dichloropropene	<2.0		2.0		ppb v/v			11/28/18 00:13	1.5
1,1,1-Trichloroethane	<2.0		2.0		ppb v/v			11/28/18 00:13	1.5
1,1,2-Trichloroethane	<2.0		2.0		ppb v/v			11/28/18 00:13	1.5
Trichloroethene	<2.0		2.0		ppb v/v			11/28/18 00:13	1.5
Vinyl chloride	**7.2**		4.0		ppb v/v			11/28/18 00:13	1.5

Client Sample ID: SG-LUM-01D

Lab Sample ID: 140-13463-2

Date Collected: 11/26/18 13:05
Matrix: Air
Date Received: 11/27/18 10:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	**21**		4.0		ppb v/v			11/28/18 00:13	1.5

Client Sample ID: SG-LUM-02

Lab Sample ID: 140-13463-3

Date Collected: 11/26/18 13:50
Matrix: Air
Date Received: 11/27/18 10:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<180		180		ug/m3			11/28/18 15:56	1.97
Benzene	**31**		6.5		ug/m3			11/28/18 15:56	1.97
Bromoform	<21		21		ug/m3			11/28/18 15:56	1.97
Bromomethane	<7.8		7.8		ug/m3			11/28/18 15:56	1.97
2-Butanone (MEK)	<30		30		ug/m3			11/28/18 15:56	1.97
Carbon disulfide	<13		13		ug/m3			11/28/18 15:56	1.97
Carbon tetrachloride	<13		13		ug/m3			11/28/18 15:56	1.97
Chlorobenzene	<9.3		9.3		ug/m3			11/28/18 15:56	1.97
Chlorodibromomethane	<17		17		ug/m3			11/28/18 15:56	1.97
Chloroethane	<5.3		5.3		ug/m3			11/28/18 15:56	1.97
Chloroform	<9.9		9.9		ug/m3			11/28/18 15:56	1.97
Chloromethane	<21		21		ug/m3			11/28/18 15:56	1.97
cis-1,2-Dichloroethene	<8.0		8.0		ug/m3			11/28/18 15:56	1.97
cis-1,3-Dichloropropene	<18		18		ug/m3			11/28/18 15:56	1.97
Dichlorobromomethane	<14		14		ug/m3			11/28/18 15:56	1.97
1,1-Dichloroethane	<8.2		8.2		ug/m3			11/28/18 15:56	1.97
1,2-Dichloroethane	<8.2		8.2		ug/m3			11/28/18 15:56	1.97
1,1-Dichloroethene	<8.0		8.0		ug/m3			11/28/18 15:56	1.97
1,2-Dichloropropane	<9.3		9.3		ug/m3			11/28/18 15:56	1.97
Ethylbenzene	**110**		8.8		ug/m3			11/28/18 15:56	1.97
2-Hexanone	<17		17		ug/m3			11/28/18 15:56	1.97
Methylene Chloride	<35		35		ug/m3			11/28/18 15:56	1.97
4-Methyl-2-pentanone (MIBK)	<41		41		ug/m3			11/28/18 15:56	1.97
Styrene	<8.6		8.6		ug/m3			11/28/18 15:56	1.97
1,1,2,2-Tetrachloroethane	<14		14		ug/m3			11/28/18 15:56	1.97
Tetrachloroethene	<14		14		ug/m3			11/28/18 15:56	1.97
Toluene	<38		38		ug/m3			11/28/18 15:56	1.97
trans-1,2-Dichloroethene	<8.0		8.0		ug/m3			11/28/18 15:56	1.97
trans-1,3-Dichloropropene	<9.2		9.2		ug/m3			11/28/18 15:56	1.97
1,1,1-Trichloroethane	<11		11		ug/m3			11/28/18 15:56	1.97
1,1,2-Trichloroethane	<11		11		ug/m3			11/28/18 15:56	1.97
Trichloroethene	<11		11		ug/m3			11/28/18 15:56	1.97
Vinyl chloride	**10**		10		ug/m3			11/28/18 15:56	1.97
Xylenes, Total	**570**		18		ug/m3			11/28/18 15:56	1.97

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<76		76		ppb v/v			11/28/18 15:56	1.97
Benzene	**9.6**		2.0		ppb v/v			11/28/18 15:56	1.97
Bromoform	<2.0		2.0		ppb v/v			11/28/18 15:56	1.97
Bromomethane	<2.0		2.0		ppb v/v			11/28/18 15:56	1.97

Client Sample ID: SG-LUM-02

Lab Sample ID: 140-13463-3
Matrix: Air
Date Collected: 11/26/18 13:50
Date Received: 11/27/18 10:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	<10		10		ppb v/v			11/28/18 15:56	1.97
Carbon disulfide	<4.0		4.0		ppb v/v			11/28/18 15:56	1.97
Carbon tetrachloride	<2.0		2.0		ppb v/v			11/28/18 15:56	1.97
Chlorobenzene	<2.0		2.0		ppb v/v			11/28/18 15:56	1.97
Chlorodibromomethane	<2.0		2.0		ppb v/v			11/28/18 15:56	1.97
Chloroethane	<2.0		2.0		ppb v/v			11/28/18 15:56	1.97
Chloroform	<2.0		2.0		ppb v/v			11/28/18 15:56	1.97
Chloromethane	<10		10		ppb v/v			11/28/18 15:56	1.97
cis-1,2-Dichloroethene	<2.0		2.0		ppb v/v			11/28/18 15:56	1.97
cis-1,3-Dichloropropene	<4.0		4.0		ppb v/v			11/28/18 15:56	1.97
Dichlorobromomethane	<2.0		2.0		ppb v/v			11/28/18 15:56	1.97
1,1-Dichloroethane	<2.0		2.0		ppb v/v			11/28/18 15:56	1.97
1,2-Dichloroethane	<2.0		2.0		ppb v/v			11/28/18 15:56	1.97
1,1-Dichloroethene	<2.0		2.0		ppb v/v			11/28/18 15:56	1.97
1,2-Dichloropropane	<2.0		2.0		ppb v/v			11/28/18 15:56	1.97
Ethylbenzene	**25**		2.0		ppb v/v			11/28/18 15:56	1.97
2-Hexanone	<4.0		4.0		ppb v/v			11/28/18 15:56	1.97
Methylene Chloride	<10		10		ppb v/v			11/28/18 15:56	1.97
4-Methyl-2-pentanone (MIBK)	<10		10		ppb v/v			11/28/18 15:56	1.97
Styrene	<2.0		2.0		ppb v/v			11/28/18 15:56	1.97
1,1,2,2-Tetrachloroethane	<2.0		2.0		ppb v/v			11/28/18 15:56	1.97
Tetrachloroethene	<2.0		2.0		ppb v/v			11/28/18 15:56	1.97
Toluene	<10		10		ppb v/v			11/28/18 15:56	1.97
trans-1,2-Dichloroethene	<2.0		2.0		ppb v/v			11/28/18 15:56	1.97
trans-1,3-Dichloropropene	<2.0		2.0		ppb v/v			11/28/18 15:56	1.97
1,1,1-Trichloroethane	<2.0		2.0		ppb v/v			11/28/18 15:56	1.97
1,1,2-Trichloroethane	<2.0		2.0		ppb v/v			11/28/18 15:56	1.97
Trichloroethene	<2.0		2.0		ppb v/v			11/28/18 15:56	1.97
Vinyl chloride	**4.0**		4.0		ppb v/v			11/28/18 15:56	1.97
Xylenes, Total	**130**		4.0		ppb v/v			11/28/18 15:56	1.97

