

REPORT OF THE SECOND GROUNDWATER STABILITY ASSESSMENT MONITORING EVENT

Former TORX Facility

4366 North Old US Highway 31
Rochester, Indiana

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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.



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ACRONYMS

CVOC	chlorinated volatile organic compounds
DCE	dichloroethene
DO	dissolved oxygen
ERD	Enhanced Reductive Dechlorination
IDEM	Indiana Department of Environmental Management
ISCR	In-situ Chemical Reduction
µg/L	micrograms per liter
MS/MSD	matrix spike/matrix spike duplicate
NTU	Nephelometric Turbidity Units
ORP	oxygen reduction potential
QAPP	Quality Assurance Project Plan
RWP	Remediation Work Plan
TCE	trichloroethene
Site	former TORX facility
USEPA	U.S. Environmental Protection Agency
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 second groundwater stability assessment monitoring event. The assessment monitoring is associated with the implemented In-Situ Chemical Reduction (ISCR) and Enhanced Reductive Dechlorination (ERD) 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 second Groundwater Stability Assessment monitoring event that has been conducted at the Site following completion of the full-scale remediation and the performance monitoring phase. Results of the first Groundwater Stability Assessment monitoring event were documented in a report entitled, *Report of the First Groundwater Stability Assessment Event, TORX Facility, 4366 North Old US Highway 31, Rochester, Indiana, Facility Cleanup ID 7100149*, 2 August 2019, Wood.

3.0 GROUNDWATER STABILITY ASSESSMENT MONITORING

Wood conducted the second quarterly groundwater stability assessment monitoring event at the Site in May 2019. The groundwater stability assessment monitoring well locations are shown on **Figure 3**.

3.1 Scope of Work

As part of the second groundwater stability assessment monitoring event, Wood collected groundwater samples from 12 monitoring wells located within and downgradient of the treatment zones. The 12 wells sampled are designated quarterly stability monitoring wells. Groundwater was purged using low-flow sampling techniques. 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).

3.2 Field Activities

On 16 May 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 remediation 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 16 May 2019 and 17 May 2019. The wells 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 (NTUs) 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**.

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 (USEPA) Method 8260B.

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. Disposable equipment (i.e., pump bladders) was changed out between each well.

4.0 DATA EVALUATION

The results of the laboratory analyses are presented on **Table 3**, which also includes results from the first groundwater stability assessment monitoring event in February 2019

and the last performance groundwater monitoring result for each monitoring well. 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 May 2019 Quarterly Stability monitoring wells is shown on **Figure 6**. Copies of the laboratory reports and chain-of-custodies are presented in **Appendix B**.

For comparison purposes, groundwater concentration data obtained from the last performance groundwater monitoring event or the last stability assessment monitoring event is provided as baseline concentrations. 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. The baseline concentration data is included in **Table 3**. The baseline (last) monitoring event occurred in October 2018 and February 2019, 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.

4.1 Quarterly Stability Monitoring Results

Messenger wells [located down-gradient of the source area, i.e., MW-6C, OW-1(39), MW-14, OW-2(33), OW-2(53)] analyzed as a part of the quarterly stability monitoring event indicate that all but one were at or below the reporting limit for the targeted CVOCs. In MW-6C, cis-1,2 dichloroethene (DCE) decreased from 4.9 micrograms per liter ($\mu\text{g/L}$) in February of 2019 to 2.8 $\mu\text{g/L}$ in May 2019, while vinyl chloride decreased from 2.1 $\mu\text{g/L}$ in February of 2019 to 1.9 $\mu\text{g/L}$ in May 2019.

Perimeter of compliance wells [located down-gradient of the messenger wells, i.e., MW-17, MW-26(17.5), MW-26(28.8), MW-26(58.2), MW-27(18)] analyzed as a part of the stability monitoring event indicate that all but one were below reporting limits for the targeted CVOCs. In MW-17, cis-1,2-DCE increased from 21 $\mu\text{g/L}$ in February of 2019 to 23 $\mu\text{g/L}$ in May of 2019; trichloroethene (TCE) remained the same from February of 2019 to May of 2019 at 42 $\mu\text{g/L}$; and vinyl chloride increased from below the detection limit in February of 2019 to 1.2 $\mu\text{g/L}$ in May 2019.

CVOCs were not detected at the down gradient wells [OW-6(38) and OW-6(63)], as was the case during the previous event.

4.2 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 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:

- Exceedances of greater than 20% calibration differences were noted for Bromomethane. Bromomethane was not detected in the associated samples and bromomethane reporting limits were qualified estimated J/UJ in all samples. This compound is not a Site contaminant of concern.
- Due to a detection of acetone above the method detection limit but below the reporting limit in the Field Blank (FB-001-G051619), acetone detections in the same range were qualified non-detect (U). With the exception of sample ATR-OW6(63)-G051619, acetone was not detected in the associated samples and reporting limits were qualified non-detect (U) in ATR-OW6(63)-G051619. This compound is not a Site contaminant of concern.

The relative percent differences for constituents detected in the primary and replicate samples were less than 25 percent indicating acceptable sampling and analytical precision. One trip blank, three equipment blanks, and two field replicates were submitted and analyzed for VOCs. No VOCs were detected in the trip, equipment or field blanks above the reporting limit.

5.0 UPCOMING ACTIVITIES

The next groundwater stability assessment monitoring event was completed in August 2019 and included the treatment area wells sampled semi-annually and the wells sampled as part of the annual groundwater monitoring event.



Textron, Inc.
TORX Facility Remediation
Report of the Second 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
MW-59(46) ²	02/06/19	799.25	14.18	785.07
	05/16/19		12.87	786.38
MW-81(27) ²	02/05/19	798.34	14.92	783.42
	05/16/19		11.64	786.70
MW-68(32) ²	02/05/19	809.46	24.67	784.79
	05/16/19		23.27	786.19
MW-72(32) ²	02/05/19	808.92	24.07	784.85
	05/16/19		22.74	786.18
MW-6C ¹	02/05/19	810.40	25.60	784.80
	05/16/19		24.35	786.05
MW-20(51) ²	02/05/19	810.41	25.63	784.78
	05/16/19		24.37	786.04
MW-82(58) ²	02/05/19	807.38	22.60	784.78
	05/16/19		22.38	785.00
OW-1(39) ¹	02/05/19	805.15	20.49	784.66
	05/16/19		19.22	785.93
MW-14 ¹	02/05/19	802.70	18.10	784.60
	05/16/19		16.97	785.73
OW-2(33) ¹	02/05/19	805.54	20.89	784.65
	05/16/19		19.72	785.82
OW-2(53) ¹	02/05/19	805.50	20.86	784.64
	05/16/19		19.69	785.81
OW-3(35) ²	02/05/19	801.72	17.23	784.49
	05/16/19		16.12	785.60
OW-3(55) ²	02/05/19	801.66	17.40	784.26
	05/16/19		16.07	785.59
MW-15 ²	02/05/19	792.90	9.10	783.80
	05/16/19		8.02	784.88
OW-4(35) ²	02/05/19	801.35	17.33	784.02
	05/16/19		16.22	785.13
OW-4(54) ²	02/05/19	801.33	17.23	784.10
	05/16/19		16.12	785.21
MW-17 ¹	02/05/19	784.41	2.90	781.51
	05/16/19		1.75	782.66
MW-25(16.4) ²	02/05/19	791.93	7.79	784.14
	05/16/19		6.76	785.17
MW-25(32.6) ²	02/06/19	791.92	7.80	784.12
	05/16/19		NM	NM
MW-25(82) ²	02/06/19	791.93	9.69	782.24
	05/16/19		NM	NM

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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
MW-26(17.5) ¹	02/05/19	792.16	10.25	781.91
	05/16/19		9.27	782.89
MW-26(28.8) ¹	02/05/19	792.14	10.18	781.96
	05/16/19		NM	NM
MW-26(58.2) ¹	02/05/19	792.17	9.70	782.47
	05/16/19		8.54	783.63
MW-27(18) ¹	02/05/19	785.82	4.27	781.55
	05/16/19		NM	NM
OW-5(16) ²	02/05/19	790.72	8.43	782.29
	05/16/19		7.52	783.20
OW-5(35) ²	02/05/19	790.76	7.80	782.96
	05/16/19		6.58	784.18
OW-5(44) ²	02/06/19	790.70	7.52	783.18
	05/16/19		NM	NM
OW-6(38) ¹	02/05/19	789.27	8.57	780.70
	05/16/19		7.36	781.91
OW-6(63) ¹	02/05/19	789.27	7.97	781.30
	05/16/19		6.76	782.51

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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	05/16/19	840.48	38.04	802.44
MW-3	05/16/19	805.45	19.19	786.26
MW-5	05/16/19	807.89	NM	NM
MW-6C	05/16/19	810.40	24.35	786.05
MW-9C	05/16/19	808.16	22.12	786.04
MW-12	05/16/19	808.46	22.50	785.96
MW-13	05/16/19	806.67	20.72	785.95
MW-14	05/16/19	802.70	16.97	785.73
MW-16	05/16/19	791.18	8.13	783.05
MW-17	05/16/19	784.41	1.75	782.66
MW-20(35)	05/16/19	810.42	24.37	786.05
MW-21(40.2)	05/16/19	810.33	24.51	785.82
MW-23(39.9)	05/16/19	816.67	30.35	786.32
MW-24(24.9)	05/16/19	804.92	19.24	785.68
MW-25(16.4)	05/16/19	791.93	6.76	785.17
MW-26(17.5)	05/16/19	792.16	9.27	782.89
MW-27(18)	05/16/19	785.82	NM	NM
MW-30(41.1)	05/16/19	794.57	NM	NM
MW-31(30.9)	05/16/19	781.48	NM	NM
MW-53(41)	05/16/19	809.87	23.60	786.27
MW-57(38)	05/16/19	795.51	6.77	788.74
MW-59(29)	05/16/19	799.57	13.23	786.34
MW-60(38)	05/16/19	798.51	11.93	786.58
MW-62(36)	05/16/19	810.71	24.68	786.03
MW-65(32)	05/16/19	809.40	23.32	786.08
MW-67(30)	05/16/19	809.53	23.33	786.20
MW-68(32)	05/16/19	809.46	23.27	786.19
MW-71(33)	05/16/19	809.15	22.95	786.20
MW-72(32)	05/16/19	808.92	22.74	786.18
MW-75(32)	05/16/19	809.39	23.35	786.04
MW-76(30)	05/16/19	809.28	23.06	786.22
MW-77(41)	05/16/19	809.39	23.30	786.09
MW-78(35)	05/16/19	809.30	23.24	786.06
MW-79(30)	05/16/19	809.26	23.15	786.11
MW-81(27)	05/16/19	798.34	11.64	786.70
MW-84(44)	05/16/19	824.91	39.25	785.66
MW-85(39)	05/16/19	796.49	10.79	785.70
MW-89(28)	05/16/19	797.77	11.42	786.35
OW-1(28)	05/16/19	805.18	19.24	785.94
OW-2(33)	05/16/19	805.54	19.72	785.82
OW-3(35)	05/16/19	801.72	16.12	785.60
OW-4(35)	05/16/19	801.35	16.22	785.13
OW-5(16)	05/16/19	790.72	7.52	783.20
OW-6(38)	05/16/19	789.27	7.36	781.91
PM-2	05/16/19	798.45	11.60	786.85
PM-3	05/16/19	808.40	23.02	785.38
ZVI-2(17.5)	05/16/19	791.17	8.29	782.88

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	05/16/19	808.07	22.06	786.01
MW-15	05/16/19	792.90	8.02	784.88
MW-19(53)	05/16/19	809.56	23.45	786.11
MW-20(51)	05/16/19	810.41	24.37	786.04
MW-24(55.4)	05/16/19	804.94	19.21	785.73
MW-25(45.2)	05/16/19	791.91	NM	NM
MW-26(58.2)	05/16/19	792.17	8.54	783.63
MW-27(53.05)	05/16/19	785.84	2.13	783.71
MW-29(82.5)	05/16/19	801.45	23.27	778.18
MW-31(55.5)	05/16/19	781.47	NM	NM
MW-52(55)	05/16/19	798.84	13.42	785.42
MW-55(49)	05/16/19	799.24	11.62	787.62
MW-56(50)	05/16/19	797.23	9.86	787.37
MW-82(58)	05/16/19	807.38	22.38	785.00
MW-83(64)	05/16/19	807.67	21.74	785.93
MW-84(65)	05/16/19	824.56	39.09	785.47
OW-1(39)	05/16/19	805.15	19.22	785.93
OW-2(53)	05/16/19	805.50	19.69	785.81
OW-3(55)	05/16/19	801.66	16.07	785.59
OW-4(54)	05/16/19	801.33	16.12	785.21
OW-5(35)	05/16/19	790.76	6.58	784.18
OW-6(63)	05/16/19	789.27	6.76	782.51
ZVI-2(32.5)	05/16/19	791.19	8.16	783.03

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
MW-59(46) ²	02/06/19	7.16	1.194	13.41	0.11	-175.5
MW-81(27) ²	02/07/19	6.06	0.963	13.60	0.23	-101.1
MW-68(32) ²	02/07/19	7.12	3.138	16.6	3.29	-161
MW-72(32) ²	02/07/19	6.72	3.489	16.8	3.64	-156
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
MW-20(51) ²	02/07/19	7.18	2.424	9.8	0.36	-140
MW-82(58) ²	02/06/19	6.88	1.814	13.38	0.15	-149.8
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
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
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
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
OW-3(35) ²	02/06/19	7.10	1.899	13.44	0.05	-179.4
OW-3(55) ²	02/06/19	6.83	2.102	13.01	5.66	127.8
MW-15 ²	02/06/19	6.54	1.235	11.8	0.30	-109
OW-4(35) ²	02/05/19	6.88	3.341	11.1	0.19	-132
OW-4(54) ²	02/05/19	7.14	1.901	11.6	0.26	-96
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
MW-25(16.4) ²	02/06/19	6.84	0.789	11.9	0.13	-122
MW-25(32.6) ²	02/06/19	6.87	0.644	12.6	0.39	-132
MW-25(82) ²	02/06/19	7.06	0.699	11.8	0.35	-113
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
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
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
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
OW-5(16) ²	02/06/19	6.78	1.825	11.60	0.18	-136.1
OW-5(35) ²	02/05/19	6.92	0.881	12.42	0.86	-90.5
OW-5(44) ²	02/06/19	6.45	3.137	11.89	0.21	-125.2
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
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

⁽¹⁾ Well sampled quarterly

⁽²⁾ Well sampled semi-annually

NM - Not Measured
mS/cm - milli Siemen/centimeter

mV - millivolt
°C - degrees Celsius

ORP - Oxidation-Reduction Potential
DO - Dissolved Oxygen

Prepared By: RLB

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 UJ		0.00
	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-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	
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-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
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 UJ		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-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-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 UJ		0.00
	OW-1(39)	10/24/18	1 U		1 U		1 U		1 U		1 U		1 UJ		0.00
	OW-1(39)	2/6/19	1 U		1 U		1 U		1 U		1 U		1 UJ		0.00
OW-1(39)	5/17/19	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
	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(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-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(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	
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
	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(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	
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-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(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(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	

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-26(17.5)	10/22/18	<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
	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(28.8)	10/22/18	<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
	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(58.2)	10/22/18	<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
	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-27(18)	7/20/18	<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
	MW-27(18)-R	7/20/18	<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
	MW-27(18)	2/5/19	1 U		1 U		1 U		1 U		1 U		1 U		0.00
	MW-27(18)	5/16/19	1 U		1 U		1 U		1 U		1 U		1 U		0.00
	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 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 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 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 U		0.00
	OW-6(38)-R	2/5/19	1 U		1 U		1 U		1 U		1 U		1 U		0.00
	OW-6(38)	5/16/19	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 U		0.00	
OW-6(63)	5/16/19	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

