



Wood Environment & Infrastructure Solutions, Inc.
521 Byers Road, Suite 204
Miamisburg, OH 45342
USA

T: 937-859-3600

www.woodplc.com

08 January 2020

Mr. Joshua Keller
Environmental Manager
Indiana Department of Environmental Management
100 North Senate Ave.
Indianapolis, IN 46204-2251

**RE: Report of the Third Groundwater Stability Assessment Event
TORX Facility, 4366 North Old US Highway 31, Rochester, Indiana
Facility Cleanup ID 7100149
Wood Project Number 3359-15-1040**

Dear Mr. Keller:

Enclosed are two copies of the Report of the Third Groundwater Stability Assessment Event performed at the TORX Facility located in Rochester, Indiana prepared by Wood Environment & Infrastructure Solutions, Inc. (Wood). The work was completed as described in the Remediation Work Plan dated 24 June 2014 and the Groundwater Stability Assessment correspondence dated 16 July 2019.

This report details the results of the third groundwater stability assessment monitoring event, which occurred in August 2019. Based on the results of the laboratory analyses performed on the groundwater samples collected from the Groundwater Stability Assessment monitoring well network, the CVOC concentrations in the messenger (located down-gradient of the source area), perimeter of compliance (located down-gradient of the messenger wells), and downgradient monitoring wells (used to assess the leading down-gradient edge of the treatment zone) continue to remain near to slightly above the laboratory reporting limit in the majority of the wells. Until a statistically significant number of Stability Assessment data points is obtained, detailed analysis of the data will be limited to general observations.

The fourth stability groundwater monitoring event was completed at the Site during the week of 25 November 2019. If you have any questions or comments following your review of this report, please call our office at 937-859-3600.

Sincerely,
Wood Environment & Infrastructure Solutions, Inc.


Paul J. Stork
Project Manager


K. Joe Deatherage, PE
Senior Engineer

Enclosure

cc: Jamison Schiff, Textron, Inc.



REPORT OF THE THIRD GROUNDWATER STABILITY ASSESSMENT MONITORING EVENT

Former TORX Facility

4366 North Old US Highway 31
Rochester, Indiana

Prepared for:

Textron Inc.

40 Westminster Street
Providence, RI 02903

Prepared by:

Wood Environment & Infrastructure Solutions, Inc.

521 Byers Road, Suite 204
Miamisburg, OH 45342

January 2020

Project No. 3359-15-1040

IMPORTANT NOTICE

This report was prepared exclusively for Textron, Inc. by Wood Environment & Infrastructure Solutions, Inc. (Wood). The quality of information, conclusions and estimates contained herein is consistent with the level of effort involved in Wood's services and based on: i) information available at the time of preparation, ii) data supplied by outside sources and iii) the assumptions, conditions and qualifications set forth in this report. This report is intended to be used by Textron, Inc. only, subject to the terms and conditions of its contract with Wood. Any other use of, or reliance on, this report by any third party is at that party's sole risk.



CONTENTS

1.0	INTRODUCTION	1
2.0	BACKGROUND	1
3.0	GROUNDWATER STABILITY ASSESSMENT MONITORING	2
3.1	Scope of Work.....	2
3.2	Field Activities	2
4.0	DATA EVALUATION.....	4
4.1	Quarterly Stability Monitoring Results.....	4
4.2	Semi-Annual Treatment Area Monitoring Results.....	5
4.3	Quality Control Results.....	6
5.0	UPCOMING ACTIVITES.....	7

T A B L E S

- Table 1: Surveyed Elevation Data and Depth to Water for Stability Assessment Monitoring Wells and Monitoring Wells Used for Groundwater Elevation Contour Mapping
- Table 2: Summary of Field Parameters - Stability Monitoring Wells
- Table 3: Summary of Target VOC Concentrations and Contaminant Mass – Stability Monitoring Wells
- Table 4: Summary of Dissolved Gases – Stability Monitoring Wells

F I G U R E S

- Figure 1: Site Location Map
- Figure 2: Treatment Zones, Arrays and Well Locations
- Figure 3: Groundwater Stability Assessment Monitoring Well Locations
- Figure 4: Groundwater Contour Map Shallow Overburden Wells Source Treatment Area 12 August 2019
- Figure 5: Groundwater Contour Map Intermediate Overburden Wells Source Treatment Area 12 August 2019
- Figure 6: Quarterly Stability Monitoring Volatile Organic Compounds
- Figure 7: Semi-Annual Treatment Area Stability Monitoring Volatile Organic Compounds

A P P E N D I C E S

- Appendix A: Groundwater Sample Collection Field Forms
- Appendix B: Laboratory Reports and Data Validation Report



ACRONYMS

CVOC	chlorinated volatile organic compounds
DCE	dichloroethene
DO	dissolved oxygen
IDEM	Indiana Department of Environmental Management
ISCR	In-situ Chemical Reduction
µg/L	micrograms per liter
ORP	oxygen reduction potential
QAPP	Quality Assurance Project Plan
RWP	Remediation Work Plan
TCE	trichloroethene
Site	former TORX facility
VOC	Volatile organic compound
Wood	Wood Environment & Infrastructure Solutions, Inc.

1.0 INTRODUCTION

Wood Environment & Infrastructure Solutions, Inc. (Wood), has prepared this report to document the findings from the third groundwater stability assessment monitoring event. This third groundwater stability assessment event includes results from quarterly groundwater stability monitoring and semi-annual treatment area groundwater monitoring. The assessment monitoring is associated with the implemented In-Situ Chemical Reduction (ISCR) and Enhanced Reductive Dechlorination remedies for groundwater containing chlorinated volatile organic compounds (CVOCs) at and in the vicinity of the former TORX Facility (now operated by Acument) located at 4366 North Old US Highway 31 in Rochester, Indiana (Site). A Site location map is presented as **Figure 1**.

2.0 BACKGROUND

Wood was retained by Textron, Inc. to conduct remedial injection activities at the former TORX facility to treat groundwater containing CVOCs. A Remediation Work Plan (RWP) was prepared in June 2014 and submitted to the Indiana Department of Environmental Management (IDEM) and was subsequently approved by IDEM. The RWP guided the remedial activities implemented at the Site. The overall remedial approach involved treating the portion of the source area near the Western Pond behind (west of) the facility using ISCR technology, and stimulating biologically mediated reductive dechlorination at the remainder of the source area west of the building, beneath the manufacturing building, and in most of the downgradient plume. Full-scale remediation injection activities commenced in 2015. Additional “polishing” injections were performed in 2016 and 2017. The treatment zones, arrays, and monitoring well locations are shown on **Figure 2**. Details of the remedial actions and subsequent performance groundwater monitoring events are provided in numerous reports on file with IDEM.

As detailed in the RWP, the performance of the remediation of the CVOCs in groundwater at the site has been monitored on a regular basis through the implementation of the Performance Groundwater Monitoring Program. The results of the Performance Groundwater Monitoring demonstrated significant reductions of CVOCs in groundwater post remediation. Because of the success of the remedial effort in reducing the

concentrations of CVOCs at the Site, the groundwater monitoring has been transitioned from performance monitoring to stability monitoring. Details of the groundwater stability assessment monitoring program are described in a correspondence submitted to IDEM entitled, *Groundwater Stability Assessment, TORX Facility, 4366 North Old US Highway 31, Rochester, Indiana, Facility Cleanup ID 7100149*, 16 July 2019, Wood.

This report documents the third groundwater stability assessment monitoring event that has been conducted at the Site following completion of the full-scale remediation and the performance monitoring phase.

3.0 GROUNDWATER STABILITY ASSESSMENT MONITORING

Wood conducted the third quarterly groundwater stability assessment monitoring and second semi-annual treatment area evaluation monitoring event at the Site in August 2019. The groundwater stability assessment monitoring well locations and treatment area monitoring well locations are shown on **Figure 3**.

3.1 Scope of Work

As part of the groundwater stability assessment monitoring event, Wood collected groundwater samples from 30 monitoring wells located within and downgradient of the treatment zones. Of the 30 monitoring wells, 12 wells are designated quarterly stability monitoring wells and 18 are semi-annual treatment area monitoring wells. For most monitoring wells, groundwater was purged using low-flow sampling techniques. Certain smaller diameter wells [MW-68(32) and MW-72(32)] were purged by bailing. Field water quality parameters were monitored during purging. Groundwater was sampled once field water quality parameters had stabilized. Groundwater samples were analyzed for volatile organic compounds (VOCs). Separate from the stability assessment, a subset of wells was also analyzed for dissolved gases (methane, ethane, and ethene).

3.2 Field Activities

On 12 August 2019, prior to commencing groundwater sampling, depth to groundwater measurements were collected, and groundwater elevations were calculated using the monitoring well casing elevations previously determined by a registered surveyor (**Table**

1). Groundwater contour maps of the treatment areas were prepared for the shallow overburden zone (**Figure 4**) and intermediate overburden zone (**Figure 5**).

Groundwater samples were collected from the stability assessment monitoring wells, identified on **Table 1**, between 19 August 2019 and 22 August 2019. The wells except MW-68(32) and MW-72(32) were purged and sampled using a pneumatic powered bladder pump. Prior to sample collection, groundwater was purged from the wells using a low-flow procedure. Groundwater field parameters including pH, temperature, conductivity, oxygen reduction potential (ORP), dissolved oxygen (DO), and turbidity, as well as, groundwater elevation, were measured approximately every 5 minutes until at least three sequential readings showed stabilization, i.e., +/- 0.1 for pH, +/- 10 millivolts for ORP, +/- 10 Nephelometric Turbidity Units for turbidity, and +/- 10% for DO. Upon achieving stabilization, groundwater samples were collected directly from the pump discharge tubing. Copies of the field sample collection logs are presented in **Appendix A**. A summary of the final field measurements is presented on **Table 2**.

The 1.5-inch diameter monitoring wells, MW-68(32) and MW-72(32), located inside the Acument building were purged and sampled using disposable 0.75-inch diameter polyethylene bailers. Prior to sample collection, at least three well volumes of groundwater were removed from each well. Groundwater samples were collected directly from the bailers. Groundwater field parameters including pH, temperature, conductivity, ORP, DO, and turbidity were measured during purging and recorded on sampling forms presented in **Appendix A**.

Groundwater samples were collected into laboratory-supplied, pre-preserved vials and labeled with the sample information. Quality control samples including equipment blanks and trip blanks were also submitted. Equipment blanks were collected by pouring deionized water through the decontaminated pump and into the sampling container. Trip blanks were prepared by the laboratory and accompanied each shipment of VOC samples during transport.

Following sample collection, the sample containers were placed on ice in coolers and shipped under chain of custody to ALS Environmental Laboratory in Holland, Michigan for VOC analysis by United States Environmental Protection Agency Method 8260B.

Samples for dissolved gas analyses were shipped under chain-of-custody to Microseeps, a division of Pace Analytical, in Pittsburgh, Pennsylvania, for analysis by Method AM20GAX.

Sampling pumps were decontaminated between wells using a liquinox-water wash, potable water rinse, and distilled water rinse. Dedicated sampling tubing was used to purge and sample each well, and new disposable bailers were used for sampling monitoring wells MW-68(32) and MW-72(32). Disposable equipment was changed out between each well.

4.0 DATA EVALUATION

The results of the laboratory analyses are presented on **Tables 3 and 4** which also include results from previous groundwater stability monitoring events. The measured field parameters referenced in Section 3.0 are included in **Table 2**. A summary of the results of the CVOC analyses performed on samples collected from the quarterly stability monitoring wells is shown on **Figure 6**, while a summary of the results of the semi-annual treatment area monitoring wells is presented on **Figure 7**. Copies of the laboratory reports and chain-of-custodies are presented in **Appendix B**.

Baseline concentration data is included on **Tables 3 and 4**. The baseline monitoring event occurred in October 2018, except for MW-59(46), MW-25(82), MW-27(18), OW-6(38), OW-6(63); for these five wells, the baseline monitoring event was the annual sampling event that occurred in July 2018. Although individual increases of CVOCs may be periodically observed at certain monitoring well locations, the entire plume mass will be considered when evaluating the stability of the plume.

4.1 Quarterly Stability Monitoring Results

The CVOC concentrations in the messenger wells [located down-gradient of the source area, , MW-6C, OW-1(39), MW-14, OW-2(33), OW-2(53)], perimeter of compliance [located down-gradient of the messenger wells, MW-17, MW-26(17.5), MW-26(28.8), MW-26(58.2), MW-27(18)], and downgradient monitoring wells [used to assess the leading down-gradient edge of the treatment zone, OW-6(38) and OW-6(63)] continue to remain near to slightly above the laboratory reporting limit in the majority of the wells. Some increases in

contaminant concentrations relative to baseline were observed in the treatment area monitoring wells. Until a statistically significant number of Stability Assessment data points is obtained, detailed analysis of the data will be limited to general observations.

Messenger wells analyzed as a part of the quarterly stability monitoring event indicate that with the exception of MW-6C and MW-14, the messenger wells were all at or below the reporting limit for the targeted CVOCs. In MW-6C, cis-1,2 dichloroethene (DCE) decreased from 28 micrograms per liter ($\mu\text{g/L}$) in May 2019 to 4.0 $\mu\text{g/L}$ in August 2019, while vinyl chloride increased slightly from 1.9 $\mu\text{g/L}$ in May 2019 to 2.3 $\mu\text{g/L}$ in August 2019. The concentrations of cis-1,2-DCE and vinyl chloride increased slightly in MW-14 when compared to the May 2019 data.

Perimeter of compliance wells analyzed as a part of the stability monitoring event indicate that with the exception of MW-27(18) and MW-17, the perimeter of compliance wells were slightly above or below reporting limits for the targeted CVOCs. MW-27(18) contained 1.1 $\mu\text{g/L}$ of TCE which increased slightly compared to the May 2019 data, which was below the detection limits. In MW-17, cis-1,2-DCE decreased from 23 $\mu\text{g/L}$ in May 2019 to 20 $\mu\text{g/L}$ in August 2019. In MW-17, trichloroethene (TCE) decreased from 42 $\mu\text{g/L}$ in May 2019 to 39 $\mu\text{g/L}$ in August 2019. In MW-17, vinyl chloride increased from 1.2 $\mu\text{g/L}$ in May 2019 to 1.6 $\mu\text{g/L}$ in August 2019. The current cis-1,2-DCE and TCE concentrations and the contaminant mass in MW-17 are at historical lows.

Consistent with previous stability monitoring results, CVOCs were not detected above the laboratory reporting limits at the down gradient wells.

4.2 Semi-Annual Treatment Area Monitoring Results

The 18 semi-Annual Treatment Area monitoring wells listed in table 1 and analyzed as a part of the stability monitoring event indicate similar or reduced contaminant concentrations relative to the February 2019 sampling event with the exception of MW-68(32). In MW-68(32), cis-1,2-DCE and vinyl chloride increased in concentration relative to the February 2019 sampling event. Monitoring well MW-59(46) is located within the source area zone, and the current CVOC concentrations are well below historic values.

Dissolved gas monitoring included the analysis of methane, ethane and ethene to gauge any continued effects of the remedial efforts. Methane concentrations decreased in all wells sampled for dissolved gases from the February 2019 sampling event. Ethene concentrations increased in MW-72(32) and decreased in the remaining wells relative to the February 2019 sampling event. Ethane concentrations decreased in all wells sampled for dissolved gases relative to the February 2019 sampling event.

4.3 Quality Control Results

The VOC data was validated in general accordance with the Site Quality Assurance Project Plan (QAPP). The data validation included an evaluation of the data quality and a review of the field quality assurance sample results. The data validation report, which includes validation of data from the 2019 Annual groundwater monitoring event and the Stability monitoring event, is included in **Appendix B**. The conclusions of the data validation indicated that certain results required qualification as detailed below.

The laboratory data conformed to the guidelines in the QAPP with a few exceptions. A detail of the exceptions is presented in **Appendix B**. The exceptions include:

- As a result of acetone detection above the method detection limit but below the reporting limit in the trip blank, acetone detections in the same range were qualified non-detect (U). With the exception of samples, ATR-OW6(63)-G082119 and ATR-OW6(63)-G082119R, acetone was not detected in the associated samples and reporting limits were qualified non-detect in ATR-OW6(63)-G082119 and ATR-OW6(63)-G082119R.
- Exceedances of greater than 20% calibration differences were noted for carbon disulfide, 2-hexanone, bromomethane, vinyl chloride, chloroethane, 1,1,2,2-tetrachloroethane and 4-methyl-2-pentanone. These VOCs were not detected in the associated samples and reporting limits were qualified estimated (UJ).
- Percent recovery of carbon disulfide in the laboratory control sample was greater than the upper control limit of 130. Carbon disulfide was not detected in the Stability Monitoring or Treatment Area Evaluation wells.

- Matrix spike/matrix spike duplicate percent recoveries for several compounds including 2-hexanone, bromoform, dibromochloromethane, trans-1,3-dichloropropene and vinyl chloride were outside the QAPP control limits for a subset of results. Percent recoveries for 2-hexanone, bromoform, dibromochloromethane and trans-1,3-dichloropropene were less than the control limits of 70-130, indicated potential low bias. Reporting limits were qualified estimated (UJ).

In accordance with the Quality Assurance Project Plan, one equipment blank was collected per day from each sampling pump, one field replicate was collected per 20 groundwater samples collected, one matrix spike and matrix spike duplicate were run at a rate of one per 20 samples collected, one field blank for the groundwater monitoring event was collected and submitted, and one trip blank for each cooler containing VOC samples was submitted and analyzed for VOCs.

There was generally good agreement between the VOC concentrations reported in the replicate samples and primary samples. The relative percent difference (RPD) between the primary and replicate results met the RPD goal of 25% or less for all detected COCs.

VOCs were not detected in the equipment blank samples, trip blank samples, or the field blank sample.

5.0 UPCOMING ACTIVITIES

The fourth groundwater stability assessment monitoring event was completed at the Site during the week of 25 November 2019, and the results from that event will be presented in the fourth Groundwater Stability Assessment Monitoring Report.

The fifth quarterly groundwater stability assessment monitoring event will occur in February 2020. The February 2020 stability assessment monitoring event will also include the semi-annual monitoring wells.



Textron, Inc.
TORX Facility Remediation
Report of the Third Groundwater Stability Assessment Monitoring Event

TABLES

Table 1
Surveyed Elevation Data and Depth to Water for Stability Assessment Monitoring Wells
and Monitoring Wells Used for Groundwater Elevation Contour Mapping
TORX Facility, 4366 North Old US Highway 31, Rochester, Indiana

Monitoring Well/Point ID	Date Measured	Top of Casing Elevation ³	Depth to Water (btoc) ⁴	Ground Water Elevation
Stability Assessment Monitoring Wells				
MW-59(29) ²	02/05/19	799.57	14.55	785.02
	05/16/19		13.23	786.34
	08/12/19		14.18	785.39
MW-59(46) ²	02/06/19	799.25	14.18	785.07
	05/16/19		12.87	786.38
	08/12/19		13.87	785.38
MW-81(27) ²	02/05/19	798.34	14.92	783.42
	05/16/19		11.64	786.70
	08/12/19		12.66	785.68
MW-68(32) ²	02/05/19	809.46	24.67	784.79
	05/16/19		23.27	786.19
	08/12/19		24.28	785.18
MW-72(32) ²	02/05/19	808.92	24.07	784.85
	05/16/19		22.74	786.18
	08/12/19		23.98	784.94
MW-6C ¹	02/05/19	810.40	25.60	784.80
	05/16/19		24.35	786.05
	08/12/19		25.31	785.09
MW-20(51) ²	02/05/19	810.41	25.63	784.78
	05/16/19		24.37	786.04
	08/12/19		25.32	785.09
MW-82(58) ²	02/05/19	807.38	22.60	784.78
	05/16/19		22.38	785.00
	08/12/19		22.35	785.03
OW-1(39) ¹	02/05/19	805.15	20.49	784.66
	05/16/19		19.22	785.93
	08/12/19		20.16	784.99
MW-14 ¹	02/05/19	802.70	18.10	784.60
	05/16/19		16.97	785.73
	08/12/19		17.91	784.79
OW-2(33) ¹	02/05/19	805.54	20.89	784.65
	05/16/19		19.72	785.82
	08/12/19		20.68	784.86
OW-2(53) ¹	02/05/19	805.50	20.86	784.64
	05/16/19		19.69	785.81
	08/12/19		20.64	784.86
OW-3(35) ²	02/05/19	801.72	17.23	784.49
	05/16/19		16.12	785.60
	08/12/19		NM	NM
OW-3(55) ²	02/05/19	801.66	17.40	784.26
	05/16/19		16.07	785.59
	08/12/19		NM	NM
MW-15 ²	02/05/19	792.90	9.10	783.80
	05/16/19		8.02	784.88
	08/12/19		8.96	783.94

Table 1
Surveyed Elevation Data and Depth to Water for Stability Assessment Monitoring Wells
and Monitoring Wells Used for Groundwater Elevation Contour Mapping
TORX Facility, 4366 North Old US Highway 31, Rochester, Indiana

Monitoring Well/Point ID	Date Measured	Top of Casing Elevation ³	Depth to Water (btoc) ⁴	Ground Water Elevation
OW-4(35) ²	02/05/19	801.35	17.33	784.02
	05/16/19		16.22	785.13
	08/12/19		18.14	783.21
OW-4(54) ²	02/05/19	801.33	17.23	784.10
	05/16/19		16.12	785.21
	08/12/19		17.04	784.29
MW-17 ¹	02/05/19	784.41	2.90	781.51
	05/16/19		1.75	782.66
	08/12/19		2.47	781.94
MW-25(16.4) ²	02/05/19	791.93	7.79	784.14
	05/16/19		6.76	785.17
	08/12/19		7.64	784.29
MW-25(32.6) ²	02/06/19	791.92	7.80	784.12
	05/16/19		NM	NM
	08/12/19		7.81	784.11
MW-25(82) ²	02/06/19	791.93	9.69	782.24
	05/16/19		NM	NM
	08/12/19		9.19	782.74
MW-26(17.5) ¹	02/05/19	792.16	10.25	781.91
	05/16/19		9.27	782.89
	08/12/19		10.06	782.10
MW-26(28.8) ¹	02/05/19	792.14	10.18	781.96
	05/16/19		NM	NM
	08/12/19		9.97	782.17
MW-26(58.2) ¹	02/05/19	792.17	9.70	782.47
	05/16/19		8.54	783.63
	08/12/19		9.38	782.79
MW-27(18) ¹	02/05/19	785.82	4.27	781.55
	05/16/19		NM	NM
	08/12/19		3.92	781.90
OW-5(16) ²	02/05/19	790.72	8.43	782.29
	05/16/19		7.52	783.20
	08/12/19		8.29	782.43
OW-5(35) ²	02/05/19	790.76	7.80	782.96
	05/16/19		6.58	784.18
	08/12/19		7.42	783.34
OW-5(44) ²	02/06/19	790.70	7.52	783.18
	05/16/19		NM	NM
	08/12/19		7.36	783.34
OW-6(38) ¹	02/05/19	789.27	8.57	780.70
	05/16/19		7.36	781.91
	08/12/19		8.13	781.14
OW-6(63) ¹	02/05/19	789.27	7.97	781.30
	05/16/19		6.76	782.51
	08/12/19		7.52	781.75

Table 1
Surveyed Elevation Data and Depth to Water for Stability Assessment Monitoring Wells
and Monitoring Wells Used for Groundwater Elevation Contour Mapping
TORX Facility, 4366 North Old US Highway 31, Rochester, Indiana

Monitoring Well/Point ID	Date Measured	Top of Casing Elevation ³	Depth to Water (btoc) ⁴	Ground Water Elevation
Shallow Overburden Wells Used for Groundwater Elevation Contour Mapping				
MW-1	08/12/19	840.48	38.15	802.33
MW-3	08/12/19	805.45	20.16	785.29
MW-5	08/12/19	807.89	20.61	787.28
MW-6C	08/12/19	810.40	25.31	785.09
MW-9C	08/12/19	808.16	23.09	785.07
MW-12	08/12/19	808.46	23.48	784.98
MW-13	08/12/19	806.67	21.69	784.98
MW-14	08/12/19	802.70	17.91	784.79
MW-16	08/12/19	791.18	8.92	782.26
MW-17	08/12/19	784.41	2.47	781.94
MW-20(35)	08/12/19	810.42	25.24	785.18
MW-21(40.2)	08/12/19	810.33	25.49	784.84
MW-23(39.9)	08/12/19	816.67	31.32	785.35
MW-24(24.9)	08/12/19	804.92	20.19	784.73
MW-25(16.4)	08/12/19	791.93	7.64	784.29
MW-26(17.5)	08/12/19	792.16	10.06	782.10
MW-27(18)	08/12/19	785.82	3.92	781.90
MW-30(41.1)	08/12/19	794.57	18.80	775.77
MW-31(30.9)	08/12/19	781.48	8.10	773.38
MW-53(41)	08/12/19	809.87	24.68	785.19
MW-57(38)	08/12/19	795.51	8.34	787.17
MW-59(29)	08/12/19	799.57	14.18	785.39
MW-60(38)	08/12/19	798.51	12.97	785.54
MW-62(36)	08/12/19	810.71	25.65	785.06
MW-65(32)	08/12/19	809.40	24.37	785.03
MW-67(30)	08/12/19	809.53	24.25	785.28
MW-68(32)	08/12/19	809.46	24.28	785.18
MW-71(33)	08/12/19	809.15	23.65	785.50
MW-72(32)	08/12/19	808.92	23.98	784.94
MW-75(32)	08/12/19	809.39	23.45	785.94
MW-76(30)	08/12/19	809.28	23.95	785.33
MW-77(41)	08/12/19	809.39	24.28	785.11
MW-78(35)	08/12/19	809.30	24.29	785.01
MW-79(30)	08/12/19	809.26	24.29	784.97
MW-81(27)	08/12/19	798.34	12.66	785.68
MW-84(44)	08/12/19	824.91	40.19	784.72
MW-85(39)	08/12/19	796.49	11.68	784.81
MW-89(28)	08/12/19	797.77	12.41	785.36
OW-1(28)	08/12/19	805.18	20.17	785.01
OW-2(33)	08/12/19	805.54	20.68	784.86
OW-3(35)	08/12/19	801.72	NM	NM
OW-4(35)	08/12/19	801.35	18.14	783.21
OW-5(16)	08/12/19	790.72	8.29	782.43
OW-6(38)	08/12/19	789.27	8.13	781.14
PM-2	08/12/19	798.45	12.67	785.78
PM-3	08/12/19	808.40	23.10	785.30
ZVI-2(17.5)	08/12/19	791.17	9.07	782.10

Table 1
Surveyed Elevation Data and Depth to Water for Stability Assessment Monitoring Wells
and Monitoring Wells Used for Groundwater Elevation Contour Mapping
TORX Facility, 4366 North Old US Highway 31, Rochester, Indiana

Monitoring Well/Point ID	Date Measured	Top of Casing Elevation ³	Depth to Water (btoc) ⁴	Ground Water Elevation
Intermediate Overburden Wells Used for Groundwater Elevation Contour Mapping				
MW-9B	08/12/19	808.07	23.02	785.05
MW-15	08/12/19	792.90	8.96	783.94
MW-19(53)	08/12/19	809.56	24.41	785.15
MW-20(51)	08/12/19	810.41	25.32	785.09
MW-24(55.4)	08/12/19	804.94	20.19	784.75
MW-25(45.2)	08/12/19	791.91	7.95	783.96
MW-26(58.2)	08/12/19	792.17	9.38	782.79
MW-27(53.05)	08/12/19	785.84	3.02	782.82
MW-29(82.5)	08/12/19	801.45	24.21	777.24
MW-31(55.5)	08/12/19	781.47	8.54	772.93
MW-52(55)	08/12/19	798.84	13.93	784.91
MW-55(49)	08/12/19	799.24	12.94	786.30
MW-56(50)	08/12/19	797.23	11.09	786.14
MW-82(58)	08/12/19	807.38	22.34	785.04
MW-83(64)	08/12/19	807.67	22.69	784.98
MW-84(65)	08/12/19	824.56	40.05	784.51
OW-1(39)	08/12/19	805.15	20.16	784.99
OW-2(53)	08/12/19	805.50	20.64	784.86
OW-3(55)	08/12/19	801.66	NM	NM
OW-4(54)	08/12/19	801.33	17.04	784.29
OW-5(35)	08/12/19	790.76	7.42	783.34
OW-6(63)	08/12/19	789.27	7.52	781.75
ZVI-2(32.5)	08/12/19	791.19	8.95	782.24

NM - Not Measured

⁽¹⁾ Well sampled quarterly

⁽²⁾ Well sampled semi-annually

⁽³⁾ Top of casing elevation established using NAVD 88 datum (US survey feet)

⁽⁴⁾ Below top of casing (feet)

Prepared By: RLB

Checked By: PJS

Table 2
Summary of Field Parameters - Stability Monitoring Wells
TORX Facility, 4366 North Old US Highway 31, Rochester, Indiana

Monitoring Well / Point ID	Date Measured	pH S.U.	Conductivity mS/cm	Temperature °C	DO mg/L	ORP mV
MW-59(29) ²	02/07/19	6.23	1.721	13.08	0.16	-104.8
	08/22/19	6.21	1.470	14.81	0.61	-48.6
MW-59(46) ²	02/06/19	7.16	1.194	13.41	0.11	-175.5
	08/22/19	7.11	0.423	14.84	0.50	-43.3
MW-81(27) ²	02/07/19	6.06	0.963	13.60	0.23	-101.1
	08/21/19	6.09	0.824	21.05	0.40	-84.4
MW-68(32) ²	02/07/19	7.12	3.138	16.6	3.29	-161
	08/22/19	6.39	2.037	18.45	6.44	44.1
MW-72(32) ²	02/07/19	6.72	3.489	16.8	3.64	-156
	08/22/19	6.43	1.484	18.79	5.65	47.5
MW-6C ¹	02/06/19	6.77	0.738	14.7	0.66	-83
	05/17/19	6.77	0.806	15.99	2.55	-106.7
	08/21/19	6.91	0.684	18.47	1.87	-8.6
MW-20(51) ²	02/07/19	7.18	2.424	9.8	0.36	-140
	08/20/19	6.62	0.410	18.34	0.65	100.9
MW-82(58) ²	02/06/19	6.88	1.814	13.38	0.15	-149.8
	08/20/19	6.83	1.102	17.41	0.21	-121.3
OW-1(39) ¹	02/06/19	7.18	1.537	13.53	0.15	-163.5
	05/17/19	7.23	0.614	14.41	0.21	-171.2
	08/21/19	7.34	0.578	15.10	0.38	-67.1
MW-14 ¹	02/06/19	7.01	1.643	12.68	1.11	-150.0
	05/17/19	7.16	0.696	14.98	0.18	-183.7
	08/20/19	6.99	1.084	14.54	0.32	-90.1
OW-2(33) ¹	02/06/19	6.92	0.889	13.3	0.21	-142
	05/16/19	7.21	0.694	14.66	0.17	-123.6
	08/21/19	7.01	0.745	15.59	0.14	-76.7
OW-2(53) ¹	02/06/19	7.00	0.694	9.2	0.49	-137
	05/16/19	6.98	0.646	15.71	0.42	-138.3
	08/21/19	7.10	0.643	15.25	0.91	-83.5
OW-3(35) ²	02/06/19	7.10	1.899	13.44	0.05	-179.4
	08/21/19	6.71	0.614	16.78	0.30	-100.2
OW-3(55) ²	02/06/19	6.83	2.102	13.01	5.66	127.8
	08/21/19	6.68	0.636	15.84	0.49	-190.1
MW-15 ²	02/06/19	6.54	1.235	11.8	0.30	-109
	08/20/19	6.35	2.161	16.61	1.02	-50.5
OW-4(35) ²	02/05/19	6.88	3.341	11.1	0.19	-132
	08/21/19	6.71	1.386	14.83	0.70	-76.8
OW-4(54) ²	02/05/19	7.14	1.901	11.6	0.26	-96
	08/21/19	7.15	0.978	14.71	0.20	-75.5
MW-17 ¹	02/05/19	6.99	0.960	7.29	0.17	-78.4
	05/16/19	6.99	0.722	14.78	0.16	-86.5
	08/20/19	6.81	1.279	21.33	0.25	-62.1
MW-25(16.4) ²	02/06/19	6.84	0.789	11.9	0.13	-122
	08/20/19	6.62	1.208	15.65	0.10	-90.2

Table 2
Summary of Field Parameters - Stability Monitoring Wells
TORX Facility, 4366 North Old US Highway 31, Rochester, Indiana

Monitoring Well / Point ID	Date Measured	pH S.U.	Conductivity mS/cm	Temperature °C	DO mg/L	ORP mV
MW-25(32.6) ²	02/06/19	6.87	0.644	12.6	0.39	-132
	08/20/19	6.63	1.032	17.77	0.28	-102.7
MW-25(82) ²	02/06/19	7.06	0.699	11.8	0.35	-113
	08/20/19	7.04	1.172	15.98	0.71	-51.8
MW-26(17.5) ¹	02/05/19	7.07	1.575	10.2	0.17	-113
	05/16/19	6.80	0.843	13.73	1.48	-102.8
	08/19/19	6.27	0.813	15.22	1.79	-78.6
MW-26(28.8) ¹	02/05/19	7.03	2.230	12.5	0.14	-113
	05/16/19	7.09	1.203	14.63	0.05	-106.8
	08/19/19	6.27	1.144	14.57	0.12	-69.7
MW-26(58.2) ¹	02/05/19	7.37	0.968	11.8	0.27	141
	05/16/19	7.21	0.573	13.64	0.44	-125.8
	08/19/19	6.95	0.604	15.74	1.01	-95.0
MW-27(18) ¹	02/05/19	7.14	0.879	9.49	0.12	-119.7
	05/16/19	6.99	0.660	13.00	0.09	-153.8
	08/19/19	7.67	0.701	18.31	10.85	1.4
OW-5(16) ²	02/06/19	6.78	1.825	11.60	0.18	-136.1
	08/21/19	6.73	0.651	16.30	0.35	-199.2
OW-5(35) ²	02/05/19	6.92	0.881	12.42	0.86	-90.5
	08/21/19	6.56	0.623	16.68	0.46	-194.1
OW-5(44) ²	02/06/19	6.45	3.137	11.89	0.21	-125.2
	08/21/19	6.00	1.065	15.40	0.40	-180.2
OW-6(38) ¹	02/05/19	7.06	0.932	12.38	1.97	-104.5
	05/16/19	7.00	0.668	13.15	1.7	-111.8
	08/21/19	7.19	0.739	14.88	0.12	-107.3
OW-6(63) ¹	02/05/19	6.79	2.164	11.99	0.19	-115.0
	05/16/19	6.97	2.087	12.72	1.1	-114.7
	08/21/19	7.10	0.78	15.30	0.25	-104.6

⁽¹⁾ Well sampled quarterly

⁽²⁾ Well sampled semi-annually

NM - Not Measured
mS/cm - milli Siemen/centimeter
mg/L - milligram per liter

mV - millivolt
°C - degrees Celsius
S.U. - Standard Unit

ORP - Oxidation-Reduction Potential
DO - Dissolved Oxygen

Prepared By: RLB
Checked By: PJS

Table 3
Summary of Target VOC Concentrations and Contaminant Mass - Stability Monitoring Wells
TORX Facility, 4366 North Old US Highway 31, Rochester, Indiana

Treatment Area	Sample ID	Sample Date	1,1-DCE (96.94)		cis-1,2-DCE (96.94)		trans-1,2-DCE (96.94)		PCE (165.83)		TCE (131.39)		Vinyl Chloride (62.5)		Total Contaminant Mass
			µg/L	m/L*	µg/L	m/L*	µg/L	m/L*	µg/L	m/L*	µg/L	m/L*	µg/L	m/L*	m/L*
Source Area Behind Plant	MW-59(29)	10/25/18	1 U		1 U		1 U		1 U		1 U		1 U		0.00
	MW-59(29)	2/7/19	1 U		1 U		1 U		1 U		1 U		1 U		0.00
	MW-59(29)	8/22/19	1 U		1.0	0.01	1 U		1 U		1 U		1.2	0.02	0.03
	MW-59(29)-R	8/22/19	1 U		1.1	0.01	1 U		1 U		1 U		1.3	0.02	0.03
	MW-59(46)	7/24/18	1 U		1.0	0.01	1 U		1 U		1 U		7.7	0.12	0.13
	MW-59(46)	2/6/19	12 J	0.12	1,200	12.4	7.0 J	0.07	1 U		1 U		1,600 J	25.6	38.2
	MW-59(46)	8/22/19	41	0.42	1,200	12.4	16	0.17	1 U		1 U		1,600	25.6	38.6
	MW-81(27)	10/25/18	1 U		4.7	0.05	1 U		1 U		1 U		10	0.16	0.21
	MW-81(27)-R	10/25/18	1 U		3.5	0.04	1 U		1 U		1 U		8.6	0.14	0.17
	MW-81(27)	2/7/19	1 U		38	0.39	1 U		1 U		1 U		46 J	0.74	1.13
MW-81(27)	8/21/19	1 U		1 U		1 U		1 U		1 U		1 U		0.00	
Source Area Beneath Plant Building	MW-68(32)	10/25/18	5 U		110	1.1	5 U		5 U		5 U		600	10	11
	MW-68(32)	2/7/19	1 U		4.9	0.05	1 U		1 U		1 U		35	0.56	0.61
	MW-68(32)	8/22/19	1 U		12	0.12	1 U		1 U		1 U		44	0.70	0.83
	MW-72(32)	10/25/18	1 U		1.7	0.02	1 U		1 U		1 U		1 U		0.02
	MW-72(32)	2/7/19	1 U		1.0	0.01	1 U		1 U		1 U		1 U		0.01
	MW-72(32)	8/22/19	1 U		1.3	0.01	1 U		1 U		1 U		1.9	0.03	0.04
Treatment Zone A	MW-6C	10/24/18	1 U		34	0.35	1 U		1 U		1.1 J	0.01	13	0.21	0.57
	MW-6C-R	10/24/18	1 U		29	0.30	1 U		1 U		1 U		11	0.18	0.48
	MW-6C	2/6/19	1 U		4.9	0.05	1 U		1 U		1 U		2.1 J	0.03	0.08
	MW-6C-R	2/6/19	1 U		4.5	0.05	1 U		1 U		1 U		2.3 J	0.04	0.08
	MW-6C	5/17/19	1 U		2.8	0.03	1 U		1 U		1 U		1.9	0.03	0.06
	MW-6C-R	5/17/19	1 U		2.7	0.03	1 U		1 U		1 U		2.0	0.03	0.06
	MW-6C	8/21/19	1 U		4.0	0.04	1 U		1 U		1 U		2.3	0.04	0.08
	MW-20(51)	10/25/18	1 U		1 U		1 U		1 U		1 U		1 U		0.00
	MW-20(51)	2/7/19	1 U		1 U		1 U		1 U		1 U		1 U		0.00
	MW-20(51)	8/20/19	1 U		1 U		1 U		1 U		1 U		1 U		0.00
	MW-82(58)	10/24/18	1 U		1 U		1 U		1 U		1 U		1 U		0.00
	MW-82(58)	2/6/19	1 U		1 U		1 U		1 U		1 U		1 U		0.00
	MW-82(58)	8/20/19	1 U		1 U		1 U		1 U		1 U		1 U		0.00
	OW-1(39)	10/24/18	1 U		1 U		1 U		1 U		1 U		1 U		0.00
	OW-1(39)	2/6/19	1 U		1 U		1 U		1 U		1 U		1 U		0.00
	OW-1(39)	5/17/19	1 U		1 U		1 U		1 U		1 U		1 U		0.00
	OW-1(39)	8/21/19	1 U		1 U		1 U		1 U		1 U		1 U		0.00

Table 3
Summary of Target VOC Concentrations and Contaminant Mass - Stability Monitoring Wells
TORX Facility, 4366 North Old US Highway 31, Rochester, Indiana

Treatment Area	Sample ID	Sample Date	1,1-DCE (96.94)		cis-1,2-DCE (96.94)		trans-1,2-DCE (96.94)		PCE (165.83)		TCE (131.39)		Vinyl Chloride (62.5)		Total Contaminant Mass
			µg/L	m/L*	µg/L	m/L*	µg/L	m/L*	µg/L	m/L*	µg/L	m/L*	µg/L	m/L*	m/L*
Treatment Zone B	MW-14	10/24/18	1 U		1.8 J	0.02	1 U		1 U		1 U		1 U		0.02
	MW-14	2/6/19	1 U		1.0	0.01	1 U		1 U		1 U		1 UJ		0.01
	MW-14	5/17/19	1 U		1 U		1 U		1 U		1 U		1 U		0.00
	MW-14	8/20/19	1 U		1.5	0.02	1 U		1 U		1 U		1.1	0.02	0.03
	OW-2(33)	10/23/18	1 U		1 U		1 U		1 U		1 U		1 U		0.00
	OW-2(33)	2/6/19	1 U		1 U		1 U		1 U		1 U		1 U		0.00
	OW-2(33)	5/16/19	1 U		1 U		1 U		1 U		1 U		1 U		0.00
	OW-2(33)	8/21/19	1 U		1 U		1 U		1 U		1 U		1 U		0.00
	OW-2(53)	10/23/18	1 UJ		1 UJ		1 UJ		1 UJ		1 UJ		1 UJ		0.00
	OW-2(53)	2/6/19	1 U		1 U		1 U		1 U		1 U		1 U		0.00
	OW-2(53)	5/16/19	1 U		1 U		1 U		1 U		1 U		1 U		0.00
	OW-2(53)	8/21/19	1 U		1 U		1 U		1 U		1 U		1 U		0.00
	OW-3(35)	10/23/18	1 U		1 U		1 U		1 U		1 U		1 U		0.00
	OW-3(35)	2/6/19	1 U		1 U		1 U		1 U		1 U		1 UJ		0.00
	OW-3(35)	8/21/19	1 U		1 U		1 U		1 U		1 U		1 U		0.00
	OW-3(55)	10/23/18	1 U		1 U		1 U		1 U		1 U		1 U		0.00
	OW-3(55)	2/6/19	1 U		1 U		1 U		1 U		1 U		1 UJ		0.00
	OW-3(55)	8/21/19	1 U		1 U		1 U		1 U		1 U		1 U		0.00
Treatment Zone C	MW-15	10/24/18	1 U		1 U		1 U		1 U		1 U		1 U		0.00
	MW-15	2/6/19	1 U		1 U		1 U		1 U		1 U		1 UJ		0.00
	MW-15	8/20/19	1 U		1 U		1 U		1 U		1 U		1 U		0.00
	OW-4(35)	10/24/18	1 U		1 U		1 U		1 U		1 U		1 U		0.00
	OW-4(35)	2/5/19	1 U		1 U		1 U		1 U		1 U		1 U		0.00
	OW-4(35)	8/21/19	1 U		1 U		1 U		1 U		1 U		1 U		0.00
	OW-4(54)	10/24/18	1 U		1 U		1 U		1 U		1 U		1 U		0.00
	OW-4(54)	2/5/19	1 U		1 U		1 U		1 U		1 U		1 U		0.00
OW-4(54)	8/21/19	1 U		1 U		1 U		1 U		1 U		1 U		0.00	

Table 3
Summary of Target VOC Concentrations and Contaminant Mass - Stability Monitoring Wells
TORX Facility, 4366 North Old US Highway 31, Rochester, Indiana

Treatment Area	Sample ID	Sample Date	1,1-DCE (96.94)		cis-1,2-DCE (96.94)		trans-1,2-DCE (96.94)		PCE (165.83)		TCE (131.39)		Vinyl Chloride (62.5)		Total Contaminant Mass
			µg/L	m/L*	µg/L	m/L*	µg/L	m/L*	µg/L	m/L*	µg/L	m/L*	µg/L	m/L*	m/L*
Treatment Zone D	MW-17	10/23/18	1 U		27	0.28	1 U		1 U		58	0.44	1 U		0.72
	MW-17	2/5/19	1 U		21	0.22	1 U		1 U		42	0.32	1 UJ		0.54
	MW-17	5/16/19	1 U		23	0.24	1 U		1 U		42	0.32	1.2	0.02	0.58
	MW-17	8/20/19	1 U		20	0.21	1 U		1 U		39	0.30	1.6	0.03	0.53
	MW-25(16.4)	10/23/18	1 U		1 U		1 U		1 U		1 U		1 U		0.00
	MW-25(16.4)	2/6/19	1 U		1 U		1 U		1 U		1 U		1 U		0.00
	MW-25(16.4)	8/20/19	1 U		1 U		1 U		1 U		1 U		1 U		0.00
	MW-25(32.6)	10/23/18	1 U		1 U		1 U		1 U		1 U		1 U		0.00
	MW-25(32.6)	2/6/19	1 U		1 U		1 U		1 U		1 U		1 U		0.00
	MW-25(32.6)	8/20/19	1 U		1 U		1 U		1 U		1 U		1 U		0.00
	MW-25(82)	7/23/18	1 U		1.2	0.01	1 U		1 U		1 U		2.5	0.04	0.05
	MW-25(82)	2/6/19	1 U		1.4	0.01	1 U		1 U		1 U		2.8 J	0.04	0.06
	MW-25(82)	8/20/19	1 U		1.5	0.02	1 U		1 U		1 U		3.6	0.06	0.07
	MW-26(17.5)	10/22/18	1 U		1 U		1 U		1 U		1 U		1 U		0.00
	MW-26(17.5)	2/5/19	1 U		1 U		1 U		1 U		1 U		1 U		0.00
	MW-26(17.5)	5/16/19	1 U		1 U		1 U		1 U		1 U		1 U		0.00
	MW-26(17.5)	8/19/19	1 U		1 U		1 U		1 U		1 U		1 U		0.00
	MW-26(28.8)	10/22/18	1 U		1 U		1 U		1 U		1 U		1 U		0.00
	MW-26(28.8)	2/5/19	1 U		1 U		1 U		1 U		1 U		1 U		0.00
	MW-26(28.8)	5/16/19	1 U		1 U		1 U		1 U		1 U		1 U		0.00
MW-26(28.8)	8/19/19	1 U		1 U		1 U		1 U		1 U		1 U		0.00	
MW-26(58.2)	10/22/18	1 U		1 U		1 U		1 U		1 U		1 U		0.00	
MW-26(58.2)	2/5/19	1 U		1 U		1 U		1 U		1 U		1 U		0.00	
MW-26(58.2)	5/16/19	1 U		1 U		1 U		1 U		1 U		1 U		0.00	
MW-26(58.2)	8/19/19	1 U		1 U		1 U		1 U		1 U		1 U		0.00	
MW-27(18)	7/20/18	1 U		1 U		1 U		1 U		1 U		1 U		0.00	
MW-27(18)-R	7/20/18	1 U		1 U		1 U		1 U		1 U		1 U		0.00	
MW-27(18)	2/5/19	1 U		1 U		1 U		1 U		1 U		1 UJ		0.00	
MW-27(18)	5/16/19	1 U		1 U		1 U		1 U		1 U		1 U		0.00	
MW-27(18)	8/19/19	1 U		1 U		1 U		1 U		1 U		1.1	0.01	0.01	
MW-27(18)-R	8/19/19	1 U		1 U		1 U		1 U		1 U		1 U		0.00	

Table 3
Summary of Target VOC Concentrations and Contaminant Mass - Stability Monitoring Wells
TORX Facility, 4366 North Old US Highway 31, Rochester, Indiana

Treatment Area	Sample ID	Sample Date	1,1-DCE (96.94)		cis-1,2-DCE (96.94)		trans-1,2-DCE (96.94)		PCE (165.83)		TCE (131.39)		Vinyl Chloride (62.5)		Total Contaminant Mass
			µg/L	m/L*	µg/L	m/L*	µg/L	m/L*	µg/L	m/L*	µg/L	m/L*	µg/L	m/L*	m/L*
Treatment Zone D	OW-5(16)	10/24/18	<i>1 U</i>		<i>1 U</i>		<i>1 U</i>		<i>1 U</i>		<i>1 U</i>		<i>1 U</i>		0.00
	OW-5(16)	2/6/19	1 U		1 U		1 U		1 U		1 U		1 UJ		0.00
	OW-5(16)	8/21/19	1 U		1 U		1 U		1 U		1 U		1 U		0.00
	OW-5(35)	10/23/18	<i>1 U</i>		<i>1 U</i>		<i>1 U</i>		<i>1 U</i>		<i>1 U</i>		<i>1 U</i>		0.00
	OW-5(35)	2/5/19	1 U		1 U		1 U		1 U		1 U		1 UJ		0.00
	OW-5(35)	8/21/19	1 U		1 U		1 U		1 U		1 U		1 U		0.00
	OW-5(44)	10/23/18	<i>1 U</i>		<i>1 U</i>		<i>1 U</i>		<i>1 U</i>		<i>1 U</i>		<i>1 U</i>		0.00
	OW-5(44)	2/6/19	1 U		1 U		1 U		1 U		1 U		1 UJ		0.00
	OW-5(44)	8/21/19	1 U		1 U		1 U		1 U		1 U		1 U		0.00
	OW-6(38)	7/19/18	<i>1 U</i>		<i>1 U</i>		<i>1 U</i>		<i>1 U</i>		<i>1 U</i>		<i>1 U</i>		0.00
	OW-6(38)	2/5/19	1 U		1 U		1 U		1 U		1 U		1 UJ		0.00
	OW-6(38)-R	2/5/19	1 U		1 U		1 U		1 U		1 U		1 UJ		0.00
	OW-6(38)	5/16/19	1 U		1 U		1 U		1 U		1 U		1 U		0.00
	OW-6(38)	8/21/19	1 U		1 U		1 U		1 U		1 U		1 U		0.00
	OW-6(63)	7/19/18	<i>1 U</i>		<i>1 U</i>		<i>1 U</i>		<i>1 U</i>		<i>1 U</i>		<i>1 U</i>		0.00
	OW-6(63)	2/5/19	1 U		1 U		1 U		1 U		1 U		1 UJ		0.00
	OW-6(63)	5/16/19	1 U		1 U		1 U		1 U		1 U		1 U		0.00
	OW-6(63)	8/21/19	1 U		1 U		1 U		1 U		1 U		1 U		0.00
OW-6(63)-R	8/21/19	1 U		1 U		1 U		1 U		1 U		1 U		0.00	

Notes: J - Estimated concentration, analyte detected below quantitation limit

U - Analyzed but not detected above the MDL

(96.94) - Compound molecular weight in grams per mole

*m/L** - micromole per liter

mg/L - micrograms per liter

Italic text is baseline data

Prepared by: RLB

Checked by: PJS

Table 4
Summary of Dissolved Gases - Stability Monitoring Wells
TORX Facility, 4366 North Old US Highway 31, Rochester, Indiana

Treatment Area	Sample ID	Sample Date	Methane	Ethane	Ethene
			µg/L	µg/L	µg/L
Source Area Behind Plant	<i>MW-59(29)</i>	<i>10/25/18</i>	<i>24,000</i>	<i>390</i>	<i>0.16</i>
	MW-59(29)	2/7/19	27,000	380	0.31
	MW-59(29)	8/22/19	21,000	270	0.14
	MW-59(29)-R	8/22/19	20,000	250	0.14
	<i>MW-81(27)</i>	<i>10/25/18</i>	<i>26,000</i>	<i>300</i>	<i>82</i>
	<i>MW-81(27)-R</i>	<i>10/25/18</i>	<i>25,000</i>	<i>290</i>	<i>81</i>
	MW-81(27)	2/7/19	25,000	350	1.0
Source Area Beneath Plant Building	<i>MW-68(32)</i>	<i>10/25/18</i>	<i>15,000</i>	<i>87</i>	<i>1,500</i>
	MW-68(32)	2/7/19	13,000	170	200
	MW-68(32)	8/22/19	11,000	120	8.0
	<i>MW-72(32)</i>	<i>10/25/18</i>	<i>7,400</i>	<i>49</i>	<i>0.52</i>
	MW-72(32)	2/7/19	10,000	40	0.27
	MW-72(32)	8/22/19	9,600	14	0.33
Treatment Zone A	<i>MW-6C</i>	<i>10/24/18</i>	<i>18,000</i>	<i>31</i>	<i>2.4</i>
	<i>MW-6C-R</i>	<i>10/24/18</i>	<i>17,000</i>	<i>32</i>	<i>2.5</i>
	MW-6C	2/6/19	26,000	33	0.95
	MW-6C-R	2/6/19	25,000	33	0.80
	MW-6C	8/21/19	16,000	22	0.42

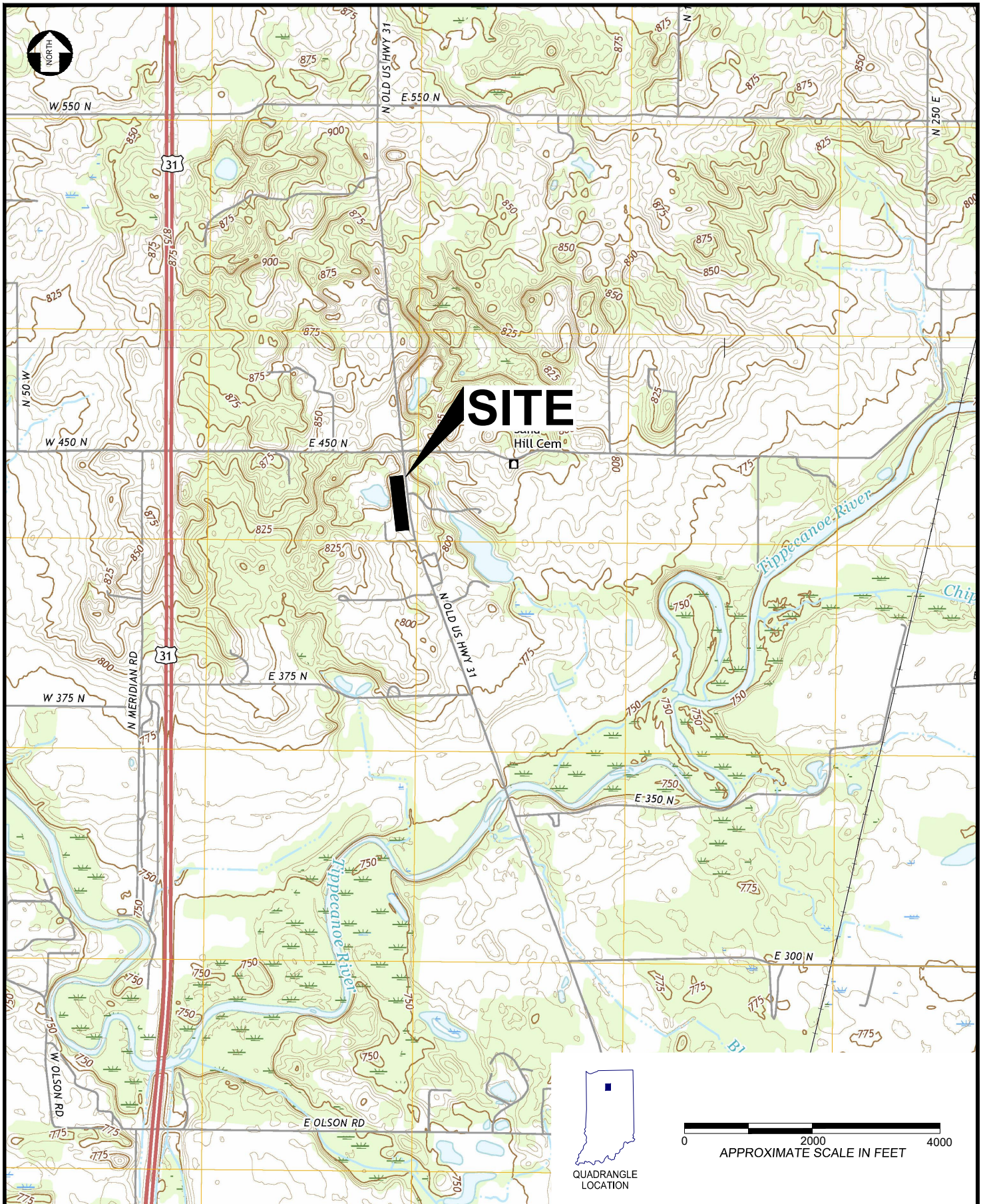
Notes: *Italic text* is baseline data
µg/L - micrograms per liter

Prepared by: RLB
Checked by: PJS



Textron, Inc.
TORX Facility Remediation
Report of the Third Groundwater Stability Assessment Monitoring Event

FIGURES



QUADRANGLE LOCATION



APPROXIMATE SCALE IN FEET

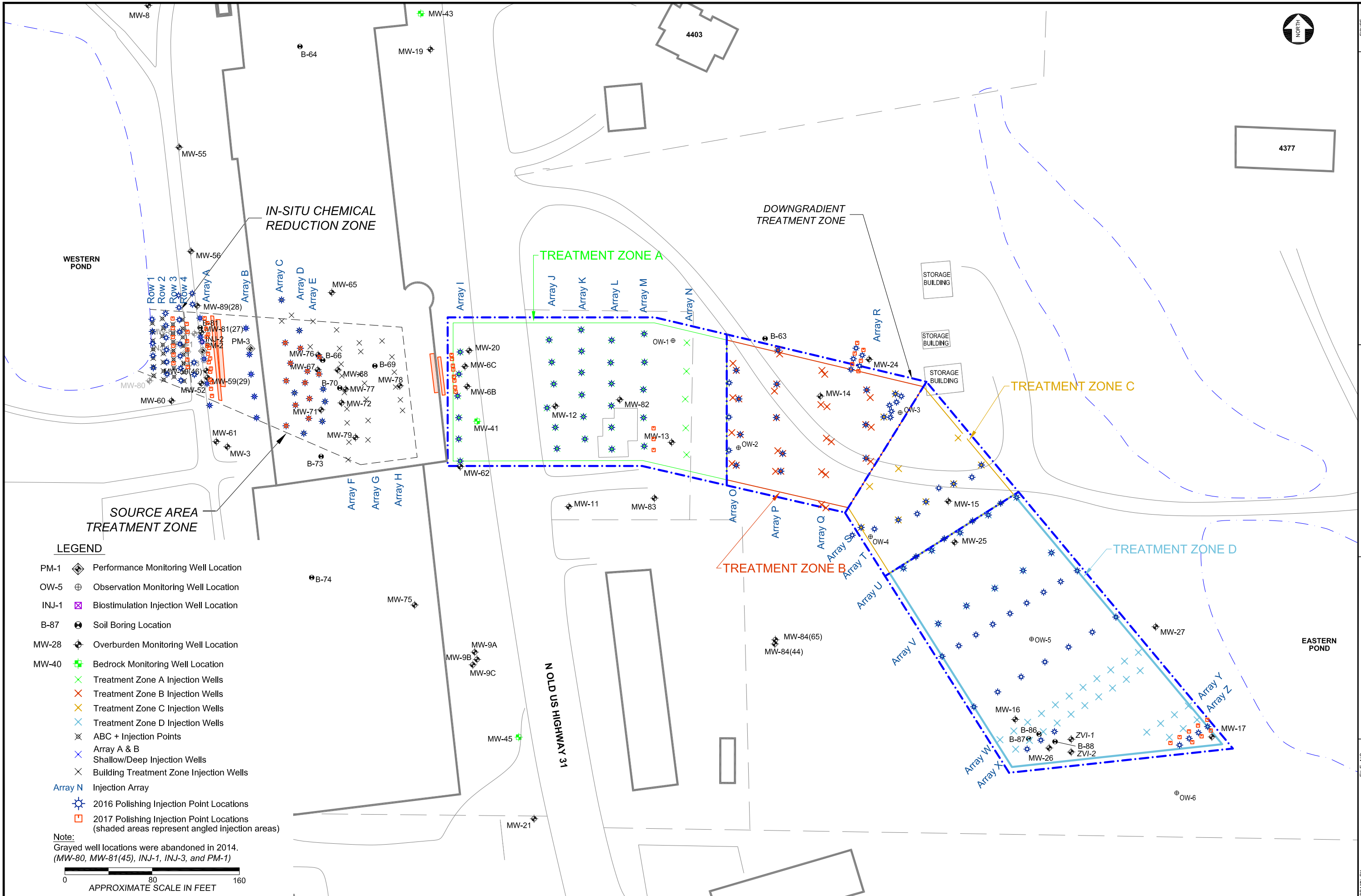
DRAWN BY P:\Textron\TFS\ FILE NO.
 RLB Drawings\TFS Topo.dwg
 APPROVED BY DATE
 PJS 09/20/2019
 SOURCE USGS 7.5 minute topographic survey maps of Argos and Rochester, IN, 2016.
 PROJECT NO. SCALE
 3359 15 1040 SEE ABOVE

