



amec  
foster  
wheeler

16 December 2016

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

**RE: Report of the Third Performance Groundwater Monitoring Event  
In Support of the Remedial Activities  
TORX Facility, 4366 North Old US Highway 31, Rochester, Indiana  
Facility Cleanup ID 7100149  
Amec Foster Wheeler Project Number 3359-15-1040**

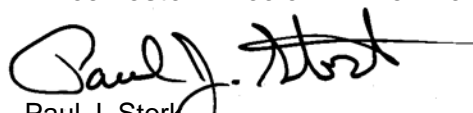
Dear Mr. Keller:

Enclosed is the *Report of the Third Performance Groundwater Monitoring Event In Support of the Remedial Activities* performed at the TORX Facility located in Rochester, Indiana prepared by Amec Foster Wheeler Environment & Infrastructure, Inc. (Amec Foster Wheeler). The report documents the third performance groundwater monitoring event performed at the referenced site. The work was completed as described in the *Remediation Work Plan* dated 24 June 2014.

The overall total site-wide treatment area mass has been reduced by 44% from baseline concentrations. This is slightly less than as reported in the previous performance monitoring report, indicating some amount of rebound. However, based on this overall reduction in CVOC mass, along with locational mass reductions in the source area and at the leading edge of the treatment area, the CVOC plume appears to be stable. The performance groundwater monitoring again documents significant concentrations of ethene in the groundwater, demonstrating that the reductive dechlorination process is going to completion.

Additional Injections of biostimulant were implemented during the fourth quarter 2016. A report detailing the additional biostimulant injections will be submitted to your office in the future. If you have any questions or comments following your review of this report, please call our office at 937-859-3600.

Sincerely,  
**Amec Foster Wheeler Environment & Infrastructure, Inc.**

  
Paul J. Stork  
Project Manager

  
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Enclosure

cc: Jamison Schiff, Textron, Inc.

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# **REPORT OF THE THIRD PERFORMANCE GROUNDWATER MONITORING EVENT IN SUPPORT OF THE REMEDIAL ACTIVITIES**

## **Former TORX Facility**

4366 North Old US Highway 31  
Rochester, Indiana

Prepared for:

### **Textron Inc.**

40 Westminster Street  
Providence, RI 02903

Prepared by:

### **Amec Foster Wheeler Environment & Infrastructure, Inc.**

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December 2016

Project No. 3359-15-1040

#### **IMPORTANT NOTICE**

This report was prepared exclusively for Textron, Inc. by Amec Foster Wheeler Environment & Infrastructure, Inc. (Amec Foster Wheeler). The quality of information, conclusions and estimates contained herein is consistent with the level of effort involved in Amec Foster Wheeler'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 Amec Foster Wheeler. 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**

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µg/L	micrograms per liter
CVOC	chlorinated volatile organic compounds
DCE	dichloroethene
DHC	Dehalococcoides bacteria
DO	dissolved oxygen
ERD	Enhanced Reductive Dechlorination
HDPE	high density polyethylene
IDEM	Indiana Department of Environmental Management
ISCR	In-situ Chemical Reduction
MCL	Maximum Contaminant Level
mg/L	milligrams per liter
mV	millivolts
NTU	Nephelometric Turbidity Units
ORP	oxygen reduction potential
PVC	polyvinyl chloride
QAPP	Quality Assurance Project Plan
RWP	Remediation Work Plan
TCE	trichloroethene
TOC	total organic carbon
USEPA	U.S. Environmental Protection Agency
VFA	volatile fatty acid
VOC	Volatile organic compound

## 1.0 INTRODUCTION

Amec Foster Wheeler Environment & Infrastructure, Inc. (Amec Foster Wheeler) has prepared this report to document performance monitoring results associated with the implementation of In-Situ Chemical Reduction (ISCR) and Enhanced Reductive Dechlorination (ERD) as remedies for groundwater containing volatile organic compounds (VOCs) 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 REMEDIAL INJECTION ACTIVITIES

Amec Foster Wheeler was retained by Textron, Inc. to conduct remedial injection activities at the former TORX facility. A Remediation Work Plan (RWP) was prepared in June 2014 and submitted to the Indiana Department of Environmental Management (IDEM) for approval. IDEM approved the RWP with comments provided in September and October 2014. Amec Foster Wheeler provided a response to comments from IDEM in December 2014. The purpose of the remediation activities is to reduce the concentration of VOCs in the groundwater at and in the vicinity of the Site.

The overall remedial approach involves treatment of a portion of the source area near the Western Pond behind (west of) the facility using ISCR technology. The remainder of the source area outside of the building and beneath the manufacturing plant is being addressed by stimulating biologically mediated enhanced reductive dechlorination, referred to as ERD or biostimulation. The downgradient treatment zone (downgradient plume) to the vicinity of MW26 and MW17 is also being addressed by ERD. In the vicinity of MW26 and MW17, a biobarrier was installed based on the use of a long lived reductive dechlorination amendment.

Amec Foster Wheeler performed injection services within the source and treatment areas shown in Figures 2 through 5. Details of the injection array layout and injection well construction were provided in Amec Foster Wheeler's January 25, 2016 *Report of Injection Well and Monitoring Well Installation*. The material mixing process consisted of two 1,700-

gallon, high density polyethylene (HDPE) tanks, transfer/mixing pumps, injection pump, flow and pressure instrumentation and control valves.

ISCR injections were implemented in the source area behind the plant building in June and July 2015. ERD injections were implemented in the source area behind the building and in downgradient treatment zones A through D between July and September 2015. The ERD injections in the source area located beneath the Acument building were performed in February 2016. The first performance monitoring event was conducted in August and October 2015, and the second was performed in February and March 2016. These activities are documented in Amec Foster Wheeler's *Report of Remedial Injection Activities and Initial Performance Monitoring*, dated 16 March 2016 and *Report of Remedial Injection Activities and Second Performance Monitoring*, dated 6 July 2016.

## 2.1 Performance Monitoring Objectives

Amec Foster Wheeler conducted the third groundwater performance monitoring sampling event during June 2016. The purpose of the groundwater performance monitoring is to assess the short-term performance of ISCR and ERD remedies implemented for the Site. The objectives of the performance monitoring are to assess the following within the Treatment Zones:

- Distribution of the remedial amendments,
- Geochemistry effects of the amendment, and
- Contaminant concentrations and transformation.

The performance monitoring results are being used to identify refinements to the additional biostimulant or ISCR amendment injections that were implemented in the fourth quarter of 2016.

## 2.2 Scope of Work

Amec Foster Wheeler conducted groundwater monitoring and sampling at 43 monitoring wells located within and downgradient of the treatment zones. The third round of groundwater performance monitoring took place in during the week of 13 June 2016.

For most performance monitoring wells, groundwater was purged using low-flow sampling techniques. Certain smaller diameter wells were purged by bailing. Field water quality

parameters were monitored during purging. Groundwater was sampled once field water quality parameters had stabilized. Groundwater samples were analyzed for VOCs, total organic carbon (TOC), and dissolved gases (methane, ethane, and ethene). As specified in the June 2014 RWP, the third performance groundwater monitoring event analytical parameters were a limited subset of the entire performance monitoring parameters.

### **3.0 Baseline Results**

Baseline groundwater monitoring consisting of a complete set of analytical parameters was conducted in 2012 prior to initiating the Pilot Study. A subset of the performance monitoring wells were purged and sampled. Groundwater was assessed for geochemical parameters [oxidation-reduction potential (ORP), dissolved oxygen (DO), and pH], VOCs, anions (nitrate, chloride, and sulfate), TOC, alkalinity, Dehalococcoides bacteria (DHC), dissolved gases (methane, ethane, and ethene), volatile fatty acids (VFAs), and select metals (arsenic, selenium, iron, and manganese). The analytical methods used are presented in Table 1. The results of this baseline sampling, supplemented with results of routine groundwater monitoring conducted from 2012 through 2014, are included on Tables 2 through 4. We note that the baseline initial sampling event for certain wells included in the performance monitoring sampling occurred at later dates (e.g., in 2013 or 2014), as annotated in Section 6.0.

### **4.0 Field Activities**

The performance monitoring wells that were sampled are indicated on Table 1. Prior to purging and sampling, total depths and static water levels were measured in monitoring wells within and downgradient of the treatment zone. Groundwater elevation contours for shallow overburden wells are shown on Figure 6. Groundwater elevation contours for the intermediate overburden wells are shown on Figure 7. Groundwater flow is generally to the southeast in both zones.

The 1-inch diameter monitoring wells, MW12 and MW13 located east of North Old US Highway 31 and monitoring wells MW67, MW68, MW71 and MW72 located inside the Acument building were purged and sampled using disposable 0.75-inch diameter polyvinyl chloride (PVC) bailers. Prior to sample collection, at least three well volumes of groundwater were removed from each well. Groundwater field parameters including pH,

temperature, conductivity, oxidation-reduction potential, dissolved oxygen, and turbidity were measured during purging and recorded. Groundwater samples were collected directly from the bailers.

The remainder of the performance monitoring wells are 2-inch diameter and were purged and sampled using a bladder pump. Prior to sample collection, groundwater was purged from the wells using a modified low-flow procedure. Groundwater field parameters including pH, temperature, conductivity, ORP, dissolved oxygen, 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 (mV) for ORP, +/- 10 Nephelometric Turbidity Units (NTUs) for turbidity, and +/- 10% for dissolved oxygen. 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.

Groundwater samples were collected into laboratory-supplied, pre-preserved vials and labeled with the sampling information. Quality control samples including field blanks, equipment blanks, and trip blanks were also submitted. Field blanks were collected by filling a laboratory supplied container with distilled water. Equipment blanks were collected by pumping distilled water through the decontaminated pump and into the sampling container. Trip blanks were prepared by the laboratory and accompanied the samples during transport. A trip blank accompanied each shipment of VOC samples.

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, as well as, TOC. Samples for dissolved gas analyses were shipped under chain-of-custody to Microseeps, a division of Pace Analytical, in Pittsburgh, Pennsylvania.

Sampling pumps were decontaminated between wells using a liquinox wash, potable water rinse, and distilled water rinse. Dedicated sampling tubing was used to purge and sample each well, and new disposable bailers were used for sampling monitoring wells MW12, MW13, MW67, MW68, MW71 and MW72. Disposable equipment was changed out between each well.

## 5.0 Analytical Methods and Use

Groundwater samples were collected and analyzed to provide data pertinent to the amendment distribution, geochemical conditions, and contaminant concentrations and transformation. The analytical methods and purpose of the data is described below and in Table 1. For this third performance monitoring event the groundwater samples collected from the performance monitoring wells were analyzed for the reduced list of analytical parameters as indicated on Table 1.

### 5.1 Amendment Distribution Indicators

#### 5.1.1 Total Organic Carbon

The groundwater samples were analyzed for TOC by Method 9060. The amendment injected to promote ISCR and ERD provides an organic carbon source to the aquifer system. Therefore, increases in TOC relative to baseline conditions are an indicator of amendment distribution to the performance monitoring well. TOC results above 20 milligrams per liter (mg/L) are considered favorable.

### 5.2 Redox Conditions

#### 5.2.1 Oxidation-Reduction Potential

ORP was measured during groundwater purging using a YSI 6920 multi-parameter water quality sonde. ORP is a potentiometric measurement of the tendency for electron transfer. ORP is measured in voltage with positive values indicating an oxidizing environment (ability to accept electrons) and negative values indicating a reducing environment (ability to furnish electrons). A reducing environment is favorable for anaerobic reductive dechlorination of chlorinated VOCs (CVOCs).

#### 5.2.2 Dissolved Oxygen

Dissolved oxygen was measured during groundwater purging using a YSI 6920 multi-parameter water quality sonde. Dissolved oxygen readings provide data on whether aerobic or anaerobic conditions exist. In an anaerobic setting, the dissolved oxygen is depleted (<0.5 mg/L).

### 5.3 Buffering

#### 5.3.1 pH

A YSI 6920 multi-parameter water quality sonde was used to measure pH during groundwater purging. Microbial growth and the desired biological processes can be

hindered or halted at low and high pH. The ideal pH range for degrading bacteria is 6 to 8. Fermentation processes associated with the remediation can result in alteration of the natural pH. If pH is lower than 5 or higher than 9, a buffering agent may be needed to provide a suitable environment for the desired biological activity.

#### **5.4 Degradation of Chlorinated VOCs**

##### **5.4.1 VOCs**

The groundwater samples were analyzed for VOCs by Method 8260B. The objective of the remediation is to reduce the mass of chlorinated VOCs in the groundwater to demonstrate that the downgradient plume concentrations are declining or stable. Although the CVOCs are expected to decline as a result of the remedial measures, degradation products such as dichloroethene (DCE) and vinyl chloride may temporarily increase as a result of dechlorination.

##### **5.4.2 Dissolved Gases**

The groundwater samples were analyzed for dissolved gases including methane, ethane, and ethene by Method AM20GAX. Elevated levels of methane are an indicator that fermentation is occurring under anaerobic conditions. Methane concentrations greater than 1 mg/L are considered favorable. Elevated levels of ethene and ethane are indicative that complete anaerobic dechlorination of CVOCs is occurring.

## **6.0 Data Evaluation**

Tables 2 through 4 present the analytical results. The measured field parameters referenced in Section 4.0 are included in Table 2. Figures 8 through 10 present a summary of the results of the VOC analyses performed on samples from the monitoring wells in the treatment areas. Copies of the laboratory reports and chain-of-custodies are presented in Appendix B.

The following subsections discuss the response of the aquifer to the biostimulant and the concentration of CVOCs in each treatment area.



### 6.1 Source Zone Outside (Behind) Plant

Four monitoring wells located in the source zone behind the plant were sampled for performance monitoring: MW81(27), MW59(29), PM2, and PM3. TOC concentrations remained well above 20 mg/L in all four wells, indicating continued presence of amendment.

The pH of PM3 at 4.56 was slightly below target range. The pH for the other three wells ranged from 5.59 to 6.01, which is just slightly less than the ideal target range. ORP indicates reducing conditions in all the wells.

Trichloroethene (TCE) was below reporting limits in all four wells, indicating remediation of the source contaminant has occurred at this location. Cis-1,2-DCE concentrations were lower at all four wells relative to the February/March 2016 monitoring event samples. Vinyl chloride concentrations at all four wells were comparable or higher than the February/March 2016 monitoring event sample results due to ongoing reductive dechlorination.

Methane concentrations for all four wells remain high, indicating anaerobic fermentation is occurring. Ethene concentrations remain elevated, indicating complete dechlorination of some of the contaminant mass.

A summary of the pertinent results for the performance monitoring wells in the Source Area Outside the Plant is provided below:

Source Zone Outside (Behind) Plant Performance Monitoring Wells	Molar Mass % Reduction Relative to Baseline				Amendment Indicator	Gases	Geochemical Environment	
	Total CVOC	TCE	cis-1,2-DCE	Vinyl Chloride	TOC > 20 mg/L	Ethene > 10 µg/L	ORP (+) or (-)	DO < 0.5 mg/L
MW81(27)	-89%	100%	-24%	-523%	YES	YES	-	NO
MW59(29)	71%	--	100%	48%	YES	YES	-	NO
PM2	41%	100%	99%	-71%	YES	YES	-	NO
PM3	-3%	--	65%	-201%	YES	YES	-	NO
Total (4 wells)	-7%							

Prepared By: LF  
 Checked By: JD

## Conclusions

- While total CVOC mass has increased by 7% relative to baseline, there has been a significant shift in mass makeup from TCE to degradation products, reflecting the ongoing dechlorination process.
- Contaminant mass has been substantially reduced in the two performance monitoring wells (PM2 and MW59(29)) located in the middle of the source area.
- Contaminant mass has significantly increased in MW81(27), likely due to liberation of mass from silt layers. However, the effects of ERD are evident, as the parent contaminant TCE is now non-detect, while the increase in mass is from daughter products DCE and vinyl chloride.
- TOC concentrations remain high, and the ORP is favorable for continued reductive dechlorination.

### 6.2 Source Zone Inside (Beneath) Plant

Seven monitoring wells located in the source zone beneath the plant were sampled for performance monitoring: MW67, MW68, MW71, MW72, MW76, MW77, and MW78. TOC concentrations were above 20 mg/L in all the wells except MW77. A significant reduction in CVOC mass is observed in all the reference wells except for MW76. ORP indicates reducing conditions in all wells, and pH ranged 5.08 to 7.01.

TCE was below reporting limits in all the wells. Cis-1,2-DCE and vinyl chloride concentrations increased at MW-76 relative to the previous sampling event. A slight increase in cis-1,2-DCE was also observed at MW78 relative to the previous sampling event. Cis-1,2-DCE and vinyl chloride concentrations were lower relative to the previous sampling event in the rest of the Source Zone Inside (Beneath) Plant performance monitoring well samples.

Methane and ethene concentrations at all seven wells are elevated, indicating anaerobic fermentation and complete anaerobic dechlorination is occurring.

A summary of the pertinent results for the performance monitoring wells in the Source Area Inside (Beneath) the Plant is provided below:

Source Zone Inside (Beneath) Plant Performance Monitoring Wells	Molar Mass % Reduction Relative to Baseline				Amendment Indicator	Gases	Geochemical Environment	
	Total CVOC	TCE	cis-1,2-DCE	Vinyl Chloride			TOC > 20 mg/L	Ethene > 10 µg/L
MW67	99%	--	99%	96%	YES	YES	-	NO
MW68	99%	--	99%	97%	YES	YES	-	NO
MW71	99%	--	100%	96%	YES	YES	-	NO
MW72	99%	--	99%	>99%	YES	YES	-	NO
MW76	-426%	--	-23%	-3285%	YES	YES	-	NO
MW77	94%	--	100%	75%	NO	YES	-	NO
MW78	99%	--	99%	100%	YES	YES	-	NO
Total (7 wells)	81%							

Prepared By: LF  
 Checked By: JD

### Conclusions

- The total molar mass for the primary CVOCs has thus far been reduced by 81% in the Source Zone Inside (Beneath) the Plant based upon data from the seven performance monitoring wells relative to baseline. This statistic is slightly less than as reported during the last performance monitoring event, due to increased concentrations of daughter products at MW76.
- While total CVOC mass at MW76 has increased, the mass is from daughter products DCE and vinyl chloride. Conditions are favorable for continued reductive dechlorination at MW76.
- TOC at MW77 remains low, but a 94% reduction in total CVOC mass has been observed and conditions are favorable for continued reductive dechlorination.

### 6.3 Treatment Zone A

Nine monitoring wells located in Treatment Zone A were sampled for performance monitoring: MW6C, MW12, MW13, MW62, MW20(35), MW20(51), MW82, OW1(28), and OW1(39). The contaminant mass at MW20(51) and OW1(39) has been reduced by 100%,



and therefore these wells are not included in the subsequent discussions on indicator parameters. TOC concentrations were at or above 20 mg/L in all the wells except MW6C, MW13, and OW1(39). ORP indicates reducing conditions in all wells. The pH ranged from 6.38 to 7.05, which is in the ideal range for biological-based treatment.

TCE was below reporting limits in all the wells. Cis-1,2-DCE concentrations were significantly lower than the previous sampling event (February/March 2016) in all the wells except MW20(35), where cis-1,2-DCE was comparable to the previous sampling event. Vinyl chloride concentrations were similar or lower in all the performance monitoring wells relative to the previous sampling event.

Methane concentrations were high in all the performance monitoring wells, indicating anaerobic fermentation is occurring. Ethene was substantially present in all wells except MW20(51), MW82, and OW1(39).

A summary of the pertinent results for the performance monitoring wells in Treatment Zone A is provided below:

Treatment Zone A Performance Monitoring Well	Molar Mass % Reduction Relative to Baseline				Amendment Indicator	Gases	Geochemical Environment	
	Total CVOC	TCE	cis-1,2-DCE	Vinyl Chloride	TOC > 20 mg/L	Ethene > 10 µg/L	ORP (+) or (-)	DO < 0.5 mg/L
MW6C	92%	--	97%	87%	NO	YES	-	NO
MW12	78%	--	94%	-86%	YES	YES	-	NO
MW13	94%	--	94%	94%	NO	YES	-	NO
MW62(36)	99%	--	>99%	98%	YES	YES	-	NO
MW20(35)	98%	--	99%	98%	YES	YES	-	NO
MW20(51)	100%	--	100%	100%	YES	NO	-	NO
MW82(58)	97%	100%	100%	100%	YES	NO	-	NO
OW1(28)	97%	--	99%	95%	NO	YES	-	NO
OW1(39)	100%	--	100%	100%	NO	NO	-	NO
Total (9 wells)	90%							

Prepared By: LF  
 Checked By: JD

## Conclusions

- The total molar mass for the primary chlorinated VOCs has thus far been reduced by 90% in Treatment Zone A based upon data from the nine performance monitoring wells relative to baseline.
- Contaminant mass has been fully reduced in the two intermediate zone performance monitoring wells [MW20(51) and OW1(39)].
- Significant CVOC mass reduction has been observed in all wells.
- Conditions are favorable for continued reductive dechlorination.

### 6.4 Treatment Zone B

Seven monitoring wells located in Treatment Zone B were sampled for performance monitoring: MW14, MW24(24.9), MW24(55.9), OW2(33), OW2(53), OW3(35), and OW3(55). Contaminant mass has not been present at MW24(24.9), and the mass at OW2(53) has been reduced by 100%; therefore, these wells are not included in the subsequent discussions on indicator parameters.

The TOC levels were greater than 20 mg/L at MW14, OW2(53), and OW3(55). The ORP indicates reducing conditions in all the wells. The pH ranged from 6.53 to 7.37, which is in the ideal range for biological-based treatment.

TCE was below reporting limits in all the wells except MW14 and MW24(55). Cis-1,2-DCE concentrations were lower than the previous sampling event (February/March 2016) in all the wells except OW2(33). Vinyl chloride concentrations were similar or lower than the previous sampling event in all the wells except OW2(33) and OW3(55).

Ethene was substantially present in all wells except MW24(24.9) and MW24(55.9). Methane was elevated in MW14, OW2(33), OW2(53), OW3(35), and OW3(55).

A summary of the pertinent results for the performance monitoring wells in Treatment Zone B is provided below:

Treatment Zone B Performance Monitoring Well	Molar Mass % Reduction Relative to Baseline				Amendment Indicator	Gases	Geochemical Environment	
	Total CVOC	TCE	cis-1,2-DCE	Vinyl Chloride	TOC > 20 mg/L	Ethene > 10 µg/L	ORP (+) or (-)	DO < 0.5 mg/L
MW14	80%	99%	64%	-448%	YES	YES	-	NO
MW24(24.9)	--	--	--	--	NO	NO	-	NO
MW24(55.9)	11%	0%	22%	--	NO	NO	-	NO
OW2(33)	-1109%	--	-1178%	-1043%	NO	YES	-	NO
OW2(53)	100%	--	100%	100%	YES	YES	-	NO
OW3(35)	99%	100%	100%	97%	NO	YES	-	NO
OW3(55)	-28%	100%	-536%	-2324%	YES	YES	-	NO
Total (7 wells)	-8%							

Prepared By: LF  
 Checked By: JD

### Conclusions

- The total molar mass for the primary chlorinated VOCs is 8% higher than baseline in Treatment Zone B based upon data from the seven performance monitoring wells relative to baseline, primarily due to an increase in degradation products in OW2(33) and OW3(55).
- Contaminant mass has increased from baseline in two wells, OW2(33) and OW3(55), likely due to liberation from silt layers from the effects of the injection. Additional amendment may be beneficial in these two areas.

### 6.5 Treatment Zone C

Six monitoring wells located in Treatment Zone C were sampled for performance monitoring: MW15, MW25(16.4), MW25(32.6), MW25(45.2), OW4(35), OW4(54).

Contaminant mass has been reduced 100% or is not present at OW4(54) and MW25(32.6);

therefore, these wells are not included in the subsequent discussion on indicator parameters.

TOC concentrations were above 20 mg/L in all wells except OW4(54). The pH ranged from 6.18 to 7.35, which is in the ideal range for biological-based treatment. ORP indicates reducing conditions in all wells.

Total CVOC molar mass is above baseline in MW15, MW25(45.2) and OW4(35), indicating liberation of contaminants from the aquifer matrix. TCE was below reporting limits in all the wells. Cis-1,2-DCE concentrations were comparable or lower in all the wells compared to the previous sampling event (February/March 2016). Vinyl chloride concentrations at all wells were similar or lower in all the wells compared to the previous sampling event except at MW25(45.2) and OW4(35).

Methane concentrations were high in all wells, and ethene was detected in all the wells.

A summary of the pertinent results for the performance monitoring wells in Treatment Zone C is provided below:

Treatment Zone C Performance Monitoring Well	Molar Mass % Reduction Relative to Baseline				Amendment Indicator	Gases	Geochemical Environment	
	Total CVOC	TCE	cis-1,2-DCE	Vinyl Chloride	TOC > 20 mg/L	Ethene > 10 µg/L	ORP (+) or (-)	DO < 0.5 mg/L
MW15	-93%	100%	-105%	-79%	YES	YES	-	NO
MW25(16.4)	98%	--	98%	97%	YES	YES	-	NO
MW25(32.6)	100%	--	100%	100%	YES	YES	-	NO
MW25(45.2)	-221%	100%	-127%	-846%	YES	YES	-	NO
OW4(35)	-65%	100%	-38%	-72%	YES	YES	-	NO
OW4(54)	100%	--	100%	--	NO	NO	-	NO
Total (6 wells)	-3%							

Prepared By: LF  
 Checked By: JD

## Conclusions

- The total molar mass for the primary chlorinated VOCs is 3% higher than baseline in Treatment Zone C based upon data from the six performance monitoring wells relative to baseline.
- TCE has been reduced to below reporting limits in all wells.
- Contaminant mass has been fully reduced at OW4(54) and MW25(32.6).
- Data indicates reductive dechlorination is occurring at MW15, MW25(16.4), MW25(45.2), and OW4(35).

### 6.6 Treatment Zone D

Ten monitoring wells located in Treatment Zone D were sampled for performance monitoring: MW16, MW17, MW26(17.5), MW26(28.8), MW26(58.8), ZVI-2(17.5), ZVI-2(32.5), OW5(16), OW5(35), and OW5(54). The contaminant mass at MW26(28.8) and ZVI-2(17.5) has been reduced 100%, therefore these wells are not included in the subsequent discussions on indicator parameters.

Samples from five of the performance monitoring wells had TOC levels greater than 20 mg/L: MW16, MW26(17.5), MW26(58.8), OW5(35), and OW5(54). The pH ranged from 6.61 to 7.65, which is in the ideal range for biological-based treatment. ORP indicates reducing conditions in all wells except MW17.

Total CVOC mass has decreased from baseline in performance monitoring wells MW16, MW26(17.5), ZVI2(17.5), ZVI2(32.5), OW5(16), and OW5(35). Total CVOC mass increased in MW17, MW26(58.8), and OW5(54), but with the exception of MW17 this is attributed to an increase in degradation products.

TCE was below reporting limits in all the wells except MW17. Cis-1,2-DCE concentrations were comparable or lower in all the wells compared to the previous sampling event (February/March 2016). Vinyl chloride concentrations were similar or lower in comparison to the previous sampling event, except at MW26(58.8).



Methane concentrations were high in all wells except MW17. Ethene was substantially present in all the wells except MW17, MW26(28.8), and MW26(58.8).

A summary of the pertinent results for the performance monitoring wells in Treatment Zone D is provided below:

Treatment Zone D Performance Monitoring Well	Molar Mass % Reduction Relative to Baseline				Amendment Indicator	Gases	Geochemical Environment	
	Total CVOC	TCE	cis-1,2-DCE	Vinyl Chloride	TOC > 20 mg/L	Ethene > 10 µg/L	ORP (+) or (-)	DO < 0.5mg/L
MW16	1%	100%	22%	-35%	YES	YES	-	NO
MW17	-6%	-16%	20%	--	NO	NO	+	NO
MW26(17.5)	98%	--	99%	98%	YES	YES	-	NO
MW26(28.8)	100%	100%	100%	100%	NO	NO	-	NO
MW26(58.8)	-2043%	--	-317%	-2500%	YES	NO	-	NO
ZVI2(17.5)	100%	--	100%	100%	NO	YES	-	YES
ZVI2(32.5)	89%	--	95%	81%	NO	YES	-	NO
OW5(16)	74%	100%	71%	80%	NO	YES	-	NO
OW5(35)	80%	100%	97%	-295%	YES	YES	-	NO
OW5(54)	-80%	100%	-355%	-16%	YES	YES	-	NO
Total (10 wells)	64%							

Prepared By: LF  
 Checked By: JD

### Conclusions

- The total molar mass for the primary CVOCs has thus far been reduced by 64% in Treatment Zone D based upon data from the 10 performance monitoring wells relative to baseline,
- Contaminant mass has been reduced in all but three of the wells [MW17, MW26(58.8), OW5(54)]. Conditions appear favorable for continued reductive dechlorination at MW26(58.8) and OW5(54), but additional amendment may be beneficial at MW17.

## 6.7 Quality Control Results

The VOC data was validated in general accordance with the Quality Assurance Project Plan (QAPP). The 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 laboratory data conformed to the guidelines in the QAPP with a few exceptions. Matrix spike and/or matrix spike duplicate recovery for a few samples were outside the control limits for bromomethane and vinyl chloride, therefore the associated concentrations were J (estimated) or UJ (undetected and reporting limit is estimated) flagged. The VOC samples for MW15 and MW67 had a pH measurement greater than 2; therefore, results analyzed outside of a 7 day holding time were qualified as J (estimated) or UJ (undetected and reporting limit is estimated). Non-detect results for 1,1,1-trichloroethane, acetone, 2-butanone, bromomethane, chloroethane, chloromethane, carbon disulfide, and xylenes were qualified as UJ (undetected and reporting limit is estimated) in a subset of the samples due to continuing calibration percent difference results outside the method goal. Low concentrations of acetone and chloroform in a subset of samples were qualified as non-detect (U) due to the presence of these chemicals in the equipment blank. 4-methyl-2-pentanone detected in the sample from MW71 was qualified as estimated (J) due to high laboratory control sample limits. No data was rejected during validation.

In accordance with the QAPP, one equipment blank was collected per day from each sampling pump, one field replicate was collected per 20 groundwater samples collected, one matrix spike and matrix spike duplicate were run at a rate of one per 20 samples collected, one field blank for the groundwater monitoring event was collected and submitted, and one trip blank for each cooler containing VOC samples was submitted and analyzed for VOCs. Toluene was detected in two of the equipment blank samples, both at a concentration of 1.1 micrograms per liter ( $\mu\text{g/L}$ ) (ATR-EB001-G062416 and ATR-EB001-G062316). Acetone and chloroform were detected in all the equipment blanks collected on 21 June and 22 June 2016. Bromodichloromethane was also detected in both the equipment blank samples collected on 22 June 2016 and chloromethane was detected in one of the equipment blank samples collected on 22 June 2016. The distilled water used to prepare the equipment blanks was purchased from retail establishments. The presence of trihalomethanes (disinfection by products) in the equipment blanks collected on the 21 June

and 22 June 2016 may indicate that the distilled water used to prepared the equipment blanks originated from a chlorinated water source that had ineffective advance filtration prior to undergoing the distillation process.