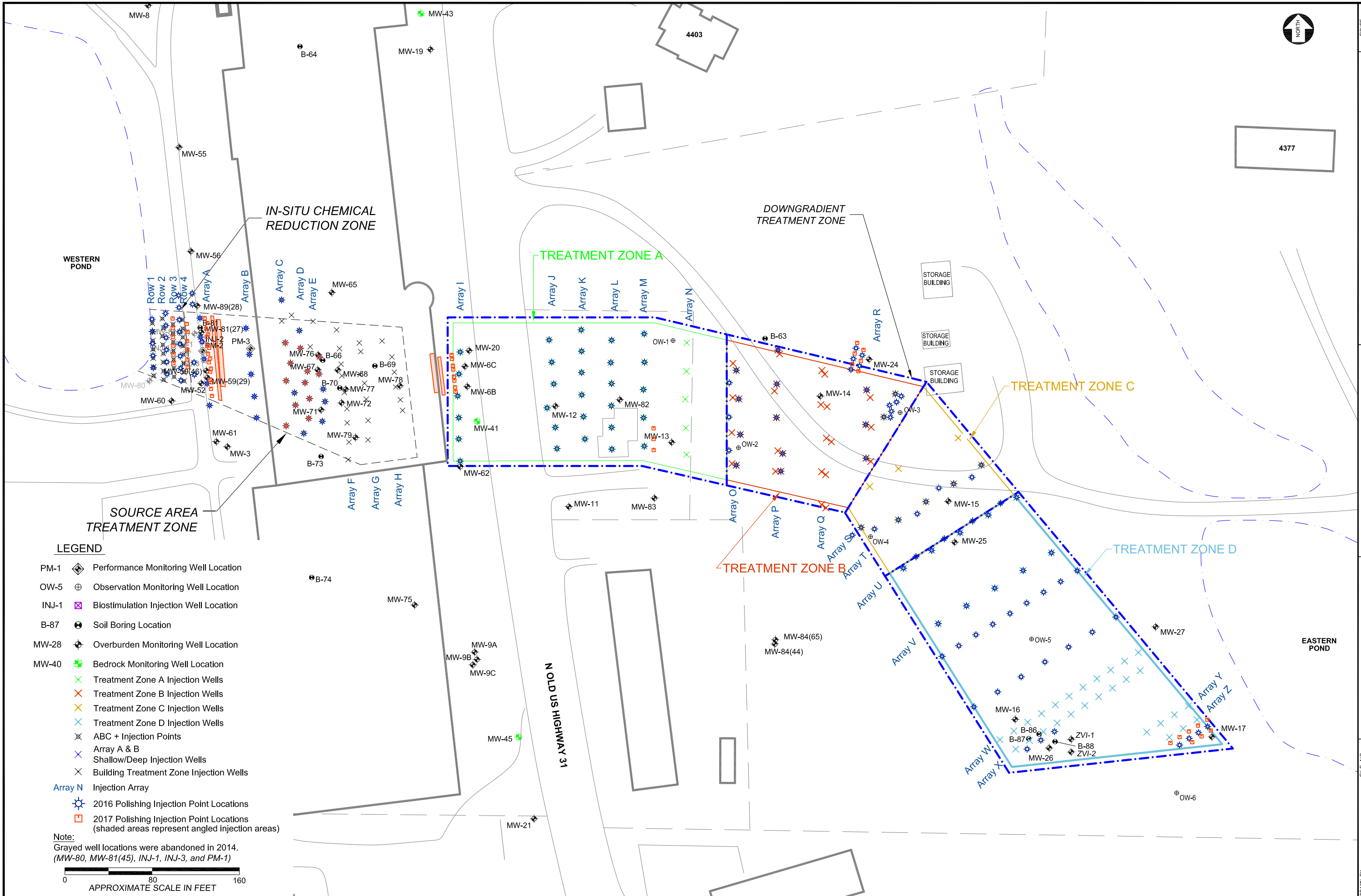
*m/L** - micromole per liter
mg/L - micrograms per liter
Italic text is baseline data

Prepared by: RLB
Checked by: PJS



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Report of the Second Groundwater Stability Assessment Monitoring Event

FIGURES



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)

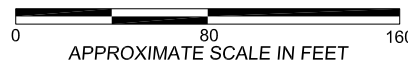
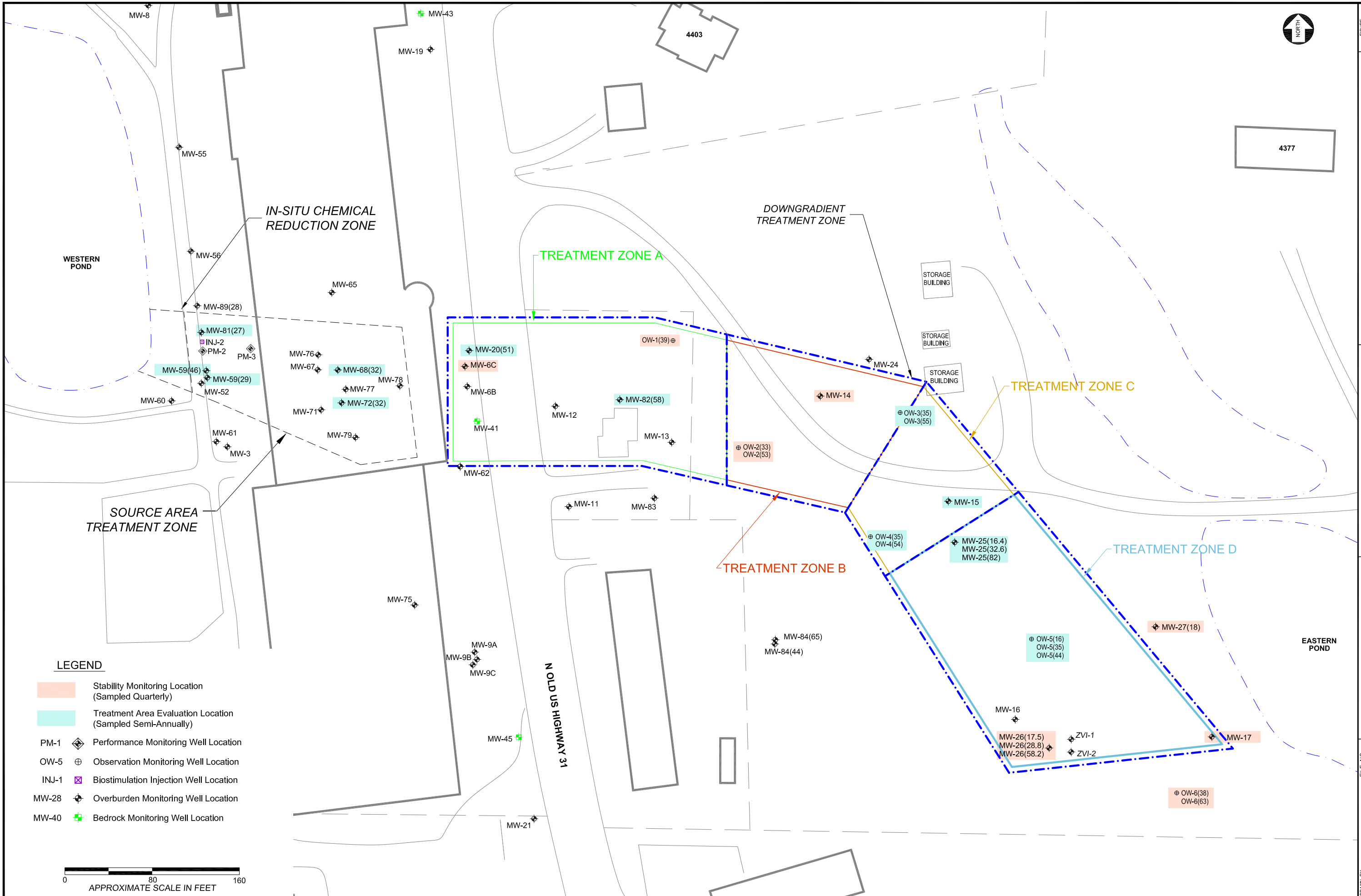


FIGURE	2	TREATMENT ZONES, ARRAYS AND WELL LOCATIONS
TORX FACILITY 4366 NORTH OLD US HIGHWAY 31 ROCHESTER, INDIANA		
DRAWN BY	FILE NO.	SCALE
RLB	P:\Tetron\TFS\Drawings\PM 2017 Site Plan.dwg	SEE ABOVE
APPROVED BY	DATE	PROJECT NO.
PJS	07/24/2019	3.359 15 1040
SOURCE Wells surveyed by Territorial Engineering, Fulton County, IN GIS, 2005.		



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

0 80 160
APPROXIMATE SCALE IN FEET

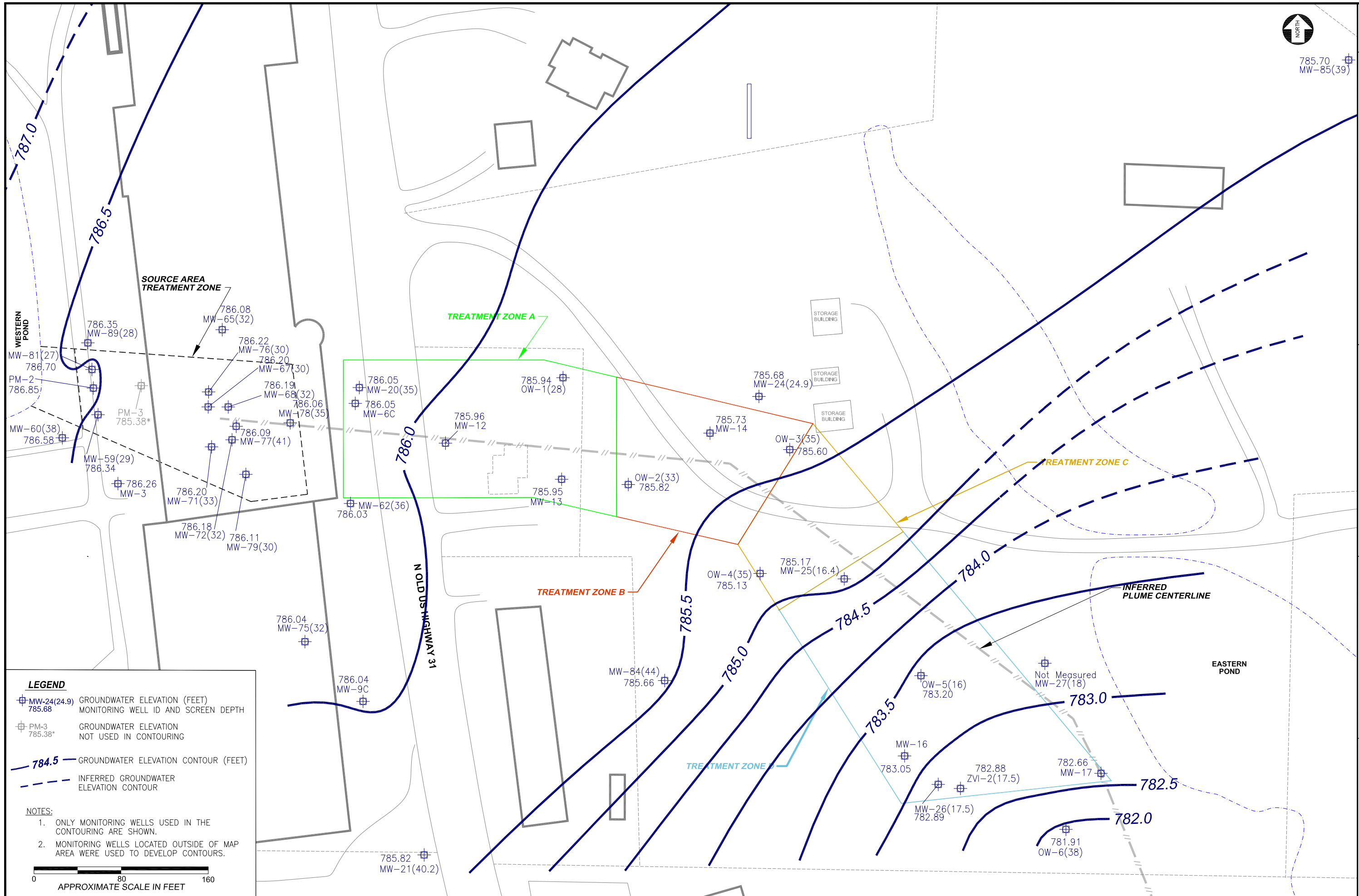
FIGURE **3**
SHEET 1 of 1

**GROUNDWATER STABILITY ASSESSMENT
MONITORING WELL LOCATIONS**

wood.

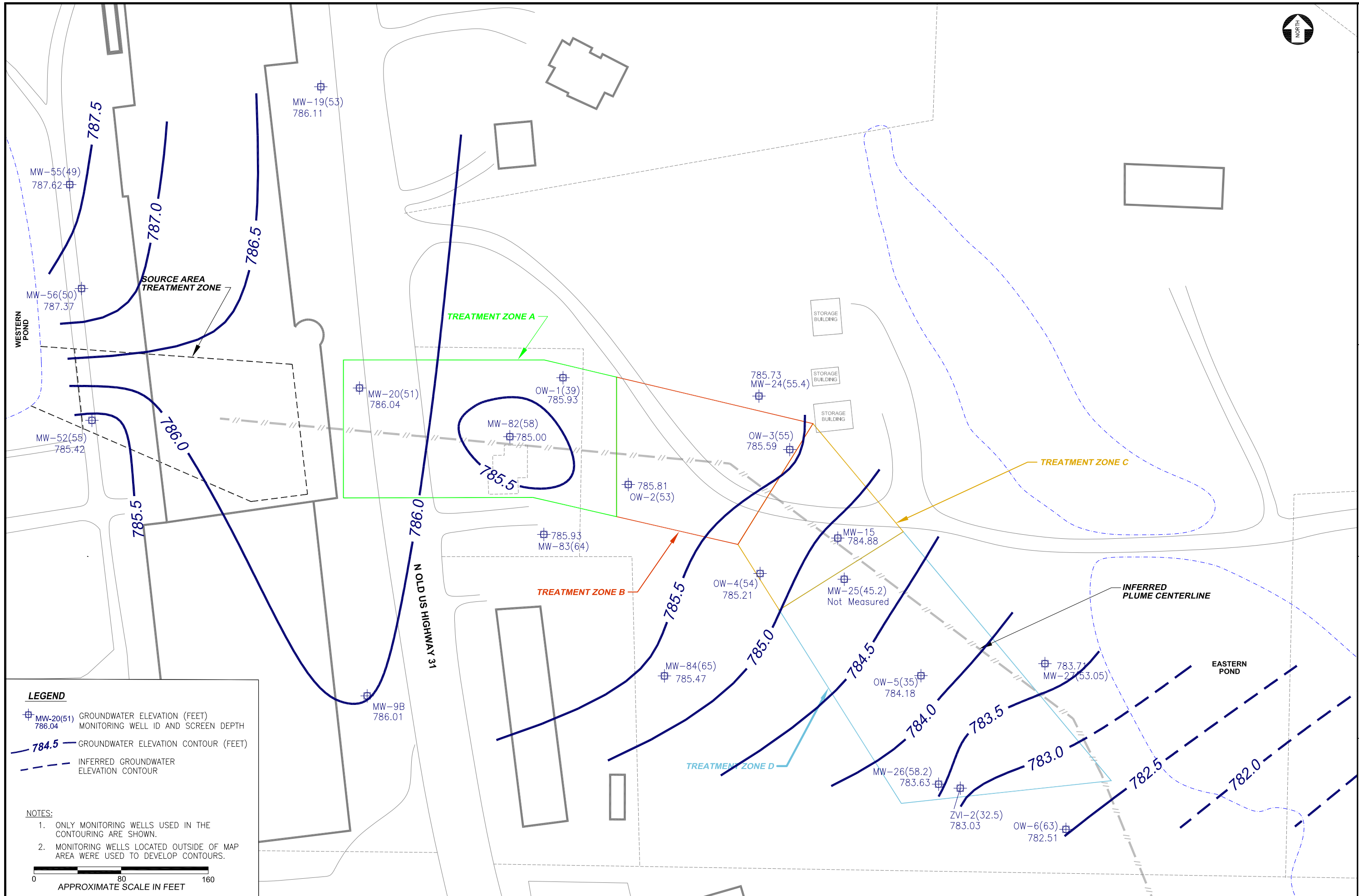
**TORX FACILITY
4366 NORTH OLD US HIGHWAY 31
ROCHESTER, INDIANA**

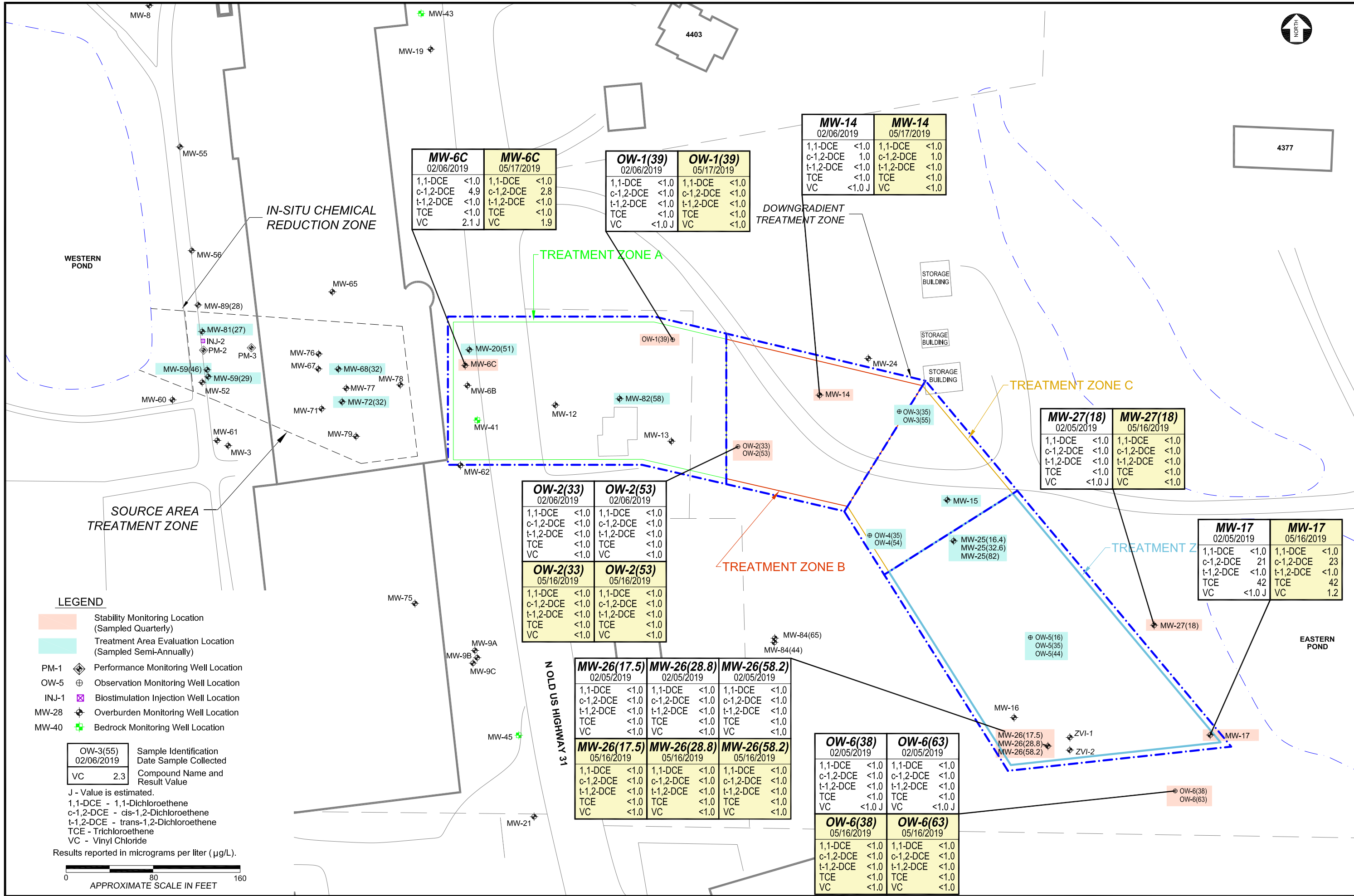
DRAWN BY RLB	FILE NO. P:\Textron\TFS\Drawings\Stability MMs.dwg	DATE 07/24/2019	SCALE SEE ABOVE
APPROVED BY PJS	SOURCE Wells surveyed by Territorial Engineering, Fulton County, IN GIS, 2005.		
PROJECT NO. 3359 15 1040			



785.70
MW-85(39)

FIGURE	4
GROUNDWATER CONTOUR MAP SHALLOW OVERBURDEN WELLS SOURCE TREATMENT AREA 16 May 2019	
wood.	
TORX FACILITY 4366 NORTH OLD US HIGHWAY 31 ROCHESTER, INDIANA	
DRAWN BY	P:\texton\TFS\Drawings\GW Contours 2018_RA.dwg
APPROVED BY	PJS
DATE	08/15/2019
SCALE	SEE ABOVE
PROJECT NO.	3359.15 1040
SOURCE Wells surveyed by Territorial Engineering; Fulton County, IN GIS, 2005.	