TORX FACILITY
4366 NORTH OLD US HIGHWAY 31
ROCHESTER, INDIANA



SITE LOCATION MAP

FIGURE
1
 SHEET 1 of 1



LEGEND

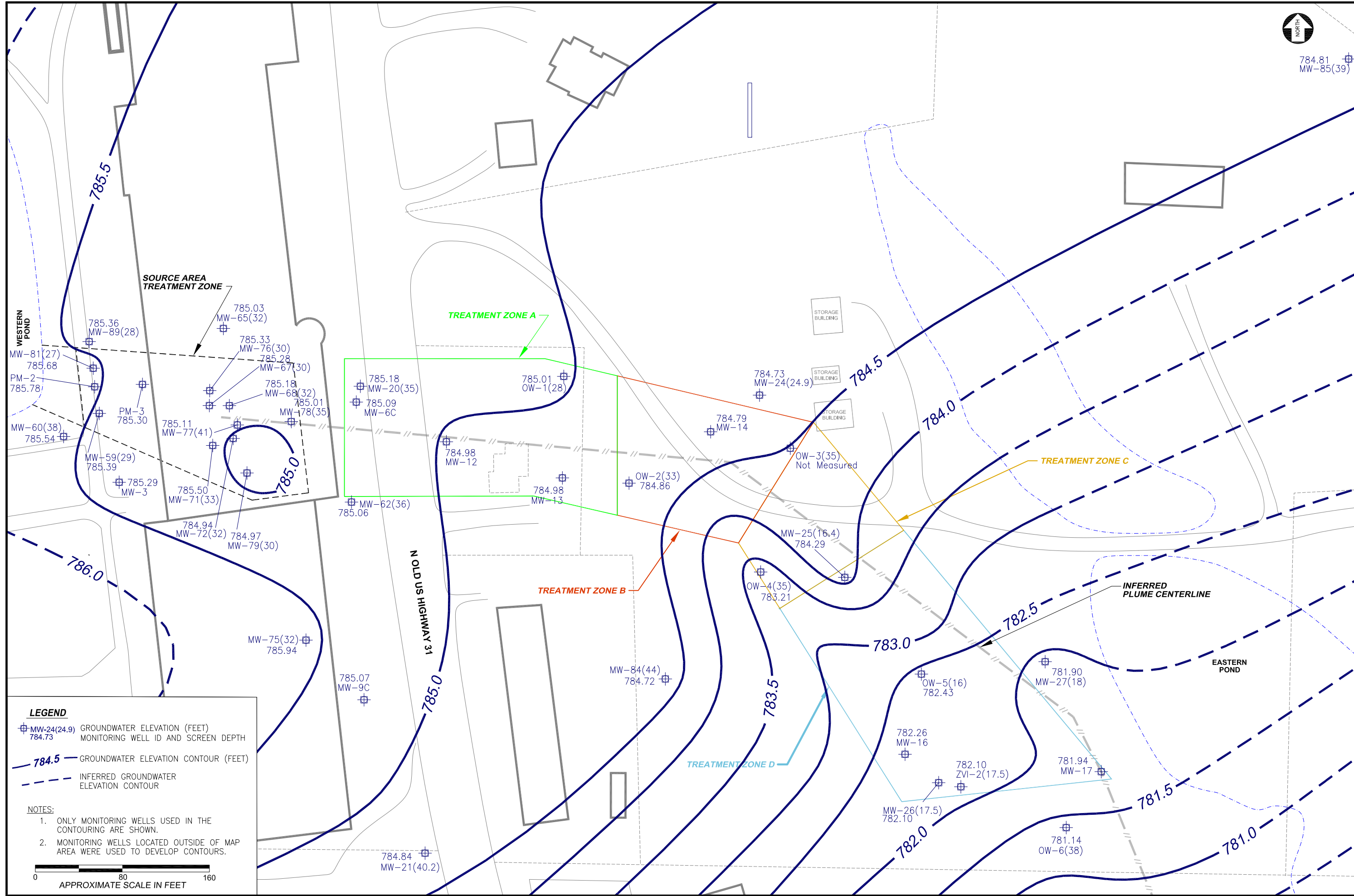
- PM-1 Performance Monitoring Well Location
- OW-5 Observation Monitoring Well Location
- INJ-1 Biostimulation Injection Well Location
- B-87 Soil Boring Location
- MW-28 Overburden Monitoring Well Location
- MW-40 Bedrock Monitoring Well Location
- Treatment Zone A Injection Wells
- Treatment Zone B Injection Wells
- Treatment Zone C Injection Wells
- Treatment Zone D Injection Wells
- ABC + Injection Points
- Array A & B Shallow/Deep Injection Wells
- Building Treatment Zone Injection Wells
- Array N Injection Array
- 2016 Polishing Injection Point Locations
- 2017 Polishing Injection Point Locations (shaded areas represent angled injection areas)

Note:
 Grayed well locations were abandoned in 2014.
 (MW-80, MW-81(45), INJ-1, INJ-3, and PM-1)



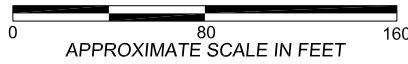


784.81
MW-85(39)

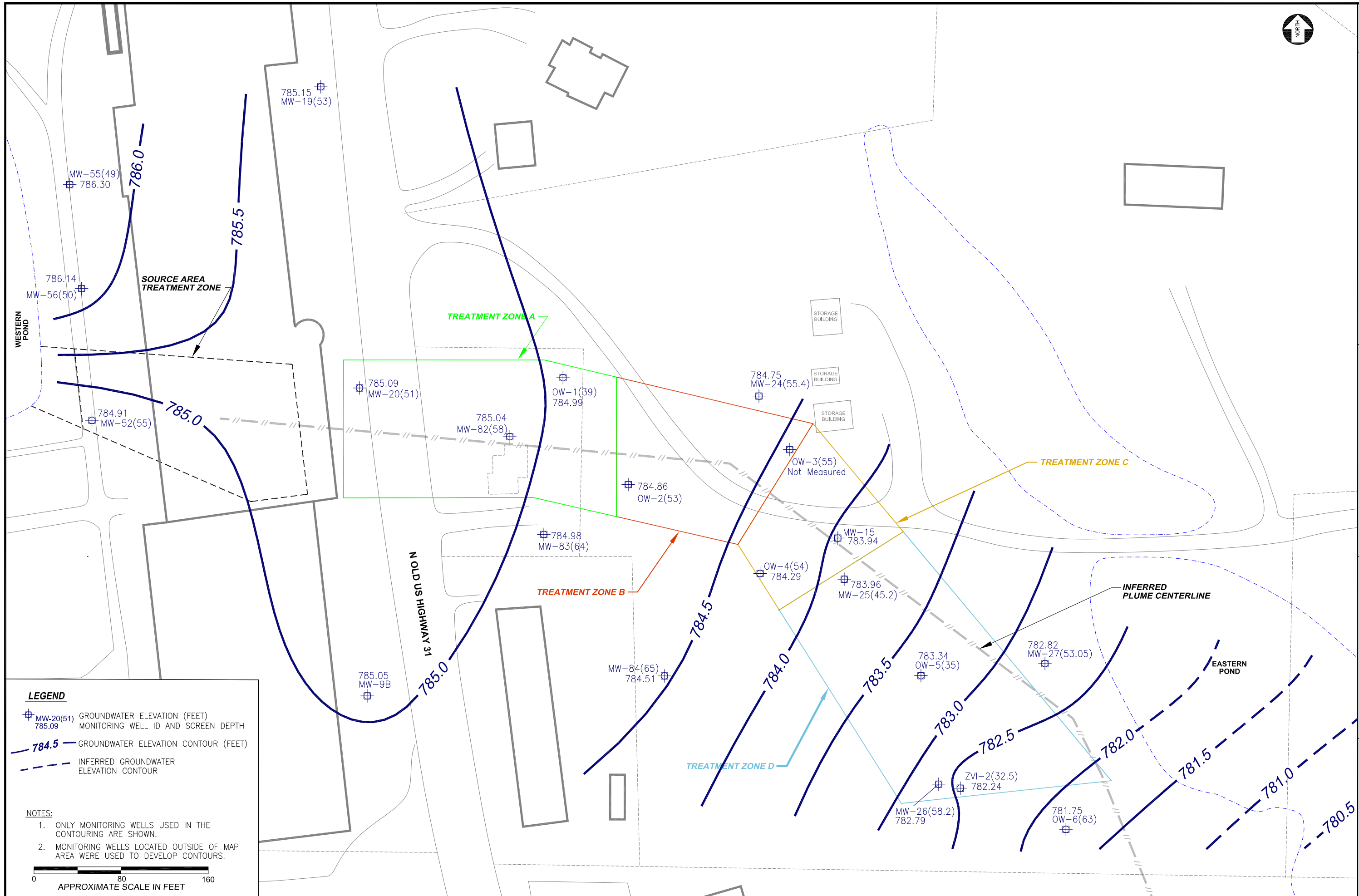


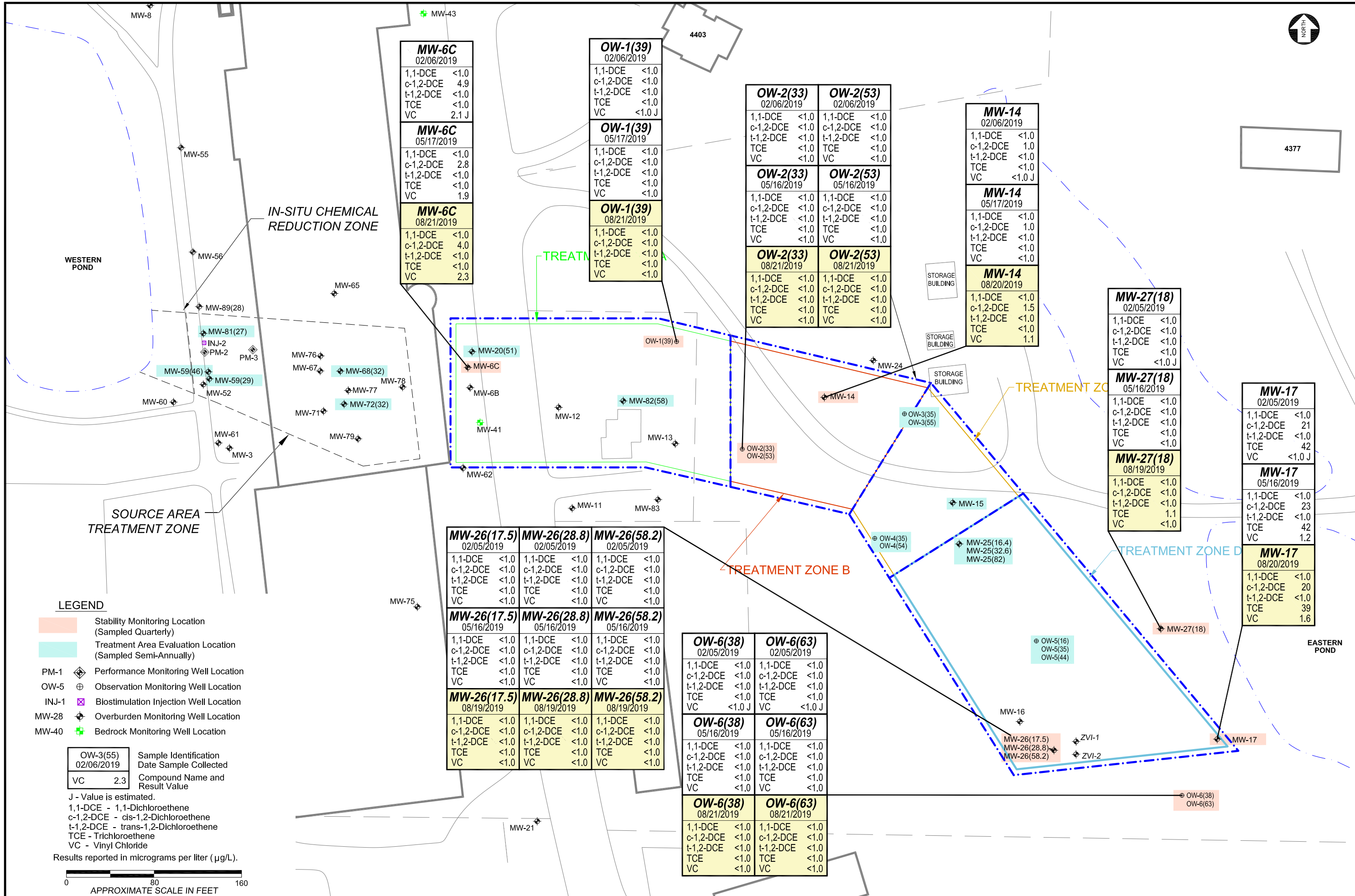
LEGEND
⊕ MW-24(24.9) GROUNDWATER ELEVATION (FEET)
784.73 MONITORING WELL ID AND SCREEN DEPTH
— 784.5 — GROUNDWATER ELEVATION CONTOUR (FEET)
- - - INFERRED GROUNDWATER ELEVATION CONTOUR

NOTES:
1. ONLY MONITORING WELLS USED IN THE CONTOURING ARE SHOWN.
2. MONITORING WELLS LOCATED OUTSIDE OF MAP AREA WERE USED TO DEVELOP CONTOURS.



APPROXIMATE SCALE IN FEET





MW-6C 02/06/2019
1,1-DCE <1.0
c-1,2-DCE 4.9
t-1,2-DCE <1.0
TCE <1.0
VC 2.1 J
MW-6C 05/17/2019
1,1-DCE <1.0
c-1,2-DCE 2.8
t-1,2-DCE <1.0
TCE <1.0
VC 1.9
MW-6C 08/21/2019
1,1-DCE <1.0
c-1,2-DCE 4.0
t-1,2-DCE <1.0
TCE <1.0
VC 2.3

OW-1(39) 02/06/2019
1,1-DCE <1.0
c-1,2-DCE <1.0
t-1,2-DCE <1.0
TCE <1.0
VC <1.0 J
OW-1(39) 05/17/2019
1,1-DCE <1.0
c-1,2-DCE <1.0
t-1,2-DCE <1.0
TCE <1.0
VC <1.0
OW-1(39) 08/21/2019
1,1-DCE <1.0
c-1,2-DCE <1.0
t-1,2-DCE <1.0
TCE <1.0
VC <1.0

OW-2(33) 02/06/2019
1,1-DCE <1.0
c-1,2-DCE <1.0
t-1,2-DCE <1.0
TCE <1.0
VC <1.0
OW-2(53) 02/06/2019
1,1-DCE <1.0
c-1,2-DCE <1.0
t-1,2-DCE <1.0
TCE <1.0
VC <1.0
OW-2(33) 05/16/2019
1,1-DCE <1.0
c-1,2-DCE <1.0
t-1,2-DCE <1.0
TCE <1.0
VC <1.0
OW-2(53) 05/16/2019
1,1-DCE <1.0
c-1,2-DCE <1.0
t-1,2-DCE <1.0
TCE <1.0
VC <1.0
OW-2(33) 08/21/2019
1,1-DCE <1.0
c-1,2-DCE <1.0
t-1,2-DCE <1.0
TCE <1.0
VC <1.0
OW-2(53) 08/21/2019
1,1-DCE <1.0
c-1,2-DCE <1.0
t-1,2-DCE <1.0
TCE <1.0
VC <1.0

MW-14 02/06/2019
1,1-DCE <1.0
c-1,2-DCE 1.0
t-1,2-DCE <1.0
TCE <1.0
VC <1.0 J
MW-14 05/17/2019
1,1-DCE <1.0
c-1,2-DCE 1.0
t-1,2-DCE <1.0
TCE <1.0
VC <1.0
MW-14 08/20/2019
1,1-DCE <1.0
c-1,2-DCE 1.5
t-1,2-DCE <1.0
TCE <1.0
VC 1.1

MW-27(18) 02/05/2019
1,1-DCE <1.0
c-1,2-DCE <1.0
t-1,2-DCE <1.0
TCE <1.0
VC <1.0 J
MW-27(18) 05/16/2019
1,1-DCE <1.0
c-1,2-DCE <1.0
t-1,2-DCE <1.0
TCE <1.0
VC <1.0
MW-27(18) 08/19/2019
1,1-DCE <1.0
c-1,2-DCE <1.0
t-1,2-DCE <1.0
TCE 1.1
VC <1.0

MW-17 02/05/2019
1,1-DCE <1.0
c-1,2-DCE 21
t-1,2-DCE <1.0
TCE 42
VC <1.0 J
MW-17 05/16/2019
1,1-DCE <1.0
c-1,2-DCE 23
t-1,2-DCE <1.0
TCE 42
VC 1.2
MW-17 08/20/2019
1,1-DCE <1.0
c-1,2-DCE 20
t-1,2-DCE <1.0
TCE 39
VC 1.6

MW-26(17.5) 02/05/2019
1,1-DCE <1.0
c-1,2-DCE <1.0
t-1,2-DCE <1.0
TCE <1.0
VC <1.0
MW-26(28.8) 02/05/2019
1,1-DCE <1.0
c-1,2-DCE <1.0
t-1,2-DCE <1.0
TCE <1.0
VC <1.0
MW-26(58.2) 02/05/2019
1,1-DCE <1.0
c-1,2-DCE <1.0
t-1,2-DCE <1.0
TCE <1.0
VC <1.0
MW-26(17.5) 05/16/2019
1,1-DCE <1.0
c-1,2-DCE <1.0
t-1,2-DCE <1.0
TCE <1.0
VC <1.0
MW-26(28.8) 05/16/2019
1,1-DCE <1.0
c-1,2-DCE <1.0
t-1,2-DCE <1.0
TCE <1.0
VC <1.0
MW-26(58.2) 05/16/2019
1,1-DCE <1.0
c-1,2-DCE <1.0
t-1,2-DCE <1.0
TCE <1.0
VC <1.0
MW-26(17.5) 08/19/2019
1,1-DCE <1.0
c-1,2-DCE <1.0
t-1,2-DCE <1.0
TCE <1.0
VC <1.0
MW-26(28.8) 08/19/2019
1,1-DCE <1.0
c-1,2-DCE <1.0
t-1,2-DCE <1.0
TCE <1.0
VC <1.0
MW-26(58.2) 08/19/2019
1,1-DCE <1.0
c-1,2-DCE <1.0
t-1,2-DCE <1.0
TCE <1.0
VC <1.0

OW-6(38) 02/05/2019
1,1-DCE <1.0
c-1,2-DCE <1.0
t-1,2-DCE <1.0
TCE <1.0
VC <1.0 J
OW-6(63) 02/05/2019
1,1-DCE <1.0
c-1,2-DCE <1.0
t-1,2-DCE <1.0
TCE <1.0
VC <1.0 J
OW-6(38) 05/16/2019
1,1-DCE <1.0
c-1,2-DCE <1.0
t-1,2-DCE <1.0
TCE <1.0
VC <1.0
OW-6(63) 05/16/2019
1,1-DCE <1.0
c-1,2-DCE <1.0
t-1,2-DCE <1.0
TCE <1.0
VC <1.0
OW-6(38) 08/21/2019
1,1-DCE <1.0
c-1,2-DCE <1.0
t-1,2-DCE <1.0
TCE <1.0
VC <1.0
OW-6(63) 08/21/2019
1,1-DCE <1.0
c-1,2-DCE <1.0
t-1,2-DCE <1.0
TCE <1.0
VC <1.0

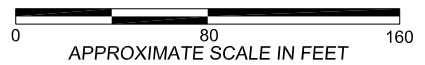
LEGEND

- Stability Monitoring Location (Sampled Quarterly)
- Treatment Area Evaluation Location (Sampled Semi-Annually)
- PM-1 Performance Monitoring Well Location
- OW-5 Observation Monitoring Well Location
- INJ-1 Biostimulation Injection Well Location
- MW-28 Overburden Monitoring Well Location
- MW-40 Bedrock Monitoring Well Location

OW-3(55)	Sample Identification
02/06/2019	Date Sample Collected
VC	Compound Name and Result Value
2.3	

J - Value is estimated.
 1,1-DCE - 1,1-Dichloroethene
 c-1,2-DCE - cis-1,2-Dichloroethene
 t-1,2-DCE - trans-1,2-Dichloroethene
 TCE - Trichloroethene
 VC - Vinyl Chloride

Results reported in micrograms per liter (µg/L).





Textron, Inc.
TORX Facility Remediation
Report of the Third Groundwater Stability Assessment Monitoring Event

APPENDIX A

GROUNDWATER SAMPLE COLLECTION FIELD FORMS

GROUND-WATER/SURFACE WATER SAMPLING FORM

Project Location TFS Rochester Surface Water Groundwater Sample ID OW4(35)
 Project Number 3359-15-1040 (Use: Well name)
 Sampling Personnel RLT Date 8/21/19 Start Time 1110 Weather Overcast 71

MEASUREMENT SUMMARY:
 Measuring Point TDC Depth to Water 17.30 Depth to Product NA Product Thickness NA
 Total Casing Depth 35 Well Diameter 2" Approx. Pump Depth 31-33 Feet
 Screen Interval top _____ bottom 35 Feet

SAMPLING SUMMARY:

Sampling Method: Grab Composite Grundfos Bladder Pump Peristaltic Pump Bailor
 Pump Started 1110 Pump Stopped _____ Total Gallons _____

Time (24-hr)	pH (S.U.)	SC (mS/cm)	Temp (°C)	Turb. (NTU)	Flow Rate (ml/min)	DTW (ft)	Drawdown (ft)	DO (mg/L)	ORP (mV)
<u>1115</u>	<u>6.77</u>	<u>0.571</u>	<u>14.80</u>	<u>11.3</u>	<u>200</u>	<u>17.48</u>	<u>0.12</u>	<u>0.49</u>	<u>-63.7</u>
<u>1120</u>	<u>6.76</u>	<u>0.573</u>	<u>14.88</u>	<u>14.3</u>	<u>200</u>	<u>17.50</u>	<u>0.02</u>	<u>0.51</u>	<u>-75.0</u>
<u>1125</u>	<u>6.75</u>	<u>1.498</u>	<u>14.91</u>	<u>4.9</u>	<u>200</u>	<u>17.55</u>	<u>0.05</u>	<u>0.69</u>	<u>-77.5</u>
<u>1130</u>	<u>6.74</u>	<u>1.457</u>	<u>14.80</u>	<u>10.7</u>	<u>200</u>	<u>17.55</u>	<u>0.00</u>	<u>0.65</u>	<u>-78.6</u>
<u>1135</u>	<u>6.73</u>	<u>1.411</u>	<u>14.68</u>	<u>9.2</u>	<u>200</u>	<u>17.55</u>	<u>0.00</u>	<u>0.68</u>	<u>-77.8</u>
<u>1140</u>	<u>6.71</u>	<u>1.386</u>	<u>14.83</u>	<u>8.0</u>	<u>200</u>	<u>17.53</u>	<u>0.00</u>	<u>0.70</u>	<u>-76.8</u>

Stabilization Criteria: ±3% ±3% ±10 ±10%

Final:

Time	pH	SC	Temp	Turb.	Flow Rate	DTW	Drawdown	DO	ORP
<u>1140</u>	<u>6.71</u>	<u>1.384</u>	<u>14.83</u>	<u>8.0</u>	<u>200</u>	<u>17.53</u>	<u>0.00</u>	<u>0.70</u>	<u>-76.8</u>

Comments: _____

Calibration: pH Calibration Buffers: 4 7 10 ORP Calibration 229 mV
 SC Reference Solution 4.49 mS/cm Turbidity Cal. Solution 0.0 NTUs

Sample Name ATR-MW-OW4(35)-G082119 Time 1140

Analyses (check)	Bottle #/Type	Preservative	Bottle #/Type	Preservative
VOCs <input checked="" type="checkbox"/>	<u>3/G</u>	<u>1</u>		
TOC + NO ₃ <input checked="" type="checkbox"/>				
Fe/Mn <input type="checkbox"/>				
		Alkalinity + Anions (Cl-, SO ₄) <input type="checkbox"/>		
Other: <input type="checkbox"/>		Other: <input type="checkbox"/>		

MS/MSD _____ Blind Dup _____ Blind Dup Name _____ TB _____

Bottle Type:
 G = Glass
 P = Poly

Preservative Codes:
 1 = HCL 4 = NaOH
 2 = HNO₃ 5 = BAC
 3 = H₂SO₄ 6 = Na₂PO₄

GROUND-WATER/SURFACE WATER SAMPLING FORM

Project Location TFS Rochester Surface Water Groundwater Sample ID ATR-MW (35)
 Project Number 3359-15-1040 (Use: Well name)
 Sampling Personnel GS Date 7/21/19 Start Time 0405 Weather Sun 80s

MEASUREMENT SUMMARY:
 Measuring Point JOC Depth to Water 7.35 Depth to Product NA Product Thickness NA
 Total Casing Depth 35 Well Diameter 2" Approx. Pump Depth 32 Feet
 Screen Interval top 30 bottom 35 Feet

SAMPLING SUMMARY:
 Sampling Method: Grab Composite Grundfos Bladder Pump Peristaltic Pump Bailor
 Pump Started 0705 Pump Stopped _____ Total Gallons _____

Time (24-hr)	pH (S.U.)	SC (mS/cm)	Temp (°C)	Turb. (NTU)	Flow Rate (ml/min)	DTW (ft)	Drawdown (ft)	DO (mg/L)	ORP (mV)
0720	6.55	0.652	17.27	335	200	7.35	0.0	0.41	-192.2
0725	6.69	0.638	17.04	117	200	7.35	0.0	0.80	-195.5
0730	6.43	0.641	16.93	111	200	7.35	0.0	0.68	-187.5
0735	6.53	0.634	16.78	70.5	200	7.35	0.0	0.53	-188.2
0740	6.56	0.634	16.90	62.9	200	7.35	0.0	0.52	-184.5
0745	6.59	0.628	16.76	24.6	200	7.35	0.0	0.57	-182.4
0750	6.59	0.629	16.75	24.6	200	7.35	0.0	0.55	-191.3
0755	6.59	0.627	16.58	21.3	200	7.35	0.0	0.53	-190.4
1000	6.59	0.624	16.74	21.3	200	7.35	0.0	0.51	-192.4
1005	6.56	0.622	16.75	25.2	200	7.35	0.0	0.50	-193.4
1010	6.52	0.620	16.74	22.3	200	7.35	0.0	0.49	-194.2
1015	6.55	0.623	16.70	22.1	200	7.35	0.0	0.48	-196.2
1020	6.56	0.623	16.68	21.8	200	7.35	0.0	0.46	-194.1

Stabilization Criteria: ±3% ±3% ±10 ±10% ±10

Final:
 Time 1020 pH 6.56 SC 0.623 Temp 16.68 Turb. 21.8 Flow Rate 200 DTW 7.35 Drawdown 0.0 DO 0.46 ORP -194.1

Comments: * Replaced ~~the~~ two well caps stability

Calibration: pH Calibration Buffers: 4 7 10 ORP Calibration 25 mV
 SC Reference Solution 4.49 mS/cm Turbidity Cal. Solution 0 NTUs

Sample Name ATR-MW (35) - 6080119 Time 1020

Analyses (check)	Bottle #/Type	Preservative	Bottle #/Type	Preservative
VOCs <input checked="" type="checkbox"/>	<u>6</u>	<u>1</u>		
TOC + NO ₃ <input type="checkbox"/>				
Fe/Mn <input type="checkbox"/>				
Other: <input type="checkbox"/>				

Dissolved Gasses VFA DHC Alkalinity + Anions (Cl-, SO₄) Other:

MS/MSD _____ Blind Dup _____ Blind Dup Name _____ TB _____



GROUNDWATER/SURFACE WATER SAMPLING FORM

GROUND-WATER/SURFACE WATER SAMPLING FORM

Project Location TFS Rochester Surface Water Groundwater Sample ID ATR-MW-OW 6(63)
 Project Number 3359-15-1040 (Use: Well name)
 Sampling Personnel _____ Date 8/21/19 Start Time 0750 Weather _____

MEASUREMENT SUMMARY:
 Measuring Point TDC Depth to Water 7.57 Depth to Product NA Product Thickness NA
 Total Casing Depth 63 Well Diameter 2" Approx. Pump Depth 5ft Feet
 Screen Interval top _____ bottom 63 Feet

SAMPLING SUMMARY:
 Sampling Method: Grab Composite Grundfos Bladder Pump Peristaltic Pump Bailor
 Pump Started 0810 Pump Stopped _____ Total Gallons _____

Time (24-hr)	pH (S.U.)	SC (mS/cm)	Temp (°C)	Turb. (NTU)	Flow Rate (ml/min)	DTW (ft)	Drawdown (ft)	DO (mg/L)	ORP (mV)
0815	6.56	0.800	17.41	209.3	200	7.57	0.00	2.82	174.8
0820	6.81	0.774	16.04	60.1	200	7.59	0.02	0.50	14.2
0825	6.94	0.770	15.65	35.8	200	7.59	0.00	0.47	-17.4
0830	7.02	0.771	15.63	53.9	200	7.59	0.00	0.20	-57.3
0835	7.03	0.770	15.68	57.9	200	7.59	0.00	0.18	-61.5
0840	7.04	0.771	15.71	62.9	200	7.59	0.00	0.18	-63.9
0845	6.99	0.774	15.66	65.5	200	7.59	0.00	0.39	-51.3
0850	7.03	0.772	15.67	30.2	200	7.59	0.00	0.26	-68.8
0855	7.04	0.771	15.86	46.0	200	7.59	0.00	0.21	-81.5
0900	7.62	0.767	16.00	58.3	200	6.99	0.00	0.40	-76.7
0905	7.02	0.767	16.05	16.6	200	7.59	0.00	0.43	-80.4
0910	7.05	0.758	16.13	11.0	200	7.59	0.00	0.37	-88.9
0915	7.07	0.772	16.11	41.2	200	7.59	0.00	0.31	-93.1
0920	7.10	0.778	15.48	37.9	200	7.59	0.00	0.27	-101.2
0925	7.10	0.790	15.30	36.2	200	7.59	0.00	0.25	-104.6
0930									
0935									

Stabilization Criteria: ±3% ±3% ±10 ±10% ±10

Final:
 Time 0925 pH 7.10 SC 0.780 Temp 15.30 Turb. 36.2 Flow Rate 200 DTW 7.59 Drawdown 0.00 DO 0.25 ORP -104.6

Comments: Visually turbidity < 10, bubbles in water possibly affecting turbidity meter readings.

Calibration: pH Calibration Buffers: 4 7 40 ORP Calibration 229 mV
 SC Reference Solution 4.49 mS/cm Turbidity Cal. Solution 0.00 NTUs

Sample Name ATR-MW-OW 6(63)-G082119 Time 0925

Analyses (check)	Bottle #/Type	Preservative	Bottle #/Type	Preservative
VOCs <input checked="" type="checkbox"/>	<u>619</u>	<u>1</u>	Dissolved Gasses <input type="checkbox"/>	_____
TOC + NO ₃ <input type="checkbox"/>	_____	_____	VFA <input type="checkbox"/>	_____
Fe/Mn <input type="checkbox"/>	_____	_____	DHC <input type="checkbox"/>	_____
Other: <input type="checkbox"/>	_____	_____	Alkalinity + Anions (Cl-, SO4) <input type="checkbox"/>	_____
Other: <input type="checkbox"/>	_____	_____	Other: <input type="checkbox"/>	_____

MS/MSD _____ Blind Dup _____ Blind Dup Name ATR-OW 6(63)-G082119 R

Bottle Type:
 G = Glass
 P = Poly
 Preservative Codes:
 1 = HCL 4 = NaOH
 2 = HNO₃ 5 = BAC
 3 = H₂SO₄ 6 = Na₃PO₄



Textron, Inc.
TORX Facility Remediation
Report of the Third Groundwater Stability Assessment Monitoring Event

APPENDIX B

LABORATORY REPORTS AND DATA VALIDATION REPORT



28-Aug-2019

Paul Stork
Wood Environment & Infrastructure Solutions, Inc.
521 Byers Road, Suite 204
Miamisburg, OH 45342

Re: **TFS Rochester (3359-15-1040)**

Work Order: **19081608**

Dear Paul,

ALS Environmental received 17 samples on 22-Aug-2019 for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental - Holland and for only the analyses requested.

Sample results are compliant with industry accepted practices and Quality Control results achieved laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 52.

If you have any questions regarding this report, please feel free to contact me:

ADDRESS: 3352 128th Avenue, Holland, MI, USA
PHONE: +1 (616) 399-6070 FAX: +1 (616) 399-6185

Sincerely,

A handwritten signature in cursive script that reads "Ehrland Bosworth".

Electronically approved by: Ehrland Bosworth

Ehrland Bosworth
Project Manager

Report of Laboratory Analysis

Certificate No: MN 026-999-449

ALS GROUP USA, CORP Part of the ALS Laboratory Group A Campbell Brothers Limited Company

Environmental ALS

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

Client: Wood Environment & Infrastructure Solutions, Inc.
Project: TFS Rochester (3359-15-1040)
Work Order: 19081608

Work Order Sample Summary

<u>Lab Samp ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
19081608-01	ATR-MW26(28.8)-G081919	Groundwater		8/19/2019 14:50	8/22/2019 09:30	<input type="checkbox"/>
19081608-02	ATR-MW26(58.2)-G081919	Groundwater		8/19/2019 14:05	8/22/2019 09:30	<input type="checkbox"/>
19081608-03	ATR-MW26(17.5)-G081919	Groundwater		8/19/2019 16:10	8/22/2019 09:30	<input type="checkbox"/>
19081608-04	ATR-EB001-081919	Water		8/19/2019 14:20	8/22/2019 09:30	<input type="checkbox"/>
19081608-05	ATR-MW27(18)-G081919	Groundwater		8/19/2019 16:00	8/22/2019 09:30	<input type="checkbox"/>
19081608-06	ATR-MW27(18)-G081919R	Groundwater		8/19/2019 16:00	8/22/2019 09:30	<input type="checkbox"/>
19081608-07	ATR-MW14-G082019	Groundwater		8/20/2019 08:35	8/22/2019 09:30	<input type="checkbox"/>
19081608-08	ATR-MW15-G082019	Groundwater		8/20/2019 09:55	8/22/2019 09:30	<input type="checkbox"/>
19081608-09	ATR-MW25(82)-G082019	Groundwater		8/20/2019 10:45	8/22/2019 09:30	<input type="checkbox"/>
19081608-10	ATR-MW25(32.6)-G082019	Groundwater		8/20/2019 12:15	8/22/2019 09:30	<input type="checkbox"/>
19081608-11	ATR-MW17-G082019	Groundwater		8/20/2019 13:20	8/22/2019 09:30	<input type="checkbox"/>
19081608-12	ATR-MW82(58)-G082019	Groundwater		8/20/2019 14:50	8/22/2019 09:30	<input type="checkbox"/>
19081608-13	ATR-MW20(51)-G082019	Groundwater		8/20/2019 13:20	8/22/2019 09:30	<input type="checkbox"/>
19081608-14	ATR-MW25(16.4)-G082019	Groundwater		8/20/2019 11:30	8/22/2019 09:30	<input type="checkbox"/>
19081608-15	ATR-MW6C-G082119	Groundwater		8/21/2019 14:50	8/22/2019 09:30	<input type="checkbox"/>
19081608-16	ATR-EB001-082119	Groundwater		8/21/2019 14:10	8/22/2019 09:30	<input type="checkbox"/>
19081608-17	ATR-TR003-082119	Groundwater		8/21/2019	8/22/2019 09:30	<input type="checkbox"/>

Client: Wood Environment & Infrastructure Solutions, Inc.
Project: TFS Rochester (3359-15-1040)
WorkOrder: 19081608

**QUALIFIERS,
ACRONYMS, UNITS**

<u>Qualifier</u>	<u>Description</u>
*	Value exceeds Regulatory Limit
**	Estimated Value
a	Analyte is non-accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
Hr	BOD/CBOD - Sample was reset outside Hold Time, value should be considered estimated.
J	Analyte is present at an estimated concentration between the MDL and Report Limit
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL
X	Analyte was detected in the Method Blank between the MDL and Reporting Limit, sample results may exhibit background or reagent contamination at the observed level.

<u>Acronym</u>	<u>Description</u>
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
LOD	Limit of Detection (see MDL)
LOQ	Limit of Quantitation (see PQL)
MBLK	Method Blank
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
TDL	Target Detection Limit
TNTC	Too Numerous To Count
A	APHA Standard Methods
D	ASTM
E	EPA
SW	SW-846 Update III

<u>Units Reported</u>	<u>Description</u>
µg/L	Micrograms per Liter

Client: Wood Environment & Infrastructure Solutions, Inc
Project: TFS Rochester (3359-15-1040)
Work Order: 19081608

Case Narrative

Samples for the above noted Work Order were received on 08/22/19. The attached "Sample Receipt Checklist" documents the status of custody seals, container integrity, preservation, and temperature compliance.

Samples were analyzed according to the analytical methodology previously transmitted in the "Work Order Acknowledgement". Methodologies are also documented in the "Analytical Result" section for each sample. Quality control results are listed in the "QC Report" section. Sample association for the reported quality control is located at the end of each batch summary. If applicable, results are appropriately qualified in the Analytical Result and QC Report sections. The "Qualifiers" section documents the various qualifiers, units, and acronyms utilized in reporting. A copy of the laboratory's scope of accreditation is available upon request.

With the following exceptions, all sample analyses achieved analytical criteria.

Volatile Organics:

Batch R269156, Method VOC_8260_W, Sample 19081608-01A: The VOC Continuing Calibration Verification did not meet acceptance criteria for the following analytes; results are to be considered estimated for 2-Hexanone.

Batch R269156, Method VOC_8260_W, Sample 19081608-02A: The VOC Continuing Calibration Verification did not meet acceptance criteria for the following analytes; results are to be considered estimated for 2-Hexanone.

Batch R269156, Method VOC_8260_W, Sample 19081608-03A: The VOC Continuing Calibration Verification did not meet acceptance criteria for the following analytes; results are to be considered estimated for 2-Hexanone.

Batch R269156, Method VOC_8260_W, Sample 19081608-04A: The VOC Continuing Calibration Verification did not meet acceptance criteria for the following analytes; results are to be considered estimated for 2-Hexanone.

Batch R269156, Method VOC_8260_W, Sample 19081608-05A: The VOC Continuing Calibration Verification did not meet acceptance criteria for the following analytes; results are to be considered estimated for 2-Hexanone.

Batch R269156, Method VOC_8260_W, Sample 19081608-06A: The VOC Continuing Calibration Verification did not meet acceptance criteria for the following analytes; results are to be considered estimated for 2-Hexanone.

Client: Wood Environment & Infrastructure Solutions, Inc
Project: TFS Rochester (3359-15-1040)
Work Order: 19081608

Case Narrative

Batch R269156, Method VOC_8260_W, Sample 19081608-08A: The VOC Continuing Calibration Verification did not meet acceptance criteria for the following analytes; results are to be considered estimated for 2-Hexanone.

Batch R269156, Method VOC_8260_W, Sample 19081608-09A: The VOC Continuing Calibration Verification did not meet acceptance criteria for the following analytes; results are to be considered estimated for 2-Hexanone.

Batch R269156, Method VOC_8260_W, Sample 19081608-10A: The VOC Continuing Calibration Verification did not meet acceptance criteria for the following analytes; results are to be considered estimated for 2-Hexanone.

Batch R269156, Method VOC_8260_W, Sample 19081608-16A: The VOC Continuing Calibration Verification did not meet acceptance criteria for the following analytes; results are to be considered estimated for 2-Hexanone.

Batch R269156, Method VOC_8260_W, Sample 19081608-17A: The VOC Continuing Calibration Verification did not meet acceptance criteria for the following analytes; results are to be considered estimated for 2-Hexanone.

No other deviations or anomalies were noted.

Client: Wood Environment & Infrastructure Solutions, Inc.

Project: TFS Rochester (3359-15-1040)

Work Order: 19081608

Sample ID: ATR-MW26(28.8)-G081919

Lab ID: 19081608-01

Collection Date: 8/19/2019 02:50 PM

Matrix: GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260C		Analyst: BG	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	8/26/2019 05:36 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	8/26/2019 05:36 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	8/26/2019 05:36 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	8/26/2019 05:36 PM
1,1-Dichloroethene	ND		1.0	µg/L	1	8/26/2019 05:36 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	8/26/2019 05:36 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	8/26/2019 05:36 PM
2-Butanone	ND		5.0	µg/L	1	8/26/2019 05:36 PM
2-Hexanone	ND		5.0	µg/L	1	8/26/2019 05:36 PM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	8/26/2019 05:36 PM
Acetone	ND		10	µg/L	1	8/26/2019 05:36 PM
Benzene	ND		1.0	µg/L	1	8/26/2019 05:36 PM
Bromodichloromethane	ND		1.0	µg/L	1	8/26/2019 05:36 PM
Bromoform	ND		1.0	µg/L	1	8/26/2019 05:36 PM
Bromomethane	ND		1.0	µg/L	1	8/26/2019 05:36 PM
Carbon disulfide	ND		1.0	µg/L	1	8/26/2019 05:36 PM
Carbon tetrachloride	ND		1.0	µg/L	1	8/26/2019 05:36 PM
Chlorobenzene	ND		1.0	µg/L	1	8/26/2019 05:36 PM
Chloroethane	ND		1.0	µg/L	1	8/26/2019 05:36 PM
Chloroform	ND		1.0	µg/L	1	8/26/2019 05:36 PM
Chloromethane	1.9		1.0	µg/L	1	8/26/2019 05:36 PM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	8/26/2019 05:36 PM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	8/26/2019 05:36 PM
Dibromochloromethane	ND		1.0	µg/L	1	8/26/2019 05:36 PM
Ethylbenzene	ND		1.0	µg/L	1	8/26/2019 05:36 PM
m,p-Xylene	ND		2.0	µg/L	1	8/26/2019 05:36 PM
Methylene chloride	ND		5.0	µg/L	1	8/26/2019 05:36 PM
o-Xylene	ND		1.0	µg/L	1	8/26/2019 05:36 PM
Styrene	ND		1.0	µg/L	1	8/26/2019 05:36 PM
Tetrachloroethene	ND		1.0	µg/L	1	8/26/2019 05:36 PM
Toluene	ND		1.0	µg/L	1	8/26/2019 05:36 PM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	8/26/2019 05:36 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	8/26/2019 05:36 PM
Trichloroethene	ND		1.0	µg/L	1	8/26/2019 05:36 PM
Vinyl chloride	ND		1.0	µg/L	1	8/26/2019 05:36 PM
Xylenes, Total	ND		3.0	µg/L	1	8/26/2019 05:36 PM
Surr: 1,2-Dichloroethane-d4	98.7		75-120	%REC	1	8/26/2019 05:36 PM
Surr: 4-Bromofluorobenzene	94.4		80-110	%REC	1	8/26/2019 05:36 PM
Surr: Dibromofluoromethane	97.8		85-115	%REC	1	8/26/2019 05:36 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 28-Aug-19

Client: Wood Environment & Infrastructure Solutions, Inc.

Project: TFS Rochester (3359-15-1040)

Work Order: 19081608

Sample ID: ATR-MW26(28.8)-G081919

Lab ID: 19081608-01

Collection Date: 8/19/2019 02:50 PM

Matrix: GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	101		85-110	%REC	1	8/26/2019 05:36 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: Wood Environment & Infrastructure Solutions, Inc.

Project: TFS Rochester (3359-15-1040)

Work Order: 19081608

Sample ID: ATR-MW26(58.2)-G081919

Lab ID: 19081608-02

Collection Date: 8/19/2019 02:05 PM

Matrix: GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260C		Analyst: BG	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	8/26/2019 06:00 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	8/26/2019 06:00 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	8/26/2019 06:00 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	8/26/2019 06:00 PM
1,1-Dichloroethene	ND		1.0	µg/L	1	8/26/2019 06:00 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	8/26/2019 06:00 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	8/26/2019 06:00 PM
2-Butanone	ND		5.0	µg/L	1	8/26/2019 06:00 PM
2-Hexanone	ND		5.0	µg/L	1	8/26/2019 06:00 PM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	8/26/2019 06:00 PM
Acetone	ND		10	µg/L	1	8/26/2019 06:00 PM
Benzene	ND		1.0	µg/L	1	8/26/2019 06:00 PM
Bromodichloromethane	ND		1.0	µg/L	1	8/26/2019 06:00 PM
Bromoform	ND		1.0	µg/L	1	8/26/2019 06:00 PM
Bromomethane	ND		1.0	µg/L	1	8/26/2019 06:00 PM
Carbon disulfide	ND		1.0	µg/L	1	8/26/2019 06:00 PM
Carbon tetrachloride	ND		1.0	µg/L	1	8/26/2019 06:00 PM
Chlorobenzene	ND		1.0	µg/L	1	8/26/2019 06:00 PM
Chloroethane	ND		1.0	µg/L	1	8/26/2019 06:00 PM
Chloroform	ND		1.0	µg/L	1	8/26/2019 06:00 PM
Chloromethane	ND		1.0	µg/L	1	8/26/2019 06:00 PM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	8/26/2019 06:00 PM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	8/26/2019 06:00 PM
Dibromochloromethane	ND		1.0	µg/L	1	8/26/2019 06:00 PM
Ethylbenzene	ND		1.0	µg/L	1	8/26/2019 06:00 PM
m,p-Xylene	ND		2.0	µg/L	1	8/26/2019 06:00 PM
Methylene chloride	ND		5.0	µg/L	1	8/26/2019 06:00 PM
o-Xylene	ND		1.0	µg/L	1	8/26/2019 06:00 PM
Styrene	ND		1.0	µg/L	1	8/26/2019 06:00 PM
Tetrachloroethene	ND		1.0	µg/L	1	8/26/2019 06:00 PM
Toluene	ND		1.0	µg/L	1	8/26/2019 06:00 PM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	8/26/2019 06:00 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	8/26/2019 06:00 PM
Trichloroethene	ND		1.0	µg/L	1	8/26/2019 06:00 PM
Vinyl chloride	ND		1.0	µg/L	1	8/26/2019 06:00 PM
Xylenes, Total	ND		3.0	µg/L	1	8/26/2019 06:00 PM
Surr: 1,2-Dichloroethane-d4	97.8		75-120	%REC	1	8/26/2019 06:00 PM
Surr: 4-Bromofluorobenzene	99.2		80-110	%REC	1	8/26/2019 06:00 PM
Surr: Dibromofluoromethane	99.9		85-115	%REC	1	8/26/2019 06:00 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 28-Aug-19

Client: Wood Environment & Infrastructure Solutions, Inc.

Project: TFS Rochester (3359-15-1040)

Work Order: 19081608

Sample ID: ATR-MW26(58.2)-G081919

Lab ID: 19081608-02

Collection Date: 8/19/2019 02:05 PM

Matrix: GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	103		85-110	%REC	1	8/26/2019 06:00 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: Wood Environment & Infrastructure Solutions, Inc.

Project: TFS Rochester (3359-15-1040)

Work Order: 19081608

Sample ID: ATR-MW26(17.5)-G081919

Lab ID: 19081608-03

Collection Date: 8/19/2019 04:10 PM

Matrix: GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260C		Analyst: BG	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	8/26/2019 06:25 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	8/26/2019 06:25 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	8/26/2019 06:25 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	8/26/2019 06:25 PM
1,1-Dichloroethene	ND		1.0	µg/L	1	8/26/2019 06:25 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	8/26/2019 06:25 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	8/26/2019 06:25 PM
2-Butanone	ND		5.0	µg/L	1	8/26/2019 06:25 PM
2-Hexanone	ND		5.0	µg/L	1	8/26/2019 06:25 PM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	8/26/2019 06:25 PM
Acetone	ND		10	µg/L	1	8/26/2019 06:25 PM
Benzene	ND		1.0	µg/L	1	8/26/2019 06:25 PM
Bromodichloromethane	ND		1.0	µg/L	1	8/26/2019 06:25 PM
Bromoform	ND		1.0	µg/L	1	8/26/2019 06:25 PM
Bromomethane	ND		1.0	µg/L	1	8/26/2019 06:25 PM
Carbon disulfide	ND		1.0	µg/L	1	8/26/2019 06:25 PM
Carbon tetrachloride	ND		1.0	µg/L	1	8/26/2019 06:25 PM
Chlorobenzene	ND		1.0	µg/L	1	8/26/2019 06:25 PM
Chloroethane	ND		1.0	µg/L	1	8/26/2019 06:25 PM
Chloroform	ND		1.0	µg/L	1	8/26/2019 06:25 PM
Chloromethane	ND		1.0	µg/L	1	8/26/2019 06:25 PM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	8/26/2019 06:25 PM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	8/26/2019 06:25 PM
Dibromochloromethane	ND		1.0	µg/L	1	8/26/2019 06:25 PM
Ethylbenzene	ND		1.0	µg/L	1	8/26/2019 06:25 PM
m,p-Xylene	ND		2.0	µg/L	1	8/26/2019 06:25 PM
Methylene chloride	ND		5.0	µg/L	1	8/26/2019 06:25 PM
o-Xylene	ND		1.0	µg/L	1	8/26/2019 06:25 PM
Styrene	ND		1.0	µg/L	1	8/26/2019 06:25 PM
Tetrachloroethene	ND		1.0	µg/L	1	8/26/2019 06:25 PM
Toluene	ND		1.0	µg/L	1	8/26/2019 06:25 PM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	8/26/2019 06:25 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	8/26/2019 06:25 PM
Trichloroethene	ND		1.0	µg/L	1	8/26/2019 06:25 PM
Vinyl chloride	ND		1.0	µg/L	1	8/26/2019 06:25 PM
Xylenes, Total	ND		3.0	µg/L	1	8/26/2019 06:25 PM
Surr: 1,2-Dichloroethane-d4	103		75-120	%REC	1	8/26/2019 06:25 PM
Surr: 4-Bromofluorobenzene	98.0		80-110	%REC	1	8/26/2019 06:25 PM
Surr: Dibromofluoromethane	100		85-115	%REC	1	8/26/2019 06:25 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 28-Aug-19

Client: Wood Environment & Infrastructure Solutions, Inc.

Project: TFS Rochester (3359-15-1040)

Work Order: 19081608

Sample ID: ATR-MW26(17.5)-G081919

Lab ID: 19081608-03

Collection Date: 8/19/2019 04:10 PM

Matrix: GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	102		85-110	%REC	1	8/26/2019 06:25 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: Wood Environment & Infrastructure Solutions, Inc.
Project: TFS Rochester (3359-15-1040)
Sample ID: ATR-EB001-081919
Collection Date: 8/19/2019 02:20 PM

Work Order: 19081608
Lab ID: 19081608-04
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260C		Analyst: BG	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	8/26/2019 03:36 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	8/26/2019 03:36 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	8/26/2019 03:36 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	8/26/2019 03:36 PM
1,1-Dichloroethene	ND		1.0	µg/L	1	8/26/2019 03:36 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	8/26/2019 03:36 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	8/26/2019 03:36 PM
2-Butanone	ND		5.0	µg/L	1	8/26/2019 03:36 PM
2-Hexanone	ND		5.0	µg/L	1	8/26/2019 03:36 PM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	8/26/2019 03:36 PM
Acetone	ND		10	µg/L	1	8/26/2019 03:36 PM
Benzene	ND		1.0	µg/L	1	8/26/2019 03:36 PM
Bromodichloromethane	ND		1.0	µg/L	1	8/26/2019 03:36 PM
Bromoform	ND		1.0	µg/L	1	8/26/2019 03:36 PM
Bromomethane	ND		1.0	µg/L	1	8/26/2019 03:36 PM
Carbon disulfide	ND		1.0	µg/L	1	8/26/2019 03:36 PM
Carbon tetrachloride	ND		1.0	µg/L	1	8/26/2019 03:36 PM
Chlorobenzene	ND		1.0	µg/L	1	8/26/2019 03:36 PM
Chloroethane	ND		1.0	µg/L	1	8/26/2019 03:36 PM
Chloroform	ND		1.0	µg/L	1	8/26/2019 03:36 PM
Chloromethane	ND		1.0	µg/L	1	8/26/2019 03:36 PM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	8/26/2019 03:36 PM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	8/26/2019 03:36 PM
Dibromochloromethane	ND		1.0	µg/L	1	8/26/2019 03:36 PM
Ethylbenzene	ND		1.0	µg/L	1	8/26/2019 03:36 PM
m,p-Xylene	ND		2.0	µg/L	1	8/26/2019 03:36 PM
Methylene chloride	ND		5.0	µg/L	1	8/26/2019 03:36 PM
o-Xylene	ND		1.0	µg/L	1	8/26/2019 03:36 PM
Styrene	ND		1.0	µg/L	1	8/26/2019 03:36 PM
Tetrachloroethene	ND		1.0	µg/L	1	8/26/2019 03:36 PM
Toluene	ND		1.0	µg/L	1	8/26/2019 03:36 PM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	8/26/2019 03:36 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	8/26/2019 03:36 PM
Trichloroethene	ND		1.0	µg/L	1	8/26/2019 03:36 PM
Vinyl chloride	ND		1.0	µg/L	1	8/26/2019 03:36 PM
Xylenes, Total	ND		3.0	µg/L	1	8/26/2019 03:36 PM
Surr: 1,2-Dichloroethane-d4	100		75-120	%REC	1	8/26/2019 03:36 PM
Surr: 4-Bromofluorobenzene	95.4		80-110	%REC	1	8/26/2019 03:36 PM
Surr: Dibromofluoromethane	97.8		85-115	%REC	1	8/26/2019 03:36 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 28-Aug-19

Client: Wood Environment & Infrastructure Solutions, Inc.

Project: TFS Rochester (3359-15-1040)

Work Order: 19081608

Sample ID: ATR-EB001-081919

Lab ID: 19081608-04

Collection Date: 8/19/2019 02:20 PM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	97.2		85-110	%REC	1	8/26/2019 03:36 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: Wood Environment & Infrastructure Solutions, Inc.

Project: TFS Rochester (3359-15-1040)

Work Order: 19081608

Sample ID: ATR-MW27(18)-G081919

Lab ID: 19081608-05

Collection Date: 8/19/2019 04:00 PM

Matrix: GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260C		Analyst: BG	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	8/26/2019 06:49 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	8/26/2019 06:49 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	8/26/2019 06:49 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	8/26/2019 06:49 PM
1,1-Dichloroethene	ND		1.0	µg/L	1	8/26/2019 06:49 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	8/26/2019 06:49 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	8/26/2019 06:49 PM
2-Butanone	ND		5.0	µg/L	1	8/26/2019 06:49 PM
2-Hexanone	ND		5.0	µg/L	1	8/26/2019 06:49 PM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	8/26/2019 06:49 PM
Acetone	ND		10	µg/L	1	8/26/2019 06:49 PM
Benzene	ND		1.0	µg/L	1	8/26/2019 06:49 PM
Bromodichloromethane	ND		1.0	µg/L	1	8/26/2019 06:49 PM
Bromoform	ND		1.0	µg/L	1	8/26/2019 06:49 PM
Bromomethane	ND		1.0	µg/L	1	8/26/2019 06:49 PM
Carbon disulfide	ND		1.0	µg/L	1	8/26/2019 06:49 PM
Carbon tetrachloride	ND		1.0	µg/L	1	8/26/2019 06:49 PM
Chlorobenzene	ND		1.0	µg/L	1	8/26/2019 06:49 PM
Chloroethane	ND		1.0	µg/L	1	8/26/2019 06:49 PM
Chloroform	ND		1.0	µg/L	1	8/26/2019 06:49 PM
Chloromethane	ND		1.0	µg/L	1	8/26/2019 06:49 PM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	8/26/2019 06:49 PM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	8/26/2019 06:49 PM
Dibromochloromethane	ND		1.0	µg/L	1	8/26/2019 06:49 PM
Ethylbenzene	ND		1.0	µg/L	1	8/26/2019 06:49 PM
m,p-Xylene	ND		2.0	µg/L	1	8/26/2019 06:49 PM
Methylene chloride	ND		5.0	µg/L	1	8/26/2019 06:49 PM
o-Xylene	ND		1.0	µg/L	1	8/26/2019 06:49 PM
Styrene	ND		1.0	µg/L	1	8/26/2019 06:49 PM
Tetrachloroethene	ND		1.0	µg/L	1	8/26/2019 06:49 PM
Toluene	ND		1.0	µg/L	1	8/26/2019 06:49 PM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	8/26/2019 06:49 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	8/26/2019 06:49 PM
Trichloroethene	1.1		1.0	µg/L	1	8/26/2019 06:49 PM
Vinyl chloride	ND		1.0	µg/L	1	8/26/2019 06:49 PM
Xylenes, Total	ND		3.0	µg/L	1	8/26/2019 06:49 PM
Surr: 1,2-Dichloroethane-d4	106		75-120	%REC	1	8/26/2019 06:49 PM
Surr: 4-Bromofluorobenzene	94.2		80-110	%REC	1	8/26/2019 06:49 PM
Surr: Dibromofluoromethane	109		85-115	%REC	1	8/26/2019 06:49 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 28-Aug-19

Client: Wood Environment & Infrastructure Solutions, Inc.

Project: TFS Rochester (3359-15-1040)

Work Order: 19081608

Sample ID: ATR-MW27(18)-G081919

Lab ID: 19081608-05

Collection Date: 8/19/2019 04:00 PM

Matrix: GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	95.8		85-110	%REC	1	8/26/2019 06:49 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: Wood Environment & Infrastructure Solutions, Inc.

Project: TFS Rochester (3359-15-1040)

Work Order: 19081608

Sample ID: ATR-MW27(18)-G081919R

Lab ID: 19081608-06

Collection Date: 8/19/2019 04:00 PM

Matrix: GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260C		Analyst: BG	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	8/26/2019 07:13 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	8/26/2019 07:13 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	8/26/2019 07:13 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	8/26/2019 07:13 PM
1,1-Dichloroethene	ND		1.0	µg/L	1	8/26/2019 07:13 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	8/26/2019 07:13 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	8/26/2019 07:13 PM
2-Butanone	ND		5.0	µg/L	1	8/26/2019 07:13 PM
2-Hexanone	ND		5.0	µg/L	1	8/26/2019 07:13 PM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	8/26/2019 07:13 PM
Acetone	ND		10	µg/L	1	8/26/2019 07:13 PM
Benzene	ND		1.0	µg/L	1	8/26/2019 07:13 PM
Bromodichloromethane	ND		1.0	µg/L	1	8/26/2019 07:13 PM
Bromoform	ND		1.0	µg/L	1	8/26/2019 07:13 PM
Bromomethane	ND		1.0	µg/L	1	8/26/2019 07:13 PM
Carbon disulfide	ND		1.0	µg/L	1	8/26/2019 07:13 PM
Carbon tetrachloride	ND		1.0	µg/L	1	8/26/2019 07:13 PM
Chlorobenzene	ND		1.0	µg/L	1	8/26/2019 07:13 PM
Chloroethane	ND		1.0	µg/L	1	8/26/2019 07:13 PM
Chloroform	ND		1.0	µg/L	1	8/26/2019 07:13 PM
Chloromethane	1.3		1.0	µg/L	1	8/26/2019 07:13 PM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	8/26/2019 07:13 PM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	8/26/2019 07:13 PM
Dibromochloromethane	ND		1.0	µg/L	1	8/26/2019 07:13 PM
Ethylbenzene	ND		1.0	µg/L	1	8/26/2019 07:13 PM
m,p-Xylene	ND		2.0	µg/L	1	8/26/2019 07:13 PM
Methylene chloride	ND		5.0	µg/L	1	8/26/2019 07:13 PM
o-Xylene	ND		1.0	µg/L	1	8/26/2019 07:13 PM
Styrene	ND		1.0	µg/L	1	8/26/2019 07:13 PM
Tetrachloroethene	ND		1.0	µg/L	1	8/26/2019 07:13 PM
Toluene	ND		1.0	µg/L	1	8/26/2019 07:13 PM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	8/26/2019 07:13 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	8/26/2019 07:13 PM
Trichloroethene	ND		1.0	µg/L	1	8/26/2019 07:13 PM
Vinyl chloride	ND		1.0	µg/L	1	8/26/2019 07:13 PM
Xylenes, Total	ND		3.0	µg/L	1	8/26/2019 07:13 PM
Surr: 1,2-Dichloroethane-d4	102		75-120	%REC	1	8/26/2019 07:13 PM
Surr: 4-Bromofluorobenzene	94.2		80-110	%REC	1	8/26/2019 07:13 PM
Surr: Dibromofluoromethane	102		85-115	%REC	1	8/26/2019 07:13 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 28-Aug-19

Client: Wood Environment & Infrastructure Solutions, Inc.

Project: TFS Rochester (3359-15-1040)

Work Order: 19081608

Sample ID: ATR-MW27(18)-G081919R

Lab ID: 19081608-06

Collection Date: 8/19/2019 04:00 PM

Matrix: GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	99.0		85-110	%REC	1	8/26/2019 07:13 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: Wood Environment & Infrastructure Solutions, Inc.