## 7.0 Conclusions

Based on the ISCR and ERD injections and subsequent performance monitoring results, Amec Foster Wheeler offers the following observations:

- The CVOC concentrations in groundwater at the Site are decreasing since the ISCR and ERD injections were initiated in 2015.
- Overall total site-wide treatment area mass has been reduced by 44% from baseline concentrations.
- Select locations may benefit from another round of injections.

The CVOC plume appears to be stable. Pertinent observed elements demonstrating plume stability include the following:

- The overall total site-wide treatment area mass has been reduced by 44% from baseline concentrations. This is slightly less than as reported in the previous performance monitoring report, indicating some amount of rebound.
- The source area mass (combined behind/outside building and beneath/inside building) has been reduced 42% from baseline. This is slightly less than reported in the previous performance monitoring report, indicating some amount of rebound.
- The mass at the leading edge of the treatment area (MW17, MW26, and ZVI-2) has been reduced by 92% from baseline.
- The data from the Annual Groundwater Monitoring Report indicates no VOC concentrations in the sentinel monitoring wells exceeded any MCLs. In addition, the leading edge of the plume has not advanced beyond MW-34, located outside the treatment area, since sampling began in 2009.

## 8.0 Upcoming Activities

The fourth performance groundwater monitoring event was conducted in September 2016. Based on the success of the remedial injections completed in 2015, additional polishing injections in the treatment zones were implemented in the fourth quarter of 2016. The next set of injections were designed to further enhance the established reductive dechlorination of the CVOCs. Details of the injections will be provided in subsequent reports.



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Report of Performance Monitoring

## TABLES

**Table 1**  
**Biostimulation Post Injection Performance Monitoring Parameters and Wells**  
**TORX Facility, 4366 North Old US Highway 31, Rochester, Indiana**

Frequency							Third Month and Sixth Month after Injections							Ninth and Twelfth Month after Injections						
Treatment Areas	Source Zone Behind Plant	Source Zone Inside Plant	Zone A	Zone B	Zone C	Zone D	Treatment Areas	Source Zone Behind Plant	Source Zone Inside Plant	Zone A	Zone B	Zone C	Zone D							
<b>Objectives</b>	Evaluate changes in aquifer chemistry and VOC concentrations in groundwater						<b>Objectives</b>	Evaluate Changes in VOC concentrations, Organic substrate, and ERD end products in groundwater												
<b>Fixed Laboratory Analyses</b>							<b>Fixed Laboratory Analyses</b>													
VOCs <sup>(1)</sup> ; TOC <sup>(2)</sup> ; Dissolved Gases <sup>(3)</sup> Metals <sup>(4)</sup> ; Alkalinity <sup>(5)</sup> Anions <sup>(6)</sup> DHC <sup>(7)</sup> VFAs <sup>(8)</sup>	4 Wells	7 Wells	9 Wells	7 Wells	6 Wells	10 Wells	VOCs; TOC; Dissolved Gases	4 Wells	7 Wells	9 Wells	7 Wells	6 Wells	10 Wells							
	MW-81(27); MW-59(29); PM-2; PM-3	MW-67; MW-68; MW-71; MW-72; MW-76; MW-77; MW-78	MW-6C; MW-12; MW-13; MW-62; MW-20(35); MW-20(51); MW-82; OW-1(28); OW-1(39)	MW-14; MW-24(24.9); MW-24(55.4); OW-2(33); OW-2(53); MW-82; OW-3(35); OW-3(55)	MW-15; MW-25(16.4); MW-25(32.6); MW-25(45.2); OW-4(35); OW-4(54)	MW-16; MW-17; MW-26(17.5); MW-26(28.8); MW-26(58.2); ZVI-2(17.5); ZVI-2(32.5); OW-5(16); OW-5(35); OW-5(44)		MW-81(27); MW-59(29); PM-2; PM-3	MW-67; MW-68; MW-71; MW-72; MW-76; MW-77; MW-78	MW-6C; MW-12; MW-13; MW-62; MW-20(35); MW-20(51); MW-82; OW-1(28); OW-1(39)	MW-14; MW-24(24.9); MW-24(55.4); OW-2(s); OW-2(d); OW-3(s); OW-3(d)	MW-15; MW-25(16.4); MW-25(32.6); MW-25(45.2); OW-4(35); OW-4(54)	MW-16; MW-17; MW-26(17.5); MW-26(28.8); MW-26(58.2); ZVI-2(17.5); ZVI-2(32.5); OW-5(16); OW-5(35); OW-5(44)							
	<b>Field Readings</b>							<b>Field Readings</b>												
	Water Level <sup>(9)</sup>	x	x	x	x	x		x	Water Level	x	x	x	x	x	x					
	ORP <sup>(10)</sup>	x	x	x	x	x		x	ORP	x	x	x	x	x	x					
pH	x	x	x	x	x	x	pH	x	x	x	x	x	x							
Cond.	x	x	x	x	x	x	Cond.	x	x	x	x	x	x							
Temperature	x	x	x	x	x	x	Temperature	x	x	x	x	x	x							
DO <sup>(11)</sup>	x	x	x	x	x	x	DO	x	x	x	x	x	x							
Turbidity	x	x	x	x	x	x	Turbidity	x	x	x	x	x	x							

<sup>(1)</sup> - VOCs: volatile organic compounds (Method 8260)

<sup>(2)</sup> - TOC: total organic carbon (Method 9060)

<sup>(3)</sup> - Dissolved gases include methane, ethane, and ethene (Method AM20GAX)

<sup>(4)</sup> - Iron and Manganese (Method 6020A)

<sup>(5)</sup> - Alkalinity (Method A2320B)

<sup>(6)</sup> - Anions include sulfate, nitrate, and chloride (Method SW9056)

<sup>(7)</sup> - DHCs: dehalococoides [Quantitative Polymerase Chain Reaction (qPCR)]

<sup>(8)</sup> - VFAs: volatile fatty acids (Method AM23G)

<sup>(9)</sup> - Depth to water measurements using a water level indicator

<sup>(10)</sup> - ORP: Oxidation Reduction Potential

<sup>(11)</sup> - DO: Dissolved Oxygen

**Table 2**  
**Summary of Measured Field Parameters, Geochemistry, and Metals**  
**Performed on the Groundwater Samples Collected from Performance Monitoring Wells**  
**TORX Facility, 4366 North Old US Highway 31, Rochester, Indiana**

Treatment Area	Sample ID	Sample Date	Field Measured Parameters						Geochemistry						Metals	
			pH	Conductivity	Temperature	Turbidity	DO	ORP	Alkalinity, Bicarbonate (as CaCO3)	Alkalinity, Total (as CaCO3)	TOC	Chloride	Nitrogen, Nitrate	Sulfate	Iron	Manganese
			S.U.	mS/cm	°C	NTU	mg/L	mV	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Source - Outside	ATR-MW81(27)-G110512	11/5/2012	6.82	0.486	15.32	5.3	0.09	-65.6	160	160	9.7	51	0.02 U	2.9	5.1	0.33
	ATR-MW81(27)	12/27/2012	6.57	0.495	14.35	0.0	0.34	152.4	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-MW81(27)-G010713	1/7/2013	6.65	0.488	14.51	8.3	0.22	-55.8	230	230	190	55	0.02 U	5.7	5.2	0.53
	ATR-MW81(27)-G020513	2/5/2013	7.08	0.448	14.13	8.7	0.34	-153.2	360	360	26	56	0.02 U	5.7	3.2	0.32
	ATR-MW81(27)-G030613	3/6/2013	6.72	0.416	13.26	1.2	0.14	-75.1	170	170	12	60	0.02 U	5.1	3.2	0.36
	ATR-MW81(27)-G050313	5/3/2013	6.78	0.419	13.64	4.8	NM	-81.1	180	180	11	61	0.02 U	3.6	3.4	0.2
	ATR-MW81(27)-G082715	8/27/2015	5.68	0.804	15.26	4.9	0.24	-25.1	210	210	370	65	0.027	1.1	14	0.78
	ATR-MW81(27)-G022316	2/23/2016	5.99	1.302	13.35	5.1	1.76	-37.3	190	190	280	110	0.2	1 U	63	1.1
	ATR-MW81(27)-G061616	6/16/2016	5.59	0.961	14.86	9.0	0.57	-55.1	NA	NA	220	NA	NA	NA	NA	NA
	ATR-MW59(29)-G092712	9/27/2012	6.86	0.417	14.92	0.9	0.35	-81.6	140	140	10	64	0.02 U	3.8	2.8	0.21
	ATR-MW59(29)-G122812	12/28/2012	5.56	1.178	14.15	5.0	0.25	-59.0	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-MW59(29)-G010713	1/7/2013	5.28	1.864	14.31	6.1	0.41	55.7	570	570	1,300	78	0.057	2.7	27	1.4
	ATR-MW59(29)-G020413	2/4/2013	6.81	1.012	13.84	4.5	0.55	-132.3	360	360	430	120	0.02 U	1 U	13	0.66
	ATR-MW59(29)-G030613	3/6/2013	6.12	0.802	13.64	14.4	0.13	-75.8	270	270	200	110	0.02 U	1 U	8.5	0.52
	ATR-MW59(29)-G050313	5/3/2013	6.61	0.476	14.09	9.0	0.17	-105.4	180	180	17	77	0.02 U	2.3	1.6	0.54
	ATR-MW59(29)-G082715	8/27/2015	6.61	0.477	14.77	3.1	0.32	-73.6	230	230	89	48	0.022	1.0 U	3.6	0.32
	ATR-MW59(29)-G022316	2/23/2016	6.37	1.744	13.42	13.7	2.06	-44.7	360	360	6.2	160	0.13	1.0 U	23	1.1
	ATR-MW59(29)-G061716	6/17/2016	5.83	1.247	17.39	29.6	0.59	-69.0	NA	NA	150	NA	NA	NA	NA	NA
	ATR-MW59(29)-G061716R	6/17/2016	NA	NA	NA	NA	NM	NA	NA	NA	140	NA	NA	NA	NA	NA
	ATR-PM2-G110512	11/5/2012	6.98	0.617	15.69	5.4	0.61	-49.8	230	230	9.7	50	0.02 U	1.7	5.4	0.58
	ATR-PM2	12/27/2012	6.56	0.519	13.20	50.8	0.40	34.5	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-PM2-G010713	1/7/2013	6.64	0.571	13.70	4.3	0.41	0.8	400	400	9.8	31	0.02 U	1.4	5.1	0.64
	ATR-PM2-G020413	2/4/2013	6.86	0.518	14.02	7.0	0.27	-133.9	250	260	9.9	33	0.02 U	1.3	5.0	0.71
	ATR-PM2-G030613	3/6/2013	6.78	0.530	13.15	4.8	0.12	-118.9	300	300	10	28	0.02 U	2.7	6.0	0.94
	ATR-PM2-G050313	5/3/2013	6.80	0.512	12.87	8.6	0.11	-125.5	300	300	16	26	0.02 U	7.3	5.5	0.84
	ATR-PM2-G082715	8/27/2015	6.48	0.706	15.01	2.9	0.51	-86.6	330	330	41	26	0.11	1.0 U	5.1	0.95
ATR-PM2-G022316	2/23/2016	6.66	0.848	10.02	59.1	0.39	-56.4	390	390	73	56	0.082	1.0 U	11	1.5	
ATR-PM2-G061616	6/16/2016	6.01	0.843	16.11	30.9	0.56	-54.2	NA	NA	44	NA	NA	NA	NA	NA	
ATR-PM3-G110512	11/5/2012	6.51	0.645	13.98	8.6	0.06	-31.8	260	260	14	47	0.056	3.9	3.2	0.63	
ATR-PM3	12/28/2012	6.55	0.461	12.12	1.8	0.29	-37.6	NA	NA	NA	NA	NA	NA	NA	NA	
ATR-PM3-G010713	1/7/2013	6.47	0.573	12.07	4.6	0.41	35.7	240	240	15	50	0.02 U	4.7	1.9	0.61	
ATR-PM3-G020413	2/4/2013	6.59	0.494	13.70	9.8	0.22	-92.9	230	230	14	48	0.02 U	3.9	1.6	0.56	
ATR-PM3-G030513	3/5/2013	6.45	0.468	12.99	5.4	0.11	-83.7	NA	NA	14	NA	NA	NA	NA	NA	
ATR-PM3-G050213	5/2/2013	6.61	0.499	14.60	6.0	0.21	-62.1	240	240	15	49	0.02 U	3.5	3.7	0.53	
ATR-PM3-G082715	8/27/2015	5.82	2.011	17.48	517.6	0.81	-79.0	310	310	38,000	53	2.7	13	6.8	0.67	
ATR-PM3-G022316	2/23/2016	5.53	1.149	12.29	1,828.5	0.21	42.6	180	180	2,400	64	1.3	1.0 U	32	1.5	
ATR-PM3-G061716	6/17/2016	4.56	0.878	15.22	571.1	0.56	-49.6	NA	NA	760	NA	NA	NA	NA	NA	
Source - Inside	ATR-MW67(30)-G092612	9/26/2012	7.04	0.784	16.95	1,341.0	3.04	164.7	370	380	8.2	16	2.2	20	170	2.7
	ATR-MW67(30)-G050613	5/6/2013	7.03	0.633	NM	1,241.6	4.01	78.5	NA	NA	7.8	NA	NA	NA	NA	NA
	ATR-MW67-G031516	3/15/2016	7.00	1.002	17.02	1040.4	-58.09*	14.6	370	370	8.2	67	2.6	24	4.6	0.97
	ATR-MW67-G062016	6/20/2016	6.36	1.439	17.77	2192	3.69	-81.3	NA	NA	50	NA	NA	NA	NA	NA
	ATR-MW68-G031516	3/15/2016	6.12	1.308	16.98	47.0	-82.06*	-39.0	490	490	1,100	34	0.27	12	9.1	1.1
ATR-MW68-G061716	6/17/2016	5.08	0.903	17.68	565.4	4.10	-36.4	NA	NA	350	NA	NA	NA	NA	NA	

**Table 2 (continued)**  
**Summary of Measured Field Parameters, Geochemistry, and Metals**  
**Performed on the Groundwater Samples Collected from the Pilot Test Performance Monitoring Wells**  
**TORX Facility, 4366 North Old US Highway 31, Rochester, Indiana**

Treatment Area	Sample ID	Sample Date	Field Measured Parameters						Geochemistry						Metals	
			pH	Conductivity	Temperature	Turbidity	DO	ORP	Alkalinity, Bicarbonate (as CaCO3)	Alkalinity, Total (as CaCO3)	TOC	Chloride	Nitrogen, Nitrate	Sulfate	Iron	Manganese
			S.U.	mS/cm	°C	NTU	mg/L	mV	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Source - Inside	ATR-MW71-G031516	3/15/2016	6.34	1.091	16.74	187.7	-85.10*	-59.5	350	350	95	93	0.055	5.4	16	1.4
	ATR-MW71-G062016	6/20/2016	5.87	3.470	19.39	294.8	3.95	-30.0	NA	NA	590	NA	NA	NA	NA	NA
	ATR-MW72(32)-G030613	3/6/2013	6.98	0.600	16.20	753.8	2.83	-56.1	280	280	NA	58	0.036	6.5	NA	NA
	ATR-MW72(32)-G050613	5/6/2013	6.99	0.570	16.95	721.0	3.04	-93.9	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-MW72-G031516	3/15/2016	5.96	1.629	16.86	93.6	-86.04*	-29.0	490	490	410	120	0.079	1.6	23	2.0
	ATR-MW72-G062016	6/20/2016	5.61	2.838	17.54	273.0	3.06	-62.3	NA	NA	630	NA	NA	NA	NA	NA
	ATR-MW76-G031516	3/15/2016	6.31	0.960	17.20	525.6	NM	-92.0	380	380	110	52	0.19	6.1	8.0	0.44
	ATR-MW76(30)-G062016	6/20/2016	5.80	1.912	17.48	11.7	0.54	-55.2	NA	NA	140	NA	NA	NA	NA	NA
	ATR-MW77-G031516	3/15/2016	7.42	0.339	15.66	74.3	NM	-83.8	150	150	2.5	9.9	0.02 U	2.1	0.48	0.16
	ATR-MW77-G062016	6/20/2016	7.01	0.598	16.06	3.3	0.57	-79.0	NA	NA	6.0	NA	NA	NA	NA	NA
ATR-MW78-G031516	3/15/2016	6.60	0.840	16.83	165.5	345.58*	-73.5	350	350	150	10	0.074	1.2	1.3	1.0	
ATR-MW78-G062016	6/20/2016	5.89	1.633	23.21	318.0	0.66	-23.0	NA	NA	340	NA	NA	NA	NA	NA	
Zone A	ATR-MW6C-G092612	9/26/2012	7.16	0.439	15.26	0.0	0.31	-26.0	250	250	4.2	15	0.02 U	9.1	0.51	0.21
	ATR-MW6C-G030513	3/5/2013	7.11	0.446	15.03	0.0	0.22	-26.2	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-MW6C-G050713	5/7/2013	7.24	0.425	15.54	0.0	0.22	-62.0	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-MW6C-G050713R	5/7/2013	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-MW6C-G082615	8/26/2015	7.25	14.17	16.30	4.8	0.27	-20.2	230	230	8.2	21	0.22	7.6	0.32	0.22
	ATR-MW6C-G022316	2/23/2016	7.51	0.651	14.34	15.0	0.47	-54.0	260	260	3.2	24	0.020 U	8.0	1.3	0.24
	ATR-MW6C-G061616	6/16/2016	6.74	0.497	18.14	10.2	0.57	-107.2	NA	NA	7.3	NA	NA	NA	NA	NA
	ATR-MW12-G050613	5/6/2013	7.37	0.458	14.60	433.9	2.91	-77.1	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-MW12-G082615	8/26/2015	6.91	17.28	15.45	188.6	1.86	-44.2	250	250	69	23	0.022	1.7	5.4	0.44
	ATR-MW12-G022416	2/24/2016	6.97	0.708	13.07	22.0	3.00	182.1	260	260	59	35	0.051	1.0 U	7.8	0.69
	ATR-MW12-G061616	6/16/2016	6.63	0.623	15.98	9.8	2.00	-101.2	NA	NA	64	NA	NA	NA	NA	NA
	ATR-MW13-G092712	9/27/2012	7.26	0.382	14.80	337.4	1.70	-13.4	200	200	5.5	24	0.78	8.4	75	1.3
	ATR-MW13	2/5/2013	7.49	0.396	12.36	NM	2.07	-16.1	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-MW13-G050613	5/6/2013	7.25	0.397	13.91	344.1	3.24	-13.2	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-MW13-G082615	8/26/2015	7.06	21.18	14.20	570.1	4.92	-53.7	310	310	120	36	0.02 U	18	15	0.73
	ATR-MW13-G030216	3/2/2016	7.38	0.749	10.73	91.3	3.86	153.1	290	290	68	20	0.12	5.9	13	0.57
	ATR-MW13-G061616	6/16/2016	6.77	0.639	17.11	35.8	1.51	-114.1	NA	NA	11	NA	NA	NA	NA	NA
	ATR-MW62(36)-G050213	5/2/2013	7.23	0.449	15.64	4.7	0.20	-81.4	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-MW62-G082715	8/27/2015	6.62	0.700	16.21	4.8	0.30	-87.4	300	300	39	40	0.1	1.1	3.9	2.9
	ATR-MW62-G022316	2/23/2016	7.14	0.872	14.14	29.13	0.39	-86.5	260	260	100	35	0.12	1.0 U	17	2.5
	ATR-MW62-G061616	6/16/2016	6.44	0.624	19.61	52.6	0.56	-120.6	NA	NA	47	NA	NA	NA	NA	NA
	ATR-MW20(35)-G050713	5/7/2013	7.27	0.451	15.85	0.0	0.15	-107.2	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-MW20(35)-G082715	8/27/2015	7.00	0.639	16.43	2.1	0.33	-95.4	320	320	84	18	0.02 U	3.1	2.6	0.37
	ATR-MW20(35)-G082715R	8/27/2015	NA	NA	NA	NA	NA	NA	320	320	88	18	0.02 U	3.3	2.6	0.37
	ATR-MW20(35)-G022316	2/23/2016	7.18	0.853	14.82	5.3	0.18	-76.8	320	320	110	21	0.081	1.0 U	9.6	0.86
	ATR-MW20(35)-G022316R	2/23/2016	NA	NA	NA	NA	NA	NA	320	320	110	22	0.079	1.0 U	10	0.85
ATR-MW20(35)-G061616	6/16/2016	6.93	0.717	19.64	48.5	0.64	-135.6	NA	NA	67	NA	NA	NA	NA	NA	
ATR-MW20(51)-G050713	5/7/2013	7.51	0.340	15.22	0.0	0.26	-133.8	NA	NA	NA	NA	NA	NA	NA	NA	
ATR-MW20(51)-G082715	8/27/2015	6.01	1.861	17.32	3.2	0.27	-62.0	740	740	740	6.5	0.08	1.0 U	46	3.5	
ATR-MW20(51)-G022316	2/23/2016	6.85	1.151	12.89	33.9	0.70	-79.0	360	360	220	14	0.18	1.0 U	98	1.6	
ATR-MW20(51)-G061616	6/16/2016	6.44	1.014	21.10	10.5	0.52	-125.3	NA	NA	83	NA	NA	NA	NA	NA	



**Table 2 (continued)**  
**Summary of Measured Field Parameters, Geochemistry, and Metals**  
**Performed on the Groundwater Samples Collected from the Pilot Test Performance Monitoring Wells**  
**TORX Facility, 4366 North Old US Highway 31, Rochester, Indiana**

Treatment Area	Sample ID	Sample Date	Field Measured Parameters						Geochemistry						Metals		
			pH	Conductivity	Temperature	Turbidity	DO	ORP	Alkalinity, Bicarbonate (as CaCO3)	Alkalinity, Total (as CaCO3)	TOC	Chloride	Nitrogen, Nitrate	Sulfate	Iron	Manganese	
			S.U.	mS/cm	°C	NTU	mg/L	mV	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Zone A	ATR-MW82(58)-G030513	3/5/2013	7.34	0.515	13.84	0.0	0.09	-83.3	NA	NA	NA	NA	NA	NA	NA	NA	
	ATR-MW82(58)-G050713	5/7/2013	7.40	0.411	14.93	0.0	0.21	-79.0	NA	NA	NA	NA	NA	NA	NA	NA	
	ATR-MW82-G082615	8/26/2015	6.19	62.61	15.24	4.2	0.15	-10.2	990	990	1600	5.4	0.021	3.0	5.8	7.4	
	ATR-MW82-G022316	2/23/2016	7.46	1.381	12.70	28.3	0.28	-113.5	370	370	310	7.7	0.10	1.0 U	23	1.7	
	ATR-MW82-G061616	6/16/2016	6.38	0.991	15.98	19.5	0.57	-124.5	NA	NA	280	NA	NA	NA	NA	NA	
	ATR-OW1(28)-G121714	12/17/2014	7.27	0.718	12.04	90.6	0.42	-63.4	NA	NA	NA	NA	NA	NA	NA	NA	
	ATR-OW1(S)-G082715	8/27/2015	7.48	1.440	13.60	5.4	0.04	-154	220	220	4.9	65	0.02 U	7.4	3.7	0.86	
	ATR-OW1(28)-G022316	2/23/2016	7.03	0.654	11.68	34.9	1.03	-133.2	270	270	3.3	38	0.036	7.9	5.3	0.98	
	ATR-OW1(28)-G061616	6/16/2016	7.05	0.789	15.18	11.0	0.58	-159.3	NA	NA	20	NA	NA	NA	NA	NA	
	ATR-OW1(39)-G121714	12/17/2014	7.67	0.498	13.68	8.3	0.42	-139.0	NA	NA	NA	NA	NA	NA	NA	NA	
	ATR-OW1(D)-G082715	8/27/2015	6.67	1.338	15.21	3.8	0.22	-84.0	600	600	410	12	0.02 U	1.0 U	13	0.86	
	ATR-OW1(39)-G022916	2/29/2016	6.68	0.843	13.24	57.4	0.36	-117.8	370	370	25	25	0.096	1.0 U	16	0.51	
ATR-OW1(39)-G061616	6/16/2016	6.88	0.639	15.97	9.3	0.55	-141.1	NA	NA	7.7	NA	NA	NA	NA	NA		
Zone B	ATR-MW14-G092712	9/27/2012	7.07	0.407	13.87	0.0	0.43	30.3	250	260	2.4	7.1	0.02 U	14	0.08 U	0.44	
	ATR-MW14	2/5/2013	7.50	0.390	12.86	67.0	0.92	-17.5	NA	NA	NA	NA	NA	NA	NA	NA	
	ATR-MW14-G030513	3/5/2013	7.22	0.393	12.95	0.0	0.17	13.0	NA	NA	NA	NA	NA	NA	NA	NA	
	ATR-MW14-G050213	5/2/2013	7.21	0.419	13.74	1.0	0.22	62.9	NA	NA	NA	NA	NA	NA	NA	NA	
	ATR-MW14-G100815	10/8/2015	7.14	0.635	13.20	0.5	0.14	-108.3	270	270	35	5.5	0.02 U	15	0.91	0.97	
	ATR-MW14-G022916	2/29/2016	7.37	0.933	13.10	25.6	0.20	-154.4	390	390	160	9.9	0.056	5.7	7.5	0.57	
	ATR-MW14-G061516	6/15/2016	6.82	1.173	16.72	3.4	0.52	-152.5	NA	NA	240	NA	NA	NA	NA	NA	
	MTR-MW24(24.9)-6082213	7/22/2013	7.29	0.628	13.40	NM	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-MW24 (24.9)-G100815	10/8/2015	6.95	0.693	14.00	4.2	0.92	7.9	290	290	1.4	39	0.19	12	0.13	0.26	
	ATR-MW24(24.9)-G022916	2/29/2016	7.31	0.729	12.29	9.2	1.25	50.9	300	300	1.6	27	0.34	39	0.08 U	0.12	
	ATR-MW24(24.8)-G061516	6/15/2016	6.72	0.680	13.77	4.8	0.54	-110.0	NA	NA	4.8	NA	NA	NA	NA	NA	
	ATR-MW24(55.4)-G030513	3/5/2013	7.00	0.977	12.27	0.0	0.22	-46.1	NA	NA	NA	NA	NA	NA	NA	NA	
	ATR-MW24(55.4)-G050213	5/2/2013	7.04	0.703	13.00	0.7	0.20	-37.0	NA	NA	NA	NA	NA	NA	NA	NA	
	ATR-MW24(55.4)-G050213R	5/2/2013	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	ATR-MW24 (55.9)-G100815	10/8/2015	6.81	0.876	13.21	0.0	0.36	-28.6	390	390	2	26	0.02 U	24	0.44	0.52	
	ATR-MW24(55.9)-G022916	2/29/2016	7.29	0.802	12.28	6.3	0.30	-28.4	400	400	1.8	18	0.020 U	22	0.41	0.57	
	ATR-MW24(55.4)-G061516	6/15/2016	6.65	0.803	14.81	1.1	0.57	-79.5	NA	NA	5.7	NA	NA	NA	NA	NA	
	ATR-OW2(33)-G121814	12/18/2014	7.37	0.490	13.37	0.2	0.46	-91.0	NA	NA	NA	NA	NA	NA	NA	NA	
	ATR-OW2 (33)-G100815	10/8/2015	7.10	0.551	17.22	67.1	2.47	-101.8	270	270	42	16	0.02 U	3.5	3.6	0.48	
	ATR-OW2(33)-G022916	2/29/2016	7.27	1.039	12.87	150.0	5.52	-0.8	440	440	160	21	0.14	8.6	31	1.5	
	ATR-OW2(33)-G061516	6/15/2016	7.37	0.632	23.12	176.6	0.68	-143.6	NA	NA	6.4	NA	NA	NA	NA	NA	
	ATR-OW2(53)-G121814	12/18/2014	7.60	0.510	13.36	2.7	0.48	-123.0	NA	NA	NA	NA	NA	NA	NA	NA	
	ATR-OW2 (53)-G100815	10/8/2015	6.75	1.517	15.33	1.0	0.33	-112.4	650	650	440	2.6	0.02 U	1.0 U	8.6	1.6	
	ATR-OW2(53)-G022916	2/29/2016	7.45	1.500	12.50	0.5	4.05	-14.5	540	540	370	7.1	0.17	7.2	37	0.89	
	ATR-OW2(53)-G061616	6/16/2016	6.79	1.143	17.24	28.4	0.54	-163.5	NA	NA	320	NA	NA	NA	NA	NA	
	ATR-OW3(35)-G121614	12/16/2014	7.50	0.652	13.53	7.5	4.24	-62.8	NA	NA	NA	NA	NA	NA	NA	NA	
ATR-OW3 (35)-G100715	10/7/2015	7.12	0.953	14.73	0.0	0.25	-136.7	390	390	130	16	0.02 U	1.0 U	23	1.6		
ATR-OW3(35)-G022916	2/29/2016	7.95	0.733	12.05	13.9	4.22	-36.5	310	310	16	22	0.098	1.0 U	12	0.72		
ATR-OW3(35)-G061516	6/15/2016	7.35	0.628	17.09	45.3	0.81	-179.9	NA	NA	5.3	NA	NA	NA	NA	NA		

**Table 2 (continued)**  
**Summary of Measured Field Parameters, Geochemistry, and Metals**  
**Performed on the Groundwater Samples Collected from the Pilot Test Performance Monitoring Wells**  
**TORX Facility, 4366 North Old US Highway 31, Rochester, Indiana**