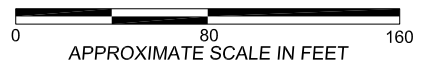
LEGEND

- 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).



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

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

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

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

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

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

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

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

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

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

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



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APPENDIX A

GROUNDWATER SAMPLE COLLECTION FIELD FORMS



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TORX Facility Remediation
Report of the Second Groundwater Stability Assessment Monitoring Event

APPENDIX B

LABORATORY REPORTS AND DATA VALIDATION REPORT



23-May-2019

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

Re: **Accument/Textron (3359-15-1040)**

Work Order: **19051239**

Dear Paul,

ALS Environmental received 16 samples on 17-May-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 46.

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

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RIGHT SOLUTIONS RIGHT PARTNER

Client: Wood Environment & Infrastructure Solutions, Inc.
Project: Accument/Textron (3359-15-1040)
Work Order: 19051239

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>
19051239-01	ATR-OW6(63)-G051619	Water		5/16/2019 08:25	5/17/2019 13:45	<input type="checkbox"/>
19051239-02	ATR-OW6(38)-G051619	Water		5/16/2019 09:20	5/17/2019 13:45	<input type="checkbox"/>
19051239-03	ATR-MW27(18)-G051619	Water		5/16/2019 11:20	5/17/2019 13:45	<input type="checkbox"/>
19051239-04	ATR-MW17-G051619	Water		5/16/2019 10:15	5/17/2019 13:45	<input type="checkbox"/>
19051239-05	ATR-MW26(58.2)-G051619	Water		5/16/2019 12:10	5/17/2019 13:45	<input type="checkbox"/>
19051239-06	ATR-MW26(28.8)-G051619	Water		5/16/2019 12:55	5/17/2019 13:45	<input type="checkbox"/>
19051239-07	ATR-MW26 (17.5)-G051619	Water		5/16/2019 13:50	5/17/2019 13:45	<input type="checkbox"/>
19051239-08	ATR-OW2(53)-G051619	Water		5/16/2019 14:50	5/17/2019 13:45	<input type="checkbox"/>
19051239-09	ATR-OW2(33)-G051619	Water		5/16/2019 15:40	5/17/2019 13:45	<input type="checkbox"/>
19051239-10	FB-001-G051619	Water		5/16/2019 15:22	5/17/2019 13:45	<input type="checkbox"/>
19051239-11	ATR-MW14-G051719	Water		5/17/2019 08:50	5/17/2019 13:45	<input type="checkbox"/>
19051239-12	ATR-OW1(38)-G051719	Water		5/17/2019 09:40	5/17/2019 13:45	<input type="checkbox"/>
19051239-13	ATR-MW6C-G051719	Water		5/17/2019 10:30	5/17/2019 13:45	<input type="checkbox"/>
19051239-14	ATR-MW6C-G051719R	Water		5/17/2019 10:30	5/17/2019 13:45	<input type="checkbox"/>
19051239-15	ATR-EB001-G051719	Water		5/17/2019	5/17/2019 13:45	<input type="checkbox"/>
19051239-16	TB-001-G051719	Water		5/17/2019 10:40	5/17/2019 13:45	<input type="checkbox"/>

Client: Wood Environment & Infrastructure Solutions, Inc.
Project: Accument/Textron (3359-15-1040)
WorkOrder: 19051239

**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: Accument/Textron (3359-15-1040)
Work Order: 19051239

Case Narrative

Samples for the above noted Work Order were received on 05/17/19. 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 R260904, Method VOC_8260_W, Sample 19051239-01A: The VOC Continuing Calibration Verification did not meet method acceptance criteria for the following analytes, result are to be considered estimated for Bromomethane.

Batch R260904, Method VOC_8260_W, Sample 19051239-02A: The VOC Continuing Calibration Verification did not meet method acceptance criteria for the following analytes, result are to be considered estimated for Bromomethane.

Batch R260904, Method VOC_8260_W, Sample 19051239-03A: The VOC Continuing Calibration Verification did not meet method acceptance criteria for the following analytes, result are to be considered estimated for Bromomethane.

Batch R260904, Method VOC_8260_W, Sample 19051239-04A: The VOC Continuing Calibration Verification did not meet method acceptance criteria for the following analytes, result are to be considered estimated for Bromomethane.

Batch R260904, Method VOC_8260_W, Sample 19051239-05A: The VOC Continuing Calibration Verification did not meet method acceptance criteria for the following analytes, result are to be considered estimated for Bromomethane.

Batch R260904, Method VOC_8260_W, Sample 19051239-06A: The VOC Continuing Calibration Verification did not meet method acceptance criteria for the following analytes, result are to be considered estimated for Bromomethane.

Client: Wood Environment & Infrastructure Solutions, Inc
Project: Accument/Textron (3359-15-1040)
Work Order: 19051239

Case Narrative

Batch R260904, Method VOC_8260_W, Sample 19051239-07A: The VOC Continuing Calibration Verification did not meet method acceptance criteria for the following analytes, result are to be considered estimated for Bromomethane.

Batch R260904, Method VOC_8260_W, Sample 19051239-08A: The VOC Continuing Calibration Verification did not meet method acceptance criteria for the following analytes, result are to be considered estimated for Bromomethane.

Batch R260904, Method VOC_8260_W, Sample 19051239-09A: The VOC Continuing Calibration Verification did not meet method acceptance criteria for the following analytes, result are to be considered estimated for Bromomethane.

Batch R260904, Method VOC_8260_W, Sample 19051239-10A: The VOC Continuing Calibration Verification did not meet method acceptance criteria for the following analytes, result are to be considered estimated for Bromomethane.

Batch R260904, Method VOC_8260_W, Sample 19051239-11A: The VOC Continuing Calibration Verification did not meet method acceptance criteria for the following analytes, result are to be considered estimated for Bromomethane.

Batch R260904, Method VOC_8260_W, Sample 19051239-12A: The VOC Continuing Calibration Verification did not meet method acceptance criteria for the following analytes, result are to be considered estimated for Bromomethane.

Batch R260904, Method VOC_8260_W, Sample 19051239-13A: The VOC Continuing Calibration Verification did not meet method acceptance criteria for the following analytes, result are to be considered estimated for Bromomethane.

Batch R260904, Method VOC_8260_W, Sample 19051239-14A: The VOC Continuing Calibration Verification did not meet method acceptance criteria for the following analytes, result are to be considered estimated for Bromomethane.

Batch R260904, Method VOC_8260_W, Sample 19051239-15A: The VOC Continuing Calibration Verification did not meet method acceptance criteria for the following analytes, result are to be considered estimated for Bromomethane.

Batch R260904, Method VOC_8260_W, Sample 19051239-16A: The VOC Continuing Calibration Verification did not meet method acceptance criteria for the following analytes, result are to be considered estimated for Bromomethane.

No other deviations or anomalies were noted.

Client: Wood Environment & Infrastructure Solutions, Inc.

Project: Accument/Textron (3359-15-1040)

Work Order: 19051239

Sample ID: ATR-OW6(63)-G051619

Lab ID: 19051239-01

Collection Date: 5/16/2019 08:25 AM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260C		Analyst: JEB	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	5/21/2019 07:27 AM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	5/21/2019 07:27 AM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	5/21/2019 07:27 AM
1,1-Dichloroethane	ND		1.0	µg/L	1	5/21/2019 07:27 AM
1,1-Dichloroethene	ND		1.0	µg/L	1	5/21/2019 07:27 AM
1,2-Dichloroethane	ND		1.0	µg/L	1	5/21/2019 07:27 AM
1,2-Dichloropropane	ND		1.0	µg/L	1	5/21/2019 07:27 AM
2-Butanone	180		25	µg/L	5	5/21/2019 03:15 PM
2-Hexanone	ND		5.0	µg/L	1	5/21/2019 07:27 AM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	5/21/2019 07:27 AM
Acetone	16		10	µg/L	1	5/21/2019 07:27 AM
Benzene	ND		1.0	µg/L	1	5/21/2019 07:27 AM
Bromodichloromethane	ND		1.0	µg/L	1	5/21/2019 07:27 AM
Bromoform	ND		1.0	µg/L	1	5/21/2019 07:27 AM
Bromomethane	ND		1.0	µg/L	1	5/21/2019 07:27 AM
Carbon disulfide	ND		1.0	µg/L	1	5/21/2019 07:27 AM
Carbon tetrachloride	ND		1.0	µg/L	1	5/21/2019 07:27 AM
Chlorobenzene	ND		1.0	µg/L	1	5/21/2019 07:27 AM
Chloroethane	ND		1.0	µg/L	1	5/21/2019 07:27 AM
Chloroform	ND		1.0	µg/L	1	5/21/2019 07:27 AM
Chloromethane	ND		1.0	µg/L	1	5/21/2019 07:27 AM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	5/21/2019 07:27 AM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	5/21/2019 07:27 AM
Dibromochloromethane	ND		1.0	µg/L	1	5/21/2019 07:27 AM
Ethylbenzene	ND		1.0	µg/L	1	5/21/2019 07:27 AM
m,p-Xylene	ND		2.0	µg/L	1	5/21/2019 07:27 AM
Methylene chloride	ND		5.0	µg/L	1	5/21/2019 07:27 AM
o-Xylene	ND		1.0	µg/L	1	5/21/2019 07:27 AM
Styrene	ND		1.0	µg/L	1	5/21/2019 07:27 AM
Tetrachloroethene	ND		1.0	µg/L	1	5/21/2019 07:27 AM
Toluene	ND		1.0	µg/L	1	5/21/2019 07:27 AM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	5/21/2019 07:27 AM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	5/21/2019 07:27 AM
Trichloroethene	ND		1.0	µg/L	1	5/21/2019 07:27 AM
Vinyl chloride	ND		1.0	µg/L	1	5/21/2019 07:27 AM
Xylenes, Total	ND		3.0	µg/L	1	5/21/2019 07:27 AM
Surr: 1,2-Dichloroethane-d4	98.3		75-120	%REC	1	5/21/2019 07:27 AM
Surr: 1,2-Dichloroethane-d4	99.0		75-120	%REC	5	5/21/2019 03:15 PM
Surr: 4-Bromofluorobenzene	98.1		80-110	%REC	1	5/21/2019 07:27 AM

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

Client: Wood Environment & Infrastructure Solutions, Inc.

Project: Accument/Textron (3359-15-1040)

Work Order: 19051239

Sample ID: ATR-OW6(63)-G051619

Lab ID: 19051239-01

Collection Date: 5/16/2019 08:25 AM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 4-Bromofluorobenzene	97.6		80-110	%REC	5	5/21/2019 03:15 PM
Surr: Dibromofluoromethane	93.7		85-115	%REC	1	5/21/2019 07:27 AM
Surr: Dibromofluoromethane	92.6		85-115	%REC	5	5/21/2019 03:15 PM
Surr: Toluene-d8	98.0		85-110	%REC	5	5/21/2019 03:15 PM
Surr: Toluene-d8	99.1		85-110	%REC	1	5/21/2019 07:27 AM

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

Client: Wood Environment & Infrastructure Solutions, Inc.

Project: Accument/Textron (3359-15-1040)

Work Order: 19051239

Sample ID: ATR-OW6(38)-G051619

Lab ID: 19051239-02

Collection Date: 5/16/2019 09:20 AM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260C		Analyst: JEB	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	5/21/2019 03:05 AM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	5/21/2019 03:05 AM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	5/21/2019 03:05 AM
1,1-Dichloroethane	ND		1.0	µg/L	1	5/21/2019 03:05 AM
1,1-Dichloroethene	ND		1.0	µg/L	1	5/21/2019 03:05 AM
1,2-Dichloroethane	ND		1.0	µg/L	1	5/21/2019 03:05 AM
1,2-Dichloropropane	ND		1.0	µg/L	1	5/21/2019 03:05 AM
2-Butanone	ND		5.0	µg/L	1	5/21/2019 03:05 AM
2-Hexanone	ND		5.0	µg/L	1	5/21/2019 03:05 AM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	5/21/2019 03:05 AM
Acetone	ND		10	µg/L	1	5/21/2019 03:05 AM
Benzene	ND		1.0	µg/L	1	5/21/2019 03:05 AM
Bromodichloromethane	ND		1.0	µg/L	1	5/21/2019 03:05 AM
Bromoform	ND		1.0	µg/L	1	5/21/2019 03:05 AM
Bromomethane	ND		1.0	µg/L	1	5/21/2019 03:05 AM
Carbon disulfide	ND		1.0	µg/L	1	5/21/2019 03:05 AM
Carbon tetrachloride	ND		1.0	µg/L	1	5/21/2019 03:05 AM
Chlorobenzene	ND		1.0	µg/L	1	5/21/2019 03:05 AM
Chloroethane	ND		1.0	µg/L	1	5/21/2019 03:05 AM
Chloroform	ND		1.0	µg/L	1	5/21/2019 03:05 AM
Chloromethane	ND		1.0	µg/L	1	5/21/2019 03:05 AM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	5/21/2019 03:05 AM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	5/21/2019 03:05 AM
Dibromochloromethane	ND		1.0	µg/L	1	5/21/2019 03:05 AM
Ethylbenzene	ND		1.0	µg/L	1	5/21/2019 03:05 AM
m,p-Xylene	ND		2.0	µg/L	1	5/21/2019 03:05 AM
Methylene chloride	ND		5.0	µg/L	1	5/21/2019 03:05 AM
o-Xylene	ND		1.0	µg/L	1	5/21/2019 03:05 AM
Styrene	ND		1.0	µg/L	1	5/21/2019 03:05 AM
Tetrachloroethene	ND		1.0	µg/L	1	5/21/2019 03:05 AM
Toluene	ND		1.0	µg/L	1	5/21/2019 03:05 AM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	5/21/2019 03:05 AM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	5/21/2019 03:05 AM
Trichloroethene	ND		1.0	µg/L	1	5/21/2019 03:05 AM
Vinyl chloride	ND		1.0	µg/L	1	5/21/2019 03:05 AM
Xylenes, Total	ND		3.0	µg/L	1	5/21/2019 03:05 AM
Surr: 1,2-Dichloroethane-d4	98.0		75-120	%REC	1	5/21/2019 03:05 AM
Surr: 4-Bromofluorobenzene	96.4		80-110	%REC	1	5/21/2019 03:05 AM
Surr: Dibromofluoromethane	93.9		85-115	%REC	1	5/21/2019 03:05 AM

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

ALS Group, USA

Date: 23-May-19

Client: Wood Environment & Infrastructure Solutions, Inc.**Project:** Accument/Textron (3359-15-1040)**Work Order:** 19051239**Sample ID:** ATR-OW6(38)-G051619**Lab ID:** 19051239-02**Collection Date:** 5/16/2019 09:20 AM**Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	96.8		85-110	%REC	1	5/21/2019 03:05 AM

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

Client: Wood Environment & Infrastructure Solutions, Inc.