Project: TFS Rochester (3359-15-1040)

Work Order: 19081608

Sample ID: ATR-MW14-G082019

Lab ID: 19081608-07

Collection Date: 8/20/2019 08:35 AM

Matrix: GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260C		Analyst: BG	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	8/26/2019 07:37 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	8/26/2019 07:37 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	8/26/2019 07:37 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	8/26/2019 07:37 PM
1,1-Dichloroethene	ND		1.0	µg/L	1	8/26/2019 07:37 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	8/26/2019 07:37 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	8/26/2019 07:37 PM
2-Butanone	ND		5.0	µg/L	1	8/26/2019 07:37 PM
2-Hexanone	ND		5.0	µg/L	1	8/26/2019 07:37 PM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	8/26/2019 07:37 PM
Acetone	ND		10	µg/L	1	8/26/2019 07:37 PM
Benzene	ND		1.0	µg/L	1	8/26/2019 07:37 PM
Bromodichloromethane	ND		1.0	µg/L	1	8/26/2019 07:37 PM
Bromoform	ND		1.0	µg/L	1	8/26/2019 07:37 PM
Bromomethane	ND		1.0	µg/L	1	8/26/2019 07:37 PM
Carbon disulfide	ND		1.0	µg/L	1	8/26/2019 07:37 PM
Carbon tetrachloride	ND		1.0	µg/L	1	8/26/2019 07:37 PM
Chlorobenzene	ND		1.0	µg/L	1	8/26/2019 07:37 PM
Chloroethane	ND		1.0	µg/L	1	8/26/2019 07:37 PM
Chloroform	ND		1.0	µg/L	1	8/26/2019 07:37 PM
Chloromethane	ND		1.0	µg/L	1	8/26/2019 07:37 PM
cis-1,2-Dichloroethene	1.5		1.0	µg/L	1	8/26/2019 07:37 PM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	8/26/2019 07:37 PM
Dibromochloromethane	ND		1.0	µg/L	1	8/26/2019 07:37 PM
Ethylbenzene	ND		1.0	µg/L	1	8/26/2019 07:37 PM
m,p-Xylene	ND		2.0	µg/L	1	8/26/2019 07:37 PM
Methylene chloride	ND		5.0	µg/L	1	8/26/2019 07:37 PM
o-Xylene	ND		1.0	µg/L	1	8/26/2019 07:37 PM
Styrene	ND		1.0	µg/L	1	8/26/2019 07:37 PM
Tetrachloroethene	ND		1.0	µg/L	1	8/26/2019 07:37 PM
Toluene	ND		1.0	µg/L	1	8/26/2019 07:37 PM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	8/26/2019 07:37 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	8/26/2019 07:37 PM
Trichloroethene	ND		1.0	µg/L	1	8/26/2019 07:37 PM
Vinyl chloride	1.1		1.0	µg/L	1	8/26/2019 07:37 PM
Xylenes, Total	ND		3.0	µg/L	1	8/26/2019 07:37 PM
Surr: 1,2-Dichloroethane-d4	102		75-120	%REC	1	8/26/2019 07:37 PM
Surr: 4-Bromofluorobenzene	95.2		80-110	%REC	1	8/26/2019 07:37 PM
Surr: Dibromofluoromethane	101		85-115	%REC	1	8/26/2019 07:37 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 28-Aug-19

Client: Wood Environment & Infrastructure Solutions, Inc.**Project:** TFS Rochester (3359-15-1040)**Work Order:** 19081608**Sample ID:** ATR-MW14-G082019**Lab ID:** 19081608-07**Collection Date:** 8/20/2019 08:35 AM**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	96.2		85-110	%REC	1	8/26/2019 07:37 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: Wood Environment & Infrastructure Solutions, Inc.

Project: TFS Rochester (3359-15-1040)

Work Order: 19081608

Sample ID: ATR-MW15-G082019

Lab ID: 19081608-08

Collection Date: 8/20/2019 09:55 AM

Matrix: GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260C		Analyst: BG	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	8/26/2019 08:01 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	8/26/2019 08:01 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	8/26/2019 08:01 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	8/26/2019 08:01 PM
1,1-Dichloroethene	ND		1.0	µg/L	1	8/26/2019 08:01 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	8/26/2019 08:01 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	8/26/2019 08:01 PM
2-Butanone	17		5.0	µg/L	1	8/26/2019 08:01 PM
2-Hexanone	ND		5.0	µg/L	1	8/26/2019 08:01 PM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	8/26/2019 08:01 PM
Acetone	ND		10	µg/L	1	8/26/2019 08:01 PM
Benzene	ND		1.0	µg/L	1	8/26/2019 08:01 PM
Bromodichloromethane	ND		1.0	µg/L	1	8/26/2019 08:01 PM
Bromoform	ND		1.0	µg/L	1	8/26/2019 08:01 PM
Bromomethane	ND		1.0	µg/L	1	8/26/2019 08:01 PM
Carbon disulfide	ND		1.0	µg/L	1	8/26/2019 08:01 PM
Carbon tetrachloride	ND		1.0	µg/L	1	8/26/2019 08:01 PM
Chlorobenzene	ND		1.0	µg/L	1	8/26/2019 08:01 PM
Chloroethane	ND		1.0	µg/L	1	8/26/2019 08:01 PM
Chloroform	ND		1.0	µg/L	1	8/26/2019 08:01 PM
Chloromethane	ND		1.0	µg/L	1	8/26/2019 08:01 PM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	8/26/2019 08:01 PM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	8/26/2019 08:01 PM
Dibromochloromethane	ND		1.0	µg/L	1	8/26/2019 08:01 PM
Ethylbenzene	ND		1.0	µg/L	1	8/26/2019 08:01 PM
m,p-Xylene	ND		2.0	µg/L	1	8/26/2019 08:01 PM
Methylene chloride	ND		5.0	µg/L	1	8/26/2019 08:01 PM
o-Xylene	ND		1.0	µg/L	1	8/26/2019 08:01 PM
Styrene	ND		1.0	µg/L	1	8/26/2019 08:01 PM
Tetrachloroethene	ND		1.0	µg/L	1	8/26/2019 08:01 PM
Toluene	ND		1.0	µg/L	1	8/26/2019 08:01 PM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	8/26/2019 08:01 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	8/26/2019 08:01 PM
Trichloroethene	ND		1.0	µg/L	1	8/26/2019 08:01 PM
Vinyl chloride	ND		1.0	µg/L	1	8/26/2019 08:01 PM
Xylenes, Total	ND		3.0	µg/L	1	8/26/2019 08:01 PM
Surr: 1,2-Dichloroethane-d4	105		75-120	%REC	1	8/26/2019 08:01 PM
Surr: 4-Bromofluorobenzene	94.8		80-110	%REC	1	8/26/2019 08:01 PM
Surr: Dibromofluoromethane	103		85-115	%REC	1	8/26/2019 08:01 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 28-Aug-19

Client: Wood Environment & Infrastructure Solutions, Inc.**Project:** TFS Rochester (3359-15-1040)**Work Order:** 19081608**Sample ID:** ATR-MW15-G082019**Lab ID:** 19081608-08**Collection Date:** 8/20/2019 09:55 AM**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	92.0		85-110	%REC	1	8/26/2019 08:01 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: Wood Environment & Infrastructure Solutions, Inc.
 Project: TFS Rochester (3359-15-1040)
 Sample ID: ATR-MW25(82)-G082019
 Collection Date: 8/20/2019 10:45 AM

Work Order: 19081608
 Lab ID: 19081608-09
 Matrix: GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260C		Analyst: BG	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	8/26/2019 08:25 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	8/26/2019 08:25 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	8/26/2019 08:25 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	8/26/2019 08:25 PM
1,1-Dichloroethene	ND		1.0	µg/L	1	8/26/2019 08:25 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	8/26/2019 08:25 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	8/26/2019 08:25 PM
2-Butanone	ND		5.0	µg/L	1	8/26/2019 08:25 PM
2-Hexanone	ND		5.0	µg/L	1	8/26/2019 08:25 PM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	8/26/2019 08:25 PM
Acetone	ND		10	µg/L	1	8/26/2019 08:25 PM
Benzene	ND		1.0	µg/L	1	8/26/2019 08:25 PM
Bromodichloromethane	ND		1.0	µg/L	1	8/26/2019 08:25 PM
Bromoform	ND		1.0	µg/L	1	8/26/2019 08:25 PM
Bromomethane	ND		1.0	µg/L	1	8/26/2019 08:25 PM
Carbon disulfide	ND		1.0	µg/L	1	8/26/2019 08:25 PM
Carbon tetrachloride	ND		1.0	µg/L	1	8/26/2019 08:25 PM
Chlorobenzene	ND		1.0	µg/L	1	8/26/2019 08:25 PM
Chloroethane	ND		1.0	µg/L	1	8/26/2019 08:25 PM
Chloroform	ND		1.0	µg/L	1	8/26/2019 08:25 PM
Chloromethane	ND		1.0	µg/L	1	8/26/2019 08:25 PM
cis-1,2-Dichloroethene	1.5		1.0	µg/L	1	8/26/2019 08:25 PM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	8/26/2019 08:25 PM
Dibromochloromethane	ND		1.0	µg/L	1	8/26/2019 08:25 PM
Ethylbenzene	ND		1.0	µg/L	1	8/26/2019 08:25 PM
m,p-Xylene	ND		2.0	µg/L	1	8/26/2019 08:25 PM
Methylene chloride	ND		5.0	µg/L	1	8/26/2019 08:25 PM
o-Xylene	ND		1.0	µg/L	1	8/26/2019 08:25 PM
Styrene	ND		1.0	µg/L	1	8/26/2019 08:25 PM
Tetrachloroethene	ND		1.0	µg/L	1	8/26/2019 08:25 PM
Toluene	ND		1.0	µg/L	1	8/26/2019 08:25 PM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	8/26/2019 08:25 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	8/26/2019 08:25 PM
Trichloroethene	ND		1.0	µg/L	1	8/26/2019 08:25 PM
Vinyl chloride	3.6		1.0	µg/L	1	8/26/2019 08:25 PM
Xylenes, Total	ND		3.0	µg/L	1	8/26/2019 08:25 PM
Surr: 1,2-Dichloroethane-d4	101		75-120	%REC	1	8/26/2019 08:25 PM
Surr: 4-Bromofluorobenzene	93.8		80-110	%REC	1	8/26/2019 08:25 PM
Surr: Dibromofluoromethane	100		85-115	%REC	1	8/26/2019 08:25 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 28-Aug-19

Client: Wood Environment & Infrastructure Solutions, Inc.

Project: TFS Rochester (3359-15-1040)

Work Order: 19081608

Sample ID: ATR-MW25(82)-G082019

Lab ID: 19081608-09

Collection Date: 8/20/2019 10:45 AM

Matrix: GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	93.6		85-110	%REC	1	8/26/2019 08:25 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: Wood Environment & Infrastructure Solutions, Inc.

Project: TFS Rochester (3359-15-1040)

Work Order: 19081608

Sample ID: ATR-MW25(32.6)-G082019

Lab ID: 19081608-10

Collection Date: 8/20/2019 12:15 PM

Matrix: GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260C			Analyst: BG
1,1,1-Trichloroethane	ND		1.0	µg/L	1	8/26/2019 08:49 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	8/26/2019 08:49 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	8/26/2019 08:49 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	8/26/2019 08:49 PM
1,1-Dichloroethene	ND		1.0	µg/L	1	8/26/2019 08:49 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	8/26/2019 08:49 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	8/26/2019 08:49 PM
2-Butanone	ND		5.0	µg/L	1	8/26/2019 08:49 PM
2-Hexanone	ND		5.0	µg/L	1	8/26/2019 08:49 PM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	8/26/2019 08:49 PM
Acetone	ND		10	µg/L	1	8/26/2019 08:49 PM
Benzene	ND		1.0	µg/L	1	8/26/2019 08:49 PM
Bromodichloromethane	ND		1.0	µg/L	1	8/26/2019 08:49 PM
Bromoform	ND		1.0	µg/L	1	8/26/2019 08:49 PM
Bromomethane	ND		1.0	µg/L	1	8/26/2019 08:49 PM
Carbon disulfide	ND		1.0	µg/L	1	8/26/2019 08:49 PM
Carbon tetrachloride	ND		1.0	µg/L	1	8/26/2019 08:49 PM
Chlorobenzene	ND		1.0	µg/L	1	8/26/2019 08:49 PM
Chloroethane	ND		1.0	µg/L	1	8/26/2019 08:49 PM
Chloroform	ND		1.0	µg/L	1	8/26/2019 08:49 PM
Chloromethane	ND		1.0	µg/L	1	8/26/2019 08:49 PM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	8/26/2019 08:49 PM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	8/26/2019 08:49 PM
Dibromochloromethane	ND		1.0	µg/L	1	8/26/2019 08:49 PM
Ethylbenzene	ND		1.0	µg/L	1	8/26/2019 08:49 PM
m,p-Xylene	ND		2.0	µg/L	1	8/26/2019 08:49 PM
Methylene chloride	ND		5.0	µg/L	1	8/26/2019 08:49 PM
o-Xylene	ND		1.0	µg/L	1	8/26/2019 08:49 PM
Styrene	ND		1.0	µg/L	1	8/26/2019 08:49 PM
Tetrachloroethene	ND		1.0	µg/L	1	8/26/2019 08:49 PM
Toluene	ND		1.0	µg/L	1	8/26/2019 08:49 PM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	8/26/2019 08:49 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	8/26/2019 08:49 PM
Trichloroethene	ND		1.0	µg/L	1	8/26/2019 08:49 PM
Vinyl chloride	ND		1.0	µg/L	1	8/26/2019 08:49 PM
Xylenes, Total	ND		3.0	µg/L	1	8/26/2019 08:49 PM
Surr: 1,2-Dichloroethane-d4	98.3		75-120	%REC	1	8/26/2019 08:49 PM
Surr: 4-Bromofluorobenzene	95.6		80-110	%REC	1	8/26/2019 08:49 PM
Surr: Dibromofluoromethane	97.6		85-115	%REC	1	8/26/2019 08:49 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 28-Aug-19

Client: Wood Environment & Infrastructure Solutions, Inc.

Project: TFS Rochester (3359-15-1040)

Work Order: 19081608

Sample ID: ATR-MW25(32.6)-G082019

Lab ID: 19081608-10

Collection Date: 8/20/2019 12:15 PM

Matrix: GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	101		85-110	%REC	1	8/26/2019 08:49 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: Wood Environment & Infrastructure Solutions, Inc.
Project: TFS Rochester (3359-15-1040)
Sample ID: ATR-MW17-G082019
Collection Date: 8/20/2019 01:20 PM

Work Order: 19081608
Lab ID: 19081608-11
Matrix: GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260C		Analyst: BG	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	8/27/2019 02:52 AM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	8/27/2019 02:52 AM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	8/27/2019 02:52 AM
1,1-Dichloroethane	ND		1.0	µg/L	1	8/27/2019 02:52 AM
1,1-Dichloroethene	ND		1.0	µg/L	1	8/27/2019 02:52 AM
1,2-Dichloroethane	ND		1.0	µg/L	1	8/27/2019 02:52 AM
1,2-Dichloropropane	ND		1.0	µg/L	1	8/27/2019 02:52 AM
2-Butanone	ND		5.0	µg/L	1	8/27/2019 02:52 AM
2-Hexanone	ND		5.0	µg/L	1	8/27/2019 02:52 AM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	8/27/2019 02:52 AM
Acetone	ND		10	µg/L	1	8/27/2019 02:52 AM
Benzene	ND		1.0	µg/L	1	8/27/2019 02:52 AM
Bromodichloromethane	ND		1.0	µg/L	1	8/27/2019 02:52 AM
Bromoform	ND		1.0	µg/L	1	8/27/2019 02:52 AM
Bromomethane	ND		1.0	µg/L	1	8/27/2019 02:52 AM
Carbon disulfide	ND		1.0	µg/L	1	8/27/2019 02:52 AM
Carbon tetrachloride	ND		1.0	µg/L	1	8/27/2019 02:52 AM
Chlorobenzene	ND		1.0	µg/L	1	8/27/2019 02:52 AM
Chloroethane	ND		1.0	µg/L	1	8/27/2019 02:52 AM
Chloroform	ND		1.0	µg/L	1	8/27/2019 02:52 AM
Chloromethane	ND		1.0	µg/L	1	8/27/2019 02:52 AM
cis-1,2-Dichloroethene	20		1.0	µg/L	1	8/27/2019 02:52 AM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	8/27/2019 02:52 AM
Dibromochloromethane	ND		1.0	µg/L	1	8/27/2019 02:52 AM
Ethylbenzene	ND		1.0	µg/L	1	8/27/2019 02:52 AM
m,p-Xylene	ND		2.0	µg/L	1	8/27/2019 02:52 AM
Methylene chloride	ND		5.0	µg/L	1	8/27/2019 02:52 AM
o-Xylene	ND		1.0	µg/L	1	8/27/2019 02:52 AM
Styrene	ND		1.0	µg/L	1	8/27/2019 02:52 AM
Tetrachloroethene	ND		1.0	µg/L	1	8/27/2019 02:52 AM
Toluene	ND		1.0	µg/L	1	8/27/2019 02:52 AM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	8/27/2019 02:52 AM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	8/27/2019 02:52 AM
Trichloroethene	39		1.0	µg/L	1	8/27/2019 02:52 AM
Vinyl chloride	1.6		1.0	µg/L	1	8/27/2019 02:52 AM
Xylenes, Total	ND		3.0	µg/L	1	8/27/2019 02:52 AM
Surr: 1,2-Dichloroethane-d4	101		75-120	%REC	1	8/27/2019 02:52 AM
Surr: 4-Bromofluorobenzene	94.9		80-110	%REC	1	8/27/2019 02:52 AM
Surr: Dibromofluoromethane	98.6		85-115	%REC	1	8/27/2019 02:52 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 28-Aug-19

Client: Wood Environment & Infrastructure Solutions, Inc.

Project: TFS Rochester (3359-15-1040)

Work Order: 19081608

Sample ID: ATR-MW17-G082019

Lab ID: 19081608-11

Collection Date: 8/20/2019 01:20 PM

Matrix: GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: Toluene-d8	96.7		85-110	%REC	1	8/27/2019 02:52 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: Wood Environment & Infrastructure Solutions, Inc.

Project: TFS Rochester (3359-15-1040)

Work Order: 19081608

Sample ID: ATR-MW82(58)-G082019

Lab ID: 19081608-12

Collection Date: 8/20/2019 02:50 PM

Matrix: GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260C		Analyst: BG	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	8/27/2019 03:16 AM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	8/27/2019 03:16 AM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	8/27/2019 03:16 AM
1,1-Dichloroethane	ND		1.0	µg/L	1	8/27/2019 03:16 AM
1,1-Dichloroethene	ND		1.0	µg/L	1	8/27/2019 03:16 AM
1,2-Dichloroethane	ND		1.0	µg/L	1	8/27/2019 03:16 AM
1,2-Dichloropropane	ND		1.0	µg/L	1	8/27/2019 03:16 AM
2-Butanone	ND		5.0	µg/L	1	8/27/2019 03:16 AM
2-Hexanone	ND		5.0	µg/L	1	8/27/2019 03:16 AM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	8/27/2019 03:16 AM
Acetone	ND		10	µg/L	1	8/27/2019 03:16 AM
Benzene	ND		1.0	µg/L	1	8/27/2019 03:16 AM
Bromodichloromethane	ND		1.0	µg/L	1	8/27/2019 03:16 AM
Bromoform	ND		1.0	µg/L	1	8/27/2019 03:16 AM
Bromomethane	ND		1.0	µg/L	1	8/27/2019 03:16 AM
Carbon disulfide	ND		1.0	µg/L	1	8/27/2019 03:16 AM
Carbon tetrachloride	ND		1.0	µg/L	1	8/27/2019 03:16 AM
Chlorobenzene	ND		1.0	µg/L	1	8/27/2019 03:16 AM
Chloroethane	ND		1.0	µg/L	1	8/27/2019 03:16 AM
Chloroform	ND		1.0	µg/L	1	8/27/2019 03:16 AM
Chloromethane	ND		1.0	µg/L	1	8/27/2019 03:16 AM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	8/27/2019 03:16 AM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	8/27/2019 03:16 AM
Dibromochloromethane	ND		1.0	µg/L	1	8/27/2019 03:16 AM
Ethylbenzene	ND		1.0	µg/L	1	8/27/2019 03:16 AM
m,p-Xylene	ND		2.0	µg/L	1	8/27/2019 03:16 AM
Methylene chloride	ND		5.0	µg/L	1	8/27/2019 03:16 AM
o-Xylene	ND		1.0	µg/L	1	8/27/2019 03:16 AM
Styrene	ND		1.0	µg/L	1	8/27/2019 03:16 AM
Tetrachloroethene	ND		1.0	µg/L	1	8/27/2019 03:16 AM
Toluene	ND		1.0	µg/L	1	8/27/2019 03:16 AM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	8/27/2019 03:16 AM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	8/27/2019 03:16 AM
Trichloroethene	ND		1.0	µg/L	1	8/27/2019 03:16 AM
Vinyl chloride	ND		1.0	µg/L	1	8/27/2019 03:16 AM
Xylenes, Total	ND		3.0	µg/L	1	8/27/2019 03:16 AM
Surr: 1,2-Dichloroethane-d4	104		75-120	%REC	1	8/27/2019 03:16 AM
Surr: 4-Bromofluorobenzene	96.8		80-110	%REC	1	8/27/2019 03:16 AM
Surr: Dibromofluoromethane	96.6		85-115	%REC	1	8/27/2019 03:16 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 28-Aug-19

Client: Wood Environment & Infrastructure Solutions, Inc.

Project: TFS Rochester (3359-15-1040)

Work Order: 19081608

Sample ID: ATR-MW82(58)-G082019

Lab ID: 19081608-12

Collection Date: 8/20/2019 02:50 PM

Matrix: GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	102		85-110	%REC	1	8/27/2019 03:16 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: Wood Environment & Infrastructure Solutions, Inc.

Project: TFS Rochester (3359-15-1040)

Work Order: 19081608

Sample ID: ATR-MW20(51)-G082019

Lab ID: 19081608-13

Collection Date: 8/20/2019 01:20 PM

Matrix: GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260C		Analyst: BG	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	8/27/2019 03:40 AM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	8/27/2019 03:40 AM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	8/27/2019 03:40 AM
1,1-Dichloroethane	ND		1.0	µg/L	1	8/27/2019 03:40 AM
1,1-Dichloroethene	ND		1.0	µg/L	1	8/27/2019 03:40 AM
1,2-Dichloroethane	ND		1.0	µg/L	1	8/27/2019 03:40 AM
1,2-Dichloropropane	ND		1.0	µg/L	1	8/27/2019 03:40 AM
2-Butanone	ND		5.0	µg/L	1	8/27/2019 03:40 AM
2-Hexanone	ND		5.0	µg/L	1	8/27/2019 03:40 AM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	8/27/2019 03:40 AM
Acetone	ND		10	µg/L	1	8/27/2019 03:40 AM
Benzene	ND		1.0	µg/L	1	8/27/2019 03:40 AM
Bromodichloromethane	ND		1.0	µg/L	1	8/27/2019 03:40 AM
Bromoform	ND		1.0	µg/L	1	8/27/2019 03:40 AM
Bromomethane	ND		1.0	µg/L	1	8/27/2019 03:40 AM
Carbon disulfide	ND		1.0	µg/L	1	8/27/2019 03:40 AM
Carbon tetrachloride	ND		1.0	µg/L	1	8/27/2019 03:40 AM
Chlorobenzene	ND		1.0	µg/L	1	8/27/2019 03:40 AM
Chloroethane	ND		1.0	µg/L	1	8/27/2019 03:40 AM
Chloroform	ND		1.0	µg/L	1	8/27/2019 03:40 AM
Chloromethane	ND		1.0	µg/L	1	8/27/2019 03:40 AM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	8/27/2019 03:40 AM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	8/27/2019 03:40 AM
Dibromochloromethane	ND		1.0	µg/L	1	8/27/2019 03:40 AM
Ethylbenzene	ND		1.0	µg/L	1	8/27/2019 03:40 AM
m,p-Xylene	ND		2.0	µg/L	1	8/27/2019 03:40 AM
Methylene chloride	ND		5.0	µg/L	1	8/27/2019 03:40 AM
o-Xylene	ND		1.0	µg/L	1	8/27/2019 03:40 AM
Styrene	ND		1.0	µg/L	1	8/27/2019 03:40 AM
Tetrachloroethene	ND		1.0	µg/L	1	8/27/2019 03:40 AM
Toluene	ND		1.0	µg/L	1	8/27/2019 03:40 AM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	8/27/2019 03:40 AM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	8/27/2019 03:40 AM
Trichloroethene	ND		1.0	µg/L	1	8/27/2019 03:40 AM
Vinyl chloride	ND		1.0	µg/L	1	8/27/2019 03:40 AM
Xylenes, Total	ND		3.0	µg/L	1	8/27/2019 03:40 AM
Surr: 1,2-Dichloroethane-d4	98.0		75-120	%REC	1	8/27/2019 03:40 AM
Surr: 4-Bromofluorobenzene	94.2		80-110	%REC	1	8/27/2019 03:40 AM
Surr: Dibromofluoromethane	98.0		85-115	%REC	1	8/27/2019 03:40 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 28-Aug-19

Client: Wood Environment & Infrastructure Solutions, Inc.

Project: TFS Rochester (3359-15-1040)

Work Order: 19081608

Sample ID: ATR-MW20(51)-G082019

Lab ID: 19081608-13

Collection Date: 8/20/2019 01:20 PM

Matrix: GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	98.2		85-110	%REC	1	8/27/2019 03:40 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: Wood Environment & Infrastructure Solutions, Inc.

Project: TFS Rochester (3359-15-1040)

Work Order: 19081608

Sample ID: ATR-MW25(16.4)-G082019

Lab ID: 19081608-14

Collection Date: 8/20/2019 11:30 AM

Matrix: GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260C		Analyst: BG	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	8/27/2019 04:04 AM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	8/27/2019 04:04 AM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	8/27/2019 04:04 AM
1,1-Dichloroethane	ND		1.0	µg/L	1	8/27/2019 04:04 AM
1,1-Dichloroethene	ND		1.0	µg/L	1	8/27/2019 04:04 AM
1,2-Dichloroethane	ND		1.0	µg/L	1	8/27/2019 04:04 AM
1,2-Dichloropropane	ND		1.0	µg/L	1	8/27/2019 04:04 AM
2-Butanone	ND		5.0	µg/L	1	8/27/2019 04:04 AM
2-Hexanone	ND		5.0	µg/L	1	8/27/2019 04:04 AM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	8/27/2019 04:04 AM
Acetone	ND		10	µg/L	1	8/27/2019 04:04 AM
Benzene	ND		1.0	µg/L	1	8/27/2019 04:04 AM
Bromodichloromethane	ND		1.0	µg/L	1	8/27/2019 04:04 AM
Bromoform	ND		1.0	µg/L	1	8/27/2019 04:04 AM
Bromomethane	ND		1.0	µg/L	1	8/27/2019 04:04 AM
Carbon disulfide	ND		1.0	µg/L	1	8/27/2019 04:04 AM
Carbon tetrachloride	ND		1.0	µg/L	1	8/27/2019 04:04 AM
Chlorobenzene	ND		1.0	µg/L	1	8/27/2019 04:04 AM
Chloroethane	ND		1.0	µg/L	1	8/27/2019 04:04 AM
Chloroform	ND		1.0	µg/L	1	8/27/2019 04:04 AM
Chloromethane	ND		1.0	µg/L	1	8/27/2019 04:04 AM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	8/27/2019 04:04 AM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	8/27/2019 04:04 AM
Dibromochloromethane	ND		1.0	µg/L	1	8/27/2019 04:04 AM
Ethylbenzene	ND		1.0	µg/L	1	8/27/2019 04:04 AM
m,p-Xylene	ND		2.0	µg/L	1	8/27/2019 04:04 AM
Methylene chloride	ND		5.0	µg/L	1	8/27/2019 04:04 AM
o-Xylene	ND		1.0	µg/L	1	8/27/2019 04:04 AM
Styrene	ND		1.0	µg/L	1	8/27/2019 04:04 AM
Tetrachloroethene	ND		1.0	µg/L	1	8/27/2019 04:04 AM
Toluene	ND		1.0	µg/L	1	8/27/2019 04:04 AM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	8/27/2019 04:04 AM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	8/27/2019 04:04 AM
Trichloroethene	ND		1.0	µg/L	1	8/27/2019 04:04 AM
Vinyl chloride	ND		1.0	µg/L	1	8/27/2019 04:04 AM
Xylenes, Total	ND		3.0	µg/L	1	8/27/2019 04:04 AM
Surr: 1,2-Dichloroethane-d4	100		75-120	%REC	1	8/27/2019 04:04 AM
Surr: 4-Bromofluorobenzene	95.1		80-110	%REC	1	8/27/2019 04:04 AM
Surr: Dibromofluoromethane	96.7		85-115	%REC	1	8/27/2019 04:04 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 28-Aug-19

Client: Wood Environment & Infrastructure Solutions, Inc.

Project: TFS Rochester (3359-15-1040)

Work Order: 19081608

Sample ID: ATR-MW25(16.4)-G082019

Lab ID: 19081608-14

Collection Date: 8/20/2019 11:30 AM

Matrix: GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	97.8		85-110	%REC	1	8/27/2019 04:04 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: Wood Environment & Infrastructure Solutions, Inc.

Project: TFS Rochester (3359-15-1040)

Work Order: 19081608

Sample ID: ATR-MW6C-G082119

Lab ID: 19081608-15

Collection Date: 8/21/2019 02:50 PM

Matrix: GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260C		Analyst: BG	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	8/27/2019 04:28 AM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	8/27/2019 04:28 AM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	8/27/2019 04:28 AM
1,1-Dichloroethane	ND		1.0	µg/L	1	8/27/2019 04:28 AM
1,1-Dichloroethene	ND		1.0	µg/L	1	8/27/2019 04:28 AM
1,2-Dichloroethane	ND		1.0	µg/L	1	8/27/2019 04:28 AM
1,2-Dichloropropane	ND		1.0	µg/L	1	8/27/2019 04:28 AM
2-Butanone	ND		5.0	µg/L	1	8/27/2019 04:28 AM
2-Hexanone	ND		5.0	µg/L	1	8/27/2019 04:28 AM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	8/27/2019 04:28 AM
Acetone	ND		10	µg/L	1	8/27/2019 04:28 AM
Benzene	ND		1.0	µg/L	1	8/27/2019 04:28 AM
Bromodichloromethane	ND		1.0	µg/L	1	8/27/2019 04:28 AM
Bromoform	ND		1.0	µg/L	1	8/27/2019 04:28 AM
Bromomethane	ND		1.0	µg/L	1	8/27/2019 04:28 AM
Carbon disulfide	ND		1.0	µg/L	1	8/27/2019 04:28 AM
Carbon tetrachloride	ND		1.0	µg/L	1	8/27/2019 04:28 AM
Chlorobenzene	ND		1.0	µg/L	1	8/27/2019 04:28 AM
Chloroethane	ND		1.0	µg/L	1	8/27/2019 04:28 AM
Chloroform	ND		1.0	µg/L	1	8/27/2019 04:28 AM
Chloromethane	1.5		1.0	µg/L	1	8/27/2019 04:28 AM
cis-1,2-Dichloroethene	4.0		1.0	µg/L	1	8/27/2019 04:28 AM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	8/27/2019 04:28 AM
Dibromochloromethane	ND		1.0	µg/L	1	8/27/2019 04:28 AM
Ethylbenzene	ND		1.0	µg/L	1	8/27/2019 04:28 AM
m,p-Xylene	ND		2.0	µg/L	1	8/27/2019 04:28 AM
Methylene chloride	ND		5.0	µg/L	1	8/27/2019 04:28 AM
o-Xylene	ND		1.0	µg/L	1	8/27/2019 04:28 AM
Styrene	ND		1.0	µg/L	1	8/27/2019 04:28 AM
Tetrachloroethene	ND		1.0	µg/L	1	8/27/2019 04:28 AM
Toluene	ND		1.0	µg/L	1	8/27/2019 04:28 AM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	8/27/2019 04:28 AM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	8/27/2019 04:28 AM
Trichloroethene	ND		1.0	µg/L	1	8/27/2019 04:28 AM
Vinyl chloride	2.3		1.0	µg/L	1	8/27/2019 04:28 AM
Xylenes, Total	ND		3.0	µg/L	1	8/27/2019 04:28 AM
Surr: 1,2-Dichloroethane-d4	104		75-120	%REC	1	8/27/2019 04:28 AM
Surr: 4-Bromofluorobenzene	93.0		80-110	%REC	1	8/27/2019 04:28 AM
Surr: Dibromofluoromethane	98.2		85-115	%REC	1	8/27/2019 04:28 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 28-Aug-19

Client: Wood Environment & Infrastructure Solutions, Inc.

Project: TFS Rochester (3359-15-1040)

Work Order: 19081608

Sample ID: ATR-MW6C-G082119

Lab ID: 19081608-15

Collection Date: 8/21/2019 02:50 PM

Matrix: GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	102		85-110	%REC	1	8/27/2019 04:28 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: Wood Environment & Infrastructure Solutions, Inc.

Project: TFS Rochester (3359-15-1040)

Work Order: 19081608

Sample ID: ATR-EB001-082119

Lab ID: 19081608-16

Collection Date: 8/21/2019 02:10 PM

Matrix: GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260C		Analyst: BG	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	8/26/2019 04:00 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	8/26/2019 04:00 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	8/26/2019 04:00 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	8/26/2019 04:00 PM
1,1-Dichloroethene	ND		1.0	µg/L	1	8/26/2019 04:00 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	8/26/2019 04:00 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	8/26/2019 04:00 PM
2-Butanone	ND		5.0	µg/L	1	8/26/2019 04:00 PM
2-Hexanone	ND		5.0	µg/L	1	8/26/2019 04:00 PM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	8/26/2019 04:00 PM
Acetone	ND		10	µg/L	1	8/26/2019 04:00 PM
Benzene	ND		1.0	µg/L	1	8/26/2019 04:00 PM
Bromodichloromethane	ND		1.0	µg/L	1	8/26/2019 04:00 PM
Bromoform	ND		1.0	µg/L	1	8/26/2019 04:00 PM
Bromomethane	ND		1.0	µg/L	1	8/26/2019 04:00 PM
Carbon disulfide	ND		1.0	µg/L	1	8/26/2019 04:00 PM
Carbon tetrachloride	ND		1.0	µg/L	1	8/26/2019 04:00 PM
Chlorobenzene	ND		1.0	µg/L	1	8/26/2019 04:00 PM
Chloroethane	ND		1.0	µg/L	1	8/26/2019 04:00 PM
Chloroform	ND		1.0	µg/L	1	8/26/2019 04:00 PM
Chloromethane	ND		1.0	µg/L	1	8/26/2019 04:00 PM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	8/26/2019 04:00 PM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	8/26/2019 04:00 PM
Dibromochloromethane	ND		1.0	µg/L	1	8/26/2019 04:00 PM
Ethylbenzene	ND		1.0	µg/L	1	8/26/2019 04:00 PM
m,p-Xylene	ND		2.0	µg/L	1	8/26/2019 04:00 PM
Methylene chloride	ND		5.0	µg/L	1	8/26/2019 04:00 PM
o-Xylene	ND		1.0	µg/L	1	8/26/2019 04:00 PM
Styrene	ND		1.0	µg/L	1	8/26/2019 04:00 PM
Tetrachloroethene	ND		1.0	µg/L	1	8/26/2019 04:00 PM
Toluene	ND		1.0	µg/L	1	8/26/2019 04:00 PM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	8/26/2019 04:00 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	8/26/2019 04:00 PM
Trichloroethene	ND		1.0	µg/L	1	8/26/2019 04:00 PM
Vinyl chloride	ND		1.0	µg/L	1	8/26/2019 04:00 PM
Xylenes, Total	ND		3.0	µg/L	1	8/26/2019 04:00 PM
Surr: 1,2-Dichloroethane-d4	101		75-120	%REC	1	8/26/2019 04:00 PM
Surr: 4-Bromofluorobenzene	95.2		80-110	%REC	1	8/26/2019 04:00 PM
Surr: Dibromofluoromethane	104		85-115	%REC	1	8/26/2019 04:00 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 28-Aug-19

Client: Wood Environment & Infrastructure Solutions, Inc.

Project: TFS Rochester (3359-15-1040)

Work Order: 19081608

Sample ID: ATR-EB001-082119

Lab ID: 19081608-16

Collection Date: 8/21/2019 02:10 PM

Matrix: GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	103		85-110	%REC	1	8/26/2019 04:00 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: Wood Environment & Infrastructure Solutions, Inc.

Project: TFS Rochester (3359-15-1040)

Work Order: 19081608

Sample ID: ATR-TR003-082119

Lab ID: 19081608-17

Collection Date: 8/21/2019

Matrix: GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260C		Analyst: BG	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	8/26/2019 04:24 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	8/26/2019 04:24 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	8/26/2019 04:24 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	8/26/2019 04:24 PM
1,1-Dichloroethene	ND		1.0	µg/L	1	8/26/2019 04:24 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	8/26/2019 04:24 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	8/26/2019 04:24 PM
2-Butanone	ND		5.0	µg/L	1	8/26/2019 04:24 PM
2-Hexanone	ND		5.0	µg/L	1	8/26/2019 04:24 PM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	8/26/2019 04:24 PM
Acetone	ND		10	µg/L	1	8/26/2019 04:24 PM
Benzene	ND		1.0	µg/L	1	8/26/2019 04:24 PM
Bromodichloromethane	ND		1.0	µg/L	1	8/26/2019 04:24 PM
Bromoform	ND		1.0	µg/L	1	8/26/2019 04:24 PM
Bromomethane	ND		1.0	µg/L	1	8/26/2019 04:24 PM
Carbon disulfide	ND		1.0	µg/L	1	8/26/2019 04:24 PM
Carbon tetrachloride	ND		1.0	µg/L	1	8/26/2019 04:24 PM
Chlorobenzene	ND		1.0	µg/L	1	8/26/2019 04:24 PM
Chloroethane	ND		1.0	µg/L	1	8/26/2019 04:24 PM
Chloroform	ND		1.0	µg/L	1	8/26/2019 04:24 PM
Chloromethane	ND		1.0	µg/L	1	8/26/2019 04:24 PM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	8/26/2019 04:24 PM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	8/26/2019 04:24 PM
Dibromochloromethane	ND		1.0	µg/L	1	8/26/2019 04:24 PM
Ethylbenzene	ND		1.0	µg/L	1	8/26/2019 04:24 PM
m,p-Xylene	ND		2.0	µg/L	1	8/26/2019 04:24 PM
Methylene chloride	ND		5.0	µg/L	1	8/26/2019 04:24 PM
o-Xylene	ND		1.0	µg/L	1	8/26/2019 04:24 PM
Styrene	ND		1.0	µg/L	1	8/26/2019 04:24 PM
Tetrachloroethene	ND		1.0	µg/L	1	8/26/2019 04:24 PM
Toluene	ND		1.0	µg/L	1	8/26/2019 04:24 PM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	8/26/2019 04:24 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	8/26/2019 04:24 PM
Trichloroethene	ND		1.0	µg/L	1	8/26/2019 04:24 PM
Vinyl chloride	ND		1.0	µg/L	1	8/26/2019 04:24 PM
Xylenes, Total	ND		3.0	µg/L	1	8/26/2019 04:24 PM
Surr: 1,2-Dichloroethane-d4	102		75-120	%REC	1	8/26/2019 04:24 PM
Surr: 4-Bromofluorobenzene	96.3		80-110	%REC	1	8/26/2019 04:24 PM
Surr: Dibromofluoromethane	99.8		85-115	%REC	1	8/26/2019 04:24 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 28-Aug-19

Client: Wood Environment & Infrastructure Solutions, Inc.

Project: TFS Rochester (3359-15-1040)

Work Order: 19081608

Sample ID: ATR-TR003-082119

Lab ID: 19081608-17

Collection Date: 8/21/2019

Matrix: GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	102		85-110	%REC	1	8/26/2019 04:24 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: Wood Environment & Infrastructure Solutions, Inc.
Work Order: 19081608
Project: TFS Rochester (3359-15-1040)

QC BATCH REPORT

Batch ID: **R269156** Instrument ID **VMS6** Method: **SW8260C**

MBLK		Sample ID: VBK1-190826-R269156				Units: µg/L		Analysis Date: 8/26/2019 11:33 AM		
Client ID:		Run ID: VMS6_190826A		SeqNo: 5875548		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloroethane	ND	1.0								
1,2-Dichloropropane	ND	1.0								
2-Butanone	ND	5.0								
2-Hexanone	ND	5.0								
4-Methyl-2-pentanone	ND	1.0								
Acetone	ND	10								
Benzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	1.0								
Carbon disulfide	ND	1.0								
Carbon tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	1.0								
Chloroform	ND	1.0								
Chloromethane	ND	1.0								
cis-1,2-Dichloroethene	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
Dibromochloromethane	ND	1.0								
Ethylbenzene	ND	1.0								
m,p-Xylene	ND	2.0								
Methylene chloride	ND	5.0								
o-Xylene	ND	1.0								
Styrene	ND	1.0								
Tetrachloroethene	ND	1.0								
Toluene	ND	1.0								
trans-1,2-Dichloroethene	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
Trichloroethene	ND	1.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	3.0								
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>19.94</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>99.7</i>	<i>75-120</i>	<i>0</i>			
<i>Surr: 4-Bromofluorobenzene</i>	<i>19.41</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>97</i>	<i>80-110</i>	<i>0</i>			
<i>Surr: Dibromofluoromethane</i>	<i>20.41</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>102</i>	<i>85-115</i>	<i>0</i>			
<i>Surr: Toluene-d8</i>	<i>20.25</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>101</i>	<i>85-110</i>	<i>0</i>			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Wood Environment & Infrastructure Solutions, Inc.
Work Order: 19081608
Project: TFS Rochester (3359-15-1040)

QC BATCH REPORT

Batch ID: **R269156** Instrument ID **VMS6** Method: **SW8260C**

LCS		Sample ID: VLCSW1-190826-R269156				Units: µg/L		Analysis Date: 8/26/2019 10:21 AM		
Client ID:		Run ID: VMS6_190826A			SeqNo: 5875543		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	23.14	1.0	20	0	116	75-130	0			
1,1,2,2-Tetrachloroethane	20.04	1.0	20	0	100	75-130	0			
1,1,2-Trichloroethane	18.7	1.0	20	0	93.5	75-125	0			
1,1-Dichloroethane	24.42	1.0	20	0	122	68-142	0			
1,1-Dichloroethene	24.51	1.0	20	0	123	70-145	0			
1,2-Dichloroethane	19.5	1.0	20	0	97.5	78-125	0			
1,2-Dichloropropane	19.03	1.0	20	0	95.2	75-125	0			
2-Butanone	19.71	5.0	20	0	98.6	55-150	0			
2-Hexanone	16.47	5.0	20	0	82.4	60-135	0			
4-Methyl-2-pentanone	24.88	1.0	20	0	124	77-178	0			
Acetone	25.93	10	20	0	130	60-160	0			
Benzene	19.91	1.0	20	0	99.6	70-130	0			
Bromodichloromethane	22.44	1.0	20	0	112	75-125	0			
Bromoform	20.49	1.0	20	0	102	60-125	0			
Bromomethane	26.42	1.0	20	0	132	30-185	0			
Carbon disulfide	27.44	1.0	20	0	137	60-165	0			
Carbon tetrachloride	22.15	1.0	20	0	111	65-140	0			
Chlorobenzene	19.83	1.0	20	0	99.2	80-120	0			
Chloroethane	22.31	1.0	20	0	112	31-172	0			
Chloroform	21.78	1.0	20	0	109	66-135	0			
Chloromethane	24.95	1.0	20	0	125	46-148	0			
cis-1,2-Dichloroethene	23.37	1.0	20	0	117	75-134	0			
cis-1,3-Dichloropropene	23.5	1.0	20	0	118	70-130	0			
Dibromochloromethane	20.01	1.0	20	0	100	60-115	0			
Ethylbenzene	20.92	1.0	20	0	105	76-123	0			
m,p-Xylene	41.7	2.0	40	0	104	75-130	0			
Methylene chloride	21.69	5.0	20	0	108	72-125	0			
o-Xylene	21.07	1.0	20	0	105	76-127	0			
Styrene	21.42	1.0	20	0	107	83-137	0			
Tetrachloroethene	20.53	1.0	20	0	103	68-166	0			
Toluene	20.99	1.0	20	0	105	76-125	0			
trans-1,2-Dichloroethene	24.21	1.0	20	0	121	80-140	0			
trans-1,3-Dichloropropene	19.39	1.0	20	0	97	56-132	0			
Trichloroethene	20.97	1.0	20	0	105	77-125	0			
Vinyl chloride	23.61	1.0	20	0	118	50-136	0			
Xylenes, Total	62.77	3.0	60	0	105	76-127	0			
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>19.17</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>95.8</i>	<i>75-120</i>	<i>0</i>			
<i>Surr: 4-Bromofluorobenzene</i>	<i>20.22</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>101</i>	<i>80-110</i>	<i>0</i>			
<i>Surr: Dibromofluoromethane</i>	<i>20.28</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>101</i>	<i>85-115</i>	<i>0</i>			
<i>Surr: Toluene-d8</i>	<i>19.76</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>98.8</i>	<i>85-110</i>	<i>0</i>			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Wood Environment & Infrastructure Solutions, Inc.
 Work Order: 19081608
 Project: TFS Rochester (3359-15-1040)

QC BATCH REPORT

Batch ID: **R269156** Instrument ID **VMS6** Method: **SW8260C**

MS		Sample ID: 19081281-04A MS				Units: µg/L		Analysis Date: 8/26/2019 09:14 PM		
Client ID:		Run ID: VMS6_190826A			SeqNo: 5875599		Prep Date:		DF: 5	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	132.2	5.0	100	0	132	75-130	0			S
1,1,2,2-Tetrachloroethane	103.6	5.0	100	0	104	75-130	0			
1,1,2-Trichloroethane	102.5	5.0	100	0	102	75-125	0			
1,1-Dichloroethane	131	5.0	100	0	131	68-142	0			
1,1-Dichloroethene	133.2	5.0	100	0	133	70-145	0			
1,2-Dichloroethane	107.7	5.0	100	0	108	78-125	0			
1,2-Dichloropropane	105.5	5.0	100	0	106	75-125	0			
2-Butanone	87	25	100	0	87	55-150	0			
2-Hexanone	76.7	25	100	0	76.7	60-135	0			
4-Methyl-2-pentanone	113	5.0	100	0	113	77-178	0			
Acetone	100.2	50	100	3.15	97.1	60-160	0			
Benzene	109.4	5.0	100	3.65	106	70-130	0			
Bromodichloromethane	108.2	5.0	100	0	108	75-125	0			
Bromoform	96.25	5.0	100	0	96.2	60-125	0			
Bromomethane	71.1	5.0	100	0	71.1	30-185	0			
Carbon disulfide	115.7	5.0	100	0	116	60-165	0			
Carbon tetrachloride	117.8	5.0	100	0	118	65-140	0			
Chlorobenzene	105.8	5.0	100	0	106	80-120	0			
Chloroethane	119.4	5.0	100	0	119	31-172	0			
Chloroform	117.7	5.0	100	0	118	66-135	0			
Chloromethane	114.5	5.0	100	0	114	46-148	0			
cis-1,2-Dichloroethene	231.4	5.0	100	112.4	119	75-134	0			
cis-1,3-Dichloropropene	116	5.0	100	0	116	70-130	0			
Dibromochloromethane	95.25	5.0	100	0	95.2	60-115	0			
Ethylbenzene	117.2	5.0	100	0	117	76-123	0			
m,p-Xylene	237.2	10	200	0	119	75-130	0			
Methylene chloride	117	25	100	0	117	72-125	0			
o-Xylene	117.6	5.0	100	0	118	76-127	0			
Styrene	115	5.0	100	0	115	83-137	0			
Tetrachloroethene	117.8	5.0	100	0	118	68-166	0			
Toluene	116	5.0	100	0	116	76-125	0			
trans-1,2-Dichloroethene	129.2	5.0	100	0	129	80-140	0			
trans-1,3-Dichloropropene	88.95	5.0	100	0	89	56-132	0			
Trichloroethene	160.2	5.0	100	42.1	118	77-125	0			
Vinyl chloride	118.8	5.0	100	3.6	115	50-136	0			
Xylenes, Total	354.8	15	300	0	118	76-127	0			
Surr: 1,2-Dichloroethane-d4	94.55	0	100	0	94.6	75-120	0			
Surr: 4-Bromofluorobenzene	103.8	0	100	0	104	80-110	0			
Surr: Dibromofluoromethane	100.9	0	100	0	101	85-115	0			
Surr: Toluene-d8	98.25	0	100	0	98.2	85-110	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Wood Environment & Infrastructure Solutions, Inc.
 Work Order: 19081608
 Project: TFS Rochester (3359-15-1040)

QC BATCH REPORT

Batch ID: **R269156** Instrument ID **VMS6** Method: **SW8260C**

MSD		Sample ID: 19081281-04A MSD				Units: µg/L		Analysis Date: 8/26/2019 09:38 PM		
Client ID:		Run ID: VMS6_190826A		SeqNo: 5875600		Prep Date:		DF: 5		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	129	5.0	100	0	129	75-130	132.2	2.53	30	
1,1,2,2-Tetrachloroethane	104.8	5.0	100	0	105	75-130	103.6	1.15	30	
1,1,2-Trichloroethane	102.6	5.0	100	0	103	75-125	102.5	0.0975	30	
1,1-Dichloroethane	129.2	5.0	100	0	129	68-142	131	1.38	30	
1,1-Dichloroethene	131.6	5.0	100	0	132	70-145	133.2	1.25	30	
1,2-Dichloroethane	107.3	5.0	100	0	107	78-125	107.7	0.372	30	
1,2-Dichloropropane	107	5.0	100	0	107	75-125	105.5	1.41	30	
2-Butanone	96.55	25	100	0	96.6	55-150	87	10.4	30	
2-Hexanone	73.15	25	100	0	73.2	60-135	76.7	4.74	30	
4-Methyl-2-pentanone	105	5.0	100	0	105	77-178	113	7.43	30	
Acetone	99.25	50	100	3.15	96.1	60-160	100.2	1	30	
Benzene	108.9	5.0	100	3.65	105	70-130	109.4	0.504	30	
Bromodichloromethane	114	5.0	100	0	114	75-125	108.2	5.27	30	
Bromoform	93.1	5.0	100	0	93.1	60-125	96.25	3.33	30	
Bromomethane	88.2	5.0	100	0	88.2	30-185	71.1	21.5	30	
Carbon disulfide	113.6	5.0	100	0	114	60-165	115.7	1.83	30	
Carbon tetrachloride	123	5.0	100	0	123	65-140	117.8	4.28	30	
Chlorobenzene	104.4	5.0	100	0	104	80-120	105.8	1.33	30	
Chloroethane	116	5.0	100	0	116	31-172	119.4	2.93	30	
Chloroform	114.8	5.0	100	0	115	66-135	117.7	2.49	30	
Chloromethane	101.2	5.0	100	0	101	46-148	114.5	12.3	30	
cis-1,2-Dichloroethene	229.3	5.0	100	112.4	117	75-134	231.4	0.912	30	
cis-1,3-Dichloropropene	109.4	5.0	100	0	109	70-130	116	5.85	30	
Dibromochloromethane	92.05	5.0	100	0	92	60-115	95.25	3.42	30	
Ethylbenzene	114.4	5.0	100	0	114	76-123	117.2	2.46	30	
m,p-Xylene	228.4	10	200	0	114	75-130	237.2	3.78	30	
Methylene chloride	112.4	25	100	0	112	72-125	117	4.01	30	
o-Xylene	113	5.0	100	0	113	76-127	117.6	3.99	30	
Styrene	113.3	5.0	100	0	113	83-137	115	1.45	30	
Tetrachloroethene	113	5.0	100	0	113	68-166	117.8	4.16	30	
Toluene	111.4	5.0	100	0	111	76-125	116	4.04	30	
trans-1,2-Dichloroethene	125.6	5.0	100	0	126	80-140	129.2	2.83	30	
trans-1,3-Dichloropropene	86.05	5.0	100	0	86	56-132	88.95	3.31	30	
Trichloroethene	160.2	5.0	100	42.1	118	77-125	160.2	0.0624	30	
Vinyl chloride	114.5	5.0	100	3.6	111	50-136	118.8	3.73	30	
Xylenes, Total	341.4	15	300	0	114	76-127	354.8	3.85	30	
Surr: 1,2-Dichloroethane-d4	97	0	100	0	97	75-120	94.55	2.56	30	
Surr: 4-Bromofluorobenzene	102	0	100	0	102	80-110	103.8	1.75	30	
Surr: Dibromofluoromethane	104.6	0	100	0	105	85-115	100.9	3.6	30	
Surr: Toluene-d8	96.85	0	100	0	96.8	85-110	98.25	1.44	30	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Wood Environment & Infrastructure Solutions, Inc.

QC BATCH REPORT

Work Order: 19081608

Project: TFS Rochester (3359-15-1040)

Batch ID: **R269156**

Instrument ID **VMS6**

Method: **SW8260C**

The following samples were analyzed in this batch:

19081608-01A	19081608-02A	19081608-03A
19081608-04A	19081608-05A	19081608-06A
19081608-07A	19081608-08A	19081608-09A
19081608-10A	19081608-16A	19081608-17A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Wood Environment & Infrastructure Solutions, Inc.
Work Order: 19081608
Project: TFS Rochester (3359-15-1040)

QC BATCH REPORT

Batch ID: **R269208a** Instrument ID **VMS6** Method: **SW8260C**

MBLK		Sample ID: VBLKW2-190826-R269208a				Units: µg/L		Analysis Date: 8/27/2019 12:51 PM		
Client ID:		Run ID: VMS6_190826B		SeqNo: 5875838		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloroethane	ND	1.0								
1,2-Dichloropropane	ND	1.0								
2-Butanone	ND	5.0								
2-Hexanone	ND	5.0								
4-Methyl-2-pentanone	ND	1.0								
Acetone	ND	10								
Benzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	1.0								
Carbon disulfide	ND	1.0								
Carbon tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	1.0								
Chloroform	ND	1.0								
Chloromethane	ND	1.0								
cis-1,2-Dichloroethene	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
Dibromochloromethane	ND	1.0								
Ethylbenzene	ND	1.0								
m,p-Xylene	ND	2.0								
Methylene chloride	ND	5.0								
o-Xylene	ND	1.0								
Styrene	ND	1.0								
Tetrachloroethene	ND	1.0								
Toluene	ND	1.0								
trans-1,2-Dichloroethene	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
Trichloroethene	ND	1.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	3.0								
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>20</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>100</i>	<i>75-120</i>	<i>0</i>			
<i>Surr: 4-Bromofluorobenzene</i>	<i>20.14</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>101</i>	<i>80-110</i>	<i>0</i>			
<i>Surr: Dibromofluoromethane</i>	<i>19.43</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>97.2</i>	<i>85-115</i>	<i>0</i>			
<i>Surr: Toluene-d8</i>	<i>19.78</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>98.9</i>	<i>85-110</i>	<i>0</i>			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Wood Environment & Infrastructure Solutions, Inc.
 Work Order: 19081608
 Project: TFS Rochester (3359-15-1040)

QC BATCH REPORT

Batch ID: **R269208a** Instrument ID **VMS6** Method: **SW8260C**

LCS		Sample ID: VLCSW2-190826-R269208a				Units: µg/L		Analysis Date: 8/26/2019 11:39 PM		
Client ID:		Run ID: VMS6_190826B		SeqNo: 5875801		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	19.73	1.0	20	0	98.6	75-130	0			
1,1,2,2-Tetrachloroethane	20.14	1.0	20	0	101	75-130	0			
1,1,2-Trichloroethane	19.42	1.0	20	0	97.1	75-125	0			
1,1-Dichloroethane	22.63	1.0	20	0	113	68-142	0			
1,1-Dichloroethene	19.94	1.0	20	0	99.7	70-145	0			
1,2-Dichloroethane	19.45	1.0	20	0	97.2	78-125	0			
1,2-Dichloropropane	18.48	1.0	20	0	92.4	75-125	0			
2-Butanone	18.03	5.0	20	0	90.2	55-150	0			
2-Hexanone	16.16	5.0	20	0	80.8	60-135	0			
4-Methyl-2-pentanone	21.75	1.0	20	0	109	77-178	0			
Acetone	23.09	10	20	0	115	60-160	0			
Benzene	18.7	1.0	20	0	93.5	70-130	0			
Bromodichloromethane	19.22	1.0	20	0	96.1	75-125	0			
Bromoform	18.12	1.0	20	0	90.6	60-125	0			
Bromomethane	21.59	1.0	20	0	108	30-185	0			
Carbon disulfide	19.15	1.0	20	0	95.8	60-165	0			
Carbon tetrachloride	17.9	1.0	20	0	89.5	65-140	0			
Chlorobenzene	18.75	1.0	20	0	93.8	80-120	0			
Chloroethane	18.74	1.0	20	0	93.7	31-172	0			
Chloroform	19.49	1.0	20	0	97.4	66-135	0			
Chloromethane	17.95	1.0	20	0	89.8	46-148	0			
cis-1,2-Dichloroethene	20.88	1.0	20	0	104	75-134	0			
cis-1,3-Dichloropropene	20.74	1.0	20	0	104	70-130	0			
Dibromochloromethane	17.4	1.0	20	0	87	60-115	0			
Ethylbenzene	19.78	1.0	20	0	98.9	76-123	0			
m,p-Xylene	39.77	2.0	40	0	99.4	75-130	0			
Methylene chloride	20.56	5.0	20	0	103	72-125	0			
o-Xylene	20.39	1.0	20	0	102	76-127	0			
Styrene	20.56	1.0	20	0	103	83-137	0			
Tetrachloroethene	18.7	1.0	20	0	93.5	68-166	0			
Toluene	19.62	1.0	20	0	98.1	76-125	0			
trans-1,2-Dichloroethene	21.43	1.0	20	0	107	80-140	0			
trans-1,3-Dichloropropene	16.76	1.0	20	0	83.8	56-132	0			
Trichloroethene	19.14	1.0	20	0	95.7	77-125	0			
Vinyl chloride	17.84	1.0	20	0	89.2	50-136	0			
Xylenes, Total	60.16	3.0	60	0	100	76-127	0			
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>19.94</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>99.7</i>	<i>75-120</i>	<i>0</i>			
<i>Surr: 4-Bromofluorobenzene</i>	<i>20.45</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>102</i>	<i>80-110</i>	<i>0</i>			
<i>Surr: Dibromofluoromethane</i>	<i>19.16</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>95.8</i>	<i>85-115</i>	<i>0</i>			
<i>Surr: Toluene-d8</i>	<i>18.65</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>93.2</i>	<i>85-110</i>	<i>0</i>			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Wood Environment & Infrastructure Solutions, Inc.
 Work Order: 19081608
 Project: TFS Rochester (3359-15-1040)

QC BATCH REPORT

Batch ID: **R269208a** Instrument ID **VMS6** Method: **SW8260C**

MS		Sample ID: 19081366-35B MS				Units: µg/L		Analysis Date: 8/27/2019 09:41 AM		
Client ID:		Run ID: VMS6_190826B			SeqNo: 5875836		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	22.99	1.0	20	0	115	75-130	0			
1,1,2,2-Tetrachloroethane	18.83	1.0	20	0	94.2	75-130	0			
1,1,2-Trichloroethane	18.76	1.0	20	0	93.8	75-125	0			
1,1-Dichloroethane	23.7	1.0	20	0	118	68-142	0			
1,1-Dichloroethene	25.15	1.0	20	0	126	70-145	0			
1,2-Dichloroethane	19.98	1.0	20	0	99.9	78-125	0			
1,2-Dichloropropane	20.38	1.0	20	0	102	75-125	0			
2-Butanone	16.94	5.0	20	0	84.7	55-150	0			
2-Hexanone	14.21	5.0	20	0	71	60-135	0			
4-Methyl-2-pentanone	20.55	1.0	20	0	103	77-178	0			
Acetone	20.87	10	20	1.4	97.4	60-160	0			
Benzene	21.91	1.0	20	0	110	70-130	0			
Bromodichloromethane	19.76	1.0	20	0	98.8	75-125	0			
Bromoform	15.69	1.0	20	0	78.4	60-125	0			
Bromomethane	17.5	1.0	20	0	87.5	30-185	0			
Carbon disulfide	18.87	1.0	20	0	94.4	60-165	0			
Carbon tetrachloride	20.99	1.0	20	0	105	65-140	0			
Chlorobenzene	19.73	1.0	20	0	98.6	80-120	0			
Chloroethane	19.17	1.0	20	0	95.8	31-172	0			
Chloroform	19.84	1.0	20	0	99.2	66-135	0			
Chloromethane	21.13	1.0	20	0	106	46-148	0			
cis-1,2-Dichloroethene	21.57	1.0	20	0	108	75-134	0			
cis-1,3-Dichloropropene	19	1.0	20	0	95	70-130	0			
Dibromochloromethane	14.94	1.0	20	0	74.7	60-115	0			
Ethylbenzene	21.69	1.0	20	0	108	76-123	0			
m,p-Xylene	44.12	2.0	40	0	110	75-130	0			
Methylene chloride	20.98	5.0	20	0	105	72-125	0			
o-Xylene	22.17	1.0	20	0	111	76-127	0			
Styrene	20.97	1.0	20	0.7	101	83-137	0			
Tetrachloroethene	21.17	1.0	20	0	106	68-166	0			
Toluene	21.72	1.0	20	0	109	76-125	0			
trans-1,2-Dichloroethene	23.32	1.0	20	0	117	80-140	0			
trans-1,3-Dichloropropene	13.97	1.0	20	0	69.8	56-132	0			
Trichloroethene	22.09	1.0	20	0	110	77-125	0			
Vinyl chloride	21.43	1.0	20	0	107	50-136	0			
Xylenes, Total	66.29	3.0	60	0	110	76-127	0			
<i>Surr: 1,2-Dichloroethane-d4</i>	20.28	0	20	0	101	75-120	0			
<i>Surr: 4-Bromofluorobenzene</i>	19.99	0	20	0	100	80-110	0			
<i>Surr: Dibromofluoromethane</i>	19.61	0	20	0	98	85-115	0			
<i>Surr: Toluene-d8</i>	19.67	0	20	0	98.4	85-110	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Wood Environment & Infrastructure Solutions, Inc.
 Work Order: 19081608
 Project: TFS Rochester (3359-15-1040)

QC BATCH REPORT

Batch ID: **R269208a** Instrument ID **VMS6** Method: **SW8260C**

MSD		Sample ID: 19081366-35B MSD				Units: µg/L		Analysis Date: 8/27/2019 10:06 AM		
Client ID:		Run ID: VMS6_190826B			SeqNo: 5875837		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	22.39	1.0	20	0	112	75-130	22.99	2.64	30	
1,1,2,2-Tetrachloroethane	18.8	1.0	20	0	94	75-130	18.83	0.159	30	
1,1,2-Trichloroethane	18.79	1.0	20	0	94	75-125	18.76	0.16	30	
1,1-Dichloroethane	24.94	1.0	20	0	125	68-142	23.7	5.1	30	
1,1-Dichloroethene	25.22	1.0	20	0	126	70-145	25.15	0.278	30	
1,2-Dichloroethane	19.72	1.0	20	0	98.6	78-125	19.98	1.31	30	
1,2-Dichloropropane	19.87	1.0	20	0	99.4	75-125	20.38	2.53	30	
2-Butanone	16.1	5.0	20	0	80.5	55-150	16.94	5.08	30	
2-Hexanone	15.17	5.0	20	0	75.8	60-135	14.21	6.54	30	
4-Methyl-2-pentanone	22.22	1.0	20	0	111	77-178	20.55	7.81	30	
Acetone	18.18	10	20	1.4	83.9	60-160	20.87	13.8	30	
Benzene	21.07	1.0	20	0	105	70-130	21.91	3.91	30	
Bromodichloromethane	19.15	1.0	20	0	95.8	75-125	19.76	3.14	30	
Bromoform	15.94	1.0	20	0	79.7	60-125	15.69	1.58	30	
Bromomethane	19.57	1.0	20	0	97.8	30-185	17.5	11.2	30	
Carbon disulfide	19.63	1.0	20	0	98.2	60-165	18.87	3.95	30	
Carbon tetrachloride	21.72	1.0	20	0	109	65-140	20.99	3.42	30	
Chlorobenzene	19.67	1.0	20	0	98.4	80-120	19.73	0.305	30	
Chloroethane	21.03	1.0	20	0	105	31-172	19.17	9.25	30	
Chloroform	21.23	1.0	20	0	106	66-135	19.84	6.77	30	
Chloromethane	21.31	1.0	20	0	107	46-148	21.13	0.848	30	
cis-1,2-Dichloroethene	21.86	1.0	20	0	109	75-134	21.57	1.34	30	
cis-1,3-Dichloropropene	17.87	1.0	20	0	89.4	70-130	19	6.13	30	
Dibromochloromethane	16.26	1.0	20	0	81.3	60-115	14.94	8.46	30	
Ethylbenzene	21.82	1.0	20	0	109	76-123	21.69	0.598	30	
m,p-Xylene	43.76	2.0	40	0	109	75-130	44.12	0.819	30	
Methylene chloride	21.75	5.0	20	0	109	72-125	20.98	3.6	30	
o-Xylene	21.63	1.0	20	0	108	76-127	22.17	2.47	30	
Styrene	21.2	1.0	20	0.7	102	83-137	20.97	1.09	30	
Tetrachloroethene	22.72	1.0	20	0	114	68-166	21.17	7.06	30	
Toluene	22.01	1.0	20	0	110	76-125	21.72	1.33	30	
trans-1,2-Dichloroethene	23.1	1.0	20	0	116	80-140	23.32	0.948	30	
trans-1,3-Dichloropropene	14.48	1.0	20	0	72.4	56-132	13.97	3.59	30	
Trichloroethene	21.23	1.0	20	0	106	77-125	22.09	3.97	30	
Vinyl chloride	22.73	1.0	20	0	114	50-136	21.43	5.89	30	
Xylenes, Total	65.39	3.0	60	0	109	76-127	66.29	1.37	30	
Surr: 1,2-Dichloroethane-d4	19.1	0	20	0	95.5	75-120	20.28	5.99	30	
Surr: 4-Bromofluorobenzene	19.97	0	20	0	99.8	80-110	19.99	0.1	30	
Surr: Dibromofluoromethane	20.17	0	20	0	101	85-115	19.61	2.82	30	
Surr: Toluene-d8	19.34	0	20	0	96.7	85-110	19.67	1.69	30	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Wood Environment & Infrastructure Solutions, Inc.