Client Sample ID: SG-LUM-02DUP

Lab Sample ID: 140-13463-4
Matrix: Air
Date Collected: 11/26/18 13:50
Date Received: 11/27/18 10:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<180		180		ug/m3			11/28/18 16:39	2.14
Benzene	**29**		6.4		ug/m3			11/28/18 16:39	2.14
Bromoform	<21		21		ug/m3			11/28/18 16:39	2.14
Bromomethane	<7.7		7.7		ug/m3			11/28/18 16:39	2.14
2-Butanone (MEK)	<29		29		ug/m3			11/28/18 16:39	2.14
Carbon disulfide	<12		12		ug/m3			11/28/18 16:39	2.14
Carbon tetrachloride	<13		13		ug/m3			11/28/18 16:39	2.14
Chlorobenzene	<9.2		9.2		ug/m3			11/28/18 16:39	2.14
Chlorodibromomethane	<17		17		ug/m3			11/28/18 16:39	2.14
Chloroethane	<5.3		5.3		ug/m3			11/28/18 16:39	2.14
Chloroform	<9.7		9.7		ug/m3			11/28/18 16:39	2.14

Client Sample ID: SG-LUM-02DUP
Date Collected: 11/26/18 13:50
Date Received: 11/27/18 10:00
Sample Container: Summa Canister 6L

Lab Sample ID: 140-13463-4
Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	<21		21		ug/m3			11/28/18 16:39	2.14
cis-1,2-Dichloroethene	<7.9		7.9		ug/m3			11/28/18 16:39	2.14
cis-1,3-Dichloropropene	<18		18		ug/m3			11/28/18 16:39	2.14
Dichlorobromomethane	<13		13		ug/m3			11/28/18 16:39	2.14
1,1-Dichloroethane	<8.1		8.1		ug/m3			11/28/18 16:39	2.14
1,2-Dichloroethane	<8.1		8.1		ug/m3			11/28/18 16:39	2.14
1,1-Dichloroethene	<7.9		7.9		ug/m3			11/28/18 16:39	2.14
1,2-Dichloropropane	<9.2		9.2		ug/m3			11/28/18 16:39	2.14
Ethylbenzene	**97**		8.6		ug/m3			11/28/18 16:39	2.14
2-Hexanone	<16		16		ug/m3			11/28/18 16:39	2.14
Methylene Chloride	<35		35		ug/m3			11/28/18 16:39	2.14
4-Methyl-2-pentanone (MIBK)	<41		41		ug/m3			11/28/18 16:39	2.14
Styrene	<8.5		8.5		ug/m3			11/28/18 16:39	2.14
1,1,2,2-Tetrachloroethane	<14		14		ug/m3			11/28/18 16:39	2.14
Tetrachloroethene	<14		14		ug/m3			11/28/18 16:39	2.14
Toluene	<38		38		ug/m3			11/28/18 16:39	2.14
trans-1,2-Dichloroethene	<7.9		7.9		ug/m3			11/28/18 16:39	2.14
trans-1,3-Dichloropropene	<9.0		9.0		ug/m3			11/28/18 16:39	2.14
1,1,1-Trichloroethane	<11		11		ug/m3			11/28/18 16:39	2.14
1,1,2-Trichloroethane	<11		11		ug/m3			11/28/18 16:39	2.14
Trichloroethene	<11		11		ug/m3			11/28/18 16:39	2.14
Vinyl chloride	<10		10		ug/m3			11/28/18 16:39	2.14
Xylenes, Total	**490**		17		ug/m3			11/28/18 16:39	2.14

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<75		75		ppb v/v			11/28/18 16:39	2.14
Benzene	**9.1**		2.0		ppb v/v			11/28/18 16:39	2.14
Bromoform	<2.0		2.0		ppb v/v			11/28/18 16:39	2.14
Bromomethane	<2.0		2.0		ppb v/v			11/28/18 16:39	2.14
2-Butanone (MEK)	<10		10		ppb v/v			11/28/18 16:39	2.14
Carbon disulfide	<4.0		4.0		ppb v/v			11/28/18 16:39	2.14
Carbon tetrachloride	<2.0		2.0		ppb v/v			11/28/18 16:39	2.14
Chlorobenzene	<2.0		2.0		ppb v/v			11/28/18 16:39	2.14
Chlorodibromomethane	<2.0		2.0		ppb v/v			11/28/18 16:39	2.14
Chloroethane	<2.0		2.0		ppb v/v			11/28/18 16:39	2.14
Chloroform	<2.0		2.0		ppb v/v			11/28/18 16:39	2.14
Chloromethane	<10		10		ppb v/v			11/28/18 16:39	2.14
cis-1,2-Dichloroethene	<2.0		2.0		ppb v/v			11/28/18 16:39	2.14
cis-1,3-Dichloropropene	<4.0		4.0		ppb v/v			11/28/18 16:39	2.14
Dichlorobromomethane	<2.0		2.0		ppb v/v			11/28/18 16:39	2.14
1,1-Dichloroethane	<2.0		2.0		ppb v/v			11/28/18 16:39	2.14
1,2-Dichloroethane	<2.0		2.0		ppb v/v			11/28/18 16:39	2.14
1,1-Dichloroethene	<2.0		2.0		ppb v/v			11/28/18 16:39	2.14
1,2-Dichloropropane	<2.0		2.0		ppb v/v			11/28/18 16:39	2.14
Ethylbenzene	**22**		2.0		ppb v/v			11/28/18 16:39	2.14
2-Hexanone	<4.0		4.0		ppb v/v			11/28/18 16:39	2.14
Methylene Chloride	<10		10		ppb v/v			11/28/18 16:39	2.14
4-Methyl-2-pentanone (MIBK)	<10		10		ppb v/v			11/28/18 16:39	2.14
Styrene	<2.0		2.0		ppb v/v			11/28/18 16:39	2.14

Client: EHS Support, LLC
Project/Site: Ashland Alterman (Jonesboro)

TestAmerica Job ID: 140-13463-1

Client Sample ID: SG-LUM-02DUP
Date Collected: 11/26/18 13:50
Date Received: 11/27/18 10:00
Sample Container: Summa Canister 6L

Lab Sample ID: 140-13463-4
Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	<2.0		2.0		ppb v/v			11/28/18 16:39	2.14
Tetrachloroethene	<2.0		2.0		ppb v/v			11/28/18 16:39	2.14
Toluene	<10		10		ppb v/v			11/28/18 16:39	2.14
trans-1,2-Dichloroethene	<2.0		2.0		ppb v/v			11/28/18 16:39	2.14
trans-1,3-Dichloropropene	<2.0		2.0		ppb v/v			11/28/18 16:39	2.14
1,1,1-Trichloroethane	<2.0		2.0		ppb v/v			11/28/18 16:39	2.14
1,1,2-Trichloroethane	<2.0		2.0		ppb v/v			11/28/18 16:39	2.14
Trichloroethene	<2.0		2.0		ppb v/v			11/28/18 16:39	2.14
Vinyl chloride	<4.0		4.0		ppb v/v			11/28/18 16:39	2.14
Xylenes, Total	**110**		4.0		ppb v/v			11/28/18 16:39	2.14

Default Detection Limits

Client: EHS Support, LLC
Project/Site: Ashland Alterman (Jonesboro)