Project: Accument/Textron (3359-15-1040)

Work Order: 19051239

Sample ID: ATR-MW27(18)-G051619

Lab ID: 19051239-03

Collection Date: 5/16/2019 11:20 AM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260C		Analyst: JEB	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	5/21/2019 03:27 AM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	5/21/2019 03:27 AM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	5/21/2019 03:27 AM
1,1-Dichloroethane	ND		1.0	µg/L	1	5/21/2019 03:27 AM
1,1-Dichloroethene	ND		1.0	µg/L	1	5/21/2019 03:27 AM
1,2-Dichloroethane	ND		1.0	µg/L	1	5/21/2019 03:27 AM
1,2-Dichloropropane	ND		1.0	µg/L	1	5/21/2019 03:27 AM
2-Butanone	ND		5.0	µg/L	1	5/21/2019 03:27 AM
2-Hexanone	ND		5.0	µg/L	1	5/21/2019 03:27 AM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	5/21/2019 03:27 AM
Acetone	ND		10	µg/L	1	5/21/2019 03:27 AM
Benzene	ND		1.0	µg/L	1	5/21/2019 03:27 AM
Bromodichloromethane	ND		1.0	µg/L	1	5/21/2019 03:27 AM
Bromoform	ND		1.0	µg/L	1	5/21/2019 03:27 AM
Bromomethane	ND		1.0	µg/L	1	5/21/2019 03:27 AM
Carbon disulfide	ND		1.0	µg/L	1	5/21/2019 03:27 AM
Carbon tetrachloride	ND		1.0	µg/L	1	5/21/2019 03:27 AM
Chlorobenzene	ND		1.0	µg/L	1	5/21/2019 03:27 AM
Chloroethane	ND		1.0	µg/L	1	5/21/2019 03:27 AM
Chloroform	ND		1.0	µg/L	1	5/21/2019 03:27 AM
Chloromethane	ND		1.0	µg/L	1	5/21/2019 03:27 AM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	5/21/2019 03:27 AM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	5/21/2019 03:27 AM
Dibromochloromethane	ND		1.0	µg/L	1	5/21/2019 03:27 AM
Ethylbenzene	ND		1.0	µg/L	1	5/21/2019 03:27 AM
m,p-Xylene	ND		2.0	µg/L	1	5/21/2019 03:27 AM
Methylene chloride	ND		5.0	µg/L	1	5/21/2019 03:27 AM
o-Xylene	ND		1.0	µg/L	1	5/21/2019 03:27 AM
Styrene	ND		1.0	µg/L	1	5/21/2019 03:27 AM
Tetrachloroethene	ND		1.0	µg/L	1	5/21/2019 03:27 AM
Toluene	ND		1.0	µg/L	1	5/21/2019 03:27 AM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	5/21/2019 03:27 AM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	5/21/2019 03:27 AM
Trichloroethene	ND		1.0	µg/L	1	5/21/2019 03:27 AM
Vinyl chloride	ND		1.0	µg/L	1	5/21/2019 03:27 AM
Xylenes, Total	ND		3.0	µg/L	1	5/21/2019 03:27 AM
Surr: 1,2-Dichloroethane-d4	97.6		75-120	%REC	1	5/21/2019 03:27 AM
Surr: 4-Bromofluorobenzene	98.5		80-110	%REC	1	5/21/2019 03:27 AM
Surr: Dibromofluoromethane	94.0		85-115	%REC	1	5/21/2019 03:27 AM

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

ALS Group, USA

Date: 23-May-19

Client: Wood Environment & Infrastructure Solutions, Inc.**Project:** Accument/Textron (3359-15-1040)**Work Order:** 19051239**Sample ID:** ATR-MW27(18)-G051619**Lab ID:** 19051239-03**Collection Date:** 5/16/2019 11:20 AM**Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	98.2		85-110	%REC	1	5/21/2019 03:27 AM

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

Client: Wood Environment & Infrastructure Solutions, Inc.

Project: Accument/Textron (3359-15-1040)

Work Order: 19051239

Sample ID: ATR-MW17-G051619

Lab ID: 19051239-04

Collection Date: 5/16/2019 10:15 AM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260C		Analyst: JEB	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	5/21/2019 03:49 AM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	5/21/2019 03:49 AM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	5/21/2019 03:49 AM
1,1-Dichloroethane	ND		1.0	µg/L	1	5/21/2019 03:49 AM
1,1-Dichloroethene	ND		1.0	µg/L	1	5/21/2019 03:49 AM
1,2-Dichloroethane	ND		1.0	µg/L	1	5/21/2019 03:49 AM
1,2-Dichloropropane	ND		1.0	µg/L	1	5/21/2019 03:49 AM
2-Butanone	ND		5.0	µg/L	1	5/21/2019 03:49 AM
2-Hexanone	ND		5.0	µg/L	1	5/21/2019 03:49 AM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	5/21/2019 03:49 AM
Acetone	ND		10	µg/L	1	5/21/2019 03:49 AM
Benzene	ND		1.0	µg/L	1	5/21/2019 03:49 AM
Bromodichloromethane	ND		1.0	µg/L	1	5/21/2019 03:49 AM
Bromoform	ND		1.0	µg/L	1	5/21/2019 03:49 AM
Bromomethane	ND		1.0	µg/L	1	5/21/2019 03:49 AM
Carbon disulfide	ND		1.0	µg/L	1	5/21/2019 03:49 AM
Carbon tetrachloride	ND		1.0	µg/L	1	5/21/2019 03:49 AM
Chlorobenzene	ND		1.0	µg/L	1	5/21/2019 03:49 AM
Chloroethane	ND		1.0	µg/L	1	5/21/2019 03:49 AM
Chloroform	ND		1.0	µg/L	1	5/21/2019 03:49 AM
Chloromethane	ND		1.0	µg/L	1	5/21/2019 03:49 AM
cis-1,2-Dichloroethene	23		1.0	µg/L	1	5/21/2019 03:49 AM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	5/21/2019 03:49 AM
Dibromochloromethane	ND		1.0	µg/L	1	5/21/2019 03:49 AM
Ethylbenzene	ND		1.0	µg/L	1	5/21/2019 03:49 AM
m,p-Xylene	ND		2.0	µg/L	1	5/21/2019 03:49 AM
Methylene chloride	ND		5.0	µg/L	1	5/21/2019 03:49 AM
o-Xylene	ND		1.0	µg/L	1	5/21/2019 03:49 AM
Styrene	ND		1.0	µg/L	1	5/21/2019 03:49 AM
Tetrachloroethene	ND		1.0	µg/L	1	5/21/2019 03:49 AM
Toluene	ND		1.0	µg/L	1	5/21/2019 03:49 AM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	5/21/2019 03:49 AM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	5/21/2019 03:49 AM
Trichloroethene	42		1.0	µg/L	1	5/21/2019 03:49 AM
Vinyl chloride	1.2		1.0	µg/L	1	5/21/2019 03:49 AM
Xylenes, Total	ND		3.0	µg/L	1	5/21/2019 03:49 AM
Surr: 1,2-Dichloroethane-d4	99.6		75-120	%REC	1	5/21/2019 03:49 AM
Surr: 4-Bromofluorobenzene	96.5		80-110	%REC	1	5/21/2019 03:49 AM
Surr: Dibromofluoromethane	95.0		85-115	%REC	1	5/21/2019 03:49 AM

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

ALS Group, USA

Date: 23-May-19

Client: Wood Environment & Infrastructure Solutions, Inc.**Project:** Accument/Textron (3359-15-1040)**Work Order:** 19051239**Sample ID:** ATR-MW17-G051619**Lab ID:** 19051239-04**Collection Date:** 5/16/2019 10:15 AM**Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	98.0		85-110	%REC	1	5/21/2019 03:49 AM

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

Client: Wood Environment & Infrastructure Solutions, Inc.

Project: Accument/Textron (3359-15-1040)

Work Order: 19051239

Sample ID: ATR-MW26(58.2)-G051619

Lab ID: 19051239-05

Collection Date: 5/16/2019 12:10 PM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260C		Analyst: JEB	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	5/21/2019 04:10 AM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	5/21/2019 04:10 AM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	5/21/2019 04:10 AM
1,1-Dichloroethane	ND		1.0	µg/L	1	5/21/2019 04:10 AM
1,1-Dichloroethene	ND		1.0	µg/L	1	5/21/2019 04:10 AM
1,2-Dichloroethane	ND		1.0	µg/L	1	5/21/2019 04:10 AM
1,2-Dichloropropane	ND		1.0	µg/L	1	5/21/2019 04:10 AM
2-Butanone	ND		5.0	µg/L	1	5/21/2019 04:10 AM
2-Hexanone	ND		5.0	µg/L	1	5/21/2019 04:10 AM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	5/21/2019 04:10 AM
Acetone	ND		10	µg/L	1	5/21/2019 04:10 AM
Benzene	ND		1.0	µg/L	1	5/21/2019 04:10 AM
Bromodichloromethane	ND		1.0	µg/L	1	5/21/2019 04:10 AM
Bromoform	ND		1.0	µg/L	1	5/21/2019 04:10 AM
Bromomethane	ND		1.0	µg/L	1	5/21/2019 04:10 AM
Carbon disulfide	ND		1.0	µg/L	1	5/21/2019 04:10 AM
Carbon tetrachloride	ND		1.0	µg/L	1	5/21/2019 04:10 AM
Chlorobenzene	ND		1.0	µg/L	1	5/21/2019 04:10 AM
Chloroethane	ND		1.0	µg/L	1	5/21/2019 04:10 AM
Chloroform	ND		1.0	µg/L	1	5/21/2019 04:10 AM
Chloromethane	ND		1.0	µg/L	1	5/21/2019 04:10 AM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	5/21/2019 04:10 AM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	5/21/2019 04:10 AM
Dibromochloromethane	ND		1.0	µg/L	1	5/21/2019 04:10 AM
Ethylbenzene	ND		1.0	µg/L	1	5/21/2019 04:10 AM
m,p-Xylene	ND		2.0	µg/L	1	5/21/2019 04:10 AM
Methylene chloride	ND		5.0	µg/L	1	5/21/2019 04:10 AM
o-Xylene	ND		1.0	µg/L	1	5/21/2019 04:10 AM
Styrene	ND		1.0	µg/L	1	5/21/2019 04:10 AM
Tetrachloroethene	ND		1.0	µg/L	1	5/21/2019 04:10 AM
Toluene	ND		1.0	µg/L	1	5/21/2019 04:10 AM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	5/21/2019 04:10 AM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	5/21/2019 04:10 AM
Trichloroethene	ND		1.0	µg/L	1	5/21/2019 04:10 AM
Vinyl chloride	ND		1.0	µg/L	1	5/21/2019 04:10 AM
Xylenes, Total	ND		3.0	µg/L	1	5/21/2019 04:10 AM
Surr: 1,2-Dichloroethane-d4	99.4		75-120	%REC	1	5/21/2019 04:10 AM
Surr: 4-Bromofluorobenzene	97.4		80-110	%REC	1	5/21/2019 04:10 AM
Surr: Dibromofluoromethane	95.6		85-115	%REC	1	5/21/2019 04:10 AM

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

ALS Group, USA

Date: 23-May-19

Client: Wood Environment & Infrastructure Solutions, Inc.**Project:** Accument/Textron (3359-15-1040)**Work Order:** 19051239**Sample ID:** ATR-MW26(58.2)-G051619**Lab ID:** 19051239-05**Collection Date:** 5/16/2019 12:10 PM**Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	98.2		85-110	%REC	1	5/21/2019 04:10 AM

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

Client: Wood Environment & Infrastructure Solutions, Inc.

Project: Accument/Textron (3359-15-1040)

Work Order: 19051239

Sample ID: ATR-MW26(28.8)-G051619

Lab ID: 19051239-06

Collection Date: 5/16/2019 12:55 PM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260C		Analyst: JEB	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	5/21/2019 04:32 AM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	5/21/2019 04:32 AM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	5/21/2019 04:32 AM
1,1-Dichloroethane	ND		1.0	µg/L	1	5/21/2019 04:32 AM
1,1-Dichloroethene	ND		1.0	µg/L	1	5/21/2019 04:32 AM
1,2-Dichloroethane	ND		1.0	µg/L	1	5/21/2019 04:32 AM
1,2-Dichloropropane	ND		1.0	µg/L	1	5/21/2019 04:32 AM
2-Butanone	ND		5.0	µg/L	1	5/21/2019 04:32 AM
2-Hexanone	ND		5.0	µg/L	1	5/21/2019 04:32 AM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	5/21/2019 04:32 AM
Acetone	ND		10	µg/L	1	5/21/2019 04:32 AM
Benzene	ND		1.0	µg/L	1	5/21/2019 04:32 AM
Bromodichloromethane	ND		1.0	µg/L	1	5/21/2019 04:32 AM
Bromoform	ND		1.0	µg/L	1	5/21/2019 04:32 AM
Bromomethane	ND		1.0	µg/L	1	5/21/2019 04:32 AM
Carbon disulfide	ND		1.0	µg/L	1	5/21/2019 04:32 AM
Carbon tetrachloride	ND		1.0	µg/L	1	5/21/2019 04:32 AM
Chlorobenzene	ND		1.0	µg/L	1	5/21/2019 04:32 AM
Chloroethane	ND		1.0	µg/L	1	5/21/2019 04:32 AM
Chloroform	ND		1.0	µg/L	1	5/21/2019 04:32 AM
Chloromethane	ND		1.0	µg/L	1	5/21/2019 04:32 AM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	5/21/2019 04:32 AM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	5/21/2019 04:32 AM
Dibromochloromethane	ND		1.0	µg/L	1	5/21/2019 04:32 AM
Ethylbenzene	ND		1.0	µg/L	1	5/21/2019 04:32 AM
m,p-Xylene	ND		2.0	µg/L	1	5/21/2019 04:32 AM
Methylene chloride	ND		5.0	µg/L	1	5/21/2019 04:32 AM
o-Xylene	ND		1.0	µg/L	1	5/21/2019 04:32 AM
Styrene	ND		1.0	µg/L	1	5/21/2019 04:32 AM
Tetrachloroethene	ND		1.0	µg/L	1	5/21/2019 04:32 AM
Toluene	ND		1.0	µg/L	1	5/21/2019 04:32 AM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	5/21/2019 04:32 AM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	5/21/2019 04:32 AM
Trichloroethene	ND		1.0	µg/L	1	5/21/2019 04:32 AM
Vinyl chloride	ND		1.0	µg/L	1	5/21/2019 04:32 AM
Xylenes, Total	ND		3.0	µg/L	1	5/21/2019 04:32 AM
Surr: 1,2-Dichloroethane-d4	100		75-120	%REC	1	5/21/2019 04:32 AM
Surr: 4-Bromofluorobenzene	97.2		80-110	%REC	1	5/21/2019 04:32 AM
Surr: Dibromofluoromethane	95.0		85-115	%REC	1	5/21/2019 04:32 AM

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

ALS Group, USA

Date: 23-May-19

Client: Wood Environment & Infrastructure Solutions, Inc.

Project: Accument/Textron (3359-15-1040)

Work Order: 19051239

Sample ID: ATR-MW26(28.8)-G051619

Lab ID: 19051239-06

Collection Date: 5/16/2019 12:55 PM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	97.6		85-110	%REC	1	5/21/2019 04:32 AM

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

Client: Wood Environment & Infrastructure Solutions, Inc.
Project: Accument/Textron (3359-15-1040)
Sample ID: ATR-MW26 (17.5)-G051619
Collection Date: 5/16/2019 01:50 PM

Work Order: 19051239
Lab ID: 19051239-07
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260C		Analyst: JEB	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	5/21/2019 04:54 AM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	5/21/2019 04:54 AM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	5/21/2019 04:54 AM
1,1-Dichloroethane	ND		1.0	µg/L	1	5/21/2019 04:54 AM
1,1-Dichloroethene	ND		1.0	µg/L	1	5/21/2019 04:54 AM
1,2-Dichloroethane	ND		1.0	µg/L	1	5/21/2019 04:54 AM
1,2-Dichloropropane	ND		1.0	µg/L	1	5/21/2019 04:54 AM
2-Butanone	ND		5.0	µg/L	1	5/21/2019 04:54 AM
2-Hexanone	ND		5.0	µg/L	1	5/21/2019 04:54 AM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	5/21/2019 04:54 AM
Acetone	ND		10	µg/L	1	5/21/2019 04:54 AM
Benzene	ND		1.0	µg/L	1	5/21/2019 04:54 AM
Bromodichloromethane	ND		1.0	µg/L	1	5/21/2019 04:54 AM
Bromoform	ND		1.0	µg/L	1	5/21/2019 04:54 AM
Bromomethane	ND		1.0	µg/L	1	5/21/2019 04:54 AM
Carbon disulfide	ND		1.0	µg/L	1	5/21/2019 04:54 AM
Carbon tetrachloride	ND		1.0	µg/L	1	5/21/2019 04:54 AM
Chlorobenzene	ND		1.0	µg/L	1	5/21/2019 04:54 AM
Chloroethane	ND		1.0	µg/L	1	5/21/2019 04:54 AM
Chloroform	ND		1.0	µg/L	1	5/21/2019 04:54 AM
Chloromethane	ND		1.0	µg/L	1	5/21/2019 04:54 AM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	5/21/2019 04:54 AM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	5/21/2019 04:54 AM
Dibromochloromethane	ND		1.0	µg/L	1	5/21/2019 04:54 AM
Ethylbenzene	ND		1.0	µg/L	1	5/21/2019 04:54 AM
m,p-Xylene	ND		2.0	µg/L	1	5/21/2019 04:54 AM
Methylene chloride	ND		5.0	µg/L	1	5/21/2019 04:54 AM
o-Xylene	ND		1.0	µg/L	1	5/21/2019 04:54 AM
Styrene	ND		1.0	µg/L	1	5/21/2019 04:54 AM
Tetrachloroethene	ND		1.0	µg/L	1	5/21/2019 04:54 AM
Toluene	ND		1.0	µg/L	1	5/21/2019 04:54 AM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	5/21/2019 04:54 AM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	5/21/2019 04:54 AM
Trichloroethene	ND		1.0	µg/L	1	5/21/2019 04:54 AM
Vinyl chloride	ND		1.0	µg/L	1	5/21/2019 04:54 AM
Xylenes, Total	ND		3.0	µg/L	1	5/21/2019 04:54 AM
Surr: 1,2-Dichloroethane-d4	101		75-120	%REC	1	5/21/2019 04:54 AM
Surr: 4-Bromofluorobenzene	99.2		80-110	%REC	1	5/21/2019 04:54 AM
Surr: Dibromofluoromethane	95.0		85-115	%REC	1	5/21/2019 04:54 AM

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

ALS Group, USA

Date: 23-May-19

Client: Wood Environment & Infrastructure Solutions, Inc.**Project:** Accument/Textron (3359-15-1040)**Work Order:** 19051239**Sample ID:** ATR-MW26 (17.5)-G051619**Lab ID:** 19051239-07**Collection Date:** 5/16/2019 01:50 PM**Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	99.8		85-110	%REC	1	5/21/2019 04:54 AM

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

Client: Wood Environment & Infrastructure Solutions, Inc.