Treatment Area	Sample ID	Sample Date	Field Measured Parameters						Geochemistry						Metals	
			pH	Conductivity	Temperature	Turbidity	DO	ORP	Alkalinity, Bicarbonate (as CaCO3)	Alkalinity, Total (as CaCO3)	TOC	Chloride	Nitrogen, Nitrate	Sulfate	Iron	Manganese
			S.U.	mS/cm	°C	NTU	mg/L	mV	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Zone B	ATR-OW3(55)-G121614	12/16/2014	7.04	0.756	13.04	1.0	0.40	-26.0	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-OW3 (55)-G100715	10/7/2015	6.55	1.594	15.15	3.8	0.20	-155.2	660	660	1600	24	0.02 U	12	11	2
	ATR-OW3 (55)-G100715 R	10/7/2015	NA	NA	NA	NA	NA	NA	690	690	1600	28	0.02 U	12	11	2.2
	ATR-OW3(55)-G022916	2/29/2016	6.97	2.009	12.16	2.9	4.68	12.5	910	910	560	10	0.15	1.0 U	29	3.5
	ATR-OW3(55)-G022916 R	2/29/2016	NA	NA	NA	NA	NA	NA	900	900	700	10	0.15	1.0 U	29	3.3
	ATR-OW3(55)-G061516	6/15/2016	6.53	1.685	16.80	21.0	0.60	-113.0	NA	NA	410	NA	NA	NA	NA	NA
Zone C	ATR-MW15-G041312	4/13/2012	7.18	0.388	13.46	2.3	0.23	-59.1	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-MW15-G041312R	4/13/2012	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-MW15-G030613	3/6/2013	7.26	0.483	12.85	0.0	0.24	-35.3	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-MW15-G050213	5/2/2013	7.35	0.366	13.43	1.1	0.19	-44.6	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-MW15-G050213R	5/2/2013	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-MW15-6082213	7/22/2013	7.36	0.466	14.10	NM	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-MW15-G101315	10/13/2015	6.65	1.168	12.99	9.1	0.16	-92.1	440 x	440 x	540	16	0.02 U	5.0	1.5	1.1
	ATR-MW15-G030116	3/1/2016	6.49	3.095	11.64	8.3	3.42	46.5	1100	1100	1000	11	0.086	1.0 U	64	3.5
	ATR-MW15-G061516	6/15/2016	6.27	2.839	16.58	1.3	0.63	-91.4	NA	NA	1000	NA	NA	NA	NA	NA
	ATR-MW25(16.4)-G092712	9/27/2012	7.21	0.410	15.24	0.6	0.30	-71.6	230	240	3.2	20	0.02 U	11	0.97	0.34
	ATR-MW25(16.4)	2/5/2013	7.51	0.412	11.36	0.0	0.78	-63.7	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-MW25(16.4)-G030613	3/6/2013	7.27	0.398	10.79	0.0	0.17	-12.3	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-MW25(16.4)-G050213	5/2/2013	7.33	0.383	11.64	0.0	0.18	-58.7	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-MW25(16.4)-G101315	10/13/2015	7.28	0.691	14.04	0.0	2.56	-65.0	250 x	250 x	3.4	28	0.02 U	19	0.4	0.33
	ATR-MW25(16.4)-G030116	3/1/2016	6.82	0.798	10.45	20.8	5.47	-93.9	370	370	33	35	0.067	3.5	4.9	0.51
	ATR-MW25(16.4)-G061516	6/15/2016	6.84	0.580	14.17	1.8	0.56	-114.1	NA	NA	56	NA	NA	NA	NA	NA
	ATR-MW25(32.6)-G041612	4/16/2012	7.36	0.349	13.46	7.9	0.20	-83.2	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-MW25(32.6)-G030613	3/6/2013	7.40	0.466	12.25	0.0	0.25	-45.2	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-MW25(32.6)-G050213	5/2/2013	7.44	0.335	12.88	1.0	0.19	-79.7	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-MW25(32.6)-G061914	6/19/2014	6.92	0.451	13.92	4.4	0.32	-77.7	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-MW25(32.6)-G101315	10/13/2015	7.43	0.561	13.20	0.0	0.16	-88.9	220 x	220 x	5.4	14	0.02 U	5.5	0.4	0.29
	ATR-MW25(32.6)-G030116	3/1/2016	6.55	2.101	12.01	14.5	0.55	-57.4	850	850	630	13	0.12	1.0 U	24	2.8
	ATR-MW25(32.6)-G061516	6/15/2016	6.49	1.340	14.69	6.3	0.51	-80.5	NA	NA	320	NA	NA	NA	NA	NA
	MTR-MW25(45.2)-6082213	7/22/2013	7.04	0.463	14.10	NM	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-MW25(45.2)-G101315	10/13/2015	7.38	0.562	13.09	0.0	0.26	-37.5	230 x	230 x	2.1	8.9	0.02 U	13	0.16	0.27
	ATR-MW25(45.2)-G030116	3/1/2016	6.68	1.519	10.56	22.5	0.28	-68.5	620	620	430	7.6	0.12	1.0 U	20	1.5
	ATR-MW25(45.2)-G061516	6/15/2016	6.18	2.025	17.09	1.3	0.55	-75.9	NA	NA	710	NA	NA	NA	NA	NA
	ATR-OW4(35)-G121614	12/16/2014	7.60	0.461	12.99	-0.1	0.42	-123.8	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-OW4(35)-G101315	10/13/2015	6.11	2.210	13.46	54.6	0.09	-109.9	670 x	670 x	1900	14	0.057	5.3	18	2.1
	ATR-OW4(35)-G030116	3/1/2016	6.36	2.405	9.38	18.4	3.52	41.6	840	840	900	9.0	0.14	1.0 U	31	3.6
ATR-OW4(35)-G061516	6/15/2016	6.40	2.433	23.40	27.7	0.61	-101.7	NA	NA	730	NA	NA	NA	NA	NA	
ATR-OW4(54)-G121614	12/16/2014	7.57	0.558	12.87	0.5	0.43	-142.8	NA	NA	NA	NA	NA	NA	NA	NA	
ATR-OW4(54)-G101315	10/13/2015	7.45	0.596	13.29	0.0	0.17	-140.2	240 x	240 x	2.1	6.2	0.02 U	17	0.92	0.044	
ATR-OW4(54)-G030116	3/1/2016	7.82	0.569	9.93	9.5	3.58	-45.2	250	250	8.3	5.5	0.020 U	13	1.5	0.072	
ATR-OW4(54)-G061516	6/15/2016	7.35	0.509	24.52	109.9	1.32	-134.3	NA	NA	4.2	NA	NA	NA	NA	NA	

**Table 2 (continued)**  
**Summary of Measured Field Parameters, Geochemistry, and Metals**  
**Performed on the Groundwater Samples Collected from the Pilot Test Performance Monitoring Wells**  
**TORX Facility, 4366 North Old US Highway 31, Rochester, Indiana**

Treatment Area	Sample ID	Sample Date	Field Measured Parameters						Geochemistry						Metals	
			pH	Conductivity	Temperature	Turbidity	DO	ORP	Alkalinity, Bicarbonate (as CaCO3)	Alkalinity, Total (as CaCO3)	TOC	Chloride	Nitrogen, Nitrate	Sulfate	Iron	Manganese
			S.U.	mS/cm	°C	NTU	mg/L	mV	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Zone D	ATR-MW16-G092612	9/26/2012	7.23	0.383	13.31	0.0	0.24	-21.7	230	230	1.7	11	0.02 U	12	0.15	0.080
	ATR-MW16-G030613	3/6/2013	6.76	0.870	13.16	0.0	0.11	-113.3	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-MW16-G030613R	3/6/2013	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-MW16-G040313	4/3/2013	6.12	0.992	13.09	0.0	0.20	-126.5	510	510	43	14	0.02 U	9.5	27	1.2
	ATR-MW16-G050213	5/2/2013	6.90	0.927	13.24	1.0	0.18	-124.2	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-MW16-G100715	10/7/2015	7.10	0.716	13.29	0.0	0.28	-98.1	320	320	2.8	12	0.02 U	8.8	3.5	0.13
	ATR-MW16-G030116	3/1/2016	7.75	0.722	11.12	1.7	3.62	0.0	320	320	3.4	13	0.020 U	4.1	2.5	0.14
	ATR-MW16-G061416	6/14/2016	6.85	1.023	15.26	15.2	0.55	-123.5	NA	NA	220	NA	NA	NA	NA	NA
	ATR-MW17-G092612	9/26/2012	7.00	0.663	12.60	0.0	0.23	1.2	380	380	1.5	37	0.79	25	0.08 U	0.31
	ATR-MW17	12/18/2012	7.12	0.563	11.94	NM	0.24	74.3	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-MW17-G030613	3/6/2013	7.11	0.552	11.36	1.8	0.14	-69.8	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-MW17-G030613R	3/6/2013	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-MW17-G040313	4/3/2013	7.10	0.572	12.12	0.3	0.26	4.7	360	360	3.4	26	0.44	22	0.08 U	0.32
	ATR-MW17-G050213	5/2/2013	7.16	0.563	12.67	2.9	0.19	-22.1	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-MW17-G100715	10/7/2015	7.11	0.846	13.20	51.2	0.31	213.1	360	360	1.7	24	1.2	23	1.8	0.62
	ATR-MW17-G030116	3/1/2016	7.74	0.787	9.19	16.4	3.81	59.7	330	330	1.6	20	0.90	20	0.3	0.53
	ATR-MW17-G061416	6/14/2016	6.71	0.734	13.17	9.7	0.60	226.9	NA	NA	6.2	NA	NA	NA	NA	NA
	ATR-MW26(17.5)-G092712	9/27/2012	7.18	0.427	14.78	0.0	0.28	-32.4	250	250	2.3	19	0.02 U	13	2.9	0.24
	ATR-MW26(17.5)-G010813	1/8/2013	7.00	0.599	12.46	1.5	0.38	-34.8	290	290	7.6	16	0.02 U	3.6	NA	NA
	ATR-MW26(17.5)	2/5/2013	7.55	0.419	12.55	0.0	0.90	-118.0	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-MW26(17.5)-G030613	3/6/2013	7.33	0.407	12.42	0.0	0.18	-106.7	260	260	2.8	18	0.02 U	3.2	2.3	0.42
	ATR-MW26(17.5)-G040313	4/3/2013	6.07	0.406	12.39	0.0	0.16	-12.8	260	260	2.7	17	0.02 U	3.8	2.2	0.42
	ATR-MW26(17.5)-G050313	5/3/2013	7.28	0.408	12.54	4.7	0.22	-108.3	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-MW26(17.5)-G100715	10/7/2015	6.98	0.694	14.18	3.1	0.32	-115.3	290	290	47	15	0.15	1.4	14	0.99
	ATR-MW26(17.5)-G030116	3/1/2016	7.37	0.698	12.04	29.8	0.88	-144.6	350	350	22	19	0.10	1.0 U	14	1.0
	ATR-MW26(17.5)-G061416	6/14/2016	6.97	0.816	13.03	9.5	0.90	-133.4	NA	NA	46	NA	NA	NA	NA	NA
	ATR-MW26(28.8)-G092712	9/27/2012	7.23	0.416	13.02	0.4	0.20	204.5	250	250	1.1	11	0.02 U	21	0.15	0.093
	ATR-MW26(28.8)-G092712R	9/27/2012	NA	NA	NA	NA	NA	NA	240	240	1.1	11	0.02 U	21	0.08 U	0.091
	ATR-MW26(28.8)	12/18/2012	6.70	0.900	13.40	NM	0.19	-96.2	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-MW26(28.8)-G010813	1/8/2013	6.39	1.037	12.33	5.0	0.29	-71.4	520	520	240	15	0.02 U	1 U	NA	NA
	ATR-MW26(28.8)	2/5/2013	6.88	0.737	13.15	NM	0.25	-94.9	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-MW26(28.8)-G030613	3/6/2013	6.79	0.725	12.99	0.0	0.14	-82.1	420	420	150	18	0.02 U	5.0	5.4	2.0
	ATR-MW26(28.8)-G040313	4/3/2013	6.77	0.741	13.05	0.0	0.13	-77.2	410	410	140	20	0.02 U	5.1	6.7	1.6
	ATR-MW26(28.8)-G050313	5/3/2013	6.98	0.581	13.19	0.0	0.22	-84.5	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-MW26(28.8)-G100715	10/7/2015	7.20	0.653	13.93	0.0	0.27	-114.3	300	300	3.6	9.3	0.02 U	2.2	4.2	0.17
	ATR-MW26(28.8)-G030116	3/1/2016	7.40	0.791	11.31	14.2	0.29	-129.0	450	450	9.3	11	0.10	1.0 U	13	0.25
	ATR-MW26(28.8)-G061416	6/14/2016	7.29	1.113	15.09	10.9	0.57	-103.7	NA	NA	7.9	NA	NA	NA	NA	NA
	ATR-MW26(58.2)-G041612	4/16/2012	7.25	0.418	12.28	0.0	0.26	-232.8	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-MW26(58.2)-G060413	6/4/2013	6.93	0.417	12.97	NM	0.55	105.4	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-MW26(58.8)-G100715	10/7/2015	6.84	0.496	15.39	0.0	0.40	-45.6	220	220	1.4	6.9	0.02 U	15	0.083	0.059
ATR-MW26(58.8)-G030116	3/1/2016	7.81	0.615	11.69	8.1	0.06	-191.2	310	310	57	4.3	0.048	1.9	5.5	0.29	
ATR-MW26(58.8)-G061416	6/14/2016	7.52	0.937	14.11	4.8	0.57	-119.4	NA	NA	130	NA	NA	NA	NA	NA	

**Table 2 (continued)**  
**Summary of Measured Field Parameters, Geochemistry, and Metals**  
**Performed on the Groundwater Samples Collected from the Pilot Test Performance Monitoring Wells**  
**TORX Facility, 4366 North Old US Highway 31, Rochester, Indiana**

Treatment Area	Sample ID	Sample Date	Field Measured Parameters						Geochemistry						Metals	
			pH	Conductivity	Temperature	Turbidity	DO	ORP	Alkalinity, Bicarbonate (as CaCO3)	Alkalinity, Total (as CaCO3)	TOC	Chloride	Nitrogen, Nitrate	Sulfate	Iron	Manganese
			S.U.	mS/cm	°C	NTU	mg/L	mV	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Zone D	ATR-ZVI-2(17.5)-G121812	12/18/2012	7.12	0.592	13.04	4.9	0.31	19.2	330	330	33	19	0.02 U	5.7	3.0	1.2
	ATR-ZVI-2(17.5)-G010813	1/8/2013	7.14	0.440	12.96	4.8	0.24	-116.7	300	300	12	18	0.02 U	5.0	4.2	1.0
	ATR-ZVI-2(17.5)-G030613	3/6/2013	7.35	0.404	11.91	4.1	0.21	-117.3	250	250	2.2	19	0.02 U	4.8	9.0	0.60
	ATR-ZVI-2(17.5)-G040313	4/3/2013	7.28	0.422	11.85	3.4	0.21	-128.9	260	260	2.1	18	0.02 U	7.3	4.0	0.56
	ATR-ZVI-2(17.5)-G050313	5/3/2013	7.34	0.428	11.95	3.6	0.19	-134.2	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-ZVI2 (17.5)-G100715	10/7/2015	7.38	0.661	14.38	3.6	0.62	-136.6	280	280	25	16	0.02 U	1.0 U	12	0.79
	ATR-ZVI2(17.5)-G030216	3/2/2016	6.61	0.642	11.03	49.0	0.57	-135.9	290	290	3.1	19	0.081	1.0 U	10	0.45
	ATR-ZVI2(17.5)-G061416	6/14/2016	7.65	0.783	14.34	31.1	0.48	-169.2	NA	NA	17	NA	NA	NA	NA	NA
	ATR-ZVI-2(32.5)-G121812	12/18/2012	6.80	0.887	13.13	3.8	0.29	26.1	540	540	270	12	0.02 U	3.6	4.7	0.66
	ATR-ZVI-2(32.5)-G010813	1/8/2013	6.88	0.535	13.43	2.7	0.20	-75.9	350	350	87	11	0.02 U	1 U	2.5	0.42
	ATR-ZVI-2(32.5)-G030613	3/6/2013	7.18	0.426	12.91	4.3	0.13	-109.5	270	280	26	11	0.02 U	2.0	2.2	0.33
	ATR-ZVI-2(32.5)-G030613R	3/6/2013	NA	NA	NA	NA	NA	NA	280	280	26	11	0.02 U	2.0	2.2	0.32
	ATR-ZVI-2(32.5)-G040313	4/3/2013	6.90	0.427	13.11	0.4	0.21	-93.8	270	270	20	11	0.02 U	2.9	2.1	0.29
	ATR-ZVI-2(32.5)-G040313R	4/3/2013	NA	NA	NA	NA	NA	NA	270	270	23	11	0.02 U	3.0	1.9	0.28
	ATR-ZVI-2(32.5)-G050313	5/3/2013	7.23	0.508	13.10	0.5	0.19	-125.6	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-ZVI2 (32.5)-G100715	10/7/2015	7.26	0.547	13.90	4.2	0.24	-83.8	250	250	5.2	10	0.02 U	9.9	1.7	0.15
	ATR-ZVI2(32.5)-G030116	3/1/2016	7.54	0.592	11.37	9.6	0.25	-122.3	320	320	7.5	11	0.026	5.1	2.5	0.15
	ATR-ZVI2(32.5)-G061416	6/14/2016	7.58	0.208	14.48	5.5	0.55	-133.7	NA	NA	9.7	NA	NA	NA	NA	NA
	ATR-OW5(16)-G121714	12/17/2014	7.31	0.629	12.96	6.4	0.51	53.3	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-OW5 (16)-G100715	10/7/2015	6.96	1.215	16.34	9.3	3.02	-80.3	510	510	140	20	0.02 U	1.0 U	9.9	1.1
	ATR-OW5(16)-G030116	3/1/2016	7.86	0.830	9.19	8.0	4.98	26.4	380	380	18	19	0.066	1.0 U	6.8	0.47
	ATR-OW5(16)-G061416	6/14/2016	7.09	0.679	14.47	45.6	1.55	-128.3	NA	NA	12	NA	NA	NA	NA	NA
	ATR-OW5(35)-G121714	12/17/2014	7.51	0.534	12.78	1.1	0.44	-76.0	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-OW5 (35)-G100715	10/7/2015	7.18	1.160	13.72	0.0	0.17	-125.0	520	520	190	9.5	0.02 U	1.0 U	7	0.45
	ATR-OW5(35)-G030116	3/1/2016	7.57	1.109	10.99	0.0	3.69	-2.3	450	450	180	8.4	0.098	1.0 U	12	0.58
	ATR-OW5(35)-G061416	6/14/2016	7.01	1.026	15.24	5.2	0.56	-149.2	NA	NA	110	NA	NA	NA	NA	NA
	ATR-OW5(44)-G121714	12/17/2014	7.67	0.495	12.53	1.0	0.43	-120.3	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-OW5 (54)-G100715	10/7/2015	7.37	0.540	13.70	0.0	0.11	-116.6	230	230	2.3	11	0.02 U	10	1.4	0.16
ATR-OW5(54)-G030116	3/1/2016	7.09	2.142	6.05	38.8	4.17	-17.7	880	880	560	11	2.3	1.0 U	17	0.85	
ATR-OW5(45)-G61416	6/14/2016	6.61	1.280	16.08	26.5	0.60	-106.3	NA	NA	280	NA	NA	NA	NA	NA	

Notes:

Blue text is performance monitoring data  
 NA - Not Analyzed/Not Applicable  
 NM - Not Measured  
 J - Estimated concentration, analyte detected below quantitation limit  
 U - Analyzed but not detected above the MDL  
 mS/cm - milli Siemen/centimeter  
 µg/L - micro grams per liter  
 x - Identified in Blank

TOC - Total Organic Carbon  
 NTU - Nephelometric Turbidity Units  
 mg/L - milligram per liter  
 mV - millivolt  
 °C - degrees Celcius  
 S.U. - Standard Unit  
 ORP - Oxidation-Reduction Potential  
 \* - Instrument reading suspect

Prepared by: RLB  
 Checked by: PJS

Table 3

Summary of Target VOC Analytical Concentrations and Molecular Mass  
 Performed on the Groundwater Samples Collected from Performance Monitoring Wells  
 TORX Facility, 4366 North Old US Highway 31, Rochester, Indiana

Treatment Area	Sample ID	Sample Date	VOCs												
			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 Molar 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 - Outside	ATR-MW81(27)-G110512	11/5/12	270	2.8	40,000	413	280	2.9	100 U		13,000	99	3,700	59	576
	ATR-MW81(27)-G010713	1/7/13	250	2.6	50,000	516	320	3.3	100 U		8,800	67	7,400	118	707
	ATR-MW81(27)-G020513	2/5/13	410	4.2	47,000	485	370	3.8	200 U		10,000	76	7,300	117	686
	ATR-MW81(27)-G030613	3/6/13	420	4.3	53,000	547	420	4.3	100 U		11,000	84	6,600	106	745
	ATR-MW81(27)-G050313	5/3/13	440	4.5	46,000	475	370	3.8	200 U		11,000	84	6,900	110	677
	ATR-MW81(27)-G082715	8/27/15	290	3.0	53,000	547	260	2.7	200 U		4,700	36	7,500	120	708
	ATR-MW81(27)-G022316	2/23/16	250 U		74,000	763	360	3.7	250 U		250 U		21,000	336	1,103
	ATR-MW81(27)-G061616	6/16/16	100 U		57,000	588	320	3.3	100 U		100 U		43,000 J	688	1,279
Source - Outside	ATR-MW59(29)-G092712	9/27/12	220	2.3	42,000	433	290	3.0	100 U		50 U		10,000	160	599
	ATR-MW59(29)-G010713	1/7/13	150	1.5	31,000	320	190	2.0	100 U		50 U		13,000	208	531
	ATR-MW59(29)-G020413	2/4/13	160	1.7	29,000	299	190	2.0	10 U		5 U		18,000	288	591
	ATR-MW59(29)-G030613	3/6/13	69	0.71	18,000	186	140	1.4	40 U		20 U		23,000	368	556
	ATR-MW59(29)-G050313	5/3/13	100 U		26,000	268	100 U		200 U		100 U		21,000	336	604
	ATR-MW59(29)-G082715	8/27/15	130	1.3	30,000	309	130	1.3	100 U		100 U		23,000	368	680
	ATR-MW59(29)-G022316	2/23/16	25 U		110	1.1	25 U		25 U		25 U		9,200	147	148
	ATR-MW59(29)-G061716	6/17/16	25 U		25 U		25 U		25 U		25 U		11,000	176	176
ATR-MW59(29)-G061716R	6/17/16	25 U		25 U		25 U		25 U		25 U		11,000	176	176	
Source - Outside	ATR-PM2-G110512	11/5/12	94	0.97	13,000	134	94	1.0	40 U		2,000	15	4,700	75	226
	ATR-PM2-G010713	1/7/13	70	0.72	9,200	95	67	0.7	20 U		660	5.0	4,400	70	172
	ATR-PM2-G020413	2/4/13	64	0.66	8,500	88	61	0.6	40 U		400	3.0	3,400	54	146
	ATR-PM2-G030613	3/6/13	79	0.81	8,300	86	59	0.6	20 U		300	2.3	3,100	50	139
	ATR-PM2-G050313	5/3/13	85	0.88	8,600	89	67	0.7	40 U		610	4.6	3,100	50	145
	ATR-PM2-G082715	8/27/15	5 U		380	3.9	5 U		5 U		5 U		1,200	19	23
	ATR-PM2-G022316	2/23/16	20 U		69	0.7	20 U		20 U		20 U		5,600	90	90
	ATR-PM2-G061616	6/16/16	10 U		20	0.2	10 U		10 U		10 U		5,300	85	85

Table 3 (continued)

**Summary of Target VOC Analytical Concentrations and Molecular Mass  
Performed on the Groundwater Samples Collected from Performance Monitoring Wells  
TORX Facility, 4366 North Old US Highway 31, Rochester, Indiana**

Treatment Area	Sample ID	Sample Date	VOCs												
			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 Molar 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 - Outside	ATR-PM3-G110512	11/5/12	200	2.1	43,000	444	280	2.9	100 U		74	0.56	7,600	122	571
	ATR-PM3-G010713	1/7/13	270	2.8	44,000	454	370	3.8	100 U		50 U		9,700	155	616
	ATR-PM3-G020413	2/4/13	340	3.5	46,000	475	410	4.2	200 U		100 U		9,900	158	641
	ATR-PM3-G030513	3/5/13	390	4.0	44,000	454	450	4.6	100 U		50 U		7,100	114	576
	ATR-PM3-G050213	5/2/13	340	3.5	37,000	382	390	4.0	200 U		100 U		8,300	133	522
	ATR-PM3-G082715	8/27/15	100 U		200	2.1	100 U		100 U		100 U		200	3.2	5.3
	ATR-PM3-G022316	2/23/16	100 U		15,000	155	110	1.1	100 U		100 U		15,000	240	396
	ATR-PM3-G061716	6/17/16	88	0.9	13,000	134	180	1.9	50 U		50 U		25,000	400	537
Source - Inside	ATR-MW67(30)-G092612	9/26/12	20 U		7,900	81	69	0.71	40 U		20 U		870	14	96
	ATR-MW67(30)-G050613	5/6/13	50 U		21,000	217	170	1.8	100 U		50 U		1,800	29	247
	ATR-MW67-G031516	3/15/16	1.4	0.01	240	2.5	4.2	0.04	1.0	0.01	1.8	0.01	130	2.1	4.6
	ATR-MW67-G062016	6/20/16	1 UJ		160 J	1.7	2.1 J	0.02	1 UJ		1 UJ		64 J	1.0	2.7
Source - Inside	ATR-MW68(32)-G050613	5/6/13	50 U		28,000	289	170	1.8	100 U		50 U		3,000	48	339
	ATR-MW68-G031516	3/15/16	9.5	0.10	660 J	6.8	14	0.14	1 U		1 U		100	1.6	8.7
	ATR-MW68-G061716	6/17/16	2.1	0.02	190	2.0	5.0	0.05	1 U		1 U		89	1.4	3.5
Source - Inside	ATR-MW71(33)-G050613	5/6/13	100 U		38,000	392	240	2.5	200 U		100 U		7,500	120	514
	ATR-MW71-G031516	3/15/16	5 U		110	1.1	5 U		5 U		5 U		1,000	16	17
	ATR-MW71-G062016	6/20/16	1 U		26	0.3	1 U		1 U		1 U		300	4.8	5.1
Source - Inside	ATR-MW72(32)-G030613	3/6/13	390	4.0	87,000	897	620	6.4	200 U		100 U		8,300	133	1,041
	ATR-MW72(32)-G050613	5/6/13	460	4.7	97,000	1,001	720	7.4	500 U		250 U		11,000	176	1,189
	ATR-MW72-G031516	3/15/16	1 U		48	0.5	1 U		1 U		1 U		88	1.4	1.9
	ATR-MW72-G062016	6/20/16	1 U		16	0.2	1 U		1 U		1 U		31	0.5	0.66
Source - Inside	ATR-MW76(30)-G030513	3/5/13	92	0.9	19,000	196	210	2.2	40 U		20 U		4,100	66	265
	ATR-MW76(30)-G050613	5/6/13	20 U		7,100	73	49	0.5	40 U		20 U		650	10	84
	ATR-MW76-G031516	3/15/16	21	0.2	5,500	57	50	0.5	20 U		20 U		6,000	96	153
	ATR-MW76-G062016	6/20/16	31	0.3	8,700	90	82	0.8	1 U		1 U		22,000	352	443

Table 3 (continued)

**Summary of Target VOC Analytical Concentrations and Molecular Mass  
Performed on the Groundwater Samples Collected from Performance Monitoring Wells  
TORX Facility, 4366 North Old US Highway 31, Rochester, Indiana**

Treatment Area	Sample ID	Sample Date	VOCs												
			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 Molar 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 - Inside	ATR-MW77(41)-G030513	3/5/13	3	0.03	550	5.7	4.4	0.05	2 U		1 U		84	1.3	7.1
	ATR-MW77(41)-G050613	5/6/13	1 U		48	0.50	1 U		2 U		1 U		11	0.18	0.67
	ATR-MW77-G031516	3/15/16	1 U		1.8	0.02	1 U		1 U		1 U		6.7	0.11	0.13
	ATR-MW77-G062016	6/20/16	1 U		1 U		1 U		1 U		1 U		2.7	0.04	0.04
Source - Inside	ATR-MW78(35)-G030513	3/5/13	8.2	0.08	2,700	28	16	0.2	10 U		5 U		77	1.2	29
	ATR-MW78(35)-G050613	5/6/13	5 U		360	3.7	5 U		10 U		5 U		540	8.6	12
	ATR-MW78-G031516	3/15/16	1 U		1.6	0.02	1 U		1 U		1 U		8.8	0.14	0.16
	ATR-MW78-G062016	6/20/16	1 U		2.9	0.03	1 U		1 U		1 U		1 U		0.03
Zone A	ATR-MW6C-G092612	9/26/12	10 U		3,600	37	10 U		20 U		10 U		1,200	19	56
	ATR-MW6C-G030513	3/5/13	5 U		2,400	25	13	0.13	10 U		5 U		740	12	37
	ATR-MW6C-G050713	5/7/13	5 U		1,800	19	10	0.10	10 U		5 U		1,200	19	38
	ATR-MW6C-G050713R	5/7/13	5 U		1,800	19	12	0.12	10 U		5 U		1,500	24	43
	ATR-MW6C-G082815	8/26/15	2 U		410	4.2	2 U		2 U		2 U		66	1.1	5.3
	ATR-MW6C-G022316	2/23/16	1 U		120	1.2	1 U		1 U		1 U		170	2.7	4.0
	ATR-MW6C-G061616	6/16/16	1 U		50	0.5	1 U		1 U		1 U		170	2.7	3.2
Zone A	ATR-MW12-G050613	5/6/13	25 U		11,000	113	25 U		50 U		25 U		700	11	125
	ATR-MW12-G082615	8/26/15	10 U		2,900	30	14	0.14	10 U		10 U		560	9.0	39
	ATR-MW12-G022416	2/24/16	10 U		1,800	19	10 U		10 U		10 U		2,600	42	60
	ATR-MW12-G061616	6/16/16	5 U		630	6	5 U		5 U		5 U		1,300	21	27
Zone A	ATR-MW13-G092712	9/27/12	10 U		4,900	51	31	0.32	20 U		10 U		440	7.0	58
	ATR-MW13-G050613	5/6/13	10 U		3,000	31	10 U		20 U		10 U		1,600	26	57
	ATR-MW13-G082615	8/26/15	10 U		3,400	35	16	0.17	10 U		10 U		870	14	49
	ATR-MW13-G030216	3/2/16	4.0	0.04	880	9	7.2	0.07	2 U		2 U		610	10	19
	ATR-MW13-G061616	6/16/16	1 U		190	2	1.0	0.01	1 U		1 U		96	2	3.5



Table 3 (continued)

**Summary of Target VOC Analytical Concentrations and Molecular Mass  
Performed on the Groundwater Samples Collected from Performance Monitoring Wells  
TORX Facility, 4366 North Old US Highway 31, Rochester, Indiana**