TestAmerica Job ID: 140-13463-1

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	RL	MDL	Units	Method
1,1,1-Trichloroethane	1.1	0.16	ug/m3	TO-15
1,1,1-Trichloroethane	0.20	0.030	ppb v/v	TO-15
1,1,2,2-Tetrachloroethane	1.4	0.42	ug/m3	TO-15
1,1,2,2-Tetrachloroethane	0.20	0.061	ppb v/v	TO-15
1,1,2-Trichloroethane	1.1	0.28	ug/m3	TO-15
1,1,2-Trichloroethane	0.20	0.052	ppb v/v	TO-15
1,1-Dichloroethane	0.81	0.11	ug/m3	TO-15
1,1-Dichloroethane	0.20	0.026	ppb v/v	TO-15
1,1-Dichloroethene	0.79	0.13	ug/m3	TO-15
1,1-Dichloroethene	0.20	0.034	ppb v/v	TO-15
1,2-Dichloroethane	0.81	0.19	ug/m3	TO-15
1,2-Dichloroethane	0.20	0.047	ppb v/v	TO-15
1,2-Dichloropropane	0.92	0.24	ug/m3	TO-15
1,2-Dichloropropane	0.20	0.052	ppb v/v	TO-15
2-Butanone (MEK)	2.9	0.59	ug/m3	TO-15
2-Butanone (MEK)	1.0	0.20	ppb v/v	TO-15
2-Hexanone	1.6	0.24	ug/m3	TO-15
2-Hexanone	0.40	0.058	ppb v/v	TO-15
4-Methyl-2-pentanone (MIBK)	4.1	0.80	ug/m3	TO-15
4-Methyl-2-pentanone (MIBK)	1.0	0.20	ppb v/v	TO-15
Acetone	18	3.3	ug/m3	TO-15
Acetone	7.5	1.4	ppb v/v	TO-15
Benzene	0.64	0.18	ug/m3	TO-15
Benzene	0.20	0.056	ppb v/v	TO-15
Bromoform	2.1	0.50	ug/m3	TO-15
Bromoform	0.20	0.048	ppb v/v	TO-15
Bromomethane	0.78	0.12	ug/m3	TO-15
Bromomethane	0.20	0.032	ppb v/v	TO-15
Carbon disulfide	1.2	0.097	ug/m3	TO-15
Carbon disulfide	0.40	0.031	ppb v/v	TO-15
Carbon tetrachloride	1.3	0.24	ug/m3	TO-15
Carbon tetrachloride	0.20	0.038	ppb v/v	TO-15
Chlorobenzene	0.92	0.23	ug/m3	TO-15
Chlorobenzene	0.20	0.049	ppb v/v	TO-15
Chlorodibromomethane	1.7	0.36	ug/m3	TO-15
Chlorodibromomethane	0.20	0.042	ppb v/v	TO-15
Chloroethane	0.53	0.092	ug/m3	TO-15
Chloroethane	0.20	0.035	ppb v/v	TO-15
Chloroform	0.98	0.19	ug/m3	TO-15
Chloroform	0.20	0.038	ppb v/v	TO-15
Chloromethane	2.1	0.33	ug/m3	TO-15
Chloromethane	1.0	0.16	ppb v/v	TO-15
cis-1,2-Dichloroethene	0.79	0.24	ug/m3	TO-15
cis-1,2-Dichloroethene	0.20	0.060	ppb v/v	TO-15
cis-1,3-Dichloropropene	1.8	0.34	ug/m3	TO-15
cis-1,3-Dichloropropene	0.40	0.074	ppb v/v	TO-15
Dichlorobromomethane	1.3	0.29	ug/m3	TO-15
Dichlorobromomethane	0.20	0.044	ppb v/v	TO-15
Ethylbenzene	0.87	0.30	ug/m3	TO-15
Ethylbenzene	0.20	0.068	ppb v/v	TO-15
Methylene Chloride	3.5	1.1	ug/m3	TO-15
Methylene Chloride	1.0	0.32	ppb v/v	TO-15

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	RL	MDL	Units	Method
Styrene	0.85	0.25	ug/m3	TO-15
Styrene	0.20	0.058	ppb v/v	TO-15
Tetrachloroethene	1.4	0.27	ug/m3	TO-15
Tetrachloroethene	0.20	0.040	ppb v/v	TO-15
Toluene	3.8	0.45	ug/m3	TO-15
Toluene	1.0	0.12	ppb v/v	TO-15
trans-1,2-Dichloroethene	0.79	0.20	ug/m3	TO-15
trans-1,2-Dichloroethene	0.20	0.050	ppb v/v	TO-15
trans-1,3-Dichloropropene	0.91	0.22	ug/m3	TO-15
trans-1,3-Dichloropropene	0.20	0.048	ppb v/v	TO-15
Trichloroethene	1.1	0.19	ug/m3	TO-15
Trichloroethene	0.20	0.036	ppb v/v	TO-15
Vinyl chloride	1.0	0.18	ug/m3	TO-15
Vinyl chloride	0.40	0.071	ppb v/v	TO-15
Xylenes, Total	1.7	0.26	ug/m3	TO-15
Xylenes, Total	0.40	0.061	ppb v/v	TO-15

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Lab Sample ID: MB 140-25627/5
Matrix: Air
Analysis Batch: 25627

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<18		18		ug/m3			11/27/18 11:47	1
Benzene	<0.64		0.64		ug/m3			11/27/18 11:47	1
Bromoform	<2.1		2.1		ug/m3			11/27/18 11:47	1
Bromomethane	<0.78		0.78		ug/m3			11/27/18 11:47	1
2-Butanone (MEK)	<2.9		2.9		ug/m3			11/27/18 11:47	1
Carbon disulfide	<1.2		1.2		ug/m3			11/27/18 11:47	1
Carbon tetrachloride	<1.3		1.3		ug/m3			11/27/18 11:47	1
Chlorobenzene	<0.92		0.92		ug/m3			11/27/18 11:47	1
Chlorodibromomethane	<1.7		1.7		ug/m3			11/27/18 11:47	1
Chloroethane	<0.53		0.53		ug/m3			11/27/18 11:47	1
Chloroform	<0.98		0.98		ug/m3			11/27/18 11:47	1
Chloromethane	<2.1		2.1		ug/m3			11/27/18 11:47	1
cis-1,2-Dichloroethene	<0.79		0.79		ug/m3			11/27/18 11:47	1
cis-1,3-Dichloropropene	<1.8		1.8		ug/m3			11/27/18 11:47	1
Dichlorobromomethane	<1.3		1.3		ug/m3			11/27/18 11:47	1
1,1-Dichloroethane	<0.81		0.81		ug/m3			11/27/18 11:47	1
1,2-Dichloroethane	<0.81		0.81		ug/m3			11/27/18 11:47	1
1,1-Dichloroethene	<0.79		0.79		ug/m3			11/27/18 11:47	1
1,2-Dichloropropane	<0.92		0.92		ug/m3			11/27/18 11:47	1
Ethylbenzene	<0.87		0.87		ug/m3			11/27/18 11:47	1
2-Hexanone	<1.6		1.6		ug/m3			11/27/18 11:47	1
Methylene Chloride	<3.5		3.5		ug/m3			11/27/18 11:47	1
4-Methyl-2-pentanone (MIBK)	<4.1		4.1		ug/m3			11/27/18 11:47	1
Styrene	<0.85		0.85		ug/m3			11/27/18 11:47	1
1,1,2,2-Tetrachloroethane	<1.4		1.4		ug/m3			11/27/18 11:47	1
Tetrachloroethene	<1.4		1.4		ug/m3			11/27/18 11:47	1
Toluene	<3.8		3.8		ug/m3			11/27/18 11:47	1
trans-1,2-Dichloroethene	<0.79		0.79		ug/m3			11/27/18 11:47	1
trans-1,3-Dichloropropene	<0.91		0.91		ug/m3			11/27/18 11:47	1
1,1,1-Trichloroethane	<1.1		1.1		ug/m3			11/27/18 11:47	1
1,1,2-Trichloroethane	<1.1		1.1		ug/m3			11/27/18 11:47	1
Trichloroethene	<1.1		1.1		ug/m3			11/27/18 11:47	1
Vinyl chloride	<1.0		1.0		ug/m3			11/27/18 11:47	1
Xylenes, Total	<1.7		1.7		ug/m3			11/27/18 11:47	1

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<7.5		7.5		ppb v/v			11/27/18 11:47	1
Benzene	<0.20		0.20		ppb v/v			11/27/18 11:47	1
Bromoform	<0.20		0.20		ppb v/v			11/27/18 11:47	1
Bromomethane	<0.20		0.20		ppb v/v			11/27/18 11:47	1
2-Butanone (MEK)	<1.0		1.0		ppb v/v			11/27/18 11:47	1
Carbon disulfide	<0.40		0.40		ppb v/v			11/27/18 11:47	1
Carbon tetrachloride	<0.20		0.20		ppb v/v			11/27/18 11:47	1
Chlorobenzene	<0.20		0.20		ppb v/v			11/27/18 11:47	1
Chlorodibromomethane	<0.20		0.20		ppb v/v			11/27/18 11:47	1
Chloroethane	<0.20		0.20		ppb v/v			11/27/18 11:47	1
Chloroform	<0.20		0.20		ppb v/v			11/27/18 11:47	1
Chloromethane	<1.0		1.0		ppb v/v			11/27/18 11:47	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: MB 140-25627/5
Matrix: Air
Analysis Batch: 25627