QC BATCH REPORT

Work Order: 19081608

Project: TFS Rochester (3359-15-1040)

Batch ID: **R269208a**

Instrument ID **VMS6**

Method: **SW8260C**

The following samples were analyzed in this batch:

19081608-11A	19081608-12A	19081608-13A
19081608-14A	19081608-15A	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.



Cincinnati, OH
+1 513 733 5336

Fort Collins, CO
+1 970 490 1511

Everett, WA
+1 425 356 2600

Holland, MI
+1 616 399 6070

Chain of Custody Form

Houston, TX
+1 281 530 5656

Spring City, PA
+1 610 948 4903

South Charleston, WV
+1 304 356 3168

Middletown, PA
+1 717 944 5541

Salt Lake City, UT
+1 801 266 7700

York, PA
+1 717 505 5280

Page 1 of 2

COC ID: 187198

ALS Project Manager: **EB**

ALS Work Order #: **19081608**

Customer Information		Project Information		Parameter/Method Request for Analysis											
Purchase Order	CO12609102	Project Name	Stability and Annual	A	VOCs										
Work Order		Project Number	3359151040	B											
Company Name	Wood Environment & Infrastructure Soluti	Bill To Company	Wood Environment & Infrastructure Sol	C											
Send Report To	Paul Stork	Invoice Attn	Accounts Payable	D											
Address	521 Byers Road, Suite 204	Address	521 Byers Road, Suite 204	E											
				F											
City/State/Zip	Miamisburg, OH 45342	City/State/Zip	Miamisburg, OH 45342	G											
Phone	(937) 859-3600	Phone	(937) 859-3600	H											
Fax	(937) 859-7951	Fax	(937) 859-7951	I											
e-Mail Address	Paul.Stork@woodpic.com	e-Mail Address		J											

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	ATR-MW26(28.8)-G081919	8/19/19	1450	GW	1	3	X										
2	ATR-MW26(58.2)-G081919	8/19/19	1405	GW	1	3	X										
3	ATR-MW26(17.5)-G081919	8/19/19	1610	GW	1	3	X										
4	ATR-EB001-081919	8/19/19	1420	W	1	3	X										
5	ATR-MW27(18)-G081919	8/19/19	1600	GW	1	3	X										
6	ATR-MW27(18)-G081919R	8/19/19	1600	GW	1	3	X										
7	ATR-MW14-G082019	8/20/19	0835	GW	1	3	X										
8	ATR-MW15-G082019	8/20/19	0955	GW	1	3	X										
9	ATR-MW25(82)-G082019	8/20/19	1045	GW	1	3	X										
10	ATR-MW25(32.6)-G082019	8/20/19	1215	GW	1	3	X										

Sampler(s) Please Print & Sign		Shipment Method		Required Turnaround Time: (Check Box)				Results Due Date:	
				<input type="checkbox"/> Std 10 WK Days <input checked="" type="checkbox"/> 5 WK Days <input type="checkbox"/> Other _____ <input type="checkbox"/> 2 WK Days <input type="checkbox"/> 24 Hour					
Relinquished by:	Date:	Time:	Received by:	Notes:					
<i>[Signature]</i>	8/21/19	1545	<i>[Signature]</i>						
Relinquished by:	Date:	Time:	Received by (Laboratory):	Cooler ID	Cooler Temp.	QC Package: (Check One Box Below)			
<i>[Signature]</i>	8/21/19	1615	<i>[Signature]</i>	SR2	4.8°C	<input type="checkbox"/> Level II Std QC <input type="checkbox"/> TRRP CheckList <input type="checkbox"/> Level III Std QC/Raw Data <input type="checkbox"/> TRRP Level IV <input checked="" type="checkbox"/> Level IV SW846/CLP <input type="checkbox"/> Other _____			
Logged by (Laboratory):	Date:	Time:	Checked by (Laboratory):						
<i>[Signature]</i>	8/22/19	1445	<i>[Signature]</i>						
Preservative Key: 1-HCl 2-HNO ₃ 3-H ₂ SO ₄ 4-NaOH 5-Na ₂ S ₂ O ₃ 6-NaHSO ₄ 7-Other 8-4°C 9-5035									

Note: 1. Any changes must be made in writing once samples and COC Form have been submitted to ALS Environmental.
 2. Unless otherwise agreed in a formal contract, services provided by ALS Environmental are expressly limited to the terms and conditions stated on the reverse.
 3. The Chain of Custody is a legal document. All information must be completed accurately.

Copyright 2011 by ALS Environmental.



Cincinnati, OH
+1 513 733 5336

Fort Collins, CO
+1 970 490 1511

Everett, WA
+1 425 356 2600

Holland, MI
+1 616 399 6070

Chain of Custody Form

Houston, TX
+1 281 530 5656

Spring City, PA
+1 610 948 4903

South Charleston, WV
+1 304 356 3168

Middletown, PA
+1 717 944 5541

Salt Lake City, UT
+1 801 266 7700

York, PA
+1 717 505 5280

Page 2 of 2

COC ID: 187811

ALS Project Manager: ER

ALS Work Order #: 19081608

Customer Information		Project Information		Parameter/Method Request for Analysis											
Purchase Order	<u>CO12609102</u>	Project Name	<u>Stability and Annual</u>	A	VOCs										
Work Order		Project Number	<u>3359151040</u>	B											
Company Name	Wood Environment & Infrastructure Solutions Inc.	Bill To Company	Wood Environment & Infrastructure Solutions Inc.	C											
Send Report To	<u>Paul Stork</u>	Invoice Attn	Accounts Payable	D											
Address	521 Byers Road, Suite 204	Address	521 Byers Road, Suite 204	E											
				F											
City/State/Zip	Miamisburg, OH 45342	City/State/Zip	Miamisburg, OH 45342	G											
Phone	(937) 859-3600	Phone	(937) 859-3600	H											
Fax	(937) 859-7951	Fax	(937) 859-7951	I											
e-Mail Address	<u>Paul.Stork@woodpe.com</u>	e-Mail Address		J											

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
11	ATR-MW17 - G082019	8/20/19	1320	GW	1	3	X										
12	ATR-MW82(58) - G082019	8/20/19	1450	GW	1	3	X										
13	ATR-MW20(51) - G082019	8/20/19	1320	GW	1	3	X										
14	ATR-MW25(16.4) - G082019	8/20/19	1130	GW	1	3	X										
15	ATR-MW6C - G082119	8/21/19	1450	GW	1	3	X										
16	ATR-EB001 - 082119	8/21/19	1410	GW	1	3	X										
17	ATR-TR003 - 082119	8/21/19		GW	1	3	X										
8																	
9																	
10																	

Sampler(s) Please Print & Sign		Shipment Method		Required Turnaround Time: (Check Box)				Results Due Date:			
				<input type="checkbox"/> Std 10 WK Days <input checked="" type="checkbox"/> 5 WK Days <input type="checkbox"/> Other _____ <input type="checkbox"/> 2 WK Days <input type="checkbox"/> 24 Hour							
Relinquished by:	Date:	Time:	Received by:	Notes:							
<u>[Signature]</u>	8/21/19	1545	<u>[Signature]</u>								
Relinquished by:	Date:	Time:	Received by (Laboratory):	Cooler ID	Cooler Temp.	QC Package: (Check One Box Below)					
<u>[Signature]</u>	8/21/19	1615	<u>[Signature]</u>	S02	4.8°C	<input type="checkbox"/> Level II Std QC <input type="checkbox"/> TRRP CheckList <input type="checkbox"/> Level III Std QC/Raw Data <input type="checkbox"/> TRRP Level IV <input checked="" type="checkbox"/> Level IV SWS46/CLP <input type="checkbox"/> Other _____					
Logged by (Laboratory):	Date:	Time:	Checked by (Laboratory):								
<u>DFS</u>	8/22/19	1445	<u>[Signature]</u>								
Preservative Key: 1-HCl 2-HNO ₃ 3-H ₂ SO ₄ 4-NaOH 5-Na ₂ S ₂ O ₃ 6-NaHSO ₄ 7-Other 8-4°C 9-5035											

Sample Receipt Checklist

Client Name: **WOOD-DAYTON**

Date/Time Received: **22-Aug-19 09:30**

Work Order: **19081608**

Received by: **DS**

Checklist completed by Diane Shaw 22-Aug-19
eSignature Date

Reviewed by: Eheland Bramworth 22-Aug-19
eSignature Date

Matrices: Groundwater, Water

Carrier name: FedEx

Shipping container/cooler in good condition? Yes No Not Present

Custody seals intact on shipping container/cooler? Yes No Not Present

Custody seals intact on sample bottles? Yes No Not Present

Chain of custody present? Yes No

Chain of custody signed when relinquished and received? Yes No

Chain of custody agrees with sample labels? Yes No

Samples in proper container/bottle? Yes No

Sample containers intact? Yes No

Sufficient sample volume for indicated test? Yes No

All samples received within holding time? Yes No

Container/Temp Blank temperature in compliance? Yes No

Sample(s) received on ice? Yes No

Temperature(s)/Thermometer(s): 4.8/4.8 c SR2

Cooler(s)/Kit(s):

Date/Time sample(s) sent to storage: 8/22/2019 3:16:26 PM

Water - VOA vials have zero headspace? Yes No No VOA vials submitted

Water - pH acceptable upon receipt? Yes No N/A

pH adjusted? Yes No N/A

pH adjusted by:

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction:



28-Aug-2019

Paul Stork
Wood Environment & Infrastructure Solutions, Inc.
521 Byers Road, Suite 204
Miamisburg, OH 45342

Re: **TFS Rochester (3359-15-1040)**

Work Order: **19081622**

Dear Paul,

ALS Environmental received 14 samples on 22-Aug-2019 for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental - Holland and for only the analyses requested.

Sample results are compliant with industry accepted practices and Quality Control results achieved laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 40.

If you have any questions regarding this report, please feel free to contact me:

ADDRESS: 3352 128th Avenue, Holland, MI, USA
PHONE: +1 (616) 399-6070 FAX: +1 (616) 399-6185

Sincerely,

A handwritten signature in black ink that reads "Ehrland Bosworth".

Electronically approved by: Ehrland Bosworth

Ehrland Bosworth
Project Manager

Report of Laboratory Analysis

Certificate No: MN 026-999-449

ALS GROUP USA, CORP Part of the ALS Laboratory Group A Campbell Brothers Limited Company

Environmental ALS

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

Client: Wood Environment & Infrastructure Solutions, Inc.
Project: TFS Rochester (3359-15-1040)
Work Order: 19081622

Work Order Sample Summary

<u>Lab Samp ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
19081622-01	ATR-OW1(39)-G082119	Groundwater		8/21/2019 14:00	8/22/2019 09:30	<input type="checkbox"/>
19081622-02	ATR-OW2(33)-G082119	Groundwater		8/21/2019 13:10	8/22/2019 09:30	<input type="checkbox"/>
19081622-03	ATR-OW2(53)-G082119	Groundwater		8/21/2019 12:25	8/22/2019 09:30	<input type="checkbox"/>
19081622-04	ATR-OW3(35)-G082119	Groundwater		8/21/2019 12:25	8/22/2019 09:30	<input type="checkbox"/>
19081622-05	ATR-OW3(55)-G082119	Groundwater		8/21/2019 11:50	8/22/2019 09:30	<input type="checkbox"/>
19081622-06	ATR-OW4(35)-G082119	Groundwater		8/21/2019 11:40	8/22/2019 09:30	<input type="checkbox"/>
19081622-07	ATR-OW4(54)-G082119	Groundwater		8/21/2019 11:05	8/22/2019 09:30	<input type="checkbox"/>
19081622-08	ATR-OW5(16)-G082119	Groundwater		8/21/2019 11:00	8/22/2019 09:30	<input type="checkbox"/>
19081622-09	ATR-OW5(35)-G082119	Groundwater		8/21/2019 10:20	8/22/2019 09:30	<input type="checkbox"/>
19081622-10	ATR-OW5(44)-G082119	Groundwater		8/21/2019 09:05	8/22/2019 09:30	<input type="checkbox"/>
19081622-11	ATR-OW6(37)-G082119	Groundwater		8/21/2019 10:10	8/22/2019 09:30	<input type="checkbox"/>
19081622-12	ATR-OW6(63)-G082119	Groundwater		8/21/2019 09:25	8/22/2019 09:30	<input type="checkbox"/>
19081622-13	ATR-OW6(63)-G082119R	Groundwater		8/21/2019 09:25	8/22/2019 09:30	<input type="checkbox"/>
19081622-14	ATR-TB002-082119	Water		8/21/2019	8/22/2019 09:30	<input type="checkbox"/>

Client: Wood Environment & Infrastructure Solutions, Inc
Project: TFS Rochester (3359-15-1040)
Work Order: 19081622

Case Narrative

Samples for the above noted Work Order were received on 08/22/19. The attached "Sample Receipt Checklist" documents the status of custody seals, container integrity, preservation, and temperature compliance.

Samples were analyzed according to the analytical methodology previously transmitted in the "Work Order Acknowledgement". Methodologies are also documented in the "Analytical Result" section for each sample. Quality control results are listed in the "QC Report" section. Sample association for the reported quality control is located at the end of each batch summary. If applicable, results are appropriately qualified in the Analytical Result and QC Report sections. The "Qualifiers" section documents the various qualifiers, units, and acronyms utilized in reporting. A copy of the laboratory's scope of accreditation is available upon request.

With the following exceptions, all sample analyses achieved analytical criteria.

Volatile Organics:

Batch R269277, Method VOC_8260_W, Sample 19081622-01A: The VOC Continuing Calibration Verification did not meet acceptance criteria for the following analytes; results are to be considered estimated for Chloroethane and 2-Hexanone.

Batch R269277, Method VOC_8260_W, Sample 19081622-02A MS and -02A MSD: The VOC MS and/or MSD recoveries were above the upper control limit. The corresponding result in the parent sample was non-detect, therefore no qualification is necessary for Vinyl Chloride.

Batch R269277, Method VOC_8260_W, Sample 19081622-02A MSD: The VOC MSD recovery was outside of the control limit. However, the MS recovery and the RPD between the MS and MSD was in control. No qualification is required for Methylene Chloride.

Batch R269277, Method VOC_8260_W, Sample 19081622-14A: The VOC Continuing Calibration Verification did not meet acceptance criteria for the following analytes; results are to be considered estimated for Chloroethane and 2-Hexanone.

No other deviations or anomalies were noted.

Client: Wood Environment & Infrastructure Solutions, Inc.
Project: TFS Rochester (3359-15-1040)
WorkOrder: 19081622

**QUALIFIERS,
ACRONYMS, UNITS**

<u>Qualifier</u>	<u>Description</u>
*	Value exceeds Regulatory Limit
**	Estimated Value
a	Analyte is non-accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
Hr	BOD/CBOD - Sample was reset outside Hold Time, value should be considered estimated.
J	Analyte is present at an estimated concentration between the MDL and Report Limit
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL
X	Analyte was detected in the Method Blank between the MDL and Reporting Limit, sample results may exhibit background or reagent contamination at the observed level.

<u>Acronym</u>	<u>Description</u>
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
LOD	Limit of Detection (see MDL)
LOQ	Limit of Quantitation (see PQL)
MBLK	Method Blank
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
TDL	Target Detection Limit
TNTC	Too Numerous To Count
A	APHA Standard Methods
D	ASTM
E	EPA
SW	SW-846 Update III

<u>Units Reported</u>	<u>Description</u>
µg/L	Micrograms per Liter

Client: Wood Environment & Infrastructure Solutions, Inc.
Project: TFS Rochester (3359-15-1040)
Sample ID: ATR-OW1(39)-G082119
Collection Date: 8/21/2019 02:00 PM

Work Order: 19081622
Lab ID: 19081622-01
Matrix: GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260C		Analyst: BG	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	8/27/2019 04:36 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	8/27/2019 04:36 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	8/27/2019 04:36 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	8/27/2019 04:36 PM
1,1-Dichloroethene	ND		1.0	µg/L	1	8/27/2019 04:36 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	8/27/2019 04:36 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	8/27/2019 04:36 PM
2-Butanone	ND		5.0	µg/L	1	8/27/2019 04:36 PM
2-Hexanone	ND		5.0	µg/L	1	8/27/2019 04:36 PM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	8/27/2019 04:36 PM
Acetone	ND		10	µg/L	1	8/27/2019 04:36 PM
Benzene	ND		1.0	µg/L	1	8/27/2019 04:36 PM
Bromodichloromethane	ND		1.0	µg/L	1	8/27/2019 04:36 PM
Bromoform	ND		1.0	µg/L	1	8/27/2019 04:36 PM
Bromomethane	ND		1.0	µg/L	1	8/27/2019 04:36 PM
Carbon disulfide	ND		1.0	µg/L	1	8/27/2019 04:36 PM
Carbon tetrachloride	ND		1.0	µg/L	1	8/27/2019 04:36 PM
Chlorobenzene	ND		1.0	µg/L	1	8/27/2019 04:36 PM
Chloroethane	ND		1.0	µg/L	1	8/27/2019 04:36 PM
Chloroform	ND		1.0	µg/L	1	8/27/2019 04:36 PM
Chloromethane	ND		1.0	µg/L	1	8/27/2019 04:36 PM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	8/27/2019 04:36 PM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	8/27/2019 04:36 PM
Dibromochloromethane	ND		1.0	µg/L	1	8/27/2019 04:36 PM
Ethylbenzene	ND		1.0	µg/L	1	8/27/2019 04:36 PM
m,p-Xylene	ND		2.0	µg/L	1	8/27/2019 04:36 PM
Methylene chloride	ND		5.0	µg/L	1	8/27/2019 04:36 PM
o-Xylene	ND		1.0	µg/L	1	8/27/2019 04:36 PM
Styrene	ND		1.0	µg/L	1	8/27/2019 04:36 PM
Tetrachloroethene	ND		1.0	µg/L	1	8/27/2019 04:36 PM
Toluene	ND		1.0	µg/L	1	8/27/2019 04:36 PM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	8/27/2019 04:36 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	8/27/2019 04:36 PM
Trichloroethene	ND		1.0	µg/L	1	8/27/2019 04:36 PM
Vinyl chloride	ND		1.0	µg/L	1	8/27/2019 04:36 PM
Xylenes, Total	ND		3.0	µg/L	1	8/27/2019 04:36 PM
Surr: 1,2-Dichloroethane-d4	96.3		75-120	%REC	1	8/27/2019 04:36 PM
Surr: 4-Bromofluorobenzene	94.2		80-110	%REC	1	8/27/2019 04:36 PM
Surr: Dibromofluoromethane	90.1		85-115	%REC	1	8/27/2019 04:36 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 28-Aug-19

Client: Wood Environment & Infrastructure Solutions, Inc.

Project: TFS Rochester (3359-15-1040)

Work Order: 19081622

Sample ID: ATR-OW1(39)-G082119

Lab ID: 19081622-01

Collection Date: 8/21/2019 02:00 PM

Matrix: GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	93.9		85-110	%REC	1	8/27/2019 04:36 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: Wood Environment & Infrastructure Solutions, Inc.

Project: TFS Rochester (3359-15-1040)

Work Order: 19081622

Sample ID: ATR-OW2(33)-G082119

Lab ID: 19081622-02

Collection Date: 8/21/2019 01:10 PM

Matrix: GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260C		Analyst: BG	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	8/27/2019 05:00 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	8/27/2019 05:00 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	8/27/2019 05:00 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	8/27/2019 05:00 PM
1,1-Dichloroethene	ND		1.0	µg/L	1	8/27/2019 05:00 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	8/27/2019 05:00 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	8/27/2019 05:00 PM
2-Butanone	ND		5.0	µg/L	1	8/27/2019 05:00 PM
2-Hexanone	ND		5.0	µg/L	1	8/27/2019 05:00 PM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	8/27/2019 05:00 PM
Acetone	ND		10	µg/L	1	8/27/2019 05:00 PM
Benzene	ND		1.0	µg/L	1	8/27/2019 05:00 PM
Bromodichloromethane	ND		1.0	µg/L	1	8/27/2019 05:00 PM
Bromoform	ND		1.0	µg/L	1	8/27/2019 05:00 PM
Bromomethane	ND		1.0	µg/L	1	8/27/2019 05:00 PM
Carbon disulfide	ND		1.0	µg/L	1	8/27/2019 05:00 PM
Carbon tetrachloride	ND		1.0	µg/L	1	8/27/2019 05:00 PM
Chlorobenzene	ND		1.0	µg/L	1	8/27/2019 05:00 PM
Chloroethane	ND		1.0	µg/L	1	8/27/2019 05:00 PM
Chloroform	ND		1.0	µg/L	1	8/27/2019 05:00 PM
Chloromethane	ND		1.0	µg/L	1	8/27/2019 05:00 PM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	8/27/2019 05:00 PM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	8/27/2019 05:00 PM
Dibromochloromethane	ND		1.0	µg/L	1	8/27/2019 05:00 PM
Ethylbenzene	ND		1.0	µg/L	1	8/27/2019 05:00 PM
m,p-Xylene	ND		2.0	µg/L	1	8/27/2019 05:00 PM
Methylene chloride	ND		5.0	µg/L	1	8/27/2019 05:00 PM
o-Xylene	ND		1.0	µg/L	1	8/27/2019 05:00 PM
Styrene	ND		1.0	µg/L	1	8/27/2019 05:00 PM
Tetrachloroethene	ND		1.0	µg/L	1	8/27/2019 05:00 PM
Toluene	ND		1.0	µg/L	1	8/27/2019 05:00 PM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	8/27/2019 05:00 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	8/27/2019 05:00 PM
Trichloroethene	ND		1.0	µg/L	1	8/27/2019 05:00 PM
Vinyl chloride	ND		1.0	µg/L	1	8/27/2019 05:00 PM
Xylenes, Total	ND		3.0	µg/L	1	8/27/2019 05:00 PM
Surr: 1,2-Dichloroethane-d4	101		75-120	%REC	1	8/27/2019 05:00 PM
Surr: 4-Bromofluorobenzene	95.0		80-110	%REC	1	8/27/2019 05:00 PM
Surr: Dibromofluoromethane	95.9		85-115	%REC	1	8/27/2019 05:00 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 28-Aug-19

Client: Wood Environment & Infrastructure Solutions, Inc.

Project: TFS Rochester (3359-15-1040)

Work Order: 19081622

Sample ID: ATR-OW2(33)-G082119

Lab ID: 19081622-02

Collection Date: 8/21/2019 01:10 PM

Matrix: GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	96.8		85-110	%REC	1	8/27/2019 05:00 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: Wood Environment & Infrastructure Solutions, Inc.

Project: TFS Rochester (3359-15-1040)

Work Order: 19081622

Sample ID: ATR-OW2(53)-G082119

Lab ID: 19081622-03

Collection Date: 8/21/2019 12:25 PM

Matrix: GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260C		Analyst: BG	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	8/27/2019 05:24 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	8/27/2019 05:24 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	8/27/2019 05:24 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	8/27/2019 05:24 PM
1,1-Dichloroethene	ND		1.0	µg/L	1	8/27/2019 05:24 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	8/27/2019 05:24 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	8/27/2019 05:24 PM
2-Butanone	ND		5.0	µg/L	1	8/27/2019 05:24 PM
2-Hexanone	ND		5.0	µg/L	1	8/27/2019 05:24 PM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	8/27/2019 05:24 PM
Acetone	ND		10	µg/L	1	8/27/2019 05:24 PM
Benzene	ND		1.0	µg/L	1	8/27/2019 05:24 PM
Bromodichloromethane	ND		1.0	µg/L	1	8/27/2019 05:24 PM
Bromoform	ND		1.0	µg/L	1	8/27/2019 05:24 PM
Bromomethane	ND		1.0	µg/L	1	8/27/2019 05:24 PM
Carbon disulfide	ND		1.0	µg/L	1	8/27/2019 05:24 PM
Carbon tetrachloride	ND		1.0	µg/L	1	8/27/2019 05:24 PM
Chlorobenzene	ND		1.0	µg/L	1	8/27/2019 05:24 PM
Chloroethane	ND		1.0	µg/L	1	8/27/2019 05:24 PM
Chloroform	ND		1.0	µg/L	1	8/27/2019 05:24 PM
Chloromethane	ND		1.0	µg/L	1	8/27/2019 05:24 PM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	8/27/2019 05:24 PM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	8/27/2019 05:24 PM
Dibromochloromethane	ND		1.0	µg/L	1	8/27/2019 05:24 PM
Ethylbenzene	ND		1.0	µg/L	1	8/27/2019 05:24 PM
m,p-Xylene	ND		2.0	µg/L	1	8/27/2019 05:24 PM
Methylene chloride	ND		5.0	µg/L	1	8/27/2019 05:24 PM
o-Xylene	ND		1.0	µg/L	1	8/27/2019 05:24 PM
Styrene	ND		1.0	µg/L	1	8/27/2019 05:24 PM
Tetrachloroethene	ND		1.0	µg/L	1	8/27/2019 05:24 PM
Toluene	ND		1.0	µg/L	1	8/27/2019 05:24 PM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	8/27/2019 05:24 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	8/27/2019 05:24 PM
Trichloroethene	ND		1.0	µg/L	1	8/27/2019 05:24 PM
Vinyl chloride	ND		1.0	µg/L	1	8/27/2019 05:24 PM
Xylenes, Total	ND		3.0	µg/L	1	8/27/2019 05:24 PM
Surr: 1,2-Dichloroethane-d4	106		75-120	%REC	1	8/27/2019 05:24 PM
Surr: 4-Bromofluorobenzene	94.6		80-110	%REC	1	8/27/2019 05:24 PM
Surr: Dibromofluoromethane	100		85-115	%REC	1	8/27/2019 05:24 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 28-Aug-19

Client: Wood Environment & Infrastructure Solutions, Inc.

Project: TFS Rochester (3359-15-1040)

Work Order: 19081622

Sample ID: ATR-OW2(53)-G082119

Lab ID: 19081622-03

Collection Date: 8/21/2019 12:25 PM

Matrix: GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	98.6		85-110	%REC	1	8/27/2019 05:24 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: Wood Environment & Infrastructure Solutions, Inc.

Project: TFS Rochester (3359-15-1040)

Work Order: 19081622

Sample ID: ATR-OW3(35)-G082119

Lab ID: 19081622-04

Collection Date: 8/21/2019 12:25 PM

Matrix: GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260C		Analyst: BG	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	8/27/2019 05:49 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	8/27/2019 05:49 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	8/27/2019 05:49 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	8/27/2019 05:49 PM
1,1-Dichloroethene	ND		1.0	µg/L	1	8/27/2019 05:49 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	8/27/2019 05:49 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	8/27/2019 05:49 PM
2-Butanone	ND		5.0	µg/L	1	8/27/2019 05:49 PM
2-Hexanone	ND		5.0	µg/L	1	8/27/2019 05:49 PM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	8/27/2019 05:49 PM
Acetone	ND		10	µg/L	1	8/27/2019 05:49 PM
Benzene	ND		1.0	µg/L	1	8/27/2019 05:49 PM
Bromodichloromethane	ND		1.0	µg/L	1	8/27/2019 05:49 PM
Bromoform	ND		1.0	µg/L	1	8/27/2019 05:49 PM
Bromomethane	ND		1.0	µg/L	1	8/27/2019 05:49 PM
Carbon disulfide	ND		1.0	µg/L	1	8/27/2019 05:49 PM
Carbon tetrachloride	ND		1.0	µg/L	1	8/27/2019 05:49 PM
Chlorobenzene	ND		1.0	µg/L	1	8/27/2019 05:49 PM
Chloroethane	ND		1.0	µg/L	1	8/27/2019 05:49 PM
Chloroform	ND		1.0	µg/L	1	8/27/2019 05:49 PM
Chloromethane	ND		1.0	µg/L	1	8/27/2019 05:49 PM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	8/27/2019 05:49 PM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	8/27/2019 05:49 PM
Dibromochloromethane	ND		1.0	µg/L	1	8/27/2019 05:49 PM
Ethylbenzene	ND		1.0	µg/L	1	8/27/2019 05:49 PM
m,p-Xylene	ND		2.0	µg/L	1	8/27/2019 05:49 PM
Methylene chloride	ND		5.0	µg/L	1	8/27/2019 05:49 PM
o-Xylene	ND		1.0	µg/L	1	8/27/2019 05:49 PM
Styrene	ND		1.0	µg/L	1	8/27/2019 05:49 PM
Tetrachloroethene	ND		1.0	µg/L	1	8/27/2019 05:49 PM
Toluene	ND		1.0	µg/L	1	8/27/2019 05:49 PM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	8/27/2019 05:49 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	8/27/2019 05:49 PM
Trichloroethene	ND		1.0	µg/L	1	8/27/2019 05:49 PM
Vinyl chloride	ND		1.0	µg/L	1	8/27/2019 05:49 PM
Xylenes, Total	ND		3.0	µg/L	1	8/27/2019 05:49 PM
Surr: 1,2-Dichloroethane-d4	104		75-120	%REC	1	8/27/2019 05:49 PM
Surr: 4-Bromofluorobenzene	96.2		80-110	%REC	1	8/27/2019 05:49 PM
Surr: Dibromofluoromethane	97.4		85-115	%REC	1	8/27/2019 05:49 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 28-Aug-19

Client: Wood Environment & Infrastructure Solutions, Inc.

Project: TFS Rochester (3359-15-1040)

Work Order: 19081622

Sample ID: ATR-OW3(35)-G082119

Lab ID: 19081622-04

Collection Date: 8/21/2019 12:25 PM

Matrix: GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	98.8		85-110	%REC	1	8/27/2019 05:49 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: Wood Environment & Infrastructure Solutions, Inc.

Project: TFS Rochester (3359-15-1040)

Work Order: 19081622

Sample ID: ATR-OW3(55)-G082119

Lab ID: 19081622-05

Collection Date: 8/21/2019 11:50 AM

Matrix: GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260C		Analyst: BG	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	8/27/2019 06:13 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	8/27/2019 06:13 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	8/27/2019 06:13 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	8/27/2019 06:13 PM
1,1-Dichloroethene	ND		1.0	µg/L	1	8/27/2019 06:13 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	8/27/2019 06:13 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	8/27/2019 06:13 PM
2-Butanone	7.0		5.0	µg/L	1	8/27/2019 06:13 PM
2-Hexanone	ND		5.0	µg/L	1	8/27/2019 06:13 PM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	8/27/2019 06:13 PM
Acetone	ND		10	µg/L	1	8/27/2019 06:13 PM
Benzene	ND		1.0	µg/L	1	8/27/2019 06:13 PM
Bromodichloromethane	ND		1.0	µg/L	1	8/27/2019 06:13 PM
Bromoform	ND		1.0	µg/L	1	8/27/2019 06:13 PM
Bromomethane	ND		1.0	µg/L	1	8/27/2019 06:13 PM
Carbon disulfide	ND		1.0	µg/L	1	8/27/2019 06:13 PM
Carbon tetrachloride	ND		1.0	µg/L	1	8/27/2019 06:13 PM
Chlorobenzene	ND		1.0	µg/L	1	8/27/2019 06:13 PM
Chloroethane	ND		1.0	µg/L	1	8/27/2019 06:13 PM
Chloroform	ND		1.0	µg/L	1	8/27/2019 06:13 PM
Chloromethane	ND		1.0	µg/L	1	8/27/2019 06:13 PM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	8/27/2019 06:13 PM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	8/27/2019 06:13 PM
Dibromochloromethane	ND		1.0	µg/L	1	8/27/2019 06:13 PM
Ethylbenzene	ND		1.0	µg/L	1	8/27/2019 06:13 PM
m,p-Xylene	ND		2.0	µg/L	1	8/27/2019 06:13 PM
Methylene chloride	ND		5.0	µg/L	1	8/27/2019 06:13 PM
o-Xylene	ND		1.0	µg/L	1	8/27/2019 06:13 PM
Styrene	ND		1.0	µg/L	1	8/27/2019 06:13 PM
Tetrachloroethene	ND		1.0	µg/L	1	8/27/2019 06:13 PM
Toluene	ND		1.0	µg/L	1	8/27/2019 06:13 PM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	8/27/2019 06:13 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	8/27/2019 06:13 PM
Trichloroethene	ND		1.0	µg/L	1	8/27/2019 06:13 PM
Vinyl chloride	ND		1.0	µg/L	1	8/27/2019 06:13 PM
Xylenes, Total	ND		3.0	µg/L	1	8/27/2019 06:13 PM
Surr: 1,2-Dichloroethane-d4	101		75-120	%REC	1	8/27/2019 06:13 PM
Surr: 4-Bromofluorobenzene	95.4		80-110	%REC	1	8/27/2019 06:13 PM
Surr: Dibromofluoromethane	98.1		85-115	%REC	1	8/27/2019 06:13 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 28-Aug-19

Client: Wood Environment & Infrastructure Solutions, Inc.**Project:** TFS Rochester (3359-15-1040)**Work Order:** 19081622**Sample ID:** ATR-OW3(55)-G082119**Lab ID:** 19081622-05**Collection Date:** 8/21/2019 11:50 AM**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	96.4		85-110	%REC	1	8/27/2019 06:13 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: Wood Environment & Infrastructure Solutions, Inc.

Project: TFS Rochester (3359-15-1040)

Work Order: 19081622

Sample ID: ATR-OW4(35)-G082119

Lab ID: 19081622-06

Collection Date: 8/21/2019 11:40 AM

Matrix: GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260C		Analyst: BG	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	8/27/2019 06:37 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	8/27/2019 06:37 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	8/27/2019 06:37 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	8/27/2019 06:37 PM
1,1-Dichloroethene	ND		1.0	µg/L	1	8/27/2019 06:37 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	8/27/2019 06:37 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	8/27/2019 06:37 PM
2-Butanone	ND		5.0	µg/L	1	8/27/2019 06:37 PM
2-Hexanone	ND		5.0	µg/L	1	8/27/2019 06:37 PM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	8/27/2019 06:37 PM
Acetone	ND		10	µg/L	1	8/27/2019 06:37 PM
Benzene	ND		1.0	µg/L	1	8/27/2019 06:37 PM
Bromodichloromethane	ND		1.0	µg/L	1	8/27/2019 06:37 PM
Bromoform	ND		1.0	µg/L	1	8/27/2019 06:37 PM
Bromomethane	ND		1.0	µg/L	1	8/27/2019 06:37 PM
Carbon disulfide	ND		1.0	µg/L	1	8/27/2019 06:37 PM
Carbon tetrachloride	ND		1.0	µg/L	1	8/27/2019 06:37 PM
Chlorobenzene	ND		1.0	µg/L	1	8/27/2019 06:37 PM
Chloroethane	ND		1.0	µg/L	1	8/27/2019 06:37 PM
Chloroform	ND		1.0	µg/L	1	8/27/2019 06:37 PM
Chloromethane	ND		1.0	µg/L	1	8/27/2019 06:37 PM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	8/27/2019 06:37 PM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	8/27/2019 06:37 PM
Dibromochloromethane	ND		1.0	µg/L	1	8/27/2019 06:37 PM
Ethylbenzene	ND		1.0	µg/L	1	8/27/2019 06:37 PM
m,p-Xylene	ND		2.0	µg/L	1	8/27/2019 06:37 PM
Methylene chloride	ND		5.0	µg/L	1	8/27/2019 06:37 PM
o-Xylene	ND		1.0	µg/L	1	8/27/2019 06:37 PM
Styrene	ND		1.0	µg/L	1	8/27/2019 06:37 PM
Tetrachloroethene	ND		1.0	µg/L	1	8/27/2019 06:37 PM
Toluene	ND		1.0	µg/L	1	8/27/2019 06:37 PM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	8/27/2019 06:37 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	8/27/2019 06:37 PM
Trichloroethene	ND		1.0	µg/L	1	8/27/2019 06:37 PM
Vinyl chloride	ND		1.0	µg/L	1	8/27/2019 06:37 PM
Xylenes, Total	ND		3.0	µg/L	1	8/27/2019 06:37 PM
Surr: 1,2-Dichloroethane-d4	99.7		75-120	%REC	1	8/27/2019 06:37 PM
Surr: 4-Bromofluorobenzene	95.6		80-110	%REC	1	8/27/2019 06:37 PM
Surr: Dibromofluoromethane	101		85-115	%REC	1	8/27/2019 06:37 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 28-Aug-19

Client: Wood Environment & Infrastructure Solutions, Inc.**Project:** TFS Rochester (3359-15-1040)**Work Order:** 19081622**Sample ID:** ATR-OW4(35)-G082119**Lab ID:** 19081622-06**Collection Date:** 8/21/2019 11:40 AM**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	95.2		85-110	%REC	1	8/27/2019 06:37 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: Wood Environment & Infrastructure Solutions, Inc.

Project: TFS Rochester (3359-15-1040)

Work Order: 19081622

Sample ID: ATR-OW4(54)-G082119

Lab ID: 19081622-07

Collection Date: 8/21/2019 11:05 AM

Matrix: GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260C		Analyst: BG	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	8/27/2019 07:01 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	8/27/2019 07:01 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	8/27/2019 07:01 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	8/27/2019 07:01 PM
1,1-Dichloroethene	ND		1.0	µg/L	1	8/27/2019 07:01 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	8/27/2019 07:01 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	8/27/2019 07:01 PM
2-Butanone	ND		5.0	µg/L	1	8/27/2019 07:01 PM
2-Hexanone	ND		5.0	µg/L	1	8/27/2019 07:01 PM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	8/27/2019 07:01 PM
Acetone	ND		10	µg/L	1	8/27/2019 07:01 PM
Benzene	ND		1.0	µg/L	1	8/27/2019 07:01 PM
Bromodichloromethane	ND		1.0	µg/L	1	8/27/2019 07:01 PM
Bromoform	ND		1.0	µg/L	1	8/27/2019 07:01 PM
Bromomethane	ND		1.0	µg/L	1	8/27/2019 07:01 PM
Carbon disulfide	ND		1.0	µg/L	1	8/27/2019 07:01 PM
Carbon tetrachloride	ND		1.0	µg/L	1	8/27/2019 07:01 PM
Chlorobenzene	ND		1.0	µg/L	1	8/27/2019 07:01 PM
Chloroethane	ND		1.0	µg/L	1	8/27/2019 07:01 PM
Chloroform	ND		1.0	µg/L	1	8/27/2019 07:01 PM
Chloromethane	ND		1.0	µg/L	1	8/27/2019 07:01 PM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	8/27/2019 07:01 PM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	8/27/2019 07:01 PM
Dibromochloromethane	ND		1.0	µg/L	1	8/27/2019 07:01 PM
Ethylbenzene	ND		1.0	µg/L	1	8/27/2019 07:01 PM
m,p-Xylene	ND		2.0	µg/L	1	8/27/2019 07:01 PM
Methylene chloride	ND		5.0	µg/L	1	8/27/2019 07:01 PM
o-Xylene	ND		1.0	µg/L	1	8/27/2019 07:01 PM
Styrene	ND		1.0	µg/L	1	8/27/2019 07:01 PM
Tetrachloroethene	ND		1.0	µg/L	1	8/27/2019 07:01 PM
Toluene	ND		1.0	µg/L	1	8/27/2019 07:01 PM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	8/27/2019 07:01 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	8/27/2019 07:01 PM
Trichloroethene	ND		1.0	µg/L	1	8/27/2019 07:01 PM
Vinyl chloride	ND		1.0	µg/L	1	8/27/2019 07:01 PM
Xylenes, Total	ND		3.0	µg/L	1	8/27/2019 07:01 PM
Surr: 1,2-Dichloroethane-d4	107		75-120	%REC	1	8/27/2019 07:01 PM
Surr: 4-Bromofluorobenzene	94.0		80-110	%REC	1	8/27/2019 07:01 PM
Surr: Dibromofluoromethane	100		85-115	%REC	1	8/27/2019 07:01 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 28-Aug-19

Client: Wood Environment & Infrastructure Solutions, Inc.

Project: TFS Rochester (3359-15-1040)

Work Order: 19081622

Sample ID: ATR-OW4(54)-G082119

Lab ID: 19081622-07

Collection Date: 8/21/2019 11:05 AM

Matrix: GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	98.4		85-110	%REC	1	8/27/2019 07:01 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: Wood Environment & Infrastructure Solutions, Inc.

Project: TFS Rochester (3359-15-1040)

Work Order: 19081622

Sample ID: ATR-OW5(16)-G082119

Lab ID: 19081622-08

Collection Date: 8/21/2019 11:00 AM

Matrix: GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260C		Analyst: BG	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	8/27/2019 07:25 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	8/27/2019 07:25 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	8/27/2019 07:25 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	8/27/2019 07:25 PM
1,1-Dichloroethene	ND		1.0	µg/L	1	8/27/2019 07:25 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	8/27/2019 07:25 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	8/27/2019 07:25 PM
2-Butanone	ND		5.0	µg/L	1	8/27/2019 07:25 PM
2-Hexanone	ND		5.0	µg/L	1	8/27/2019 07:25 PM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	8/27/2019 07:25 PM
Acetone	ND		10	µg/L	1	8/27/2019 07:25 PM
Benzene	ND		1.0	µg/L	1	8/27/2019 07:25 PM
Bromodichloromethane	ND		1.0	µg/L	1	8/27/2019 07:25 PM
Bromoform	ND		1.0	µg/L	1	8/27/2019 07:25 PM
Bromomethane	ND		1.0	µg/L	1	8/27/2019 07:25 PM
Carbon disulfide	ND		1.0	µg/L	1	8/27/2019 07:25 PM
Carbon tetrachloride	ND		1.0	µg/L	1	8/27/2019 07:25 PM
Chlorobenzene	ND		1.0	µg/L	1	8/27/2019 07:25 PM
Chloroethane	ND		1.0	µg/L	1	8/27/2019 07:25 PM
Chloroform	ND		1.0	µg/L	1	8/27/2019 07:25 PM
Chloromethane	ND		1.0	µg/L	1	8/27/2019 07:25 PM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	8/27/2019 07:25 PM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	8/27/2019 07:25 PM
Dibromochloromethane	ND		1.0	µg/L	1	8/27/2019 07:25 PM
Ethylbenzene	ND		1.0	µg/L	1	8/27/2019 07:25 PM
m,p-Xylene	ND		2.0	µg/L	1	8/27/2019 07:25 PM
Methylene chloride	ND		5.0	µg/L	1	8/27/2019 07:25 PM
o-Xylene	ND		1.0	µg/L	1	8/27/2019 07:25 PM
Styrene	ND		1.0	µg/L	1	8/27/2019 07:25 PM
Tetrachloroethene	ND		1.0	µg/L	1	8/27/2019 07:25 PM
Toluene	ND		1.0	µg/L	1	8/27/2019 07:25 PM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	8/27/2019 07:25 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	8/27/2019 07:25 PM
Trichloroethene	ND		1.0	µg/L	1	8/27/2019 07:25 PM
Vinyl chloride	ND		1.0	µg/L	1	8/27/2019 07:25 PM
Xylenes, Total	ND		3.0	µg/L	1	8/27/2019 07:25 PM
Surr: 1,2-Dichloroethane-d4	101		75-120	%REC	1	8/27/2019 07:25 PM
Surr: 4-Bromofluorobenzene	97.6		80-110	%REC	1	8/27/2019 07:25 PM
Surr: Dibromofluoromethane	99.2		85-115	%REC	1	8/27/2019 07:25 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 28-Aug-19

Client: Wood Environment & Infrastructure Solutions, Inc.**Project:** TFS Rochester (3359-15-1040)**Work Order:** 19081622**Sample ID:** ATR-OW5(16)-G082119**Lab ID:** 19081622-08**Collection Date:** 8/21/2019 11:00 AM**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	99.8		85-110	%REC	1	8/27/2019 07:25 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: Wood Environment & Infrastructure Solutions, Inc.

Project: TFS Rochester (3359-15-1040)

Work Order: 19081622

Sample ID: ATR-OW5(35)-G082119

Lab ID: 19081622-09

Collection Date: 8/21/2019 10:20 AM

Matrix: GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260C		Analyst: BG	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	8/27/2019 07:50 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	8/27/2019 07:50 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	8/27/2019 07:50 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	8/27/2019 07:50 PM
1,1-Dichloroethene	ND		1.0	µg/L	1	8/27/2019 07:50 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	8/27/2019 07:50 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	8/27/2019 07:50 PM
2-Butanone	ND		5.0	µg/L	1	8/27/2019 07:50 PM
2-Hexanone	ND		5.0	µg/L	1	8/27/2019 07:50 PM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	8/27/2019 07:50 PM
Acetone	ND		10	µg/L	1	8/27/2019 07:50 PM
Benzene	ND		1.0	µg/L	1	8/27/2019 07:50 PM
Bromodichloromethane	ND		1.0	µg/L	1	8/27/2019 07:50 PM
Bromoform	ND		1.0	µg/L	1	8/27/2019 07:50 PM
Bromomethane	ND		1.0	µg/L	1	8/27/2019 07:50 PM
Carbon disulfide	ND		1.0	µg/L	1	8/27/2019 07:50 PM
Carbon tetrachloride	ND		1.0	µg/L	1	8/27/2019 07:50 PM
Chlorobenzene	ND		1.0	µg/L	1	8/27/2019 07:50 PM
Chloroethane	ND		1.0	µg/L	1	8/27/2019 07:50 PM
Chloroform	ND		1.0	µg/L	1	8/27/2019 07:50 PM
Chloromethane	ND		1.0	µg/L	1	8/27/2019 07:50 PM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	8/27/2019 07:50 PM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	8/27/2019 07:50 PM
Dibromochloromethane	ND		1.0	µg/L	1	8/27/2019 07:50 PM
Ethylbenzene	ND		1.0	µg/L	1	8/27/2019 07:50 PM
m,p-Xylene	ND		2.0	µg/L	1	8/27/2019 07:50 PM
Methylene chloride	ND		5.0	µg/L	1	8/27/2019 07:50 PM
o-Xylene	ND		1.0	µg/L	1	8/27/2019 07:50 PM
Styrene	ND		1.0	µg/L	1	8/27/2019 07:50 PM
Tetrachloroethene	ND		1.0	µg/L	1	8/27/2019 07:50 PM
Toluene	ND		1.0	µg/L	1	8/27/2019 07:50 PM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	8/27/2019 07:50 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	8/27/2019 07:50 PM
Trichloroethene	ND		1.0	µg/L	1	8/27/2019 07:50 PM
Vinyl chloride	ND		1.0	µg/L	1	8/27/2019 07:50 PM
Xylenes, Total	ND		3.0	µg/L	1	8/27/2019 07:50 PM
Surr: 1,2-Dichloroethane-d4	101		75-120	%REC	1	8/27/2019 07:50 PM
Surr: 4-Bromofluorobenzene	95.9		80-110	%REC	1	8/27/2019 07:50 PM
Surr: Dibromofluoromethane	93.7		85-115	%REC	1	8/27/2019 07:50 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 28-Aug-19

Client: Wood Environment & Infrastructure Solutions, Inc.

Project: TFS Rochester (3359-15-1040)

Work Order: 19081622

Sample ID: ATR-OW5(35)-G082119

Lab ID: 19081622-09

Collection Date: 8/21/2019 10:20 AM

Matrix: GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	92.8		85-110	%REC	1	8/27/2019 07:50 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: Wood Environment & Infrastructure Solutions, Inc.

Project: TFS Rochester (3359-15-1040)

Work Order: 19081622

Sample ID: ATR-OW5(44)-G082119

Lab ID: 19081622-10

Collection Date: 8/21/2019 09:05 AM

Matrix: GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260C			Analyst: BG
1,1,1-Trichloroethane	ND		1.0	µg/L	1	8/27/2019 08:14 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	8/27/2019 08:14 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	8/27/2019 08:14 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	8/27/2019 08:14 PM
1,1-Dichloroethene	ND		1.0	µg/L	1	8/27/2019 08:14 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	8/27/2019 08:14 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	8/27/2019 08:14 PM
2-Butanone	ND		5.0	µg/L	1	8/27/2019 08:14 PM
2-Hexanone	ND		5.0	µg/L	1	8/27/2019 08:14 PM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	8/27/2019 08:14 PM
Acetone	ND		10	µg/L	1	8/27/2019 08:14 PM
Benzene	ND		1.0	µg/L	1	8/27/2019 08:14 PM
Bromodichloromethane	ND		1.0	µg/L	1	8/27/2019 08:14 PM
Bromoform	ND		1.0	µg/L	1	8/27/2019 08:14 PM
Bromomethane	ND		1.0	µg/L	1	8/27/2019 08:14 PM
Carbon disulfide	ND		1.0	µg/L	1	8/27/2019 08:14 PM
Carbon tetrachloride	ND		1.0	µg/L	1	8/27/2019 08:14 PM
Chlorobenzene	ND		1.0	µg/L	1	8/27/2019 08:14 PM
Chloroethane	ND		1.0	µg/L	1	8/27/2019 08:14 PM
Chloroform	ND		1.0	µg/L	1	8/27/2019 08:14 PM
Chloromethane	ND		1.0	µg/L	1	8/27/2019 08:14 PM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	8/27/2019 08:14 PM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	8/27/2019 08:14 PM
Dibromochloromethane	ND		1.0	µg/L	1	8/27/2019 08:14 PM
Ethylbenzene	ND		1.0	µg/L	1	8/27/2019 08:14 PM
m,p-Xylene	ND		2.0	µg/L	1	8/27/2019 08:14 PM
Methylene chloride	ND		5.0	µg/L	1	8/27/2019 08:14 PM
o-Xylene	ND		1.0	µg/L	1	8/27/2019 08:14 PM
Styrene	ND		1.0	µg/L	1	8/27/2019 08:14 PM
Tetrachloroethene	ND		1.0	µg/L	1	8/27/2019 08:14 PM
Toluene	ND		1.0	µg/L	1	8/27/2019 08:14 PM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	8/27/2019 08:14 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	8/27/2019 08:14 PM
Trichloroethene	ND		1.0	µg/L	1	8/27/2019 08:14 PM
Vinyl chloride	ND		1.0	µg/L	1	8/27/2019 08:14 PM
Xylenes, Total	ND		3.0	µg/L	1	8/27/2019 08:14 PM
Surr: 1,2-Dichloroethane-d4	106		75-120	%REC	1	8/27/2019 08:14 PM
Surr: 4-Bromofluorobenzene	97.0		80-110	%REC	1	8/27/2019 08:14 PM
Surr: Dibromofluoromethane	102		85-115	%REC	1	8/27/2019 08:14 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 28-Aug-19

Client: Wood Environment & Infrastructure Solutions, Inc.

Project: TFS Rochester (3359-15-1040)

Work Order: 19081622

Sample ID: ATR-OW5(44)-G082119

Lab ID: 19081622-10

Collection Date: 8/21/2019 09:05 AM

Matrix: GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	97.4		85-110	%REC	1	8/27/2019 08:14 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: Wood Environment & Infrastructure Solutions, Inc.

Project: TFS Rochester (3359-15-1040)

Work Order: 19081622

Sample ID: ATR-OW6(37)-G082119

Lab ID: 19081622-11

Collection Date: 8/21/2019 10:10 AM

Matrix: GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260C		Analyst: BG	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	8/27/2019 08:38 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	8/27/2019 08:38 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	8/27/2019 08:38 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	8/27/2019 08:38 PM
1,1-Dichloroethene	ND		1.0	µg/L	1	8/27/2019 08:38 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	8/27/2019 08:38 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	8/27/2019 08:38 PM
2-Butanone	ND		5.0	µg/L	1	8/27/2019 08:38 PM
2-Hexanone	ND		5.0	µg/L	1	8/27/2019 08:38 PM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	8/27/2019 08:38 PM
Acetone	ND		10	µg/L	1	8/27/2019 08:38 PM
Benzene	ND		1.0	µg/L	1	8/27/2019 08:38 PM
Bromodichloromethane	ND		1.0	µg/L	1	8/27/2019 08:38 PM
Bromoform	ND		1.0	µg/L	1	8/27/2019 08:38 PM
Bromomethane	ND		1.0	µg/L	1	8/27/2019 08:38 PM
Carbon disulfide	ND		1.0	µg/L	1	8/27/2019 08:38 PM
Carbon tetrachloride	ND		1.0	µg/L	1	8/27/2019 08:38 PM
Chlorobenzene	ND		1.0	µg/L	1	8/27/2019 08:38 PM
Chloroethane	ND		1.0	µg/L	1	8/27/2019 08:38 PM
Chloroform	ND		1.0	µg/L	1	8/27/2019 08:38 PM
Chloromethane	ND		1.0	µg/L	1	8/27/2019 08:38 PM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	8/27/2019 08:38 PM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	8/27/2019 08:38 PM
Dibromochloromethane	ND		1.0	µg/L	1	8/27/2019 08:38 PM
Ethylbenzene	ND		1.0	µg/L	1	8/27/2019 08:38 PM
m,p-Xylene	ND		2.0	µg/L	1	8/27/2019 08:38 PM
Methylene chloride	ND		5.0	µg/L	1	8/27/2019 08:38 PM
o-Xylene	ND		1.0	µg/L	1	8/27/2019 08:38 PM
Styrene	ND		1.0	µg/L	1	8/27/2019 08:38 PM
Tetrachloroethene	ND		1.0	µg/L	1	8/27/2019 08:38 PM
Toluene	ND		1.0	µg/L	1	8/27/2019 08:38 PM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	8/27/2019 08:38 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	8/27/2019 08:38 PM
Trichloroethene	ND		1.0	µg/L	1	8/27/2019 08:38 PM
Vinyl chloride	ND		1.0	µg/L	1	8/27/2019 08:38 PM
Xylenes, Total	ND		3.0	µg/L	1	8/27/2019 08:38 PM
Surr: 1,2-Dichloroethane-d4	103		75-120	%REC	1	8/27/2019 08:38 PM
Surr: 4-Bromofluorobenzene	93.4		80-110	%REC	1	8/27/2019 08:38 PM
Surr: Dibromofluoromethane	95.2		85-115	%REC	1	8/27/2019 08:38 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 28-Aug-19

Client: Wood Environment & Infrastructure Solutions, Inc.

Project: TFS Rochester (3359-15-1040)

Work Order: 19081622

Sample ID: ATR-OW6(37)-G082119

Lab ID: 19081622-11

Collection Date: 8/21/2019 10:10 AM

Matrix: GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	92.1		85-110	%REC	1	8/27/2019 08:38 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: Wood Environment & Infrastructure Solutions, Inc.