Project: Accument/Textron (3359-15-1040)

Work Order: 19051239

Sample ID: ATR-OW2(53)-G051619

Lab ID: 19051239-08

Collection Date: 5/16/2019 02:50 PM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260C		Analyst: JEB	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	5/21/2019 05:16 AM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	5/21/2019 05:16 AM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	5/21/2019 05:16 AM
1,1-Dichloroethane	ND		1.0	µg/L	1	5/21/2019 05:16 AM
1,1-Dichloroethene	ND		1.0	µg/L	1	5/21/2019 05:16 AM
1,2-Dichloroethane	ND		1.0	µg/L	1	5/21/2019 05:16 AM
1,2-Dichloropropane	ND		1.0	µg/L	1	5/21/2019 05:16 AM
2-Butanone	ND		5.0	µg/L	1	5/21/2019 05:16 AM
2-Hexanone	ND		5.0	µg/L	1	5/21/2019 05:16 AM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	5/21/2019 05:16 AM
Acetone	ND		10	µg/L	1	5/21/2019 05:16 AM
Benzene	ND		1.0	µg/L	1	5/21/2019 05:16 AM
Bromodichloromethane	ND		1.0	µg/L	1	5/21/2019 05:16 AM
Bromoform	ND		1.0	µg/L	1	5/21/2019 05:16 AM
Bromomethane	ND		1.0	µg/L	1	5/21/2019 05:16 AM
Carbon disulfide	ND		1.0	µg/L	1	5/21/2019 05:16 AM
Carbon tetrachloride	ND		1.0	µg/L	1	5/21/2019 05:16 AM
Chlorobenzene	ND		1.0	µg/L	1	5/21/2019 05:16 AM
Chloroethane	ND		1.0	µg/L	1	5/21/2019 05:16 AM
Chloroform	ND		1.0	µg/L	1	5/21/2019 05:16 AM
Chloromethane	ND		1.0	µg/L	1	5/21/2019 05:16 AM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	5/21/2019 05:16 AM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	5/21/2019 05:16 AM
Dibromochloromethane	ND		1.0	µg/L	1	5/21/2019 05:16 AM
Ethylbenzene	ND		1.0	µg/L	1	5/21/2019 05:16 AM
m,p-Xylene	ND		2.0	µg/L	1	5/21/2019 05:16 AM
Methylene chloride	ND		5.0	µg/L	1	5/21/2019 05:16 AM
o-Xylene	ND		1.0	µg/L	1	5/21/2019 05:16 AM
Styrene	ND		1.0	µg/L	1	5/21/2019 05:16 AM
Tetrachloroethene	ND		1.0	µg/L	1	5/21/2019 05:16 AM
Toluene	ND		1.0	µg/L	1	5/21/2019 05:16 AM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	5/21/2019 05:16 AM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	5/21/2019 05:16 AM
Trichloroethene	ND		1.0	µg/L	1	5/21/2019 05:16 AM
Vinyl chloride	ND		1.0	µg/L	1	5/21/2019 05:16 AM
Xylenes, Total	ND		3.0	µg/L	1	5/21/2019 05:16 AM
Surr: 1,2-Dichloroethane-d4	99.0		75-120	%REC	1	5/21/2019 05:16 AM
Surr: 4-Bromofluorobenzene	97.0		80-110	%REC	1	5/21/2019 05:16 AM
Surr: Dibromofluoromethane	96.2		85-115	%REC	1	5/21/2019 05:16 AM

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

ALS Group, USA

Date: 23-May-19

Client: Wood Environment & Infrastructure Solutions, Inc.**Project:** Accument/Textron (3359-15-1040)**Work Order:** 19051239**Sample ID:** ATR-OW2(53)-G051619**Lab ID:** 19051239-08**Collection Date:** 5/16/2019 02:50 PM**Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	97.0		85-110	%REC	1	5/21/2019 05:16 AM

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

Client: Wood Environment & Infrastructure Solutions, Inc.

Project: Accument/Textron (3359-15-1040)

Work Order: 19051239

Sample ID: ATR-OW2(33)-G051619

Lab ID: 19051239-09

Collection Date: 5/16/2019 03:40 PM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260C		Analyst: JEB	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	5/21/2019 05:38 AM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	5/21/2019 05:38 AM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	5/21/2019 05:38 AM
1,1-Dichloroethane	ND		1.0	µg/L	1	5/21/2019 05:38 AM
1,1-Dichloroethene	ND		1.0	µg/L	1	5/21/2019 05:38 AM
1,2-Dichloroethane	ND		1.0	µg/L	1	5/21/2019 05:38 AM
1,2-Dichloropropane	ND		1.0	µg/L	1	5/21/2019 05:38 AM
2-Butanone	ND		5.0	µg/L	1	5/21/2019 05:38 AM
2-Hexanone	ND		5.0	µg/L	1	5/21/2019 05:38 AM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	5/21/2019 05:38 AM
Acetone	ND		10	µg/L	1	5/21/2019 05:38 AM
Benzene	ND		1.0	µg/L	1	5/21/2019 05:38 AM
Bromodichloromethane	ND		1.0	µg/L	1	5/21/2019 05:38 AM
Bromoform	ND		1.0	µg/L	1	5/21/2019 05:38 AM
Bromomethane	ND		1.0	µg/L	1	5/21/2019 05:38 AM
Carbon disulfide	ND		1.0	µg/L	1	5/21/2019 05:38 AM
Carbon tetrachloride	ND		1.0	µg/L	1	5/21/2019 05:38 AM
Chlorobenzene	ND		1.0	µg/L	1	5/21/2019 05:38 AM
Chloroethane	ND		1.0	µg/L	1	5/21/2019 05:38 AM
Chloroform	ND		1.0	µg/L	1	5/21/2019 05:38 AM
Chloromethane	ND		1.0	µg/L	1	5/21/2019 05:38 AM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	5/21/2019 05:38 AM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	5/21/2019 05:38 AM
Dibromochloromethane	ND		1.0	µg/L	1	5/21/2019 05:38 AM
Ethylbenzene	ND		1.0	µg/L	1	5/21/2019 05:38 AM
m,p-Xylene	ND		2.0	µg/L	1	5/21/2019 05:38 AM
Methylene chloride	ND		5.0	µg/L	1	5/21/2019 05:38 AM
o-Xylene	ND		1.0	µg/L	1	5/21/2019 05:38 AM
Styrene	ND		1.0	µg/L	1	5/21/2019 05:38 AM
Tetrachloroethene	ND		1.0	µg/L	1	5/21/2019 05:38 AM
Toluene	ND		1.0	µg/L	1	5/21/2019 05:38 AM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	5/21/2019 05:38 AM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	5/21/2019 05:38 AM
Trichloroethene	ND		1.0	µg/L	1	5/21/2019 05:38 AM
Vinyl chloride	ND		1.0	µg/L	1	5/21/2019 05:38 AM
Xylenes, Total	ND		3.0	µg/L	1	5/21/2019 05:38 AM
Surr: 1,2-Dichloroethane-d4	99.8		75-120	%REC	1	5/21/2019 05:38 AM
Surr: 4-Bromofluorobenzene	98.6		80-110	%REC	1	5/21/2019 05:38 AM
Surr: Dibromofluoromethane	93.8		85-115	%REC	1	5/21/2019 05:38 AM

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

ALS Group, USA

Date: 23-May-19

Client: Wood Environment & Infrastructure Solutions, Inc.

Project: Accument/Textron (3359-15-1040)

Work Order: 19051239

Sample ID: ATR-OW2(33)-G051619

Lab ID: 19051239-09

Collection Date: 5/16/2019 03:40 PM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	98.4		85-110	%REC	1	5/21/2019 05:38 AM

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

Client: Wood Environment & Infrastructure Solutions, Inc.
Project: Accument/Textron (3359-15-1040)
Sample ID: FB-001-G051619
Collection Date: 5/16/2019 03:22 PM

Work Order: 19051239
Lab ID: 19051239-10
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260C		Analyst: JEB	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	5/21/2019 02:43 AM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	5/21/2019 02:43 AM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	5/21/2019 02:43 AM
1,1-Dichloroethane	ND		1.0	µg/L	1	5/21/2019 02:43 AM
1,1-Dichloroethene	ND		1.0	µg/L	1	5/21/2019 02:43 AM
1,2-Dichloroethane	ND		1.0	µg/L	1	5/21/2019 02:43 AM
1,2-Dichloropropane	ND		1.0	µg/L	1	5/21/2019 02:43 AM
2-Butanone	13		5.0	µg/L	1	5/21/2019 02:43 AM
2-Hexanone	ND		5.0	µg/L	1	5/21/2019 02:43 AM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	5/21/2019 02:43 AM
Acetone	ND		10	µg/L	1	5/21/2019 02:43 AM
Benzene	ND		1.0	µg/L	1	5/21/2019 02:43 AM
Bromodichloromethane	ND		1.0	µg/L	1	5/21/2019 02:43 AM
Bromoform	ND		1.0	µg/L	1	5/21/2019 02:43 AM
Bromomethane	ND		1.0	µg/L	1	5/21/2019 02:43 AM
Carbon disulfide	ND		1.0	µg/L	1	5/21/2019 02:43 AM
Carbon tetrachloride	ND		1.0	µg/L	1	5/21/2019 02:43 AM
Chlorobenzene	ND		1.0	µg/L	1	5/21/2019 02:43 AM
Chloroethane	ND		1.0	µg/L	1	5/21/2019 02:43 AM
Chloroform	ND		1.0	µg/L	1	5/21/2019 02:43 AM
Chloromethane	ND		1.0	µg/L	1	5/21/2019 02:43 AM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	5/21/2019 02:43 AM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	5/21/2019 02:43 AM
Dibromochloromethane	ND		1.0	µg/L	1	5/21/2019 02:43 AM
Ethylbenzene	ND		1.0	µg/L	1	5/21/2019 02:43 AM
m,p-Xylene	ND		2.0	µg/L	1	5/21/2019 02:43 AM
Methylene chloride	ND		5.0	µg/L	1	5/21/2019 02:43 AM
o-Xylene	ND		1.0	µg/L	1	5/21/2019 02:43 AM
Styrene	ND		1.0	µg/L	1	5/21/2019 02:43 AM
Tetrachloroethene	ND		1.0	µg/L	1	5/21/2019 02:43 AM
Toluene	ND		1.0	µg/L	1	5/21/2019 02:43 AM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	5/21/2019 02:43 AM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	5/21/2019 02:43 AM
Trichloroethene	ND		1.0	µg/L	1	5/21/2019 02:43 AM
Vinyl chloride	ND		1.0	µg/L	1	5/21/2019 02:43 AM
Xylenes, Total	ND		3.0	µg/L	1	5/21/2019 02:43 AM
Surr: 1,2-Dichloroethane-d4	99.2		75-120	%REC	1	5/21/2019 02:43 AM
Surr: 4-Bromofluorobenzene	95.9		80-110	%REC	1	5/21/2019 02:43 AM
Surr: Dibromofluoromethane	94.6		85-115	%REC	1	5/21/2019 02:43 AM

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

ALS Group, USA

Date: 23-May-19

Client: Wood Environment & Infrastructure Solutions, Inc.**Project:** Accument/Textron (3359-15-1040)**Work Order:** 19051239**Sample ID:** FB-001-G051619**Lab ID:** 19051239-10**Collection Date:** 5/16/2019 03:22 PM**Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	97.2		85-110	%REC	1	5/21/2019 02:43 AM

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

Client: Wood Environment & Infrastructure Solutions, Inc.
Project: Accument/Textron (3359-15-1040)
Sample ID: ATR-MW14-G051719
Collection Date: 5/17/2019 08:50 AM

Work Order: 19051239
Lab ID: 19051239-11
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260C		Analyst: JEB	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	5/21/2019 06:00 AM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	5/21/2019 06:00 AM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	5/21/2019 06:00 AM
1,1-Dichloroethane	ND		1.0	µg/L	1	5/21/2019 06:00 AM
1,1-Dichloroethene	ND		1.0	µg/L	1	5/21/2019 06:00 AM
1,2-Dichloroethane	ND		1.0	µg/L	1	5/21/2019 06:00 AM
1,2-Dichloropropane	ND		1.0	µg/L	1	5/21/2019 06:00 AM
2-Butanone	ND		5.0	µg/L	1	5/21/2019 06:00 AM
2-Hexanone	ND		5.0	µg/L	1	5/21/2019 06:00 AM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	5/21/2019 06:00 AM
Acetone	ND		10	µg/L	1	5/21/2019 06:00 AM
Benzene	ND		1.0	µg/L	1	5/21/2019 06:00 AM
Bromodichloromethane	ND		1.0	µg/L	1	5/21/2019 06:00 AM
Bromoform	ND		1.0	µg/L	1	5/21/2019 06:00 AM
Bromomethane	ND		1.0	µg/L	1	5/21/2019 06:00 AM
Carbon disulfide	ND		1.0	µg/L	1	5/21/2019 06:00 AM
Carbon tetrachloride	ND		1.0	µg/L	1	5/21/2019 06:00 AM
Chlorobenzene	ND		1.0	µg/L	1	5/21/2019 06:00 AM
Chloroethane	ND		1.0	µg/L	1	5/21/2019 06:00 AM
Chloroform	ND		1.0	µg/L	1	5/21/2019 06:00 AM
Chloromethane	ND		1.0	µg/L	1	5/21/2019 06:00 AM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	5/21/2019 06:00 AM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	5/21/2019 06:00 AM
Dibromochloromethane	ND		1.0	µg/L	1	5/21/2019 06:00 AM
Ethylbenzene	ND		1.0	µg/L	1	5/21/2019 06:00 AM
m,p-Xylene	ND		2.0	µg/L	1	5/21/2019 06:00 AM
Methylene chloride	ND		5.0	µg/L	1	5/21/2019 06:00 AM
o-Xylene	ND		1.0	µg/L	1	5/21/2019 06:00 AM
Styrene	ND		1.0	µg/L	1	5/21/2019 06:00 AM
Tetrachloroethene	ND		1.0	µg/L	1	5/21/2019 06:00 AM
Toluene	ND		1.0	µg/L	1	5/21/2019 06:00 AM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	5/21/2019 06:00 AM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	5/21/2019 06:00 AM
Trichloroethene	ND		1.0	µg/L	1	5/21/2019 06:00 AM
Vinyl chloride	ND		1.0	µg/L	1	5/21/2019 06:00 AM
Xylenes, Total	ND		3.0	µg/L	1	5/21/2019 06:00 AM
Surr: 1,2-Dichloroethane-d4	101		75-120	%REC	1	5/21/2019 06:00 AM
Surr: 4-Bromofluorobenzene	97.0		80-110	%REC	1	5/21/2019 06:00 AM
Surr: Dibromofluoromethane	97.2		85-115	%REC	1	5/21/2019 06:00 AM

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

ALS Group, USA

Date: 23-May-19

Client: Wood Environment & Infrastructure Solutions, Inc.

Project: Accument/Textron (3359-15-1040)

Work Order: 19051239

Sample ID: ATR-MW14-G051719

Lab ID: 19051239-11

Collection Date: 5/17/2019 08:50 AM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	97.2		85-110	%REC	1	5/21/2019 06:00 AM

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

Client: Wood Environment & Infrastructure Solutions, Inc.

Project: Accument/Textron (3359-15-1040)

Work Order: 19051239

Sample ID: ATR-OW1(38)-G051719

Lab ID: 19051239-12

Collection Date: 5/17/2019 09:40 AM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260C		Analyst: JEB	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	5/21/2019 06:22 AM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	5/21/2019 06:22 AM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	5/21/2019 06:22 AM
1,1-Dichloroethane	ND		1.0	µg/L	1	5/21/2019 06:22 AM
1,1-Dichloroethene	ND		1.0	µg/L	1	5/21/2019 06:22 AM
1,2-Dichloroethane	ND		1.0	µg/L	1	5/21/2019 06:22 AM
1,2-Dichloropropane	ND		1.0	µg/L	1	5/21/2019 06:22 AM
2-Butanone	ND		5.0	µg/L	1	5/21/2019 06:22 AM
2-Hexanone	ND		5.0	µg/L	1	5/21/2019 06:22 AM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	5/21/2019 06:22 AM
Acetone	ND		10	µg/L	1	5/21/2019 06:22 AM
Benzene	ND		1.0	µg/L	1	5/21/2019 06:22 AM
Bromodichloromethane	ND		1.0	µg/L	1	5/21/2019 06:22 AM
Bromoform	ND		1.0	µg/L	1	5/21/2019 06:22 AM
Bromomethane	ND		1.0	µg/L	1	5/21/2019 06:22 AM
Carbon disulfide	ND		1.0	µg/L	1	5/21/2019 06:22 AM
Carbon tetrachloride	ND		1.0	µg/L	1	5/21/2019 06:22 AM
Chlorobenzene	ND		1.0	µg/L	1	5/21/2019 06:22 AM
Chloroethane	ND		1.0	µg/L	1	5/21/2019 06:22 AM
Chloroform	ND		1.0	µg/L	1	5/21/2019 06:22 AM
Chloromethane	ND		1.0	µg/L	1	5/21/2019 06:22 AM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	5/21/2019 06:22 AM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	5/21/2019 06:22 AM
Dibromochloromethane	ND		1.0	µg/L	1	5/21/2019 06:22 AM
Ethylbenzene	ND		1.0	µg/L	1	5/21/2019 06:22 AM
m,p-Xylene	ND		2.0	µg/L	1	5/21/2019 06:22 AM
Methylene chloride	ND		5.0	µg/L	1	5/21/2019 06:22 AM
o-Xylene	ND		1.0	µg/L	1	5/21/2019 06:22 AM
Styrene	ND		1.0	µg/L	1	5/21/2019 06:22 AM
Tetrachloroethene	ND		1.0	µg/L	1	5/21/2019 06:22 AM
Toluene	ND		1.0	µg/L	1	5/21/2019 06:22 AM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	5/21/2019 06:22 AM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	5/21/2019 06:22 AM
Trichloroethene	ND		1.0	µg/L	1	5/21/2019 06:22 AM
Vinyl chloride	ND		1.0	µg/L	1	5/21/2019 06:22 AM
Xylenes, Total	ND		3.0	µg/L	1	5/21/2019 06:22 AM
Surr: 1,2-Dichloroethane-d4	100		75-120	%REC	1	5/21/2019 06:22 AM
Surr: 4-Bromofluorobenzene	97.0		80-110	%REC	1	5/21/2019 06:22 AM
Surr: Dibromofluoromethane	95.0		85-115	%REC	1	5/21/2019 06:22 AM

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

ALS Group, USA

Date: 23-May-19

Client: Wood Environment & Infrastructure Solutions, Inc.**Project:** Accument/Textron (3359-15-1040)**Work Order:** 19051239**Sample ID:** ATR-OW1(38)-G051719**Lab ID:** 19051239-12**Collection Date:** 5/17/2019 09:40 AM**Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	96.7		85-110	%REC	1	5/21/2019 06:22 AM

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

Client: Wood Environment & Infrastructure Solutions, Inc.