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	<0.20		0.20		ppb v/v			11/27/18 11:47	1
cis-1,3-Dichloropropene	<0.40		0.40		ppb v/v			11/27/18 11:47	1
Dichlorobromomethane	<0.20		0.20		ppb v/v			11/27/18 11:47	1
1,1-Dichloroethane	<0.20		0.20		ppb v/v			11/27/18 11:47	1
1,2-Dichloroethane	<0.20		0.20		ppb v/v			11/27/18 11:47	1
1,1-Dichloroethene	<0.20		0.20		ppb v/v			11/27/18 11:47	1
1,2-Dichloropropane	<0.20		0.20		ppb v/v			11/27/18 11:47	1
Ethylbenzene	<0.20		0.20		ppb v/v			11/27/18 11:47	1
2-Hexanone	<0.40		0.40		ppb v/v			11/27/18 11:47	1
Methylene Chloride	<1.0		1.0		ppb v/v			11/27/18 11:47	1
4-Methyl-2-pentanone (MIBK)	<1.0		1.0		ppb v/v			11/27/18 11:47	1
Styrene	<0.20		0.20		ppb v/v			11/27/18 11:47	1
1,1,2,2-Tetrachloroethane	<0.20		0.20		ppb v/v			11/27/18 11:47	1
Tetrachloroethene	<0.20		0.20		ppb v/v			11/27/18 11:47	1
Toluene	<1.0		1.0		ppb v/v			11/27/18 11:47	1
trans-1,2-Dichloroethene	<0.20		0.20		ppb v/v			11/27/18 11:47	1
trans-1,3-Dichloropropene	<0.20		0.20		ppb v/v			11/27/18 11:47	1
1,1,1-Trichloroethane	<0.20		0.20		ppb v/v			11/27/18 11:47	1
1,1,2-Trichloroethane	<0.20		0.20		ppb v/v			11/27/18 11:47	1
Trichloroethene	<0.20		0.20		ppb v/v			11/27/18 11:47	1
Vinyl chloride	<0.40		0.40		ppb v/v			11/27/18 11:47	1
Xylenes, Total	<0.40		0.40		ppb v/v			11/27/18 11:47	1

Lab Sample ID: LCS 140-25627/1002
Matrix: Air
Analysis Batch: 25627

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	14.3	14.5		ug/m3		101	60 - 140
Benzene	6.39	6.05		ug/m3		95	70 - 130
Bromoform	20.7	23.9		ug/m3		116	60 - 140
Bromomethane	7.77	8.53		ug/m3		110	70 - 130
2-Butanone (MEK)	5.90	5.86		ug/m3		99	60 - 140
Carbon disulfide	6.23	6.00		ug/m3		96	70 - 130
Carbon tetrachloride	12.6	14.7		ug/m3		117	70 - 130
Chlorobenzene	9.21	9.56		ug/m3		104	70 - 130
Chlorodibromomethane	17.0	20.2		ug/m3		118	70 - 130
Chloroethane	5.28	5.48		ug/m3		104	70 - 130
Chloroform	9.77	10.2		ug/m3		104	70 - 130
Chloromethane	4.13	3.89		ug/m3		94	60 - 140
cis-1,2-Dichloroethene	7.93	7.81		ug/m3		99	70 - 130
cis-1,3-Dichloropropene	9.08	9.94		ug/m3		110	70 - 130
Dichlorobromomethane	13.4	14.9		ug/m3		111	70 - 130
1,1-Dichloroethane	8.09	7.91		ug/m3		98	70 - 130
1,2-Dichloroethane	8.09	8.62		ug/m3		106	70 - 130
1,1-Dichloroethene	7.93	7.47		ug/m3		94	70 - 130
1,2-Dichloropropane	9.24	9.05		ug/m3		98	70 - 130
Ethylbenzene	8.68	9.11		ug/m3		105	70 - 130

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 140-25627/1002
Matrix: Air
Analysis Batch: 25627

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Hexanone	8.20	8.44		ug/m3		103	60 - 140
Methylene Chloride	6.95	6.03		ug/m3		87	70 - 130
4-Methyl-2-pentanone (MIBK)	8.19	8.91		ug/m3		109	60 - 140
Styrene	8.52	9.62		ug/m3		113	70 - 130
1,1,2,2-Tetrachloroethane	13.7	15.5		ug/m3		113	70 - 130
Tetrachloroethene	13.6	14.4		ug/m3		106	70 - 130
Toluene	7.54	7.62		ug/m3		101	70 - 130
trans-1,2-Dichloroethene	7.93	7.63		ug/m3		96	70 - 130
trans-1,3-Dichloropropene	9.08	9.83		ug/m3		108	70 - 130
1,1,1-Trichloroethane	10.9	12.0		ug/m3		110	70 - 130
1,1,2-Trichloroethane	10.9	11.6		ug/m3		106	70 - 130
Trichloroethene	10.7	11.2		ug/m3		104	70 - 130
Vinyl chloride	5.11	5.05		ug/m3		99	70 - 130
Xylenes, Total	26.1	28.7		ug/m3		110	70 - 130

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	6.0	6.09		ppb v/v		101	60 - 140
Benzene	2.0	1.89		ppb v/v		95	70 - 130
Bromoform	2.0	2.32		ppb v/v		116	60 - 140
Bromomethane	2.0	2.20		ppb v/v		110	70 - 130
2-Butanone (MEK)	2.0	1.99		ppb v/v		99	60 - 140
Carbon disulfide	2.0	1.93		ppb v/v		96	70 - 130
Carbon tetrachloride	2.0	2.34		ppb v/v		117	70 - 130
Chlorobenzene	2.0	2.08		ppb v/v		104	70 - 130
Chlorodibromomethane	2.0	2.37		ppb v/v		118	70 - 130
Chloroethane	2.0	2.08		ppb v/v		104	70 - 130
Chloroform	2.0	2.09		ppb v/v		104	70 - 130
Chloromethane	2.0	1.89		ppb v/v		94	60 - 140
cis-1,2-Dichloroethene	2.0	1.97		ppb v/v		99	70 - 130
cis-1,3-Dichloropropene	2.0	2.19		ppb v/v		110	70 - 130
Dichlorobromomethane	2.0	2.22		ppb v/v		111	70 - 130
1,1-Dichloroethane	2.0	1.96		ppb v/v		98	70 - 130
1,2-Dichloroethane	2.0	2.13		ppb v/v		106	70 - 130
1,1-Dichloroethene	2.0	1.88		ppb v/v		94	70 - 130
1,2-Dichloropropane	2.0	1.96		ppb v/v		98	70 - 130
Ethylbenzene	2.0	2.10		ppb v/v		105	70 - 130
2-Hexanone	2.0	2.06		ppb v/v		103	60 - 140
Methylene Chloride	2.0	1.73		ppb v/v		87	70 - 130
4-Methyl-2-pentanone (MIBK)	2.0	2.18		ppb v/v		109	60 - 140
Styrene	2.0	2.26		ppb v/v		113	70 - 130
1,1,2,2-Tetrachloroethane	2.0	2.25		ppb v/v		113	70 - 130
Tetrachloroethene	2.0	2.12		ppb v/v		106	70 - 130
Toluene	2.0	2.02		ppb v/v		101	70 - 130
trans-1,2-Dichloroethene	2.0	1.92		ppb v/v		96	70 - 130
trans-1,3-Dichloropropene	2.0	2.17		ppb v/v		108	70 - 130
1,1,1-Trichloroethane	2.0	2.20		ppb v/v		110	70 - 130
1,1,2-Trichloroethane	2.0	2.12		ppb v/v		106	70 - 130
Trichloroethene	2.0	2.08		ppb v/v		104	70 - 130