Project: TFS Rochester (3359-15-1040)

Work Order: 19081622

Sample ID: ATR-OW6(63)-G082119

Lab ID: 19081622-12

Collection Date: 8/21/2019 09:25 AM

Matrix: GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260C		Analyst: BG	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	8/27/2019 09:02 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	8/27/2019 09:02 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	8/27/2019 09:02 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	8/27/2019 09:02 PM
1,1-Dichloroethene	ND		1.0	µg/L	1	8/27/2019 09:02 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	8/27/2019 09:02 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	8/27/2019 09:02 PM
2-Butanone	55		5.0	µg/L	1	8/27/2019 09:02 PM
2-Hexanone	ND		5.0	µg/L	1	8/27/2019 09:02 PM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	8/27/2019 09:02 PM
Acetone	19		10	µg/L	1	8/27/2019 09:02 PM
Benzene	ND		1.0	µg/L	1	8/27/2019 09:02 PM
Bromodichloromethane	ND		1.0	µg/L	1	8/27/2019 09:02 PM
Bromoform	ND		1.0	µg/L	1	8/27/2019 09:02 PM
Bromomethane	ND		1.0	µg/L	1	8/27/2019 09:02 PM
Carbon disulfide	ND		1.0	µg/L	1	8/27/2019 09:02 PM
Carbon tetrachloride	ND		1.0	µg/L	1	8/27/2019 09:02 PM
Chlorobenzene	ND		1.0	µg/L	1	8/27/2019 09:02 PM
Chloroethane	ND		1.0	µg/L	1	8/27/2019 09:02 PM
Chloroform	ND		1.0	µg/L	1	8/27/2019 09:02 PM
Chloromethane	ND		1.0	µg/L	1	8/27/2019 09:02 PM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	8/27/2019 09:02 PM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	8/27/2019 09:02 PM
Dibromochloromethane	ND		1.0	µg/L	1	8/27/2019 09:02 PM
Ethylbenzene	ND		1.0	µg/L	1	8/27/2019 09:02 PM
m,p-Xylene	ND		2.0	µg/L	1	8/27/2019 09:02 PM
Methylene chloride	ND		5.0	µg/L	1	8/27/2019 09:02 PM
o-Xylene	ND		1.0	µg/L	1	8/27/2019 09:02 PM
Styrene	ND		1.0	µg/L	1	8/27/2019 09:02 PM
Tetrachloroethene	ND		1.0	µg/L	1	8/27/2019 09:02 PM
Toluene	ND		1.0	µg/L	1	8/27/2019 09:02 PM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	8/27/2019 09:02 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	8/27/2019 09:02 PM
Trichloroethene	ND		1.0	µg/L	1	8/27/2019 09:02 PM
Vinyl chloride	ND		1.0	µg/L	1	8/27/2019 09:02 PM
Xylenes, Total	ND		3.0	µg/L	1	8/27/2019 09:02 PM
Surr: 1,2-Dichloroethane-d4	102		75-120	%REC	1	8/27/2019 09:02 PM
Surr: 4-Bromofluorobenzene	95.1		80-110	%REC	1	8/27/2019 09:02 PM
Surr: Dibromofluoromethane	99.4		85-115	%REC	1	8/27/2019 09:02 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 28-Aug-19

Client: Wood Environment & Infrastructure Solutions, Inc.

Project: TFS Rochester (3359-15-1040)

Work Order: 19081622

Sample ID: ATR-OW6(63)-G082119

Lab ID: 19081622-12

Collection Date: 8/21/2019 09:25 AM

Matrix: GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	98.8		85-110	%REC	1	8/27/2019 09:02 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: Wood Environment & Infrastructure Solutions, Inc.

Project: TFS Rochester (3359-15-1040)

Work Order: 19081622

Sample ID: ATR-OW6(63)-G082119R

Lab ID: 19081622-13

Collection Date: 8/21/2019 09:25 AM

Matrix: GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260C		Analyst: BG	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	8/27/2019 09:26 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	8/27/2019 09:26 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	8/27/2019 09:26 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	8/27/2019 09:26 PM
1,1-Dichloroethene	ND		1.0	µg/L	1	8/27/2019 09:26 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	8/27/2019 09:26 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	8/27/2019 09:26 PM
2-Butanone	57		5.0	µg/L	1	8/27/2019 09:26 PM
2-Hexanone	ND		5.0	µg/L	1	8/27/2019 09:26 PM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	8/27/2019 09:26 PM
Acetone	19		10	µg/L	1	8/27/2019 09:26 PM
Benzene	ND		1.0	µg/L	1	8/27/2019 09:26 PM
Bromodichloromethane	ND		1.0	µg/L	1	8/27/2019 09:26 PM
Bromoform	ND		1.0	µg/L	1	8/27/2019 09:26 PM
Bromomethane	ND		1.0	µg/L	1	8/27/2019 09:26 PM
Carbon disulfide	ND		1.0	µg/L	1	8/27/2019 09:26 PM
Carbon tetrachloride	ND		1.0	µg/L	1	8/27/2019 09:26 PM
Chlorobenzene	ND		1.0	µg/L	1	8/27/2019 09:26 PM
Chloroethane	ND		1.0	µg/L	1	8/27/2019 09:26 PM
Chloroform	ND		1.0	µg/L	1	8/27/2019 09:26 PM
Chloromethane	ND		1.0	µg/L	1	8/27/2019 09:26 PM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	8/27/2019 09:26 PM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	8/27/2019 09:26 PM
Dibromochloromethane	ND		1.0	µg/L	1	8/27/2019 09:26 PM
Ethylbenzene	ND		1.0	µg/L	1	8/27/2019 09:26 PM
m,p-Xylene	ND		2.0	µg/L	1	8/27/2019 09:26 PM
Methylene chloride	ND		5.0	µg/L	1	8/27/2019 09:26 PM
o-Xylene	ND		1.0	µg/L	1	8/27/2019 09:26 PM
Styrene	ND		1.0	µg/L	1	8/27/2019 09:26 PM
Tetrachloroethene	ND		1.0	µg/L	1	8/27/2019 09:26 PM
Toluene	ND		1.0	µg/L	1	8/27/2019 09:26 PM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	8/27/2019 09:26 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	8/27/2019 09:26 PM
Trichloroethene	ND		1.0	µg/L	1	8/27/2019 09:26 PM
Vinyl chloride	ND		1.0	µg/L	1	8/27/2019 09:26 PM
Xylenes, Total	ND		3.0	µg/L	1	8/27/2019 09:26 PM
Surr: 1,2-Dichloroethane-d4	101		75-120	%REC	1	8/27/2019 09:26 PM
Surr: 4-Bromofluorobenzene	92.7		80-110	%REC	1	8/27/2019 09:26 PM
Surr: Dibromofluoromethane	97.0		85-115	%REC	1	8/27/2019 09:26 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 28-Aug-19

Client: Wood Environment & Infrastructure Solutions, Inc.

Project: TFS Rochester (3359-15-1040)

Work Order: 19081622

Sample ID: ATR-OW6(63)-G082119R

Lab ID: 19081622-13

Collection Date: 8/21/2019 09:25 AM

Matrix: GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: Toluene-d8	97.0		85-110	%REC	1	8/27/2019 09:26 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: Wood Environment & Infrastructure Solutions, Inc.
Project: TFS Rochester (3359-15-1040)
Sample ID: ATR-TB002-082119
Collection Date: 8/21/2019

Work Order: 19081622
Lab ID: 19081622-14
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260C		Analyst: BG	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	8/27/2019 04:12 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	8/27/2019 04:12 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	8/27/2019 04:12 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	8/27/2019 04:12 PM
1,1-Dichloroethene	ND		1.0	µg/L	1	8/27/2019 04:12 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	8/27/2019 04:12 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	8/27/2019 04:12 PM
2-Butanone	ND		5.0	µg/L	1	8/27/2019 04:12 PM
2-Hexanone	ND		5.0	µg/L	1	8/27/2019 04:12 PM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	8/27/2019 04:12 PM
Acetone	11		10	µg/L	1	8/27/2019 04:12 PM
Benzene	ND		1.0	µg/L	1	8/27/2019 04:12 PM
Bromodichloromethane	ND		1.0	µg/L	1	8/27/2019 04:12 PM
Bromoform	ND		1.0	µg/L	1	8/27/2019 04:12 PM
Bromomethane	ND		1.0	µg/L	1	8/27/2019 04:12 PM
Carbon disulfide	ND		1.0	µg/L	1	8/27/2019 04:12 PM
Carbon tetrachloride	ND		1.0	µg/L	1	8/27/2019 04:12 PM
Chlorobenzene	ND		1.0	µg/L	1	8/27/2019 04:12 PM
Chloroethane	ND		1.0	µg/L	1	8/27/2019 04:12 PM
Chloroform	ND		1.0	µg/L	1	8/27/2019 04:12 PM
Chloromethane	ND		1.0	µg/L	1	8/27/2019 04:12 PM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	8/27/2019 04:12 PM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	8/27/2019 04:12 PM
Dibromochloromethane	ND		1.0	µg/L	1	8/27/2019 04:12 PM
Ethylbenzene	ND		1.0	µg/L	1	8/27/2019 04:12 PM
m,p-Xylene	ND		2.0	µg/L	1	8/27/2019 04:12 PM
Methylene chloride	ND		5.0	µg/L	1	8/27/2019 04:12 PM
o-Xylene	ND		1.0	µg/L	1	8/27/2019 04:12 PM
Styrene	ND		1.0	µg/L	1	8/27/2019 04:12 PM
Tetrachloroethene	ND		1.0	µg/L	1	8/27/2019 04:12 PM
Toluene	ND		1.0	µg/L	1	8/27/2019 04:12 PM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	8/27/2019 04:12 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	8/27/2019 04:12 PM
Trichloroethene	ND		1.0	µg/L	1	8/27/2019 04:12 PM
Vinyl chloride	ND		1.0	µg/L	1	8/27/2019 04:12 PM
Xylenes, Total	ND		3.0	µg/L	1	8/27/2019 04:12 PM
Surr: 1,2-Dichloroethane-d4	101		75-120	%REC	1	8/27/2019 04:12 PM
Surr: 4-Bromofluorobenzene	93.4		80-110	%REC	1	8/27/2019 04:12 PM
Surr: Dibromofluoromethane	89.2		85-115	%REC	1	8/27/2019 04:12 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 28-Aug-19

Client: Wood Environment & Infrastructure Solutions, Inc.

Project: TFS Rochester (3359-15-1040)

Work Order: 19081622

Sample ID: ATR-TB002-082119

Lab ID: 19081622-14

Collection Date: 8/21/2019

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	98.0		85-110	%REC	1	8/27/2019 04:12 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: Wood Environment & Infrastructure Solutions, Inc.
Work Order: 19081622
Project: TFS Rochester (3359-15-1040)

QC BATCH REPORT

Batch ID: **R269277** Instrument ID **VMS6** Method: **SW8260C**

MBLK		Sample ID: VBK1-190827-R269277				Units: µg/L		Analysis Date: 8/27/2019 02:59 PM		
Client ID:		Run ID: VMS6_190827A		SeqNo: 5878306		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloroethane	ND	1.0								
1,2-Dichloropropane	ND	1.0								
2-Butanone	ND	5.0								
2-Hexanone	ND	5.0								
4-Methyl-2-pentanone	ND	1.0								
Acetone	ND	10								
Benzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	1.0								
Carbon disulfide	ND	1.0								
Carbon tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	1.0								
Chloroform	ND	1.0								
Chloromethane	ND	1.0								
cis-1,2-Dichloroethene	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
Dibromochloromethane	ND	1.0								
Ethylbenzene	ND	1.0								
m,p-Xylene	ND	2.0								
Methylene chloride	ND	5.0								
o-Xylene	ND	1.0								
Styrene	ND	1.0								
Tetrachloroethene	ND	1.0								
Toluene	ND	1.0								
trans-1,2-Dichloroethene	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
Trichloroethene	ND	1.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	3.0								
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>20.06</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>100</i>	<i>75-120</i>	<i>0</i>			
<i>Surr: 4-Bromofluorobenzene</i>	<i>18.98</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>94.9</i>	<i>80-110</i>	<i>0</i>			
<i>Surr: Dibromofluoromethane</i>	<i>18.76</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>93.8</i>	<i>85-115</i>	<i>0</i>			
<i>Surr: Toluene-d8</i>	<i>19.65</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>98.2</i>	<i>85-110</i>	<i>0</i>			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Wood Environment & Infrastructure Solutions, Inc.
 Work Order: 19081622
 Project: TFS Rochester (3359-15-1040)

QC BATCH REPORT

Batch ID: **R269277** Instrument ID **VMS6** Method: **SW8260C**

LCS		Sample ID: VLCSW1-190827-R269277				Units: µg/L		Analysis Date: 8/27/2019 01:47 PM		
Client ID:		Run ID: VMS6_190827A			SeqNo: 5878305		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	18.85	1.0	20	0	94.2	75-130	0			
1,1,2,2-Tetrachloroethane	19.51	1.0	20	0	97.6	75-130	0			
1,1,2-Trichloroethane	19.16	1.0	20	0	95.8	75-125	0			
1,1-Dichloroethane	21.38	1.0	20	0	107	68-142	0			
1,1-Dichloroethene	18.87	1.0	20	0	94.4	70-145	0			
1,2-Dichloroethane	19.17	1.0	20	0	95.8	78-125	0			
1,2-Dichloropropane	18.41	1.0	20	0	92	75-125	0			
2-Butanone	19.01	5.0	20	0	95	55-150	0			
2-Hexanone	16.43	5.0	20	0	82.2	60-135	0			
4-Methyl-2-pentanone	23.82	1.0	20	0	119	77-178	0			
Acetone	22.02	10	20	0	110	60-160	0			
Benzene	18.57	1.0	20	0	92.8	70-130	0			
Bromodichloromethane	18.08	1.0	20	0	90.4	75-125	0			
Bromoform	16.48	1.0	20	0	82.4	60-125	0			
Bromomethane	18.22	1.0	20	0	91.1	30-185	0			
Carbon disulfide	17.28	1.0	20	0	86.4	60-165	0			
Carbon tetrachloride	16.87	1.0	20	0	84.4	65-140	0			
Chlorobenzene	19.14	1.0	20	0	95.7	80-120	0			
Chloroethane	18.02	1.0	20	0	90.1	31-172	0			
Chloroform	17.6	1.0	20	0	88	66-135	0			
Chloromethane	17.97	1.0	20	0	89.8	46-148	0			
cis-1,2-Dichloroethene	19.02	1.0	20	0	95.1	75-134	0			
cis-1,3-Dichloropropene	20.38	1.0	20	0	102	70-130	0			
Dibromochloromethane	15.02	1.0	20	0	75.1	60-115	0			
Ethylbenzene	19.85	1.0	20	0	99.2	76-123	0			
m,p-Xylene	39.44	2.0	40	0	98.6	75-130	0			
Methylene chloride	19.93	5.0	20	0	99.6	72-125	0			
o-Xylene	20.2	1.0	20	0	101	76-127	0			
Styrene	21.14	1.0	20	0	106	83-137	0			
Tetrachloroethene	19.24	1.0	20	0	96.2	68-166	0			
Toluene	19.43	1.0	20	0	97.2	76-125	0			
trans-1,2-Dichloroethene	20.19	1.0	20	0	101	80-140	0			
trans-1,3-Dichloropropene	16.44	1.0	20	0	82.2	56-132	0			
Trichloroethene	18.61	1.0	20	0	93	77-125	0			
Vinyl chloride	17.24	1.0	20	0	86.2	50-136	0			
Xylenes, Total	59.64	3.0	60	0	99.4	76-127	0			
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>19.17</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>95.8</i>	<i>75-120</i>	<i>0</i>			
<i>Surr: 4-Bromofluorobenzene</i>	<i>20.34</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>102</i>	<i>80-110</i>	<i>0</i>			
<i>Surr: Dibromofluoromethane</i>	<i>19.14</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>95.7</i>	<i>85-115</i>	<i>0</i>			
<i>Surr: Toluene-d8</i>	<i>19.49</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>97.4</i>	<i>85-110</i>	<i>0</i>			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Wood Environment & Infrastructure Solutions, Inc.
 Work Order: 19081622
 Project: TFS Rochester (3359-15-1040)

QC BATCH REPORT

Batch ID: **R269277** Instrument ID **VMS6** Method: **SW8260C**

MS		Sample ID: 19081622-02A MS				Units: µg/L		Analysis Date: 8/27/2019 11:26 PM		
Client ID: ATR-OW2(33)-G082119		Run ID: VMS6_190827A		SeqNo: 5878326		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	24.71	1.0	20	0	124	75-130	0			
1,1,2,2-Tetrachloroethane	20.86	1.0	20	0	104	75-130	0			
1,1,2-Trichloroethane	21.72	1.0	20	0	109	75-125	0			
1,1-Dichloroethane	25.23	1.0	20	0	126	68-142	0			
1,1-Dichloroethene	27.81	1.0	20	0	139	70-145	0			
1,2-Dichloroethane	21.19	1.0	20	0	106	78-125	0			
1,2-Dichloropropane	21.81	1.0	20	0	109	75-125	0			
2-Butanone	17.99	5.0	20	0	90	55-150	0			
2-Hexanone	17.62	5.0	20	0	88.1	60-135	0			
4-Methyl-2-pentanone	22.97	1.0	20	0	115	77-178	0			
Acetone	19.98	10	20	3.79	81	60-160	0			
Benzene	23.59	1.0	20	0	118	70-130	0			
Bromodichloromethane	21.36	1.0	20	0	107	75-125	0			
Bromoform	17.17	1.0	20	0	85.8	60-125	0			
Bromomethane	16.83	1.0	20	0	84.2	30-185	0			
Carbon disulfide	24.45	1.0	20	0	122	60-165	0			
Carbon tetrachloride	22.58	1.0	20	0	113	65-140	0			
Chlorobenzene	21.52	1.0	20	0	108	80-120	0			
Chloroethane	26.86	1.0	20	0	134	31-172	0			
Chloroform	22.22	1.0	20	0	111	66-135	0			
Chloromethane	28.59	1.0	20	0	143	46-148	0			
cis-1,2-Dichloroethene	24.01	1.0	20	0	120	75-134	0			
cis-1,3-Dichloropropene	21.25	1.0	20	0	106	70-130	0			
Dibromochloromethane	16.38	1.0	20	0	81.9	60-115	0			
Ethylbenzene	24.01	1.0	20	0	120	76-123	0			
m,p-Xylene	48.29	2.0	40	0	121	75-130	0			
Methylene chloride	23.14	5.0	20	0	116	72-125	0			
o-Xylene	24.09	1.0	20	0	120	76-127	0			
Styrene	23.55	1.0	20	0	118	83-137	0			
Tetrachloroethene	25.29	1.0	20	0	126	68-166	0			
Toluene	24.18	1.0	20	0	121	76-125	0			
trans-1,2-Dichloroethene	25.48	1.0	20	0	127	80-140	0			
trans-1,3-Dichloropropene	16.78	1.0	20	0	83.9	56-132	0			
Trichloroethene	24.78	1.0	20	0	124	77-125	0			
Vinyl chloride	27.58	1.0	20	0	138	50-136	0			S
Xylenes, Total	72.38	3.0	60	0	121	76-127	0			
Surr: 1,2-Dichloroethane-d4	19.48	0	20	0	97.4	75-120	0			
Surr: 4-Bromofluorobenzene	20.24	0	20	0	101	80-110	0			
Surr: Dibromofluoromethane	19.65	0	20	0	98.2	85-115	0			
Surr: Toluene-d8	20.55	0	20	0	103	85-110	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Wood Environment & Infrastructure Solutions, Inc.
 Work Order: 19081622
 Project: TFS Rochester (3359-15-1040)

QC BATCH REPORT

Batch ID: **R269277** Instrument ID **VMS6** Method: **SW8260C**

MSD		Sample ID: 19081622-02A MSD				Units: µg/L		Analysis Date: 8/27/2019 11:49 PM		
Client ID: ATR-OW2(33)-G082119		Run ID: VMS6_190827A		SeqNo: 5878327		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	24.92	1.0	20	0	125	75-130	24.71	0.846	30	
1,1,2,2-Tetrachloroethane	19.63	1.0	20	0	98.2	75-130	20.86	6.08	30	
1,1,2-Trichloroethane	21.32	1.0	20	0	107	75-125	21.72	1.86	30	
1,1-Dichloroethane	27.17	1.0	20	0	136	68-142	25.23	7.4	30	
1,1-Dichloroethene	24.06	1.0	20	0	120	70-145	27.81	14.5	30	
1,2-Dichloroethane	21.46	1.0	20	0	107	78-125	21.19	1.27	30	
1,2-Dichloropropane	22.25	1.0	20	0	111	75-125	21.81	2	30	
2-Butanone	18.31	5.0	20	0	91.6	55-150	17.99	1.76	30	
2-Hexanone	17.34	5.0	20	0	86.7	60-135	17.62	1.6	30	
4-Methyl-2-pentanone	23.54	1.0	20	0	118	77-178	22.97	2.45	30	
Acetone	20.43	10	20	3.79	83.2	60-160	19.98	2.23	30	
Benzene	22.71	1.0	20	0	114	70-130	23.59	3.8	30	
Bromodichloromethane	20.61	1.0	20	0	103	75-125	21.36	3.57	30	
Bromoform	16.83	1.0	20	0	84.2	60-125	17.17	2	30	
Bromomethane	20.44	1.0	20	0	102	30-185	16.83	19.4	30	
Carbon disulfide	26.29	1.0	20	0	131	60-165	24.45	7.25	30	
Carbon tetrachloride	23.32	1.0	20	0	117	65-140	22.58	3.22	30	
Chlorobenzene	21.88	1.0	20	0	109	80-120	21.52	1.66	30	
Chloroethane	28.63	1.0	20	0	143	31-172	26.86	6.38	30	
Chloroform	21.99	1.0	20	0	110	66-135	22.22	1.04	30	
Chloromethane	28.98	1.0	20	0	145	46-148	28.59	1.35	30	
cis-1,2-Dichloroethene	24.29	1.0	20	0	121	75-134	24.01	1.16	30	
cis-1,3-Dichloropropene	21.77	1.0	20	0	109	70-130	21.25	2.42	30	
Dibromochloromethane	17.19	1.0	20	0	86	60-115	16.38	4.83	30	
Ethylbenzene	23.4	1.0	20	0	117	76-123	24.01	2.57	30	
m,p-Xylene	47.4	2.0	40	0	118	75-130	48.29	1.86	30	
Methylene chloride	25.1	5.0	20	0	126	72-125	23.14	8.13	30	S
o-Xylene	23.72	1.0	20	0	119	76-127	24.09	1.55	30	
Styrene	22.29	1.0	20	0	111	83-137	23.55	5.5	30	
Tetrachloroethene	23.21	1.0	20	0	116	68-166	25.29	8.58	30	
Toluene	23.36	1.0	20	0	117	76-125	24.18	3.45	30	
trans-1,2-Dichloroethene	26.34	1.0	20	0	132	80-140	25.48	3.32	30	
trans-1,3-Dichloropropene	15.79	1.0	20	0	79	56-132	16.78	6.08	30	
Trichloroethene	23.32	1.0	20	0	117	77-125	24.78	6.07	30	
Vinyl chloride	28.07	1.0	20	0	140	50-136	27.58	1.76	30	S
Xylenes, Total	71.12	3.0	60	0	119	76-127	72.38	1.76	30	
Surr: 1,2-Dichloroethane-d4	19.81	0	20	0	99	75-120	19.48	1.68	30	
Surr: 4-Bromofluorobenzene	19.8	0	20	0	99	80-110	20.24	2.2	30	
Surr: Dibromofluoromethane	20.15	0	20	0	101	85-115	19.65	2.51	30	
Surr: Toluene-d8	19.12	0	20	0	95.6	85-110	20.55	7.21	30	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Wood Environment & Infrastructure Solutions, Inc.

QC BATCH REPORT

Work Order: 19081622

Project: TFS Rochester (3359-15-1040)

Batch ID: **R269277**

Instrument ID **VMS6**

Method: **SW8260C**

The following samples were analyzed in this batch:

19081622-01A	19081622-02A	19081622-03A
19081622-04A	19081622-05A	19081622-06A
19081622-07A	19081622-08A	19081622-09A
19081622-10A	19081622-11A	19081622-12A
19081622-13A	19081622-14A	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.



Cincinnati, OH
+1 513 733 5336

Fort Collins, CO
+1 970 490 1511

Everett, WA
+1 425 356 2600

Holland, MI
+1 616 399 6070

Chain of Custody Form

Houston, TX
+1 281 530 5656

Spring City, PA
+1 610 948 4903

South Charleston, WV
+1 304 356 3168

Middletown, PA
+1 717 944 5541

Salt Lake City, UT
+1 801 266 7700

York, PA
+1 717 505 5280

Page 1 of 2

COC ID: 187808

ALS Project Manager: EB

ALS Work Order #: 19081622

Customer Information		Project Information		Parameter/Method Request for Analysis												
Purchase Order	<u>CO12609102</u>	Project Name	<u>Stability</u>	A	VOCs	<u>82603</u>										
Work Order		Project Number	<u>3359101040</u>	B												
Company Name	Wood Environment & Infrastructure Soluti and Inc.	Bill To Company	Wood Environment & Infrastructure Sol utions Inc.	C												
Send Report To	<u>Paul Stork</u>	Invoice Attn	Accounts Payable	D												
Address	521 Byers Road, Suite 204	Address	521 Byers Road, Suite 204	E												
				F												
City/State/Zip	Miamisburg, OH 45342	City/State/Zip	Miamisburg, OH 45342	G												
Phone	(937) 859-3600	Phone	(937) 859-3600	H												
Fax	(937) 859-7951	Fax	(937) 859-7951	I												
e-Mail Address	<u>Paul.Stork@woodinc.com</u>	e-Mail Address		J												

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	ATR-OW 2 (39) - G082119	8/21/19	1400	GW	1	3	X										
2	ATR-OW 2 (33) - G082119	8/21/19	1310	GW	1	9	X										
3	ATR-OW 2 (53) - G082119	8/21/19	1225	GW	1	9	X										
4	ATR-OW 3 (35) - G082119	8/21/19	1225	GW	1	9	X										
5	ATR-OW 3 (55) - G082119	8/21/19	1150	GW	1	3	X										
6	ATR-OW 4 (35) - G082119	8/21/19	1140	GW	1	3	X										
7	ATR-OW 4 (54) - G082119	8/21/19	1105	GW	1	3	X										
8	ATR-OW 5 (16) - G082119	8/21/19	1100	GW	1	3	X										
9	ATR-OW 5 (35) - G082119	8/21/19	1020	GW	1	3	X										
10	ATR-OW 5 (44) - G082119	8/21/19	0905	GW	1	3	X										

Sampler(s) Please Print & Sign _____ Shipment Method _____ Required Turnaround Time: (Check Box) Std 10 WK Days 5 WK Days Other 2 WK Days 24 Hour Results Due Date: _____

Relinquished by: <u>[Signature]</u>	Date: <u>8/21/19</u>	Time: <u>1545</u>	Received by: <u>[Signature]</u>	Notes: <u>ATR-OW 2 (33) includes samples for MS/MSD</u>			
Relinquished by: <u>[Signature]</u>	Date: <u>8/21/19</u>	Time: <u>1615</u>	Received by (Laboratory): <u>[Signature]</u>	Cooler ID: <u>S22</u>	Cooler Temp.: <u>4.8°C</u>	QC Package: (Check One Box Below)	
Logged by (Laboratory): <u>DFS</u>	Date: <u>8/22/19</u>	Time: <u>1500</u>	Checked by (Laboratory): <u>EB</u>			<input type="checkbox"/> Level II Std QC	<input type="checkbox"/> TRRP Check/let
Preservative Key: 1-HCl 2-HNO ₃ 3-H ₂ SO ₄ 4-NaOH 5-Na ₂ S ₂ O ₃ 6-NaHSO ₄ 7-Other 8-4°C 9-5035						<input checked="" type="checkbox"/> Level III Std QC/Raw Data	<input type="checkbox"/> TRRP Level IV
						<input checked="" type="checkbox"/> Level IV SW846/CLP	
						<input type="checkbox"/> Other _____	



Cincinnati, OH
+1 513 733 5336

Fort Collins, CO
+1 970 490 1511

Chain of Custody Form

Houston, TX
+1 281 530 5656

Spring City, PA
+1 610 948 4903

South Charleston, WV
+1 304 356 3168

Everett, WA
+1 425 356 2600

Holland, MI
+1 616 399 6070

Page 2 of 2

Middletown, PA
+1 717 944 5541

Salt Lake City, UT
+1 801 266 7700

York, PA
+1 717 505 5280

COC ID: 187807

ALS Project Manager: **EB**

ALS Work Order #: 19081022

Customer Information		Project Information		Parameter/Method Request for Analysis												
Purchase Order	CD12609102	Project Name	Stability	A	VOCs	82603										
Work Order		Project Number	3359151040	B												
Company Name	Wood Environment & Infrastructure Soluti	Bill To Company	Wood Environment & Infrastructure Sol	C												
Send Report To	Paul Stork	Invoice Attn	Accounts Payable	D												
Address	521 Byers Road, Suite 204	Address	521 Byers Road, Suite 204	E												
				F												
City/State/Zip	Miamisburg, OH 45342	City/State/Zip	Miamisburg, OH 45342	G												
Phone	(937) 859-3600	Phone	(937) 859-3600	H												
Fax	(937) 859-7951	Fax	(937) 859-7951	I												
e-Mail Address	Paul.Stork@woodpc.com	e-Mail Address		J												

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	ATR-OW6(37)-G082119	8/21/19	1010	GW	1	3	X										
11	ATR-OW6(37)-G082119	8/21/19	1010	GW	1	3	X										
12	ATR-OW6(63)-G082119	8/21/19	0925	GW	1	3	X										
13	ATR-OW6(63)-G082119 R	8/21/19	0925	GW	1	3	X										
14	ATR-TB002-082119	8/21/19		W	2	1	X										
6																	
7																	
8																	
9																	
10																	

Sampler(s) Please Print & Sign		Shipment Method		Required Turnaround Time: (Check Box)				Results Due Date:		
				<input type="checkbox"/> Std 10 WK Days <input checked="" type="checkbox"/> 5 WK Days <input type="checkbox"/> Other <input type="checkbox"/> 2 WK Days <input type="checkbox"/> 24 Hour						
Relinquished by:	Date: 8/21/19	Time: 1545	Received by:	Notes:						
Relinquished by:	Date: 8/21/19	Time: 1615	Received by (Laboratory):	8/22/19	Cooler ID	Cooler Temp.	QC Package: (Check One Box Below)			
Logged by (Laboratory):	Date: 8/22/19	Time: 1500	Checked by (Laboratory):	0930	SP2	4.8°C	<input type="checkbox"/> Level II Std QC	<input type="checkbox"/> TRRP CheckList		
Preservative Key: 1-HCl 2-HNO ₃ 3-H ₂ SO ₄ 4-NaOH 5-Na ₂ S ₂ O ₃ 6-NaHSO ₄ 7-Other 8-4°C 9-5035								<input checked="" type="checkbox"/> Level IV SW846/CLP	<input type="checkbox"/> TRRP Level IV	
								<input type="checkbox"/> Other		

Note: 1. Any changes must be made in writing once samples and COC Form have been submitted to ALS Environmental.
 2. Unless otherwise agreed in a formal contract, services provided by ALS Environmental are expressly limited to the terms and conditions stated on the reverse.
 3. The Chain of Custody is a legal document. All information must be completed accurately.

Sample Receipt Checklist

Client Name: **WOOD-DAYTON**

Date/Time Received: **22-Aug-19 09:30**

Work Order: **19081622**

Received by: **DS**

Checklist completed by Diane Shaw 22-Aug-19
eSignature Date

Reviewed by: Eheland Bramworth 22-Aug-19
eSignature Date

Matrices: Groundwater

Carrier name: FedEx

- Shipping container/cooler in good condition? Yes No Not Present
- Custody seals intact on shipping container/cooler? Yes No Not Present
- Custody seals intact on sample bottles? Yes No Not Present
- Chain of custody present? Yes No
- Chain of custody signed when relinquished and received? Yes No
- Chain of custody agrees with sample labels? Yes No
- Samples in proper container/bottle? Yes No
- Sample containers intact? Yes No
- Sufficient sample volume for indicated test? Yes No
- All samples received within holding time? Yes No
- Container/Temp Blank temperature in compliance? Yes No
- Sample(s) received on ice? Yes No

Temperature(s)/Thermometer(s):

Cooler(s)/Kit(s):

Date/Time sample(s) sent to storage:

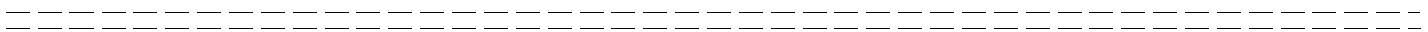
Water - VOA vials have zero headspace? Yes No No VOA vials submitted

Water - pH acceptable upon receipt? Yes No N/A

pH adjusted? Yes No N/A

pH adjusted by:

Login Notes:



Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction:



03-Sep-2019

Paul Stork
Wood Environment & Infrastructure Solutions, Inc.
521 Byers Road, Suite 204
Miamisburg, OH 45342

Re: **TFS Rochester (3359-15-1040)**

Work Order: **19081718**

Dear Paul,

ALS Environmental received 6 samples on 23-Aug-2019 for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental - Holland and for only the analyses requested.

Sample results are compliant with industry accepted practices and Quality Control results achieved laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 29.

If you have any questions regarding this report, please feel free to contact me:

ADDRESS: 3352 128th Avenue, Holland, MI, USA
PHONE: +1 (616) 399-6070 FAX: +1 (616) 399-6185

Sincerely,

A handwritten signature in black ink that reads "Ehrland Bosworth".

Electronically approved by: Ehrland Bosworth

Ehrland Bosworth
Project Manager

Report of Laboratory Analysis

Certificate No: MN 026-999-449

ALS GROUP USA, CORP Part of the ALS Laboratory Group A Campbell Brothers Limited Company

Environmental ALS

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

Client: Wood Environment & Infrastructure Solutions, Inc.
Project: TFS Rochester (3359-15-1040)
Work Order: 19081718

Work Order Sample Summary

<u>Lab Samp ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
19081718-01	ATR-MW68 (32)-G082219	Groundwater		8/22/2019 15:30	8/23/2019 13:30	<input type="checkbox"/>
19081718-02	ATR-MW72 (32)-G082219	Groundwater		8/22/2019 14:35	8/23/2019 13:30	<input type="checkbox"/>
19081718-03	ATR-MW59 (46)-G082219	Groundwater		8/22/2019 10:25	8/23/2019 13:30	<input type="checkbox"/>
19081718-04	ATR-MW59 (29)-G082219	Groundwater		8/22/2019 10:10	8/23/2019 13:30	<input type="checkbox"/>
19081718-05	ATR-MW59 (29)-G082219R	Groundwater		8/22/2019 10:10	8/23/2019 13:30	<input type="checkbox"/>
19081718-06	ATR-MW81 (27)-G082219	Groundwater		8/21/2019 15:15	8/23/2019 13:30	<input type="checkbox"/>

Client: Wood Environment & Infrastructure Solutions, Inc.
Project: TFS Rochester (3359-15-1040)
WorkOrder: 19081718

**QUALIFIERS,
ACRONYMS, UNITS**

<u>Qualifier</u>	<u>Description</u>
*	Value exceeds Regulatory Limit
**	Estimated Value
a	Analyte is non-accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
Hr	BOD/CBOD - Sample was reset outside Hold Time, value should be considered estimated.
J	Analyte is present at an estimated concentration between the MDL and Report Limit
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL
X	Analyte was detected in the Method Blank between the MDL and Reporting Limit, sample results may exhibit background or reagent contamination at the observed level.

<u>Acronym</u>	<u>Description</u>
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
LOD	Limit of Detection (see MDL)
LOQ	Limit of Quantitation (see PQL)
MBLK	Method Blank
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
TDL	Target Detection Limit
TNTC	Too Numerous To Count
A	APHA Standard Methods
D	ASTM
E	EPA
SW	SW-846 Update III

<u>Units Reported</u>	<u>Description</u>
µg/L	Micrograms per Liter

Client: Wood Environment & Infrastructure Solutions, Inc
Project: TFS Rochester (3359-15-1040)
Work Order: 19081718

Case Narrative

Samples for the above noted Work Order were received on 08/23/19. The attached "Sample Receipt Checklist" documents the status of custody seals, container integrity, preservation, and temperature compliance.

Samples were analyzed according to the analytical methodology previously transmitted in the "Work Order Acknowledgement". Methodologies are also documented in the "Analytical Result" section for each sample. Quality control results are listed in the "QC Report" section. Sample association for the reported quality control is located at the end of each batch summary. If applicable, results are appropriately qualified in the Analytical Result and QC Report sections. The "Qualifiers" section documents the various qualifiers, units, and acronyms utilized in reporting. A copy of the laboratory's scope of accreditation is available upon request.

With the following exceptions, all sample analyses achieved analytical criteria.

Volatile Organics:

Batch R269311a, Method VOC_8260_W, Sample 19081718-01A: The VOC Continuing Calibration Verification did not meet acceptance criteria for the following analytes; results are to be considered estimated for Bromomethane, 4-Methyl-2-pentanone, and 1,1,2,2-Tetrachloroethane.

Batch R269311a, Method VOC_8260_W, Sample 19081718-02A: The VOC Continuing Calibration Verification did not meet acceptance criteria for the following analytes; results are to be considered estimated for Bromomethane, 4-Methyl-2-pentanone, and 1,1,2,2-Tetrachloroethane.

Batch R269311a, Method VOC_8260_W, Sample 19081718-02A: Verification of sample preservation indicated a pH >2.

Batch R269311a, Method VOC_8260_W, Sample 19081718-03A: The VOC Continuing Calibration Verification did not meet acceptance criteria for the following analytes; results are to be considered estimated for Bromomethane, 4-Methyl-2-pentanone, and 1,1,2,2-Tetrachloroethane.

Batch R269311a, Method VOC_8260_W, Sample 19081718-06A: The VOC Continuing Calibration Verification did not meet acceptance criteria for the following analytes; results are to be considered estimated for Bromomethane, 4-Methyl-2-pentanone, and 1,1,2,2-Tetrachloroethane.

Client: Wood Environment & Infrastructure Solutions, Inc
Project: TFS Rochester (3359-15-1040)
Work Order: 19081718

Case Narrative

Batch R269397a, Method VOC_8260_W, Sample 19081718-04A: The VOC Continuing Calibration Verification did not meet acceptance criteria for the following analytes; results are to be considered estimated for Bromomethane, 2-Hexanone, and 4-Methyl-2-pentanone.

Batch R269397a, Method VOC_8260_W, Sample 19081718-05A: The VOC Continuing Calibration Verification did not meet acceptance criteria for the following analytes; results are to be considered estimated for Bromomethane, 2-Hexanone, and 4-Methyl-2-pentanone.

No other deviations or anomalies were noted.

Client: Wood Environment & Infrastructure Solutions, Inc.
Project: TFS Rochester (3359-15-1040)
Sample ID: ATR-MW68 (32)-G082219
Collection Date: 8/22/2019 03:30 PM

Work Order: 19081718
Lab ID: 19081718-01
Matrix: GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260C		Analyst: WH	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	8/28/2019 08:04 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	8/28/2019 08:04 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	8/28/2019 08:04 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	8/28/2019 08:04 PM
1,1-Dichloroethene	ND		1.0	µg/L	1	8/28/2019 08:04 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	8/28/2019 08:04 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	8/28/2019 08:04 PM
2-Butanone	9.0		5.0	µg/L	1	8/28/2019 08:04 PM
2-Hexanone	ND		5.0	µg/L	1	8/28/2019 08:04 PM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	8/28/2019 08:04 PM
Acetone	12		10	µg/L	1	8/28/2019 08:04 PM
Benzene	ND		1.0	µg/L	1	8/28/2019 08:04 PM
Bromodichloromethane	ND		1.0	µg/L	1	8/28/2019 08:04 PM
Bromoform	ND		1.0	µg/L	1	8/28/2019 08:04 PM
Bromomethane	ND		1.0	µg/L	1	8/28/2019 08:04 PM
Carbon disulfide	ND		1.0	µg/L	1	8/28/2019 08:04 PM
Carbon tetrachloride	ND		1.0	µg/L	1	8/28/2019 08:04 PM
Chlorobenzene	ND		1.0	µg/L	1	8/28/2019 08:04 PM
Chloroethane	ND		1.0	µg/L	1	8/28/2019 08:04 PM
Chloroform	ND		1.0	µg/L	1	8/28/2019 08:04 PM
Chloromethane	ND		1.0	µg/L	1	8/28/2019 08:04 PM
cis-1,2-Dichloroethene	12		1.0	µg/L	1	8/28/2019 08:04 PM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	8/28/2019 08:04 PM
Dibromochloromethane	ND		1.0	µg/L	1	8/28/2019 08:04 PM
Ethylbenzene	ND		1.0	µg/L	1	8/28/2019 08:04 PM
m,p-Xylene	ND		2.0	µg/L	1	8/28/2019 08:04 PM
Methylene chloride	ND		5.0	µg/L	1	8/28/2019 08:04 PM
o-Xylene	ND		1.0	µg/L	1	8/28/2019 08:04 PM
Styrene	ND		1.0	µg/L	1	8/28/2019 08:04 PM
Tetrachloroethene	ND		1.0	µg/L	1	8/28/2019 08:04 PM
Toluene	1.4		1.0	µg/L	1	8/28/2019 08:04 PM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	8/28/2019 08:04 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	8/28/2019 08:04 PM
Trichloroethene	ND		1.0	µg/L	1	8/28/2019 08:04 PM
Vinyl chloride	44		1.0	µg/L	1	8/28/2019 08:04 PM
Xylenes, Total	ND		3.0	µg/L	1	8/28/2019 08:04 PM
Surr: 1,2-Dichloroethane-d4	92.0		75-120	%REC	1	8/28/2019 08:04 PM
Surr: 4-Bromofluorobenzene	98.9		80-110	%REC	1	8/28/2019 08:04 PM
Surr: Dibromofluoromethane	98.0		85-115	%REC	1	8/28/2019 08:04 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 03-Sep-19

Client: Wood Environment & Infrastructure Solutions, Inc.

Project: TFS Rochester (3359-15-1040)

Work Order: 19081718

Sample ID: ATR-MW68 (32)-G082219

Lab ID: 19081718-01

Collection Date: 8/22/2019 03:30 PM

Matrix: GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	89.2		85-110	%REC	1	8/28/2019 08:04 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: Wood Environment & Infrastructure Solutions, Inc.

Project: TFS Rochester (3359-15-1040)

Work Order: 19081718

Sample ID: ATR-MW72 (32)-G082219

Lab ID: 19081718-02

Collection Date: 8/22/2019 02:35 PM

Matrix: GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260C		Analyst: WH	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	8/28/2019 05:51 AM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	8/28/2019 05:51 AM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	8/28/2019 05:51 AM
1,1-Dichloroethane	ND		1.0	µg/L	1	8/28/2019 05:51 AM
1,1-Dichloroethene	ND		1.0	µg/L	1	8/28/2019 05:51 AM
1,2-Dichloroethane	ND		1.0	µg/L	1	8/28/2019 05:51 AM
1,2-Dichloropropane	ND		1.0	µg/L	1	8/28/2019 05:51 AM
2-Butanone	44		5.0	µg/L	1	8/28/2019 05:51 AM
2-Hexanone	ND		5.0	µg/L	1	8/28/2019 05:51 AM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	8/28/2019 05:51 AM
Acetone	66		50	µg/L	5	8/30/2019 04:43 PM
Benzene	ND		1.0	µg/L	1	8/28/2019 05:51 AM
Bromodichloromethane	ND		1.0	µg/L	1	8/28/2019 05:51 AM
Bromoform	ND		1.0	µg/L	1	8/28/2019 05:51 AM
Bromomethane	ND		1.0	µg/L	1	8/28/2019 05:51 AM
Carbon disulfide	ND		1.0	µg/L	1	8/28/2019 05:51 AM
Carbon tetrachloride	ND		1.0	µg/L	1	8/28/2019 05:51 AM
Chlorobenzene	ND		1.0	µg/L	1	8/28/2019 05:51 AM
Chloroethane	ND		1.0	µg/L	1	8/28/2019 05:51 AM
Chloroform	ND		1.0	µg/L	1	8/28/2019 05:51 AM
Chloromethane	ND		1.0	µg/L	1	8/28/2019 05:51 AM
cis-1,2-Dichloroethene	1.3		1.0	µg/L	1	8/28/2019 05:51 AM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	8/28/2019 05:51 AM
Dibromochloromethane	ND		1.0	µg/L	1	8/28/2019 05:51 AM
Ethylbenzene	ND		1.0	µg/L	1	8/28/2019 05:51 AM
m,p-Xylene	ND		2.0	µg/L	1	8/28/2019 05:51 AM
Methylene chloride	ND		5.0	µg/L	1	8/28/2019 05:51 AM
o-Xylene	ND		1.0	µg/L	1	8/28/2019 05:51 AM
Styrene	ND		1.0	µg/L	1	8/28/2019 05:51 AM
Tetrachloroethene	ND		1.0	µg/L	1	8/28/2019 05:51 AM
Toluene	2.4		1.0	µg/L	1	8/28/2019 05:51 AM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	8/28/2019 05:51 AM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	8/28/2019 05:51 AM
Trichloroethene	ND		1.0	µg/L	1	8/28/2019 05:51 AM
Vinyl chloride	1.9		1.0	µg/L	1	8/28/2019 05:51 AM
Xylenes, Total	ND		3.0	µg/L	1	8/28/2019 05:51 AM
Surr: 1,2-Dichloroethane-d4	89.2		75-120	%REC	5	8/30/2019 04:43 PM
Surr: 1,2-Dichloroethane-d4	92.6		75-120	%REC	1	8/28/2019 05:51 AM
Surr: 4-Bromofluorobenzene	102		80-110	%REC	5	8/30/2019 04:43 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 03-Sep-19

Client: Wood Environment & Infrastructure Solutions, Inc.**Project:** TFS Rochester (3359-15-1040)**Work Order:** 19081718**Sample ID:** ATR-MW72 (32)-G082219**Lab ID:** 19081718-02**Collection Date:** 8/22/2019 02:35 PM**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 4-Bromofluorobenzene	98.3		80-110	%REC	1	8/28/2019 05:51 AM
Surr: Dibromofluoromethane	92.0		85-115	%REC	5	8/30/2019 04:43 PM
Surr: Dibromofluoromethane	96.9		85-115	%REC	1	8/28/2019 05:51 AM
Surr: Toluene-d8	94.1		85-110	%REC	1	8/28/2019 05:51 AM
Surr: Toluene-d8	88.4		85-110	%REC	5	8/30/2019 04:43 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 03-Sep-19

Client: Wood Environment & Infrastructure Solutions, Inc.

Project: TFS Rochester (3359-15-1040)

Work Order: 19081718

Sample ID: ATR-MW59 (46)-G082219

Lab ID: 19081718-03

Collection Date: 8/22/2019 10:25 AM

Matrix: GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260C		Analyst: WH	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	8/28/2019 06:08 AM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	8/28/2019 06:08 AM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	8/28/2019 06:08 AM
1,1-Dichloroethane	ND		1.0	µg/L	1	8/28/2019 06:08 AM
1,1-Dichloroethene	41		1.0	µg/L	1	8/28/2019 06:08 AM
1,2-Dichloroethane	ND		1.0	µg/L	1	8/28/2019 06:08 AM
1,2-Dichloropropane	ND		1.0	µg/L	1	8/28/2019 06:08 AM
2-Butanone	ND		5.0	µg/L	1	8/28/2019 06:08 AM
2-Hexanone	ND		5.0	µg/L	1	8/28/2019 06:08 AM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	8/28/2019 06:08 AM
Acetone	ND		10	µg/L	1	8/28/2019 06:08 AM
Benzene	ND		1.0	µg/L	1	8/28/2019 06:08 AM
Bromodichloromethane	ND		1.0	µg/L	1	8/28/2019 06:08 AM
Bromoform	ND		1.0	µg/L	1	8/28/2019 06:08 AM
Bromomethane	ND		1.0	µg/L	1	8/28/2019 06:08 AM
Carbon disulfide	ND		1.0	µg/L	1	8/28/2019 06:08 AM
Carbon tetrachloride	ND		1.0	µg/L	1	8/28/2019 06:08 AM
Chlorobenzene	ND		1.0	µg/L	1	8/28/2019 06:08 AM
Chloroethane	ND		1.0	µg/L	1	8/28/2019 06:08 AM
Chloroform	ND		1.0	µg/L	1	8/28/2019 06:08 AM
Chloromethane	ND		1.0	µg/L	1	8/28/2019 06:08 AM
cis-1,2-Dichloroethene	1,200		50	µg/L	50	8/28/2019 08:55 PM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	8/28/2019 06:08 AM
Dibromochloromethane	ND		1.0	µg/L	1	8/28/2019 06:08 AM
Ethylbenzene	4.6		1.0	µg/L	1	8/28/2019 06:08 AM
m,p-Xylene	3.7		2.0	µg/L	1	8/28/2019 06:08 AM
Methylene chloride	ND		5.0	µg/L	1	8/28/2019 06:08 AM
o-Xylene	3.8		1.0	µg/L	1	8/28/2019 06:08 AM
Styrene	ND		1.0	µg/L	1	8/28/2019 06:08 AM
Tetrachloroethene	ND		1.0	µg/L	1	8/28/2019 06:08 AM
Toluene	3.9		1.0	µg/L	1	8/28/2019 06:08 AM
trans-1,2-Dichloroethene	16		1.0	µg/L	1	8/28/2019 06:08 AM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	8/28/2019 06:08 AM
Trichloroethene	ND		1.0	µg/L	1	8/28/2019 06:08 AM
Vinyl chloride	1,600		50	µg/L	50	8/28/2019 08:55 PM
Xylenes, Total	7.5		3.0	µg/L	1	8/28/2019 06:08 AM
Surr: 1,2-Dichloroethane-d4	92.0		75-120	%REC	50	8/28/2019 08:55 PM
Surr: 1,2-Dichloroethane-d4	91.4		75-120	%REC	1	8/28/2019 06:08 AM
Surr: 4-Bromofluorobenzene	98.4		80-110	%REC	1	8/28/2019 06:08 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 03-Sep-19

Client: Wood Environment & Infrastructure Solutions, Inc.**Project:** TFS Rochester (3359-15-1040)**Work Order:** 19081718**Sample ID:** ATR-MW59 (46)-G082219**Lab ID:** 19081718-03**Collection Date:** 8/22/2019 10:25 AM**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 4-Bromofluorobenzene	99.3		80-110	%REC	50	8/28/2019 08:55 PM
Surr: Dibromofluoromethane	98.8		85-115	%REC	1	8/28/2019 06:08 AM
Surr: Dibromofluoromethane	98.3		85-115	%REC	50	8/28/2019 08:55 PM
Surr: Toluene-d8	91.1		85-110	%REC	50	8/28/2019 08:55 PM
Surr: Toluene-d8	91.6		85-110	%REC	1	8/28/2019 06:08 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: Wood Environment & Infrastructure Solutions, Inc.
 Project: TFS Rochester (3359-15-1040)
 Sample ID: ATR-MW59 (29)-G082219
 Collection Date: 8/22/2019 10:10 AM

Work Order: 19081718
 Lab ID: 19081718-04
 Matrix: GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260C		Analyst: WH	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	8/28/2019 07:30 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	8/28/2019 07:30 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	8/28/2019 07:30 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	8/28/2019 07:30 PM
1,1-Dichloroethene	ND		1.0	µg/L	1	8/28/2019 07:30 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	8/28/2019 07:30 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	8/28/2019 07:30 PM
2-Butanone	ND		5.0	µg/L	1	8/28/2019 07:30 PM
2-Hexanone	ND		5.0	µg/L	1	8/28/2019 07:30 PM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	8/28/2019 07:30 PM
Acetone	ND		10	µg/L	1	8/28/2019 07:30 PM
Benzene	ND		1.0	µg/L	1	8/28/2019 07:30 PM
Bromodichloromethane	ND		1.0	µg/L	1	8/28/2019 07:30 PM
Bromoform	ND		1.0	µg/L	1	8/28/2019 07:30 PM
Bromomethane	ND		1.0	µg/L	1	8/28/2019 07:30 PM
Carbon disulfide	ND		1.0	µg/L	1	8/28/2019 07:30 PM
Carbon tetrachloride	ND		1.0	µg/L	1	8/28/2019 07:30 PM
Chlorobenzene	ND		1.0	µg/L	1	8/28/2019 07:30 PM
Chloroethane	2.9		1.0	µg/L	1	8/28/2019 07:30 PM
Chloroform	ND		1.0	µg/L	1	8/28/2019 07:30 PM
Chloromethane	ND		1.0	µg/L	1	8/28/2019 07:30 PM
cis-1,2-Dichloroethene	1.0		1.0	µg/L	1	8/28/2019 07:30 PM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	8/28/2019 07:30 PM
Dibromochloromethane	ND		1.0	µg/L	1	8/28/2019 07:30 PM
Ethylbenzene	2.7		1.0	µg/L	1	8/28/2019 07:30 PM
m,p-Xylene	4.5		2.0	µg/L	1	8/28/2019 07:30 PM
Methylene chloride	ND		5.0	µg/L	1	8/28/2019 07:30 PM
o-Xylene	2.6		1.0	µg/L	1	8/28/2019 07:30 PM
Styrene	ND		1.0	µg/L	1	8/28/2019 07:30 PM
Tetrachloroethene	ND		1.0	µg/L	1	8/28/2019 07:30 PM
Toluene	3.1		1.0	µg/L	1	8/28/2019 07:30 PM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	8/28/2019 07:30 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	8/28/2019 07:30 PM
Trichloroethene	ND		1.0	µg/L	1	8/28/2019 07:30 PM
Vinyl chloride	1.2		1.0	µg/L	1	8/28/2019 07:30 PM
Xylenes, Total	7.0		3.0	µg/L	1	8/28/2019 07:30 PM
Surr: 1,2-Dichloroethane-d4	94.4		75-120	%REC	1	8/28/2019 07:30 PM
Surr: 4-Bromofluorobenzene	97.6		80-110	%REC	1	8/28/2019 07:30 PM
Surr: Dibromofluoromethane	98.8		85-115	%REC	1	8/28/2019 07:30 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 03-Sep-19

Client: Wood Environment & Infrastructure Solutions, Inc.**Project:** TFS Rochester (3359-15-1040)**Work Order:** 19081718**Sample ID:** ATR-MW59 (29)-G082219**Lab ID:** 19081718-04**Collection Date:** 8/22/2019 10:10 AM**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	91.8		85-110	%REC	1	8/28/2019 07:30 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: Wood Environment & Infrastructure Solutions, Inc.

Project: TFS Rochester (3359-15-1040)

Work Order: 19081718

Sample ID: ATR-MW59 (29)-G082219R

Lab ID: 19081718-05

Collection Date: 8/22/2019 10:10 AM

Matrix: GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260C		Analyst: WH	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	8/28/2019 07:47 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	8/28/2019 07:47 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	8/28/2019 07:47 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	8/28/2019 07:47 PM
1,1-Dichloroethene	ND		1.0	µg/L	1	8/28/2019 07:47 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	8/28/2019 07:47 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	8/28/2019 07:47 PM
2-Butanone	ND		5.0	µg/L	1	8/28/2019 07:47 PM
2-Hexanone	ND		5.0	µg/L	1	8/28/2019 07:47 PM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	8/28/2019 07:47 PM
Acetone	ND		10	µg/L	1	8/28/2019 07:47 PM
Benzene	ND		1.0	µg/L	1	8/28/2019 07:47 PM
Bromodichloromethane	ND		1.0	µg/L	1	8/28/2019 07:47 PM
Bromoform	ND		1.0	µg/L	1	8/28/2019 07:47 PM
Bromomethane	ND		1.0	µg/L	1	8/28/2019 07:47 PM
Carbon disulfide	ND		1.0	µg/L	1	8/28/2019 07:47 PM
Carbon tetrachloride	ND		1.0	µg/L	1	8/28/2019 07:47 PM
Chlorobenzene	ND		1.0	µg/L	1	8/28/2019 07:47 PM
Chloroethane	2.2		1.0	µg/L	1	8/28/2019 07:47 PM
Chloroform	ND		1.0	µg/L	1	8/28/2019 07:47 PM
Chloromethane	ND		1.0	µg/L	1	8/28/2019 07:47 PM
cis-1,2-Dichloroethene	1.1		1.0	µg/L	1	8/28/2019 07:47 PM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	8/28/2019 07:47 PM
Dibromochloromethane	ND		1.0	µg/L	1	8/28/2019 07:47 PM
Ethylbenzene	2.7		1.0	µg/L	1	8/28/2019 07:47 PM
m,p-Xylene	4.4		2.0	µg/L	1	8/28/2019 07:47 PM
Methylene chloride	ND		5.0	µg/L	1	8/28/2019 07:47 PM
o-Xylene	2.5		1.0	µg/L	1	8/28/2019 07:47 PM
Styrene	ND		1.0	µg/L	1	8/28/2019 07:47 PM
Tetrachloroethene	ND		1.0	µg/L	1	8/28/2019 07:47 PM
Toluene	3.1		1.0	µg/L	1	8/28/2019 07:47 PM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	8/28/2019 07:47 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	8/28/2019 07:47 PM
Trichloroethene	ND		1.0	µg/L	1	8/28/2019 07:47 PM
Vinyl chloride	1.3		1.0	µg/L	1	8/28/2019 07:47 PM
Xylenes, Total	6.9		3.0	µg/L	1	8/28/2019 07:47 PM
Surr: 1,2-Dichloroethane-d4	94.0		75-120	%REC	1	8/28/2019 07:47 PM
Surr: 4-Bromofluorobenzene	100		80-110	%REC	1	8/28/2019 07:47 PM
Surr: Dibromofluoromethane	99.0		85-115	%REC	1	8/28/2019 07:47 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 03-Sep-19

Client: Wood Environment & Infrastructure Solutions, Inc.**Project:** TFS Rochester (3359-15-1040)**Work Order:** 19081718**Sample ID:** ATR-MW59 (29)-G082219R**Lab ID:** 19081718-05**Collection Date:** 8/22/2019 10:10 AM**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	90.7		85-110	%REC	1	8/28/2019 07:47 PM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: Wood Environment & Infrastructure Solutions, Inc.

Project: TFS Rochester (3359-15-1040)

Work Order: 19081718

Sample ID: ATR-MW81 (27)-G082219

Lab ID: 19081718-06

Collection Date: 8/21/2019 03:15 PM

Matrix: GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260C		Analyst: WH	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	8/28/2019 06:59 AM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	8/28/2019 06:59 AM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	8/28/2019 06:59 AM
1,1-Dichloroethane	ND		1.0	µg/L	1	8/28/2019 06:59 AM
1,1-Dichloroethene	ND		1.0	µg/L	1	8/28/2019 06:59 AM
1,2-Dichloroethane	ND		1.0	µg/L	1	8/28/2019 06:59 AM
1,2-Dichloropropane	ND		1.0	µg/L	1	8/28/2019 06:59 AM
2-Butanone	ND		5.0	µg/L	1	8/28/2019 06:59 AM
2-Hexanone	ND		5.0	µg/L	1	8/28/2019 06:59 AM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	8/28/2019 06:59 AM
Acetone	ND		10	µg/L	1	8/28/2019 06:59 AM
Benzene	ND		1.0	µg/L	1	8/28/2019 06:59 AM
Bromodichloromethane	ND		1.0	µg/L	1	8/28/2019 06:59 AM
Bromoform	ND		1.0	µg/L	1	8/28/2019 06:59 AM
Bromomethane	ND		1.0	µg/L	1	8/28/2019 06:59 AM
Carbon disulfide	ND		1.0	µg/L	1	8/28/2019 06:59 AM
Carbon tetrachloride	ND		1.0	µg/L	1	8/28/2019 06:59 AM
Chlorobenzene	ND		1.0	µg/L	1	8/28/2019 06:59 AM
Chloroethane	ND		1.0	µg/L	1	8/28/2019 06:59 AM
Chloroform	ND		1.0	µg/L	1	8/28/2019 06:59 AM
Chloromethane	ND		1.0	µg/L	1	8/28/2019 06:59 AM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	8/28/2019 06:59 AM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	8/28/2019 06:59 AM
Dibromochloromethane	ND		1.0	µg/L	1	8/28/2019 06:59 AM
Ethylbenzene	1.4		1.0	µg/L	1	8/28/2019 06:59 AM
m,p-Xylene	2.4		2.0	µg/L	1	8/28/2019 06:59 AM
Methylene chloride	ND		5.0	µg/L	1	8/28/2019 06:59 AM
o-Xylene	1.2		1.0	µg/L	1	8/28/2019 06:59 AM
Styrene	ND		1.0	µg/L	1	8/28/2019 06:59 AM
Tetrachloroethene	ND		1.0	µg/L	1	8/28/2019 06:59 AM
Toluene	7.8		1.0	µg/L	1	8/28/2019 06:59 AM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	8/28/2019 06:59 AM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	8/28/2019 06:59 AM
Trichloroethene	ND		1.0	µg/L	1	8/28/2019 06:59 AM
Vinyl chloride	ND		1.0	µg/L	1	8/28/2019 06:59 AM
Xylenes, Total	3.7		3.0	µg/L	1	8/28/2019 06:59 AM
Surr: 1,2-Dichloroethane-d4	95.2		75-120	%REC	1	8/28/2019 06:59 AM
Surr: 4-Bromofluorobenzene	96.2		80-110	%REC	1	8/28/2019 06:59 AM
Surr: Dibromofluoromethane	98.0		85-115	%REC	1	8/28/2019 06:59 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 03-Sep-19

Client: Wood Environment & Infrastructure Solutions, Inc.