Project: Accument/Textron (3359-15-1040)

Work Order: 19051239

Sample ID: ATR-MW6C-G051719

Lab ID: 19051239-13

Collection Date: 5/17/2019 10:30 AM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260C		Analyst: JEB	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	5/21/2019 06:43 AM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	5/21/2019 06:43 AM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	5/21/2019 06:43 AM
1,1-Dichloroethane	ND		1.0	µg/L	1	5/21/2019 06:43 AM
1,1-Dichloroethene	ND		1.0	µg/L	1	5/21/2019 06:43 AM
1,2-Dichloroethane	ND		1.0	µg/L	1	5/21/2019 06:43 AM
1,2-Dichloropropane	ND		1.0	µg/L	1	5/21/2019 06:43 AM
2-Butanone	ND		5.0	µg/L	1	5/21/2019 06:43 AM
2-Hexanone	ND		5.0	µg/L	1	5/21/2019 06:43 AM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	5/21/2019 06:43 AM
Acetone	ND		10	µg/L	1	5/21/2019 06:43 AM
Benzene	ND		1.0	µg/L	1	5/21/2019 06:43 AM
Bromodichloromethane	ND		1.0	µg/L	1	5/21/2019 06:43 AM
Bromoform	ND		1.0	µg/L	1	5/21/2019 06:43 AM
Bromomethane	ND		1.0	µg/L	1	5/21/2019 06:43 AM
Carbon disulfide	ND		1.0	µg/L	1	5/21/2019 06:43 AM
Carbon tetrachloride	ND		1.0	µg/L	1	5/21/2019 06:43 AM
Chlorobenzene	ND		1.0	µg/L	1	5/21/2019 06:43 AM
Chloroethane	ND		1.0	µg/L	1	5/21/2019 06:43 AM
Chloroform	ND		1.0	µg/L	1	5/21/2019 06:43 AM
Chloromethane	ND		1.0	µg/L	1	5/21/2019 06:43 AM
cis-1,2-Dichloroethene	2.8		1.0	µg/L	1	5/21/2019 06:43 AM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	5/21/2019 06:43 AM
Dibromochloromethane	ND		1.0	µg/L	1	5/21/2019 06:43 AM
Ethylbenzene	ND		1.0	µg/L	1	5/21/2019 06:43 AM
m,p-Xylene	ND		2.0	µg/L	1	5/21/2019 06:43 AM
Methylene chloride	ND		5.0	µg/L	1	5/21/2019 06:43 AM
o-Xylene	ND		1.0	µg/L	1	5/21/2019 06:43 AM
Styrene	ND		1.0	µg/L	1	5/21/2019 06:43 AM
Tetrachloroethene	ND		1.0	µg/L	1	5/21/2019 06:43 AM
Toluene	ND		1.0	µg/L	1	5/21/2019 06:43 AM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	5/21/2019 06:43 AM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	5/21/2019 06:43 AM
Trichloroethene	ND		1.0	µg/L	1	5/21/2019 06:43 AM
Vinyl chloride	1.9		1.0	µg/L	1	5/21/2019 06:43 AM
Xylenes, Total	ND		3.0	µg/L	1	5/21/2019 06:43 AM
Surr: 1,2-Dichloroethane-d4	100		75-120	%REC	1	5/21/2019 06:43 AM
Surr: 4-Bromofluorobenzene	98.8		80-110	%REC	1	5/21/2019 06:43 AM
Surr: Dibromofluoromethane	95.1		85-115	%REC	1	5/21/2019 06:43 AM

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

ALS Group, USA

Date: 23-May-19

Client: Wood Environment & Infrastructure Solutions, Inc.

Project: Accument/Textron (3359-15-1040)

Work Order: 19051239

Sample ID: ATR-MW6C-G051719

Lab ID: 19051239-13

Collection Date: 5/17/2019 10:30 AM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	100		85-110	%REC	1	5/21/2019 06:43 AM

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

Client: Wood Environment & Infrastructure Solutions, Inc.
Project: Accument/Textron (3359-15-1040)
Sample ID: ATR-MW6C-G051719R
Collection Date: 5/17/2019 10:30 AM

Work Order: 19051239
Lab ID: 19051239-14
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260C		Analyst: JEB	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	5/21/2019 07:05 AM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	5/21/2019 07:05 AM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	5/21/2019 07:05 AM
1,1-Dichloroethane	ND		1.0	µg/L	1	5/21/2019 07:05 AM
1,1-Dichloroethene	ND		1.0	µg/L	1	5/21/2019 07:05 AM
1,2-Dichloroethane	ND		1.0	µg/L	1	5/21/2019 07:05 AM
1,2-Dichloropropane	ND		1.0	µg/L	1	5/21/2019 07:05 AM
2-Butanone	ND		5.0	µg/L	1	5/21/2019 07:05 AM
2-Hexanone	ND		5.0	µg/L	1	5/21/2019 07:05 AM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	5/21/2019 07:05 AM
Acetone	ND		10	µg/L	1	5/21/2019 07:05 AM
Benzene	ND		1.0	µg/L	1	5/21/2019 07:05 AM
Bromodichloromethane	ND		1.0	µg/L	1	5/21/2019 07:05 AM
Bromoform	ND		1.0	µg/L	1	5/21/2019 07:05 AM
Bromomethane	ND		1.0	µg/L	1	5/21/2019 07:05 AM
Carbon disulfide	ND		1.0	µg/L	1	5/21/2019 07:05 AM
Carbon tetrachloride	ND		1.0	µg/L	1	5/21/2019 07:05 AM
Chlorobenzene	ND		1.0	µg/L	1	5/21/2019 07:05 AM
Chloroethane	ND		1.0	µg/L	1	5/21/2019 07:05 AM
Chloroform	ND		1.0	µg/L	1	5/21/2019 07:05 AM
Chloromethane	ND		1.0	µg/L	1	5/21/2019 07:05 AM
cis-1,2-Dichloroethene	2.7		1.0	µg/L	1	5/21/2019 07:05 AM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	5/21/2019 07:05 AM
Dibromochloromethane	ND		1.0	µg/L	1	5/21/2019 07:05 AM
Ethylbenzene	ND		1.0	µg/L	1	5/21/2019 07:05 AM
m,p-Xylene	ND		2.0	µg/L	1	5/21/2019 07:05 AM
Methylene chloride	ND		5.0	µg/L	1	5/21/2019 07:05 AM
o-Xylene	ND		1.0	µg/L	1	5/21/2019 07:05 AM
Styrene	ND		1.0	µg/L	1	5/21/2019 07:05 AM
Tetrachloroethene	ND		1.0	µg/L	1	5/21/2019 07:05 AM
Toluene	ND		1.0	µg/L	1	5/21/2019 07:05 AM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	5/21/2019 07:05 AM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	5/21/2019 07:05 AM
Trichloroethene	ND		1.0	µg/L	1	5/21/2019 07:05 AM
Vinyl chloride	2.0		1.0	µg/L	1	5/21/2019 07:05 AM
Xylenes, Total	ND		3.0	µg/L	1	5/21/2019 07:05 AM
Surr: 1,2-Dichloroethane-d4	99.6		75-120	%REC	1	5/21/2019 07:05 AM
Surr: 4-Bromofluorobenzene	97.4		80-110	%REC	1	5/21/2019 07:05 AM
Surr: Dibromofluoromethane	96.8		85-115	%REC	1	5/21/2019 07:05 AM

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

ALS Group, USA

Date: 23-May-19

Client: Wood Environment & Infrastructure Solutions, Inc.**Project:** Accument/Textron (3359-15-1040)**Work Order:** 19051239**Sample ID:** ATR-MW6C-G051719R**Lab ID:** 19051239-14**Collection Date:** 5/17/2019 10:30 AM**Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	98.2		85-110	%REC	1	5/21/2019 07:05 AM

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

Client: Wood Environment & Infrastructure Solutions, Inc.

Project: Accument/Textron (3359-15-1040)

Work Order: 19051239

Sample ID: ATR-EB001-G051719

Lab ID: 19051239-15

Collection Date: 5/17/2019

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260C		Analyst: JEB	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	5/21/2019 01:59 AM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	5/21/2019 01:59 AM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	5/21/2019 01:59 AM
1,1-Dichloroethane	ND		1.0	µg/L	1	5/21/2019 01:59 AM
1,1-Dichloroethene	ND		1.0	µg/L	1	5/21/2019 01:59 AM
1,2-Dichloroethane	ND		1.0	µg/L	1	5/21/2019 01:59 AM
1,2-Dichloropropane	ND		1.0	µg/L	1	5/21/2019 01:59 AM
2-Butanone	ND		5.0	µg/L	1	5/21/2019 01:59 AM
2-Hexanone	ND		5.0	µg/L	1	5/21/2019 01:59 AM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	5/21/2019 01:59 AM
Acetone	ND		10	µg/L	1	5/21/2019 01:59 AM
Benzene	ND		1.0	µg/L	1	5/21/2019 01:59 AM
Bromodichloromethane	ND		1.0	µg/L	1	5/21/2019 01:59 AM
Bromoform	ND		1.0	µg/L	1	5/21/2019 01:59 AM
Bromomethane	ND		1.0	µg/L	1	5/21/2019 01:59 AM
Carbon disulfide	ND		1.0	µg/L	1	5/21/2019 01:59 AM
Carbon tetrachloride	ND		1.0	µg/L	1	5/21/2019 01:59 AM
Chlorobenzene	ND		1.0	µg/L	1	5/21/2019 01:59 AM
Chloroethane	ND		1.0	µg/L	1	5/21/2019 01:59 AM
Chloroform	ND		1.0	µg/L	1	5/21/2019 01:59 AM
Chloromethane	ND		1.0	µg/L	1	5/21/2019 01:59 AM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	5/21/2019 01:59 AM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	5/21/2019 01:59 AM
Dibromochloromethane	ND		1.0	µg/L	1	5/21/2019 01:59 AM
Ethylbenzene	ND		1.0	µg/L	1	5/21/2019 01:59 AM
m,p-Xylene	ND		2.0	µg/L	1	5/21/2019 01:59 AM
Methylene chloride	ND		5.0	µg/L	1	5/21/2019 01:59 AM
o-Xylene	ND		1.0	µg/L	1	5/21/2019 01:59 AM
Styrene	ND		1.0	µg/L	1	5/21/2019 01:59 AM
Tetrachloroethene	ND		1.0	µg/L	1	5/21/2019 01:59 AM
Toluene	ND		1.0	µg/L	1	5/21/2019 01:59 AM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	5/21/2019 01:59 AM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	5/21/2019 01:59 AM
Trichloroethene	ND		1.0	µg/L	1	5/21/2019 01:59 AM
Vinyl chloride	ND		1.0	µg/L	1	5/21/2019 01:59 AM
Xylenes, Total	ND		3.0	µg/L	1	5/21/2019 01:59 AM
Surr: 1,2-Dichloroethane-d4	98.8		75-120	%REC	1	5/21/2019 01:59 AM
Surr: 4-Bromofluorobenzene	98.6		80-110	%REC	1	5/21/2019 01:59 AM
Surr: Dibromofluoromethane	93.9		85-115	%REC	1	5/21/2019 01:59 AM

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

ALS Group, USA

Date: 23-May-19

Client: Wood Environment & Infrastructure Solutions, Inc.**Project:** Accument/Textron (3359-15-1040)**Work Order:** 19051239**Sample ID:** ATR-EB001-G051719**Lab ID:** 19051239-15**Collection Date:** 5/17/2019**Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	100		85-110	%REC	1	5/21/2019 01:59 AM

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

Client: Wood Environment & Infrastructure Solutions, Inc.

Project: Accument/Textron (3359-15-1040)

Work Order: 19051239

Sample ID: TB-001-G051719

Lab ID: 19051239-16

Collection Date: 5/17/2019 10:40 AM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260C		Analyst: JEB	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	5/21/2019 02:21 AM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	5/21/2019 02:21 AM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	5/21/2019 02:21 AM
1,1-Dichloroethane	ND		1.0	µg/L	1	5/21/2019 02:21 AM
1,1-Dichloroethene	ND		1.0	µg/L	1	5/21/2019 02:21 AM
1,2-Dichloroethane	ND		1.0	µg/L	1	5/21/2019 02:21 AM
1,2-Dichloropropane	ND		1.0	µg/L	1	5/21/2019 02:21 AM
2-Butanone	ND		5.0	µg/L	1	5/21/2019 02:21 AM
2-Hexanone	ND		5.0	µg/L	1	5/21/2019 02:21 AM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	5/21/2019 02:21 AM
Acetone	ND		10	µg/L	1	5/21/2019 02:21 AM
Benzene	ND		1.0	µg/L	1	5/21/2019 02:21 AM
Bromodichloromethane	ND		1.0	µg/L	1	5/21/2019 02:21 AM
Bromoform	ND		1.0	µg/L	1	5/21/2019 02:21 AM
Bromomethane	ND		1.0	µg/L	1	5/21/2019 02:21 AM
Carbon disulfide	ND		1.0	µg/L	1	5/21/2019 02:21 AM
Carbon tetrachloride	ND		1.0	µg/L	1	5/21/2019 02:21 AM
Chlorobenzene	ND		1.0	µg/L	1	5/21/2019 02:21 AM
Chloroethane	ND		1.0	µg/L	1	5/21/2019 02:21 AM
Chloroform	ND		1.0	µg/L	1	5/21/2019 02:21 AM
Chloromethane	ND		1.0	µg/L	1	5/21/2019 02:21 AM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	5/21/2019 02:21 AM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	5/21/2019 02:21 AM
Dibromochloromethane	ND		1.0	µg/L	1	5/21/2019 02:21 AM
Ethylbenzene	ND		1.0	µg/L	1	5/21/2019 02:21 AM
m,p-Xylene	ND		2.0	µg/L	1	5/21/2019 02:21 AM
Methylene chloride	ND		5.0	µg/L	1	5/21/2019 02:21 AM
o-Xylene	ND		1.0	µg/L	1	5/21/2019 02:21 AM
Styrene	ND		1.0	µg/L	1	5/21/2019 02:21 AM
Tetrachloroethene	ND		1.0	µg/L	1	5/21/2019 02:21 AM
Toluene	ND		1.0	µg/L	1	5/21/2019 02:21 AM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	5/21/2019 02:21 AM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	5/21/2019 02:21 AM
Trichloroethene	ND		1.0	µg/L	1	5/21/2019 02:21 AM
Vinyl chloride	ND		1.0	µg/L	1	5/21/2019 02:21 AM
Xylenes, Total	ND		3.0	µg/L	1	5/21/2019 02:21 AM
Surr: 1,2-Dichloroethane-d4	99.6		75-120	%REC	1	5/21/2019 02:21 AM
Surr: 4-Bromofluorobenzene	98.1		80-110	%REC	1	5/21/2019 02:21 AM
Surr: Dibromofluoromethane	95.6		85-115	%REC	1	5/21/2019 02:21 AM

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

ALS Group, USA

Date: 23-May-19

Client: Wood Environment & Infrastructure Solutions, Inc.**Project:** Accument/Textron (3359-15-1040)**Work Order:** 19051239**Sample ID:** TB-001-G051719**Lab ID:** 19051239-16**Collection Date:** 5/17/2019 10:40 AM**Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	97.8		85-110	%REC	1	5/21/2019 02:21 AM

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

Client: Wood Environment & Infrastructure Solutions, Inc.
Work Order: 19051239
Project: Accument/Textron (3359-15-1040)

QC BATCH REPORT

Batch ID: **R260904** Instrument ID **VMS11** Method: **SW8260C**

MBLK		Sample ID: VBK2-190520-R260904				Units: µg/L		Analysis Date: 5/21/2019 01:15 AM		
Client ID:		Run ID: VMS11_190520B		SeqNo: 5668070		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	19.71	0	20	0	98.6	75-120	0			
Surr: 4-Bromofluorobenzene	19.82	0	20	0	99.1	80-110	0			
Surr: Dibromofluoromethane	19.55	0	20	0	97.8	85-115	0			
Surr: Toluene-d8	19.62	0	20	0	98.1	85-110	0			

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

Client: Wood Environment & Infrastructure Solutions, Inc.
 Work Order: 19051239
 Project: Accument/Textron (3359-15-1040)