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 140-25627/1002
Matrix: Air
Analysis Batch: 25627

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Vinyl chloride	2.0	1.98		ppb v/v		99	70 - 130
Xylenes, Total	6.0	6.60		ppb v/v		110	70 - 130

Lab Sample ID: MB 140-25662/6
Matrix: Air
Analysis Batch: 25662

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<18		18		ug/m3			11/28/18 12:53	1
Benzene	<0.64		0.64		ug/m3			11/28/18 12:53	1
Bromoform	<2.1		2.1		ug/m3			11/28/18 12:53	1
Bromomethane	<0.78		0.78		ug/m3			11/28/18 12:53	1
2-Butanone (MEK)	<2.9		2.9		ug/m3			11/28/18 12:53	1
Carbon disulfide	<1.2		1.2		ug/m3			11/28/18 12:53	1
Carbon tetrachloride	<1.3		1.3		ug/m3			11/28/18 12:53	1
Chlorobenzene	<0.92		0.92		ug/m3			11/28/18 12:53	1
Chlorodibromomethane	<1.7		1.7		ug/m3			11/28/18 12:53	1
Chloroethane	<0.53		0.53		ug/m3			11/28/18 12:53	1
Chloroform	<0.98		0.98		ug/m3			11/28/18 12:53	1
Chloromethane	<2.1		2.1		ug/m3			11/28/18 12:53	1
cis-1,2-Dichloroethene	<0.79		0.79		ug/m3			11/28/18 12:53	1
cis-1,3-Dichloropropene	<1.8		1.8		ug/m3			11/28/18 12:53	1
Dichlorobromomethane	<1.3		1.3		ug/m3			11/28/18 12:53	1
1,1-Dichloroethane	<0.81		0.81		ug/m3			11/28/18 12:53	1
1,2-Dichloroethane	<0.81		0.81		ug/m3			11/28/18 12:53	1
1,1-Dichloroethene	<0.79		0.79		ug/m3			11/28/18 12:53	1
1,2-Dichloropropane	<0.92		0.92		ug/m3			11/28/18 12:53	1
Ethylbenzene	<0.87		0.87		ug/m3			11/28/18 12:53	1
2-Hexanone	<1.6		1.6		ug/m3			11/28/18 12:53	1
Methylene Chloride	<3.5		3.5		ug/m3			11/28/18 12:53	1
4-Methyl-2-pentanone (MIBK)	<4.1		4.1		ug/m3			11/28/18 12:53	1
Styrene	<0.85		0.85		ug/m3			11/28/18 12:53	1
1,1,2,2-Tetrachloroethane	<1.4		1.4		ug/m3			11/28/18 12:53	1
Tetrachloroethene	<1.4		1.4		ug/m3			11/28/18 12:53	1
Toluene	<3.8		3.8		ug/m3			11/28/18 12:53	1
trans-1,2-Dichloroethene	<0.79		0.79		ug/m3			11/28/18 12:53	1
trans-1,3-Dichloropropene	<0.91		0.91		ug/m3			11/28/18 12:53	1
1,1,1-Trichloroethane	<1.1		1.1		ug/m3			11/28/18 12:53	1
1,1,2-Trichloroethane	<1.1		1.1		ug/m3			11/28/18 12:53	1
Trichloroethene	<1.1		1.1		ug/m3			11/28/18 12:53	1
Vinyl chloride	<1.0		1.0		ug/m3			11/28/18 12:53	1
Xylenes, Total	<1.7		1.7		ug/m3			11/28/18 12:53	1

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	<7.5		7.5		ppb v/v			11/28/18 12:53	1
Benzene	<0.20		0.20		ppb v/v			11/28/18 12:53	1
Bromoform	<0.20		0.20		ppb v/v			11/28/18 12:53	1
Bromomethane	<0.20		0.20		ppb v/v			11/28/18 12:53	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: MB 140-25662/6
Matrix: Air
Analysis Batch: 25662

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Butanone (MEK)	<1.0		1.0		ppb v/v			11/28/18 12:53	1
Carbon disulfide	<0.40		0.40		ppb v/v			11/28/18 12:53	1
Carbon tetrachloride	<0.20		0.20		ppb v/v			11/28/18 12:53	1
Chlorobenzene	<0.20		0.20		ppb v/v			11/28/18 12:53	1
Chlorodibromomethane	<0.20		0.20		ppb v/v			11/28/18 12:53	1
Chloroethane	<0.20		0.20		ppb v/v			11/28/18 12:53	1
Chloroform	<0.20		0.20		ppb v/v			11/28/18 12:53	1
Chloromethane	<1.0		1.0		ppb v/v			11/28/18 12:53	1
cis-1,2-Dichloroethene	<0.20		0.20		ppb v/v			11/28/18 12:53	1
cis-1,3-Dichloropropene	<0.40		0.40		ppb v/v			11/28/18 12:53	1
Dichlorobromomethane	<0.20		0.20		ppb v/v			11/28/18 12:53	1
1,1-Dichloroethane	<0.20		0.20		ppb v/v			11/28/18 12:53	1
1,2-Dichloroethane	<0.20		0.20		ppb v/v			11/28/18 12:53	1
1,1-Dichloroethene	<0.20		0.20		ppb v/v			11/28/18 12:53	1
1,2-Dichloropropane	<0.20		0.20		ppb v/v			11/28/18 12:53	1
Ethylbenzene	<0.20		0.20		ppb v/v			11/28/18 12:53	1
2-Hexanone	<0.40		0.40		ppb v/v			11/28/18 12:53	1
Methylene Chloride	<1.0		1.0		ppb v/v			11/28/18 12:53	1
4-Methyl-2-pentanone (MIBK)	<1.0		1.0		ppb v/v			11/28/18 12:53	1
Styrene	<0.20		0.20		ppb v/v			11/28/18 12:53	1
1,1,2,2-Tetrachloroethane	<0.20		0.20		ppb v/v			11/28/18 12:53	1
Tetrachloroethene	<0.20		0.20		ppb v/v			11/28/18 12:53	1
Toluene	<1.0		1.0		ppb v/v			11/28/18 12:53	1
trans-1,2-Dichloroethene	<0.20		0.20		ppb v/v			11/28/18 12:53	1
trans-1,3-Dichloropropene	<0.20		0.20		ppb v/v			11/28/18 12:53	1
1,1,1-Trichloroethane	<0.20		0.20		ppb v/v			11/28/18 12:53	1
1,1,2-Trichloroethane	<0.20		0.20		ppb v/v			11/28/18 12:53	1
Trichloroethene	<0.20		0.20		ppb v/v			11/28/18 12:53	1
Vinyl chloride	<0.40		0.40		ppb v/v			11/28/18 12:53	1
Xylenes, Total	<0.40		0.40		ppb v/v			11/28/18 12:53	1

Lab Sample ID: LCS 140-25662/1002
Matrix: Air
Analysis Batch: 25662

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	14.3	13.5		ug/m3		95	60 - 140
Benzene	6.39	6.57		ug/m3		103	70 - 130
Bromoform	20.7	20.9		ug/m3		101	60 - 140
Bromomethane	7.77	8.46		ug/m3		109	70 - 130
2-Butanone (MEK)	5.90	5.29		ug/m3		90	60 - 140
Carbon disulfide	6.23	6.41		ug/m3		103	70 - 130
Carbon tetrachloride	12.6	14.5		ug/m3		115	70 - 130
Chlorobenzene	9.21	8.90		ug/m3		97	70 - 130
Chlorodibromomethane	17.0	17.5		ug/m3		103	70 - 130
Chloroethane	5.28	5.78		ug/m3		110	70 - 130
Chloroform	9.77	10.1		ug/m3		104	70 - 130
Chloromethane	4.13	4.49		ug/m3		109	60 - 140

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 140-25662/1002
Matrix: Air
Analysis Batch: 25662