Treatment Area	Sample ID	Sample Date	VOCs												
			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 Molar 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*
Zone A	ATR-MW62(36)-G050213	5/2/13	10 U		2,400	25	10 U		20 U		10 U		2,000	32	57
	ATR-MW62-G082715	8/27/15	20 U		5,600	58	21	0.22	20 U		20 U		1,600	26	84
	ATR-MW62-G022316	2/23/16	1 U		37	0.4	1 U		1 U		1 U		180	2.9	3.3
	ATR-MW62-G061616	6/16/16	1 U		4.8	0.05	1 U		1 U		1 U		39	0.6	0.67
Zone A	ATR-MW20(35)-G050713	5/7/13	5 U		360	3.7	5 U		10 U		5 U		510	8.2	11.9
	ATR-MW20(35)-G082715	8/27/15	1 U		180	1.9	1.4	0.01	1.8	0.01	3.5	0.03	200	3.2	5.1
	ATR-MW20(35)-G082715R	8/27/15	1 U		180	1.9	1.2	0.01	1.8	0.01	3.5	0.03	250	4.0	5.9
	ATR-MW20(35)-G022316	2/23/16	1 U		27	0.3	1 U		1 U		1 U		99	1.6	1.9
	ATR-MW20(35)-G022316R	2/23/16	1 U		29	0.3	1 U		1 U		1 U		96	1.5	1.8
	ATR-MW20(35)-G061616	6/16/16	1 U		1.7	0.02	1 U		1 U		1 U		12	0.19	0.21
	ATR-MW20(35)-G061616R	6/16/16	1 U		2.1	0.02	1 U		1 U		1 U		12	0.19	0.21
Zone A	ATR-MW20(51)-G050713	5/7/13	3.4	0.04	670	6.9	3.3	0.03	2 U		1 U		270	4.3	11.3
	ATR-MW20(51)-G050713R	5/7/13	3.2	0.03	570	5.9	3.4	0.04	2 U		1 U		230	3.7	9.6
	ATR-MW20(51)-G082715	8/27/15	1 U		350	3.6	1.7	0.02	1 U		1 U		210	3.4	7.0
	ATR-MW20(51)-G022316	2/23/16	1 U		1 U		1 U		1 U		1 U		1 U		0.0
	ATR-MW20(51)-G061616	6/16/16	1 U		1 U		1 U		1 U		1 U		1 U		0.0
Zone A	ATR-MW82(58)-G030513	3/5/13	1 U		13	0.13	1.7	0.02	2 U		8.4	0.06	9.9	0.16	0.37
	ATR-MW82(58)-G050613	5/7/13	1 U		12	0.12	1 U		2 U		7.6	0.06	17	0.27	0.45
	ATR-MW82-G082615	8/26/15	1 U		21	0.22	1.8	0.02	1 U		8.3	0.06	15	0.24	0.54
	ATR-MW82-G022316	2/23/16	1 U		4.8	0.05	1.5	0.02	1 U		1 U		9.8	0.16	0.22
	ATR-MW82-G061616	6/16/16	1 U		1 U		1.1	0.01	1 U		1 U		1 U		0.01
Zone A	ATR-OW1(28)-G121714	12/17/14	7.2	0.07	1,300	13	11	0.11	1 U		1 U		500	8.0	21.6
	ATR-OW1(S)-G082715	8/27/15	2 U		270	2.8	2 U		2 U		2 U		240	3.8	6.6
	ATR-OW1(28)-G02216	2/24/16	5 UJ		530 J	5.5	5 UJ		5 UJ		5 UJ		850 J	13.6	19.1
	ATR-OW1(28)-G061616	6/16/16	1 U		18	0.2	1 U		1 U		1 U		26	0.4	0.60



Table 3 (continued)

**Summary of Target VOC Analytical Concentrations and Molecular Mass  
Performed on the Groundwater Samples Collected from Performance Monitoring Wells  
TORX Facility, 4366 North Old US Highway 31, Rochester, Indiana**

Treatment Area	Sample ID	Sample Date	VOCs												
			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 Molar 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*
Zone A	ATR-OW1(39)-G121714	12/17/14	2.1	0.02	540	5.6	1 U		1 U		1 U		650	10	16
	ATR-OW1(D)-G082715	8/27/15	1 U		180	1.9	1 U		1 U		1 U		370	5.9	7.8
	ATR-OW1(39)-G022916	2/29/16	1 U		1 U		1 U		1 U		1 U		1 U		0.0
	ATR-OW1(39)-G061616	6/16/16	1 U		1 U		1 U		1 U		1 U		1 U		0.0
Zone B	ATR-MW14-G092712	9/27/12	1 U		53	0.55	2.3	0.02	2 U		390	3.0	30	0.48	4.0
	ATR-MW14-G030513	3/5/13	1.2	0.01	60	0.62	2.7	0.03	2 U		380	2.9	6.1	0.10	3.6
	ATR-MW14-G050213	5/2/13	1 U		55	0.57	2.3	0.02	2 U		320	2.4	4.2	0.07	3.1
	ATR-MW14-G100815	10/8/15	2 U		110	1.1	3.0	0.03	2 U		570 J	4.3	3.6	0.06	5.6
	ATR-MW14-G022916	2/29/16	2 U		700	7.2	6.4	0.07	2 U		5.1	0.04	340	5.4	12.8
	ATR-MW14-G061516	6/15/16	1 U		20	0.2	1.5	0.02	1 U		2.2	0.02	23	0.4	0.6
Zone B	MTR-MW24(24.9)-6082213	7/22/13	1 U		1 U		1 U		2 U		1 U		1 U		0.0
	ATR-MW24 (24.9)-G100815	10/8/15	1 U		1 U		1 U		1 U		1 U		1 U		0.0
	ATR-MW24(24.9)-G022916	2/29/16	1 U		1 U		1 U		1 U		1 U		1 U		0.0
	ATR-MW24(24.8)-G061516	6/15/16	1 U		1 U		1 U		1 U		1 U		1 U		0.0
Zone B	ATR-MW24(55.4)-G030513	3/5/13	1 U		61	0.63	5.9	0.06	2 U		130	1.0	1.6	0.03	1.7
	ATR-MW24(55.4)-G050213	5/2/13	1 U		57	0.59	4.5	0.05	2 U		110	0.84	1 U		1.5
	ATR-MW24(55.4)-G050213R	5/2/13	1 U		64	0.66	5.5	0.06	2 U		110	0.84	1 U		1.6
	ATR-MW24 (55.9)-G100815	10/8/15	1 U		49	0.51	2.5	0.03	1 U		110	0.84	1.0	0.02	1.4
	ATR-MW24(55.9)-G022916	2/29/16	1 U		56	0.58	2.8	0.03	1 U		130	0.99	1.1	0.02	1.6
	ATR-MW24(55.4)-G061516	6/15/16	1 U		47	0.48	2.2	0.02	1 U		110	0.84	1 U		1.3
Zone B	ATR-OW2(33)-G121814	12/18/14	1 U		180	1.9	1 U		1 U		1 U		140	2.2	4.1
	ATR-OW2 (33)-G100815	10/8/15	5.3	0.05	2,000	21	9.2	0.09	5 U		5 U		1,600	26	46
	ATR-OW2(33)-G022916	2/29/16	1 U		320	3.3	1.9	0.02	1 U		1 U		520	8.3	11.6
	ATR-OW2(33)-G061516	6/15/16	7.1	0.07	2,300	23.7	11	0.11	5 U		5 U		1,600	25.6	49.5

Table 3 (continued)

**Summary of Target VOC Analytical Concentrations and Molecular Mass  
Performed on the Groundwater Samples Collected from Performance Monitoring Wells  
TORX Facility, 4366 North Old US Highway 31, Rochester, Indiana**

Treatment Area	Sample ID	Sample Date	VOCs												
			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 Molar 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*
Zone B	ATR-OW2(53)-G121814	12/18/14	1 U		1,100	11	7.3	0.08	1 U		1 U		1,500	24	35
	ATR-OW2 (53)-G100815	10/8/15	1 U		30	0.31	1 U		1 U		1 U		19	0.30	0.61
	ATR-OW2(53)-G022916	2/29/16	1 U		1 U		1 U		1 U		1 U		1 U		0.0
	ATR-OW2(53)-G061616	6/16/16	5 U		5 U		5 U		5 U		5 U		5 U		0.0
Zone B	ATR-OW3(35)-G121614	12/16/14	1 U		300	3.1	1.7	0.02	1 U		8	0.06	94	1.5	4.7
	ATR-OW3 (35)-G100715	10/7/15	1 U		150	1.5	1.3	0.01	1 U		1 U		84	1.3	2.9
	ATR-OW3(35)-G022916	2/29/16	1 U		24	0.2	1 U		1 U		1 U		29	0.5	0.71
	ATR-OW3(35)-G061516	6/15/16	1 U		1 U		1 U		1 U		1 U		3.0	0.05	0.05
Zone B	ATR-OW3(55)-G121614	12/16/14	1 U		110	1.1	45	0.46	1 U		680	5.2	3.3	0.05	6.8
	ATR-OW3 (55)-G100715	10/7/15	1 UJ		55 J	0.57	9.1 J	0.09	1 U		430	3.3	1.0 J	0.02	3.9
	ATR-OW3 (55)-G100715 R	10/7/15	1.1 J	0.01	89 J	0.92	21 J	0.22	1 U		430	3.3	2.4 J	0.04	4.5
	ATR-OW3(55)-G022916	2/29/16	10 U		1,600 J	16.5	10 U		10 U		10 U		22	0.35	16.9
	ATR-OW3(55)-G022916 R	2/29/16	10 U		1,200 J	12.4	37	0.38	10 U		10 U		24	0.38	13.1
	ATR-OW3(55)-G061516	6/15/16	2 U		700	7.2	22	0.23	2 U		2 U		80	1.28	8.7
Zone C	ATR-MW15-G041312	4/13/12	5 U		1,800	19	57	0.59	10 U		28	0.21	350	5.6	25
	ATR-MW15-G041312R	4/13/12	5 U		1,300	13	40	0.41	10 U		27	0.21	220	3.5	18
	ATR-MW15-G030613	3/6/13	15	0.15	2,800	29	71	0.73	10 U		200	1.5	380	6.1	37
	ATR-MW15-G050213	5/2/13	10 U		2,900	30	62	0.64	20 U		240	1.8	300	4.8	37
	ATR-MW15-G050213R	5/2/13	14	0.14	2,800	29	67	0.69	10 U		220	1.7	300	4.8	36
	ATR-MW15-6082213	7/22/13	11	0.11	2,100	22	58	0.60	10 U		160	1.2	190	3.0	27
	ATR-MW15-G101315	10/13/15	55	0.57	4,600	47	350	3.6	10 U		690	5.3	460	7.4	64
	ATR-MW15-G030116	3/1/16	24	0.25	4,500	46	130	1.3	20 U		20 U		360	5.8	54
ATR-MW15-G061516	6/15/16	22 J	0.23	4,300 J	44	140 J	1.4	10 UJ		10 UJ		340 J	5.4	51	

Table 3 (continued)

**Summary of Target VOC Analytical Concentrations and Molecular Mass  
Performed on the Groundwater Samples Collected from Performance Monitoring Wells  
TORX Facility, 4366 North Old US Highway 31, Rochester, Indiana**

Treatment Area	Sample ID	Sample Date	VOCs												Total Molar Mass
			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)		
			µg/L	m/L*	µg/L	m/L*	µg/L	m/L*	µg/L	m/L*	µg/L	m/L*	µg/L	m/L*	
Zone C	ATR-MW25(16.4)-G092712	9/27/12	5 U		1,800	19	5 U		10 U		5 U		630	10	29
	ATR-MW25(16.4)-G030613	3/6/13	5 U		2,600	27	15	0.15	10 U		5 U		560	9.0	36
	ATR-MW25(16.4)-G050213	5/2/13	10 U		2,500	26	10 U		20 U		10 U		520	8.3	34
	ATR-MW25(16.4)-G101315	10/13/15	14	0.14	3,600	37	38	0.39	10 U		10 U		670	11	48
	ATR-MW25(16.4)-G030116	3/1/16	2 U		480	5.0	2 U		2 U		2 U		320	5.1	10
	ATR-MW25(16.4)-G061516	6/15/16	1 U		49	0.51	1 U		1 U		1 U		16	0.26	0.76
Zone C	ATR-MW25(32.6)-G041612	4/16/12	1.8	0.02	590	6.09	2.0	0.02	2 U		1 U		270	4.3	10
	ATR-MW25(32.6)-G030613	3/6/13	10 U		1,300	13	10.0 U		20 U		10 U		440	7.0	20
	ATR-MW25(32.6)-G050213	5/2/13	5 U		1,500	15	5.0 U		10 U		5 U		360	5.8	21
	ATR-MW25(32.6)-G061914	6/19/14	5 U		1,200	12	5.0 U		5 U		14 J	0.11	300 J	4.8	17
	ATR-MW25(32.6)-G101315	10/13/15	5 U		1,600	17	7.4	0.08	5 U		78	0.59	980	16	33
	ATR-MW25(32.6)-G030116	3/1/16	2 U		420	4.3	2.6	0.03	2 U		2 U		500	8.0	12
	ATR-MW25(32.6)-G061516	6/15/16	1 U		1 U		1 U		1 U		1 U		1 U		0.0
Zone C	MTR-MW25(45.2)-6082213	7/22/13	3.1	0.03	750	7.7	71	0.73	4 UJ		7.1	0.05	92	1.5	10
	ATR-MW25(45.2)-G101315	10/13/15	10 U		1,800	19	200	2.1	10 U		15	0.11	220	3.5	24
	ATR-MW25(45.2)-G030116	3/1/16	7.5	0.08	2,400	24.8	180	1.9	2 U		2 U		370	5.9	33
	ATR-MW25(45.2)-G061516	6/15/16	6.6	0.07	1,700	17.5	65	0.7	5 U		5 U		870	13.9	32
Zone C	ATR-OW4(35)-G121614	12/16/14	1 U		210	2.2	1 U		1 U		2.4	0.02	540	8.6	11
	ATR-OW4(35)-G101315	10/13/15	5 U		170	1.8	5 U		5 U		5 U		230	3.7	5.4
	ATR-OW4(35)-G030116	3/1/16	5 U		760 J	7.8	7.6	0.08	5 U		5 U		480	7.7	16
	ATR-OW4(35)-G061516	6/15/16	5 U		290	3.0	5 U		5 U		5 U		930	14.9	18
Zone C	ATR-OW4(54)-G121614	12/16/14	1 U		2.5	0.03	1 U		1 U		1 U		1 U		0.03
	ATR-OW4(54)-G101315	10/13/15	1 U		1 U		1 U		1 U		1 U		1 U		0.0
	ATR-OW4(54)-G030116	3/1/16	1 U		1 U		1 U		1 U		1 U		1 U		0.0
	ATR-OW4(54)-G061516	6/15/16	1 U		1 U		1 U		1 U		1 U		1 U		0.0

Table 3 (continued)

**Summary of Target VOC Analytical Concentrations and Molecular Mass  
Performed on the Groundwater Samples Collected from Performance Monitoring Wells  
TORX Facility, 4366 North Old US Highway 31, Rochester, Indiana**

Treatment Area	Sample ID	Sample Date	VOCs												
			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 Molar 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*
Zone D	ATR-MW16-G092612	9/26/12	1 U		360	3.7	11	0.11	2 U		42	0.32	130	2.1	6.2
	ATR-MW16-G030613	3/6/13	1 U		370	3.8	12	0.12	2 U		27	0.21	260	4.2	8.3
	ATR-MW16-G030613R	3/6/13	1 U		340	3.5	12	0.12	2 U		27	0.21	210	3.4	7.2
	ATR-MW16-G040313	4/3/13	1 U		390	4.0	12	0.12	2 U		18	0.14	290	4.6	8.9
	ATR-MW16-G050213	5/2/13	1 U		410	4.2	13	0.13	2 U		19	0.14	200	3.2	7.7
	ATR-MW16-G100715	10/7/15	1.7	0.02	480	5.0	10	0.10	1 U		2.2	0.02	170	2.7	7.8
	ATR-MW16-G030116	3/1/16	2 U		630	6.5	10	0.10	2 U		2 U		250	4.0	11
	ATR-MW16-G061416	6/14/16	1 U		320	3.3	2.4	0.02	1 U		1 U		270	4.3	7.6
Zone D	ATR-MW17-G092612	9/26/12	1 U		67	0.69	2.4	0.02	2 U		270	2.1	1 U		2.8
	ATR-MW17-G030613	3/6/13	1 U		56	0.58	1.9	0.02	2 U		200	1.5	1 U		2.1
	ATR-MW17-G030613R	3/6/13	1 U		58	0.60	1.9	0.02	2 U		220	1.7	1.7	0.03	2.3
	ATR-MW17-G040313	4/3/13	1 U		46	0.47	1.5	0.02	2 U		210	1.6	1 U		2.1
	ATR-MW17-G050213	5/2/13	1 U		51	0.53	1.8	0.02	2 U		190	1.4	1 U		2.0
	ATR-MW17-G100715	10/7/15	1 U		41	0.42	1.6	0.02	1 U		190 J	1.4	1 U		1.9
	ATR-MW17-G030116	3/1/16	1 U		44	0.45	1.7	0.02	1 U		190	1.4	1 U		1.9
	ATR-MW17-G061416	6/14/16	1 U		41	0.42	1.8	0.02	1 U		220	1.7	1 U		2.1
Zone D	ATR-MW26(17.5)-G092712	9/27/12	2.8	0.03	770	7.9	12	0.12	2 U		4.1	0.03	380	6.1	14
	ATR-MW26(17.5)-G010813	1/8/13	5 U		1,200	12	15	0.15	10 U		5 U		500	8.0	21
	ATR-MW26(17.5)-G030613	3/6/13	5 U		1,200	12	14	0.14	10 U		5 U		430	6.9	19
	ATR-MW26(17.5)-G040313	4/3/13	5 U		1,200	12	12	0.12	10 U		5 U		650	10	23
	ATR-MW26(17.5)-G050313	5/3/13	5 U		880	9.1	11	0.11	10 U		5 U		530	8.5	18
	ATR-MW26 (17.5)-G100715	10/7/15	1 U		510	5.3	3.2	0.03	1 U		1 U		170	2.7	8.0
	ATR-MW26(17.5)-G030116	3/1/16	1 U		170	1.8	1 U		1 U		1 U		110	1.8	3.5
	ATR-MW26(17.5)-G061416	6/14/16	1 U		13	0.1	1 U		1 U		1 U		11	0.2	0.31

Table 3 (continued)

**Summary of Target VOC Analytical Concentrations and Molecular Mass  
Performed on the Groundwater Samples Collected from Performance Monitoring Wells  
TORX Facility, 4366 North Old US Highway 31, Rochester, Indiana**

Treatment Area	Sample ID	Sample Date	VOCs												
			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 Molar 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*
Zone D	ATR-MW26(28.8)-G092712	9/27/12	1 U		45	0.46	2.2	0.02	2 U		22	0.17	13	0.21	0.86
	ATR-MW26(28.8)-G092712R	9/27/12	1 U		47	0.48	2.3	0.02	2 U		24	0.18	14	0.22	0.92
	ATR-MW26(28.8)-G010813	1/8/13	1.4	0.01	480	5.0	9.9	0.10	2 U		1 U		130	2.1	7.1
	ATR-MW26(28.8)-G030613	3/6/13	1.2	0.01	330	3.4	10	0.10	2 U		1 U		150	2.4	5.9
	ATR-MW26(28.8)-G040313	4/3/13	1.5	0.02	460	4.7	11	0.11	2 U		1.4	0.01	240	3.8	8.7
	ATR-MW26(28.8)-G050313	5/3/13	2.3	0.02	490	5.1	14	0.14	2 U		1.9	0.01	200	3.2	8.4
	ATR-MW26 (28.8)-G100715	10/7/15	1 U		1 U		1 U		1 U		1 U		1 U		0.0
	ATR-MW26(28.8)-G030116	3/1/16	1 U		1 U		1 U		1 U		1 U		1 U		0.0
	ATR-MW26(28.8)-G061416	6/14/16	1 U		1 U		1 U		1 U		1 U		1 U		0.0
Zone D	ATR-MW26(58.2)-G041612	4/16/12	1 U		2.2	0.02	1 U		2 U		1.8	0.01	1 U		0.04
	ATR-MW26(58.2)-G060413	6/4/13	1 U		2.4	0.02	1 U		2 U		1 U		1 U		0.02
	ATR-MW26 (58.8)-G100715	10/7/15	1 U		8.3	0.09	1 U		1 U		1 U		3.1	0.05	0.14
	ATR-MW26(58.8)-G030116	3/1/16	1 U		20	0.21	1.1	0.01	1 U		1 U		13	0.21	0.43
	ATR-MW26(58.2)-G061416	6/14/16	1 U		10	0.10	1.1	0.01	1 U		1 U		26	0.42	0.53
Zone D	ATR-ZVI-2(17.5)-G121812	12/18/12	2.3	0.02	1,300	13.4	12	0.12	2 U		5.1	0.04	400	6.4	20
	ATR-ZVI-2(17.5)-G010813	1/8/13	5 U		1,200	12.4	12	0.12	10 U		5 U		480	7.7	20
	ATR-ZVI-2(17.5)-G030613	3/6/13	5 U		1,500	15.5	13	0.13	10 U		5 U		460	7.4	23
	ATR-ZVI-2(17.5)-G040313	4/3/13	5 U		1,500	15.5	11	0.11	10 U		5 U		450	7.2	23
	ATR-ZVI-2(17.5)-G050313	5/3/13	5 U		1,500	15.5	10	0.10	10 U		5 U		350	5.6	21
	ATR-ZVI2 (17.5)-G100715	10/7/15	1 U		320	3.3	2.9	0.03	1 U		1 U		250	4.0	7.3
	ATR-ZVI2(17.5)-G030216	3/2/16	1 U		1.6	0.02	1 U		1 U		1 U		9.1	0.15	0.16
	ATR-ZVI2(17.5)-G061416	6/14/16	1 U		1 U		1 U		1 U		1 U		1 U		0.0

**Table 3 (continued)**  
**Summary of Target VOC Analytical Concentrations and Molecular Mass**  
**Performed on the Groundwater Samples Collected from Performance Monitoring Wells**  
**TORX Facility, 4366 North Old US Highway 31, Rochester, Indiana**

Treatment Area	Sample ID	Sample Date	VOCs												
			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 Molar 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*
Zone D	ATR-ZVI-2(32.5)-G121812	12/18/12	3.9	0.04	580	6.0	10	0.10	2 U		16	0.12	210	3.4	10
	ATR-ZVI-2(32.5)-G010813	1/8/13	4.2	0.04	670	6.9	13	0.13	2 U		3.2	0.02	280	4.5	12
	ATR-ZVI-2(32.5)-G030613	3/6/13	4.6	0.05	650	6.7	16	0.17	2 U		1 U		280	4.5	11
	ATR-ZVI-2(32.5)-G030613R	3/6/13	4.5	0.05	650	6.7	16	0.17	2 U		1 U		280	4.5	11
	ATR-ZVI-2(32.5)-G040313	4/3/13	3.6	0.04	710	7.3	14	0.14	2 U		1 U		410	6.6	14
	ATR-ZVI-2(32.5)-G040313R	4/3/13	3.5	0.04	710	7.3	14	0.14	2 U		1 U		410	6.6	14
	ATR-ZVI-2(32.5)-G050313	5/3/13	3.9	0.04	600	6.2	15	0.15	2 U		1 U		340	5.4	12
	ATR-ZVI2 (32.5)-G100715	10/7/15	2.2	0.02	320	3.3	2.8	0.03	1 U		1 U		130	2.1	5.4
	ATR-ZVI2(32.5)-G030116	3/1/16	1 U		160	1.7	1 U		1 U		1 U		140	2.2	3.9
	ATR-ZVI2(32.5)-G061416	6/14/16	1 U		30	0.3	1 U		1 U		1 U		65	1.0	1.3
Zone D	ATR-OW5(16)-G121714	12/17/14	1 U		780	8.0	5.6	0.06	1 U		9.4	0.07	230	3.7	12
	ATR-OW5 (16)-G100715	10/7/15	2 U		720	7.4	6.1	0.06	2 U		2 U		190	3.0	11
	ATR-OW5(16)-G030116	3/1/16	1 U		350	3.6	3.1	0.03	1 U		1 U		250	4.0	7.6
	ATR-OW5(16)-G061416	6/14/16	1 U		230	2.4	1.2	0.01	1 U		1 U		47	0.8	3.1
Zone D	ATR-OW5(35)-G121714	12/17/14	1 U		1,200	12.4	15	0.15	1 U		330	2.5	43	0.69	16
	ATR-OW5 (35)-G100715	10/7/15	5.0	0.05	1,100	11.3	5.4	0.06	5 U		5 U		170	2.7	14
	ATR-OW5(35)-G030116	3/1/16	5 U		980	10.1	6.5	0.07	5 U		5 U		260	4.2	14
	ATR-OW5(35)-G061416	6/14/16	1 U		32	0.3	2.1	0.02	1 U		1 U		170 J	2.7	3.1
Zone D	ATR-OW5(44)-G121714	12/17/14	1 U		220	2.3	6.1	0.06	1 U		5.5	0.04	580	9.3	12
	ATR-OW5 (54)-G100715	10/7/15	7.0	0.07	2,000	20.6	14	0.14	5 U		5 U		300	4.8	26
	ATR-OW5(54)-G030116	3/1/16	6.6	0.07	1,900	19.6	8.2	0.08	5 U		5 U		700	11	31
	ATR-OW5(45)-G061416	6/14/16	5 U		1,000	10.3	5 U		5 U		5 U		670	11	21

Notes:

J - Estimated concentration, analyte detected below quantitation limit

U - Analyzed but not detected above the MDL

UJ - Not detected and reporting limit is estimated

(96.94) - Compound molecular weight in grams per mole

m/L\* - micromole per liter

µg/L - micrograms per liter

Green text is baseline data

Blue text is performance monitoring data

Prepared by: RED

Checked by: PJS





**Table 4 (continued)**  
**Summary of Dechlorinating Bacteria, Functional Genes, Dissolved Gases, and Volatile Fatty Acid Results**  
**Performed on the Groundwater Samples Collected from Performance Monitoring Wells**  
**TORX Facility, 4366 North Old US Highway 31, Rochester, Indiana**

Treatment Area	Sample ID	Sample Date	Dechlorinating Bacteria & Functional Genes				Dissolved Gases			Volatile Fatty Acids									
			DHC	tceA Reductase	bvcA Reductase	VC Reductase	Methane	Ethane	Ethene	Lactic Acid	Acetic Acid	Propionic Acid	Formic Acid	Butyric Acid	Pyruvic Acid	i-Pentanoic Acid	Pentanoic Acid	i-Hexanoic Acid	Hexanoic Acid
			cells/mL	cells/mL	cells/mL	cells/mL	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Source - Inside	ATR-MW76-G031516	3/15/16	5.40E+01	1.28E+01	3.40E+00	1.5E+00 J	1,700	41	150	1 J	38	12	0.088 J	1.3	0.064 J	0.1 J	0.02 J	0.2 U	0.024 J
	ATR-MW76-G062016	6/20/16	NA	NA	NA	NA	2,700	87	1,300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-MW77-G031516	3/15/16	1.88E+03	8.00E-01	1.34E+02	3.75E+02	2,100	13	33	0.027 J	0.078 J	0.1 U	0.016 J	0.1 U	0.1 U	0.1 U	0.1 U	0.2 U	0.2 U
	ATR-MW77-G062016	6/20/16	NA	NA	NA	NA	6,900	18	14	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-MW78-G031516	3/15/16	6.18E+02	5.30E+00	8.80E+00	7.99E+01	5,400	30	850	45.000	150	12	0.11 J	0.84	0.17	0.48	0.1	0.2 U	0.067 J
	ATR-MW78-G062016	6/20/16	NA	NA	NA	NA	18,000	170	28	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zone A	MTR-MW6C-G030513	3/5/13	2.40E+01*	< 5.00E-01*	2.36E+01*	< 5.00E-01*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-MW6C-G082615	8/26/15	5.67E+04	2.66E+01	2.47E+04	9.77E+03	1,500	18	39	0.1 U	3.2	3.5	0.049 J	0.043 J	0.015 J	0.015 J	0.07 U	0.2 U	0.5 U
	ATR-MW6C-G022316	2/23/16	2.52E+05	5.17E+01	1.21E+04	1.02E+05	4,800	30	39	0.017 J	0.57	0.0041 J	0.028 J	0.006 J	0.1 U	0.1 U	0.1 U	0.2 U	0.2 U
	ATR-MW6C-G061616	6/16/16	NA	NA	NA	NA	11,000	81	68	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-MW12-G082615	8/26/15	5.42E+02	< 2.50E+00	1.62E+01	1.64E+01	1,400	19	520	0.35 J	48	27	0.35	4	0.28	0.19	0.094	0.2 U	0.5 U
	ATR-MW12-G022416	2/24/16	2.60E+06	< 6.00E-01	7.01E+05	4.93E+05	13,000	15	880	0.038 J	130	1.2	0.081 J	3.4	0.2	0.28	0.043 J	0.2 U	0.37
	ATR-MW12-G061616	6/16/16	NA	NA	NA	NA	18,000	37	1600	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	MTR-MW13-G092712	9/27/12	5.66E+02*	< 6.80E+00*	8.30E+00*	2.46E+02*	1,600	30	21	0.032 J	1.9	0.050 U	0.050 J	0.050 U	0.15 U	0.15 U	0.070 U	0.050 U	0.050 U
	ATR-MW13-G082615	8/26/15	1.32E+06	3.90E+00	4.41E+05	1.87E+05	850	28	220	1	46	49	0.18	0.32	0.39	0.054 J	0.07 U	0.2 U	0.5 U
	ATR-MW13-G030216	3/2/16	8.64E+05	< 1.10E+00	2.47E+05	1.61E+05	11000	26	2100	0.29 J	150	2.7	0.12 J	0.84 J	0.17 J	0.31 J	1 U	2 U	2 U
	ATR-MW13-G061616	6/16/16	NA	NA	NA	NA	18,000	130	1000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-MW62-G082715	8/27/15	4.93E+04	2.86E+02	1.82E+04	9.99E+03	2,000	60	420	0.51	21	3.8	0.2	2.4	0.042 J	0.15 U	0.047 J	0.2 U	0.5 U
	ATR-MW62-G022316	2/23/16	3.46E+05	6.18E+02	1.21E+04	8.65E+04	17,000	200	4,700	2.0 U	220	1.6	0.14 J	19	0.33	0.25	0.11	0.011 J	2.7
	ATR-MW62(36)-G061616	6/16/16	NA	NA	NA	NA	17,000	140	3,400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-MW20(35)-G082715	8/27/15	7.82E+03	2.08E+02	5.36E+03	6.76E+01	1,900	30	110	0.028 J	13	1.1	0.1	0.08	0.028 J	0.072 J	0.023 J	0.2 U	0.5 U
	ATR-MW20(35)-G082715R	8/27/15	9.06E+03	2.40E+02	6.69E+03	8.04E+01	2,000	31	120	0.053 J	12	0.86	0.11	0.056	0.029 J	0.073 J	0.022 J	0.2 U	0.5 U
	ATR-MW20(35)-G022316	2/23/16	5.13E+04	3.01E+02	1.67E+02	1.51E+04	22,000	50	210	20 U	270	2.2	0.077 J	0.85 J	0.19	0.22	0.1 U	0.022 J	0.011 J
	ATR-MW20(35)-G022316R	2/23/16	8.82E+04	3.80E+02	3.43E+02	2.85E+04	22,000	51	220	0.03 J	250	2	0.1 J	0.85 J	0.085 J	0.13	0.1 U	0.02 J	0.011 J
	ATR-MW20(35)-G061616	6/16/16	NA	NA	NA	NA	18,000	130	320	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-MW20(35)-G061616R	6/16/16	NA	NA	NA	NA	18,000	130	300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-MW20(51)-G082715	8/27/15	1.05E+02	< 1.90E+00	1.78E+01	2.80E+00	1,500	44	270	4.3	600	470	3.2 J	64	2.6	1.5	0.39 J	0.2 U	0.48 J
	ATR-MW20(51)-G022316	2/23/16	1.82E+04	3.00E-01 J	3.27E+02	3.38E+03	31,000	21	0.54	20 U	460	12	0.23 J	25	1.5	0.92 J	2.4	0.16 J	4.1
	ATR-MW20(51)-G061616	6/16/16	NA	NA	NA	NA	23,000	7.5	0.078	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-MW82-G082615	8/26/15	5.85E+03	< 3.30E+00	1.63E+02	8.77E+01	1,400	1.4	26	160	670	520	4.5 J	270	5.9	1.6	3.1	0.25	0.5 U
	ATR-MW82-G022316	2/23/16	1.12E+06	2.00E-01 J	2.89E+03	3.76E+05	24,000	22	140	20 U	590	47 J	0.5 J	20	4	1.7	4.1	0.11 J	1.4
	ATR-MW82-G061616	6/16/16	NA	NA	NA	NA	25,000	81	0.31	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-OW1S-G082715	8/27/15	3.56E+05	< 5.00E-01	6.74E+03	1.48E+05	2,800	18	83	0.1 U	2.2	0.04 J	0.047 J	0.089	0.15 U	0.15 U	0.07 U	0.2 U	0.5 U
	ATR-OW1(28)-G022416	2/24/16	1.05E+05	< 5.00E-01	9.51E+03	3.72E+04	7,600	39	360	0.02 J	0.78	0.0096 J	0.024 J	0.014 J	0.1 U	0.1 U	0.1 U	0.2 U	0.2 U
	ATR-OU1(28)-G061616	6/16/16	NA	NA	NA	NA	14,000	58	320	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-OW1D-G082715	8/27/15	1.22E+06	< 5.00E-01	6.04E+05	3.44E+05	1,400	5.1	150	1 U	280	460	2.1	26	1.6	0.5 J	0.85	0.2 U	0.21 J
ATR-OW1(39)-G022916	2/29/16	2.28E+04	3.00E-01 J	4.22E+03	2.51E+03	23,000	95	1.8	0.05 J	10	28	0.17	0.49	0.55	0.13	0.57	0.2 U	0.035 J	
ATR-OU1(39)-G061616	6/16/16	NA	NA	NA	NA	20,000	160	0.012	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	