QC BATCH REPORT

Batch ID: **R260904** Instrument ID **VMS11** Method: **SW8260C**

LCS		Sample ID: VLCSW2-190520-R260904				Units: µg/L		Analysis Date: 5/21/2019 12:10 PM		
Client ID:		Run ID: VMS11_190520B		SeqNo: 5668100		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	22.58	1.0	20	0	113	75-130	0			
1,1,2,2-Tetrachloroethane	21.65	1.0	20	0	108	75-130	0			
1,1,2-Trichloroethane	21.52	1.0	20	0	108	75-125	0			
1,1-Dichloroethane	23.06	1.0	20	0	115	68-142	0			
1,1-Dichloroethene	22.12	1.0	20	0	111	70-145	0			
1,2-Dichloroethane	20.47	1.0	20	0	102	78-125	0			
1,2-Dichloropropane	21.49	1.0	20	0	107	75-125	0			
2-Butanone	19.08	5.0	20	0	95.4	55-150	0			
2-Hexanone	17.56	5.0	20	0	87.8	60-135	0			
4-Methyl-2-pentanone	25.62	1.0	20	0	128	77-178	0			
Acetone	18.07	10	20	0	90.4	60-160	0			
Benzene	20.41	1.0	20	0	102	85-125	0			
Bromodichloromethane	21.86	1.0	20	0	109	75-125	0			
Bromoform	17.81	1.0	20	0	89	60-125	0			
Bromomethane	14.98	1.0	20	0	74.9	30-185	0			
Carbon disulfide	19.98	1.0	20	0	99.9	60-165	0			
Carbon tetrachloride	19.87	1.0	20	0	99.4	65-140	0			
Chlorobenzene	20.42	1.0	20	0	102	80-120	0			
Chloroethane	18.55	1.0	20	0	92.8	31-172	0			
Chloroform	21.23	1.0	20	0	106	80-130	0			
Chloromethane	15.81	1.0	20	0	79	46-148	0			
cis-1,2-Dichloroethene	21.88	1.0	20	0	109	75-134	0			
cis-1,3-Dichloropropene	19.23	1.0	20	0	96.2	70-130	0			
Dibromochloromethane	17.78	1.0	20	0	88.9	60-115	0			
Ethylbenzene	20.85	1.0	20	0	104	76-123	0			
m,p-Xylene	41.26	2.0	40	0	103	75-130	0			
Methylene chloride	21.45	5.0	20	0	107	72-125	0			
o-Xylene	21.13	1.0	20	0	106	76-127	0			
Styrene	21.69	1.0	20	0	108	83-137	0			
Tetrachloroethene	20.78	1.0	20	0	104	68-166	0			
Toluene	20.19	1.0	20	0	101	76-125	0			
trans-1,2-Dichloroethene	23.57	1.0	20	0	118	80-140	0			
trans-1,3-Dichloropropene	17.56	1.0	20	0	87.8	56-132	0			
Trichloroethene	20.32	1.0	20	0	102	77-125	0			
Vinyl chloride	16.69	1.0	20	0	83.4	50-136	0			
Xylenes, Total	62.39	3.0	60	0	104	76-127	0			
Surr: 1,2-Dichloroethane-d4	19.79	0	20	0	99	75-120	0			
Surr: 4-Bromofluorobenzene	20.02	0	20	0	100	80-110	0			
Surr: Dibromofluoromethane	20.48	0	20	0	102	85-115	0			
Surr: Toluene-d8	19.7	0	20	0	98.5	85-110	0			

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

Client: Wood Environment & Infrastructure Solutions, Inc.
 Work Order: 19051239
 Project: Accument/Textron (3359-15-1040)

QC BATCH REPORT

Batch ID: **R260904** Instrument ID **VMS11** Method: **SW8260C**

MS		Sample ID: 19051314-01A MS				Units: µg/L		Analysis Date: 5/21/2019 09:16 AM		
Client ID:		Run ID: VMS11_190520B		SeqNo: 5668098		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	25.01	1.0	20	0	125	75-130	0			
1,1,2,2-Tetrachloroethane	22.92	1.0	20	0	115	75-130	0			
1,1,2-Trichloroethane	22.51	1.0	20	0	113	75-125	0			
1,1-Dichloroethane	24.86	1.0	20	0	124	68-142	0			
1,1-Dichloroethene	25.38	1.0	20	0	127	70-145	0			
1,2-Dichloroethane	22.9	1.0	20	0	114	78-125	0			
1,2-Dichloropropane	23.26	1.0	20	0	116	75-125	0			
2-Butanone	19.07	5.0	20	0	95.4	55-150	0			
2-Hexanone	20.45	5.0	20	0	102	60-135	0			
4-Methyl-2-pentanone	27.91	1.0	20	0	140	77-178	0			
Acetone	20	10	20	1.1	94.5	60-160	0			
Benzene	22.59	1.0	20	0	113	85-125	0			
Bromodichloromethane	22.3	1.0	20	0	112	75-125	0			
Bromoform	17.28	1.0	20	0	86.4	60-125	0			
Bromomethane	8.45	1.0	20	0	42.2	30-185	0			
Carbon disulfide	21.18	1.0	20	0	106	60-165	0			
Carbon tetrachloride	22.12	1.0	20	0	111	65-140	0			
Chlorobenzene	22.24	1.0	20	0	111	80-120	0			
Chloroethane	21.73	1.0	20	0	109	31-172	0			
Chloroform	24.11	1.0	20	1.41	114	80-130	0			
Chloromethane	18.03	1.0	20	0	90.2	46-148	0			
cis-1,2-Dichloroethene	22.88	1.0	20	0	114	75-134	0			
cis-1,3-Dichloropropene	19.59	1.0	20	0	98	70-130	0			
Dibromochloromethane	17.63	1.0	20	0	88.2	60-115	0			
Ethylbenzene	23.15	1.0	20	0	116	76-123	0			
m,p-Xylene	45.45	2.0	40	0	114	75-130	0			
Methylene chloride	23.32	5.0	20	0	117	72-125	0			
o-Xylene	23.02	1.0	20	0	115	76-127	0			
Styrene	23.08	1.0	20	0	115	83-137	0			
Tetrachloroethene	23.43	1.0	20	0	117	68-166	0			
Toluene	22.15	1.0	20	0	111	76-125	0			
trans-1,2-Dichloroethene	26.15	1.0	20	0	131	80-140	0			
trans-1,3-Dichloropropene	17.18	1.0	20	0	85.9	56-132	0			
Trichloroethene	22.89	1.0	20	0	114	77-125	0			
Vinyl chloride	20.14	1.0	20	0	101	50-136	0			
Xylenes, Total	68.47	3.0	60	0	114	76-127	0			
Surr: 1,2-Dichloroethane-d4	20.01	0	20	0	100	75-120	0			
Surr: 4-Bromofluorobenzene	20.21	0	20	0	101	80-110	0			
Surr: Dibromofluoromethane	20.04	0	20	0	100	85-115	0			
Surr: Toluene-d8	19.88	0	20	0	99.4	85-110	0			

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

Client: Wood Environment & Infrastructure Solutions, Inc.
 Work Order: 19051239
 Project: Accument/Textron (3359-15-1040)

QC BATCH REPORT

Batch ID: **R260904** Instrument ID **VMS11** Method: **SW8260C**

MSD		Sample ID: 19051314-01A MSD				Units: µg/L		Analysis Date: 5/21/2019 09:38 AM		
Client ID:		Run ID: VMS11_190520B		SeqNo: 5668099		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	26.02	1.0	20	0	130	75-130	25.01	3.96	30	S
1,1,2,2-Tetrachloroethane	23.4	1.0	20	0	117	75-130	22.92	2.07	30	
1,1,2-Trichloroethane	23.22	1.0	20	0	116	75-125	22.51	3.11	30	
1,1-Dichloroethane	25.33	1.0	20	0	127	68-142	24.86	1.87	30	
1,1-Dichloroethene	25.84	1.0	20	0	129	70-145	25.38	1.8	30	
1,2-Dichloroethane	23.2	1.0	20	0	116	78-125	22.9	1.3	30	
1,2-Dichloropropane	23.94	1.0	20	0	120	75-125	23.26	2.88	30	
2-Butanone	21.07	5.0	20	0	105	55-150	19.07	9.97	30	
2-Hexanone	21.22	5.0	20	0	106	60-135	20.45	3.7	30	
4-Methyl-2-pentanone	29.02	1.0	20	0	145	77-178	27.91	3.9	30	
Acetone	22.49	10	20	1.1	107	60-160	20	11.7	30	
Benzene	23.22	1.0	20	0	116	85-125	22.59	2.75	30	
Bromodichloromethane	23.27	1.0	20	0	116	75-125	22.3	4.26	30	
Bromoform	17.52	1.0	20	0	87.6	60-125	17.28	1.38	30	
Bromomethane	10.39	1.0	20	0	52	30-185	8.45	20.6	30	
Carbon disulfide	21.88	1.0	20	0	109	60-165	21.18	3.25	30	
Carbon tetrachloride	22.83	1.0	20	0	114	65-140	22.12	3.16	30	
Chlorobenzene	22.52	1.0	20	0	113	80-120	22.24	1.25	30	
Chloroethane	21.34	1.0	20	0	107	31-172	21.73	1.81	30	
Chloroform	24.02	1.0	20	1.41	113	80-130	24.11	0.374	30	
Chloromethane	18.5	1.0	20	0	92.5	46-148	18.03	2.57	30	
cis-1,2-Dichloroethene	23.12	1.0	20	0	116	75-134	22.88	1.04	30	
cis-1,3-Dichloropropene	20	1.0	20	0	100	70-130	19.59	2.07	30	
Dibromochloromethane	18	1.0	20	0	90	60-115	17.63	2.08	30	
Ethylbenzene	23.56	1.0	20	0	118	76-123	23.15	1.76	30	
m,p-Xylene	45.85	2.0	40	0	115	75-130	45.45	0.876	30	
Methylene chloride	23.64	5.0	20	0	118	72-125	23.32	1.36	30	
o-Xylene	23.04	1.0	20	0	115	76-127	23.02	0.0868	30	
Styrene	23.25	1.0	20	0	116	83-137	23.08	0.734	30	
Tetrachloroethene	23.26	1.0	20	0	116	68-166	23.43	0.728	30	
Toluene	22.31	1.0	20	0	112	76-125	22.15	0.72	30	
trans-1,2-Dichloroethene	26.49	1.0	20	0	132	80-140	26.15	1.29	30	
trans-1,3-Dichloropropene	17.27	1.0	20	0	86.4	56-132	17.18	0.522	30	
Trichloroethene	23.3	1.0	20	0	116	77-125	22.89	1.78	30	
Vinyl chloride	20.93	1.0	20	0	105	50-136	20.14	3.85	30	
Xylenes, Total	68.89	3.0	60	0	115	76-127	68.47	0.612	30	
Surr: 1,2-Dichloroethane-d4	19.68	0	20	0	98.4	75-120	20.01	1.66	30	
Surr: 4-Bromofluorobenzene	20.01	0	20	0	100	80-110	20.21	0.995	30	
Surr: Dibromofluoromethane	20.47	0	20	0	102	85-115	20.04	2.12	30	
Surr: Toluene-d8	19.67	0	20	0	98.4	85-110	19.88	1.06	30	

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

Client: Wood Environment & Infrastructure Solutions, Inc.

QC BATCH REPORT

Work Order: 19051239

Project: Accument/Textron (3359-15-1040)

Batch ID: **R260904**

Instrument ID **VMS11**

Method: **SW8260C**

The following samples were analyzed in this batch:

19051239-01A	19051239-02A	19051239-03A
19051239-04A	19051239-05A	19051239-06A
19051239-07A	19051239-08A	19051239-09A
19051239-10A	19051239-11A	19051239-12A
19051239-13A	19051239-14A	19051239-15A
19051239-16A		

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

Client: Wood Environment & Infrastructure Solutions, Inc.
 Work Order: 19051239
 Project: Accument/Textron (3359-15-1040)

QC BATCH REPORT

Batch ID: **R260926** Instrument ID **VMS11** Method: **SW8260C**

MBLK		Sample ID: VBLKW1-190521-R260926				Units: µg/L		Analysis Date: 5/21/2019 02:31 PM		
Client ID:		Run ID: VMS11_190521A		SeqNo: 5671037		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2-Butanone	ND	5.0								
Surr: 1,2-Dichloroethane-d4	19.73	0	20	0	98.6	75-120	0			
Surr: 4-Bromofluorobenzene	19.72	0	20	0	98.6	80-110	0			
Surr: Dibromofluoromethane	18.72	0	20	0	93.6	85-115	0			
Surr: Toluene-d8	19.85	0	20	0	99.2	85-110	0			

LCS		Sample ID: VLCSW1-190521-R260926				Units: µg/L		Analysis Date: 5/21/2019 01:46 PM		
Client ID:		Run ID: VMS11_190521A		SeqNo: 5671036		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2-Butanone	23.54	5.0	20	0	118	55-150	0			
Surr: 1,2-Dichloroethane-d4	19.89	0	20	0	99.4	75-120	0			
Surr: 4-Bromofluorobenzene	20.5	0	20	0	102	80-110	0			
Surr: Dibromofluoromethane	20.45	0	20	0	102	85-115	0			
Surr: Toluene-d8	19.83	0	20	0	99.2	85-110	0			

MS		Sample ID: 19051179-08B MS				Units: µg/L		Analysis Date: 5/21/2019 10:27 PM		
Client ID:		Run ID: VMS11_190521A		SeqNo: 5671044		Prep Date:		DF: 20		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2-Butanone	379.8	100	400	0	95	55-150	0			
Surr: 1,2-Dichloroethane-d4	401.6	0	400	0	100	75-120	0			
Surr: 4-Bromofluorobenzene	403.4	0	400	0	101	80-110	0			
Surr: Dibromofluoromethane	388.8	0	400	0	97.2	85-115	0			
Surr: Toluene-d8	394	0	400	0	98.5	85-110	0			

MSD		Sample ID: 19051179-08B MSD				Units: µg/L		Analysis Date: 5/21/2019 10:49 PM		
Client ID:		Run ID: VMS11_190521A		SeqNo: 5671045		Prep Date:		DF: 20		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2-Butanone	383.8	100	400	0	96	55-150	379.8	1.05	30	
Surr: 1,2-Dichloroethane-d4	388.2	0	400	0	97	75-120	401.6	3.39	30	
Surr: 4-Bromofluorobenzene	407.8	0	400	0	102	80-110	403.4	1.08	30	
Surr: Dibromofluoromethane	400.4	0	400	0	100	85-115	388.8	2.94	30	
Surr: Toluene-d8	397.8	0	400	0	99.4	85-110	394	0.96	30	

The following samples were analyzed in this batch:

19051239-01A

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



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York, PA
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Page 1 of 2

COC ID: 178840

ALS Project Manager:

ALS Work Order #: 19051239

Customer Information		Project Information		Parameter/Method Request for Analysis	
Purchase Order	<u>C012605142</u>	Project Name	<u>Account Flexstream</u>	A	<u>VOC-8260B</u>
Work Order		Project Number	<u>3359151040</u>	B	
Company Name	<u>Wood Environment & Infrastructure Soluti</u>	Bill To Company	<u>Wood Environment & Infrastructure Sol</u>	C	
Send Report To	<u>Paul Steink</u>	Invoice Attn	<u>Accounts Payable</u>	D	
Address	<u>521 Byers Road, Suite 204</u>	Address	<u>521 Byers Road, Suite 204</u>	E	
City/State/Zip	<u>Miamisburg, OH 45342</u>	City/State/Zip	<u>Miamisburg, OH 45342</u>	F	
Phone	<u>(937) 859-3600</u>	Phone	<u>(937) 859-3600</u>	G	
Fax	<u>(937) 859-7951</u>	Fax	<u>(937) 859-7951</u>	H	
e-Mail Address	<u>Paul.Steink@woodplc.com</u>	e-Mail Address		I	
				J	

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	<u>ATR-OW6(63)-GOS1619</u>	<u>5/16/19</u>	<u>0825</u>	<u>GW</u>	<u>1</u>	<u>3</u>	<u>X</u>										
2	<u>ATR-OW6(38)-GOS1619</u>	<u>5/16/19</u>	<u>0920</u>	<u>GW</u>	<u>1</u>	<u>3</u>	<u>X</u>										
3	<u>ATR-MW22(18)-GOS1619</u>	<u>5/16/19</u>	<u>1120</u>	<u>GW</u>	<u>1</u>	<u>3</u>	<u>X</u>										
4	<u>ATR-MW17-GOS1619</u>	<u>5/16/19</u>	<u>1015</u>	<u>GW</u>	<u>1</u>	<u>3</u>	<u>X</u>										
5	<u>ATR-MW26(58.2)-GOS1619</u>	<u>5/16/19</u>	<u>1210</u>	<u>GW</u>	<u>1</u>	<u>3</u>	<u>X</u>										
6	<u>ATR-MW26(28.8)-GOS1619</u>	<u>5/16/19</u>	<u>1255</u>	<u>GW</u>	<u>1</u>	<u>3</u>	<u>X</u>										
7	<u>ATR-MW26(17.5)-GOS1619</u>	<u>5/16/19</u>	<u>1350</u>	<u>GW</u>	<u>1</u>	<u>3</u>	<u>X</u>										
8	<u>ATR-OW2(53)-GOS1619</u>	<u>5/16/19</u>	<u>1450</u>	<u>GW</u>	<u>1</u>	<u>3</u>	<u>X</u>										
9	<u>ATR-OW2(33)-GOS1619</u>	<u>5/16/19</u>	<u>1540</u>	<u>GW</u>	<u>1</u>	<u>3</u>	<u>X</u>										
10	<u>FB-001-GOS1619</u>	<u>5/16/19</u>	<u>1522</u>		<u>1</u>	<u>3</u>	<u>X</u>										

Sampler(s) Please Print & Sign <u>Donald L. Doerbusch Jr</u>		Shipment Method		Required Turnaround Time: (Check Box) <input type="checkbox"/> Std 10 Wk Days <input type="checkbox"/> 5 Wk Days <input type="checkbox"/> Other <u>2 Wk Days</u> <input type="checkbox"/> 24 Hour				Results Due Date:			
Relinquished by: <u>[Signature]</u>	Date: <u>5/17/19</u>	Time: <u>0745-1100</u>	Received by: <u>[Signature]</u>	Notes:							
Relinquished by: <u>[Signature]</u>	Date: <u>5/17/19</u>	Time: <u>1345</u>	Received by (Laboratory): <u>[Signature]</u>	Cooler ID: <u>522</u>	Cooler Temp.: <u>3.0°C</u>	QC Package: (Check One Box Below)					
Logged by (Laboratory): <u>[Signature]</u>	Date: <u>5/17/19</u>	Time: <u>1400</u>	Checked by (Laboratory): <u>[Signature]</u>	<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 type="checkbox"/> Level IV SW846/CLP <input type="checkbox"/> Other							
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.