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,2-Dichloroethene	7.93	8.20		ug/m3		103	70 - 130
cis-1,3-Dichloropropene	9.08	9.36		ug/m3		103	70 - 130
Dichlorobromomethane	13.4	14.2		ug/m3		106	70 - 130
1,1-Dichloroethane	8.09	8.55		ug/m3		106	70 - 130
1,2-Dichloroethane	8.09	8.73		ug/m3		108	70 - 130
1,1-Dichloroethene	7.93	7.83		ug/m3		99	70 - 130
1,2-Dichloropropane	9.24	9.11		ug/m3		99	70 - 130
Ethylbenzene	8.68	8.26		ug/m3		95	70 - 130
2-Hexanone	8.20	7.25		ug/m3		88	60 - 140
Methylene Chloride	6.95	6.19		ug/m3		89	70 - 130
4-Methyl-2-pentanone (MIBK)	8.19	7.74		ug/m3		95	60 - 140
Styrene	8.52	8.17		ug/m3		96	70 - 130
1,1,2,2-Tetrachloroethane	13.7	13.5		ug/m3		98	70 - 130
Tetrachloroethene	13.6	12.8		ug/m3		95	70 - 130
Toluene	7.54	7.09		ug/m3		94	70 - 130
trans-1,2-Dichloroethene	7.93	8.36		ug/m3		105	70 - 130
trans-1,3-Dichloropropene	9.08	9.05		ug/m3		100	70 - 130
1,1,1-Trichloroethane	10.9	11.2		ug/m3		103	70 - 130
1,1,2-Trichloroethane	10.9	10.7		ug/m3		98	70 - 130
Trichloroethene	10.7	10.4		ug/m3		97	70 - 130
Vinyl chloride	5.11	5.65		ug/m3		110	70 - 130
Xylenes, Total	26.1	24.8		ug/m3		95	70 - 130

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	6.0	5.70		ppb v/v		95	60 - 140
Benzene	2.0	2.06		ppb v/v		103	70 - 130
Bromoform	2.0	2.02		ppb v/v		101	60 - 140
Bromomethane	2.0	2.18		ppb v/v		109	70 - 130
2-Butanone (MEK)	2.0	1.79		ppb v/v		90	60 - 140
Carbon disulfide	2.0	2.06		ppb v/v		103	70 - 130
Carbon tetrachloride	2.0	2.30		ppb v/v		115	70 - 130
Chlorobenzene	2.0	1.93		ppb v/v		97	70 - 130
Chlorodibromomethane	2.0	2.06		ppb v/v		103	70 - 130
Chloroethane	2.0	2.19		ppb v/v		110	70 - 130
Chloroform	2.0	2.07		ppb v/v		104	70 - 130
Chloromethane	2.0	2.17		ppb v/v		109	60 - 140
cis-1,2-Dichloroethene	2.0	2.07		ppb v/v		103	70 - 130
cis-1,3-Dichloropropene	2.0	2.06		ppb v/v		103	70 - 130
Dichlorobromomethane	2.0	2.11		ppb v/v		106	70 - 130
1,1-Dichloroethane	2.0	2.11		ppb v/v		106	70 - 130
1,2-Dichloroethane	2.0	2.16		ppb v/v		108	70 - 130
1,1-Dichloroethene	2.0	1.98		ppb v/v		99	70 - 130
1,2-Dichloropropane	2.0	1.97		ppb v/v		99	70 - 130
Ethylbenzene	2.0	1.90		ppb v/v		95	70 - 130
2-Hexanone	2.0	1.77		ppb v/v		88	60 - 140
Methylene Chloride	2.0	1.78		ppb v/v		89	70 - 130
4-Methyl-2-pentanone (MIBK)	2.0	1.89		ppb v/v		95	60 - 140
Styrene	2.0	1.92		ppb v/v		96	70 - 130

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 140-25662/1002
Matrix: Air
Analysis Batch: 25662

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,2,2-Tetrachloroethane	2.0	1.96		ppb v/v		98	70 - 130
Tetrachloroethene	2.0	1.89		ppb v/v		95	70 - 130
Toluene	2.0	1.88		ppb v/v		94	70 - 130
trans-1,2-Dichloroethene	2.0	2.11		ppb v/v		105	70 - 130
trans-1,3-Dichloropropene	2.0	1.99		ppb v/v		100	70 - 130
1,1,1-Trichloroethane	2.0	2.06		ppb v/v		103	70 - 130
1,1,2-Trichloroethane	2.0	1.96		ppb v/v		98	70 - 130
Trichloroethene	2.0	1.93		ppb v/v		97	70 - 130
Vinyl chloride	2.0	2.21		ppb v/v		110	70 - 130
Xylenes, Total	6.0	5.72		ppb v/v		95	70 - 130

QC Association Summary

Client: EHS Support, LLC
Project/Site: Ashland Alterman (Jonesboro)

TestAmerica Job ID: 140-13463-1

Air - GC/MS VOA

Analysis Batch: 25627

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-13463-1	SG-LUM-01	Total/NA	Air	TO-15	
140-13463-2	SG-LUM-01D	Total/NA	Air	TO-15	
MB 140-25627/5	Method Blank	Total/NA	Air	TO-15	
LCS 140-25627/1002	Lab Control Sample	Total/NA	Air	TO-15	

Analysis Batch: 25662

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-13463-3	SG-LUM-02	Total/NA	Air	TO-15	
140-13463-4	SG-LUM-02DUP	Total/NA	Air	TO-15	
MB 140-25662/6	Method Blank	Total/NA	Air	TO-15	
LCS 140-25662/1002	Lab Control Sample	Total/NA	Air	TO-15	

Lab Chronicle

Client: EHS Support, LLC
Project/Site: Ashland Alterman (Jonesboro)

TestAmerica Job ID: 140-13463-1

Client Sample ID: SG-LUM-01
Date Collected: 11/26/18 13:00
Date Received: 11/27/18 10:00

Lab Sample ID: 140-13463-1
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1	20 mL	500 mL	25627	11/27/18 23:21	S1K	TAL KNX
	Instrument ID: MR									

Client Sample ID: SG-LUM-01D
Date Collected: 11/26/18 13:05
Date Received: 11/27/18 10:00

Lab Sample ID: 140-13463-2
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1.5	30 mL	500 mL	25627	11/28/18 00:13	S1K	TAL KNX
	Instrument ID: MR									

Client Sample ID: SG-LUM-02
Date Collected: 11/26/18 13:50
Date Received: 11/27/18 10:00

Lab Sample ID: 140-13463-3
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1.97	39 mL	500 mL	25662	11/28/18 15:56	S1K	TAL KNX
	Instrument ID: MG									

Client Sample ID: SG-LUM-02DUP
Date Collected: 11/26/18 13:50
Date Received: 11/27/18 10:00

Lab Sample ID: 140-13463-4
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		2.14	43 mL	500 mL	25662	11/28/18 16:39	S1K	TAL KNX
	Instrument ID: MG									

Client Sample ID: Method Blank
Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 140-25627/5
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1	200 mL	500 mL	25627	11/27/18 11:47	S1K	TAL KNX
	Instrument ID: MR									

Client Sample ID: Method Blank
Date Collected: N/A
Date Received: N/A

Lab Sample ID: MB 140-25662/6
Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1	200 mL	500 mL	25662	11/28/18 12:53	S1K	TAL KNX
	Instrument ID: MG									

Lab Chronicle

Client: EHS Support, LLC
Project/Site: Ashland Alterman (Jonesboro)

TestAmerica Job ID: 140-13463-1

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 140-25627/1002
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1	500 mL	500 mL	25627	11/27/18 10:06	S1K	TAL KNX
	Instrument ID: MR									

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 140-25662/1002
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1	500 mL	500 mL	25662	11/28/18 10:41	S1K	TAL KNX
	Instrument ID: MG									

Laboratory References:
TAL KNX = TestAmerica Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000