**Table 4 (continued)**  
**Summary of Dechlorinating Bacteria, Functional Genes, Dissolved Gases, and Volatile Fatty Acid Results**  
**Performed on the Groundwater Samples Collected from Performance Monitoring Wells**  
**TORX Facility, 4366 North Old US Highway 31, Rochester, Indiana**

Treatment Area	Sample ID	Sample Date	Dechlorinating Bacteria & Functional Genes				Dissolved Gases			Volatile Fatty Acids									
			DHC	tceA Reductase	bvcA Reductase	VC Reductase	Methane	Ethane	Ethene	Lactic Acid	Acetic Acid	Propionic Acid	Formic Acid	Butyric Acid	Pyruvic Acid	i-Pentanoic Acid	Pentanoic Acid	i-Hexanoic Acid	Hexanoic Acid
			cells/mL	cells/mL	cells/mL	cells/mL	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Zone B	MTR-MW14-G092712	9/27/12	1.08E+01	1.19E+01	< 5.00E-01	< 5.00E-01	62	0.31	0.18	0.10 U	0.070 U	0.050 U	0.10 U	0.050 U	0.15 U	0.15 U	0.070 U	0.050 U	0.050 U
	ATR-MW14-G100815	10/8/15	4.18E+02	3.00E-1 J	< 5.00E-01	5.00E+00	43	0.2	0.09 J	1.8	9.4	14	0.79	0.18	0.26	0.1 U	0.1 U	0.2 U	0.2 U
	ATR-MW14-G022916	2/29/16	1.98E+06	1.58E+04	1.80E+00	4.45E+05	440	0.94	120	2.0 U	130	210	1.4	4.9 J	1.7	0.39 J	1.7	0.013 J	0.049 J
	ATR-MW14-G061516	6/15/16	NA	NA	NA	NA	3,800	1.1	1,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-MW24 (24.9)-G100815	10/8/15	4.30E+02	< 5.00E-01	< 5.00E-01	< 5.00E-01	1.4	0.0039	0.0074	0.021 J	0.034 J	0.1 U	0.019 J	0.017 J	0.1 U	0.1 U	0.1 U	0.2 U	0.2 U
	ATR-MW24 (24.9)-G022916	2/29/16	1.12E+02	3.00E-01 J	< 5.00E-01	2.70E+00	7.0	0.0093 J	0.014 J	0.014 J	0.08 J	0.02 J	0.16	0.056 J	0.1 U	0.1 U	0.1 U	0.2 U	0.2 U
	ATR-MW24(24.9)-G061516	6/15/16	NA	NA	NA	NA	13	0.0069	0.0083	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-MW24 (55.9)-G100815	10/8/15	7.20E+02	4.00E-01 J	1.87E+01	< 5.00E-01	27	0.19	0.1	0.025 J	0.03 J	0.1 U	0.031 J	0.014 J	0.1 U	0.1 U	0.1 U	0.2 U	0.2 U
	ATR-MW24 (55.9)-G022916	2/29/16	9.32E+02	9.30E+00	5.10E+02	1.00E-01 J	25	0.19	0.076 J	0.013 J	0.025 J	0.0029 J	0.037 J	0.0074 J	0.1 U	0.1 U	0.1 U	0.2 U	0.2 U
	ATR-MW24(55.4)-G061516	6/15/16	NA	NA	NA	NA	19	0.15	0.089	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-OW2 (33)-G100815	10/8/15	1.72E+06	< 5.00E-01	1.76E+05	1.60E+05	1,800	24	370	2 U	64	52	0.3	6	0.5	0.23	0.4	0.2 U	0.2 U
	ATR-OW2 (33)-G022916	2/29/16	6.20E+05	< 5.00E-01	1.75E+05	1.36E+05	16,000	360	650	2.0 U	330	100	0.39 J	5.6 J	3.5	2.0	4.7	0.05 J	0.22
	ATR-OW2(33)-G061516	6/15/16	NA	NA	NA	NA	11,000	51	1,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-OW2 (53)-G100815	10/8/15	1.00E+04	< 5.00E-01	1.20E+00	1.92E+03	770	1.3	16	1.3 J	250	650	2.5	15	5.2	0.44 J	1.4	0.2 U	0.2 U
	ATR-OW2 (53)-G022916	2/29/16	7.80E+05	< 6.00E-01	2.48E+03	1.68E+05	6,500	16	1,000	20 U	480	390	1.3 J	2.1 J	4.9	4.2	1.5	0.023 J	0.043 J
	ATR-OU2(53)-G061616	6/16/16	NA	NA	NA	NA	24000	110	310	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-OW3 (35)-G100715	10/7/15	7.91E+02	< 5.00E-01	3.00E-01 J	4.00E-01 J	1,500	1.8	6.2	2 U	110	170	0.5 J	1.2	1.2	0.56	0.55	0.2 U	0.43
	ATR-OW3 (35)-G022916	2/29/16	2.99E+05	2.75E+03	1.53E+04	5.27E+04	24,000	5.9	16	0.031 J	32	0.41 J	0.052 J	0.015 J	0.038 J	0.10 U	0.10 U	0.20 U	0.20 U
	ATR-OW3(35)-G061516	6/15/16	NA	NA	NA	NA	13,000	24	23	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-OW3 (55)-G100715	10/7/15	1.90E+01	< 1.30E+00	< 1.30E+00	< 1.30E+00	44	2.7	0.54	80	330	34	120	8.7	24	0.38	0.1 U	0.2 U	0.29
ATR-OW3 (55)-G100715R	10/7/15	2.71E+01	< 2.00E+00	< 2.00E+00	< 2.00E+00	57	2.6	0.53	83	340	36	120	8.6	24	0.38	0.1 U	0.2 U	0.28	
ATR-OW3(55)-G022916	2/29/16	9.68E+03	1.56E+01	8.95E+02	9.60E+02	14,000	3.2	6.5	2.5	490	790	3.7 J	5.0 J	4.7	2.2	2.7	0.2 U	0.49	
ATR-OW3(55)-G022916R	2/29/16	3.81E+03	7.30E+00	3.13E+02	2.89E+02	17,000	3.4	8.5	0.98 J	420	710	2.2 J	5.0 J	4.4	2.1	2.7	0.2 U	0.50	
ATR-OW3(55)-G061516	6/15/16	NA	NA	NA	NA	24,000	33	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Zone C	ATR-MW15-G101315	10/13/15	5.05E+02	2.00E-01 J	7.30E+00	1.50E+00	2,400	5.2	260	26	180	55	56	0.62 J	1.5	0.1	0.18	0.2 U	0.2 U
	ATR-MW15-030116	3/1/16	1.95E+04	1.50E+02	4.14E+02	2.54E+02	1,500	11	170	0.19 J	1,200	1,100	4 J	42.0	3.7 J	1.2 J	6.5 J	2 U	0.59 J
	ATR-MW15-G061516	6/15/16	NA	NA	NA	NA	4,200	9.2	170	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	MTR-MW25(16.4)-G092712	9/27/12	2.11E+02	7.00E+00	5.00E-01	7.90E+00	1,300	20	13	0.030 J	0.038 J	0.050 U	0.068 J	0.050 U	0.15 U	0.15 U	0.070 U	0.050 U	0.050 U
	MTR-MW25(16.4)-101315	10/13/15	8.42E+03	4.90E+00	2.83E+03	7.42E+02	1,200	13	40	0.027 J	0.035 J	0.1 U	0.036 J	0.02 J	0.1 U	0.1 U	0.1 U	0.2 U	0.2 U
	ATR-MW25(16.4)-030116	3/1/16	1.06E+06	1.16E+03	2.38E+04	5.28E+04	1,700	8.5	1,000	0.44 J	51	4.5 J	0.16 J	0.22 J	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U
	ATR-MW25(16.4)-G061516	6/15/16	NA	NA	NA	NA	12,000	140	920	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-MW25(32.6)-G101315	10/13/15	3.26E+02	8.00E-01	1.34E+01	4.50E+00	3,100	18	370	0.02 J	1.4	0.15	1.5	0.023 J	0.1 U	0.1 U	0.1 U	0.2 U	0.2 U
	ATR-MW25(32.6)-G030116	3/1/16	6.51E+05	4.77E+02	1.73E+04	2.75E+04	10,000	45	1,400	0.15 J	780	730	2.6 J	33	5.6 J	1.9 J	35	0.18 J	4.2
	ATR-MW25(32.6)-G061516	6/15/16	NA	NA	NA	NA	18,000	70	1,200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-MW25(45.2)-G101315	10/13/15	1.70E+02	< 5.00E-01	6.00E-01	< 5.00E-01	600	4.5	12	0.017 J	0.024 J	0.1 U	0.056 J	0.0091 J	0.1 U	0.1 U	0.1 U	0.2 U	0.2 U
	ATR-MW25(45.2)-G030116	3/1/16	3.08E+04	2.10E+00	6.35E+03	2.10E+00	1,100	10	84	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
ATR-MW25(45.2)-G061516	6/15/16	NA	NA	NA	NA	3,000	8.6	96	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	

Table 4 (continued)  
 Summary of Dechlorinating Bacteria, Functional Genes, Dissolved Gases, and Volatile Fatty Acid Results  
 Performed on the Groundwater Samples Collected from Performance Monitoring Wells  
 TORX Facility, 4366 North Old US Highway 31, Rochester, Indiana

Treatment Area	Sample ID	Sample Date	Dechlorinating Bacteria & Functional Genes				Dissolved Gases			Volatile Fatty Acids										
			DHC	tceA Reductase	bvcA Reductase	VC Reductase	Methane	Ethane	Ethene	Lactic Acid	Acetic Acid	Propionic Acid	Formic Acid	Butyric Acid	Pyruvic Acid	i-Pentanoic Acid	Pentanoic Acid	i-Hexanoic Acid	Hexanoic Acid	
			cells/mL	cells/mL	cells/mL	cells/mL	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Zone C	ATR-OW4(35)-G101315	10/13/15	5.00E+00	< 2.30E+00	< 2.30E+00	< 2.30E+00	380	22	6.5	55	400	94	350	6.1	11	0.064 J	1.6	0.2 U	0.66	
	ATR-OW4(35)-G030116	3/1/16	3.71E+03	1.37E+01	4.01E+02	4.67E+01	6,600	65	29	0.18 J	900	610	1.8 J	36	4.6 J	2.6	17	2.0 U	2.5	
	ATR-OW4(35)-G061516	6/15/16	NA	NA	NA	NA	30,000	7.5	730	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	ATR-OW4(54)-G101315	10/13/15	1.62E+02	< 5.00E-01	< 5.00E-01	< 5.00E-01	120	0.22	0.052 J	0.2 U	1.3	0.36	0.034 J	0.031 J	0.1 U	0.1 U	0.1 U	0.2 U	0.2 U	
	ATR-OW4(54)-G030116	3/1/16	4.52E+02	2.00E-01 J	7.00E-01	4.00E-01 J	260	0.31	0.094 J	0.52 J	8.0	5.2	0.15 J	0.14 J	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	
	ATR-OW4(54)-G061516	6/15/16	NA	NA	NA	NA	730	0.24	0.13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zone D	ATR-MW16-G100715	10/7/15	4.06E+04	3.71E+01	9.62E+02	5.56E+03	8,400	45	18	0.026 J	0.21	0.012 J	0.042 J	0.02 J	0.1 U	0.1 U	0.1 U	0.2 U	0.2 U	
	ATR-MW16-G030116	3/1/16	5.64E+04	5.01E+01	3.18E+03	2.05E+03	4.6	0.026 J	0.021 J	0.015 J	0.34	0.0056 J	0.025 J	0.0087 J	0.1 U	0.1 U	0.1 U	0.2 U	0.2 U	
	ATR-MW16-G061416	6/14/16	NA	NA	NA	NA	12000	100	88	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-MW17-G100715	10/7/15	3.00E-01 J	< 5.00E-01	< 5.00E-01	< 5.00E-01	3.8	0.041	0.016	0.026 J	0.037 J	0.1 U	0.033 J	0.017 J	0.1 U	0.1 U	0.1 U	0.2 U	0.2 U	
	ATR-MW17-G030116	3/1/16	9.00E-01	<5.00E-01	<5.00E-01	<5.00E-01	11,000	330	150	0.0085 J	0.028 J	0.0031 J	0.028 J	0.0085 J	0.1 U	0.1 U	0.1 U	0.2 U	0.2 U	
	ATR-MW17-G061416	6/14/16	NA	NA	NA	NA	3.1	0.046	0.012	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	MTR-MW26(17.5)-G092712	9/27/12	2.70E+00	< 5.00E-01	2.00E-01 J	< 5.00E-01	790	25	3.2	0.10 U	0.0083 J	0.050 U	0.037 J	0.050 U	0.15 U	0.15 U	0.070 U	0.050 U	0.050 U	
	MTR-MW26(17.5)-G030613	3/6/13	NA	NA	NA	NA	NA	NA	NA	0.036 J	0.91	0.15	0.047 J	0.050 U	0.15 U	0.15 U	0.070 U	0.050 U	0.11	
	MTR-MW26(17.5)-G050313	5/3/13	3.33E+04*	7.19E+04*	2.39E+03*	4.05E+02*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-MW26 (17.5)-G100715	10/7/15	1.20E+06	2.30E+02	1.64E+05	2.45E+05	4,100	27	260	2 U	64	31	0.4	1.3	0.22	0.18	0.2	0.2 U	0.3	
	ATR-MW26(17.5)-G030116	3/1/16	1.36E+05	5.92E+02	1.21E+04	2.00E+03	15,000	430	190	0.44 J	34	2.3	0.15 J	0.12 J	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	
	ATR-MW26(17.5)-G061416	6/14/16	NA	NA	NA	NA	20,000	340	200	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	MTR-MW26(28.8)-G092712	9/27/12	1.10E+00	< 5.00E-01	< 5.00E-01	< 5.00E-01	120	2.6	0.043	0.036 J	0.070 U	0.050 U	0.069 J	0.050 U	0.15 U	0.15 U	0.070 U	0.050 U	0.050 U	
	MTR-MW26(28.8)-G092712R	9/27/12	NA	NA	NA	NA	110	2.5	0.037	0.10 U	0.012 J	0.050 U	0.055 J	0.050 U	0.15 U	0.15 U	0.070 U	0.050 U	0.050 U	
	ATR-MW26(28.8)-G030613	3/6/13	NA	NA	NA	NA	NA	NA	NA	1.0 U	170	100	1.4	1.7	0.84	0.54	0.16	0.050 U	0.10 U	
	ATR-MW26(28.8)-G050313	5/3/13	1.65E+04*	2.73E+03*	8.12E+03*	5.73E+01*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-MW26 (28.8)-G100715	10/7/15	6.86E+04	1.05E+02	2.56E+03	7.06E+03	15,000	62	8.6	2 U	25	48	0.21	0.79	0.24	0.098 J	0.2	0.2 U	0.2 U	
	ATR-MW26(28.8)-030116	3/1/16	5.40E+03	1.56E+01	2.85E+02	6.53E+01	31,000	36	0.0086 J	0.011 J	4.9	2.5	0.16	0.018 J	0.045 J	0.1 U	0.0097 J	0.2 U	0.2 U	
	ATR-MW26(28.8)-G061416	6/14/16	NA	NA	NA	NA	28,000	57	0.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-MW26 (58.8)-G100715	10/7/15	3.96E+02	< 5.00E-01	9.00E-01	3.00E-01 J	77	1.3	0.66	0.017 J	0.026 J	0.1 U	0.023 J	0.0074 J	0.1 U	0.1 U	0.1 U	0.2 U	0.2 U	
	ATR-MW26(58.8)-G030116	3/1/16	3.63E+03	7.98E+01	1.40E+00	7.40E+00	240	1.8	0.58	0.47 J	54	62	0.46 J	0.46 J	0.27 J	1.0 U	0.14 J	2.0 U	2.0 U	
	ATR-MW26(58.2)-G061416	6/14/16	NA	NA	NA	NA	810	2.2	1.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ZVI-2(17.5)-G121812	12/18/12	1.00E+00	1.00E+00	1.00E+00	1.00E+00	NA	NA	NA	1.0 U	22	18	0.36	0.088	0.034 J	0.15 U	0.07 U	0.05 U	0.1 U	
	ZVI-2(17.5)-G030613	3/6/13	1.15E+01*	8.83E+00*	< 4.00E-01*	< 4.00E-01*	930	16	4.6	0.067 J	0.23	0.0096 J	0.023 J	0.033 J	0.15 U	0.15 U	0.070 U	0.050 U	0.10 U	
	ZVI-2(17.5)-G050313	5/3/13	1.34E+03*	5.90E+03*	1.70E+00*	5.80E+00*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-ZVI2 (17.5)-G100715	10/7/15	8.61E+05	6.91E+02	3.74E+04	9.92E+04	3,200	38	320	2 U	34	15	0.22	0.36	0.086 J	0.11	0.09 J	0.2 U	0.2 U	
	ATR-ZVI2(17.5)-030216	3/2/16	9.04E+04	4.41E+02	7.59E+03	2.09E+04	13,000	300	180	0.016 J	0.27	0.0035 J	0.047 J	0.0079 J	0.1 U	0.1 U	0.1 U	0.2 U	0.2 U	
	ATR-ZVI2(17.5)-G061416	6/14/16	NA	NA	NA	NA	18,000	350	110	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ZVI-2(32.5)-G121812	12/18/12	1.00E+00	1.00E+00	1.00E+00	1.00E+00	NA	NA	NA	37	260	98	1.2	11	0.52 J	0.15 U	0.10	0.05 U	0.1 U	
	ZVI-2(32.5)-G030613	3/6/13	2.00E+00*	2.70E+00*	< 1.40E+00*	< 1.40E+00*	650	15	10	0.044 J	31	19	0.32 J	0.27 J	0.15	0.20	0.040 J	0.050 U	0.10 U	
ZVI-2(32.5)-G030613	5/3/13	1.56E+04*	7.94E+03*	8.76E+01*	7.90E+01*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
ATR-ZVI2 (32.5)-G100715	10/7/15	2.56E+05	2.70E+02	1.43E+01	3.23E+04	1,000	6	14	0.091 J	2.4	1.6	0.043 J	0.02 J	0.1 U	0.1 U	0.1 U	0.2 U	0.2 U		
ATR-ZVI2(32.5)-G030116	3/1/16	2.50E+05	6.84E+02	2.59E+01	8.44E+03	5,200	5.7	48	0.009 J	7.4	6.2	0.16	0.02 J	0.017 J	0.1 U	0.0068 J	0.2 U	0.2 U		
ATR-ZVI2(32.5)-G061416	6/14/16	NA	NA	NA	NA	8,300	44	54	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	

**Table 4 (continued)**  
**Summary of Dechlorinating Bacteria, Functional Genes, Dissolved Gases, and Volatile Fatty Acid Results**  
**Performed on the Groundwater Samples Collected from Performance Monitoring Wells**  
**TORX Facility, 4366 North Old US Highway 31, Rochester, Indiana**

Zone D	ATR-OW5 (16)-G100715	10/7/15	2.06E+03	1.30E+00	6.00E+00	2.02E+01	350	4	9.8	2 U	120	180	0.9	2.3	1	0.75	0.066 J	0.2 U	0.2 U
	ATR-OW5(16)-G030116	3/1/16	1.54E+06	6.45E+03	3.01E+03	6.32E+04	2,400	5.1	180	0.01 J	12	7	0.21	0.046 J	0.042 J	0.1 U	0.012 J	0.2 U	0.2 U
	ATR-OW5(16)-G061416	6/14/16	NA	NA	NA	NA	5,200	2.9	160	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-OW5 (35)-G100715	10/7/15	4.80E+03	2.00E-01 J	1.30E+00	3.60E+00	1,200	3.4	56	2 U	85	330	0.83 J	1.2	0.72 J	0.081 J	0.075 J	0.2 U	0.2 U
	ATR-OW5(35)-G030116	3/1/16	2.48E+06	7.78E+03	3.34E+04	8.55E+04	6,700	11	130	0.3 J	280	120	0.45 J	1.8	2.1	0.75 J	0.8 J	2.0 U	2 U
	ATR-OW5(35)-G061416	6/14/16	NA	NA	NA	NA	22,000	71	170	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-OW5 (54)-G100715	10/7/15	1.94E+03	< 5.00E-01	4.00E-01 J	5.39E+01	610	2.7	11	0.031 J	0.056 J	0.047 J	0.028 J	0.012 J	0.1 U	0.1 U	0.1 U	0.2 U	0.2 U
	ATR-OW5(54)-G030116	3/1/16	1.50E+06	7.07E+02	5.87E+02	2.42E+05	1,100	7.5	180	0.12 J	550	760	2.3 J	2.7 J	1.6 J	1.2	0.84 J	2.0 U	2.0 U
	ATR-OW5(45)-G061416	6/14/16	NA	NA	NA	NA	2,900	14	310	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Notes: Blue text is performance monitoring data  
 NA - Not Analyzed  
 NM - Not Measured  
 J - Estimated concentration, analyte detected below quantitation limit  
 U - Analyzed but not detected above the MDL  
 cells/mL - cells per milliliter

mg/L - milligram per liter  
 µg/L - micro grams per liter  
**Bold** - Indicates measured or laboratory detection  
 DHC - Dehalococcoides Bacteria  
 \*DHC Sample filtered by Microbial Insights at the laboratory

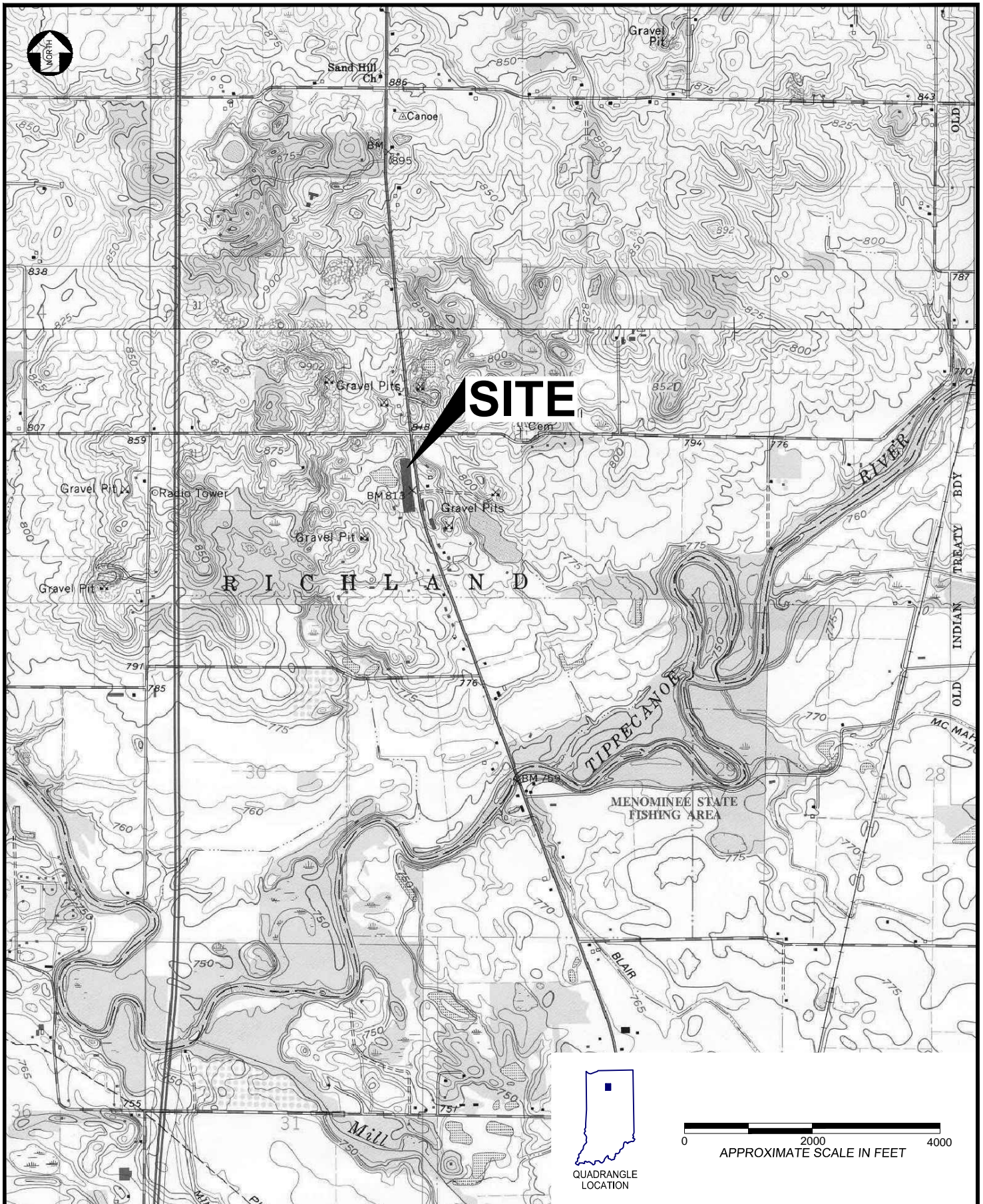
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TORX Facility Remediation  
Report of Performance Monitoring

## FIGURES





QUADRANGLE LOCATION



APPROXIMATE SCALE IN FEET

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 RLB Drawings\TFS Topo.dwg  
 APPROVED BY DATE  
 LF 11/10/2016  
 SOURCE USGS topographic quadrangles of  
 Argos, IN, 1994 and Rochester, IN, 1992.  
 PROJECT NO. SCALE  
 3359 15 1040 SEE ABOVE

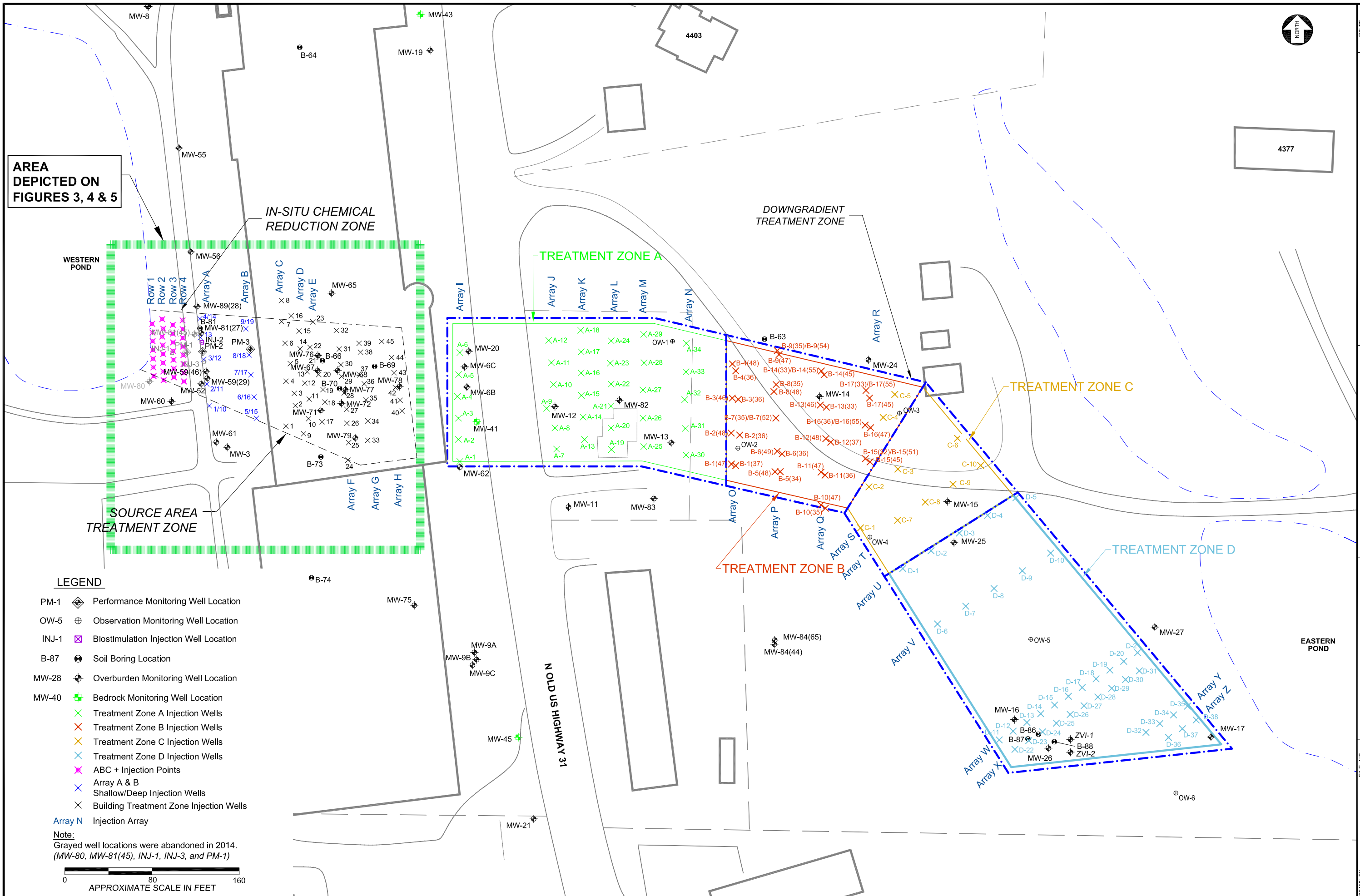
**FORMER TORX FACILITY**  
**4366 NORTH OLD US HIGHWAY 31**  
**ROCHESTER, INDIANA**