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York, PA
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COC ID: 178131

ALS Project Manager:

ALS Work Order #: 19051239

Customer Information		Project Information		Parameter/Method Request for Analysis												
Purchase Order	CO12605142	Project Name	Textreen/Account	A	VOC-8260B											
Work Order		Project Number	3355151040	B												
Company Name	Wood Environment & Infrastructure Soluti	Bill To Company	Wood Environment & Infrastructure Sol	C												
Send Report To	Paul Stueck	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.stueck@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-MW14-G051719	5/17/19	0850	GW	1	3	X										
2	ATR-OW1(35)-G051719	5/17/19	0940	GW	1	3	X										
3	ATR-MW6C-G051719	5/17/19	1030	GW	1	3	X										
4	ATR-MW6C-G051719R	5/17/19	1030	GW	1	3	X										
5	ATR-EB001-G051719	5/17/19			1	3	X										
6	TB-001-G051719	5/17/19	1040		1	1	X										
7																	
8																	
9																	
10																	

Sampler(s) Please Print & Sign <i>Wendy D. ...</i>		Shipment Method		Required Turnaround Time: (Check Box)				Results Due Date:			
				<input type="checkbox"/> Std 10 Wk Days <input type="checkbox"/> 5 Wk Days <input type="checkbox"/> Other _____ <input type="checkbox"/> 2 Wk Days <input type="checkbox"/> 24 Hour							
Relinquished by: <i>[Signature]</i>	Date: 5/17/19	Time: 1100	Received by: <i>[Signature]</i>	Notes:							
Relinquished by: <i>[Signature]</i>	Date: 5/17/19	Time: 1345	Received by (Laboratory): <i>[Signature]</i>	Cooler ID	Cooler Temp.	QC Package: (Check One Box Below)					
Logged by (Laboratory): <i>[Signature]</i>	Date: 5/17/19	Time: 1400	Checked by (Laboratory): <i>[Signature]</i>			<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 type="checkbox"/> Level III Std QC/Raw Data	<input type="checkbox"/> TRRP Level IV				
						<input type="checkbox"/> Level IV SW846/CLP					
						<input type="checkbox"/> Other					

Note: 1. Any changes must be made in writing once samples and COC Form have been submitted to ALS Environmental.
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Sample Receipt Checklist

Client Name: **WOOD-DAYTON**

Date/Time Received: **17-May-19 13:45**

Work Order: **19051239**

Received by: **KRW**

Checklist completed by Keith Wierenga 17-May-19
eSignature Date

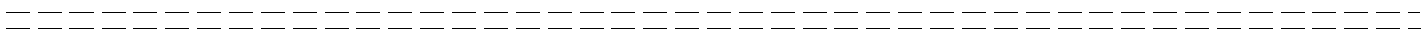
Reviewed by: Eheland Beaworth 20-May-19
eSignature Date

Matrices: Water

Carrier name: ALSHN

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>3.0/3.0 C</u>		<u>SR2</u>
Cooler(s)/Kit(s):	<u> </u>		
Date/Time sample(s) sent to storage:	<u>5/17/2019 2:03:53 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:

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

1.0 INTRODUCTION

Groundwater samples were collected during monitoring well sampling completed in May 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 samples ATR-MW17-G051619 and ATR-MW6C-G051719. 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. 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

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

Continuing Calibration

The percent difference for bromomethane (21) exceeded the project goal of 20. Bromomethane was not detected in associated samples, and reporting limits for bromomethane in all samples were qualified estimated (UJ). Qualified results are summarized in Table 3 with reason code CCV%D.

QC Blanks

Due to contamination in the associated trip blank, equipment blank, and field blank, the result for acetone in sample ATR-OW6(63)-G051619 was qualified non-detect (U).

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: July 11, 2019

Report Reviewed by: Chris Ricardi, NRCC_EAC



Date: July 12, 2019

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

							SW8260C
							TRG
SDG	Location	Field Sample ID	Date	Matrix	Lab Sample ID	Type	VOC
19051239	MW-14	ATR-MW14-G051719	5/17/2019	GW	19051239-11A	FS	36
19051239	MW-17	ATR-MW17-G051619	5/16/2019	GW	19051239-04A	FS	36
19051239	MW-26(17.5)	ATR-MW26 (17.5)-G051619	5/16/2019	GW	19051239-07A	FS	36
19051239	MW-26(28.8)	ATR-MW26(28.8)-G051619	5/16/2019	GW	19051239-06A	FS	36
19051239	MW-26(58.8)	ATR-MW26(58.2)-G051619	5/16/2019	GW	19051239-05A	FS	36
19051239	MW-27(18)	ATR-MW27(18)-G051619	5/16/2019	GW	19051239-03A	FS	36
19051239	MW-6C	ATR-MW6C-G051719	5/17/2019	GW	19051239-13A	FS	36
19051239	MW-6C	ATR-MW6C-G051719R	5/17/2019	GW	19051239-14A	FD	36
19051239	OW-01(39)	ATR-OW1(38)-G051719	5/17/2019	GW	19051239-12A	FS	36
19051239	OW-02(33)	ATR-OW2(33)-G051619	5/16/2019	GW	19051239-09A	FS	36
19051239	OW-02(53)	ATR-OW2(53)-G051619	5/16/2019	GW	19051239-08A	FS	36
19051239	OW-06(38)	ATR-OW6(38)-G051619	5/16/2019	GW	19051239-02A	FS	36
19051239	OW-06(63)	ATR-OW6(63)-G051619	5/16/2019	GW	19051239-01A	FS	36
19051239	QC	ATR-EB001-G051719	5/17/2019	BW	19051239-15A	EB	36
19051239	QC	FB-001-G051619	5/16/2019	BW	19051239-10A	FB	36
19051239	QC	TB-001-G051719	5/17/2019	BW	19051239-16A	TB	36

Notes:

ED = equipment blank

FB = field blank

FD = field duplicate

FS = field sample

TB = trip blank

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

SDG	Analysis Method	Lab Sample Id	Sample Date	Field Sample Id	Param Name	Lab Result Text	Lab Qual	Final Result	Final Qual	Val Reason Code	Result Units
19051239	SW8260C	19051239-11A	5/17/2019	ATR-MW14-G051719	Bromomethane	1	U	1	UJ	CCV%D	UG/L
19051239	SW8260C	19051239-04A	5/16/2019	ATR-MW17-G051619	Bromomethane	1	U	1	UJ	CCV%D	UG/L
19051239	SW8260C	19051239-07A	5/16/2019	ATR-MW26 (17.5)-G051619	Bromomethane	1	U	1	UJ	CCV%D	UG/L
19051239	SW8260C	19051239-06A	5/16/2019	ATR-MW26(28.8)-G051619	Bromomethane	1	U	1	UJ	CCV%D	UG/L
19051239	SW8260C	19051239-05A	5/16/2019	ATR-MW26(58.2)-G051619	Bromomethane	1	U	1	UJ	CCV%D	UG/L
19051239	SW8260C	19051239-03A	5/16/2019	ATR-MW27(18)-G051619	Bromomethane	1	U	1	UJ	CCV%D	UG/L
19051239	SW8260C	19051239-13A	5/17/2019	ATR-MW6C-G051719	Bromomethane	1	U	1	UJ	CCV%D	UG/L
19051239	SW8260C	19051239-14A	5/17/2019	ATR-MW6C-G051719R	Bromomethane	1	U	1	UJ	CCV%D	UG/L
19051239	SW8260C	19051239-12A	5/17/2019	ATR-OW1(38)-G051719	Bromomethane	1	U	1	UJ	CCV%D	UG/L
19051239	SW8260C	19051239-09A	5/16/2019	ATR-OW2(33)-G051619	Bromomethane	1	U	1	UJ	CCV%D	UG/L
19051239	SW8260C	19051239-08A	5/16/2019	ATR-OW2(53)-G051619	Bromomethane	1	U	1	UJ	CCV%D	UG/L
19051239	SW8260C	19051239-02A	5/16/2019	ATR-OW6(38)-G051619	Bromomethane	1	U	1	UJ	CCV%D	UG/L
19051239	SW8260C	19051239-01A	5/16/2019	ATR-OW6(63)-G051619	Acetone	16		16	U	BL2	UG/L
19051239	SW8260C	19051239-01A	5/16/2019	ATR-OW6(63)-G051619	Bromomethane	1	U	1	UJ	CCV%D	UG/L

U = not detected, value is the detection limit
J = value is estimated
UG/L = microgram per liter

CCV%D = continuing calibration percent difference exceeds QC limit
BL2 = field or trip blank contamination

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

			SDG: 19051239		19051239		19051239		19051239		19051239	
			MW-14		MW-17		MW-26(17.5)		MW-26(28.8)		MW-26(58.8)	
			05/17/19		05/16/19		05/16/19		05/16/19		05/16/19	
			ATR-MW14-G051719		ATR-MW17-G051619		ATR-MW26 (17.5)-G051619		ATR-MW26(28.8)-G051619		ATR-MW26(58.2)-G051619	
			FS		FS		FS		FS		FS	
Method	Unit	Parameter	Final Result	Final Qualifier	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	1	U
SW8260C	UG/L	1,1,2,2-Tetrachloroethane	1	U	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1,2-Trichloroethane	1	U	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1-Dichloroethane	1	U	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1-Dichloroethene	1	U	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,2-Dichloroethane	1	U	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,2-Dichloropropane	1	U	1	U	1	U	1	U	1	U
SW8260C	UG/L	2-Butanone	5	U	5	U	5	U	5	U	5	U
SW8260C	UG/L	2-Hexanone	5	U	5	U	5	U	5	U	5	U
SW8260C	UG/L	4-Methyl-2-pentanone	1	U	1	U	1	U	1	U	1	U
SW8260C	UG/L	Acetone	10	U	10	U	10	U	10	U	10	U
SW8260C	UG/L	Benzene	1	U	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromodichloromethane	1	U	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromoform	1	U	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromomethane	1	UJ	1	UJ	1	UJ	1	UJ	1	UJ
SW8260C	UG/L	Carbon disulfide	1	U	1	U	1	U	1	U	1	U
SW8260C	UG/L	Carbon tetrachloride	1	U	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chlorobenzene	1	U	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloroethane	1	U	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloroform	1	U	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloromethane	1	U	1	U	1	U	1	U	1	U
SW8260C	UG/L	cis-1,2-Dichloroethene	1	U	23	U	1	U	1	U	1	U
SW8260C	UG/L	cis-1,3-Dichloropropene	1	U	1	U	1	U	1	U	1	U
SW8260C	UG/L	Dibromochloromethane	1	U	1	U	1	U	1	U	1	U
SW8260C	UG/L	Ethylbenzene	1	U	1	U	1	U	1	U	1	U
SW8260C	UG/L	Methylene chloride	5	U	5	U	5	U	5	U	5	U
SW8260C	UG/L	Styrene	1	U	1	U	1	U	1	U	1	U
SW8260C	UG/L	Tetrachloroethene	1	U	1	U	1	U	1	U	1	U
SW8260C	UG/L	Toluene	1	U	1	U	1	U	1	U	1	U
SW8260C	UG/L	trans-1,2-Dichloroethene	1	U	1	U	1	U	1	U	1	U
SW8260C	UG/L	trans-1,3-Dichloropropene	1	U	1	U	1	U	1	U	1	U
SW8260C	UG/L	Trichloroethene	1	U	42	U	1	U	1	U	1	U
SW8260C	UG/L	Vinyl chloride	1	U	1.2	U	1	U	1	U	1	U
SW8260C	UG/L	Xylene, o	1	U	1	U	1	U	1	U	1	U
SW8260C	UG/L	Xylenes (m&p)	2	U	2	U	2	U	2	U	2	U
SW8260C	UG/L	Xylenes, Total	3	U	3	U	3	U	3	U	3	U

Notes:

- ED = equipment blank
- FB = field blank
- FD = field duplicate
- FS = field sample
- TB = trip blank
- U = undetected
- J = estimated

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

			SDG: 19051239		19051239		19051239		19051239		19051239			
			MW-6C		MW-6C		OW-01(39)		OW-02(33)		OW-02(53)		OW-06(38)	
			05/17/19		05/17/19		05/17/19		05/16/19		05/16/19		05/16/19	
			ATR-MW6C-G051719		ATR-MW6C-G051719R		ATR-OW1(38)-G051719		ATR-OW2(33)-G051619		ATR-OW2(53)-G051619		ATR-OW6(38)-G051619	
			FS		FD		FS		FS		FS		FS	
Method	Unit	Parameter	Final Result	Final Qualifier	Final Result	Final Qualifier	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	1	U	1	U
SW8260C	UG/L	1,1,2,2-Tetrachloroethane	1	U	1	U	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1,2-Trichloroethane	1	U	1	U	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1-Dichloroethane	1	U	1	U	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,1-Dichloroethene	1	U	1	U	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,2-Dichloroethane	1	U	1	U	1	U	1	U	1	U	1	U
SW8260C	UG/L	1,2-Dichloropropane	1	U	1	U	1	U	1	U	1	U	1	U
SW8260C	UG/L	2-Butanone	5	U	5	U	5	U	5	U	5	U	5	U
SW8260C	UG/L	2-Hexanone	5	U	5	U	5	U	5	U	5	U	5	U
SW8260C	UG/L	4-Methyl-2-pentanone	1	U	1	U	1	U	1	U	1	U	1	U
SW8260C	UG/L	Acetone	10	U	10	U	10	U	10	U	10	U	16	U
SW8260C	UG/L	Benzene	1	U	1	U	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromodichloromethane	1	U	1	U	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromoform	1	U	1	U	1	U	1	U	1	U	1	U
SW8260C	UG/L	Bromomethane	1	UJ	1	UJ	1	UJ	1	UJ	1	UJ	1	UJ
SW8260C	UG/L	Carbon disulfide	1	U	1	U	1	U	1	U	1	U	1	U
SW8260C	UG/L	Carbon tetrachloride	1	U	1	U	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chlorobenzene	1	U	1	U	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloroethane	1	U	1	U	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloroform	1	U	1	U	1	U	1	U	1	U	1	U
SW8260C	UG/L	Chloromethane	1	U	1	U	1	U	1	U	1	U	1	U
SW8260C	UG/L	cis-1,2-Dichloroethene	2.8		2.7		1	U	1	U	1	U	1	U
SW8260C	UG/L	cis-1,3-Dichloropropene	1	U	1	U	1	U	1	U	1	U	1	U
SW8260C	UG/L	Dibromochloromethane	1	U	1	U	1	U	1	U	1	U	1	U
SW8260C	UG/L	Ethylbenzene	1	U	1	U	1	U	1	U	1	U	1	U
SW8260C	UG/L	Methylene chloride	5	U	5	U	5	U	5	U	5	U	5	U
SW8260C	UG/L	Styrene	1	U	1	U	1	U	1	U	1	U	1	U
SW8260C	UG/L	Tetrachloroethene	1	U	1	U	1	U	1	U	1	U	1	U
SW8260C	UG/L	Toluene	1	U	1	U	1	U	1	U	1	U	1	U
SW8260C	UG/L	trans-1,2-Dichloroethene	1	U	1	U	1	U	1	U	1	U	1	U
SW8260C	UG/L	trans-1,3-Dichloropropene	1	U	1	U	1	U	1	U	1	U	1	U
SW8260C	UG/L	Trichloroethene	1	U	1	U	1	U	1	U	1	U	1	U
SW8260C	UG/L	Vinyl chloride	1.9		2		1	U	1	U	1	U	1	U
SW8260C	UG/L	Xylene, o	1	U	1	U	1	U	1	U	1	U	1	U
SW8260C	UG/L	Xylenes (m&p)	2	U	2	U	2	U	2	U	2	U	2	U
SW8260C	UG/L	Xylenes, Total	3	U	3	U	3	U	3	U	3	U	3	U

Notes:

- ED = equipment blank
- FB = field blank
- FD = field duplicate
- FS = field sample
- TB = trip blank
- U = undetected
- J = estimated

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

			SDG: Location: Date Collected: Field Sample ID: Type:	19051239 OW-06(63) 05/16/19 ATR-OW6(63)-G051619 FS	19051239 QC 05/16/19 FB-001-G051619 FB	19051239 QC 05/17/19 ATR-EB001-G051719 EB	19051239 QC 05/17/19 TB-001-G051719 TB	
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	1	U	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	180		13		5	U
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	10	U
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	J	1	U	1	U
SW8260C	UG/L	Carbon disulfide	1	U	1	U	1	U
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	1	U	1	U	1	U
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	U
SW8260C	UG/L	trans-1,2-Dichloroethene	1	U	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	1	U	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

Notes:

- ED = equipment blank
- FB = field blank
- FD = field duplicate
- FS = field sample
- TB = trip blank
- U = undetected
- J = estimated