Accreditation/Certification Summary

Client: EHS Support, LLC
Project/Site: Ashland Alterman (Jonesboro)

TestAmerica Job ID: 140-13463-1

Laboratory: TestAmerica Knoxville

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
	AFCEE		N/A	
ANAB	DoD ELAP		L2311	02-13-19
Arkansas DEQ	State Program	6	88-0688	06-16-19
California	State Program	9	2423	06-30-19
Colorado	State Program	8	TN00009	02-28-19
Connecticut	State Program	1	PH-0223	09-30-19
Florida	NELAP	4	E87177	06-30-19
Georgia	State Program	4	906	04-13-20
Hawaii	State Program	9	N/A	04-13-19
Kansas	NELAP	7	E-10349	10-31-19
Kentucky (DW)	State Program	4	90101	12-31-18
Louisiana	NELAP	6	83979	06-30-19
Louisiana (DW)	NELAP	6	LA160005	12-31-18
Maryland	State Program	3	277	03-31-19
Michigan	State Program	5	9933	04-13-20
Nevada	State Program	9	TN00009	07-31-19
New Jersey	NELAP	2	TN001	06-30-19
New York	NELAP	2	10781	03-31-19
North Carolina (DW)	State Program	4	21705	07-31-19
North Carolina (WW/SW)	State Program	4	64	12-31-18
Ohio VAP	State Program	5	CL0059	08-28-20
Oklahoma	State Program	6	9415	08-31-19
Oregon	NELAP	10	TNI0189	01-01-19
Pennsylvania	NELAP	3	68-00576	12-31-18
Tennessee	State Program	4	2014	04-13-20
Texas	NELAP	6	T104704380-16-9	08-31-19
US Fish & Wildlife	Federal		LE-058448-0	07-31-19
USDA	Federal		P330-16-00262	08-20-19
Utah	NELAP	8	TN00009	07-31-19
Virginia	NELAP	3	460176	09-14-19
Washington	State Program	10	C593	01-19-19
West Virginia (DW)	State Program	3	9955C	12-31-18
West Virginia DEP	State Program	3	345	04-30-19
Wisconsin	State Program	5	998044300	08-31-19

Laboratory: TestAmerica Savannah

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
	AFCEE		SAVLAB	
Alabama	State Program	4	41450	06-30-19
Alaska	State Program	10		06-30-19
Alaska (UST)	State Program	10	UST-104	09-22-19
ANAB	DoD ELAP		L2463	09-22-19
ANAB	ISO/IEC 17025		L2463.01	09-22-19
Arizona	State Program	9	AZ0808	12-14-18
Arkansas DEQ	State Program	6	88-0692	02-01-19
California	State Program	9	2939	06-30-19
Colorado	State Program	8	N/A	12-31-18
Connecticut	State Program	1	PH-0161	03-31-19

Accreditation/Certification Summary

Client: EHS Support, LLC
Project/Site: Ashland Alterman (Jonesboro)

TestAmerica Job ID: 140-13463-1

Laboratory: TestAmerica Savannah (Continued)

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Florida	NELAP	4	E87052	06-30-19
GA Dept. of Agriculture	State Program	4	N/A	06-12-19
Georgia	State Program	4	N/A	06-30-19
Guam	State Program	9	15-005r	04-17-19
Hawaii	State Program	9	N/A	06-30-19
Indiana	State Program	5	N/A	06-30-19
Iowa	State Program	7	353	06-30-19
Kentucky (DW)	State Program	4	90084	12-31-18
Kentucky (UST)	State Program	4	18	06-30-19
Kentucky (WW)	State Program	4	90084	12-31-18 *
Louisiana	NELAP	6	30690	06-30-19
Louisiana (DW)	NELAP	6	LA160019	12-31-18
Maine	State Program	1	GA00006	09-25-20
Maryland	State Program	3	250	12-31-18
Massachusetts	State Program	1	M-GA006	06-30-19
Michigan	State Program	5	9925	03-05-19
Mississippi	State Program	4	N/A	06-30-19
Nebraska	State Program	7	TestAmerica-Savannah	06-30-19
New Jersey	NELAP	2	GA769	06-30-19
New Mexico	State Program	6	N/A	06-30-19
New York	NELAP	2	10842	03-31-19
North Carolina (DW)	State Program	4	13701	07-31-19
North Carolina (WW/SW)	State Program	4	269	12-31-18
Oklahoma	State Program	6	9984	08-31-19
Pennsylvania	NELAP	3	68-00474	06-30-19
Puerto Rico	State Program	2	GA00006	12-31-18
South Carolina	State Program	4	98001	06-30-18 *
Tennessee	State Program	4	TN02961	06-30-19
Texas (DW)	State Program	1	T104704185	06-30-19
US Fish & Wildlife	Federal		LE058448-0	07-31-19
Washington	State Program	10	C805	06-10-19
West Virginia (DW)	State Program	3	9950C	12-31-18
West Virginia DEP	State Program	3	094	06-30-19
Wisconsin	State Program	5	999819810	08-31-19
Wyoming	State Program	8	8TMS-L	06-30-16 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: EHS Support, LLC
Project/Site: Ashland Alterman (Jonesboro)

TestAmerica Job ID: 140-13463-1

Method	Method Description	Protocol	Laboratory
TO-15	Volatile Organic Compounds in Ambient Air	EPA	TAL KNX

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

TAL KNX = TestAmerica Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000

Sample Summary

Client: EHS Support, LLC
Project/Site: Ashland Alterman (Jonesboro)

TestAmerica Job ID: 140-13463-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
140-13463-1	SG-LUM-01	Air	11/26/18 13:00	11/27/18 10:00
140-13463-2	SG-LUM-01D	Air	11/26/18 13:05	11/27/18 10:00
140-13463-3	SG-LUM-02	Air	11/26/18 13:50	11/27/18 10:00
140-13463-4	SG-LUM-02DUP	Air	11/26/18 13:50	11/27/18 10:00

TAL Knoxville
5815 Middlebrook Pike
Knoxville, TN 37921
phone 865-291-3000 fax 865-584-4315

Canister Samples Chain of Custody Record

TestAmerica assumes no liability with respect to the collection and shipment of these samples.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Contact Information	**Project Manager:** Chrissy P.	**Sampled By:** Kris Spikes
Company: Ashland / EHS	**Phone:** 678-522-6050	1 of 1 COCs
Address: 228 4th Ave	**Site Contact:** Kris Spikes	
City/State/Zip Decatur, GA 30030	**TAL Contact:**	
Phone: 678-522-6050		**681-Atlanta**
FAX:		
Project Name: Alterman	**Analysis Turnaround Time**	
Site/location: Jonesboro GA	Standard (Specify)_____	
PO # Alterman	Rush (Specify)_____	

Sample Identification	Sample Date(s)	Time Start	Time Stop	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, 'Hg (Stop)	Flow Controller ID	Canister ID	TO-15	TO-14A	EPA 3C	EPA 25C	ASTM D-1946	Other (Please specify in notes section)	Sample Type	Indoor Air	Ambient Air	Soil Gas	Landfill Gas	Other (Please specify in notes section)
SG-LUM-01	11/26/18	1230	1300	29	3	11785	09783	X											
SG-LUM-01D	11/26/18	1235	1305	29	11	11917	10237	X											
SG-LUM-02	11/26/18	1320	1350	29	15	~~12787~~ 11958	10374	X											
SG-LUM-02DUP	11/26/18	1320	1350	29	9	11958	09764	X											

140-13463 Chain of Custody

Sampled by : KS

Temperature (Fahrenheit)	Interior	Ambient
Start	N/A	43°F
Stop	N/A	42°F

Pressure (inches of Hg)	Interior	Ambient
Start	N/A	29.9
Stop	N/A	29.9

NO CUSTODY SEALS
ACCEPTED AMBIENT
BKD 11-27-18
1 BOX FED EX # 465100797334 SD
4 CANS / 4 FLOWS (2) / 1 T

Special Instructions/QC Requirements & Comments:

Canisters Shipped by: KS	Date/Time: 11/26/18 14:50	Canisters Received by: 11/26/18 14:50
Samples Relinquished by: 11/26/18	Date/Time: 16:10	Received by: 11-27-18 10:00 TAKNA
Relinquished by:	Date/Time:	Received by:

Lab Use Only **Shipper Name:** **Opened by:** **Condition:**

Loc: 140
13463

TESTAMERICA KNOXVILLE SAMPLE RECEIPT/CONDITION UPON RECEIPT ANOMALY CHECKLIST **Log In Number:**

Review Items	Yes	No	NA	If No, what was the problem?
1. Are the shipping containers intact?	✓			☐ **Containers, Broken**
2. Were ambient air containers received intact?			✓	☑ Checked in lab
3. The coolers/containers custody seal if present, is it intact?			✓	☐ Yes ☐ NA
4. Is the cooler temperature within limits? (> freezing temp. of water to 6 °C, VOST: 10°C) Thermometer ID :_____ Correction factor: _____			✓	☐ **Cooler Out of Temp, Client Contacted, Proceed/Cancel** ☐ **Cooler Out of Temp, Same Day Receipt**
5. Were all of the sample containers received intact?	✓			☐ **Containers, Broken**
6. Were samples received in appropriate containers?	✓			☐ **Containers, Improper; Client Contacted; Proceed/Cancel**
7. Do sample container labels match COC? (IDs, Dates, Times)		✓		☑ **COC & Samples Do Not Match** ☐ **COC Incorrect/Incomplete** ☐ **COC Not Received**
8. Were all of the samples listed on the COC received?	✓			☐ **Sample Received, Not on COC** ☐ **Sample on COC, Not Received**
9. Is the date/time of sample collection noted?	✓			☐ **COC; No Date/Time; Client Contacted**
10. Was the sampler identified on the COC?	✓			☐ **Sampler Not Listed on COC**
11. Is the client and project name/# identified?	✓			☐ **COC Incorrect/Incomplete**
12. Are tests/parameters listed for each sample?	✓			☐ **COC No tests on COC**
13. Is the matrix of the samples noted?	✓			☐ **COC Incorrect/Incomplete**
14. Was COC relinquished? (Signed/Dated/Timed)	✓			☐ **COC Incorrect/Incomplete**
15. Were samples received within holding time?	✓			☐ **Holding Time - Receipt**
16. Were samples received with correct chemical preservative (excluding Encore)?			✓	☐ **pH Adjusted, pH Included (See box 16A)** ☐ **Incorrect Preservative**
17. Were VOA samples received without headspace?			✓	☐ **Headspace (VOA only)**
18. Did you check for residual chlorine, if necessary? (e.g. 1613B, 1668) Chlorine test strip lot number:			✓	☐ **Residual Chlorine**
19. For 1613B water samples is pH<9?			✓	☐ If no, lab will adjust
20. For rad samples was sample activity info. Provided?			✓	☐ Project missing info

Comments/Actions Taken

7, SG-HUM-02DVP, LABEL LIST
SG-HUM-02, MATCHED BY CANISTER ID

Labeling Verified by: **Date:**

pH test strip lot number:

	Box 16A: pH Preservation	Box 18A: Residual Chlorine
Preservative:		
Lot Number:		
Exp Date:		
Analyst:		
Date:		
Time:		

Project #: 68002361 PM Instructions: NA

Sample Receiving Associate: Date: 11-27-18

QA026R30.doc, 080916

11/30/2018

TestAmerica Knoxville - Air Canister Initial Pressure Check

Gauge ID: G5
Date: 11/27/2018

Analyst	Sample ID	Asset #	Cleaning Job	Cert	Size (L)	Pressure @ Receipt (-in Hg or +psig)	Time	Comments
BKK	140-13463-A-1	09783	12800	IND	6	-3.0	12:40	
BKK	140-13463-A-2	10237	12811	IND	6	-9.2	12:41	+0.6
BKK	140-13463-A-3	10374	12767	IND	6	-14.1	12:42	+0.6
BKK	140-13463-A-4	09764	12838	IND	6	-15.4	12:43	+0.6

□ Receiving –Air Can –Calve Open (NCM #__________)
□ Air - Can P -24 to -25 " - Flow Contr. Works (NCM#_________)
□ Air - Can P -24 to -25 " - Flow Contr. Faulty (NCM#_________)
□ Air - Can P Out -26" - Flow Contr. Works (NCM#___________)
□ Air - Can P Out -26" - Flow Contr. Faulty (NCM#___________)
□ Air - Can P Low -24 to -25 " - Grab Sample (NCM#__________)
□ Air - Can P Low -26 "- Grab Sample (NCM#____________)

ATTACHMENT E

Attachment B
Professional Hours Summary
Tara Shopping Center (HSI 10798)
Jonesboro, GA

Professional Service	Date	Hours	Description
Professional Engineer (PE)			
Jonathan Waddel, PE	07/09/2018	0.75	Call with Kris Spikes regarding pending task to be completed
	07/04/2018	0.5	Development of surface water agenda
	08/06/2018	1	Prepared surface water agenda, call with Ashland to discuss
	08/07/2018	0.25	Internal correspondence regarding surface water
	08/08/2018	0.75	Internal correspondence regarding surface water
	08/10/2018	0.75	Call with Ashland regarding surface water
	09/10/2018	1.25	Internal planning call.
	09/11/2018	1.5	Call with Sam Parker regarding surface water model, compiled information on historical surface water sampling results.
	09/17/2018	1.25	Internal call to discuss surface water research
	09/21/2018	0.75	Coordination of surfacew ater data and figure preparation
	10/01/2018	1	Call with Kris Spikes, figure edits, coordinate data with Sam Parker
	10/10/2018	0.25	Review surface water evaluation
	10/11/2018	1.75	Call with Kris Spikes on surface water, call regarding low-flow sampling, review of records for documentation of GA EPD request for low-flow sampling
	10/11/2018	1.25	Internal call regarding low-flow sampling, review of historical correspondence.
	10/15/2018	1.5	Call with Kris Spikes, edits to agenda
	10/17/2018	1.5	Call with Chrissy Peterson and Kris Spikes regarding Alterman, follow up call with Greg Murphy of Sediment Team
	10/29/2018	0.75	Scoping coordination with Greg Murphy and sediment team.
	11/01/2018	1	Development of agenda with Kri s Spikes, prep for and meeting with GA EPD.
	11/08/2018	0.25	Coordination call with Greg Murphy - surface water proposal.
	11/27/2018	1	Evaluation of financial assurance
	11/29/2018	0.75	Review of email, call with Kris Spikes
	11/30/2018	0.25	Call with Kris Spikes and Tim Davis on VI reporting and VRP Progress Report

CERTIFICATION

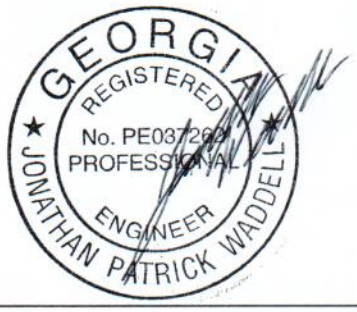
"I certify under penalty of law that this report and all attachments were prepared by me or under my direct supervision in accordance with the Voluntary Remediation Program Act (O.C.G.A. Section 12-8-101, et m.). I am a professional engineer/professional geologist who is registered with the Georgia State Board of Registration for Professional Engineers and Land Surveyors/Georgia State Board of Registration for Professional Geologists and I have the necessary experience and am in charge of the investigation and remediation of this release of regulated substances.

Furthermore, to document my direct oversight of the Voluntary Remediation Plan development, implementation of corrective action, and long term monitoring, I have attached a monthly summary of hours invoiced and description of services provided by me to the Voluntary Remediation Program participant since the previous submittal to the Georgia Environmental Protection Division.

The information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Jonathan Patrick Waddell PE037262 — 12/19/2018

Printed Name and GA PE/PG Number — Date



Signature and Stamp