**SITE**  
**LOCATION**  
**MAP**

FIGURE  
**1**  
 SHEET 1 of 1





AREA  
DEPICTED ON  
FIGURES 3, 4 & 5

**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

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



FIGURE **2**  
SHEET 1 of 1

**TREATMENT ZONES, ARRAYS AND WELL LOCATIONS**

amec foster wheeler

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

FILE NO. P:\Tektron\TFS\Drawings\Temp-Perf Mon 2016.dwg  
DATE 11/10/2016  
APPROVED BY PJS  
SOURCE Wells surveyed by Territorial Engineering, Fulton County, IN GIS, 2005.  
PROJECT NO. 3.359.15.1040  
SCALE SEE ABOVE



WESTERN  
POND

MW-56

**ZVI INJECTION INTERVALS  
(MSL (ft.) NAVD 88)**

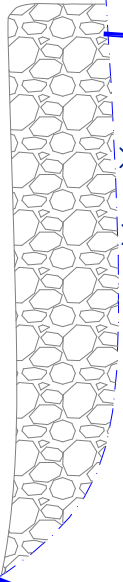
**ROWS 1 & 2**

755-758	758-761
761-764	764-767
767-770	770-773
773-776	

**ROWS 3 & 4**

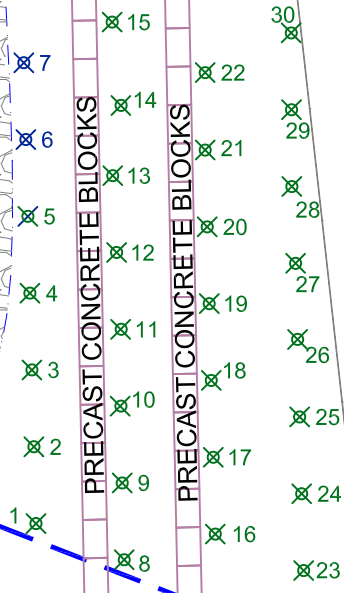
755-758	758-761
761-764	764-767
767-770	770-773
773-776	776-779

ROW 1  
ROW 2  
ROW 3  
ROW 4



PRECAST CONCRETE BLOCKS

PRECAST CONCRETE BLOCKS



MW-89(28)

B-81

MW-81(27)

INJ-2

PM-2

MW-59(46)

MW-59(29)

MW-52

IN-SITU  
CHEMICAL  
REDUCTION  
TREATMENT  
ZONE

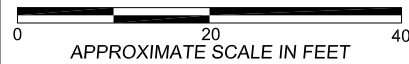
PM-3

MW-60

ACCESS ROAD

MW-61

EQUIPMENT  
STAGING AREA



**LEGEND**

- PM-1 PERFORMANCE MONITORING WELL LOCATION
- INJ-1 BIOSTIMULATION INJECTION WELL LOCATION
- B-87 SOIL BORING LOCATION OVERBURDEN
- MW-28 MONITORING WELL LOCATION
- ABC + INJECTION POINTS
- GRAVEL BACKFILL AREA

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 RLB Drawings\TFS InSitu Inj Pts.dwg  
 APPROVED BY DATE  
 PJS 12/13/2016  
 SOURCE Wells surveyed by Territorial Engineering, 2009;  
 Fulton County, IN GIS, 2005; historical maps from Textron  
 PROJECT NO. SCALE  
 3359 15 1040 SEE ABOVE

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

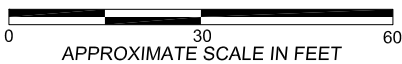
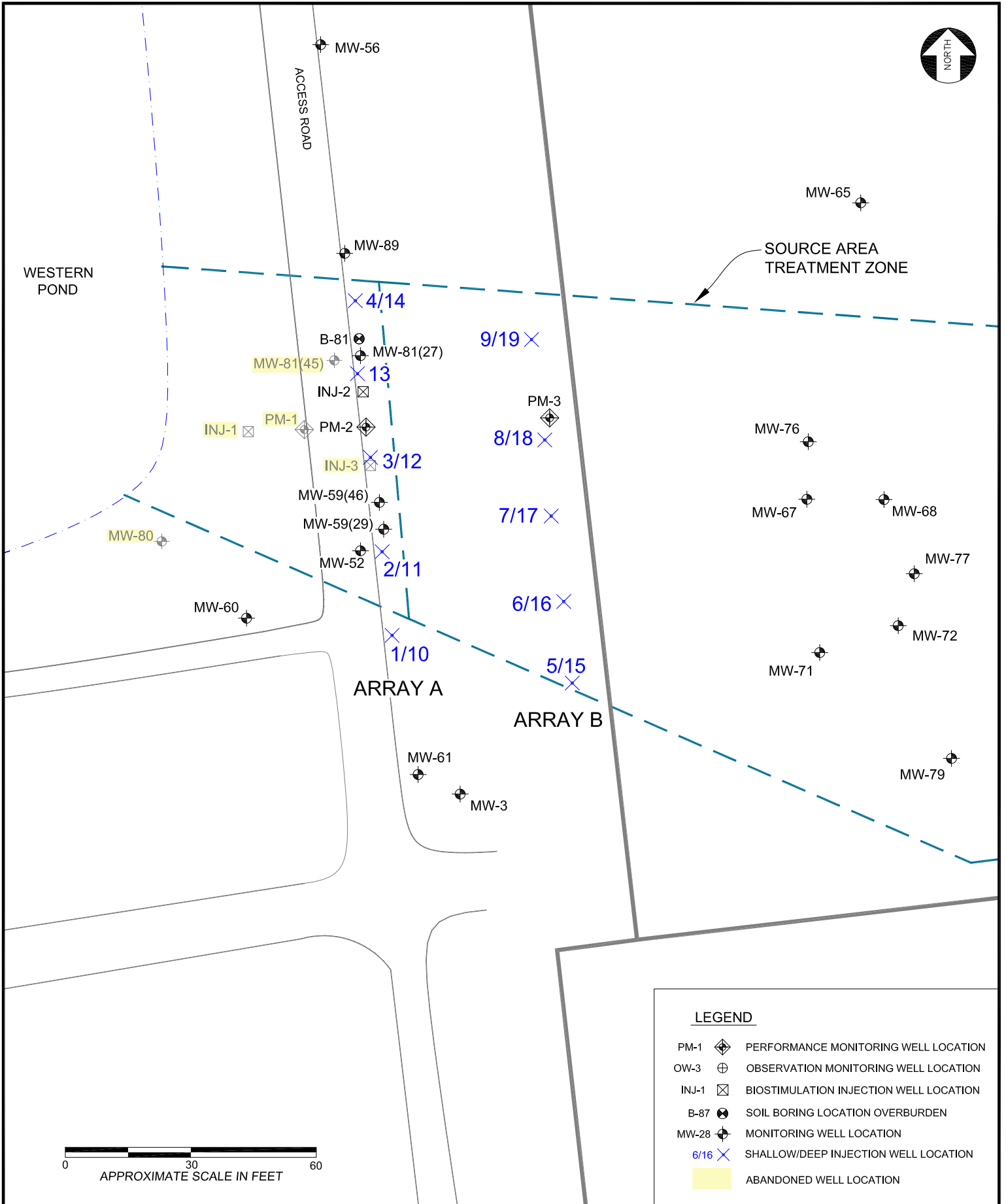


**IN-SITU CHEMICAL  
REDUCTION INJECTION  
POINTS AND  
MONITORING WELLS**








FIGURE

**3**

SHEET 1 of 1



**LEGEND**

- PM-1  PERFORMANCE MONITORING WELL LOCATION
- OW-3  OBSERVATION MONITORING WELL LOCATION
- INJ-1  BIOSTIMULATION INJECTION WELL LOCATION
- B-87  SOIL BORING LOCATION OVERBURDEN
- MW-28  MONITORING WELL LOCATION
- 6/16  SHALLOW/DEEP INJECTION WELL LOCATION
-  ABANDONED WELL LOCATION

DRAWN BY P:\Textron\TFS\RLB	FILE NO.
Drawings\TFS SA Outside Bld Inj Pts.dwg	
APPROVED BY PJS	DATE 12/13/2016
SOURCE Wells surveyed by Territorial Engineering, 2009; Fulton County, IN GIS, 2005; historical maps from Textron	
PROJECT NO. 3359 15 1040	SCALE SEE ABOVE

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



**MONITORING WELLS AND INJECTION WELLS IN AREA BEHIND BUILDING**

FIGURE





**4**

SHEET 1 of 1






**LEGEND**

-  9 INJECTION POINT LOCATION
-  B-73 SOIL BORING LOCATION
-  MW-79 MONITORING WELL LOCATION
-  PM-3 PERFORMANCE MONITORING WELL LOCATION
- 19 COLUMN / ROW DESIGNATION



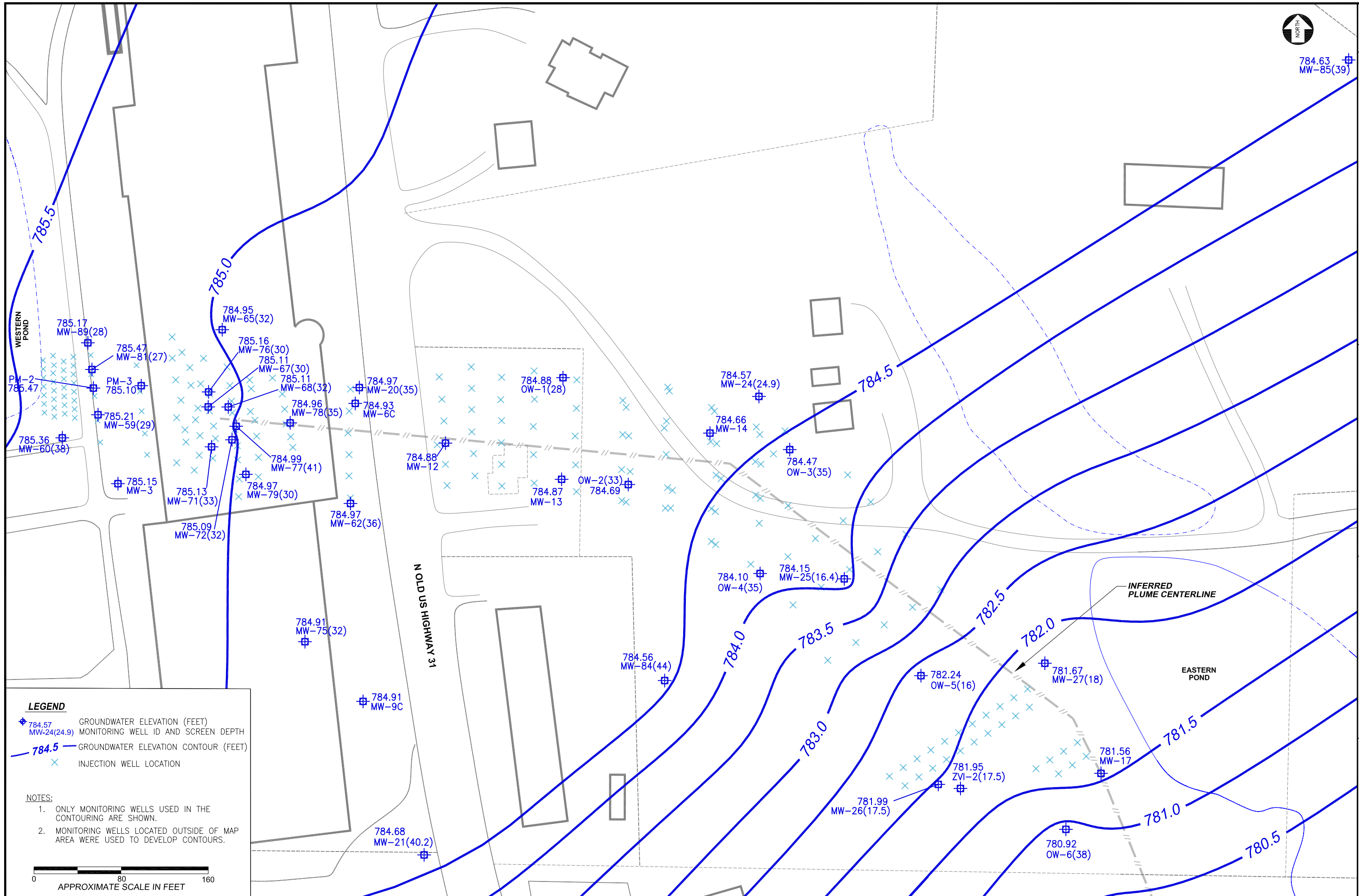
DRAWN BY P:\Textron\TFS\ FILE NO.  
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 APPROVED BY DATE  
 LF 12/13/2016  
 SOURCE Wells surveyed by Territorial Engineering;  
 Fulton County, IN GIS, 2005; historical maps from Textron  
 PROJECT NO. SCALE  
 3359 15 1040 SEE ABOVE

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

amec foster wheeler 

**MONITORING WELLS  
 AND INJECTION WELLS  
 IN SOURCE AREA  
 INSIDE BUILDING**

FIGURE  
**5**  
 SHEET 1 of 1



**LEGEND**

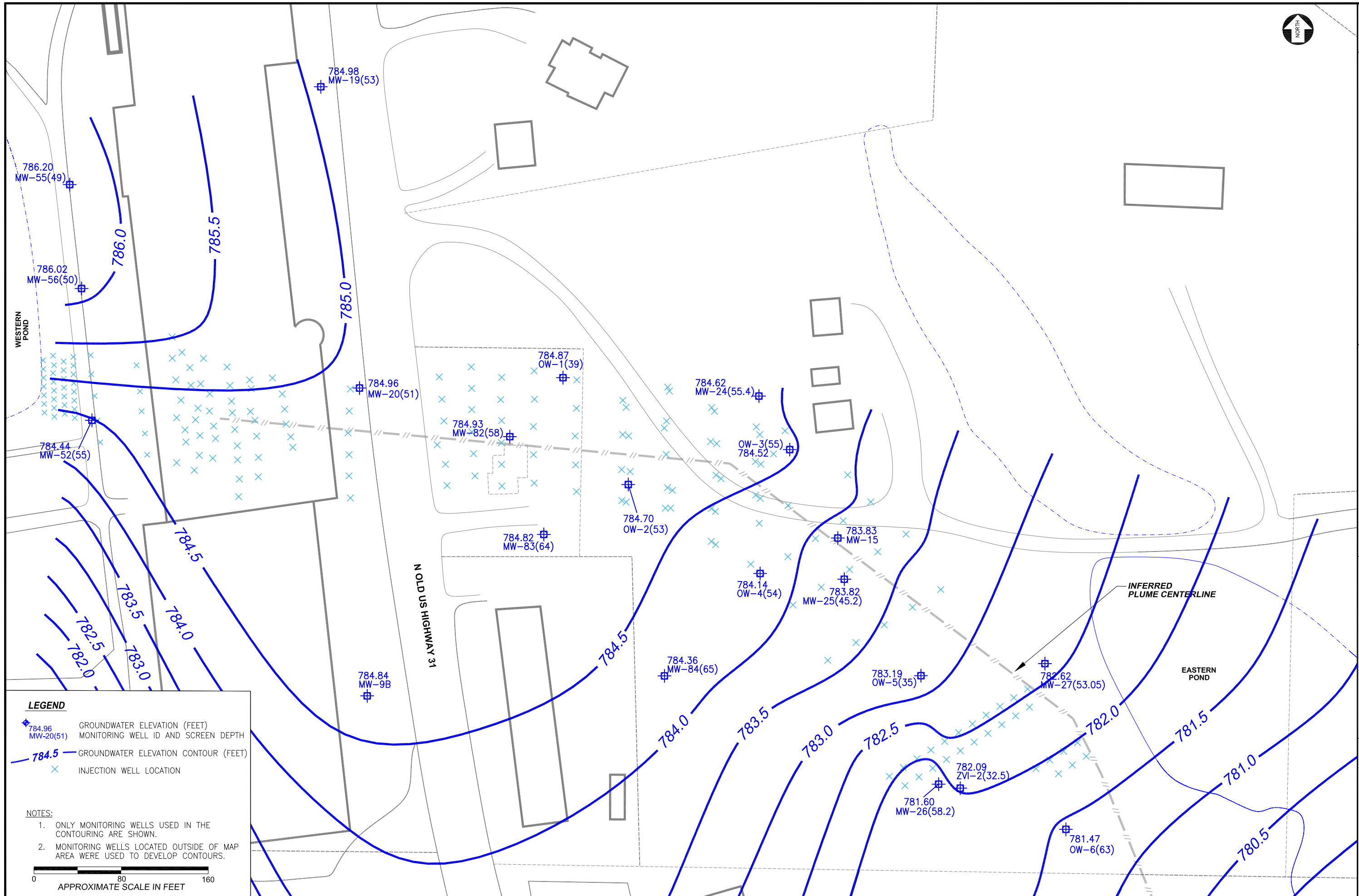
- 784.57 MW-24(24.9) GROUNDWATER ELEVATION (FEET)  
MONITORING WELL ID AND SCREEN DEPTH
- 784.5 GROUNDWATER ELEVATION CONTOUR (FEET)
- INJECTION WELL LOCATION

**NOTES:**

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



FIGURE	<b>6</b>
<b>GROUNDWATER CONTOUR MAP</b> <b>SHALLOW OVERBURDEN WELLS</b> 13 June 2016	
<b>TORX FACILITY</b> <b>4366 NORTH OLD US HIGHWAY 31</b> <b>ROCHESTER, INDIANA</b>	
DRAWN BY	P:\texton\JFS
APPROVED BY	RLB
FILE NO.	Drawings\GW Contours 2014_RA.dwg
DATE	11/10/2016
SCALE	SEE ABOVE
SOURCE	Wells surveyed by Territorial Engineering; Fulton County, IN GIS, 2005.
PROJECT NO.	3359.15 1040
SHEET	1 of 1



**LEGEND**

- 784.96 MW-20(51) GROUNDWATER ELEVATION (FEET)  
MONITORING WELL ID AND SCREEN DEPTH
- 784.5 GROUNDWATER ELEVATION CONTOUR (FEET)
- INJECTION WELL LOCATION

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

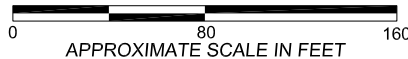
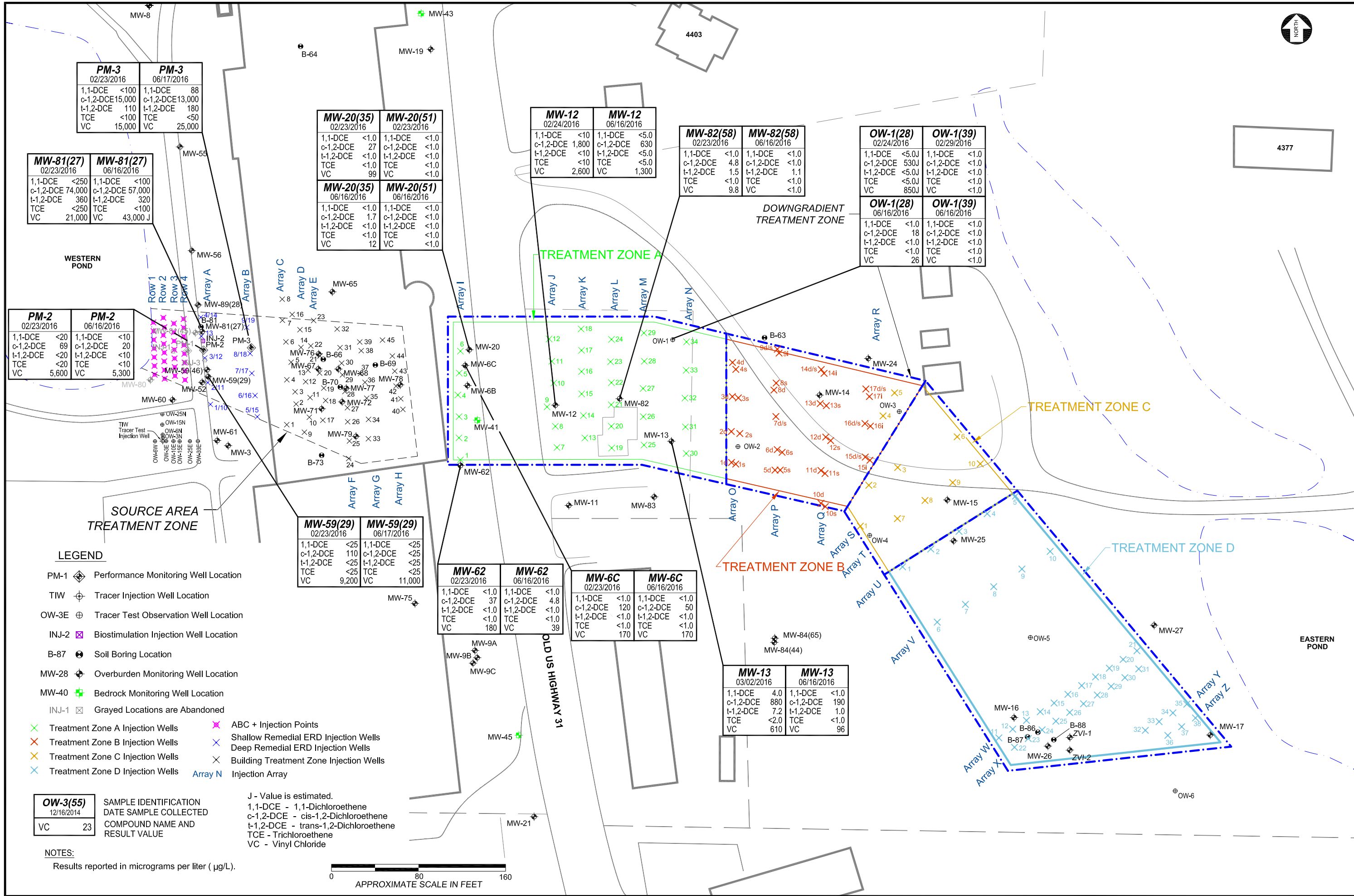
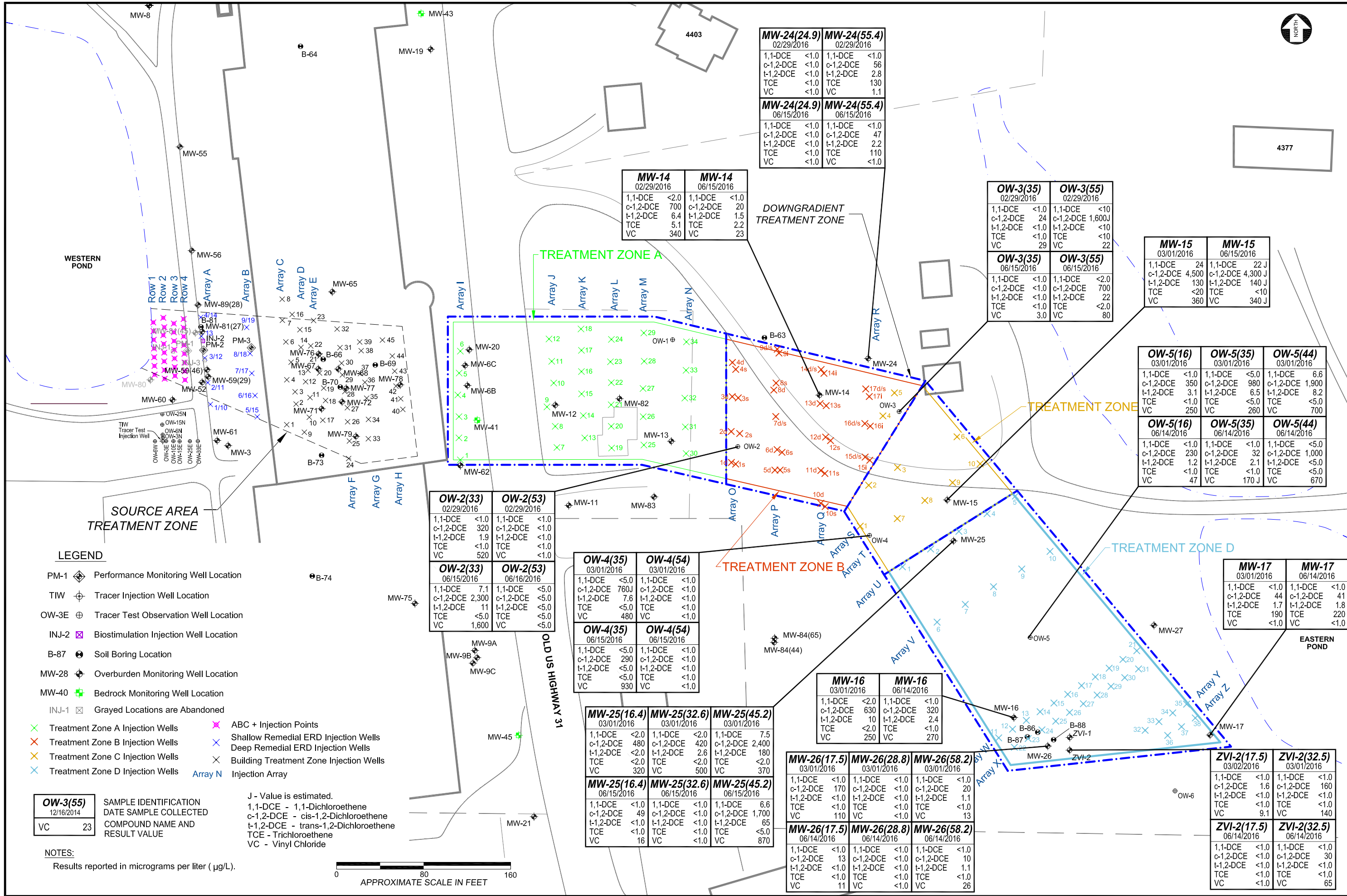


FIGURE	7
<p><b>GROUNDWATER CONTOUR MAP</b>  <b>INTERMEDIATE OVERBURDEN WELLS</b>          13 June 2016</p>	
<p><b>TORX FACILITY</b>          4366 NORTH OLD US HIGHWAY 31          ROCHESTER, INDIANA</p>	
DRAWN BY	P:\Tektron\TFS
RLB	Drawings\GW Contours 2014_RA.dwg
APPROVED BY	DATE
LF	11/10/2016
SOURCE Wells surveyed by Territorial Engineering; Fulton County, IN GIS, 2005.	
PROJECT NO.	SCALE
3359_15 1040	SEE ABOVE







<b>MW-24(24.9)</b> 02/29/2016	<b>MW-24(55.4)</b> 02/29/2016
1,1-DCE <1.0	1,1-DCE <1.0
c-1,2-DCE <1.0	c-1,2-DCE 56
t-1,2-DCE <1.0	t-1,2-DCE 2.8
TCE <1.0	TCE 130
VC <1.0	VC 1.1

<b>MW-14</b> 02/29/2016	<b>MW-14</b> 06/15/2016
1,1-DCE <2.0	1,1-DCE <1.0
c-1,2-DCE 700	c-1,2-DCE 20
t-1,2-DCE 6.4	t-1,2-DCE 1.5
TCE 5.1	TCE 2.2
VC 340	VC 23

<b>OW-3(35)</b> 02/29/2016	<b>OW-3(55)</b> 02/29/2016
1,1-DCE <1.0	1,1-DCE <10
c-1,2-DCE 24	c-1,2-DCE 1,600J
t-1,2-DCE <1.0	t-1,2-DCE <10
TCE <1.0	TCE <10
VC 29	VC 22

<b>MW-15</b> 03/01/2016	<b>MW-15</b> 06/15/2016
1,1-DCE 24	1,1-DCE 22 J
c-1,2-DCE 4,500	c-1,2-DCE 4,300 J
t-1,2-DCE 130	t-1,2-DCE 140 J
TCE <20	TCE <10
VC 360	VC 340 J

<b>OW-5(16)</b> 03/01/2016	<b>OW-5(35)</b> 03/01/2016	<b>OW-5(44)</b> 03/01/2016
1,1-DCE <1.0	1,1-DCE <5.0	1,1-DCE 6.6
c-1,2-DCE 350	c-1,2-DCE 980	c-1,2-DCE 1,900
t-1,2-DCE 3.1	t-1,2-DCE 6.5	t-1,2-DCE 8.2
TCE <1.0	TCE <5.0	TCE <5.0
VC 250	VC 260	VC 700

<b>OW-2(33)</b> 02/29/2016	<b>OW-2(53)</b> 02/29/2016
1,1-DCE <1.0	1,1-DCE <1.0
c-1,2-DCE 320	c-1,2-DCE <1.0
t-1,2-DCE 1.9	t-1,2-DCE <1.0
TCE <1.0	TCE <1.0
VC 520	VC <1.0

<b>OW-4(35)</b> 03/01/2016	<b>OW-4(54)</b> 03/01/2016
1,1-DCE <5.0	1,1-DCE <1.0
c-1,2-DCE 760J	c-1,2-DCE <1.0
t-1,2-DCE 7.6	t-1,2-DCE <1.0
TCE <5.0	TCE <1.0
VC 480	VC <1.0

<b>MW-16</b> 03/01/2016	<b>MW-16</b> 06/14/2016
1,1-DCE <2.0	1,1-DCE <1.0
c-1,2-DCE 630	c-1,2-DCE 320
t-1,2-DCE 10	t-1,2-DCE 2.4
TCE <2.0	TCE <1.0
VC 250	VC 270

<b>MW-25(16.4)</b> 03/01/2016	<b>MW-25(32.6)</b> 03/01/2016	<b>MW-25(45.2)</b> 03/01/2016
1,1-DCE <2.0	1,1-DCE <2.0	1,1-DCE 7.5
c-1,2-DCE 480	c-1,2-DCE 420	c-1,2-DCE 2,400
t-1,2-DCE <2.0	t-1,2-DCE 2.6	t-1,2-DCE 180
TCE <2.0	TCE <2.0	TCE <2.0
VC 320	VC 500	VC 370

<b>MW-26(17.5)</b> 03/01/2016	<b>MW-26(28.8)</b> 03/01/2016	<b>MW-26(58.2)</b> 03/01/2016
1,1-DCE <1.0	1,1-DCE <1.0	1,1-DCE <1.0
c-1,2-DCE 170	c-1,2-DCE <1.0	c-1,2-DCE 20
t-1,2-DCE <1.0	t-1,2-DCE <1.0	t-1,2-DCE 1.1
TCE <1.0	TCE <1.0	TCE <1.0
VC 110	VC <1.0	VC 13

<b>MW-17</b> 03/01/2016	<b>MW-17</b> 06/14/2016
1,1-DCE <1.0	1,1-DCE <1.0
c-1,2-DCE 44	c-1,2-DCE 41
t-1,2-DCE 1.7	t-1,2-DCE 1.8
TCE 190	TCE 220
VC <1.0	VC <1.0

<b>ZVI-2(17.5)</b> 03/02/2016	<b>ZVI-2(32.5)</b> 03/01/2016
1,1-DCE <1.0	1,1-DCE <1.0
c-1,2-DCE 1.6	c-1,2-DCE 160
t-1,2-DCE <1.0	t-1,2-DCE <1.0
TCE <1.0	TCE <1.0
VC 9.1	VC 140



WESTERN POND

MW-76		MW-76	
03/15/2016		06/20/2016	
1,1-DCE	21	1,1-DCE	31
c-1,2-DCE	5,500	c-1,2-DCE	8,700
t-1,2-DCE	50	t-1,2-DCE	82
TCE	<20	TCE	<1.0
VC	6,000	VC	22,000