Project: TFS Rochester (3359-15-1040)

Work Order: 19081718

Sample ID: ATR-MW81 (27)-G082219

Lab ID: 19081718-06

Collection Date: 8/21/2019 03:15 PM

Matrix: GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	92.6		85-110	%REC	1	8/28/2019 06:59 AM

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: Wood Environment & Infrastructure Solutions, Inc.
Work Order: 19081718
Project: TFS Rochester (3359-15-1040)

QC BATCH REPORT

Batch ID: **R269311a** Instrument ID **VMS10** Method: **SW8260C**

MBLK		Sample ID: VBK2-190827-R269311a				Units: µg/L		Analysis Date: 8/28/2019 01:00 AM		
Client ID:		Run ID: VMS10_190827B		SeqNo: 5879349		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloroethane	ND	1.0								
1,2-Dichloropropane	ND	1.0								
2-Butanone	ND	5.0								
2-Hexanone	ND	5.0								
4-Methyl-2-pentanone	ND	1.0								
Acetone	ND	10								
Benzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	1.0								
Carbon disulfide	ND	1.0								
Carbon tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	1.0								
Chloroform	ND	1.0								
Chloromethane	ND	1.0								
cis-1,2-Dichloroethene	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
Dibromochloromethane	ND	1.0								
Ethylbenzene	ND	1.0								
m,p-Xylene	ND	2.0								
Methylene chloride	ND	5.0								
o-Xylene	ND	1.0								
Styrene	ND	1.0								
Tetrachloroethene	ND	1.0								
Toluene	ND	1.0								
trans-1,2-Dichloroethene	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
Trichloroethene	ND	1.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	3.0								
Surr: 1,2-Dichloroethane-d4	18.27	0	20	0	91.4	75-120	0			
Surr: 4-Bromofluorobenzene	18.92	0	20	0	94.6	80-110	0			
Surr: Dibromofluoromethane	18.68	0	20	0	93.4	85-115	0			
Surr: Toluene-d8	18.43	0	20	0	92.2	85-110	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Wood Environment & Infrastructure Solutions, Inc.
 Work Order: 19081718
 Project: TFS Rochester (3359-15-1040)

QC BATCH REPORT

Batch ID: **R269311a** Instrument ID **VMS10** Method: **SW8260C**

LCS		Sample ID: VLCSW3-190827-R269311a				Units: µg/L		Analysis Date: 8/28/2019 09:26 AM		
Client ID:		Run ID: VMS10_190827B		SeqNo: 5879399		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	22.11	1.0	20	0	111	75-130	0			
1,1,2,2-Tetrachloroethane	16.53	1.0	20	0	82.6	75-130	0			
1,1,2-Trichloroethane	18.77	1.0	20	0	93.8	75-125	0			
1,1-Dichloroethane	19.7	1.0	20	0	98.5	68-142	0			
1,1-Dichloroethene	20.65	1.0	20	0	103	70-145	0			
1,2-Dichloroethane	18.6	1.0	20	0	93	78-125	0			
1,2-Dichloropropane	17.99	1.0	20	0	90	75-125	0			
2-Butanone	17.13	5.0	20	0	85.6	55-150	0			
2-Hexanone	15.1	5.0	20	0	75.5	60-135	0			
4-Methyl-2-pentanone	21.45	1.0	20	0	107	77-178	0			
Acetone	19.93	10	20	0	99.6	60-160	0			
Benzene	19.59	1.0	20	0	98	70-130	0			
Bromodichloromethane	20.89	1.0	20	0	104	75-125	0			
Bromoform	18.5	1.0	20	0	92.5	60-125	0			
Bromomethane	23.36	1.0	20	0	117	30-185	0			
Carbon disulfide	23.5	1.0	20	0	118	60-165	0			
Carbon tetrachloride	20.57	1.0	20	0	103	65-140	0			
Chlorobenzene	17.65	1.0	20	0	88.2	80-120	0			
Chloroethane	20.66	1.0	20	0	103	31-172	0			
Chloroform	18.53	1.0	20	0	92.6	66-135	0			
Chloromethane	16.2	1.0	20	0	81	46-148	0			
cis-1,2-Dichloroethene	18.82	1.0	20	0	94.1	75-134	0			
cis-1,3-Dichloropropene	19.36	1.0	20	0	96.8	70-130	0			
Dibromochloromethane	17.82	1.0	20	0	89.1	60-115	0			
Ethylbenzene	17.89	1.0	20	0	89.4	76-123	0			
m,p-Xylene	35.75	2.0	40	0	89.4	75-130	0			
Methylene chloride	16.98	5.0	20	0	84.9	72-125	0			
o-Xylene	18.08	1.0	20	0	90.4	76-127	0			
Styrene	19.14	1.0	20	0	95.7	83-137	0			
Tetrachloroethene	20.6	1.0	20	0	103	68-166	0			
Toluene	17.42	1.0	20	0	87.1	76-125	0			
trans-1,2-Dichloroethene	20.33	1.0	20	0	102	80-140	0			
trans-1,3-Dichloropropene	18.07	1.0	20	0	90.4	56-132	0			
Trichloroethene	21.03	1.0	20	0	105	77-125	0			
Vinyl chloride	21.1	1.0	20	0	106	50-136	0			
Xylenes, Total	53.83	3.0	60	0	89.7	76-127	0			
<i>Surr: 1,2-Dichloroethane-d4</i>	18.69	0	20	0	93.4	75-120	0			
<i>Surr: 4-Bromofluorobenzene</i>	20.24	0	20	0	101	80-110	0			
<i>Surr: Dibromofluoromethane</i>	20.84	0	20	0	104	85-115	0			
<i>Surr: Toluene-d8</i>	18.57	0	20	0	92.8	85-110	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Wood Environment & Infrastructure Solutions, Inc.
 Work Order: 19081718
 Project: TFS Rochester (3359-15-1040)

QC BATCH REPORT

Batch ID: **R269311a** Instrument ID **VMS10** Method: **SW8260C**

MS		Sample ID: 19081711-01A MS				Units: µg/L		Analysis Date: 8/28/2019 07:16 AM		
Client ID:		Run ID: VMS10_190827B		SeqNo: 5879397		Prep Date:		DF: 100		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	2041	100	2000	0	102	75-130		0		
1,1,2,2-Tetrachloroethane	1610	100	2000	0	80.5	75-130		0		
1,1,2-Trichloroethane	1778	100	2000	0	88.9	75-125		0		
1,1-Dichloroethane	1820	100	2000	0	91	68-142		0		
1,1-Dichloroethene	2042	100	2000	0	102	70-145		0		
1,2-Dichloroethane	1721	100	2000	0	86	78-125		0		
1,2-Dichloropropane	1740	100	2000	0	87	75-125		0		
2-Butanone	1830	500	2000	0	91.5	55-150		0		
2-Hexanone	1617	500	2000	0	80.8	60-135		0		
4-Methyl-2-pentanone	2188	100	2000	0	109	77-178		0		
Acetone	2089	1,000	2000	0	104	60-160		0		
Benzene	1820	100	2000	0	91	70-130		0		
Bromodichloromethane	1858	100	2000	0	92.9	75-125		0		
Bromoform	1592	100	2000	0	79.6	60-125		0		
Bromomethane	2518	100	2000	0	126	30-185		0		
Carbon disulfide	2060	100	2000	0	103	60-165		0		
Carbon tetrachloride	1879	100	2000	0	94	65-140		0		
Chlorobenzene	1569	100	2000	0	78.4	80-120		0		S
Chloroethane	1903	100	2000	0	95.2	31-172		0		
Chloroform	1694	100	2000	0	84.7	66-135		0		
Chloromethane	1441	100	2000	0	72	46-148		0		
cis-1,2-Dichloroethene	1605	100	2000	0	80.2	75-134		0		
cis-1,3-Dichloropropene	1633	100	2000	0	81.6	70-130		0		
Dibromochloromethane	1470	100	2000	0	73.5	60-115		0		
Ethylbenzene	1603	100	2000	0	80.2	76-123		0		
m,p-Xylene	3144	200	4000	0	78.6	75-130		0		
Methylene chloride	1508	500	2000	0	75.4	72-125		0		
o-Xylene	1640	100	2000	0	82	76-127		0		
Styrene	1671	100	2000	0	83.6	83-137		0		
Tetrachloroethene	1824	100	2000	0	91.2	68-166		0		
Toluene	1560	100	2000	0	78	76-125		0		
trans-1,2-Dichloroethene	1832	100	2000	0	91.6	80-140		0		
trans-1,3-Dichloropropene	1539	100	2000	0	77	56-132		0		
Trichloroethene	1927	100	2000	0	96.4	77-125		0		
Vinyl chloride	2069	100	2000	0	103	50-136		0		
Xylenes, Total	4784	300	6000	0	79.7	76-127		0		
Surr: 1,2-Dichloroethane-d4	1884	0	2000	0	94.2	75-120		0		
Surr: 4-Bromofluorobenzene	1988	0	2000	0	99.4	80-110		0		
Surr: Dibromofluoromethane	2067	0	2000	0	103	85-115		0		
Surr: Toluene-d8	1828	0	2000	0	91.4	85-110		0		

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Wood Environment & Infrastructure Solutions, Inc.
 Work Order: 19081718
 Project: TFS Rochester (3359-15-1040)

QC BATCH REPORT

Batch ID: **R269311a** Instrument ID **VMS10** Method: **SW8260C**

MSD		Sample ID: 19081711-01A MSD				Units: µg/L		Analysis Date: 8/28/2019 07:34 AM		
Client ID:		Run ID: VMS10_190827B		SeqNo: 5879398		Prep Date:		DF: 100		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	2449	100	2000	0	122	75-130	2041	18.2	30	
1,1,2,2-Tetrachloroethane	1714	100	2000	0	85.7	75-130	1610	6.26	30	
1,1,2-Trichloroethane	1938	100	2000	0	96.9	75-125	1778	8.61	30	
1,1-Dichloroethane	2145	100	2000	0	107	68-142	1820	16.4	30	
1,1-Dichloroethene	2413	100	2000	0	121	70-145	2042	16.7	30	
1,2-Dichloroethane	1918	100	2000	0	95.9	78-125	1721	10.8	30	
1,2-Dichloropropane	1936	100	2000	0	96.8	75-125	1740	10.7	30	
2-Butanone	1829	500	2000	0	91.4	55-150	1830	0.0547	30	
2-Hexanone	1687	500	2000	0	84.4	60-135	1617	4.24	30	
4-Methyl-2-pentanone	2263	100	2000	0	113	77-178	2188	3.37	30	
Acetone	2331	1,000	2000	0	117	60-160	2089	11	30	
Benzene	2108	100	2000	0	105	70-130	1820	14.7	30	
Bromodichloromethane	2082	100	2000	0	104	75-125	1858	11.4	30	
Bromoform	1736	100	2000	0	86.8	60-125	1592	8.65	30	
Bromomethane	2719	100	2000	0	136	30-185	2518	7.68	30	
Carbon disulfide	2555	100	2000	0	128	60-165	2060	21.5	30	
Carbon tetrachloride	2269	100	2000	0	113	65-140	1879	18.8	30	
Chlorobenzene	1829	100	2000	0	91.4	80-120	1569	15.3	30	
Chloroethane	2406	100	2000	0	120	31-172	1903	23.3	30	
Chloroform	1965	100	2000	0	98.2	66-135	1694	14.8	30	
Chloromethane	1771	100	2000	0	88.6	46-148	1441	20.5	30	
cis-1,2-Dichloroethene	1849	100	2000	0	92.4	75-134	1605	14.1	30	
cis-1,3-Dichloropropene	1850	100	2000	0	92.5	70-130	1633	12.5	30	
Dibromochloromethane	1694	100	2000	0	84.7	60-115	1470	14.2	30	
Ethylbenzene	1853	100	2000	0	92.6	76-123	1603	14.5	30	
m,p-Xylene	3657	200	4000	0	91.4	75-130	3144	15.1	30	
Methylene chloride	1695	500	2000	0	84.8	72-125	1508	11.7	30	
o-Xylene	1892	100	2000	0	94.6	76-127	1640	14.3	30	
Styrene	1920	100	2000	0	96	83-137	1671	13.9	30	
Tetrachloroethene	2162	100	2000	0	108	68-166	1824	17	30	
Toluene	1837	100	2000	0	91.8	76-125	1560	16.3	30	
trans-1,2-Dichloroethene	2199	100	2000	0	110	80-140	1832	18.2	30	
trans-1,3-Dichloropropene	1677	100	2000	0	83.8	56-132	1539	8.58	30	
Trichloroethene	2176	100	2000	0	109	77-125	1927	12.1	30	
Vinyl chloride	2542	100	2000	0	127	50-136	2069	20.5	30	
Xylenes, Total	5549	300	6000	0	92.5	76-127	4784	14.8	30	
Surr: 1,2-Dichloroethane-d4	1880	0	2000	0	94	75-120	1884	0.213	30	
Surr: 4-Bromofluorobenzene	1938	0	2000	0	96.9	80-110	1988	2.55	30	
Surr: Dibromofluoromethane	2055	0	2000	0	103	85-115	2067	0.582	30	
Surr: Toluene-d8	1847	0	2000	0	92.4	85-110	1828	1.03	30	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Wood Environment & Infrastructure Solutions, Inc.

QC BATCH REPORT

Work Order: 19081718

Project: TFS Rochester (3359-15-1040)

Batch ID: **R269311a**

Instrument ID **VMS10**

Method: **SW8260C**

The following samples were analyzed in this batch:

19081718-01A	19081718-02A	19081718-03A
19081718-04A	19081718-05A	19081718-06A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Wood Environment & Infrastructure Solutions, Inc.
 Work Order: 19081718
 Project: TFS Rochester (3359-15-1040)

QC BATCH REPORT

Batch ID: **R269397a** Instrument ID **VMS10** Method: **SW8260C**

MBLK		Sample ID: VBLKW1-190827-R269397a				Units: µg/L		Analysis Date: 8/28/2019 06:19 PM		
Client ID:		Run ID: VMS10_190828A		SeqNo: 5881694		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloroethane	ND	1.0								
1,2-Dichloropropane	ND	1.0								
2-Butanone	ND	5.0								
2-Hexanone	ND	5.0								
4-Methyl-2-pentanone	ND	1.0								
Acetone	ND	10								
Benzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	1.0								
Carbon disulfide	ND	1.0								
Carbon tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	1.0								
Chloroform	ND	1.0								
Chloromethane	ND	1.0								
cis-1,2-Dichloroethene	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
Dibromochloromethane	ND	1.0								
Ethylbenzene	ND	1.0								
m,p-Xylene	ND	2.0								
Methylene chloride	ND	5.0								
o-Xylene	ND	1.0								
Styrene	ND	1.0								
Tetrachloroethene	ND	1.0								
Toluene	ND	1.0								
trans-1,2-Dichloroethene	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
Trichloroethene	ND	1.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	3.0								
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>18.8</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>94</i>	<i>75-120</i>	<i>0</i>			
<i>Surr: 4-Bromofluorobenzene</i>	<i>19.29</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>96.4</i>	<i>80-110</i>	<i>0</i>			
<i>Surr: Dibromofluoromethane</i>	<i>19.72</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>98.6</i>	<i>85-115</i>	<i>0</i>			
<i>Surr: Toluene-d8</i>	<i>18.02</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>90.1</i>	<i>85-110</i>	<i>0</i>			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Wood Environment & Infrastructure Solutions, Inc.
Work Order: 19081718
Project: TFS Rochester (3359-15-1040)

QC BATCH REPORT

Batch ID: **R269397a** Instrument ID **VMS10** Method: **SW8260C**

LCS		Sample ID: VLCSW1-190828-R269397a				Units: µg/L		Analysis Date: 8/28/2019 05:27 PM		
Client ID:		Run ID: VMS10_190828A		SeqNo: 5881693		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	22.48	1.0	20	0	112	75-130	0			
1,1,2,2-Tetrachloroethane	16.67	1.0	20	0	83.4	75-130	0			
1,1,2-Trichloroethane	19.24	1.0	20	0	96.2	75-125	0			
1,1-Dichloroethane	20.61	1.0	20	0	103	68-142	0			
1,1-Dichloroethene	21.23	1.0	20	0	106	70-145	0			
1,2-Dichloroethane	19.87	1.0	20	0	99.4	78-125	0			
1,2-Dichloropropane	19.5	1.0	20	0	97.5	75-125	0			
2-Butanone	17.57	5.0	20	0	87.8	55-150	0			
2-Hexanone	15.61	5.0	20	0	78	60-135	0			
4-Methyl-2-pentanone	20.92	1.0	20	0	105	77-178	0			
Acetone	24.33	10	20	0	122	60-160	0			
Benzene	20.67	1.0	20	0	103	70-130	0			
Bromodichloromethane	22.75	1.0	20	0	114	75-125	0			
Bromoform	20.56	1.0	20	0	103	60-125	0			
Bromomethane	40.02	1.0	20	0	200	30-185	0			S
Carbon disulfide	25.1	1.0	20	0	126	60-165	0			
Carbon tetrachloride	21.11	1.0	20	0	106	65-140	0			
Chlorobenzene	18.18	1.0	20	0	90.9	80-120	0			
Chloroethane	23.26	1.0	20	0	116	31-172	0			
Chloroform	20.02	1.0	20	0	100	66-135	0			
Chloromethane	17.48	1.0	20	0	87.4	46-148	0			
cis-1,2-Dichloroethene	19.5	1.0	20	0	97.5	75-134	0			
cis-1,3-Dichloropropene	20.41	1.0	20	0	102	70-130	0			
Dibromochloromethane	19.1	1.0	20	0	95.5	60-115	0			
Ethylbenzene	17.52	1.0	20	0	87.6	76-123	0			
m,p-Xylene	35.65	2.0	40	0	89.1	75-130	0			
Methylene chloride	17.75	5.0	20	0	88.8	72-125	0			
o-Xylene	18.58	1.0	20	0	92.9	76-127	0			
Styrene	19.65	1.0	20	0	98.2	83-137	0			
Tetrachloroethene	20.11	1.0	20	0	101	68-166	0			
Toluene	17.47	1.0	20	0	87.4	76-125	0			
trans-1,2-Dichloroethene	21.25	1.0	20	0	106	80-140	0			
trans-1,3-Dichloropropene	19.04	1.0	20	0	95.2	56-132	0			
Trichloroethene	21.57	1.0	20	0	108	77-125	0			
Vinyl chloride	21.94	1.0	20	0	110	50-136	0			
Xylenes, Total	54.23	3.0	60	0	90.4	76-127	0			
<i>Surr: 1,2-Dichloroethane-d4</i>	19.15	0	20	0	95.8	75-120	0			
<i>Surr: 4-Bromofluorobenzene</i>	19.58	0	20	0	97.9	80-110	0			
<i>Surr: Dibromofluoromethane</i>	20.57	0	20	0	103	85-115	0			
<i>Surr: Toluene-d8</i>	18.31	0	20	0	91.6	85-110	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Wood Environment & Infrastructure Solutions, Inc.
 Work Order: 19081718
 Project: TFS Rochester (3359-15-1040)

QC BATCH REPORT

Batch ID: **R269397a** Instrument ID **VMS10** Method: **SW8260C**

MS		Sample ID: 19081711-05A MS				Units: µg/L		Analysis Date: 8/29/2019 01:10 AM		
Client ID:		Run ID: VMS10_190828A		SeqNo: 5881703		Prep Date:		DF: 10		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	246.7	10	200	0	123	75-130	0			
1,1,2,2-Tetrachloroethane	157.7	10	200	0	78.8	75-130	0			
1,1,2-Trichloroethane	189	10	200	0	94.5	75-125	0			
1,1-Dichloroethane	217.3	10	200	0	109	68-142	0			
1,1-Dichloroethene	243.4	10	200	0	122	70-145	0			
1,2-Dichloroethane	196.6	10	200	0	98.3	78-125	0			
1,2-Dichloropropane	193.7	10	200	0	96.8	75-125	0			
2-Butanone	202.6	50	200	0	101	55-150	0			
2-Hexanone	166.3	50	200	0	83.2	60-135	0			
4-Methyl-2-pentanone	224.9	10	200	0	112	77-178	0			
Acetone	269.5	100	200	0	135	60-160	0			
Benzene	215.5	10	200	0	108	70-130	0			
Bromodichloromethane	207.4	10	200	0	104	75-125	0			
Bromoform	173.5	10	200	0	86.8	60-125	0			
Bromomethane	381.8	10	200	0	191	30-185	0			S
Carbon disulfide	252.4	10	200	0	126	60-165	0			
Carbon tetrachloride	224.5	10	200	0	112	65-140	0			
Chlorobenzene	180.9	10	200	0	90.4	80-120	0			
Chloroethane	233.7	10	200	0	117	31-172	0			
Chloroform	198.4	10	200	0	99.2	66-135	0			
Chloromethane	196.5	10	200	0	98.2	46-148	0			
cis-1,2-Dichloroethene	646.9	10	200	417.1	115	75-134	0			
cis-1,3-Dichloropropene	193.2	10	200	0	96.6	70-130	0			
Dibromochloromethane	166.4	10	200	0	83.2	60-115	0			
Ethylbenzene	185.3	10	200	0	92.6	76-123	0			
m,p-Xylene	372.8	20	400	0	93.2	75-130	0			
Methylene chloride	180.7	50	200	0	90.4	72-125	0			
o-Xylene	189.5	10	200	0	94.8	76-127	0			
Styrene	190.1	10	200	0	95	83-137	0			
Tetrachloroethene	213.9	10	200	0	107	68-166	0			
Toluene	180.6	10	200	0	90.3	76-125	0			
trans-1,2-Dichloroethene	222.6	10	200	0	111	80-140	0			
trans-1,3-Dichloropropene	172.2	10	200	0	86.1	56-132	0			
Trichloroethene	226.9	10	200	0	113	77-125	0			
Vinyl chloride	696.3	10	200	429.9	133	50-136	0			
Xylenes, Total	562.3	30	600	0	93.7	76-127	0			
Surr: 1,2-Dichloroethane-d4	179.4	0	200	0	89.7	75-120	0			
Surr: 4-Bromofluorobenzene	203.5	0	200	0	102	80-110	0			
Surr: Dibromofluoromethane	203	0	200	0	102	85-115	0			
Surr: Toluene-d8	181	0	200	0	90.5	85-110	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Wood Environment & Infrastructure Solutions, Inc.

QC BATCH REPORT

Work Order: 19081718

Project: TFS Rochester (3359-15-1040)

Batch ID: **R269397a**

Instrument ID **VMS10**

Method: **SW8260C**

The following samples were analyzed in this batch:

19081718-01A	19081718-02A	19081718-03A
19081718-04A	19081718-05A	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Wood Environment & Infrastructure Solutions, Inc.
 Work Order: 19081718
 Project: TFS Rochester (3359-15-1040)

QC BATCH REPORT

Batch ID: **R269576a** Instrument ID **VMS10** Method: **SW8260C**

MBLK		Sample ID: VBLKW1-190830-R269576a				Units: µg/L		Analysis Date: 8/30/2019 01:53 PM		
Client ID:		Run ID: VMS10_190830A		SeqNo: 5886444		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acetone	ND	10								
Surr: 1,2-Dichloroethane-d4	18.72	0	20	0	93.6	75-120	0			
Surr: 4-Bromofluorobenzene	19.62	0	20	0	98.1	80-110	0			
Surr: Dibromofluoromethane	18.75	0	20	0	93.8	85-115	0			
Surr: Toluene-d8	17.92	0	20	0	89.6	85-110	0			

LCS		Sample ID: VLCSW1-190830-R269576a				Units: µg/L		Analysis Date: 8/30/2019 01:02 PM		
Client ID:		Run ID: VMS10_190830A		SeqNo: 5886443		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acetone	23.85	10	20	0	119	60-160	0			
Surr: 1,2-Dichloroethane-d4	17.8	0	20	0	89	75-120	0			
Surr: 4-Bromofluorobenzene	20.25	0	20	0	101	80-110	0			
Surr: Dibromofluoromethane	20.28	0	20	0	101	85-115	0			
Surr: Toluene-d8	17.92	0	20	0	89.6	85-110	0			

MS		Sample ID: 19081718-02A MS				Units: µg/L		Analysis Date: 8/30/2019 08:45 PM		
Client ID: ATR-MW72 (32)-G082219		Run ID: VMS10_190830A		SeqNo: 5887461		Prep Date:		DF: 5		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acetone	154.2	50	100	66	88.2	60-160	0			
Surr: 1,2-Dichloroethane-d4	90.4	0	100	0	90.4	75-120	0			
Surr: 4-Bromofluorobenzene	98.7	0	100	0	98.7	80-110	0			
Surr: Dibromofluoromethane	95.85	0	100	0	95.8	85-115	0			
Surr: Toluene-d8	87.5	0	100	0	87.5	85-110	0			

MSD		Sample ID: 19081718-02A MSD				Units: µg/L		Analysis Date: 8/30/2019 09:02 PM		
Client ID: ATR-MW72 (32)-G082219		Run ID: VMS10_190830A		SeqNo: 5887462		Prep Date:		DF: 5		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Acetone	168.2	50	100	66	102	60-160	154.2	8.72	30	
Surr: 1,2-Dichloroethane-d4	90.1	0	100	0	90.1	75-120	90.4	0.332	30	
Surr: 4-Bromofluorobenzene	102.9	0	100	0	103	80-110	98.7	4.17	30	
Surr: Dibromofluoromethane	99.95	0	100	0	100	85-115	95.85	4.19	30	
Surr: Toluene-d8	87.55	0	100	0	87.6	85-110	87.5	0.0571	30	

The following samples were analyzed in this batch:

19081718-02A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.



Cincinnati, OH
+1 513 733 5336

Fort Collins, CO
+1 970 490 1511

Everett, WA
+1 425 356 2600

Holland, MI
+1 616 399 6070

Chain of Custody Form

Houston, TX
+1 281 530 5656

Spring City, PA
+1 610 948 4903

Middletown, PA
+1 717 944 5541

Salt Lake City, UT
+1 801 266 7700

South Charleston, WV
+1 304 356 3168

York, PA
+1 717 505 5280

Page 1 of 1

COC ID: 187796

ALS Project Manager: **EB**

ALS Work Order #: 19081718

Customer Information		Project Information		Parameter/Method Request for Analysis											
Purchase Order	CO12609102	Project Name	Stability and Annual	A	VOCs 82603										
Work Order		Project Number	3359 15 1040	B											
Company Name	Wood Environment & Infrastructure Soluti	Bill To Company	Wood Environment & Infrastructure Sol	C											
Send Report To	Paul Stork	Invoice Attn	Accounts Payable	D											
Address	521 Byers Road, Suite 204	Address	521 Byers Road, Suite 204	E											
				F											
City/State/Zip	Miamisburg, OH 45342	City/State/Zip	Miamisburg, OH 45342	G											
Phone	(937) 859-3600	Phone	(937) 859-3600	H											
Fax	(937) 859-7951	Fax	(937) 859-7951	I											
e-Mail Address	Paul.Stork@woodplc.com	e-Mail Address		J											

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	ATR-MW68(32)-G082219	8/22/19	1530	GW	1	3	X										
2	ATR-MW72(32)-G082219	8/22/19	1435	GW	1	3	X										
3	ATR-MW59(46)-G082219	8/22/19	0925	GW	1	3	X										
4	ATR-MW59(29)-G082219	8/22/19	1010	GW	1	3	X										
5	ATR-MW59(29)-G082219R	8/22/19	1010	GW	1	3	X										
6	ATR-MW81(27)-G08219	8/21/19	1515	GW	1	3	X										
7																	
8																	
9																	
10																	

Sampler(s) Please Print & Sign		Shipment Method		Required Turnaround Time: (Check Box)				Results Due Date:								
				<input type="checkbox"/> Std 10 WK Days <input checked="" type="checkbox"/> 5 WK Days <input type="checkbox"/> Other _____ <input type="checkbox"/> 2 WK Days <input type="checkbox"/> 24 Hour												
Relinquished by: <i>Raquel Wike</i>	Date: 8/23/19	Time: 0950	Received by: <i>Reuben</i>	Notes:												
Relinquished by:	Date:	Time:	Received by (Laboratory):	Cooler ID	Cooler Temp.	QC Package: (Check One Box Below)										
			<i>[Signature]</i> 8/23/19 15:30	3.40C		<input type="checkbox"/> Level II Std QC	<input type="checkbox"/> TRRP CheckList									
Logged by (Laboratory): <i>MSG</i>	Date: 8/23/19	Time: 15:35	Checked by (Laboratory): <i>EB</i>	SR2		<input type="checkbox"/> Level III Std QC/Raw Data	<input type="checkbox"/> TRRP Level IV									
Preservative Key:	1-HCl	2-HNO ₃	3-H ₂ SO ₄	4-NaOH	5-Na ₂ S ₂ O ₃	6-NaHSO ₄	7-Other	8-4°C	9-5035	PH17	<input type="checkbox"/> Other _____					

Note: 1. Any changes must be made in writing once samples and COC Form have been submitted to ALS Environmental.
 2. Unless otherwise agreed in a formal contract, services provided by ALS Environmental are expressly limited to the terms and conditions stated on the reverse.
 3. The Chain of Custody is a legal document. All information must be completed accurately.

Sample Receipt Checklist

Client Name: **WOOD-DAYTON**

Date/Time Received: **23-Aug-19 13:30**

Work Order: **19081718**

Received by: **MJG**

Checklist completed by Matthew Gaylord 23-Aug-19
eSignature Date

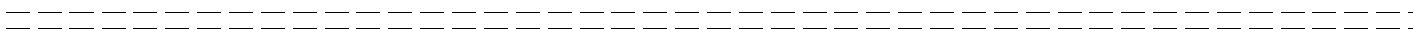
Reviewed by: Eheland Bramworth 23-Aug-19
eSignature Date

Matrices: groundwater

Carrier name: Courier

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample(s) received on ice?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Temperature(s)/Thermometer(s):	<u>3.4/3.4C</u>		<u>SR2</u>
Cooler(s)/Kit(s):	<u></u>		
Date/Time sample(s) sent to storage:	<u>8/23/2019 3:47:53 PM</u>		
Water - VOA vials have zero headspace?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
pH adjusted?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>
pH adjusted by:	<u></u>		

Login Notes:



Client Contacted: _____ Date Contacted: _____ Person Contacted: _____

Contacted By: _____ Regarding: _____

Comments:

CorrectiveAction:



Pace Analytical Energy Services LLC
220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

August 29, 2019

Paul Stork
Wood Environment & Infrastructure Solutions, Inc
521 Byers Road
Suite 204
Miamisburg, OH 45342

RE: **3329151040**

Pace Workorder: 31268

Dear Paul Stork:

Enclosed are the analytical results for sample(s) received by the laboratory on Tuesday, August 27, 2019. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Ruth Welsh 08/29/2019
Ruth.Welsh@pacelabs.com

Customer Service Representative

Enclosures

As a valued client we would appreciate your comments on our service.
Please email PAESfeedback@pacelabs.com.

Total Number of Pages 15

Report ID: 31268 - 1198690

Page 1 of 14



CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Energy Services LLC.

LABORATORY ACCREDITATIONS & CERTIFICATIONS

Accreditor:	Pennsylvania Department of Environmental Protection, Bureau of Laboratories
Accreditation ID:	02-00538
Scope:	NELAP Non-Potable Water
Accreditor:	West Virginia Department of Environmental Protection, Division of Water and Waste Management
Accreditation ID:	395
Scope:	Non-Potable Water
Accreditor:	South Carolina Department of Health and Environmental Control, Office of Environmental Laboratory Certification
Accreditation ID:	89009003
Scope:	Clean Water Act (CWA); Resource Conservation and Recovery Act (RCRA)
Accreditor:	State of Virginia
Accreditation ID:	460201
Scope:	Non-Potable Water
Accreditor:	NELAP: New Jersey, Department of Environmental Protection
Accreditation ID:	PA026
Scope:	Non-Potable Water
Accreditor:	NELAP: New York, Department of Health Wadsworth Center
Accreditation ID:	11815
Scope:	Non-Potable Water
Accreditor:	State of Connecticut, Department of Public Health, Division of Environmental Health
Accreditation ID:	PH-0263
Scope:	Clean Water Act (CWA) Resource Conservation and Recovery Act (RCRA)
Accreditor:	NELAP: Texas, Commission on Environmental Quality
Accreditation ID:	T104704453-09-TX
Scope:	Non-Potable Water
Accreditor:	State of New Hampshire
Accreditation ID:	299409
Scope:	Non-potable water
Accreditor:	State of Georgia
Accreditation ID:	Chapter 391-3-26
Scope:	As per the Georgia EPD Rules and Regulations for Commercial Laboratories, PAES is accredited by the Pennsylvania Department of Environmental Protection Bureau of Laboratories under the National Environmental Laboratory Approval Program (NELAC).



CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
 without the written consent of Pace Analytical Energy Services LLC.



SAMPLE SUMMARY

Workorder: 31268 3329151040

Lab ID	Sample ID	Matrix	Date Collected	Date Received
312680001	ATR-MW59(29)-G082219	Water	8/22/2019 10:10	8/27/2019 11:00
312680002	ATR-MW59(29)-G082219R	Water	8/22/2019 10:10	8/27/2019 11:00
312680003	ATR-MW68(32)-G082219	Water	8/22/2019 15:30	8/27/2019 11:00
312680004	ATR-MW72(32)-G082219	Water	8/22/2019 14:35	8/27/2019 11:00
312680005	ATR-MW81(27)-G082219	Water	8/21/2019 15:15	8/27/2019 11:00
312680006	ATR-MW6C-G082119	Water	8/21/2019 14:50	8/27/2019 11:00



CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Energy Services LLC.



PROJECT SUMMARY

Workorder: 31268 3329151040

Workorder Comments

The container pH for samples 31268 (0001-0004) were measured as below the expected pH (< 10) for those samples preserved with trisodium phosphate, as assigned to PAES method AM20GAX.

Batch Comments

Batch: DISG/7740 - AM20GAX Water QC

The matrix spike and/or spike duplicate, recovery or relative percent difference; accuracy influenced by the concentration of the reference sample 312690003. Analyte Methane. Batch acceptance based on laboratory control sample recovery.



CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Energy Services LLC.



ANALYTICAL RESULTS

Workorder: 31268 3329151040

Lab ID: **312680001** Date Received: 8/27/2019 11:00 Matrix: Water
 Sample ID: **ATR-MW59(29)-G082219** Date Collected: 8/22/2019 10:10

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
------------	---------	-------	-----	-----	----	----------	----	------------

RISK - PAES

Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	21000	ug/l	0.50	0.094	1	8/28/2019 09:15	TD	M3,n,M5
Ethane	270	ug/l	0.10	0.011	1	8/28/2019 09:15	TD	n
Ethene	0.14	ug/l	0.10	0.0080	1	8/28/2019 09:15	TD	n



CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
 without the written consent of Pace Analytical Energy Services LLC.



ANALYTICAL RESULTS

Workorder: 31268 3329151040

Lab ID: **312680002** Date Received: 8/27/2019 11:00 Matrix: Water
 Sample ID: **ATR-MW59(29)-G082219R** Date Collected: 8/22/2019 10:10

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
------------	---------	-------	-----	-----	----	----------	----	------------

RISK - PAES

Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	20000	ug/l	0.50	0.094	1	8/28/2019 09:35	TD	M3,n,M5
Ethane	250	ug/l	0.10	0.011	1	8/28/2019 09:35	TD	n
Ethene	0.14	ug/l	0.10	0.0080	1	8/28/2019 09:35	TD	n



CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
 without the written consent of Pace Analytical Energy Services LLC.



ANALYTICAL RESULTS

Workorder: 31268 3329151040

Lab ID: **312680003** Date Received: 8/27/2019 11:00 Matrix: Water
 Sample ID: **ATR-MW68(32)-G082219** Date Collected: 8/22/2019 15:30

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
------------	---------	-------	-----	-----	----	----------	----	------------

RISK - PAES

Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	11000	ug/l	0.50	0.094	1	8/28/2019 09:54	TD	M3,n,M5
Ethane	120	ug/l	0.10	0.011	1	8/28/2019 09:54	TD	n
Ethene	8.0	ug/l	0.10	0.0080	1	8/28/2019 09:54	TD	n



CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
 without the written consent of Pace Analytical Energy Services LLC.



ANALYTICAL RESULTS

Workorder: 31268 3329151040

Lab ID: **312680004** Date Received: 8/27/2019 11:00 Matrix: Water
 Sample ID: **ATR-MW72(32)-G082219** Date Collected: 8/22/2019 14:35

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
------------	---------	-------	-----	-----	----	----------	----	------------

RISK - PAES

Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	9600	ug/l	0.50	0.094	1	8/28/2019 10:11	TD	M3,n,M5
Ethane	14	ug/l	0.10	0.011	1	8/28/2019 10:11	TD	n
Ethene	0.33	ug/l	0.10	0.0080	1	8/28/2019 10:11	TD	n



CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
 without the written consent of Pace Analytical Energy Services LLC.



ANALYTICAL RESULTS

Workorder: 31268 3329151040

Lab ID: **312680005** Date Received: 8/27/2019 11:00 Matrix: Water
 Sample ID: **ATR-MW81(27)-G082119** Date Collected: 8/21/2019 15:15

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
------------	---------	-------	-----	-----	----	----------	----	------------

RISK - PAES

Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	21000	ug/l	0.50	0.094	1	8/28/2019 10:28	TD	M3,n,M5
Ethane	160	ug/l	0.10	0.011	1	8/28/2019 10:28	TD	n
Ethene	0.20	ug/l	0.10	0.0080	1	8/28/2019 10:28	TD	n



CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
 without the written consent of Pace Analytical Energy Services LLC.



ANALYTICAL RESULTS

Workorder: 31268 3329151040

Lab ID: **312680006** Date Received: 8/27/2019 11:00 Matrix: Water
 Sample ID: **ATR-MW6C-G082119** Date Collected: 8/21/2019 14:50

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
------------	---------	-------	-----	-----	----	----------	----	------------

RISK - PAES

Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	16000	ug/l	0.50	0.094	1	8/28/2019 10:58	TD	M3,n,M5
Ethane	22	ug/l	0.10	0.011	1	8/28/2019 10:58	TD	n
Ethene	0.42	ug/l	0.10	0.0080	1	8/28/2019 10:58	TD	n



CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
 without the written consent of Pace Analytical Energy Services LLC.

ANALYTICAL RESULTS QUALIFIERS

Workorder: 31268 3329151040

DEFINITIONS/QUALIFIERS

MDL	Method Detection Limit. Can be used synonymously with LOD; Limit Of Detection.
PQL	Practical Quantitation Limit. Can be used synonymously with LOQ; Limit Of Quantitation.
ND	Not detected at or above reporting limit.
DF	Dilution Factor.
S	Surrogate.
RPD	Relative Percent Difference.
% Rec	Percent Recovery.
U	Indicates the compound was analyzed for, but not detected at or above the noted concentration.
J	Estimated concentration greater than the set method detection limit (MDL) and less than the set reporting limit (PQL).
n	The laboratory does not hold NELAP/TNI accreditation for this method or analyte.
M5	The matrix spike duplicate sample recovery was outside laboratory control limits.
M3	The matrix spike sample recovery was outside laboratory control limits.

CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Energy Services LLC.



QUALITY CONTROL DATA

Workorder: 31268 3329151040

QC Batch: DISG/7740 Analysis Method: AM20GAX
 QC Batch Method: AM20GAX
 Associated Lab Samples: 312680001, 312680002, 312680003, 312680004, 312680005, 312680006

METHOD BLANK: 62864

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
RISK				
Methane	ug/l	0.50 U	0.50	M3,n,M5
Ethane	ug/l	0.10 U	0.10	n
Ethene	ug/l	0.10 U	0.10	n

LABORATORY CONTROL SAMPLE & LCSD: 62866 62868

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
Methane	ug/l	750	790	720	106	96	80-120	9.9	20	M3,M5,n
Ethane	ug/l	38	36	34	94	91	80-120	3.4	20	n
Ethene	ug/l	35	33	32	94	91	80-120	3.5	20	n

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 62892 62893 Original: 312690003

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
RISK											
Methane	ug/l	260	40	370	370	282	282	70-130	0.01	20	M3,n,M5
Ethane	ug/l	0.62	76	82	84	108	111	70-130	2.3	20	n
Ethene	ug/l	0.06	71	76	79	108	111	70-130	3.3	20	n



CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Energy Services LLC.



QUALITY CONTROL DATA QUALIFIERS

Workorder: 31268 3329151040

QUALITY CONTROL PARAMETER QUALIFIERS

- M3 The matrix spike sample recovery was outside laboratory control limits.
- M5 The matrix spike duplicate sample recovery was outside laboratory control limits.
- n The laboratory does not hold NELAP/TNI accreditation for this method or analyte.



CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Energy Services LLC.



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: 31268 3329151040

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
312680001	ATR-MW59(29)-G082219			AM20GAX	DISG/7740
312680002	ATR-MW59(29)-G082219R			AM20GAX	DISG/7740
312680003	ATR-MW68(32)-G082219			AM20GAX	DISG/7740
312680004	ATR-MW72(32)-G082219			AM20GAX	DISG/7740
312680005	ATR-MW81(27)-G082119			AM20GAX	DISG/7740
312680006	ATR-MW6C-G082119			AM20GAX	DISG/7740



CERTIFICATE OF ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Energy Services LLC.



CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

Company: **WOOD EGIS**

Billing Information: 521 Byers Rd. Miamisburg, OH 45342

Address: 521 Byers Rd. Miamisburg, OH 45342

Report To: **Paul Stark**

Email To: **Paul.Stark@woodolc.com**

Copy To:

Site Collection Info/Address:

Customer Project Name/Number: **3359151040**

State: **IN** County/City: **Rockaster** Time Zone Collected: **[] PT [] MT [] CT [] ET**

Phone: **937 859 3600**

Site/Facility ID #: **IN/ Rockaster**

Email: **Paul.Stark@woodolc.com**

Compliance Monitoring? **[] Yes [] No**

Collected By (print): **Paul Hicks**

Purchase Order #: **000038105**

Collected By (signature): **[Signature]**

Turnaround Date Required: **[] Yes [] No**

Sample Disposal: **[] Dispose as appropriate [] Return [] Archive: [] Hold:**

Rush: **[] Same Day [] Next Day [] 2 Day [] 3 Day [] 4 Day [] 5 Day**

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Field Filtered (if applicable): **[] Yes [] No**

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start)		Composite End		Res Cl	# of Ctns
			Date	Time	Date	Time		
ATR-MNW51(22)-4082219	GW	G	8/22/19	10:10				3
ATR-MNW59(22)-4082219	GW	G	8/22/19	10:10				3
ATR-MNW48(32)-4082219	GW	G	8/22/19	15:30				3
ATR-MNW72(32)-4082219	GW	G	8/22/19	14:35				3
ATR-MNW81(22)-4082219	GW	G	8/21/19	15:15				3
ATR-MNW6C-4082219	GW	G	8/21/19	14:50				3

AM20GAX

LAB USE ONLY - Affix Workorder/Login Label Here or List Pace Workorder Number or MTIL Log-in Number Here
31268
2085219

Container Preservative Type **

** Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other

Analyses

Lab Profile/Line:

Lab Sample Receipt Checklist:

- Custody Seals Present/Intact **[] Y [] N [] NA**
- Custody Signatures Present **[] Y [] N [] NA**
- Collector Signatures Present **[] Y [] N [] NA**
- Bottles Intact **[] Y [] N [] NA**
- Correct Bottles **[] Y [] N [] NA**
- Sufficient Volume **[] Y [] N [] NA**
- Samples Received on Ice **[] Y [] N [] NA**
- VOA - Headspace Acceptable **[] Y [] N [] NA**
- USDA Regulated Soils **[] Y [] N [] NA**
- Samples in Holding Time **[] Y [] N [] NA**
- Residual Chlorine Present **[] Y [] N [] NA**
- CI Strips: **[] Y [] N [] NA**
- sample pH Acceptable **[] Y [] N [] NA**
- pH Strips: **[] Y [] N [] NA**
- Sulfide Present **[] Y [] N [] NA**
- Lead Acetate Strips: **[] Y [] N [] NA**

LAB USE ONLY: Lab Sample # / Comments:

Customer Remarks / Special Conditions / Possible Hazards:

Type of Ice Used: **Wet** Blue Dry None

Packing Material Used: **Bubble wrap**

Radchem sample(s) screened (<500 cpm): Y N **NA**

Lab Tracking #: **77607643 2288396**

Samples received via: **FEDEX** UPS Client Courier Pace Courier

MTIL LAB USE ONLY

Table #: _____

Actnum: _____

Template: _____

Prelogin: _____

PM: _____

PB: _____

Lab Sample Temperature Info:

Temp Blank Received: **[] Y [] N [] NA**

Therm ID#: _____

Cooler 1 Temp Upon Receipt: **7.8°C**

Cooler 1 Therm Corr. Factor: _____ °C

Cooler 1 Corrected Temp: _____ °C

Comments: _____

Trip Blank Received: **[] Y [] N [] NA**

HCL MeOH TSP Other

Non Conformance(s): **[] YES [] NO**

Page: _____ of: _____

**DATA VALIDATION REPORT
AUGUST 2019 GROUNDWATER SAMPLING
TEXTRON FORMER TORX FACILITY
ROCHESTER, INDIANA**

1.0 INTRODUCTION

Groundwater samples were collected during monitoring well sampling completed in August 2019 at the Former TORX Facility in Rochester, Indiana. Samples were analyzed by ALS Laboratory Group in Holland, Michigan. A summary of sample delivery groups (SDGs) and field samples included in this review is contained in Table 1. Samples reviewed in this report were analyzed for the following USEPA SW-846 (USEPA, 1996) method:

- Volatile Organic Compounds (VOCs) by USEPA Method 8260C

Sample results were validated using general procedures in the USEPA National Data Validation Guidelines (USEPA, 1999), Indiana Department of Environmental Management (IDEM) data review guidelines (IDEM, 2012), and data validation goals identified in the Work Plan Appendix N Quality Assurance Project Plan (QAPP) [AMEC, 2014]. Project data quality criteria for the VOC analyses are identified based on IDEM quality control (QC) goals (IDEM, 1998) and the professional judgment of the project chemist. A summary of project QC limits used during data validation is provided in Table 2. Full validation was completed on ten percent of the samples. Full validation was completed on the following samples:

- ATR-MW37 (98)- G081319
- ATR-MW50 (45)-G081419
- ATR-MW29 (132)-G081419
- ATR-MW29 (82.5)-G081419
- ATR-MW29 (103.3)- G081419
- ATR-MW32 (110)- G081519
- ATR-MW32 (89)- G081519
- ATR-MW32 (24.1)- G081519
- ATR-MW30 (41.1)- G081519
- ATR-MW1 - G081519
- ATR-MW48 (159)- G081519
- ATR-MW48 (159)- G081519R
- ATR-MW34 (84)- G081519
- ATR-MW34 (37)- G081519

Full validation includes review of raw instrument data, lab notebook records, and calculation checks in addition to the following parameters:

- laboratory report narrative
- sample chain of custody/sample receipt records
- sample preservation and holding times
- instrument tuning and calibration
- QC blanks
- laboratory control sample (LCS) results
- matrix spike and matrix spike duplicate (MS/MSD) sample results

- surrogate recovery
- internal standard recovery and retention times
- field duplicate sample results
- sample results summary
- verification of electronic database results

Level II validation was completed on the remaining ninety percent of the data in accordance with specifications in the Work Plan. During the Level II validation the major quality assurance (QA)/QC indicators of analytical data quality are reviewed, but review of calculations and raw laboratory data is not included. QC data checks are completed using QC summary forms provided in the laboratory packages. The following parameters are checked during the Level II review:

- laboratory report narrative
- sample chain of custody/sample receipt records
- sample preservation and holding times
- QC blanks
- laboratory control sample (LCS) results
- matrix spike and matrix spike duplicate (MS/MSD) sample results
- surrogate recovery
- internal standard recovery and retention times
- field duplicate sample results
- sample results summary
- verification of electronic database results

A summary of qualification actions is presented in Table 3. Table 3 includes listings of validation reason codes to document the reason for the validation qualification. Final sample results are presented in Table 4. A summary of table notes applicable to Tables 1, 3, and 4 is presented just before Table 1. Target analytes were reported as detections if concentrations were greater than the reporting limit (RL). If target compounds were not detected, or concentrations were less than RLs, the compounds are reported as non-detect (U) at the reporting limits. Data validation qualifiers were added to results if associated quality control data did not meet goals in the validation guidelines or project work plan. The following data quality flags shown below were used to qualify data that did not meet project specific QC goals.

- UJ – undetected and reporting limit is estimated
- U – undetected
- J - estimated value
- J+ - estimated value and potentially biased high

2.0 VALIDATION OBSERVATION AND ACTIONS

With the exception of the data qualification actions discussed in the sections below, results are interpreted to be usable as reported by the laboratory. A summary of qualification actions is presented on Table 3. Validation reason codes are applied to the results to document the reason for the validation qualification.

2.1 VOCs

During the Level II review the data quality indicators listed below were reviewed. Checks that included validation actions are marked with an asterisk (*) and discussed in the following sections.

- laboratory report narrative
- sample chain of custody/sample receipt records
- sample preservation and holding times
- QC blanks*
- laboratory control sample (LCS) results*
- matrix spike and matrix spike duplicate (MS/MSD) sample results*
- surrogate recovery*
- internal standard recovery and retention times
- field duplicate sample results
- sample results summary
- verification of electronic database results

During the full validation the data quality indicators listed below were also reviewed:

- instrument tuning
- initial calibration
- continuing calibration*
- calculation checks specified in USEPA guidelines
- analyte identification and quantitation

QC Blanks

Due to contamination in the associated trip blank (11 ug/L) the result for acetone in sample ATR-OW6(63)-G082119 and ATR-OW6(63)-G082119R were qualified non-detect (U). The qualified results are included in Table 3 with reason code BL2.

Continuing Calibration

The percent difference for carbon disulfide, 2-hexanone, bromomethane, vinyl chloride, chloroethane, 1,1,2,2-tetrachloroethane, and 4-methyl-2-pentanone in various analytical batches exceeded the project goal of 20. These VOCs were not detected in associated samples, and reporting limits for these VOCs in associated samples were qualified estimated (UJ). Qualified results are summarized in Table 3 with reason code CCV%D.

LCS

In the LCS associated with batch R269467a the percent recovery of carbon disulfide was greater than the limit of 130. Of the associated samples, carbon disulfide was only detected in sample ATR-MW71(33)-G082219. The detection of carbon disulfide in sample ATR-MW71(33)-G082219 was qualified estimated (J). The MS/MSD for sample ATR-MW71(33)-G082219 also had a relative percent difference for carbon disulfide that exceeded the precision goal. The qualified result is included in Table 3 with reason codes LCSH and MSRPD.

MS/MSD

Multiple MS/MSD analyses were completed using groundwater samples from this event. The majority of VOCs has recoveries within the QC limit goal of 70-130 percent. A subset of results for the following compounds was qualified as estimated values (J+/UJ) due to MS/MSD percent recoveries outside the QAPP specified control limits.

2-hexanone
Bromoform
Dibromochloromethane
trans-1,3-Dichloropropene
Vinyl chloride

In the MS/MSD associated with sample ATR-MW39 (13)- G081319, percent recoveries for 2-hexanone (67), bromoform (64), dibromochloromethane (66), and trans-1,3-dichloropropene (68) were less than the 70-130 control limits, indicating a potential low bias. Reporting limits were qualified estimated (UJ) and are included in Table 3 with reason code MSL.

In the MS/MSD associated with sample ATR-MW60 (38)-G082219, percent recovery for vinyl chloride (133) in the MS was greater than the 70-130 control limits. The result for vinyl chloride was qualified estimated with a potential high bias (J+). The result is included in Table 3 with reason code MSH.

The MS/MSD for sample ATR-MW71(33)-G082219 had a relative percent difference for carbon disulfide that exceeded the precision goal. The result for carbon disulfide is qualified as estimated (J). The qualified result is included in Table 3 with reason code MSRPD.

Surrogates

Percent recoveries of the surrogate 1,2-dichloroethane-d4 (82-83) in samples ATR-MW39 (76.7)-G081319, ATR-MW39 (29.3)- G081319, and ATR-MW39 (13)- G081319 were less than the 85-115 control limits, indicating potential low bias. No VOCs were detected in samples ATR-MW39 (76.7)-G081319, ATR-MW39 (29.3)- G081319, and ATR-MW39 (13)- G081319 and reporting limits were qualified estimated (UJ). Qualified results are included in Table 3 with reason code SSL.

Reference:

IDEM, 1998. "Guidance to the Performance and Presentation of Analytical Chemistry Data"; Indiana Department of Environmental Monitoring; Technical Waste Assessment, Rev. 1: July 16, 1998.

IDEM, 2012. "Remediation Closure Guide"; Office of Land Quality; Indiana Department of Environmental Management; March 22, 2012, with corrections through July 9, 2012.

AMEC, 2014. "Investigation Work Plan Former TORX Facility 4366 North Old US Rt. 31 Rochester, Indiana"; Appendix N QAPP – Groundwater Data Collection, Sampling, and Analyses; June 2014.

U.S. Environmental Protection Agency (USEPA), 1996. "Test Methods for Evaluating Solid Waste"; Laboratory Manual Physical/Chemical Methods; Office of Solid Waste and Emergency Response; Washington, DC; SW-846; November 1986; Revision 4 -December 1996.

U.S. Environmental Protection Agency (USEPA), 1999. "USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review"; Office of Emergency and Remedial Response; EPA-540/R-99/008; October 1999.