MW-68		MW-68	
03/15/2016		06/17/2016	
1,1-DCE	9.5	1,1-DCE	2.1
c-1,2-DCE	660J	c-1,2-DCE	190
t-1,2-DCE	14	t-1,2-DCE	5.0
TCE	<1.0	TCE	<1.0
VC	100	VC	89

MW-78		MW-78	
03/15/2016		06/20/2016	
1,1-DCE	<1.0	1,1-DCE	<1.0
c-1,2-DCE	1.6	c-1,2-DCE	2.9
t-1,2-DCE	<1.0	t-1,2-DCE	<1.0
TCE	<1.0	TCE	<1.0
VC	8.8	VC	<1.0

MW-67		MW-67	
03/15/2016		06/20/2016	
1,1-DCE	1.4	1,1-DCE	<1.0
c-1,2-DCE	240	c-1,2-DCE	160 J
t-1,2-DCE	4.2	t-1,2-DCE	2.1 J
TCE	1.8	TCE	<1.0
VC	130	VC	64 J

MW-71		MW-71	
03/15/2016		06/20/2016	
1,1-DCE	<5.0	1,1-DCE	<1.0
c-1,2-DCE	110	c-1,2-DCE	26
t-1,2-DCE	<5.0	t-1,2-DCE	<1.0
TCE	<5.0	TCE	<1.0
VC	1,000	VC	300

MW-72		MW-72	
03/15/2016		06/20/2016	
1,1-DCE	<1.0	1,1-DCE	<1.0
c-1,2-DCE	48	c-1,2-DCE	16
t-1,2-DCE	<1.0	t-1,2-DCE	<1.0
TCE	<1.0	TCE	<1.0
VC	88	VC	31

MW-77		MW-77	
03/15/2016		06/20/2016	
1,1-DCE	<1.0	1,1-DCE	<1.0
c-1,2-DCE	1.8	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	6.7	VC	2.7

**LEGEND**

- PM-1 Performance Monitoring Well Location
- INJ-2 Biostimulation Injection Well Location
- B-87 Soil Boring Location
- MW-28 Overburden Monitoring Well Location
- MW-40 Bedrock Monitoring Well Location
- INJ-1 Grayed Locations are Abandoned

- Treatment Zone A Injection Wells
- ABC + Injection Points
- Shallow Remedial ERD Injection Wells
- Deep Remedial ERD Injection Wells
- Building Treatment Zone Injection Wells

<b>OW-3(55)</b>	SAMPLE IDENTIFICATION
12/16/2014	DATE SAMPLE COLLECTED
VC	COMPOUND NAME AND RESULT VALUE
23	

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

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



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APPROVED BY PJS	DATE 11/10/2016	
SOURCE Wells surveyed by Territorial Engineering; Fulton County, IN GIS, 2005.		
PROJECT NO. 3359 15 1040	SCALE SEE ABOVE	

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



**PERFORMANCE MONITORING  
 VOLATILE ORGANIC  
 COMPOUNDS  
 SOURCE AREA  
 INSIDE BUILDING**



Textron, Inc.  
TORX Facility Remediation  
Report of Performance Monitoring

## **APPENDIX A**

### **GROUNDWATER SAMPLE COLLECTION FIELD LOGS**







## GROUND-WATER/SURFACE WATER SAMPLING FORM

Project Location TFS Rochester Surface Water  Groundwater  Sample Identification ATR-001(39)  
 Project Number 3359-15-1040 (Use: Well name)  
 Sampling Personnel SP Date 6-16-16 Start Time 1000 Weather 74° Sunny

### MEASUREMENT SUMMARY:

Measuring Point TC Depth to Water 20.28 Depth to Product \_\_\_\_\_ Product Thickness \_\_\_\_\_  
 Total Casing Depth 30.65 Borehole Diameter \_\_\_\_\_ Approx. Pump Depth 35 Feet  
 Screen Interval top \_\_\_\_\_ bottom \_\_\_\_\_ Feet

### SAMPLING SUMMARY:

Sampling Method: Grab  Composite  Grundfos  Bladder Pump  Peristaltic Pump  Bailer

Pump Started 1020 Pump Stopped \_\_\_\_\_ Total Gallons 2.15

Time (24-hr)	pH (S.U.)	SC (mS/cm)	Temp (°C)	Turb. (NTU)	Flow Rate (ml/min)	DTW (ft)	Drawdown (ft)	DO (mg/L)	ORP (mV)
<u>1025</u>	<u>6.91</u>	<u>0.701</u>	<u>16.21</u>	<u>72.5</u>	<u>200</u>	<u>20.35</u>		<u>1.15</u>	<u>-138.3</u>
<u>1030</u>	<u>6.81</u>	<u>0.684</u>	<u>16.08</u>	<u>67.1</u>	<u>200</u>	<u>20.35</u>		<u>0.70</u>	<u>-137.8</u>
<u>1035</u>	<u>6.94</u>	<u>0.673</u>	<u>15.99</u>	<u>47.2</u>	<u>200</u>	<u>20.35</u>		<u>0.63</u>	<u>-138.6</u>
<u>1040</u>	<u>6.86</u>	<u>0.656</u>	<u>15.67</u>	<u>28.2</u>	<u>200</u>	<u>20.35</u>		<u>0.59</u>	<u>-143.3</u>
<u>1045</u>	<u>6.87</u>	<u>0.653</u>	<u>15.73</u>	<u>21.0</u>	<u>200</u>	<u>20.35</u>		<u>0.58</u>	<u>-140.7</u>
<u>1050</u>	<u>6.88</u>	<u>0.647</u>	<u>15.86</u>	<u>13.2</u>	<u>200</u>	<u>20.35</u>		<u>0.58</u>	<u>-141.1</u>
<u>1055</u>	<u>6.88</u>	<u>0.641</u>	<u>15.95</u>	<u>10.4</u>	<u>200</u>	<u>20.35</u>		<u>0.56</u>	<u>-141.1</u>
<u>1100</u>	<u>6.88</u>	<u>0.639</u>	<u>15.97</u>	<u>9.0</u>	<u>200</u>	<u>20.35</u>		<u>0.55</u>	<u>-141.0</u>

### Final:

Time 1100 pH 6.88 SC 0.639 Temp 15.97 Turb. 9.3 Flow Rate 200 DTW 20.35 Drawdown \_\_\_\_\_ DO 0.55 ORP -141.1

Comments: Purge water black.

Calibration: pH Calibration Buffers: 4  7  10  ORP Calibration 248 mV  
 SC Reference Solution 1.413 mS/cm Turbidity Cal. Solution 0/106 NTUs  
 Sample Name ATR-001(39)-6061616 Time 1105 VOCs  SVOCs  PAHs  TOC   
 Total Metals  Dissolved Metals  BTEX  Total Cyanide  Free Cyanide   
 Other  List: Dissolved Gas  
 MS/MSD YES Blind Dup \_\_\_\_\_ Blind Dup Name \_\_\_\_\_ TB \_\_\_\_\_











# GROUND-WATER/SURFACE WATER SAMPLING FORM

Project Location TFS Rochester Surface Water  Groundwater  Sample Identification ATR-PM-2  
 Project Number 3359-15-1040 (Use: Well name)  
 Sampling Personnel AA Date 6/16/18 Start Time 1600 Weather Overcast, 70°F

**MEASUREMENT SUMMARY:**

Measuring Point TOC Depth to Water 13.37 Depth to Product — Product Thickness —  
 Total Casing Depth 23.90 Borehole Diameter 2 in. Approx. Pump Depth — Feet  
 Screen Interval top — bottom — Feet

**SAMPLING SUMMARY:**

Sampling Method: Grab  Composite  Grundfos  Bladder Pump  Peristaltic Pump  Bailor

Pump Started — Pump Stopped — Total Gallons —

Time (24-hr)	pH (S.U.)	SC (mS/cm)	Temp (°C)	Turb. (NTU)	Flow Rate (ml/min)	DTW (ft)	Drawdown (ft)	DO (mg/L)	ORP (mV)
<u>1608</u>	<u>6.12</u>	<u>0.750</u>	<u>16.38</u>	<u>324.4</u>	<u>~250</u>	<u>13.37</u>	<u>13.37</u>	<u>0.90</u>	<u>-56.6</u>
<u>1610</u>	<u>6.99</u>	<u>0.772</u>	<u>15.79</u>	<u>104.8</u>	<u>~300</u>	<u>13.47</u>	<u>0.10</u>	<u>0.64</u>	<u>-40.9</u>
<u>1615</u>	<u>5.99</u>	<u>0.781</u>	<u>15.85</u>	<u>69.1</u>	<u>~350</u>	<u>13.48</u>	<u>0.11</u>	<u>0.62</u>	<u>-46.1</u>
<u>1620</u>	<u>6.00</u>	<u>0.806</u>	<u>16.14</u>	<u>40.7</u>	<u>~250</u>	<u>13.49</u>	<u>0.12</u>	<u>0.59</u>	<u>-48.9</u>
<u>1625</u>	<u>6.01</u>	<u>0.830</u>	<u>16.26</u>	<u>32.2</u>	<u>~250</u>	<u>13.49</u>	<u>0.12</u>	<u>0.57</u>	<u>-53.1</u>
<u>1630</u>	<u>6.01</u>	<u>0.843</u>	<u>16.11</u>	<u>31.8</u>	<u>~250</u>	<u>13.49</u>	<u>0.12</u>	<u>0.56</u>	<u>-54.2</u>

**Final:**  
 Time 1630 pH 6.01 SC 0.843 Temp 16.11 Turb. 30.9 Flow Rate 250 DTW 13.49 Drawdown 0.12 DO 0.56 ORP -54.2

Comments: \* flow reduced to < 250 ml/min before collection

Calibration: pH Calibration Buffers: 4  7  10  ORP Calibration 240 mV  
 SC Reference Solution 1.413 mS/cm Turbidity Cal. Solution 0/120 NTUs  
 Sample Name ATR-PM-2-6/16/18 Time 1630 VOCs  SVOCs  PAHs  TOC   
 Total Metals  Dissolved Metals  BTEX  Total Cyanide  Free Cyanide   
 Other  List: Dissolved Gases  
 MS/MSD   Blind Dup   Blind Dup Name   TB  



# GROUND-WATER/SURFACE WATER SAMPLING FORM

Project Location TFS Rochester Surface Water  Groundwater  Sample Identification ATR-003(35)  
 Project Number 3359-15-1040 (Use: Well name)  
 Sampling Personnel SP Date 6-15-16 Start Time 1335 Weather 86°F Sunny

### MEASUREMENT SUMMARY:

Measuring Point BC Depth to Water 17.25 Depth to Product \_\_\_\_\_ Product Thickness \_\_\_\_\_  
 Total Casing Depth 35.96 Borehole Diameter \_\_\_\_\_ Approx. Pump Depth 31 Feet  
 Screen Interval top \_\_\_\_\_ bottom \_\_\_\_\_ Feet

### SAMPLING SUMMARY:

Sampling Method: Grab  Composite  Grundfos  Bladder Pump  Peristaltic Pump  Bailer   
 Pump Started 1345 Pump Stopped \_\_\_\_\_ Total Gallons 1.5

Time (24-hr)	pH (S.U.)	SC (mS/cm)	Temp (°C)	Turb. (NTU)	Flow Rate (ml/min)	DTW (ft)	Drawdown (ft)	DO (mg/L)	ORP (mV)
<u>1350</u>	<u>7.38</u>	<u>0.619</u>	<u>20.32</u>	<u>46.5</u>	<u>250</u>	<u>17.30</u>		<u>1.70</u>	<u>-134.8</u>
<u>1355</u>	<u>7.32</u>	<u>0.629</u>	<u>19.93</u>	<u>43.3</u>	<u>250</u>	<u>17.30</u>		<u>1.18</u>	<u>-161.8</u>
<u>1400</u>	<u>7.30</u>	<u>0.634</u>	<u>17.00</u>	<u>45.8</u>	<u>250</u>	<u>17.30</u>		<u>0.91</u>	<u>-173.0</u>
<u>1405</u>	<u>7.28</u>	<u>0.631</u>	<u>16.84</u>	<u>47.7</u>	<u>250</u>	<u>17.30</u>		<u>0.88</u>	<u>-175.6</u>
<u>1410</u>	<u>7.35</u>	<u>0.628</u>	<u>17.09</u>	<u>45.3</u>	<u>250</u>	<u>17.30</u>		<u>0.81</u>	<u>-179.9</u>

**Final:**

Time	pH	SC	Temp	Turb.	Flow Rate	DTW	Drawdown	DO	ORP
<u>1410</u>	<u>7.35</u>	<u>0.628</u>	<u>17.09</u>	<u>45.3</u>	<u>250</u>	<u>17.30</u>		<u>0.81</u>	<u>-179.9</u>

Comments: \_\_\_\_\_

Calibration: pH Calibration Buffers: 4  7  10  ORP Calibration 240 mV  
 SC Reference Solution 1.413 mS/cm Turbidity Cal. Solution 0/128 NTUs

Sample Name ATR-003(35)-6001516 Time 1415 VOCs  SVOCs  PAHs  TOC   
 Total Metals  Dissolved Metals  BTEX  Total Cyanide  Free Cyanide   
 Other  List: Dissolved Gases  
 MS/MSD \_\_\_\_\_ Blind Dup \_\_\_\_\_ Blind Dup Name \_\_\_\_\_ TB \_\_\_\_\_



# GROUND-WATER/SURFACE WATER SAMPLING FORM

Project Location TFS Rochester Surface Water  Groundwater  Sample Identification ATR-0W3 (SS)  
 Project Number 3359-15-1040 (Use: Well name)  
 Sampling Personnel SP Date 6-15-16 Start Time 12:30 Weather 86° Sunny

**MEASUREMENT SUMMARY:**

Measuring Point 70C Depth to Water 17.14 Depth to Product      Product Thickness       
 Total Casing Depth 54.82 Borehole Diameter      Approx. Pump Depth 51 Feet  
 Screen Interval top      bottom      Feet

**SAMPLING SUMMARY:**

Sampling Method: Grab  Composite  Grundfos  Bladder Pump  Peristaltic Pump  Bailor   
 Pump Started 12:50 Pump Stopped      Total Gallons 1

Time (24-hr)	pH (S.U.)	SC (mS/cm)	Temp (°C)	Turb. (NTU)	Flow Rate (ml/min)	DTW (ft)	Drawdown (ft)	DO (mg/L)	ORP (mV)
<u>12:55</u>	<u>6.67</u>	<u>1.700</u>	<u>15.99</u>	<u>33.5</u>	<u>200</u>	<u>17.21</u>		<u>1.38</u>	<u>-78.4</u>
<u>13:00</u>	<u>6.50</u>	<u>1.701</u>	<u>16.37</u>	<u>29.9</u>	<u>200</u>	<u>17.22</u>		<u>0.79</u>	<u>-100.2</u>
<u>13:05</u>	<u>6.50</u>	<u>1.707</u>	<u>16.59</u>	<u>27.0</u>	<u>200</u>	<u>17.22</u>		<u>0.76</u>	<u>-105.8</u>
<u>13:10</u>	<u>6.53</u>	<u>1.691</u>	<u>16.74</u>	<u>21.3</u>	<u>200</u>	<u>17.22</u>		<u>0.64</u>	<u>-111.8</u>
<u>13:15</u>	<u>6.53</u>	<u>1.685</u>	<u>16.80</u>	<u>21.0</u>	<u>200</u>	<u>17.22</u>		<u>0.60</u>	<u>-113.0</u>

**Final:**  
 Time 13:15 pH 6.53 SC 1.685 Temp 16.80 Turb. 21.0 Flow Rate 200 DTW 17.22 Drawdown      DO 0.60 ORP -113.0

Comments: \_\_\_\_\_

Calibration: pH Calibration Buffers: 4  7  10  ORP Calibration 2410 mV  
 SC Reference Solution 1.413 mS/cm Turbidity Cal. Solution 0/126 NTUs  
 Sample Name ATR-0W3(SS)-6061576 Time 13:20 VOCs  SVOCs  PAHs  TOC   
 Total Metals  Dissolved Metals  BTEX  Total Cyanide  Free Cyanide   
 Other  List: Dissolved gas  
 MS/MSD      Blind Dup      Blind Dup Name      TB     





## GROUND-WATER/SURFACE WATER SAMPLING FORM

Project Location TFS Rochester Surface Water  Groundwater  Sample Identification ATR- PM-3  
 Project Number 3359-15-1040 (Use: Well name)  
 Sampling Personnel LH Date 6/17/16 Start Time 0850 Weather Sunny, 72°F

### MEASUREMENT SUMMARY:

Measuring Point TOC Depth to Water 23.68 Depth to Product — Product Thickness —  
 Total Casing Depth 34.10 Borehole Diameter 2.2 Approx. Pump Depth — Feet  
 Screen Interval top — bottom — Feet

### SAMPLING SUMMARY:

Sampling Method: Grab  Composite  Grundfos  Bladder Pump  Peristaltic Pump  Bailor

Pump Started 0850 Pump Stopped — Total Gallons —

Time (24-hr)	pH (S.U.)	SC (mS/cm)	Temp (°C)	Turb. (NTU)	Flow Rate (ml/min)	DTW (ft)	Drawdown (ft)	DO (mg/L)	ORP (mV)
0855	5.01	1.022	15.23	950.2	~350	23.68	0.00	2.35	-15.2
<del>0900</del>	<del>4.90</del>	<del>0.925</del>	<del>14.29</del>	<del>—</del>	<del>—</del>	<del>—</del>	<del>—</del>	<del>—</del>	<del>—</del>
0905	4.90	0.925	15.02	1682.2	~350	23.68	0.00	3.84	-32.5
0910	4.82	0.923	14.97	1682.3	~350	23.68	0.00	0.50	-34.1
0915	4.76	0.916	15.03	1668.9	~350	23.68	0.00	0.65	-35.6
0920	4.73	0.908	14.94	1423.7	~350	23.68	0.00	0.60	-37.2
0925	4.70	0.904	15.10	1194.3	~350	23.68	0.00	0.89	-38.7
0930	4.67	0.896	15.14	980.0	~350	23.68	0.00	0.58	-40.1
0935	4.64	0.885	15.22	780.0	~350	23.68	0.00	0.57	-42.1
0940	4.59	0.879	15.41	682.6	~350	23.68	0.00	0.57	-44.4
0945	4.59	0.878	15.51	620.0	~350	23.68	0.00	0.50	-46.6
0950	4.56	0.878	15.22	571.1	~350	23.68	0.00	0.56	-49.6

### Final:

Time 0950 pH 4.56 SC 0.878 Temp 15.22 Turb. 571.1 Flow Rate ~350 DTW 23.68 Drawdown 0.00 DO 0.56 ORP -49.6

Comments: \* Flow reduced to < 250 ml/min prior to collection  
\* High concentration of Bio-amendment. NTU stability not achieved.

Calibration: pH Calibration Buffers: 4  7  10  ORP Calibration 240 mV  
 SC Reference Solution 1413 mS/cm Turbidity Cal. Solution 0/126 NTUs

Sample Name ATR- PM-3-61061716 Time 0950 VOCs  SVOCs  PAHs  TOC

Total Metals  Dissolved Metals  BTEX  Total Cyanide  Free Cyanide

Other  List: Dissolved Gas

MS/MSD — Blind Dup — Blind Dup Name — TB —



## GROUND-WATER/SURFACE WATER SAMPLING FORM

Project Location TFS Rochester Surface Water  Groundwater  Sample Identification ATR-0W4(35)  
 Project Number 3359-15-1040 (Use: Well name)  
 Sampling Personnel SP Date 6-15-16 Start Time 1110 Weather 77 Sunny

### MEASUREMENT SUMMARY:

Measuring Point TOC Depth to Water 17.11 Depth to Product \_\_\_\_\_ Product Thickness \_\_\_\_\_  
 Total Casing Depth 34.74 Borehole Diameter \_\_\_\_\_ Approx. Pump Depth 31 Feet  
 Screen Interval top \_\_\_\_\_ bottom \_\_\_\_\_ Feet

### SAMPLING SUMMARY:

Sampling Method: Grab  Composite  Grundfos  Bladder Pump  Peristaltic Pump  Bailor

Pump Started 1115 Pump Stopped \_\_\_\_\_ Total Gallons \_\_\_\_\_

Time (24-hr)	pH (S.U.)	SC (mS/cm)	Temp (°C)	Turb. (NTU)	Flow Rate (ml/min)	DTW (ft)	Drawdown (ft)	DO (mg/L)	ORP (mV)
<u>1120</u>	<u>6.63</u>	<u>2.384</u>	<u>22.72</u>	<u>25.4</u>	<u>250</u>	<u>17.38</u>		<u>2.19</u>	<u>-87.1</u>
<u>1125</u>	<u>6.38</u>	<u>2.391</u>	<u>19.29</u>	<u>33.2</u>	<u>250</u>	<u>17.29</u>		<u>0.90</u>	<u>-86.9</u>
<u>1130</u>	<u>6.35</u>	<u>2.377</u>	<u>21.11</u>	<u>30.2</u>	<u>250</u>	<u>17.30</u>	<u>0.67</u>		<u>-92.9</u>
<u>1135</u>	<u>6.38</u>	<u>2.408</u>	<u>22.53</u>	<u>28.9</u>	<u>250</u>	<u>17.29</u>		<u>0.64</u>	<u>-98.3</u>
<u>1140</u>	<u>6.40</u>	<u>2.433</u>	<u>23.40</u>	<u>27.7</u>	<u>250</u>	<u>17.30</u>		<u>0.61</u>	<u>-101.7</u>

**Final:**  
 Time 1140 pH 6.40 SC 2.433 Temp 23.40 Turb. 27.7 Flow Rate 250 DTW 17.30 Drawdown \_\_\_\_\_ DO 0.61 ORP -101.7

Comments: \_\_\_\_\_

Calibration: pH Calibration Buffers: 4  7  10  ORP Calibration 240 mV  
 SC Reference Solution 1.413 mS/cm Turbidity Cal. Solution 0/126 NTUs  
 Sample Name ATR-0W4(35)-6061516 Time 1145 VOCs  SVOCs  PAHs  TOC   
 Total Metals  Dissolved Metals  BTEX  Total Cyanide  Free Cyanide   
 Other  List: Dissolved gases  
 MS/MSD \_\_\_\_\_ Blind Dup \_\_\_\_\_ Blind Dup Name \_\_\_\_\_ TB \_\_\_\_\_





# GROUND-WATER/SURFACE WATER SAMPLING FORM

Project Location TFS Rochester Surface Water  Groundwater  Sample Identification ATR-0105 (16)  
 Project Number 3359-15-1040 (Use: Well name)  
 Sampling Personnel SUP Date 6-14-16 Start Time 1130 Weather 70° Sunny

### MEASUREMENT SUMMARY:

Measuring Point T0C Depth to Water 8.48 Depth to Product      Product Thickness       
 Total Casing Depth 16.24 Borehole Diameter      Approx. Pump Depth 13 Feet  
 Screen Interval top bottom Feet

### SAMPLING SUMMARY:

Sampling Method: Grab  Composite  Grundfos  Bladder Pump  Peristaltic Pump  Bailor

Pump Started 1145 Pump Stopped 1308 Total Gallons ~ 3.75

Time (24-hr)	pH (S.U.)	SC (mS/cm)	Temp (°C)	Turb. (NTU)	Flow Rate (ml/min)	DTW (ft)	Drawdown (ft)	DO (mg/L)	ORP (mV)
1150	7.13	0.680	16.90	163.6	250	8.49		1.11	-139.4
1155	7.06	0.684	16.92	253.1	250	8.48		0.81	-145.8
1200	7.07	0.688	16.76	312.2	250	8.48		0.68	-152.0
1205	7.12	0.688	16.68	343.2	250	8.48		0.73	-154.4
1210	7.09	0.685	16.61	306.7	250	8.48		0.74	-152.8
1215	7.09	0.684	16.46	256.7	250	8.48		0.84	-149.8
1220	7.10	0.683	15.83	190.7	250	8.48		1.07	-144.0
1225	7.09	0.682	15.32	146.2	250	8.48		1.17	-139.3
1230	7.08	0.680	15.10	120.6	250	8.48		1.24	-137.3
1235	7.08	0.681	14.87	96.9	250	8.48		1.30	-134.4
1240	7.08	0.680	14.62	70.8	250	8.48		1.43	-130.2
1245	7.09	0.679	14.54	55.3	250	8.48		1.60	-129.2
1250	7.09	0.679	14.49	49.1	250	8.48		1.53	-129.0
1255	7.09	0.679	14.47	45.6	250	8.48		1.55	-128.3

**Final:**

Time	pH	SC	Temp	Turb.	Flow Rate	DTW	Drawdown	DO	ORP
1255	7.09	0.679	14.47	45.6	250	8.48		1.55	-128.3

Comments: \_\_\_\_\_

Calibration: pH Calibration Buffers: 4  7  10  ORP Calibration 240 mV  
 SC Reference Solution 1.413 mS/cm Turbidity Cal. Solution 0/126 NTUs

Sample Name ATR-0105(16)-6061416 Time 1300 VOCs  SVOCs  PAHs  TOC

Total Metals  Dissolved Metals  BTEX  Total Cyanide  Free Cyanide

Other  List: Dissolved gas

MS/MSD \_\_\_\_\_ Blind Dup \_\_\_\_\_ Blind Dup Name \_\_\_\_\_ TB \_\_\_\_\_





# GROUND-WATER/SURFACE WATER SAMPLING FORM

Project Location TFS Rochester Surface Water  Groundwater  Sample Identification ATR-OW5(45)  
 Project Number 3359-15-1040 (Use: Well name)  
 Sampling Personnel SP Date 6-14-16 Start Time 1400 Weather 75° Sunny

**MEASUREMENT SUMMARY:**

Measuring Point TOC Depth to Water 7.53 Depth to Product  Product Thickness   
 Total Casing Depth 43.94 Borehole Diameter        Approx. Pump Depth 40 Feet  
 Screen Interval top        bottom        Feet

**SAMPLING SUMMARY:**

Sampling Method: Grab  Composite  Grundfos  Bladder Pump  Peristaltic Pump  Bailer   
 Pump Started 1410 Pump Stopped        Total Gallons       

Time (24-hr)	pH (S.U.)	SC (mS/cm)	Temp (°C)	Turb. (NTU)	Flow Rate (ml/min)	DTW (ft)	Drawdown (ft)	DO (mg/L)	ORP (mV)
<u>1415</u>	<u>6.99</u>	<u>1.110</u>	<u>16.96</u>	<u>49.5</u>	<u>250</u>	<u>7.62</u>		<u>2.51</u>	<u>-109.6</u>
<u>1426</u>	<u>6.68</u>	<u>1.193</u>	<u>16.61</u>	<u>51.5</u>	<u>250</u>	<u>7.62</u>		<u>0.98</u>	<u>-102.4</u>
<u>1425</u>	<u>6.68</u>	<u>1.220</u>	<u>16.69</u>	<u>45.8</u>	<u>250</u>	<u>7.62</u>		<u>0.76</u>	<u>-103.9</u>
<u>1430</u>	<u>6.65</u>	<u>1.260</u>	<u>16.29</u>	<u>34.5</u>	<u>250</u>	<u>7.62</u>		<u>0.65</u>	<u>-105.3</u>
<u>1435</u>	<u>6.61</u>	<u>1.280</u>	<u>16.08</u>	<u>26.5</u>	<u>250</u>	<u>7.62</u>		<u>0.60</u>	<u>-106.3</u>

**Final:**  
 Time 1435 pH 6.61 SC 1.280 Temp 16.08 Turb. 26.5 Flow Rate 250 DTW 7.62 Drawdown        DO 0.60 ORP -106.3

Comments: \_\_\_\_\_

Calibration: pH Calibration Buffers: 4  7  10  ORP Calibration 240 mV  
 SC Reference Solution 1.413 mS/cm Turbidity Cal. Solution 0/126 NTUs  
 Sample Name ATR-OW5(45) - 6061416 Time 1440 VOCs  SVOCs  PAHs  TOC   
 Total Metals  Dissolved Metals  BTEX  Total Cyanide  Free Cyanide   
 Other  List: Dissolved Gas  
 MS/MSD        Blind Dup        Blind Dup Name        TB       









# GROUND-WATER/SURFACE WATER SAMPLING FORM

Project Location TFS Rochester Surface Water  Groundwater  Sample Identification ATR-*mwl3*  
 Project Number 3359-15-1040 (Use: Well name)  
 Sampling Personnel LH Date 6/16/16 Start Time 1130 Weather Sunny, 73°F

**MEASUREMENT SUMMARY:**

Measuring Point TDC Depth to Water 21.80 Depth to Product \_\_\_\_\_ Product Thickness \_\_\_\_\_  
 Total Casing Depth 28.09 Borehole Diameter \_\_\_\_\_ Approx. Pump Depth \_\_\_\_\_ Feet  
 Screen Interval top \_\_\_\_\_ bottom \_\_\_\_\_ Feet

**SAMPLING SUMMARY:**

Sampling Method: Grab  Composite  Grundfos  Bladder Pump  Peristaltic Pump  Bailer   
 Pump Started \_\_\_\_\_ Pump Stopped \_\_\_\_\_ Total Gallons 0.75

0.25  
0.50  
0.75

Time (24-hr)	pH (S.U.)	SC (mS/cm)	Temp (°C)	Turb. (NTU)	Flow Rate (ml/min)	DTW (ft)	Drawdown (ft)	DO (mg/L)	ORP (mV)
<u>1135</u>	<u>6.55</u>	<u>0.653</u>	<u>17.92</u>	<u>19.3</u>	_____	_____	_____	<u>1.48</u>	<u>-105.0</u>
<u>1140</u>	<u>6.77</u>	<u>0.646</u>	<u>16.62</u>	<u>25.5</u>	_____	_____	_____	<u>1.52</u>	<u>-108.1</u>
<u>1145</u>	<u>6.77</u>	<u>0.639</u>	<u>17.11</u>	<u>35.8</u>	_____	_____	_____	<u>1.51</u>	<u>-114.1</u>

**Final:**  
 Time 1145 pH 6.77 SC 0.639 Temp 17.11 Turb. 35.8 Flow Rate \_\_\_\_\_ DTW \_\_\_\_\_ Drawdown \_\_\_\_\_ DO 1.51 ORP -114.1

Comments: 28.09 - 21.80 = 6.29 x 0.041 = 0.25789      0.25789 x 3 = 0.75 (3x)

Calibration: pH Calibration Buffers: 4  7  10  ORP Calibration 240 mV  
 SC Reference Solution 1413 mS/cm Turbidity Cal. Solution 0.1126 NTUs  
 Sample Name ATR-mwl3-Gable Time 1150 VOCs  SVOCs  PAHs  TOC   
 Total Metals  Dissolved Metals  BTEX  Total Cyanide  Free Cyanide   
 Other  List: Resolved Issues  
 MS/MSD \_\_\_\_\_ Blind Dup \_\_\_\_\_ Blind Dup Name \_\_\_\_\_ TB \_\_\_\_\_