Data Validator: Liesel Krout



Date: October 25, 2019

Report Reviewed by: Chris Ricardi, NRCC_EAC



Date: November 1, 2019

Standard Table Notes:

Sample Type (QC Code)

FS – field sample
FD – field duplicate
TB – trip blank
EB – equipment blank
FB – field blank

Matrix

GW – ground water
BW – blank water
TW – tap water
SV – soil vapor
SED - sediment

Units

mg/L – milligrams per liter
ng/L – nanograms per liter
µg/L – micrograms per liter
mg/kg – milligrams per kilogram
µg/kg – micrograms per kilogram
µg/m³ – micrograms per cubic meter

Qualifiers

U – not detected above quantitation limit
J – estimated quantity
J+ - estimated quantity, biased high
J- - estimated quantity, biased low
R – data unusable

Fraction

T – total
D – dissolved
N – normal

Qualification Reason Codes

BL1 – method blank qualifier
BL2 – field or trip blank qualifier
CCV – continuing calibration verification recovery outside limits
CCV%D – continuing calibration verification percent difference exceeds goal
CCVRRF – continuing calibration relative response factor low
CI – chromatographic interference present
DCPD – dual column percent difference exceeds limit
E – result exceeds calibration range
FD – field duplicate precision goal exceeded
FP – false positive interference
HT – holding time for prep or analysis exceeded
HTG – holding time for prep or analysis grossly exceeded
ICV – initial calibration verification recovery outside limit
ICVRRF – initial calibration verification relative response factor low
ICVRS D – initial calibration verification % relative standard deviation exceeds goal
ISH – internal standard response greater than limit
ISL – internal standard response less than limit
LCSH – laboratory control sample recovery high
LCSL – laboratory control sample recovery low
LCSRPD – laboratory control sample/duplicate relative % difference precision goal exceeded
LD – lab duplicate precision goal exceeded
MSH – matrix spike and/or MS duplicate recovery high
MSL – matrix spike and/or MS duplicate recovery low
MSRPD – matrix spike/duplicate relative % difference precision goal exceeded
N – analyte identification is not certain
PEM – performance evaluation mixture exceeds limit
PM – sample percent moisture exceeds EPA guideline
SD – serial dilution result exceeds percent difference limit
SP – sample preservation/collection does not meet method requirement
SSH – surrogate recovery high
SSL – surrogate recovery low
TD – dissolved concentration exceeds total

TABLE 1 - SAMPLE AND ANALYSIS SUMMARY
DATA VALIDATION REPORT
AUGUST 2019 GROUNDWATER SAMPLING
TEXTRON FORMER TORX FACILITY
ROCHESTER, INDIANA

SDG	Location	Field Sample ID	Sample Date	Matrix	Lab Sample ID	Method SW8260C	
						Sample Type	Count
19081137	MW-29(103.3)	ATR-MW29 (103.3)-G081419	8/14/2019	GW	19081137-31A	FS	36
19081137	MW-29(132.8)	ATR-MW29 (132)-G081419	8/14/2019	GW	19081137-29A	FS	36
19081137	MW-29(82.5)	ATR-MW29 (82.5)-G081419	8/14/2019	GW	19081137-30A	FS	36
19081137	MW-31(139.2)	ATR-MW31 (139.2)- G081419	8/14/2019	GW	19081137-20A	FS	36
19081137	MW-31(30.9)	ATR-MW31 (30.9)-G081419	8/14/2019	GW	19081137-24A	FS	36
19081137	MW-31(55.5)	ATR-MW31 (55.5)-G081419	8/14/2019	GW	19081137-21A	FS	36
19081137	MW-31(98.5)	ATR-MW31 (98.5)-G081419	8/14/2019	GW	19081137-22A	FS	36
19081137	MW-31(98.5)	ATR-MW31 (98.5)-G081419R	8/14/2019	GW	19081137-23A	FD	36
19081137	MW-35(148)	ATR-MW35 (148)- G081419	8/14/2019	GW	19081137-19A	FS	36
19081137	MW-35(45)	ATR-MW35 (45)- G081419	8/14/2019	GW	19081137-16A	FS	36
19081137	MW-35(90)	ATR-MW35 (90)- G081419	8/14/2019	GW	19081137-17A	FS	36
19081137	MW-36(124.5)	ATR-MW36 (124.5)- G081319	8/13/2019	GW	19081137-14A	FS	36
19081137	MW-36(35.2)	ATR-MW36 (35.2)- G081319	8/13/2019	GW	19081137-15A	FS	36
19081137	MW-36(92.4)	ATR-MW36 (92.4)- G081319	8/13/2019	GW	19081137-13A	FS	36
19081137	MW-37(23.3)	ATR-MW37 (23.3)- G081319	8/13/2019	GW	19081137-01A	FS	36
19081137	MW-37(70)	ATR-MW37 (70)- G081319	8/13/2019	GW	19081137-02A	FS	36
19081137	MW-37(98)	ATR-MW37 (98)- G081319	8/13/2019	GW	19081137-03A	FS	36
19081137	MW-38(102.5)	ATR-MW38 (102.5)- G081319	8/13/2019	GW	19081137-08A	FS	36
19081137	MW-38(20.8)	ATR-MW38 (20.8)- G081319	8/13/2019	GW	19081137-09A	FS	36
19081137	MW-38(29.1)	ATR-MW38 (29.1)- G081319	8/13/2019	GW	19081137-10A	FS	36
19081137	MW-38(69.9)	ATR-MW38 (69.9)- G081319	8/13/2019	GW	19081137-11A	FS	36
19081137	MW-38(69.9)	ATR-MW38 (69.9)- G081319R	8/13/2019	GW	19081137-12A	FD	36
19081137	MW-39(13)	ATR-MW39 (13)- G081319	8/13/2019	GW	19081137-06A	FS	36
19081137	MW-39(29.3)	ATR-MW39 (29.3)- G081319	8/13/2019	GW	19081137-05A	FS	36
19081137	MW-39(76.8)	ATR-MW39 (76.7)- G081319	8/13/2019	GW	19081137-04A	FS	36
19081137	MW-50(45)	ATR-MW50 (45)-G081419	8/14/2019	GW	19081137-28A	FS	36
19081137	MW-50(80)	ATR-MW50 (80)-G081419	8/14/2019	GW	19081137-27A	FS	36
19081137	MW-51(25)	ATR-MW51 (25)-G081419	8/14/2019	GW	19081137-26A	FS	36
19081137	MW-51(70)	ATR-MW51 (70)-G081419	8/14/2019	GW	19081137-25A	FS	36
19081137	QC	ATR-EB001-081319	8/13/2019	BW	19081137-07A	EB	36
19081137	QC	ATR-EB001-081419	8/14/2019	BW	19081137-18A	EB	36
19081137	QC	ATR-TB001-081419	8/14/2019	BW	19081137-32A	TB	36
19081281	MW-1	ATR-MW1 - G081519	8/15/2019	GW	19081281-05A	FS	36
19081281	MW-19(53)	ATR-MW19 (53) - G081619	8/16/2019	GW	19081281-16A	FS	36
19081281	MW-24(55.9)	ATR-MW24 (55) - G081619	8/16/2019	GW	19081281-19A	FS	36
19081281	MW-24(55.9)	ATR-MW24 (55) - G081619R	8/16/2019	GW	19081281-20A	FD	36
19081281	MW-30(41.1)	ATR-MW30 (41.1) - G081519	8/15/2019	GW	19081281-04A	FS	36
19081281	MW-32(110)	ATR-MW32 (110) - G081519	8/15/2019	GW	19081281-01A	FS	36
19081281	MW-32(24.1)	ATR-MW32 (24.1) - G081519	8/15/2019	GW	19081281-03A	FS	36
19081281	MW-32(89)	ATR-MW32 (89) - G081519	8/15/2019	GW	19081281-02A	FS	36
19081281	MW-34(110)	ATR-MW34 (110) - G081519	8/15/2019	GW	19081281-10A	FS	36
19081281	MW-34(37)	ATR-MW34 (37) - G081519	8/15/2019	GW	19081281-09A	FS	36
19081281	MW-34(85)	ATR-MW34 (84) - G081519	8/15/2019	GW	19081281-08A	FS	36

TABLE 1 - SAMPLE AND ANALYSIS SUMMARY
DATA VALIDATION REPORT
AUGUST 2019 GROUNDWATER SAMPLING
TEXTRON FORMER TORX FACILITY
ROCHESTER, INDIANA

SDG	Location	Field Sample ID	Sample Date	Matrix	Lab Sample ID	Method SW8260C	
						Sample Type	Count
19081281	MW-45(185)	ATR-MW45 (185) - G081619	8/16/2019	GW	19081281-23A	FS	36
19081281	MW-48(159)	ATR-MW48 (159) - G081519	8/15/2019	GW	19081281-06A	FS	36
19081281	MW-48(159)	ATR-MW48 (159) - G081519R	8/15/2019	GW	19081281-07A	FD	36
19081281	MW-53(41)	ATR-MW53 (41) - G081619	8/16/2019	GW	19081281-18A	FS	36
19081281	MW-55(49)	ATR-MW55 (49) - G081619	8/16/2019	GW	19081281-22A	FS	36
19081281	MW-57(38)	ATR-MW57 (38) - G081619	8/16/2019	GW	19081281-21A	FS	36
19081281	MW-62(36)	ATR-MW62 (36)-G081619	8/16/2019	GW	19081281-15A	FS	36
19081281	MW-83(64)	ATR-MW83 (64) - G081619	8/16/2019	GW	19081281-14A	FS	36
19081281	MW-85(130)	ATR-MW85 (130) - G081519	8/15/2019	GW	19081281-13A	FS	36
19081281	MW-85(39)	ATR-MW85 (39) - G081519	8/15/2019	GW	19081281-12A	FS	36
19081281	QC	ATR-EB001 - 081519	8/15/2019	BW	19081281-11A	EB	36
19081281	QC	ATR-EB001 - 081619	8/16/2019	BW	19081281-17A	EB	36
19081281	QC	Trip Blank	8/16/2019	BW	19081281-24A	TB	36
19081608	MW-14	ATR-MW14-G082019	8/20/2019	GW	19081608-07A	FS	36
19081608	MW-15	ATR-MW15-G082019	8/20/2019	GW	19081608-08A	FS	36
19081608	MW-17	ATR-MW17-G082019	8/20/2019	GW	19081608-11A	FS	36
19081608	MW-20(51)	ATR-MW20(51)-G082019	8/20/2019	GW	19081608-13A	FS	36
19081608	MW-25(16.4)	ATR-MW25(16.4)-G082019	8/20/2019	GW	19081608-14A	FS	36
19081608	MW-25(32.6)	ATR-MW25(32.6)-G082019	8/20/2019	GW	19081608-10A	FS	36
19081608	MW-25(82)	ATR-MW25(82)-G082019	8/20/2019	GW	19081608-09A	FS	36
19081608	MW-26(17.5)	ATR-MW26(17.5)-G081919	8/19/2019	GW	19081608-03A	FS	36
19081608	MW-26(28.8)	ATR-MW26(28.8)-G081919	8/19/2019	GW	19081608-01A	FS	36
19081608	MW-26(58.8)	ATR-MW26(58.2)-G081919	8/19/2019	GW	19081608-02A	FS	36
19081608	MW-27(18)	ATR-MW27(18)-G081919	8/19/2019	GW	19081608-05A	FS	36
19081608	MW-27(18)	ATR-MW27(18)-G081919R	8/19/2019	GW	19081608-06A	FS	36
19081608	MW-6C	ATR-MW6C-G082119	8/21/2019	GW	19081608-15A	FS	36
19081608	MW-82(58)	ATR-MW82(58)-G082019	8/20/2019	GW	19081608-12A	FS	36
19081608	QC	ATR-EB001-081919	8/19/2019	BW	19081608-04A	EB	36
19081608	QC	ATR-EB001-082119	8/21/2019	BW	19081608-16A	EB	36
19081608	QC	ATR-TR003-082119	8/21/2019	BW	19081608-17A	TB	36
19081615	MW-11	ATR-MW11-G082019	8/20/2019	GW	19081615-12A	FS	36
19081615	MW-12	ATR-MW12-G082019	8/20/2019	GW	19081615-13A	FS	36
19081615	MW-13	ATR-MW13-G082019	8/20/2019	GW	19081615-11A	FS	36
19081615	MW-16	ATR-MW16-G081919	8/19/2019	GW	19081615-03A	FS	36
19081615	MW-20(124)	ATR-MW20(124)-G082019	8/20/2019	GW	19081615-14A	FS	36
19081615	MW-20(155)	ATR-MW20(155)-G082019	8/20/2019	GW	19081615-10A	FS	36
19081615	MW-20(35)	ATR-MW20(35)-G082019	8/20/2019	GW	19081615-09A	FS	36
19081615	MW-27(104.2)	ATR-MW27(104.2)-G081919	8/19/2019	GW	19081615-08A	FS	36
19081615	MW-27(53.05)	ATR-MW27(53.05)-G081919	8/19/2019	GW	19081615-06A	FS	36
19081615	MW-27(75.4)	ATR-MW27(75.4)-G081919	8/19/2019	GW	19081615-07A	FS	36
19081615	MW-56(50)	ATR-MW56(51)-G082119	8/21/2019	GW	19081615-16A	FS	36
19081615	MW-84(44)	ATR-MW84(44)-G081919	8/19/2019	GW	19081615-02A	FS	36
19081615	MW-84(65)	ATR-MW84(68)-G081919	8/19/2019	GW	19081615-01A	FS	36

TABLE 1 - SAMPLE AND ANALYSIS SUMMARY
DATA VALIDATION REPORT
AUGUST 2019 GROUNDWATER SAMPLING
TEXTRON FORMER TORX FACILITY
ROCHESTER, INDIANA

SDG	Location	Field Sample ID	Sample Date	Matrix	Lab Sample ID	Method SW8260C	
						Sample Type	Count
19081615	MW-89(28)	ATR-MW89(28)-G082119	8/21/2019	GW	19081615-17A	FS	36
19081615	MW-9B	ATR-MW9B-G081919	8/19/2019	GW	19081615-05A	FS	36
19081615	MW-9C	ATR-MW9C-G081919	8/19/2019	GW	19081615-04A	FS	36
19081615	QC	ATR-EB001-082019	8/20/2019	BW	19081615-15A	EB	36
19081615	QC	ATR-TB001-082119	8/21/2019	BW	19081615-18A	TB	36
19081622	OW-01(39)	ATR-OW1(39)-G082119	8/21/2019	GW	19081622-01A	FS	36
19081622	OW-02(33)	ATR-OW2(33)-G082119	8/21/2019	GW	19081622-02A	FS	36
19081622	OW-02(53)	ATR-OW2(53)-G082119	8/21/2019	GW	19081622-03A	FS	36
19081622	OW-03(35)	ATR-OW3(35)-G082119	8/21/2019	GW	19081622-04A	FS	36
19081622	OW-03(55)	ATR-OW3(55)-G082119	8/21/2019	GW	19081622-05A	FS	36
19081622	OW-04(35)	ATR-OW4(35)-G082119	8/21/2019	GW	19081622-06A	FS	36
19081622	OW-04(54)	ATR-OW4(54)-G082119	8/21/2019	GW	19081622-07A	FS	36
19081622	OW-05(16)	ATR-OW5(16)-G082119	8/21/2019	GW	19081622-08A	FS	36
19081622	OW-05(35)	ATR-OW5(35)-G082119	8/21/2019	GW	19081622-09A	FS	36
19081622	OW-05(54)	ATR-OW5(44)-G082119	8/21/2019	GW	19081622-10A	FS	36
19081622	OW-06(38)	ATR-OW6(37)-G082119	8/21/2019	GW	19081622-11A	FS	36
19081622	OW-06(63)	ATR-OW6(63)-G082119	8/21/2019	GW	19081622-12A	FS	36
19081622	OW-06(63)	ATR-OW6(63)-G082119R	8/21/2019	GW	19081622-13A	FD	36
19081622	QC	ATR-TB002-082119	8/21/2019	BW	19081622-14A	TB	36
19081711	MW-3	ATR-MW3-G082219	8/22/2019	GW	19081711-04A	FS	36
19081711	MW-52(148)	ATR-MW52 (148)-G082219	8/22/2019	GW	19081711-02A	FS	36
19081711	MW-52(55)	ATR-MW52(55)-G082219	8/22/2019	GW	19081711-03A	FS	36
19081711	MW-60(38)	ATR-MW60 (38)-G082219	8/22/2019	GW	19081711-05A	FS	36
19081711	MW-65(32)	ATR-MW65 (32)-G082219	8/22/2019	GW	19081711-12A	FS	36
19081711	MW-67(30)	ATR-MW67 (30)-G082219	8/22/2019	GW	19081711-11A	FS	36
19081711	MW-71(33)	ATR-MW71(33)-G082219	8/22/2019	GW	19081711-01A	FS	36
19081711	MW-75(32)	ATR-MW75 (30)-G082219	8/22/2019	GW	19081711-13A	FS	36
19081711	MW-76(30)	ATR-MW76 (30)-G082219	8/22/2019	GW	19081711-07A	FS	36
19081711	MW-77(41)	ATR-MW77 (41)-G082219	8/22/2019	GW	19081711-09A	FS	36
19081711	MW-78(35)	ATR-MW78 (35)-G082219	8/22/2019	GW	19081711-10A	FS	36
19081711	MW-79(30)	ATR-MW79 (30)-G082219	8/22/2019	GW	19081711-08A	FS	36
19081711	QC	ATR-EB001-G082219	8/22/2019	BW	19081711-06A	EB	36
19081711	QC	ATR-FB001-G082219	8/22/2019	BW	19081711-14A	FB	36
19081718	MW-59(29)	ATR-MW59 (29)-G082219	8/22/2019	GW	19081718-04A	FS	36
19081718	MW-59(29)	ATR-MW59 (29)-G082219R	8/22/2019	GW	19081718-05A	FD	36
19081718	MW-59(46)	ATR-MW59 (46)-G082219	8/22/2019	GW	19081718-03A	FS	36
19081718	MW-68(32)	ATR-MW68 (32)-G082219	8/22/2019	GW	19081718-01A	FS	36
19081718	MW-72(32)	ATR-MW72 (32)-G082219	8/22/2019	GW	19081718-02A	FS	36
19081718	MW-81(27)	ATR-MW81 (27)-G082219	8/21/2019	GW	19081718-06A	FS	36

Notes:

BW = blank water

EB = equipment blank

TABLE 1 - SAMPLE AND ANALYSIS SUMMARY
 DATA VALIDATION REPORT
 AUGUST 2019 GROUNDWATER SAMPLING
 TEXTRON FORMER TORX FACILITY
 ROCHESTER, INDIANA

SDG	Location	Field Sample ID	Sample Date	Matrix	Lab Sample ID	Method SW8260C Sample Type	Count
-----	----------	-----------------	-------------	--------	---------------	-------------------------------	-------

FD = field duplicate
 FS = field sample
 GW = groundwater
 TB = trip blank

**TABLE 2 - QC LIMITS
DATA VALIDATION REPORT
AUGUST 2019 GROUNDWATER SAMPLING
TEXTRON FORMER TORX FACILITY
ROCHESTER, INDIANA**

PARAMETER	QC TEST	ANALYTE	WATER (%)	WATER RPD
Volatiles	Surrogate	All Surrogates(1) All Target	85 - 115	
	LCS	Compounds All Target	70 - 130	
	MS/MSD	Compounds All Target	70 - 130	20(2)
	Field Duplicates	Compounds		25(3)

Notes:

LCS - Laboratory Control Sample

MS/MSD - Matrix Spike/ Matrix Spike Duplicate

(1) Project-specific limits for surrogate recovery review/validation are established based on subcontract laboratory and Indiana Department of Environmental Management (IDEM) recommended control limits. The project limits are used for evaluation of recovery for all surrogates during data validation.

(2) Both results are > 5X the sample quantitation limit (SQL). For aqueous results < 5X the SQL use \pm SQL value. For solid media (soil and sediment) use \pm 2X SQL value.

(3) Both results are > 5X the SQL. For aqueous results < 5X the SQL use \pm 1.5X SQL value. For solid media (soil and sediment) use \pm 2.5X SQL value.

TABLE 3 - QUALIFICATION ACTIONS SUMMARY
DATA VALIDATION REPORT
AUGUST 2019 GROUNDWATER SAMPLING
TEXTRON FORMER TORX FACILITY
ROCHESTER, INDIANA

SDG	Analysis Method	Lab Sample Id	Sample Date	Field Sample Id	Param Name	Lab Result	Lab Qual	Final Result	Final Qual	Val Reason Code	Units
19081137	SW8260C	19081137-31A	8/14/2019	ATR-MW29 (103.3)-G081419	Carbon disulfide	1	U	1	UJ	CCV%D	UG/L
19081137	SW8260C	19081137-29A	8/14/2019	ATR-MW29 (132)-G081419	Carbon disulfide	1	U	1	UJ	CCV%D	UG/L
19081137	SW8260C	19081137-30A	8/14/2019	ATR-MW29 (82.5)-G081419	Carbon disulfide	1	U	1	UJ	CCV%D	UG/L
19081137	SW8260C	19081137-03A	8/13/2019	ATR-MW37 (98)- G081319	Carbon disulfide	1	U	1	UJ	CCV%D	UG/L
19081137	SW8260C	19081137-06A	8/13/2019	ATR-MW39 (13)- G081319	1,1,1-Trichloroethane	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-06A	8/13/2019	ATR-MW39 (13)- G081319	1,1,2,2-Tetrachloroethane	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-06A	8/13/2019	ATR-MW39 (13)- G081319	1,1,2-Trichloroethane	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-06A	8/13/2019	ATR-MW39 (13)- G081319	1,1-Dichloroethane	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-06A	8/13/2019	ATR-MW39 (13)- G081319	1,1-Dichloroethene	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-06A	8/13/2019	ATR-MW39 (13)- G081319	1,2-Dichloroethane	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-06A	8/13/2019	ATR-MW39 (13)- G081319	1,2-Dichloropropane	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-06A	8/13/2019	ATR-MW39 (13)- G081319	2-Butanone	5	U	5	UJ	SSL	UG/L
19081137	SW8260C	19081137-06A	8/13/2019	ATR-MW39 (13)- G081319	2-Hexanone	5	U	5	UJ	MSL, SSL	UG/L
19081137	SW8260C	19081137-06A	8/13/2019	ATR-MW39 (13)- G081319	4-Methyl-2-pentanone	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-06A	8/13/2019	ATR-MW39 (13)- G081319	Acetone	10	U	10	UJ	SSL	UG/L
19081137	SW8260C	19081137-06A	8/13/2019	ATR-MW39 (13)- G081319	Benzene	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-06A	8/13/2019	ATR-MW39 (13)- G081319	Bromodichloromethane	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-06A	8/13/2019	ATR-MW39 (13)- G081319	Bromoform	1	U	1	UJ	MSL, SSL	UG/L
19081137	SW8260C	19081137-06A	8/13/2019	ATR-MW39 (13)- G081319	Bromomethane	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-06A	8/13/2019	ATR-MW39 (13)- G081319	Carbon disulfide	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-06A	8/13/2019	ATR-MW39 (13)- G081319	Carbon tetrachloride	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-06A	8/13/2019	ATR-MW39 (13)- G081319	Chlorobenzene	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-06A	8/13/2019	ATR-MW39 (13)- G081319	Chloroethane	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-06A	8/13/2019	ATR-MW39 (13)- G081319	Chloroform	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-06A	8/13/2019	ATR-MW39 (13)- G081319	Chloromethane	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-06A	8/13/2019	ATR-MW39 (13)- G081319	cis-1,2-Dichloroethene	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-06A	8/13/2019	ATR-MW39 (13)- G081319	cis-1,3-Dichloropropene	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-06A	8/13/2019	ATR-MW39 (13)- G081319	Dibromochloromethane	1	U	1	UJ	MSL, SSL	UG/L
19081137	SW8260C	19081137-06A	8/13/2019	ATR-MW39 (13)- G081319	Ethylbenzene	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-06A	8/13/2019	ATR-MW39 (13)- G081319	Methylene chloride	5	U	5	UJ	SSL	UG/L
19081137	SW8260C	19081137-06A	8/13/2019	ATR-MW39 (13)- G081319	Styrene	1	U	1	UJ	SSL	UG/L

TABLE 3 - QUALIFICATION ACTIONS SUMMARY
DATA VALIDATION REPORT
AUGUST 2019 GROUNDWATER SAMPLING
TEXTRON FORMER TORX FACILITY
ROCHESTER, INDIANA

SDG	Analysis Method	Lab Sample Id	Sample Date	Field Sample Id	Param Name	Lab Result	Lab Qual	Final Result	Final Qual	Val Reason Code	Units
19081137	SW8260C	19081137-06A	8/13/2019	ATR-MW39 (13)- G081319	Tetrachloroethene	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-06A	8/13/2019	ATR-MW39 (13)- G081319	Toluene	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-06A	8/13/2019	ATR-MW39 (13)- G081319	trans-1,2-Dichloroethene	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-06A	8/13/2019	ATR-MW39 (13)- G081319	trans-1,3-Dichloropropene	1	U	1	UJ	MSSL, SSL	UG/L
19081137	SW8260C	19081137-06A	8/13/2019	ATR-MW39 (13)- G081319	Trichloroethene	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-06A	8/13/2019	ATR-MW39 (13)- G081319	Vinyl chloride	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-06A	8/13/2019	ATR-MW39 (13)- G081319	Xylene, o	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-06A	8/13/2019	ATR-MW39 (13)- G081319	Xylenes (m&p)	2	U	2	UJ	SSL	UG/L
19081137	SW8260C	19081137-06A	8/13/2019	ATR-MW39 (13)- G081319	Xylenes, Total	3	U	3	UJ	SSL	UG/L
19081137	SW8260C	19081137-05A	8/13/2019	ATR-MW39 (29.3)- G081319	1,1,1-Trichloroethane	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-05A	8/13/2019	ATR-MW39 (29.3)- G081319	1,1,2,2-Tetrachloroethane	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-05A	8/13/2019	ATR-MW39 (29.3)- G081319	1,1,2-Trichloroethane	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-05A	8/13/2019	ATR-MW39 (29.3)- G081319	1,1-Dichloroethane	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-05A	8/13/2019	ATR-MW39 (29.3)- G081319	1,1-Dichloroethene	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-05A	8/13/2019	ATR-MW39 (29.3)- G081319	1,2-Dichloroethane	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-05A	8/13/2019	ATR-MW39 (29.3)- G081319	1,2-Dichloropropane	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-05A	8/13/2019	ATR-MW39 (29.3)- G081319	2-Butanone	5	U	5	UJ	SSL	UG/L
19081137	SW8260C	19081137-05A	8/13/2019	ATR-MW39 (29.3)- G081319	2-Hexanone	5	U	5	UJ	SSL	UG/L
19081137	SW8260C	19081137-05A	8/13/2019	ATR-MW39 (29.3)- G081319	4-Methyl-2-pentanone	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-05A	8/13/2019	ATR-MW39 (29.3)- G081319	Acetone	10	U	10	UJ	SSL	UG/L
19081137	SW8260C	19081137-05A	8/13/2019	ATR-MW39 (29.3)- G081319	Benzene	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-05A	8/13/2019	ATR-MW39 (29.3)- G081319	Bromodichloromethane	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-05A	8/13/2019	ATR-MW39 (29.3)- G081319	Bromoform	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-05A	8/13/2019	ATR-MW39 (29.3)- G081319	Bromomethane	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-05A	8/13/2019	ATR-MW39 (29.3)- G081319	Carbon disulfide	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-05A	8/13/2019	ATR-MW39 (29.3)- G081319	Carbon tetrachloride	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-05A	8/13/2019	ATR-MW39 (29.3)- G081319	Chlorobenzene	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-05A	8/13/2019	ATR-MW39 (29.3)- G081319	Chloroethane	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-05A	8/13/2019	ATR-MW39 (29.3)- G081319	Chloroform	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-05A	8/13/2019	ATR-MW39 (29.3)- G081319	Chloromethane	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-05A	8/13/2019	ATR-MW39 (29.3)- G081319	cis-1,2-Dichloroethene	1	U	1	UJ	SSL	UG/L

TABLE 3 - QUALIFICATION ACTIONS SUMMARY
DATA VALIDATION REPORT
AUGUST 2019 GROUNDWATER SAMPLING
TEXTRON FORMER TORX FACILITY
ROCHESTER, INDIANA

SDG	Analysis Method	Lab Sample Id	Sample Date	Field Sample Id	Param Name	Lab Result	Lab Qual	Final Result	Final Qual	Val Reason Code	Units
19081137	SW8260C	19081137-05A	8/13/2019	ATR-MW39 (29.3)- G081319	cis-1,3-Dichloropropene	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-05A	8/13/2019	ATR-MW39 (29.3)- G081319	Dibromochloromethane	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-05A	8/13/2019	ATR-MW39 (29.3)- G081319	Ethylbenzene	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-05A	8/13/2019	ATR-MW39 (29.3)- G081319	Methylene chloride	5	U	5	UJ	SSL	UG/L
19081137	SW8260C	19081137-05A	8/13/2019	ATR-MW39 (29.3)- G081319	Styrene	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-05A	8/13/2019	ATR-MW39 (29.3)- G081319	Tetrachloroethene	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-05A	8/13/2019	ATR-MW39 (29.3)- G081319	Toluene	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-05A	8/13/2019	ATR-MW39 (29.3)- G081319	trans-1,2-Dichloroethene	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-05A	8/13/2019	ATR-MW39 (29.3)- G081319	trans-1,3-Dichloropropene	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-05A	8/13/2019	ATR-MW39 (29.3)- G081319	Trichloroethene	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-05A	8/13/2019	ATR-MW39 (29.3)- G081319	Vinyl chloride	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-05A	8/13/2019	ATR-MW39 (29.3)- G081319	Xylene, o	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-05A	8/13/2019	ATR-MW39 (29.3)- G081319	Xylenes (m&p)	2	U	2	UJ	SSL	UG/L
19081137	SW8260C	19081137-05A	8/13/2019	ATR-MW39 (29.3)- G081319	Xylenes, Total	3	U	3	UJ	SSL	UG/L
19081137	SW8260C	19081137-04A	8/13/2019	ATR-MW39 (76.7)- G081319	1,1,1-Trichloroethane	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-04A	8/13/2019	ATR-MW39 (76.7)- G081319	1,1,2,2-Tetrachloroethane	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-04A	8/13/2019	ATR-MW39 (76.7)- G081319	1,1,2-Trichloroethane	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-04A	8/13/2019	ATR-MW39 (76.7)- G081319	1,1-Dichloroethane	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-04A	8/13/2019	ATR-MW39 (76.7)- G081319	1,1-Dichloroethene	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-04A	8/13/2019	ATR-MW39 (76.7)- G081319	1,2-Dichloroethane	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-04A	8/13/2019	ATR-MW39 (76.7)- G081319	1,2-Dichloropropane	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-04A	8/13/2019	ATR-MW39 (76.7)- G081319	2-Butanone	5	U	5	UJ	SSL	UG/L
19081137	SW8260C	19081137-04A	8/13/2019	ATR-MW39 (76.7)- G081319	2-Hexanone	5	U	5	UJ	SSL	UG/L
19081137	SW8260C	19081137-04A	8/13/2019	ATR-MW39 (76.7)- G081319	4-Methyl-2-pentanone	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-04A	8/13/2019	ATR-MW39 (76.7)- G081319	Acetone	10	U	10	UJ	SSL	UG/L
19081137	SW8260C	19081137-04A	8/13/2019	ATR-MW39 (76.7)- G081319	Benzene	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-04A	8/13/2019	ATR-MW39 (76.7)- G081319	Bromodichloromethane	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-04A	8/13/2019	ATR-MW39 (76.7)- G081319	Bromoform	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-04A	8/13/2019	ATR-MW39 (76.7)- G081319	Bromomethane	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-04A	8/13/2019	ATR-MW39 (76.7)- G081319	Carbon disulfide	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-04A	8/13/2019	ATR-MW39 (76.7)- G081319	Carbon tetrachloride	1	U	1	UJ	SSL	UG/L

TABLE 3 - QUALIFICATION ACTIONS SUMMARY
DATA VALIDATION REPORT
AUGUST 2019 GROUNDWATER SAMPLING
TEXTRON FORMER TORX FACILITY
ROCHESTER, INDIANA

SDG	Analysis Method	Lab Sample Id	Sample Date	Field Sample Id	Param Name	Lab Result	Lab Qual	Final Result	Final Qual	Val Reason Code	Units
19081137	SW8260C	19081137-04A	8/13/2019	ATR-MW39 (76.7)- G081319	Chlorobenzene	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-04A	8/13/2019	ATR-MW39 (76.7)- G081319	Chloroethane	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-04A	8/13/2019	ATR-MW39 (76.7)- G081319	Chloroform	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-04A	8/13/2019	ATR-MW39 (76.7)- G081319	Chloromethane	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-04A	8/13/2019	ATR-MW39 (76.7)- G081319	cis-1,2-Dichloroethene	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-04A	8/13/2019	ATR-MW39 (76.7)- G081319	cis-1,3-Dichloropropene	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-04A	8/13/2019	ATR-MW39 (76.7)- G081319	Dibromochloromethane	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-04A	8/13/2019	ATR-MW39 (76.7)- G081319	Ethylbenzene	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-04A	8/13/2019	ATR-MW39 (76.7)- G081319	Methylene chloride	5	U	5	UJ	SSL	UG/L
19081137	SW8260C	19081137-04A	8/13/2019	ATR-MW39 (76.7)- G081319	Styrene	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-04A	8/13/2019	ATR-MW39 (76.7)- G081319	Tetrachloroethene	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-04A	8/13/2019	ATR-MW39 (76.7)- G081319	Toluene	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-04A	8/13/2019	ATR-MW39 (76.7)- G081319	trans-1,2-Dichloroethene	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-04A	8/13/2019	ATR-MW39 (76.7)- G081319	trans-1,3-Dichloropropene	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-04A	8/13/2019	ATR-MW39 (76.7)- G081319	Trichloroethene	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-04A	8/13/2019	ATR-MW39 (76.7)- G081319	Vinyl chloride	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-04A	8/13/2019	ATR-MW39 (76.7)- G081319	Xylene, o	1	U	1	UJ	SSL	UG/L
19081137	SW8260C	19081137-04A	8/13/2019	ATR-MW39 (76.7)- G081319	Xylenes (m&p)	2	U	2	UJ	SSL	UG/L
19081137	SW8260C	19081137-04A	8/13/2019	ATR-MW39 (76.7)- G081319	Xylenes, Total	3	U	3	UJ	SSL	UG/L
19081137	SW8260C	19081137-28A	8/14/2019	ATR-MW50 (45)-G081419	Carbon disulfide	1	U	1	UJ	CCV%D	UG/L
19081281	SW8260C	19081281-05A	8/15/2019	ATR-MW1 - G081519	Carbon disulfide	1	U	1	UJ	CCV%D	UG/L
19081281	SW8260C	19081281-19A	8/16/2019	ATR-MW24 (55) - G081619	2-Hexanone	5	U	5	UJ	CCV%D	UG/L
19081281	SW8260C	19081281-20A	8/16/2019	ATR-MW24 (55) - G081619R	2-Hexanone	5	U	5	UJ	CCV%D	UG/L
19081281	SW8260C	19081281-04A	8/15/2019	ATR-MW30 (41.1) - G081519	Carbon disulfide	1	U	1	UJ	CCV%D	UG/L
19081281	SW8260C	19081281-01A	8/15/2019	ATR-MW32 (110) - G081519	Carbon disulfide	1	U	1	UJ	CCV%D	UG/L
19081281	SW8260C	19081281-03A	8/15/2019	ATR-MW32 (24.1) - G081519	Carbon disulfide	1	U	1	UJ	CCV%D	UG/L
19081281	SW8260C	19081281-02A	8/15/2019	ATR-MW32 (89) - G081519	Carbon disulfide	1	U	1	UJ	CCV%D	UG/L
19081281	SW8260C	19081281-10A	8/15/2019	ATR-MW34 (110) - G081519	Carbon disulfide	1	U	1	UJ	CCV%D	UG/L
19081281	SW8260C	19081281-09A	8/15/2019	ATR-MW34 (37) - G081519	Carbon disulfide	1	U	1	UJ	CCV%D	UG/L
19081281	SW8260C	19081281-08A	8/15/2019	ATR-MW34 (84) - G081519	Carbon disulfide	1	U	1	UJ	CCV%D	UG/L
19081281	SW8260C	19081281-23A	8/16/2019	ATR-MW45 (185) - G081619	2-Hexanone	5	U	5	UJ	CCV%D	UG/L

TABLE 3 - QUALIFICATION ACTIONS SUMMARY
DATA VALIDATION REPORT
AUGUST 2019 GROUNDWATER SAMPLING
TEXTRON FORMER TORX FACILITY
ROCHESTER, INDIANA

SDG	Analysis Method	Lab Sample Id	Sample Date	Field Sample Id	Param Name	Lab Result	Lab Qual	Final Result	Final Qual	Val Reason Code	Units
19081281	SW8260C	19081281-06A	8/15/2019	ATR-MW48 (159) - G081519	Carbon disulfide	1	U	1	UJ	CCV%D	UG/L
19081281	SW8260C	19081281-07A	8/15/2019	ATR-MW48 (159) - G081519R	Carbon disulfide	1	U	1	UJ	CCV%D	UG/L
19081281	SW8260C	19081281-18A	8/16/2019	ATR-MW53 (41) - G081619	Carbon disulfide	1	U	1	UJ	CCV%D	UG/L
19081281	SW8260C	19081281-22A	8/16/2019	ATR-MW55 (49) - G081619	2-Hexanone	5	U	5	UJ	CCV%D	UG/L
19081281	SW8260C	19081281-21A	8/16/2019	ATR-MW57 (38) - G081619	2-Hexanone	5	U	5	UJ	CCV%D	UG/L
19081281	SW8260C	19081281-14A	8/16/2019	ATR-MW83 (64) - G081619	Carbon disulfide	1	U	1	UJ	CCV%D	UG/L
19081281	SW8260C	19081281-13A	8/15/2019	ATR-MW85 (130) - G081519	Carbon disulfide	1	U	1	UJ	CCV%D	UG/L
19081281	SW8260C	19081281-12A	8/15/2019	ATR-MW85 (39) - G081519	Carbon disulfide	1	U	1	UJ	CCV%D	UG/L
19081608	SW8260C	19081608-08A	8/20/2019	ATR-MW15-G082019	2-Hexanone	5	U	5	UJ	CCV%D	UG/L
19081608	SW8260C	19081608-10A	8/20/2019	ATR-MW25(32.6)-G082019	2-Hexanone	5	U	5	UJ	CCV%D	UG/L
19081608	SW8260C	19081608-09A	8/20/2019	ATR-MW25(82)-G082019	2-Hexanone	5	U	5	UJ	CCV%D	UG/L
19081608	SW8260C	19081608-03A	8/19/2019	ATR-MW26(17.5)-G081919	2-Hexanone	5	U	5	UJ	CCV%D	UG/L
19081608	SW8260C	19081608-01A	8/19/2019	ATR-MW26(28.8)-G081919	2-Hexanone	5	U	5	UJ	CCV%D	UG/L
19081608	SW8260C	19081608-02A	8/19/2019	ATR-MW26(58.2)-G081919	2-Hexanone	5	U	5	UJ	CCV%D	UG/L
19081608	SW8260C	19081608-05A	8/19/2019	ATR-MW27(18)-G081919	2-Hexanone	5	U	5	UJ	CCV%D	UG/L
19081608	SW8260C	19081608-06A	8/19/2019	ATR-MW27(18)-G081919R	2-Hexanone	5	U	5	UJ	CCV%D	UG/L
19081615	SW8260C	19081615-03A	8/19/2019	ATR-MW16-G081919	Bromomethane	1	U	1	UJ	CCV%D	UG/L
19081615	SW8260C	19081615-03A	8/19/2019	ATR-MW16-G081919	Carbon disulfide	1	U	1	UJ	CCV%D	UG/L
19081615	SW8260C	19081615-03A	8/19/2019	ATR-MW16-G081919	Vinyl chloride	1	U	1	UJ	CCV%D	UG/L
19081622	SW8260C	19081622-01A	8/21/2019	ATR-OW1(39)-G082119	2-Hexanone	5	U	5	UJ	CCV%D	UG/L
19081622	SW8260C	19081622-01A	8/21/2019	ATR-OW1(39)-G082119	Chloroethane	1	U	1	UJ	CCV%D	UG/L
19081622	SW8260C	19081622-12A	8/21/2019	ATR-OW6(63)-G082119	Acetone	19		19	U	BL2	UG/L
19081622	SW8260C	19081622-13A	8/21/2019	ATR-OW6(63)-G082119R	Acetone	19		19	U	BL2	UG/L
19081711	SW8260C	19081711-05A	8/22/2019	ATR-MW60 (38)-G082219	Vinyl chloride	430		430	J+	MSH	UG/L
19081711	SW8260C	19081711-01A	8/22/2019	ATR-MW71(33)-G082219	Carbon disulfide	1.2		1.2	J	LCSH, MSRPD	UG/L
19081718	SW8260C	19081718-04A	8/22/2019	ATR-MW59 (29)-G082219	2-Hexanone	5	U	5	UJ	CCV%D	UG/L
19081718	SW8260C	19081718-04A	8/22/2019	ATR-MW59 (29)-G082219	4-Methyl-2-pentanone	1	U	1	UJ	CCV%D	UG/L
19081718	SW8260C	19081718-04A	8/22/2019	ATR-MW59 (29)-G082219	Bromomethane	1	U	1	UJ	CCV%D	UG/L
19081718	SW8260C	19081718-05A	8/22/2019	ATR-MW59 (29)-G082219R	2-Hexanone	5	U	5	UJ	CCV%D	UG/L
19081718	SW8260C	19081718-05A	8/22/2019	ATR-MW59 (29)-G082219R	4-Methyl-2-pentanone	1	U	1	UJ	CCV%D	UG/L
19081718	SW8260C	19081718-05A	8/22/2019	ATR-MW59 (29)-G082219R	Bromomethane	1	U	1	UJ	CCV%D	UG/L

TABLE 3 - QUALIFICATION ACTIONS SUMMARY
 DATA VALIDATION REPORT
 AUGUST 2019 GROUNDWATER SAMPLING
 TEXTRON FORMER TORX FACILITY
 ROCHESTER, INDIANA

SDG	Analysis Method	Lab Sample Id	Sample Date	Field Sample Id	Param Name	Lab Result	Lab Qual	Final Result	Final Qual	Val Reason Code	Units
19081718	SW8260C	19081718-03A	8/22/2019	ATR-MW59 (46)-G082219	1,1,2,2-Tetrachloroethane	1	U	1	UJ	CCV%D	UG/L
19081718	SW8260C	19081718-03A	8/22/2019	ATR-MW59 (46)-G082219	4-Methyl-2-pentanone	1	U	1	UJ	CCV%D	UG/L
19081718	SW8260C	19081718-03A	8/22/2019	ATR-MW59 (46)-G082219	Bromomethane	1	U	1	UJ	CCV%D	UG/L
19081718	SW8260C	19081718-01A	8/22/2019	ATR-MW68 (32)-G082219	1,1,2,2-Tetrachloroethane	1	U	1	UJ	CCV%D	UG/L
19081718	SW8260C	19081718-01A	8/22/2019	ATR-MW68 (32)-G082219	4-Methyl-2-pentanone	1	U	1	UJ	CCV%D	UG/L
19081718	SW8260C	19081718-01A	8/22/2019	ATR-MW68 (32)-G082219	Bromomethane	1	U	1	UJ	CCV%D	UG/L
19081718	SW8260C	19081718-02A	8/22/2019	ATR-MW72 (32)-G082219	1,1,2,2-Tetrachloroethane	1	U	1	UJ	CCV%D	UG/L
19081718	SW8260C	19081718-02A	8/22/2019	ATR-MW72 (32)-G082219	4-Methyl-2-pentanone	1	U	1	UJ	CCV%D	UG/L
19081718	SW8260C	19081718-02A	8/22/2019	ATR-MW72 (32)-G082219	Bromomethane	1	U	1	UJ	CCV%D	UG/L
19081718	SW8260C	19081718-06A	8/21/2019	ATR-MW81 (27)-G082219	1,1,2,2-Tetrachloroethane	1	U	1	UJ	CCV%D	UG/L
19081718	SW8260C	19081718-06A	8/21/2019	ATR-MW81 (27)-G082219	4-Methyl-2-pentanone	1	U	1	UJ	CCV%D	UG/L
19081718	SW8260C	19081718-06A	8/21/2019	ATR-MW81 (27)-G082219	Bromomethane	1	U	1	UJ	CCV%D	UG/L

Notes:

BL2 = detected in trip blank

CCV%D = continuing calibration percent difference exceeds QC limit

FD = field duplicate precision goal not met

J = value is estimated

J+ = value is estimated biased high

LCSL = LCS recovery low

MSH = matrix spike recovery high

MSL = matrix spike recovery low

MSRPD = matrix spike relative percent difference

SSL = surrogate standard recovery low

U = not detected, value is the detection limit

UG/L = microgram per liter

TABLE 4 - FINAL RESULTS SUMMARY
DATA VALIDATION REPORT
AUGUST 2019 GROUNDWATER SAMPLING
TEXTRON FORMER TORX FACILITY
ROCHESTER, INDIANA

SDG:			19081137		19081137		19081137		19081137	
Location:			MW-29(103.3)		MW-29(132.8)		MW-29(82.5)		MW-31(139.2)	
Date Collected:			08/14/19		08/14/19		08/14/19		08/14/19	
Field Sample ID:			ATR-MW29 (103.3)-G081419		ATR-MW29 (132)-G081419		ATR-MW29 (82.5)-G081419		ATR-MW31 (139.2)- G081419	
Type:			FS		FS		FS		FS	
Method	Unit	Parameter	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier
SW8260C	UG/L	1,1,1-Trichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1,2,2-Tetrachloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1,2-Trichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1-Dichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1-Dichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,2-Dichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,2-Dichloropropane	1	U	1	U	1	U	1	U
SW8260C	UG/L	2-Butanone	5	U	5	U	5	U	5	U
SW8260C	UG/L	2-Hexanone	5	U	5	U	5	U	5	U
SW8260C	UG/L	4-Methyl-2-pentanone	1	U	1	U	1	U	1	U
SW8260C	UG/L	Acetone	10	U	10	U	10	U	10	U
SW8260C	UG/L	Benzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromodichloromethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromoform	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromomethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Carbon disulfide	1	UJ	1	UJ	1	UJ	1	U
SW8260C	UG/L	Carbon tetrachloride	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chlorobenzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloroform	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloromethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	cis-1,2-Dichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	cis-1,3-Dichloropropene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Dibromochloromethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Ethylbenzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Methylene chloride	5	U	5	U	5	U	5	U
SW8260C	UG/L	Styrene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Tetrachloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Toluene	1	U	1	U	1	U	1	U
SW8260C	UG/L	trans-1,2-Dichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	trans-1,3-Dichloropropene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Trichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Vinyl chloride	1	U	1	U	1	U	1	U
SW8260C	UG/L	Xylene, o	1	U	1	U	1	U	1	U
SW8260C	UG/L	Xylenes (m&p)	2	U	2	U	2	U	2	U
SW8260C	UG/L	Xylenes, Total	3	U	3	U	3	U	3	U

U = not detected, value is the detection limit

J = value is estimated

UG/L = microgram per liter

FS = Field Sample

FD = Field Duplicate

TB = Trip Blank

TABLE 4 - FINAL RESULTS SUMMARY
DATA VALIDATION REPORT
AUGUST 2019 GROUNDWATER SAMPLING
TEXTRON FORMER TORX FACILITY
ROCHESTER, INDIANA

SDG:			19081137		19081137		19081137		19081137	
Location:			MW-31(30.9)		MW-31(55.5)		MW-31(98.5)		MW-31(98.5)	
Date Collected:			08/14/19		08/14/19		08/14/19		08/14/19	
Field Sample ID:			ATR-MW31 (30.9)-G081419		ATR-MW31 (55.5)-G081419		ATR-MW31 (98.5)-G081419		ATR-MW31 (98.5)-G081419R	
Type:			FS		FS		FS		FD	
Method	Unit	Parameter	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier
SW8260C	UG/L	1,1,1-Trichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1,2,2-Tetrachloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1,2-Trichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1-Dichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1-Dichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,2-Dichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,2-Dichloropropane	1	U	1	U	1	U	1	U
SW8260C	UG/L	2-Butanone	5	U	5	U	5	U	5	U
SW8260C	UG/L	2-Hexanone	5	U	5	U	5	U	5	U
SW8260C	UG/L	4-Methyl-2-pentanone	1	U	1	U	1	U	1	U
SW8260C	UG/L	Acetone	10	U	10	U	10	U	10	U
SW8260C	UG/L	Benzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromodichloromethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromoform	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromomethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Carbon disulfide	1	U	1	U	1	U	1	U
SW8260C	UG/L	Carbon tetrachloride	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chlorobenzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloroform	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloromethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	cis-1,2-Dichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	cis-1,3-Dichloropropene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Dibromochloromethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Ethylbenzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Methylene chloride	5	U	5	U	5	U	5	U
SW8260C	UG/L	Styrene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Tetrachloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Toluene	1	U	1	U	1	U	1	U
SW8260C	UG/L	trans-1,2-Dichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	trans-1,3-Dichloropropene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Trichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Vinyl chloride	1	U	1	U	3		3	
SW8260C	UG/L	Xylene, o	1	U	1	U	1	U	1	U
SW8260C	UG/L	Xylenes (m&p)	2	U	2	U	2	U	2	U
SW8260C	UG/L	Xylenes, Total	3	U	3	U	3	U	3	U

U = not detected, value is the detection limit

J = value is estimated

UG/L = microgram per liter

FS = Field Sample

FD = Field Duplicate

TB = Trip Blank

TABLE 4 - FINAL RESULTS SUMMARY
DATA VALIDATION REPORT
AUGUST 2019 GROUNDWATER SAMPLING
TEXTRON FORMER TORX FACILITY
ROCHESTER, INDIANA

SDG:			19081137		19081137		19081137		19081137	
Location:			MW-35(148)		MW-35(45)		MW-35(90)		MW-36(124.5)	
Date Collected:			08/14/19		08/14/19		08/14/19		08/13/19	
Field Sample ID:			ATR-MW35 (148)- G081419		ATR-MW35 (45)- G081419		ATR-MW35 (90)- G081419		ATR-MW36 (124.5)- G081319	
Type:			FS		FS		FS		FS	
Method	Unit	Parameter	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier
SW8260C	UG/L	1,1,1-Trichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1,2,2-Tetrachloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1,2-Trichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1-Dichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1-Dichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,2-Dichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,2-Dichloropropane	1	U	1	U	1	U	1	U
SW8260C	UG/L	2-Butanone	5	U	5	U	5	U	5	U
SW8260C	UG/L	2-Hexanone	5	U	5	U	5	U	5	U
SW8260C	UG/L	4-Methyl-2-pentanone	1	U	1	U	1	U	1	U
SW8260C	UG/L	Acetone	10	U	10	U	10	U	10	U
SW8260C	UG/L	Benzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromodichloromethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromoform	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromomethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Carbon disulfide	1	U	1	U	1	U	1	U
SW8260C	UG/L	Carbon tetrachloride	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chlorobenzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloroform	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloromethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	cis-1,2-Dichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	cis-1,3-Dichloropropene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Dibromochloromethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Ethylbenzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Methylene chloride	5	U	5	U	5	U	5	U
SW8260C	UG/L	Styrene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Tetrachloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Toluene	1	U	1	U	1	U	1	U
SW8260C	UG/L	trans-1,2-Dichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	trans-1,3-Dichloropropene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Trichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Vinyl chloride	1	U	1	U	2.3		1	U
SW8260C	UG/L	Xylene, o	1	U	1	U	1	U	1	U
SW8260C	UG/L	Xylenes (m&p)	2	U	2	U	2	U	2	U
SW8260C	UG/L	Xylenes, Total	3	U	3	U	3	U	3	U

U = not detected, value is the detection limit

J = value is estimated

UG/L = microgram per liter

FS = Field Sample

FD = Field Duplicate

TB = Trip Blank

TABLE 4 - FINAL RESULTS SUMMARY
DATA VALIDATION REPORT
AUGUST 2019 GROUNDWATER SAMPLING
TEXTRON FORMER TORX FACILITY
ROCHESTER, INDIANA

SDG:			19081137		19081137		19081137		19081137	
Location:			MW-36(35.2)		MW-36(92.4)		MW-37(23.3)		MW-37(70)	
Date Collected:			08/13/19		08/13/19		08/13/19		08/13/19	
Field Sample ID:			ATR-MW36 (35.2)- G081319		ATR-MW36 (92.4)- G081319		ATR-MW37 (23.3)- G081319		ATR-MW37 (70)- G081319	
Type:			FS		FS		FS		FS	
Method	Unit	Parameter	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier
SW8260C	UG/L	1,1,1-Trichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1,2,2-Tetrachloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1,2-Trichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1-Dichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1-Dichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,2-Dichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,2-Dichloropropane	1	U	1	U	1	U	1	U
SW8260C	UG/L	2-Butanone	5	U	5	U	5	U	5	U
SW8260C	UG/L	2-Hexanone	5	U	5	U	5	U	5	U
SW8260C	UG/L	4-Methyl-2-pentanone	1	U	1	U	1	U	1	U
SW8260C	UG/L	Acetone	10	U	10	U	10	U	10	U
SW8260C	UG/L	Benzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromodichloromethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromoform	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromomethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Carbon disulfide	1	U	1	U	1	U	1	U
SW8260C	UG/L	Carbon tetrachloride	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chlorobenzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloroform	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloromethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	cis-1,2-Dichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	cis-1,3-Dichloropropene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Dibromochloromethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Ethylbenzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Methylene chloride	5	U	5	U	5	U	5	U
SW8260C	UG/L	Styrene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Tetrachloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Toluene	1	U	1	U	1	U	1	U
SW8260C	UG/L	trans-1,2-Dichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	trans-1,3-Dichloropropene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Trichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Vinyl chloride	1	U	1	U	1	U	1	U
SW8260C	UG/L	Xylene, o	1	U	1	U	1	U	1	U
SW8260C	UG/L	Xylenes (m&p)	2	U	2	U	2	U	2	U
SW8260C	UG/L	Xylenes, Total	3	U	3	U	3	U	3	U

U = not detected, value is the detection limit

J = value is estimated

UG/L = microgram per liter

FS = Field Sample

FD = Field Duplicate

TB = Trip Blank

TABLE 4 - FINAL RESULTS SUMMARY
DATA VALIDATION REPORT
AUGUST 2019 GROUNDWATER SAMPLING
TEXTRON FORMER TORX FACILITY
ROCHESTER, INDIANA

SDG:			19081137		19081137		19081137		19081137	
Location:			MW-37(98)		MW-38(102.5)		MW-38(20.8)		MW-38(29.1)	
Date Collected:			08/13/19		08/13/19		08/13/19		08/13/19	
Field Sample ID:			ATR-MW37 (98)- G081319		ATR-MW38 (102.5)- G081319		ATR-MW38 (20.8)- G081319		ATR-MW38 (29.1)- G081319	
Type:			FS		FS		FS		FS	
Method	Unit	Parameter	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier
SW8260C	UG/L	1,1,1-Trichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1,2,2-Tetrachloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1,2-Trichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1-Dichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1-Dichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,2-Dichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,2-Dichloropropane	1	U	1	U	1	U	1	U
SW8260C	UG/L	2-Butanone	5	U	5	U	5	U	5	U
SW8260C	UG/L	2-Hexanone	5	U	5	U	5	U	5	U
SW8260C	UG/L	4-Methyl-2-pentanone	1	U	1	U	1	U	1	U
SW8260C	UG/L	Acetone	10	U	10	U	10	U	10	U
SW8260C	UG/L	Benzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromodichloromethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromoform	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromomethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Carbon disulfide	1	U	1	U	1	U	1	U
SW8260C	UG/L	Carbon tetrachloride	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chlorobenzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloroform	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloromethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	cis-1,2-Dichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	cis-1,3-Dichloropropene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Dibromochloromethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Ethylbenzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Methylene chloride	5	U	5	U	5	U	5	U
SW8260C	UG/L	Styrene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Tetrachloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Toluene	1	U	1	U	1	U	1	U
SW8260C	UG/L	trans-1,2-Dichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	trans-1,3-Dichloropropene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Trichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Vinyl chloride	1	U	1	U	1	U	1	U
SW8260C	UG/L	Xylene, o	1	U	1	U	1	U	1	U
SW8260C	UG/L	Xylenes (m&p)	2	U	2	U	2	U	2	U
SW8260C	UG/L	Xylenes, Total	3	U	3	U	3	U	3	U

U = not detected, value is the detection limit

J = value is estimated

UG/L = microgram per liter

FS = Field Sample

FD = Field Duplicate

TB = Trip Blank

TABLE 4 - FINAL RESULTS SUMMARY
DATA VALIDATION REPORT
AUGUST 2019 GROUNDWATER SAMPLING
TEXTRON FORMER TORX FACILITY
ROCHESTER, INDIANA

SDG:			19081137		19081137		19081137		19081137	
Location:			MW-38(69.9)		MW-38(69.9)		MW-39(13)		MW-39(29.3)	
Date Collected:			08/13/19		08/13/19		08/13/19		08/13/19	
Field Sample ID:			ATR-MW38 (69.9)- G081319		ATR-MW38 (69.9)- G081319R		ATR-MW39 (13)- G081319		ATR-MW39 (29.3)- G081319	
Type:			FS		FD		FS		FS	
Method	Unit	Parameter	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier
SW8260C	UG/L	1,1,1-Trichloroethane	1	U	1	U	1	UJ	1	UJ
SW8260C	UG/L	1,1,2,2-Tetrachloroethane	1	U	1	U	1	UJ	1	UJ
SW8260C	UG/L	1,1,2-Trichloroethane	1	U	1	U	1	UJ	1	UJ
SW8260C	UG/L	1,1-Dichloroethane	1	U	1	U	1	UJ	1	UJ
SW8260C	UG/L	1,1-Dichloroethene	1	U	1	U	1	UJ	1	UJ
SW8260C	UG/L	1,2-Dichloroethane	1	U	1	U	1	UJ	1	UJ
SW8260C	UG/L	1,2-Dichloropropane	1	U	1	U	1	UJ	1	UJ
SW8260C	UG/L	2-Butanone	5	U	5	U	5	UJ	5	UJ
SW8260C	UG/L	2-Hexanone	5	U	5	U	5	UJ	5	UJ
SW8260C	UG/L	4-Methyl-2-pentanone	1	U	1	U	1	UJ	1	UJ
SW8260C	UG/L	Acetone	10	U	10	U	10	UJ	10	UJ
SW8260C	UG/L	Benzene	1	U	1	U	1	UJ	1	UJ
SW8260C	UG/L	Bromodichloromethane	1	U	1	U	1	UJ	1	UJ
SW8260C	UG/L	Bromoform	1	U	1	U	1	UJ	1	UJ
SW8260C	UG/L	Bromomethane	1	U	1	U	1	UJ	1	UJ
SW8260C	UG/L	Carbon disulfide	1	U	1	U	1	UJ	1	UJ
SW8260C	UG/L	Carbon tetrachloride	1	U	1	U	1	UJ	1	UJ
SW8260C	UG/L	Chlorobenzene	1	U	1	U	1	UJ	1	UJ
SW8260C	UG/L	Chloroethane	1	U	1	U	1	UJ	1	UJ
SW8260C	UG/L	Chloroform	1	U	1	U	1	UJ	1	UJ
SW8260C	UG/L	Chloromethane	1	U	1	U	1	UJ	1	UJ
SW8260C	UG/L	cis-1,2-Dichloroethene	1	U	1	U	1	UJ	1	UJ
SW8260C	UG/L	cis-1,3-Dichloropropene	1	U	1	U	1	UJ	1	UJ
SW8260C	UG/L	Dibromochloromethane	1	U	1	U	1	UJ	1	UJ
SW8260C	UG/L	Ethylbenzene	1	U	1	U	1	UJ	1	UJ
SW8260C	UG/L	Methylene chloride	5	U	5	U	5	UJ	5	UJ
SW8260C	UG/L	Styrene	1	U	1	U	1	UJ	1	UJ
SW8260C	UG/L	Tetrachloroethene	1	U	1	U	1	UJ	1	UJ
SW8260C	UG/L	Toluene	1	U	1	U	1	UJ	1	UJ
SW8260C	UG/L	trans-1,2-Dichloroethene	1	U	1	U	1	UJ	1	UJ
SW8260C	UG/L	trans-1,3-Dichloropropene	1	U	1	U	1	UJ	1	UJ
SW8260C	UG/L	Trichloroethene	1	U	1	U	1	UJ	1	UJ
SW8260C	UG/L	Vinyl chloride	2.4		3		1	UJ	1	UJ
SW8260C	UG/L	Xylene, o	1	U	1	U	1	UJ	1	UJ
SW8260C	UG/L	Xylenes (m&p)	2	U	2	U	2	UJ	2	UJ
SW8260C	UG/L	Xylenes, Total	3	U	3	U	3	UJ	3	UJ

U = not detected, value is the detection limit

J = value is estimated

UG/L = microgram per liter

FS = Field Sample

FD = Field Duplicate

TB = Trip Blank

TABLE 4 - FINAL RESULTS SUMMARY
DATA VALIDATION REPORT
AUGUST 2019 GROUNDWATER SAMPLING
TEXTRON FORMER TORX FACILITY
ROCHESTER, INDIANA

SDG:			19081137		19081137		19081137		19081137	
Location:			MW-39(76.8)		MW-50(45)		MW-50(80)		MW-51(25)	
Date Collected:			08/13/19		08/14/19		08/14/19		08/14/19	
Field Sample ID:			ATR-MW39 (76.7)- G081319		ATR-MW50 (45)-G081419		ATR-MW50 (80)-G081419		ATR-MW51 (25)-G081419	
Type:			FS		FS		FS		FS	
Method	Unit	Parameter	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier
SW8260C	UG/L	1,1,1-Trichloroethane	1	UJ	1	U	1	U	1	U
SW8260C	UG/L	1,1,2,2-Tetrachloroethane	1	UJ	1	U	1	U	1	U
SW8260C	UG/L	1,1,2-Trichloroethane	1	UJ	1	U	1	U	1	U
SW8260C	UG/L	1,1-Dichloroethane	1	UJ	1	U	1	U	1	U
SW8260C	UG/L	1,1-Dichloroethene	1	UJ	1	U	1	U	1	U
SW8260C	UG/L	1,2-Dichloroethane	1	UJ	1	U	1	U	1	U
SW8260C	UG/L	1,2-Dichloropropane	1	UJ	1	U	1	U	1	U
SW8260C	UG/L	2-Butanone	5	UJ	5	U	5	U	5	U
SW8260C	UG/L	2-Hexanone	5	UJ	5	U	5	U	5	U
SW8260C	UG/L	4-Methyl-2-pentanone	1	UJ	1	U	1	U	1	U
SW8260C	UG/L	Acetone	10	UJ	10	U	10	U	10	U
SW8260C	UG/L	Benzene	1	UJ	1	U	1	U	1	U
SW8260C	UG/L	Bromodichloromethane	1	UJ	1	U	1	U	1	U
SW8260C	UG/L	Bromoform	1	UJ	1	U	1	U	1	U
SW8260C	UG/L	Bromomethane	1	UJ	1	U	1	U	1	U
SW8260C	UG/L	Carbon disulfide	1	UJ	1	UJ	1	U	1	U
SW8260C	UG/L	Carbon tetrachloride	1	UJ	1	U	1	U	1	U
SW8260C	UG/L	Chlorobenzene	1	UJ	1	U	1	U	1	U
SW8260C	UG/L	Chloroethane	1	UJ	1	U	1	U	1	U
SW8260C	UG/L	Chloroform	1	UJ	1	U	1	U	1	U
SW8260C	UG/L	Chloromethane	1	UJ	1	U	1	U	1	U
SW8260C	UG/L	cis-1,2-Dichloroethene	1	UJ	1.4		1.2		1	U
SW8260C	UG/L	cis-1,3-Dichloropropene	1	UJ	1	U	1	U	1	U
SW8260C	UG/L	Dibromochloromethane	1	UJ	1	U	1	U	1	U
SW8260C	UG/L	Ethylbenzene	1	UJ	1	U	1	U	1	U
SW8260C	UG/L	Methylene chloride	5	UJ	5	U	5	U	5	U
SW8260C	UG/L	Styrene	1	UJ	1	U	1	U	1	U
SW8260C	UG/L	Tetrachloroethene	1	UJ	1	U	1	U	1	U
SW8260C	UG/L	Toluene	1	UJ	1	U	1	U	1	U
SW8260C	UG/L	trans-1,2-Dichloroethene	1	UJ	1	U	1	U	1	U
SW8260C	UG/L	trans-1,3-Dichloropropene	1	UJ	1	U	1	U	1	U
SW8260C	UG/L	Trichloroethene	1	UJ	1	U	1	U	1	U
SW8260C	UG/L	Vinyl chloride	1	UJ	1.3		1	U	1	U
SW8260C	UG/L	Xylene, o	1	UJ	1	U	1	U	1	U
SW8260C	UG/L	Xylenes (m&p)	2	UJ	2	U	2	U	2	U
SW8260C	UG/L	Xylenes, Total	3	UJ	3	U	3	U	3	U

U = not detected, value is the detection limit

J = value is estimated

UG/L = microgram per liter

FS = Field Sample

FD = Field Duplicate

TB = Trip Blank

TABLE 4 - FINAL RESULTS SUMMARY
 DATA VALIDATION REPORT
 AUGUST 2019 GROUNDWATER SAMPLING
 TEXTRON FORMER TORX FACILITY
 ROCHESTER, INDIANA

SDG:			19081137		19081137		19081137		19081137	
Location:			MW-51(70)		QC		QC		QC	
Date Collected:			08/14/19		08/13/19		08/14/19		08/14/19	
Field Sample ID:			ATR-MW51 (70)-G081419		ATR-EB001-081319		ATR-TB001-081419		ATR-EB001-081419	
Type:			FS		EB		TB		EB	
Method	Unit	Parameter	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier
SW8260C	UG/L	1,1,1-Trichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1,2,2-Tetrachloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1,2-Trichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1-Dichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1-Dichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,2-Dichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,2-Dichloropropane	1	U	1	U	1	U	1	U
SW8260C	UG/L	2-Butanone	5	U	5	U	5	U	5	U
SW8260C	UG/L	2-Hexanone	5	U	5	U	5	U	5	U
SW8260C	UG/L	4-Methyl-2-pentanone	1	U	1	U	1	U	1	U
SW8260C	UG/L	Acetone	10	U	10	U	10	U	10	U
SW8260C	UG/L	Benzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromodichloromethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromoform	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromomethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Carbon disulfide	1	U	1	U	1	U	1	U
SW8260C	UG/L	Carbon tetrachloride	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chlorobenzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloroform	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloromethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	cis-1,2-Dichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	cis-1,3-Dichloropropene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Dibromochloromethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Ethylbenzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Methylene chloride	5	U	5	U	5	U	5	U
SW8260C	UG/L	Styrene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Tetrachloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Toluene	1	U	1	U	1	U	1	U
SW8260C	UG/L	trans-1,2-Dichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	trans-1,3-Dichloropropene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Trichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Vinyl chloride	1.2		1	U	1	U	1	U
SW8260C	UG/L	Xylene, o	1	U	1	U	1	U	1	U
SW8260C	UG/L	Xylenes (m&p)	2	U	2	U	2	U	2	U
SW8260C	UG/L	Xylenes, Total	3	U	3	U	3	U	3	U

U = not detected, value is the detection limit

J = value is estimated

UG/L = microgram per liter

FS = Field Sample

FD = Field Duplicate

TB = Trip Blank

TABLE 4 - FINAL RESULTS SUMMARY
DATA VALIDATION REPORT
AUGUST 2019 GROUNDWATER SAMPLING
TEXTRON FORMER TORX FACILITY
ROCHESTER, INDIANA

SDG:			19081281		19081281		19081281		19081281	
Location:			MW-1		MW-19(53)		MW-24(55.9)		MW-24(55.9)	
Date Collected:			08/15/19		08/16/19		08/16/19		08/16/19	
Field Sample ID:			ATR-MW1 - G081519		ATR-MW19 (53) - G081619		ATR-MW24 (55) - G081619		ATR-MW24 (55) - G081619R	
Type:			FS		FS		FS		FD	
Method	Unit	Parameter	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier
SW8260C	UG/L	1,1,1-Trichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1,2,2-Tetrachloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1,2-Trichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1-Dichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1-Dichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,2-Dichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,2-Dichloropropane	1	U	1	U	1	U	1	U
SW8260C	UG/L	2-Butanone	5	U	5	U	5	U	5	U
SW8260C	UG/L	2-Hexanone	5	U	5	U	5	UJ	5	UJ
SW8260C	UG/L	4-Methyl-2-pentanone	1	U	1	U	1	U	1	U
SW8260C	UG/L	Acetone	10	U	10	U	10	U	10	U
SW8260C	UG/L	Benzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromodichloromethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromoform	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromomethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Carbon disulfide	1	UJ	1	U	1	U	1	U
SW8260C	UG/L	Carbon tetrachloride	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chlorobenzene	2.1		1	U	1	U	1	U
SW8260C	UG/L	Chloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloroform	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloromethane	1.6		1.1		2.4		1.3	
SW8260C	UG/L	cis-1,2-Dichloroethene	1		24		1	U	1	U
SW8260C	UG/L	cis-1,3-Dichloropropene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Dibromochloromethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Ethylbenzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Methylene chloride	5	U	5	U	5	U	5	U
SW8260C	UG/L	Styrene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Tetrachloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Toluene	1	U	1	U	1	U	1	U
SW8260C	UG/L	trans-1,2-Dichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	trans-1,3-Dichloropropene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Trichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Vinyl chloride	1	U	23		1.4		1.2	
SW8260C	UG/L	Xylene, o	1	U	1	U	1	U	1	U
SW8260C	UG/L	Xylenes (m&p)	2	U	2	U	2	U	2	U
SW8260C	UG/L	Xylenes, Total	3	U	3	U	3	U	3	U

U = not detected, value is the detection limit

J = value is estimated

UG/L = microgram per liter

FS = Field Sample

FD = Field Duplicate

TB = Trip Blank

TABLE 4 - FINAL RESULTS SUMMARY
DATA VALIDATION REPORT
AUGUST 2019 GROUNDWATER SAMPLING
TEXTRON FORMER TORX FACILITY
ROCHESTER, INDIANA

SDG:			19081281		19081281		19081281		19081281	
Location:			MW-30(41.1)		MW-32(110)		MW-32(24.1)		MW-32(89)	
Date Collected:			08/15/19		08/15/19		08/15/19		08/15/19	
Field Sample ID:			ATR-MW30 (41.1) - G081519		ATR-MW32 (110) - G081519		ATR-MW32 (24.1) - G081519		ATR-MW32 (89) - G081519	
Type:			FS		FS		FS		FS	
Method	Unit	Parameter	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier
SW8260C	UG/L	1,1,1-Trichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1,2,2-Tetrachloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1,2-Trichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1-Dichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1-Dichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,2-Dichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,2-Dichloropropane	1	U	1	U	1	U	1	U
SW8260C	UG/L	2-Butanone	5	U	5	U	5	U	5	U
SW8260C	UG/L	2-Hexanone	5	U	5	U	5	U	5	U
SW8260C	UG/L	4-Methyl-2-pentanone	1	U	1	U	1	U	1	U
SW8260C	UG/L	Acetone	10	U	10	U	10	U	10	U
SW8260C	UG/L	Benzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromodichloromethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromoform	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromomethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Carbon disulfide	1	UJ	1	UJ	1	UJ	1	UJ
SW8260C	UG/L	Carbon tetrachloride	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chlorobenzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloroform	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloromethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	cis-1,2-Dichloroethene	110	U	1	U	1.5	U	1	U
SW8260C	UG/L	cis-1,3-Dichloropropene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Dibromochloromethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Ethylbenzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Methylene chloride	5	U	5	U	5	U	5	U
SW8260C	UG/L	Styrene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Tetrachloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Toluene	1	U	1	U	1	U	1	U
SW8260C	UG/L	trans-1,2-Dichloroethene	2.5	U	1	U	1	U	1	U
SW8260C	UG/L	trans-1,3-Dichloropropene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Trichloroethene	42	U	1	U	1	U	1	U
SW8260C	UG/L	Vinyl chloride	2.6	U	1	U	1	U	14	U
SW8260C	UG/L	Xylene, o	1	U	1	U	1	U	1	U
SW8260C	UG/L	Xylenes (m&p)	2	U	2	U	2	U	2	U
SW8260C	UG/L	Xylenes, Total	3	U	3	U	3	U	3	U

U = not detected, value is the detection limit

J = value is estimated

UG/L = microgram per liter

FS = Field Sample

FD = Field Duplicate

TB = Trip Blank

TABLE 4 - FINAL RESULTS SUMMARY
DATA VALIDATION REPORT
AUGUST 2019 GROUNDWATER SAMPLING
TEXTRON FORMER TORX FACILITY
ROCHESTER, INDIANA

SDG:			19081281		19081281		19081281		19081281	
Location:			MW-34(110)		MW-34(37)		MW-34(85)		MW-45(185)	
Date Collected:			08/15/19		08/15/19		08/15/19		08/16/19	
Field Sample ID:			ATR-MW34 (110) - G081519		ATR-MW34 (37) - G081519		ATR-MW34 (84) - G081519		ATR-MW45 (185) - G081619	
Type:			FS		FS		FS		FS	
Method	Unit	Parameter	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier
SW8260C	UG/L	1,1,1-Trichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1,2,2-Tetrachloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1,2-Trichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1-Dichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1-Dichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,2-Dichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,2-Dichloropropane	1	U	1	U	1	U	1	U
SW8260C	UG/L	2-Butanone	5	U	5	U	5	U	5	U
SW8260C	UG/L	2-Hexanone	5	U	5	U	5	U	5	UJ
SW8260C	UG/L	4-Methyl-2-pentanone	1	U	1	U	1	U	1	U
SW8260C	UG/L	Acetone	10	U	10	U	10	U	10	U
SW8260C	UG/L	Benzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromodichloromethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromoform	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromomethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Carbon disulfide	1	UJ	1	UJ	1	UJ	1	U
SW8260C	UG/L	Carbon tetrachloride	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chlorobenzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloroform	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloromethane	1	U	1	U	1.7		1	U
SW8260C	UG/L	cis-1,2-Dichloroethene	7		1	U	1	U	1	U
SW8260C	UG/L	cis-1,3-Dichloropropene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Dibromochloromethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Ethylbenzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Methylene chloride	5	U	5	U	5	U	5	U
SW8260C	UG/L	Styrene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Tetrachloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Toluene	1	U	1	U	1	U	1	U
SW8260C	UG/L	trans-1,2-Dichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	trans-1,3-Dichloropropene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Trichloroethene	1.1		1	U	20		1	U
SW8260C	UG/L	Vinyl chloride	1.2		1	U	1	U	1	U
SW8260C	UG/L	Xylene, o	1	U	1	U	1	U	1	U
SW8260C	UG/L	Xylenes (m&p)	2	U	2	U	2	U	2	U
SW8260C	UG/L	Xylenes, Total	3	U	3	U	3	U	3	U

U = not detected, value is the detection limit

J = value is estimated

UG/L = microgram per liter

FS = Field Sample

FD = Field Duplicate

TB = Trip Blank

TABLE 4 - FINAL RESULTS SUMMARY
DATA VALIDATION REPORT
AUGUST 2019 GROUNDWATER SAMPLING
TEXTRON FORMER TORX FACILITY
ROCHESTER, INDIANA

SDG:			19081281		19081281		19081281		19081281	
Location:			MW-48(159)		MW-48(159)		MW-53(41)		MW-55(49)	
Date Collected:			08/15/19		08/15/19		08/16/19		08/16/19	
Field Sample ID:			ATR-MW48 (159) - G081519		ATR-MW48 (159) - G081519R		ATR-MW53 (41) - G081619		ATR-MW55 (49) - G081619	
Type:			FS		FD		FS		FS	
Method	Unit	Parameter	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier
SW8260C	UG/L	1,1,1-Trichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1,2,2-Tetrachloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1,2-Trichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1-Dichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1-Dichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,2-Dichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,2-Dichloropropane	1	U	1	U	1	U	1	U
SW8260C	UG/L	2-Butanone	5	U	5	U	5	U	5	U
SW8260C	UG/L	2-Hexanone	5	U	5	U	5	U	5	UJ
SW8260C	UG/L	4-Methyl-2-pentanone	1	U	1	U	1	U	1	U
SW8260C	UG/L	Acetone	10	U	10	U	10	U	10	U
SW8260C	UG/L	Benzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromodichloromethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromoform	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromomethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Carbon disulfide	1	UJ	1	UJ	1	UJ	1	U
SW8260C	UG/L	Carbon tetrachloride	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chlorobenzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloroform	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloromethane	1	U	1	U	1	U	1.7	
SW8260C	UG/L	cis-1,2-Dichloroethene	1	U	1	U	1	U	1.9	
SW8260C	UG/L	cis-1,3-Dichloropropene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Dibromochloromethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Ethylbenzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Methylene chloride	5	U	5	U	5	U	5	U
SW8260C	UG/L	Styrene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Tetrachloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Toluene	1	U	1	U	1	U	1	U
SW8260C	UG/L	trans-1,2-Dichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	trans-1,3-Dichloropropene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Trichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Vinyl chloride	1	U	1	U	1	U	1	U
SW8260C	UG/L	Xylene, o	1	U	1	U	1	U	1	U
SW8260C	UG/L	Xylenes (m&p)	2	U	2	U	2	U	2	U
SW8260C	UG/L	Xylenes, Total	3	U	3	U	3	U	3	U

U = not detected, value is the detection limit

J = value is estimated

UG/L = microgram per liter

FS = Field Sample

FD = Field Duplicate

TB = Trip Blank

TABLE 4 - FINAL RESULTS SUMMARY
DATA VALIDATION REPORT
AUGUST 2019 GROUNDWATER SAMPLING
TEXTRON FORMER TORX FACILITY
ROCHESTER, INDIANA

SDG:			19081281		19081281		19081281		19081281	
Location:			MW-57(38)		MW-62(36)		MW-83(64)		MW-85(130)	
Date Collected:			08/16/19		08/16/19		08/16/19		08/15/19	
Field Sample ID:			ATR-MW57 (38) - G081619		ATR-MW62 (36)-G081619		ATR-MW83 (64) - G081619		ATR-MW85 (130) - G081519	
Type:			FS		FS		FS		FS	
Method	Unit	Parameter	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier
SW8260C	UG/L	1,1,1-Trichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1,2,2-Tetrachloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1,2-Trichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1-Dichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1-Dichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,2-Dichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,2-Dichloropropane	1	U	1	U	1	U	1	U
SW8260C	UG/L	2-Butanone	5	U	5	U	5	U	5	U
SW8260C	UG/L	2-Hexanone	5	UJ	5	U	5	U	5	U
SW8260C	UG/L	4-Methyl-2-pentanone	1	U	1	U	1	U	1	U
SW8260C	UG/L	Acetone	10	U	10	U	10	U	10	U
SW8260C	UG/L	Benzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromodichloromethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromoform	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromomethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Carbon disulfide	1	U	1	U	1	UJ	1	UJ
SW8260C	UG/L	Carbon tetrachloride	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chlorobenzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloroform	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloromethane	1.8		1	U	1	U	1	U
SW8260C	UG/L	cis-1,2-Dichloroethene	8.3		1	U	1	U	1	U
SW8260C	UG/L	cis-1,3-Dichloropropene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Dibromochloromethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Ethylbenzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Methylene chloride	5	U	5	U	5	U	5	U
SW8260C	UG/L	Styrene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Tetrachloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Toluene	1	U	1	U	1	U	1	U
SW8260C	UG/L	trans-1,2-Dichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	trans-1,3-Dichloropropene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Trichloroethene	5.3		1	U	1	U	1	U
SW8260C	UG/L	Vinyl chloride	1	U	1.2		1	U	1	U
SW8260C	UG/L	Xylene, o	1	U	1	U	1	U	1	U
SW8260C	UG/L	Xylenes (m&p)	2	U	2	U	2	U	2	U
SW8260C	UG/L	Xylenes, Total	3	U	3	U	3	U	3	U

U = not detected, value is the detection limit

J = value is estimated

UG/L = microgram per liter

FS = Field Sample

FD = Field Duplicate

TB = Trip Blank

TABLE 4 - FINAL RESULTS SUMMARY
DATA VALIDATION REPORT
AUGUST 2019 GROUNDWATER SAMPLING
TEXTRON FORMER TORX FACILITY
ROCHESTER, INDIANA

SDG:			19081281		19081281		19081281		19081281	
Location:			MW-85(39)		QC		QC		QC	
Date Collected:			08/15/19		08/15/19		08/16/19		08/16/19	
Field Sample ID:			ATR-MW85 (39) - G081519		ATR-EB001 - 081519		Trip Blank		ATR-EB001 - 081619	
Type:			FS		EB		TB		EB	
Method	Unit	Parameter	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier
SW8260C	UG/L	1,1,1-Trichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1,2,2-Tetrachloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1,2-Trichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1-Dichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1-Dichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,2-Dichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,2-Dichloropropane	1	U	1	U	1	U	1	U
SW8260C	UG/L	2-Butanone	5	U	5	U	5	U	5	U
SW8260C	UG/L	2-Hexanone	5	U	5	U	5	U	5	U
SW8260C	UG/L	4-Methyl-2-pentanone	1	U	1	U	1	U	1	U
SW8260C	UG/L	Acetone	10	U	10	U	10	U	10	U
SW8260C	UG/L	Benzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromodichloromethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromoform	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromomethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Carbon disulfide	1	U	1	U	1	U	1	U
SW8260C	UG/L	Carbon tetrachloride	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chlorobenzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloroform	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloromethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	cis-1,2-Dichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	cis-1,3-Dichloropropene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Dibromochloromethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Ethylbenzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Methylene chloride	5	U	5	U	5	U	5	U
SW8260C	UG/L	Styrene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Tetrachloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Toluene	1	U	1	U	1	U	1	U
SW8260C	UG/L	trans-1,2-Dichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	trans-1,3-Dichloropropene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Trichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Vinyl chloride	1	U	1	U	1	U	1	U
SW8260C	UG/L	Xylene, o	1	U	1	U	1	U	1	U
SW8260C	UG/L	Xylenes (m&p)	2	U	2	U	2	U	2	U
SW8260C	UG/L	Xylenes, Total	3	U	3	U	3	U	3	U

U = not detected, value is the detection limit

J = value is estimated

UG/L = microgram per liter

FS = Field Sample

FD = Field Duplicate

TB = Trip Blank

TABLE 4 - FINAL RESULTS SUMMARY
DATA VALIDATION REPORT
AUGUST 2019 GROUNDWATER SAMPLING
TEXTRON FORMER TORX FACILITY
ROCHESTER, INDIANA

SDG:			19081608		19081608		19081608		19081608	
Location:			MW-14		MW-15		MW-17		MW-20(51)	
Date Collected:			08/20/19		08/20/19		08/20/19		08/20/19	
Field Sample ID:			ATR-MW14-G082019		ATR-MW15-G082019		ATR-MW17-G082019		ATR-MW20(51)-G082019	
Type:			FS		FS		FS		FS	
Method	Unit	Parameter	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier
SW8260C	UG/L	1,1,1-Trichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1,2,2-Tetrachloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1,2-Trichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1-Dichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1-Dichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,2-Dichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,2-Dichloropropane	1	U	1	U	1	U	1	U
SW8260C	UG/L	2-Butanone	5	U	17		5	U	5	U
SW8260C	UG/L	2-Hexanone	5	U	5	UJ	5	U	5	U
SW8260C	UG/L	4-Methyl-2-pentanone	1	U	1	U	1	U	1	U
SW8260C	UG/L	Acetone	10	U	10	U	10	U	10	U
SW8260C	UG/L	Benzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromodichloromethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromoform	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromomethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Carbon disulfide	1	U	1	U	1	U	1	U
SW8260C	UG/L	Carbon tetrachloride	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chlorobenzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloroform	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloromethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	cis-1,2-Dichloroethene	1.5		1	U	20		1	U
SW8260C	UG/L	cis-1,3-Dichloropropene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Dibromochloromethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Ethylbenzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Methylene chloride	5	U	5	U	5	U	5	U
SW8260C	UG/L	Styrene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Tetrachloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Toluene	1	U	1	U	1	U	1	U
SW8260C	UG/L	trans-1,2-Dichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	trans-1,3-Dichloropropene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Trichloroethene	1	U	1	U	39		1	U
SW8260C	UG/L	Vinyl chloride	1.1		1	U	1.6		1	U
SW8260C	UG/L	Xylene, o	1	U	1	U	1	U	1	U
SW8260C	UG/L	Xylenes (m&p)	2	U	2	U	2	U	2	U
SW8260C	UG/L	Xylenes, Total	3	U	3	U	3	U	3	U

U = not detected, value is the detection limit

J = value is estimated

UG/L = microgram per liter

FS = Field Sample

FD = Field Duplicate

TB = Trip Blank

TABLE 4 - FINAL RESULTS SUMMARY
DATA VALIDATION REPORT
AUGUST 2019 GROUNDWATER SAMPLING
TEXTRON FORMER TORX FACILITY
ROCHESTER, INDIANA

SDG:			19081608	19081608	19081608	19081608				
Location:			MW-25(16.4)	MW-25(32.6)	MW-25(82)	MW-26(17.5)				
Date Collected:			08/20/19	08/20/19	08/20/19	08/19/19				
Field Sample ID:			ATR-MW25(16.4)-G082019	ATR-MW25(32.6)-G082019	ATR-MW25(82)-G082019	ATR-MW26(17.5)-G081919				
Type:			FS	FS	FS	FS				
Method	Unit	Parameter	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier
SW8260C	UG/L	1,1,1-Trichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1,2,2-Tetrachloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1,2-Trichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1-Dichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1-Dichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,2-Dichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,2-Dichloropropane	1	U	1	U	1	U	1	U
SW8260C	UG/L	2-Butanone	5	U	5	U	5	U	5	U
SW8260C	UG/L	2-Hexanone	5	U	5	UJ	5	UJ	5	UJ
SW8260C	UG/L	4-Methyl-2-pentanone	1	U	1	U	1	U	1	U
SW8260C	UG/L	Acetone	10	U	10	U	10	U	10	U
SW8260C	UG/L	Benzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromodichloromethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromoform	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromomethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Carbon disulfide	1	U	1	U	1	U	1	U
SW8260C	UG/L	Carbon tetrachloride	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chlorobenzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloroform	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloromethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	cis-1,2-Dichloroethene	1	U	1	U	1.5		1	U
SW8260C	UG/L	cis-1,3-Dichloropropene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Dibromochloromethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Ethylbenzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Methylene chloride	5	U	5	U	5	U	5	U
SW8260C	UG/L	Styrene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Tetrachloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Toluene	1	U	1	U	1	U	1	U
SW8260C	UG/L	trans-1,2-Dichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	trans-1,3-Dichloropropene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Trichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Vinyl chloride	1	U	1	U	3.6		1	U
SW8260C	UG/L	Xylene, o	1	U	1	U	1	U	1	U
SW8260C	UG/L	Xylenes (m&p)	2	U	2	U	2	U	2	U
SW8260C	UG/L	Xylenes, Total	3	U	3	U	3	U	3	U

U = not detected, value is the detection limit

J = value is estimated

UG/L = microgram per liter

FS = Field Sample

FD = Field Duplicate

TB = Trip Blank

TABLE 4 - FINAL RESULTS SUMMARY
DATA VALIDATION REPORT
AUGUST 2019 GROUNDWATER SAMPLING
TEXTRON FORMER TORX FACILITY
ROCHESTER, INDIANA

SDG:			19081608		19081608		19081608		19081608	
Location:			MW-26(28.8)		MW-26(58.8)		MW-27(18)		MW-27(18)	
Date Collected:			08/19/19		08/19/19		08/19/19		08/19/19	
Field Sample ID:			ATR-MW26(28.8)-G081919		ATR-MW26(58.2)-G081919		ATR-MW27(18)-G081919		ATR-MW27(18)-G081919R	
Type:			FS		FS		FS		FS	
Method	Unit	Parameter	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier
SW8260C	UG/L	1,1,1-Trichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1,2,2-Tetrachloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1,2-Trichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1-Dichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1-Dichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,2-Dichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,2-Dichloropropane	1	U	1	U	1	U	1	U
SW8260C	UG/L	2-Butanone	5	U	5	U	5	U	5	U
SW8260C	UG/L	2-Hexanone	5	UJ	5	UJ	5	UJ	5	UJ
SW8260C	UG/L	4-Methyl-2-pentanone	1	U	1	U	1	U	1	U
SW8260C	UG/L	Acetone	10	U	10	U	10	U	10	U
SW8260C	UG/L	Benzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromodichloromethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromoform	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromomethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Carbon disulfide	1	U	1	U	1	U	1	U
SW8260C	UG/L	Carbon tetrachloride	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chlorobenzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloroform	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloromethane	1.9		1	U	1	U	1.3	
SW8260C	UG/L	cis-1,2-Dichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	cis-1,3-Dichloropropene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Dibromochloromethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Ethylbenzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Methylene chloride	5	U	5	U	5	U	5	U
SW8260C	UG/L	Styrene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Tetrachloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Toluene	1	U	1	U	1	U	1	U
SW8260C	UG/L	trans-1,2-Dichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	trans-1,3-Dichloropropene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Trichloroethene	1	U	1	U	1.1		1	U
SW8260C	UG/L	Vinyl chloride	1	U	1	U	1	U	1	U
SW8260C	UG/L	Xylene, o	1	U	1	U	1	U	1	U
SW8260C	UG/L	Xylenes (m&p)	2	U	2	U	2	U	2	U
SW8260C	UG/L	Xylenes, Total	3	U	3	U	3	U	3	U

U = not detected, value is the detection limit

J = value is estimated

UG/L = microgram per liter

FS = Field Sample

FD = Field Duplicate

TB = Trip Blank

TABLE 4 - FINAL RESULTS SUMMARY
DATA VALIDATION REPORT
AUGUST 2019 GROUNDWATER SAMPLING
TEXTRON FORMER TORX FACILITY
ROCHESTER, INDIANA

SDG:			19081608		19081608		19081608		19081608	
Location:			MW-6C		MW-82(58)		QC		QC	
Date Collected:			08/21/19		08/20/19		08/19/19		08/21/19	
Field Sample ID:			ATR-MW6C-G082119		ATR-MW82(58)-G082019		ATR-EB001-081919		ATR-TR003-082119	
Type:			FS		FS		EB		TB	
Method	Unit	Parameter	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier
SW8260C	UG/L	1,1,1-Trichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1,2,2-Tetrachloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1,2-Trichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1-Dichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1-Dichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,2-Dichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,2-Dichloropropane	1	U	1	U	1	U	1	U
SW8260C	UG/L	2-Butanone	5	U	5	U	5	U	5	U
SW8260C	UG/L	2-Hexanone	5	U	5	U	5	U	5	U
SW8260C	UG/L	4-Methyl-2-pentanone	1	U	1	U	1	U	1	U
SW8260C	UG/L	Acetone	10	U	10	U	10	U	10	U
SW8260C	UG/L	Benzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromodichloromethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromoform	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromomethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Carbon disulfide	1	U	1	U	1	U	1	U
SW8260C	UG/L	Carbon tetrachloride	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chlorobenzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloroform	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloromethane	1.5		1	U	1	U	1	U
SW8260C	UG/L	cis-1,2-Dichloroethene	4		1	U	1	U	1	U
SW8260C	UG/L	cis-1,3-Dichloropropene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Dibromochloromethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Ethylbenzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Methylene chloride	5	U	5	U	5	U	5	U
SW8260C	UG/L	Styrene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Tetrachloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Toluene	1	U	1	U	1	U	1	U
SW8260C	UG/L	trans-1,2-Dichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	trans-1,3-Dichloropropene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Trichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Vinyl chloride	2.3		1	U	1	U	1	U
SW8260C	UG/L	Xylene, o	1	U	1	U	1	U	1	U
SW8260C	UG/L	Xylenes (m&p)	2	U	2	U	2	U	2	U
SW8260C	UG/L	Xylenes, Total	3	U	3	U	3	U	3	U

U = not detected, value is the detection limit

J = value is estimated

UG/L = microgram per liter

FS = Field Sample

FD = Field Duplicate

TB = Trip Blank

TABLE 4 - FINAL RESULTS SUMMARY
DATA VALIDATION REPORT
AUGUST 2019 GROUNDWATER SAMPLING
TEXTRON FORMER TORX FACILITY
ROCHESTER, INDIANA

SDG:			19081608		19081615		19081615		19081615	
Location:			QC		MW-11		MW-12		MW-13	
Date Collected:			08/21/19		08/20/19		08/20/19		08/20/19	
Field Sample ID:			ATR-EB001-082119		ATR-MW11-G082019		ATR-MW12-G082019		ATR-MW13-G082019	
Type:			EB		FS		FS		FS	
Method	Unit	Parameter	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier
SW8260C	UG/L	1,1,1-Trichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1,2,2-Tetrachloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1,2-Trichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1-Dichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1-Dichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,2-Dichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,2-Dichloropropane	1	U	1	U	1	U	1	U
SW8260C	UG/L	2-Butanone	5	U	5	U	5	U	5	U
SW8260C	UG/L	2-Hexanone	5	U	5	U	5	U	5	U
SW8260C	UG/L	4-Methyl-2-pentanone	1	U	1	U	1	U	1	U
SW8260C	UG/L	Acetone	10	U	10	U	10	U	10	U
SW8260C	UG/L	Benzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromodichloromethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromoform	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromomethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Carbon disulfide	1	U	1	U	1	U	1	U
SW8260C	UG/L	Carbon tetrachloride	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chlorobenzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloroform	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloromethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	cis-1,2-Dichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	cis-1,3-Dichloropropene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Dibromochloromethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Ethylbenzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Methylene chloride	5	U	5	U	5	U	5	U
SW8260C	UG/L	Styrene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Tetrachloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Toluene	1	U	1	U	1	U	1	U
SW8260C	UG/L	trans-1,2-Dichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	trans-1,3-Dichloropropene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Trichloroethene	1	U	1.6		1	U	1	U
SW8260C	UG/L	Vinyl chloride	1	U	1	U	1	U	1	U
SW8260C	UG/L	Xylene, o	1	U	1	U	1	U	1	U
SW8260C	UG/L	Xylenes (m&p)	2	U	2	U	2	U	2	U
SW8260C	UG/L	Xylenes, Total	3	U	3	U	3	U	3	U

U = not detected, value is the detection limit

J = value is estimated

UG/L = microgram per liter

FS = Field Sample

FD = Field Duplicate

TB = Trip Blank

TABLE 4 - FINAL RESULTS SUMMARY
DATA VALIDATION REPORT
AUGUST 2019 GROUNDWATER SAMPLING
TEXTRON FORMER TORX FACILITY
ROCHESTER, INDIANA

SDG:			19081615		19081615		19081615		19081615	
Location:			MW-16		MW-20(124)		MW-20(155)		MW-20(35)	
Date Collected:			08/19/19		08/20/19		08/20/19		08/20/19	
Field Sample ID:			ATR-MW16-G081919		ATR-MW20(124)-G082019		ATR-MW20(155)-G082019		ATR-MW20(35)-G082019	
Type:			FS		FS		FS		FS	
Method	Unit	Parameter	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier
SW8260C	UG/L	1,1,1-Trichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1,2,2-Tetrachloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1,2-Trichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1-Dichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1-Dichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,2-Dichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,2-Dichloropropane	1	U	1	U	1	U	1	U
SW8260C	UG/L	2-Butanone	5	U	5	U	5	U	5	U
SW8260C	UG/L	2-Hexanone	5	U	5	U	5	U	5	U
SW8260C	UG/L	4-Methyl-2-pentanone	1	U	1	U	1	U	1	U
SW8260C	UG/L	Acetone	10	U	10	U	10	U	10	U
SW8260C	UG/L	Benzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromodichloromethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromoform	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromomethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Carbon disulfide	1	U	1	U	1	U	1	U
SW8260C	UG/L	Carbon tetrachloride	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chlorobenzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloroform	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloromethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	cis-1,2-Dichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	cis-1,3-Dichloropropene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Dibromochloromethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Ethylbenzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Methylene chloride	5	U	5	U	5	U	5	U
SW8260C	UG/L	Styrene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Tetrachloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Toluene	1	U	1	U	1	U	1	U
SW8260C	UG/L	trans-1,2-Dichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	trans-1,3-Dichloropropene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Trichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Vinyl chloride	1	U	1	U	1	U	1	U
SW8260C	UG/L	Xylene, o	1	U	1	U	1	U	1	U
SW8260C	UG/L	Xylenes (m&p)	2	U	2	U	2	U	2	U
SW8260C	UG/L	Xylenes, Total	3	U	3	U	3	U	3	U

U = not detected, value is the detection limit

J = value is estimated

UG/L = microgram per liter

FS = Field Sample

FD = Field Duplicate

TB = Trip Blank

TABLE 4 - FINAL RESULTS SUMMARY
DATA VALIDATION REPORT
AUGUST 2019 GROUNDWATER SAMPLING
TEXTRON FORMER TORX FACILITY
ROCHESTER, INDIANA

SDG:			19081615		19081615		19081615		19081615	
Location:			MW-27(104.2)		MW-27(53.05)		MW-27(75.4)		MW-56(50)	
Date Collected:			08/19/19		08/19/19		08/19/19		08/21/19	
Field Sample ID:			ATR-MW27(104.2)-G081919		ATR-MW27(53.05)-G081919		ATR-MW27(75.4)-G081919		ATR-MW56(51)-G082119	
Type:			FS		FS		FS		FS	
Method	Unit	Parameter	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier
SW8260C	UG/L	1,1,1-Trichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1,2,2-Tetrachloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1,2-Trichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1-Dichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1-Dichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,2-Dichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,2-Dichloropropane	1	U	1	U	1	U	1	U
SW8260C	UG/L	2-Butanone	5	U	5	U	5	U	5	U
SW8260C	UG/L	2-Hexanone	5	U	5	U	5	U	5	U
SW8260C	UG/L	4-Methyl-2-pentanone	1	U	1	U	1	U	1	U
SW8260C	UG/L	Acetone	10	U	10	U	10	U	10	U
SW8260C	UG/L	Benzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromodichloromethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromoform	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromomethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Carbon disulfide	1	U	1	U	1	U	1	U
SW8260C	UG/L	Carbon tetrachloride	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chlorobenzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloroethane	1	U	1	U	1.1		1	U
SW8260C	UG/L	Chloroform	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloromethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	cis-1,2-Dichloroethene	1	U	1	U	2.9		1.7	
SW8260C	UG/L	cis-1,3-Dichloropropene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Dibromochloromethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Ethylbenzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Methylene chloride	5	U	5	U	5	U	5	U
SW8260C	UG/L	Styrene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Tetrachloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Toluene	1	U	1	U	1	U	1	U
SW8260C	UG/L	trans-1,2-Dichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	trans-1,3-Dichloropropene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Trichloroethene	1	U	3.9		7.8		1	U
SW8260C	UG/L	Vinyl chloride	2		1	U	1	U	1	U
SW8260C	UG/L	Xylene, o	1	U	1	U	1	U	1	U
SW8260C	UG/L	Xylenes (m&p)	2	U	2	U	2	U	2	U
SW8260C	UG/L	Xylenes, Total	3	U	3	U	3	U	3	U

U = not detected, value is the detection limit

J = value is estimated

UG/L = microgram per liter

FS = Field Sample

FD = Field Duplicate

TB = Trip Blank

TABLE 4 - FINAL RESULTS SUMMARY
DATA VALIDATION REPORT
AUGUST 2019 GROUNDWATER SAMPLING
TEXTRON FORMER TORX FACILITY
ROCHESTER, INDIANA

SDG:			19081615		19081615		19081615		19081615	
Location:			MW-84(44)		MW-84(65)		MW-89(28)		MW-9B	
Date Collected:			08/19/19		08/19/19		08/21/19		08/19/19	
Field Sample ID:			ATR-MW84(44)-G081919		ATR-MW84(68)-G081919		ATR-MW89(28)-G082119		ATR-MW9B-G081919	
Type:			FS		FS		FS		FS	
Method	Unit	Parameter	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier
SW8260C	UG/L	1,1,1-Trichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1,2,2-Tetrachloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1,2-Trichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1-Dichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1-Dichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,2-Dichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,2-Dichloropropane	1	U	1	U	1	U	1	U
SW8260C	UG/L	2-Butanone	5	U	5	U	5	U	5	U
SW8260C	UG/L	2-Hexanone	5	U	5	U	5	U	5	U
SW8260C	UG/L	4-Methyl-2-pentanone	1	U	1	U	1	U	1	U
SW8260C	UG/L	Acetone	10	U	10	U	10	U	10	U
SW8260C	UG/L	Benzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromodichloromethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromoform	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromomethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Carbon disulfide	1	U	1	U	1	U	1	U
SW8260C	UG/L	Carbon tetrachloride	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chlorobenzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloroform	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloromethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	cis-1,2-Dichloroethene	1	U	1	U	3.6		1	U
SW8260C	UG/L	cis-1,3-Dichloropropene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Dibromochloromethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Ethylbenzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Methylene chloride	5	U	5	U	5	U	5	U
SW8260C	UG/L	Styrene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Tetrachloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Toluene	1	U	1	U	1	U	1	U
SW8260C	UG/L	trans-1,2-Dichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	trans-1,3-Dichloropropene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Trichloroethene	2.6		1	U	1	U	1	U
SW8260C	UG/L	Vinyl chloride	1	U	1	U	35		1	U
SW8260C	UG/L	Xylene, o	1	U	1	U	1	U	1	U
SW8260C	UG/L	Xylenes (m&p)	2	U	2	U	2	U	2	U
SW8260C	UG/L	Xylenes, Total	3	U	3	U	3	U	3	U

U = not detected, value is the detection limit

J = value is estimated

UG/L = microgram per liter

FS = Field Sample

FD = Field Duplicate

TB = Trip Blank

TABLE 4 - FINAL RESULTS SUMMARY
DATA VALIDATION REPORT
AUGUST 2019 GROUNDWATER SAMPLING
TEXTRON FORMER TORX FACILITY
ROCHESTER, INDIANA

SDG:			19081615		19081615		19081615		19081622	
Location:			MW-9C		QC		QC		OW-01(39)	
Date Collected:			08/19/19		08/20/19		08/21/19		08/21/19	
Field Sample ID:			ATR-MW9C-G081919		ATR-EB001-082019		ATR-TB001-082119		ATR-OW1(39)-G082119	
Type:			FS		EB		TB		FS	
Method	Unit	Parameter	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier
SW8260C	UG/L	1,1,1-Trichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1,2,2-Tetrachloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1,2-Trichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1-Dichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1-Dichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,2-Dichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,2-Dichloropropane	1	U	1	U	1	U	1	U
SW8260C	UG/L	2-Butanone	5	U	5	U	5	U	5	U
SW8260C	UG/L	2-Hexanone	5	U	5	U	5	U	5	UJ
SW8260C	UG/L	4-Methyl-2-pentanone	1	U	1	U	1	U	1	U
SW8260C	UG/L	Acetone	10	U	10	U	10	U	10	U
SW8260C	UG/L	Benzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromodichloromethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromoform	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromomethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Carbon disulfide	1	U	1	U	1	U	1	U
SW8260C	UG/L	Carbon tetrachloride	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chlorobenzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloroethane	1	U	1	U	1	U	1	UJ
SW8260C	UG/L	Chloroform	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloromethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	cis-1,2-Dichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	cis-1,3-Dichloropropene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Dibromochloromethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Ethylbenzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Methylene chloride	5	U	5	U	5	U	5	U
SW8260C	UG/L	Styrene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Tetrachloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Toluene	1	U	1	U	1	U	1	U
SW8260C	UG/L	trans-1,2-Dichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	trans-1,3-Dichloropropene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Trichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Vinyl chloride	1	U	1	U	1	U	1	U
SW8260C	UG/L	Xylene, o	1	U	1	U	1	U	1	U
SW8260C	UG/L	Xylenes (m&p)	2	U	2	U	2	U	2	U
SW8260C	UG/L	Xylenes, Total	3	U	3	U	3	U	3	U

U = not detected, value is the detection limit

J = value is estimated

UG/L = microgram per liter

FS = Field Sample

FD = Field Duplicate

TB = Trip Blank

TABLE 4 - FINAL RESULTS SUMMARY
DATA VALIDATION REPORT
AUGUST 2019 GROUNDWATER SAMPLING
TEXTRON FORMER TORX FACILITY
ROCHESTER, INDIANA

SDG:			19081622		19081622		19081622		19081622	
Location:			OW-02(33)		OW-02(53)		OW-03(35)		OW-03(55)	
Date Collected:			08/21/19		08/21/19		08/21/19		08/21/19	
Field Sample ID:			ATR-OW2(33)-G082119		ATR-OW2(53)-G082119		ATR-OW3(35)-G082119		ATR-OW3(55)-G082119	
Type:			FS		FS		FS		FS	
Method	Unit	Parameter	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier
SW8260C	UG/L	1,1,1-Trichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1,2,2-Tetrachloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1,2-Trichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1-Dichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1-Dichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,2-Dichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,2-Dichloropropane	1	U	1	U	1	U	1	U
SW8260C	UG/L	2-Butanone	5	U	5	U	5	U	7	
SW8260C	UG/L	2-Hexanone	5	U	5	U	5	U	5	U
SW8260C	UG/L	4-Methyl-2-pentanone	1	U	1	U	1	U	1	U
SW8260C	UG/L	Acetone	10	U	10	U	10	U	10	U
SW8260C	UG/L	Benzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromodichloromethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromoform	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromomethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Carbon disulfide	1	U	1	U	1	U	1	U
SW8260C	UG/L	Carbon tetrachloride	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chlorobenzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloroform	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloromethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	cis-1,2-Dichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	cis-1,3-Dichloropropene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Dibromochloromethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Ethylbenzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Methylene chloride	5	U	5	U	5	U	5	U
SW8260C	UG/L	Styrene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Tetrachloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Toluene	1	U	1	U	1	U	1	U
SW8260C	UG/L	trans-1,2-Dichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	trans-1,3-Dichloropropene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Trichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Vinyl chloride	1	U	1	U	1	U	1	U
SW8260C	UG/L	Xylene, o	1	U	1	U	1	U	1	U
SW8260C	UG/L	Xylenes (m&p)	2	U	2	U	2	U	2	U
SW8260C	UG/L	Xylenes, Total	3	U	3	U	3	U	3	U

U = not detected, value is the detection limit

J = value is estimated

UG/L = microgram per liter

FS = Field Sample

FD = Field Duplicate

TB = Trip Blank

TABLE 4 - FINAL RESULTS SUMMARY
DATA VALIDATION REPORT
AUGUST 2019 GROUNDWATER SAMPLING
TEXTRON FORMER TORX FACILITY
ROCHESTER, INDIANA

SDG:			19081622		19081622		19081622		19081622	
Location:			OW-04(35)		OW-04(54)		OW-05(16)		OW-05(35)	
Date Collected:			08/21/19		08/21/19		08/21/19		08/21/19	
Field Sample ID:			ATR-OW4(35)-G082119		ATR-OW4(54)-G082119		ATR-OW5(16)-G082119		ATR-OW5(35)-G082119	
Type:			FS		FS		FS		FS	
Method	Unit	Parameter	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier
SW8260C	UG/L	1,1,1-Trichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1,2,2-Tetrachloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1,2-Trichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1-Dichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1-Dichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,2-Dichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,2-Dichloropropane	1	U	1	U	1	U	1	U
SW8260C	UG/L	2-Butanone	5	U	5	U	5	U	5	U
SW8260C	UG/L	2-Hexanone	5	U	5	U	5	U	5	U
SW8260C	UG/L	4-Methyl-2-pentanone	1	U	1	U	1	U	1	U
SW8260C	UG/L	Acetone	10	U	10	U	10	U	10	U
SW8260C	UG/L	Benzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromodichloromethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromoform	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromomethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Carbon disulfide	1	U	1	U	1	U	1	U
SW8260C	UG/L	Carbon tetrachloride	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chlorobenzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloroform	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloromethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	cis-1,2-Dichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	cis-1,3-Dichloropropene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Dibromochloromethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Ethylbenzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Methylene chloride	5	U	5	U	5	U	5	U
SW8260C	UG/L	Styrene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Tetrachloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Toluene	1	U	1	U	1	U	1	U
SW8260C	UG/L	trans-1,2-Dichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	trans-1,3-Dichloropropene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Trichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Vinyl chloride	1	U	1	U	1	U	1	U
SW8260C	UG/L	Xylene, o	1	U	1	U	1	U	1	U
SW8260C	UG/L	Xylenes (m&p)	2	U	2	U	2	U	2	U
SW8260C	UG/L	Xylenes, Total	3	U	3	U	3	U	3	U

U = not detected, value is the detection limit

J = value is estimated

UG/L = microgram per liter

FS = Field Sample

FD = Field Duplicate

TB = Trip Blank

TABLE 4 - FINAL RESULTS SUMMARY
DATA VALIDATION REPORT
AUGUST 2019 GROUNDWATER SAMPLING
TEXTRON FORMER TORX FACILITY
ROCHESTER, INDIANA

SDG:			19081622		19081622		19081622		19081622	
Location:			OW-05(54)		OW-06(38)		OW-06(63)		OW-06(63)	
Date Collected:			08/21/19		08/21/19		08/21/19		08/21/19	
Field Sample ID:			ATR-OW5(44)-G082119		ATR-OW6(37)-G082119		ATR-OW6(63)-G082119		ATR-OW6(63)-G082119R	
Type:			FS		FS		FS		FD	
Method	Unit	Parameter	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier
SW8260C	UG/L	1,1,1-Trichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1,2,2-Tetrachloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1,2-Trichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1-Dichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1-Dichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,2-Dichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,2-Dichloropropane	1	U	1	U	1	U	1	U
SW8260C	UG/L	2-Butanone	5	U	5	U	55		57	
SW8260C	UG/L	2-Hexanone	5	U	5	U	5	U	5	U
SW8260C	UG/L	4-Methyl-2-pentanone	1	U	1	U	1	U	1	U
SW8260C	UG/L	Acetone	10	U	10	U	19	U	19	U
SW8260C	UG/L	Benzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromodichloromethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromoform	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromomethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Carbon disulfide	1	U	1	U	1	U	1	U
SW8260C	UG/L	Carbon tetrachloride	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chlorobenzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloroform	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloromethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	cis-1,2-Dichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	cis-1,3-Dichloropropene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Dibromochloromethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Ethylbenzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Methylene chloride	5	U	5	U	5	U	5	U
SW8260C	UG/L	Styrene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Tetrachloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Toluene	1	U	1	U	1	U	1	U
SW8260C	UG/L	trans-1,2-Dichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	trans-1,3-Dichloropropene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Trichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Vinyl chloride	1	U	1	U	1	U	1	U
SW8260C	UG/L	Xylene, o	1	U	1	U	1	U	1	U
SW8260C	UG/L	Xylenes (m&p)	2	U	2	U	2	U	2	U
SW8260C	UG/L	Xylenes, Total	3	U	3	U	3	U	3	U

U = not detected, value is the detection limit

J = value is estimated

UG/L = microgram per liter

FS = Field Sample

FD = Field Duplicate

TB = Trip Blank

TABLE 4 - FINAL RESULTS SUMMARY
DATA VALIDATION REPORT
AUGUST 2019 GROUNDWATER SAMPLING
TEXTRON FORMER TORX FACILITY
ROCHESTER, INDIANA

SDG:			19081622	19081711	19081711	19081711				
Location:			QC	MW-3	MW-52(148)	MW-52(55)				
Date Collected:			08/21/19	08/22/19	08/22/19	08/22/19				
Field Sample ID:			ATR-TB002-082119	ATR-MW3-G082219	ATR-MW52 (148)-G082219	ATR-MW52(55)-G082219				
Type:			TB	FS	FS	FS				
Method	Unit	Parameter	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier
SW8260C	UG/L	1,1,1-Trichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1,2,2-Tetrachloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1,2-Trichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1-Dichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1-Dichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,2-Dichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,2-Dichloropropane	1	U	1	U	1	U	1	U
SW8260C	UG/L	2-Butanone	5	U	5	U	5	U	5	U
SW8260C	UG/L	2-Hexanone	5	U	5	U	5	U	5	U
SW8260C	UG/L	4-Methyl-2-pentanone	1	U	1	U	1	U	1	U
SW8260C	UG/L	Acetone	11		10	U	10	U	10	U
SW8260C	UG/L	Benzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromodichloromethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromoform	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromomethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Carbon disulfide	1	U	1	U	1	U	1	U
SW8260C	UG/L	Carbon tetrachloride	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chlorobenzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloroform	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloromethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	cis-1,2-Dichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	cis-1,3-Dichloropropene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Dibromochloromethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Ethylbenzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Methylene chloride	5	U	5	U	5	U	5	U
SW8260C	UG/L	Styrene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Tetrachloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Toluene	1	U	1	U	1	U	1	U
SW8260C	UG/L	trans-1,2-Dichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	trans-1,3-Dichloropropene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Trichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Vinyl chloride	1	U	3.4		1	U	1	U
SW8260C	UG/L	Xylene, o	1	U	1	U	1	U	1	U
SW8260C	UG/L	Xylenes (m&p)	2	U	2	U	2	U	2	U
SW8260C	UG/L	Xylenes, Total	3	U	3	U	3	U	3	U

U = not detected, value is the detection limit

J = value is estimated

UG/L = microgram per liter

FS = Field Sample

FD = Field Duplicate

TB = Trip Blank

TABLE 4 - FINAL RESULTS SUMMARY
DATA VALIDATION REPORT
AUGUST 2019 GROUNDWATER SAMPLING
TEXTRON FORMER TORX FACILITY
ROCHESTER, INDIANA

SDG:			19081711	19081711	19081711	19081711		
Location:			MW-60(38)	MW-65(32)	MW-67(30)	MW-71(33)		
Date Collected:			08/22/19	08/22/19	08/22/19	08/22/19		
Field Sample ID:			ATR-MW60 (38)-G082219	ATR-MW65 (32)-G082219	ATR-MW67 (30)-G082219	ATR-MW71(33)-G082219		
Type:			FS	FS	FS	FS		
Method	Unit	Parameter	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier
SW8260C	UG/L	1,1,1-Trichloroethane	1	U	1	U	1	U
SW8260C	UG/L	1,1,2,2-Tetrachloroethane	1	U	1	U	1	U
SW8260C	UG/L	1,1,2-Trichloroethane	1	U	1	U	1	U
SW8260C	UG/L	1,1-Dichloroethane	1	U	1	U	1	U
SW8260C	UG/L	1,1-Dichloroethene	3		1	U	1	U
SW8260C	UG/L	1,2-Dichloroethane	1	U	1	U	1	U
SW8260C	UG/L	1,2-Dichloropropane	1	U	1	U	1	U
SW8260C	UG/L	2-Butanone	5	U	5	U	5.3	
SW8260C	UG/L	2-Hexanone	5	U	5	U	5	U
SW8260C	UG/L	4-Methyl-2-pentanone	1	U	1	U	1	U
SW8260C	UG/L	Acetone	10	U	10	U	16	
SW8260C	UG/L	Benzene	1	U	1	U	1	U
SW8260C	UG/L	Bromodichloromethane	1	U	1	U	1	U
SW8260C	UG/L	Bromoform	1	U	1	U	1	U
SW8260C	UG/L	Bromomethane	1	U	1	U	1	U
SW8260C	UG/L	Carbon disulfide	1	U	1	U	1.2	J
SW8260C	UG/L	Carbon tetrachloride	1	U	1	U	1	U
SW8260C	UG/L	Chlorobenzene	1	U	1	U	1	U
SW8260C	UG/L	Chloroethane	1	U	1	U	1	U
SW8260C	UG/L	Chloroform	1	U	1	U	1	U
SW8260C	UG/L	Chloromethane	1	U	1	U	1	U
SW8260C	UG/L	cis-1,2-Dichloroethene	420		1	U	2.6	
SW8260C	UG/L	cis-1,3-Dichloropropene	1	U	1	U	1	U
SW8260C	UG/L	Dibromochloromethane	1	U	1	U	1	U
SW8260C	UG/L	Ethylbenzene	1	U	1	U	1	U
SW8260C	UG/L	Methylene chloride	5	U	5	U	5	U
SW8260C	UG/L	Styrene	1	U	1	U	1	U
SW8260C	UG/L	Tetrachloroethene	1	U	1	U	1	U
SW8260C	UG/L	Toluene	1	U	1	U	1.6	
SW8260C	UG/L	trans-1,2-Dichloroethene	2.4		1	U	1	U
SW8260C	UG/L	trans-1,3-Dichloropropene	1	U	1	U	1	U
SW8260C	UG/L	Trichloroethene	1	U	1	U	1	U
SW8260C	UG/L	Vinyl chloride	430	J+	1	U	1	U
SW8260C	UG/L	Xylene, o	1	U	1	U	1	U
SW8260C	UG/L	Xylenes (m&p)	2	U	2	U	2	U
SW8260C	UG/L	Xylenes, Total	3	U	3	U	3	U

U = not detected, value is the detection limit

J = value is estimated

UG/L = microgram per liter

FS = Field Sample

FD = Field Duplicate

TB = Trip Blank

TABLE 4 - FINAL RESULTS SUMMARY
DATA VALIDATION REPORT
AUGUST 2019 GROUNDWATER SAMPLING
TEXTRON FORMER TORX FACILITY
ROCHESTER, INDIANA

SDG:			19081711	19081711	19081711	19081711				
Location:			MW-75(32)	MW-76(30)	MW-77(41)	MW-78(35)				
Date Collected:			08/22/19	08/22/19	08/22/19	08/22/19				
Field Sample ID:			ATR-MW75 (30)-G082219	ATR-MW76 (30)-G082219	ATR-MW77 (41)-G082219	ATR-MW78 (35)-G082219				
Type:			FS	FS	FS	FS				
Method	Unit	Parameter	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier
SW8260C	UG/L	1,1,1-Trichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1,2,2-Tetrachloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1,2-Trichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1-Dichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1-Dichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,2-Dichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,2-Dichloropropane	1	U	1	U	1	U	1	U
SW8260C	UG/L	2-Butanone	5	U	5	U	5	U	5	U
SW8260C	UG/L	2-Hexanone	5	U	5	U	5	U	5	U
SW8260C	UG/L	4-Methyl-2-pentanone	1	U	1	U	1	U	1	U
SW8260C	UG/L	Acetone	10	U	17		10	U	10	U
SW8260C	UG/L	Benzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromodichloromethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromoform	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromomethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Carbon disulfide	1	U	1	U	1	U	1	U
SW8260C	UG/L	Carbon tetrachloride	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chlorobenzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloroform	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloromethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	cis-1,2-Dichloroethene	1	U	46		1	U	1	U
SW8260C	UG/L	cis-1,3-Dichloropropene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Dibromochloromethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Ethylbenzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Methylene chloride	5	U	5	U	5	U	5	U
SW8260C	UG/L	Styrene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Tetrachloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Toluene	1	U	2.2		1	U	1	U
SW8260C	UG/L	trans-1,2-Dichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	trans-1,3-Dichloropropene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Trichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Vinyl chloride	1	U	350		1	U	1	U
SW8260C	UG/L	Xylene, o	1	U	1	U	1	U	1	U
SW8260C	UG/L	Xylenes (m&p)	2	U	2	U	2	U	2	U
SW8260C	UG/L	Xylenes, Total	3	U	3	U	3	U	3	U

U = not detected, value is the detection limit

J = value is estimated

UG/L = microgram per liter

FS = Field Sample

FD = Field Duplicate

TB = Trip Blank

TABLE 4 - FINAL RESULTS SUMMARY
DATA VALIDATION REPORT
AUGUST 2019 GROUNDWATER SAMPLING
TEXTRON FORMER TORX FACILITY
ROCHESTER, INDIANA

SDG:			19081711		19081711		19081711		19081718	
Location:			MW-79(30)		QC		QC		MW-59(29)	
Date Collected:			08/22/19		08/22/19		08/22/19		08/22/19	
Field Sample ID:			ATR-MW79 (30)-G082219		ATR-EB001-G082219		ATR-FB001-G082219		ATR-MW59 (29)-G082219	
Type:			FS		EB		FB		FS	
Method	Unit	Parameter	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier
SW8260C	UG/L	1,1,1-Trichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1,2,2-Tetrachloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1,2-Trichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1-Dichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1-Dichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,2-Dichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,2-Dichloropropane	1	U	1	U	1	U	1	U
SW8260C	UG/L	2-Butanone	5	U	5	U	5	U	5	U
SW8260C	UG/L	2-Hexanone	5	U	5	U	5	U	5	UJ
SW8260C	UG/L	4-Methyl-2-pentanone	1	U	1	U	1	U	1	UJ
SW8260C	UG/L	Acetone	10	U	10	U	10	U	10	U
SW8260C	UG/L	Benzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromodichloromethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromoform	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromomethane	1	U	1	U	1	U	1	UJ
SW8260C	UG/L	Carbon disulfide	1	U	1	U	1	U	1	U
SW8260C	UG/L	Carbon tetrachloride	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chlorobenzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloroethane	1	U	1	U	1	U	2.9	
SW8260C	UG/L	Chloroform	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloromethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	cis-1,2-Dichloroethene	1	U	1	U	1	U	1	
SW8260C	UG/L	cis-1,3-Dichloropropene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Dibromochloromethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Ethylbenzene	1	U	1	U	1	U	2.7	
SW8260C	UG/L	Methylene chloride	5	U	5	U	5	U	5	U
SW8260C	UG/L	Styrene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Tetrachloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Toluene	1	U	1	U	1	U	3.1	
SW8260C	UG/L	trans-1,2-Dichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	trans-1,3-Dichloropropene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Trichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Vinyl chloride	1	U	1	U	1	U	1.2	
SW8260C	UG/L	Xylene, o	1	U	1	U	1	U	2.6	
SW8260C	UG/L	Xylenes (m&p)	2	U	2	U	2	U	4.5	
SW8260C	UG/L	Xylenes, Total	3	U	3	U	3	U	7	

U = not detected, value is the detection limit

J = value is estimated

UG/L = microgram per liter

FS = Field Sample

FD = Field Duplicate

TB = Trip Blank

TABLE 4 - FINAL RESULTS SUMMARY
DATA VALIDATION REPORT
AUGUST 2019 GROUNDWATER SAMPLING
TEXTRON FORMER TORX FACILITY
ROCHESTER, INDIANA

SDG:			19081718		19081718		19081718		19081718	
Location:			MW-59(29)		MW-59(46)		MW-68(32)		MW-72(32)	
Date Collected:			08/22/19		08/22/19		08/22/19		08/22/19	
Field Sample ID:			ATR-MW59 (29)-G082219R		ATR-MW59 (46)-G082219		ATR-MW68 (32)-G082219		ATR-MW72 (32)-G082219	
Type:			FD		FS		FS		FS	
Method	Unit	Parameter	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier
SW8260C	UG/L	1,1,1-Trichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1,2,2-Tetrachloroethane	1	U	1	UJ	1	UJ	1	UJ
SW8260C	UG/L	1,1,2-Trichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1-Dichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1-Dichloroethene	1	U	41		1	U	1	U
SW8260C	UG/L	1,2-Dichloroethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,2-Dichloropropane	1	U	1	U	1	U	1	U
SW8260C	UG/L	2-Butanone	5	U	5	U	9		44	
SW8260C	UG/L	2-Hexanone	5	UJ	5	U	5	U	5	U
SW8260C	UG/L	4-Methyl-2-pentanone	1	UJ	1	UJ	1	UJ	1	UJ
SW8260C	UG/L	Acetone	10	U	10	U	12		66	
SW8260C	UG/L	Benzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromodichloromethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromoform	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromomethane	1	UJ	1	UJ	1	UJ	1	UJ
SW8260C	UG/L	Carbon disulfide	1	U	1	U	1	U	1	U
SW8260C	UG/L	Carbon tetrachloride	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chlorobenzene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloroethane	2.2		1	U	1	U	1	U
SW8260C	UG/L	Chloroform	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloromethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	cis-1,2-Dichloroethene	1.1		1200		12		1.3	
SW8260C	UG/L	cis-1,3-Dichloropropene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Dibromochloromethane	1	U	1	U	1	U	1	U
SW8260C	UG/L	Ethylbenzene	2.7		4.6		1	U	1	U
SW8260C	UG/L	Methylene chloride	5	U	5	U	5	U	5	U
SW8260C	UG/L	Styrene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Tetrachloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Toluene	3.1		3.9		1.4		2.4	
SW8260C	UG/L	trans-1,2-Dichloroethene	1	U	16		1	U	1	U
SW8260C	UG/L	trans-1,3-Dichloropropene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Trichloroethene	1	U	1	U	1	U	1	U
SW8260C	UG/L	Vinyl chloride	1.3		1600		44		1.9	
SW8260C	UG/L	Xylene, o	2.5		3.8		1	U	1	U
SW8260C	UG/L	Xylenes (m&p)	4.4		3.7		2	U	2	U
SW8260C	UG/L	Xylenes, Total	6.9		7.5		3	U	3	U

U = not detected, value is the detection limit

J = value is estimated

UG/L = microgram per liter

FS = Field Sample

FD = Field Duplicate

TB = Trip Blank

TABLE 4 - FINAL RESULTS SUMMARY
 DATA VALIDATION REPORT
 AUGUST 2019 GROUNDWATER SAMPLING
 TEXTRON FORMER TORX FACILITY
 ROCHESTER, INDIANA

		SDG:	19081718
		Location:	MW-81(27)
		Date Collected:	08/21/19
		Field Sample ID:	ATR-MW81 (27)-G082219
		Type:	FS
Method	Unit	Parameter	Final Result Final Qualifier
SW8260C	UG/L	1,1,1-Trichloroethane	1 U
SW8260C	UG/L	1,1,2,2-Tetrachloroethane	1 UJ
SW8260C	UG/L	1,1,2-Trichloroethane	1 U
SW8260C	UG/L	1,1-Dichloroethane	1 U
SW8260C	UG/L	1,1-Dichloroethene	1 U
SW8260C	UG/L	1,2-Dichloroethane	1 U
SW8260C	UG/L	1,2-Dichloropropane	1 U
SW8260C	UG/L	2-Butanone	5 U
SW8260C	UG/L	2-Hexanone	5 U
SW8260C	UG/L	4-Methyl-2-pentanone	1 UJ
SW8260C	UG/L	Acetone	10 U
SW8260C	UG/L	Benzene	1 U
SW8260C	UG/L	Bromodichloromethane	1 U
SW8260C	UG/L	Bromoform	1 U
SW8260C	UG/L	Bromomethane	1 UJ
SW8260C	UG/L	Carbon disulfide	1 U
SW8260C	UG/L	Carbon tetrachloride	1 U
SW8260C	UG/L	Chlorobenzene	1 U
SW8260C	UG/L	Chloroethane	1 U
SW8260C	UG/L	Chloroform	1 U
SW8260C	UG/L	Chloromethane	1 U
SW8260C	UG/L	cis-1,2-Dichloroethene	1 U
SW8260C	UG/L	cis-1,3-Dichloropropene	1 U
SW8260C	UG/L	Dibromochloromethane	1 U
SW8260C	UG/L	Ethylbenzene	1.4
SW8260C	UG/L	Methylene chloride	5 U
SW8260C	UG/L	Styrene	1 U
SW8260C	UG/L	Tetrachloroethene	1 U
SW8260C	UG/L	Toluene	7.8
SW8260C	UG/L	trans-1,2-Dichloroethene	1 U
SW8260C	UG/L	trans-1,3-Dichloropropene	1 U
SW8260C	UG/L	Trichloroethene	1 U
SW8260C	UG/L	Vinyl chloride	1 U
SW8260C	UG/L	Xylene, o	1.2
SW8260C	UG/L	Xylenes (m&p)	2.4
SW8260C	UG/L	Xylenes, Total	3.7

U = not detected, value is the detection limit

J = value is estimated

UG/L = microgram per liter

FS = Field Sample

FD = Field Duplicate

TB = Trip Blank