# GROUND-WATER/SURFACE WATER SAMPLING FORM

Project Location TFS Rochester Surface Water  Groundwater  Sample Identification ATR- MW 4  
 Project Number 3359-15-1040 (Use: Well name)  
 Sampling Personnel LH Date 6/15/16 Start Time 1500 Weather \_\_\_\_\_

### MEASUREMENT SUMMARY:

Measuring Point TOC Depth to Water 18.12 Depth to Product \_\_\_\_\_ Product Thickness \_\_\_\_\_  
 Total Casing Depth 45.75 Borehole Diameter \_\_\_\_\_ Approx. Pump Depth 40' from bottom Feet  
 Screen Interval top \_\_\_\_\_ bottom \_\_\_\_\_ Feet

### SAMPLING SUMMARY:

Sampling Method: Grab  Composite  Grundfos  Bladder Pump  Peristaltic Pump  Bailer

Pump Started 1500 Pump Stopped 1530 Total Gallons 3.5

Time (24-hr)	pH (S.U.)	SC (mS/cm)	Temp (°C)	Turb. (NTU)	Flow Rate (ml/min)	DTW (ft)	Drawdown (ft)	DO (mg/L)	ORP (mV)
<u>1505</u>	<u>6.96</u>	<u>0.961</u>	<u>17.44</u>	<u>10.1</u>	<u>~400</u>	<u>18.12</u>	<u>0.00</u>	<u>0.62</u>	<u>-157.5</u>
<u>1510</u>	<u>6.82</u>	<u>1.201</u>	<u>16.96</u>	<u>4.0</u>	<u>~400</u>	<u>18.12</u>	<u>0.00</u>	<u>0.57</u>	<u>-154.5</u>
<u>1515</u>	<u>6.79</u>	<u>1.245</u>	<u>16.70</u>	<u>4.5</u>	<u>~400</u>	<u>18.12</u>	<u>0.00</u>	<u>0.58</u>	<u>-146.7</u>
<u>1520</u>	<u>6.82</u>	<u>1.207</u>	<u>16.83</u>	<u>3.7</u>	<u>~400</u>	<u>18.12</u>	<u>0.00</u>	<u>0.53</u>	<u>-150.1</u>
<u>1525</u>	<u>6.82</u>	<u>1.173</u>	<u>16.72</u>	<u>3.4</u>	<u>~400</u>	<u>18.12</u>	<u>0.00</u>	<u>0.52</u>	<u>-152.5</u>

Final:  
 Time 1525 pH 6.82 SC 1.173 Temp 16.72 Turb. 3.4 Flow Rate ~400 DTW 18.12 Drawdown 0.00 DO 0.52 ORP -152.5

Comments: Flow reduced to <280 ml/min prior to collection

Calibration: pH Calibration Buffers: 4  7  10  ORP Calibration 210 mV  
 SC Reference Solution 1.413 mS/cm Turbidity Cal. Solution 0/100 NTUs  
 Sample Name ATR- MW/4-6106/16 Time 1530 VOCs  SVOCs  PAHs  TOC   
 Total Metals  Dissolved Metals  BTEX  Total Cyanide  Free Cyanide   
 Other  List: Dissolved Gases  
 MS/MSD \_\_\_\_\_ Blind Dup \_\_\_\_\_ Blind Dup Name \_\_\_\_\_ TB \_\_\_\_\_



# GROUND-WATER/SURFACE WATER SAMPLING FORM

Project Location TFS Rochester Surface Water  Groundwater  Sample Identification ATR-MW15  
 Project Number 3359-15-1040 (Use: Well name)  
 Sampling Personnel SP Date 6-15-16 Start Time 0838 Weather 70°F light rain

MEASUREMENT SUMMARY:  
 Measuring Point T0C Depth to Water 9.07 Depth to Product  Product Thickness   
 Total Casing Depth 54.70 Borehole Diameter \_\_\_\_\_ Approx. Pump Depth 51 Feet  
 Screen Interval top \_\_\_\_\_ bottom \_\_\_\_\_ Feet

SAMPLING SUMMARY:  
 Sampling Method: Grab  Composite  Grundfos  Bladder Pump  Peristaltic Pump  Bailor   
 Pump Started 0850 Pump Stopped \_\_\_\_\_ Total Gallons 1.5

Time (24-hr)	pH (S.U.)	SC (mS/cm)	Temp (°C)	Turb. (NTU)	Flow Rate (ml/min)	DTW (ft)	Drawdown (ft)	DO (mg/L)	ORP (mV)
<u>0855</u>	<u>6.53</u>	<u>4.273</u>	<u>17.03</u>	<u>11.8</u>	<u>250</u>	<u>9.07</u>		<u>3.32</u>	<u>-88.3</u>
<u>0900</u>	<u>6.33</u>	<u>4.333</u>	<u>16.88</u>	<u>7.3</u>	<u>250</u>	<u>9.07</u>		<u>2.90</u>	<u>-79.6</u>
<u>0905</u>	<u>6.16</u>	<u>4.774</u>	<u>16.89</u>	<u>4.4</u>	<u>250</u>	<u>9.07</u>		<u>1.22</u>	<u>-80.8</u>
<u>0910</u>	<u>6.18</u>	<u>4.975</u>	<u>16.73</u>	<u>4.2</u>	<u>250</u>	<u>9.07</u>		<u>0.92</u>	<u>-83.4</u>
<u>PAUSE TO RECALIBRATE SPECIFIC CONDUCTIVITY</u>									
<u>0935</u>	<u>6.33</u>	<u>2.841</u>	<u>15.82</u>	<u>7.4</u>	<u>250</u>	<u>9.07</u>		<u>1.67</u>	<u>-83.7</u>
<u>0940</u>	<u>6.28</u>	<u>2.835</u>	<u>16.24</u>	<u>3.8</u>	<u>250</u>	<u>9.07</u>		<u>1.18</u>	<u>-87.2</u>
<u>0945</u>	<u>6.24</u>	<u>2.848</u>	<u>16.37</u>	<u>1.8</u>	<u>250</u>	<u>9.07</u>		<u>0.82</u>	<u>-88.5</u>
<u>0950</u>	<u>6.26</u>	<u>2.844</u>	<u>16.46</u>	<u>1.4</u>	<u>250</u>	<u>9.07</u>		<u>0.69</u>	<u>-90.3</u>
<u>0955</u>	<u>6.27</u>	<u>2.839</u>	<u>16.58</u>	<u>1.3</u>	<u>250</u>	<u>9.07</u>		<u>0.65</u>	<u>-91.4</u>

Final:  
 Time 0955 pH 6.27 SC 2.839 Temp 16.58 Turb. 1.3 Flow Rate 250 DTW 9.07 Drawdown \_\_\_\_\_ DO 0.63 ORP -91.4

Comments: \_\_\_\_\_

Calibration: pH Calibration Buffers: 4  7  10  ORP Calibration 240 mV  
 SC Reference Solution 1.413 mS/cm Turbidity Cal. Solution 0/126 NTUs  
 Sample Name ATR-MW15-6061516 Time 0955 VOCs  SVOCs  PAHs  TOC   
 Total Metals  Dissolved Metals  BTEX  Total Cyanide  Free Cyanide   
 Other  List: Dissolved Gases  
 MS/MSD \_\_\_\_\_ Blind Dup \_\_\_\_\_ Blind Dup Name \_\_\_\_\_ TB \_\_\_\_\_

# GROUND-WATER/SURFACE WATER SAMPLING FORM

Project Location TFS Rochester Surface Water  Groundwater  Sample Identification ATR-MW16-6061416  
 Project Number 3359-15-1040 (Use: Well name)  
 Sampling Personnel SP Date 6-14-16 Start Time 1500 Weather 77° Sunny

**MEASUREMENT SUMMARY:**

Measuring Point TOC Depth to Water 9.07 Depth to Product / Product Thickness /  
 Total Casing Depth 32.73 Borehole Diameter \_\_\_\_\_ Approx. Pump Depth 29 Feet  
 Screen Interval top \_\_\_\_\_ bottom \_\_\_\_\_ Feet

**SAMPLING SUMMARY:**

Sampling Method: Grab  Composite  Grundfos  Bladder Pump  Peristaltic Pump  Bailor   
 Pump Started 1520 Pump Stopped \_\_\_\_\_ Total Gallons 1.5

1525  
1530  
1535  
1540

Time (24-hr)	pH (S.U.)	SC (mS/cm)	Temp (°C)	Turb. (NTU)	Flow Rate (ml/min)	DTW (ft)	Drawdown (ft)	DO (mg/L)	ORP (mV)
<u>1325</u>	<u>7.21</u>	<u>0.652</u>	<u>16.46</u>	<u>17.0</u>	<u>250</u>	<u>9.12</u>		<u>1.15</u>	<u>-112.1</u>
<u>1330</u>	<u>6.90</u>	<u>0.681</u>	<u>15.52</u>	<u>15.3</u>	<u>250</u>	<u>9.12</u>		<u>0.71</u>	<u>-114.7</u>
<u>1335</u>	<u>6.87</u>	<u>0.806</u>	<u>15.47</u>	<u>16.0</u>	<u>250</u>	<u>9.12</u>		<u>0.58</u>	<u>-118.7</u>
<u>1340</u>	<u>6.91</u>	<u>0.947</u>	<u>15.29</u>	<u>19.1</u>	<u>250</u>	<u>9.12</u>		<u>0.57</u>	<u>-121.8</u>
<u>1545</u>	<u>6.85</u>	<u>1.023</u>	<u>15.26</u>	<u>15.2</u>	<u>250</u>	<u>9.12</u>		<u>0.55</u>	<u>-123.5</u>
<u>1550</u>									

**Final:**

Time 1550 pH 6.85 SC 1.023 Temp 15.26 Turb. 15.2 Flow Rate 250 DTW 9.12 Drawdown \_\_\_\_\_ DO 0.55 ORP -123.5

Comments: \_\_\_\_\_

Calibration: pH Calibration Buffers: 4  7  10  ORP Calibration 248 mV  
 SC Reference Solution 1.413 mS/cm Turbidity Cal. Solution 0/126 NTUs  
 Sample Name ATR-MW16-6061416 Time 1555 VOCs  SVOCs  PAHs  TOC   
 Total Metals  Dissolved Metals  BTEX  Total Cyanide  Free Cyanide   
 Other  List: Dissolved gases  
 MS/MSD \_\_\_\_\_ Blind Dup \_\_\_\_\_ Blind Dup Name \_\_\_\_\_ TB \_\_\_\_\_



# GROUND-WATER/SURFACE WATER SAMPLING FORM

Project Location TFS Rochester Surface Water  Groundwater  Sample Identification ATR-MW17  
 Project Number 3359-15-1040 (Use: Well name)  
 Sampling Personnel SUP Date 6-14-16 Start Time 1010 Weather 61°F Rain

### MEASUREMENT SUMMARY:

Measuring Point JOC Depth to Water 2.85 Depth to Product ✓ Product Thickness ✓  
 Total Casing Depth 42.41 Borehole Diameter \_\_\_\_\_ Approx. Pump Depth 39 Feet  
 Screen Interval top \_\_\_\_\_ bottom \_\_\_\_\_ Feet

### SAMPLING SUMMARY:

Sampling Method: Grab  Composite  Grundfos  Bladder Pump  Peristaltic Pump  Bailer   
 Pump Started 1025 Pump Stopped 1110 Total Gallons ~2.75

Time (24-hr)	pH (S.U.)	SC (mS/cm)	Temp (°C)	Turb. (NTU)	Flow Rate (ml/min)	DTW (ft)	Drawdown (ft)	DO (mg/L)	ORP (mV)
1030	6.98	0.707	14.31	94.5	500	3.20		2.89	224.1
1035	6.65	0.731	13.54	257.3	500	3.20		1.33	225.0
1040	6.60	0.737	13.30	121.3	500	3.20		0.88	224.8
1045	6.70	0.733	13.28	44.7	500	3.20		0.70	232.9
1050	6.67	0.734	13.14	19.7	500	3.20		0.63	230.5
1055	6.70	0.735	13.13	12.1	500	3.20		0.61	229.3
1100	6.71	0.734	13.17	9.7	500	3.20		0.60	226.9

**Final:**  
 Time 1100 pH 6.71 SC 0.734 Temp 13.17 Turb. 9.7 Flow Rate 500 DTW 3.20 Drawdown \_\_\_\_\_ DO 0.60 ORP 226.9

Comments: Flow Rate reduced to 250 ml/min prior to collection

Calibration: pH Calibration Buffers: 4  7  10  ORP Calibration 240 mV  
 SC Reference Solution 1.413 mS/cm Turbidity Cal. Solution 0/126 NTUs  
 Sample Name ATR-MW17-6061416 Time 1105 VOCs  SVOCs  PAHs  TOC   
 Total Metals  Dissolved Metals  BTEX  Total Cyanide  Free Cyanide   
 Other  List: Dissolved gases  
 MS/MSD \_\_\_\_\_ Blind Dup \_\_\_\_\_ Blind Dup Name \_\_\_\_\_ TB \_\_\_\_\_



# GROUND-WATER/SURFACE WATER SAMPLING FORM

Project Location TFS Rochester Surface Water  Groundwater  Sample Identification ATR-~~muw20(35)~~  
 Project Number 3359-15-1040 (Use: Well name)  
 Sampling Personnel SP Date 6-16-16 Start Time 1420 Weather 75° overcast

### MEASUREMENT SUMMARY:

Measuring Point TOC Depth to Water 24.45 Depth to Product \_\_\_\_\_ Product Thickness \_\_\_\_\_  
 Total Casing Depth 34.55 Borehole Diameter \_\_\_\_\_ Approx. Pump Depth 31 Feet  
 Screen Interval top \_\_\_\_\_ bottom \_\_\_\_\_ Feet

### SAMPLING SUMMARY:

Sampling Method: Grab  Composite  Grundfos  Bladder Pump  Peristaltic Pump  Bailor   
 Pump Started 1425 Pump Stopped \_\_\_\_\_ Total Gallons 0.7

Time (24-hr)	pH (S.U.)	SC (mS/cm)	Temp (°C)	Turb. (NTU)	Flow Rate (ml/min)	DTW (ft)	Drawdown (ft)	DO (mg/L)	ORP (mV)
<u>1430</u>	<u>7.02</u>	<u>0.753</u>	<u>16.84</u>	<u>61.5</u>	<u>200</u>	<u>25.51</u>		<u>2.14</u>	<u>-110.3</u>
<u>1435</u>	<u>6.89</u>	<u>0.747</u>	<u>17.55</u>	<u>58.7</u>	<u>200</u>	<u>25.51</u>		<u>1.67</u>	<u>-119.2</u>
<u>1440</u>	<u>6.92</u>	<u>0.750</u>	<u>20.07</u>	<u>50.4</u>	<u>200</u>	<u>25.51</u>		<u>0.95</u>	<u>-127.5</u>
<u>1445</u>	<u>6.93</u>	<u>0.728</u>	<u>19.71</u>	<u>49.5</u>	<u>200</u>	<u>25.51</u>		<u>0.70</u>	<u>-133.7</u>
<u>1450</u>	<u>6.93</u>	<u>0.717</u>	<u>19.64</u>	<u>48.5</u>	<u>200</u>	<u>25.51</u>		<u>0.64</u>	<u>-135.6</u>
<u>1455</u>									

**Final:**  
 Time 1450 pH 6.93 SC 0.717 Temp 19.64 Turb. 48.5 Flow Rate 200 DTW 25.51 Drawdown \_\_\_\_\_ DO 0.64 ORP -135.6

Comments: \_\_\_\_\_

Calibration: pH Calibration Buffers: 4  7  10  ORP Calibration 240 mV  
 SC Reference Solution 1413 mS/cm Turbidity Cal. Solution 0/176 NTUs  
 Sample Name ATR-~~muw20(35)~~-6061616 Time 1455 VOCs  SVOCs  PAHs  TOC   
 Total Metals  Dissolved Metals  BTEX  Total Cyanide  Free Cyanide   
 Other  List: Dissolved Gases  
 MS/MSD \_\_\_\_\_ Blind Dup Yes Blind Dup Name ATR-~~muw20(35)~~-6061616 TB \_\_\_\_\_





# GROUND-WATER/SURFACE WATER SAMPLING FORM

Project Location TFS Rochester Surface Water  Groundwater  Sample Identification ATR- 20 mugs(s)  
 Project Number 3359-15-1040 (Use: Well name)  
 Sampling Personnel SVP Date 6-16-16 Start Time 1255 Weather 76° Overcast

### MEASUREMENT SUMMARY:

Measuring Point TOC Depth to Water 25.15 Depth to Product \_\_\_\_\_ Product Thickness \_\_\_\_\_  
 Total Casing Depth 13.31 Borehole Diameter \_\_\_\_\_ Approx. Pump Depth 47 Feet  
 Screen Interval top \_\_\_\_\_ bottom \_\_\_\_\_ Feet

### SAMPLING SUMMARY:

Sampling Method: Grab  Composite  Grundfos  Bladder Pump  Peristaltic Pump  Bailer   
 Pump Started 1310 Pump Stopped \_\_\_\_\_ Total Gallons 1.25

Time (24-hr)	pH (S.U.)	SC (mS/cm)	Temp (°C)	Turb. (NTU)	Flow Rate (ml/min)	DTW (ft)	Drawdown (ft)	DO (mg/L)	ORP (mV)
1310	7.05	0.635	20.23	37.7	250	25.51		1.86	-91.9
1320	6.85	0.693	19.71	31.5	250	25.51		1.87	-95.6
1325	6.53	0.828	19.97	25.0	250	25.51		0.71	-111.7
1330	6.49	0.863	20.53	20.4	250	25.51		0.63	-116.7
1335	6.47	0.905	20.57	51.4	250	25.51		0.61	-119.6
1340	6.46	0.939	20.60	21.2	250	25.51		0.59	-120.8
1345	6.44	0.979	20.99	12.8	250	25.51		0.56	-124.3
1350	6.44	1.001	21.01	12.9	250	25.51		0.53	-125.5
1355	6.44	1.014	21.10	10.5	250	25.51		0.52	-125.3

Final:  
 Time 1355 pH 6.44 SC 1.014 Temp 21.10 Turb. 10.5 Flow Rate 250 DTW 25.51 Drawdown \_\_\_\_\_ DO 0.52 ORP -125.3

Comments: \_\_\_\_\_

Calibration: pH Calibration Buffers: 4  7  10  ORP Calibration 240 mV  
 SC Reference Solution 1.413 mS/cm Turbidity Cal. Solution 0/126 NTUs  
 Sample Name ATR-mugs(s)-6061616 Time 1400 VOCs  SVOCs  PAHs  TOC   
 Total Metals  Dissolved Metals  BTEX  Total Cyanide  Free Cyanide   
 Other  List: Dissolved gases  
 MS/MSD \_\_\_\_\_ Blind Dup \_\_\_\_\_ Blind Dup Name \_\_\_\_\_ TB \_\_\_\_\_



# GROUND-WATER/SURFACE WATER SAMPLING FORM

Project Location TFS Rochester Surface Water  Groundwater  Sample Identification ATR: MW24(24.9)C  
 Project Number 3359-15-1040 (Use: Well name)  
 Sampling Personnel LH Date 6/15/06 Start Time 1225 Weather Sunny 80°F

**MEASUREMENT SUMMARY:**

Measuring Point 760 Depth to Water 20.40 Depth to Product - Product Thickness -  
 Total Casing Depth 24.90 Borehole Diameter \_\_\_\_\_ Approx. Pump Depth 20 Feet  
 Screen Interval top \_\_\_\_\_ bottom \_\_\_\_\_ Feet

**SAMPLING SUMMARY:**

Sampling Method: Grab  Composite  Grundfos  Bladder Pump  Peristaltic Pump  Bailer   
 Pump Started 1225 Pump Stopped \_\_\_\_\_ Total Gallons \_\_\_\_\_

Time (24-hr)	pH (S.U.)	SC (mS/cm)	Temp (°C)	Turb. (NTU)	Flow Rate (ml/min)	DTW (ft)	Drawdown (ft)	DO (mg/L)	ORP (mV)
<u>1230</u>	<u>6.85</u>	<u>0.681</u>	<u>14.20</u>	<u>28.1</u>	<u>~400</u>	<u>20.40</u>	<u>0</u>	<u>0.68</u>	<u>-51.0</u>
<u>1235</u>	<u>6.78</u>	<u>0.684</u>	<u>14.02</u>	<u>55.2</u>	<u>~400</u>	<u>20.40</u>	<u>0</u>	<u>0.62</u>	<u>-84.8</u>
<u>1240</u>	<u>6.71</u>	<u>0.680</u>	<u>13.71</u>	<u>10.7</u>	<u>~400</u>	<u>20.40</u>	<u>0</u>	<u>0.56</u>	<u>-104.1</u>
<u>1245</u>	<u>6.72</u>	<u>0.679</u>	<u>13.71</u>	<u>4.6</u>	<u>~400</u>	<u>20.40</u>	<u>0</u>	<u>0.54</u>	<u>-109.0</u>
<u>1250</u>	<u>6.72</u>	<u>0.680</u>	<u>13.77</u>	<u>4.8</u>	<u>~400</u>	<u>20.40</u>	<u>0</u>	<u>0.54</u>	<u>-110.0</u>

**Final:**  
 Time 1250 pH 6.72 SC 0.680 Temp 13.77 Turb. 4.8 Flow Rate ~400 DTW 20.40 Drawdown 0 DO 0.54 ORP -110.0

Comments: Flow reduced to <250 ml/min prior to collection

Calibration: pH Calibration Buffers: 4  7  10  ORP Calibration 200 mV  
 SC Reference Solution 1.413 mS/cm Turbidity Cal. Solution 0/125 NTUs  
 Sample Name ATR: MW24(24.9)0001516 Time 1250 VOCs  SVOCs  PAHs  TOC   
 Total Metals  Dissolved Metals  BTEX  Total Cyanide  Free Cyanide   
 Other  List: Dissolved Bases  
 MS/MSD \_\_\_\_\_ Blind Dup \_\_\_\_\_ Blind Dup Name \_\_\_\_\_ TB \_\_\_\_\_



## GROUND-WATER/SURFACE WATER SAMPLING FORM

Project Location TFS Rochester Surface Water  Groundwater  Sample Identification ATR- MW24(55.4)  
 Project Number 3359-15-1040 (Use: Well name)  
 Sampling Personnel LT Date 6/8/16 Start Time 1330 Weather \_\_\_\_\_

**MEASUREMENT SUMMARY:**

Measuring Point 706 Depth to Water 20.48 Depth to Product \_\_\_\_\_ Product Thickness \_\_\_\_\_  
 Total Casing Depth 55.57 Borehole Diameter \_\_\_\_\_ Approx. Pump Depth 50 Feet  
 Screen Interval top \_\_\_\_\_ bottom \_\_\_\_\_ Feet

**SAMPLING SUMMARY:**

Sampling Method: Grab  Composite  Grundfos  Bladder Pump  Peristaltic Pump  Bailor   
 Pump Started 1330 Pump Stopped 1400 Total Gallons 3.25

Time (24-hr)	pH (S.U.)	SC (mS/cm)	Temp (°C)	Turb. (NTU)	Flow Rate (ml/min)	DTW (ft)	Drawdown (ft)	DO (mg/L)	ORP (mV)
1335	6.45	0.811	15.07	4.6	~350	20.48	0.00	0.176	-47.1
1340	6.71	0.806	15.14	2.0	~350	20.48	0	0.165	-68.6
1345	6.70	0.804	15.37	0.8	~350	20.48	0	0.161	-72.7
1350	6.68	0.803	15.24	0.9	~350	20.48	0	0.156	-77.9
1355	6.65	0.803	14.81	1.1	~350	20.48	0	0.157	-79.5

**Final:**

Time	pH	SC	Temp	Turb.	Flow Rate	DTW	Drawdown	DO	ORP
1355	6.65	0.803	14.81	1.1	~350	20.48	0	0.157	-79.5

Comments: Flow reduced to <250 ml/min prior to collection

Calibration: pH Calibration Buffers: 4  7  10  ORP Calibration 240 mV  
 SC Reference Solution 1.419 mS/cm Turbidity Cal. Solution 0/126 NTUs  
 Sample Name ATR- MW24(55.4)-606156 Time 1355 VOCs  SVOCs  PAHs  TOC   
 Total Metals  Dissolved Metals  BTEX  Total Cyanide  Free Cyanide   
 Other  List: Resolved Gas  
 MS/MSD \_\_\_\_\_ Blind Dup \_\_\_\_\_ Blind Dup Name \_\_\_\_\_ TB \_\_\_\_\_

# GROUND-WATER/SURFACE WATER SAMPLING FORM

Project Location TFS Rochester Surface Water  Groundwater  Sample Identification ATR-MW 25/16.4  
 Project Number 3359-15-1040 (Use: Well name)  
 Sampling Personnel LH Date 6/15/16 Start Time 0850 Weather Overcast, 70°F

### MEASUREMENT SUMMARY:

Measuring Point 706 Depth to Water 7.82 ft Depth to Product — Product Thickness —  
 Total Casing Depth 15.73 Borehole Diameter — Approx. Pump Depth 12.0 Feet  
 Screen Interval top \_\_\_\_\_ bottom \_\_\_\_\_ Feet

### SAMPLING SUMMARY:

Sampling Method: Grab  Composite  Grundfos  Bladder Pump  Peristaltic Pump  Bailor

Pump Started 0850 Pump Stopped 0936 Total Gallons 3.25

Time (24-hr)	pH (S.U.)	SC (mS/cm)	Temp (°C)	Turb. (NTU)	Flow Rate (ml/min)	DTW (ft)	Drawdown (ft)	DO (mg/L)	ORP (mV)
<u>0855</u>	<u>6.55</u>	<u>0.853</u>	<u>15.40</u>	<u>49.3</u>	<u>~400</u>	<u>7.82</u>	<u>0</u>	<u>1.90</u>	<u>-55.2</u>
<u>0900</u>	<u>6.56</u>	<u>0.868</u>	<u>14.87</u>	<u>11.90</u>	<u>~400</u>	<u>7.82</u>	<u>0</u>	<u>0.68</u>	<u>-66.5</u>
<u>0905</u>	<u>6.66</u>	<u>0.860</u>	<u>14.32</u>	<u>6.0</u>	<u>~400</u>	<u>7.92</u>	<u>0</u>	<u>0.60</u>	<u>-66.6</u>
<u>0910</u>	<u>6.91</u>	<u>0.994</u>	<u>15.39</u>	<u>3.1</u>	<u>~400</u>	<u>7.82</u>	<u>0</u>	<u>1.52</u>	<u>-101.6</u>
<u>0920</u>	<u>6.79</u>	<u>0.853</u>	<u>14.26</u>	<u>2.3</u>	<u>~400</u>	<u>7.82</u>	<u>0</u>	<u>0.65</u>	<u>-114.0</u>
<u>0925</u>	<u>6.84</u>	<u>0.850</u>	<u>14.17</u>	<u>1.8</u>	<u>~460</u>	<u>7.82</u>	<u>0</u>	<u>0.56</u>	<u>-114.1</u>

Final:  
 Time 0925 pH 6.84 SC 0.850 Temp 14.17 Turb. 1.8 Flow Rate ~400 DTW 7.82 Drawdown 0 DO 0.56 ORP -114.1

Comments: flow rate reduced to < 250 ml/min prior to collection

Calibration: pH Calibration Buffers: 4  7  10  ORP Calibration 240 mV  
 SC Reference Solution 1.413 mS/cm Turbidity Cal. Solution 0/126 NTUs  
 Sample Name ATR-MW 25/16.4-606/156 Time 0925 VOCs  SVOCs  PAHs  TOC   
 Total Metals  Dissolved Metals  BTEX  Total Cyanide  Free Cyanide   
 Other  List: Dissolved Gas  
 MS/MSD \_\_\_\_\_ Blind Dup \_\_\_\_\_ Blind Dup Name \_\_\_\_\_ TB \_\_\_\_\_



# GROUND-WATER/SURFACE WATER SAMPLING FORM

Project Location TFS Rochester Surface Water  Groundwater  Sample Identification ATR-MW25(32.6)  
 Project Number 3359-15-1040 (Use: Well name)  
 Sampling Personnel LH Date 6/15/16 Start Time 1000 Weather Overcast, 75°F

**MEASUREMENT SUMMARY:**

Measuring Point T6C Depth to Water 7.95 Depth to Product - Product Thickness -  
 Total Casing Depth 31.91 Borehole Diameter \_\_\_\_\_ Approx. Pump Depth 28 Feet  
 Screen Interval top \_\_\_\_\_ bottom \_\_\_\_\_ Feet

**SAMPLING SUMMARY:**

Sampling Method: Grab  Composite  Grundfos  Bladder Pump  Peristaltic Pump  Bailor

Pump Started 1000 Pump Stopped 1035 Total Gallons 3.5

Time (24-hr)	pH (S.U.)	SC (mS/cm)	Temp (°C)	Turb. (NTU)	Flow Rate (ml/min)	DTW (ft)	Drawdown (ft)	DO (mg/L)	ORP (mV)
<u>1005</u>	<u>6.81</u>	<u>1.905</u>	<u>15.53</u>	<u>16.6</u>	<u>~400</u>	<u>7.95</u>	<u>0.10</u>	<u>1.15</u>	<u>-116.6</u>
<u>1010</u>	<u>6.54</u>	<u>1.319</u>	<u>14.71</u>	<u>9.0</u>	<u>~400</u>	<u>7.85</u>	<u>0.10</u>	<u>0.60</u>	<u>-75.3</u>
<u>1015</u>	<u>6.52</u>	<u>1.326</u>	<u>14.60</u>	<u>9.1</u>	<u>~400</u>	<u>7.85</u>	<u>0.10</u>	<u>0.56</u>	<u>-77.2</u>
<u>1020</u>	<u>6.49</u>	<u>1.335</u>	<u>14.81</u>	<u>6.8</u>	<u>~400</u>	<u>7.85</u>	<u>0.10</u>	<u>0.53</u>	<u>-79.5</u>
<u>1025</u>	<u>6.49</u>	<u>1.340</u>	<u>14.69</u>	<u>6.3</u>	<u>~400</u>	<u>7.85</u>	<u>0.10</u>	<u>0.51</u>	<u>-80.6</u>

**Final:**

Time	pH	SC	Temp	Turb.	Flow Rate	DTW	Drawdown	DO	ORP
<u>1025</u>	<u>6.49</u>	<u>1.340</u>	<u>14.69</u>	<u>6.3</u>	<u>~400</u>	<u>7.85</u>	<u>0.10</u>	<u>0.51</u>	<u>-80.5</u>

Comments: Flow reduced to <250 ml/min prior to collection

Calibration: pH Calibration Buffers: 4  7  10  ORP Calibration 240 mV  
 SC Reference Solution 1.413 mS/cm Turbidity Cal. Solution 0/126 NTUs  
 Sample Name ATR-MW25(32.6) 666156 Time 1030 VOCs  SVOCs  PAHs  TOC   
 Total Metals  Dissolved Metals  BTEX  Total Cyanide  Free Cyanide   
 Other  List: Dissolved Gases  
 MS/MSD \_\_\_\_\_ Blind Dup \_\_\_\_\_ Blind Dup Name \_\_\_\_\_ TB \_\_\_\_\_



# GROUND-WATER/SURFACE WATER SAMPLING FORM

Project Location TFS Rochester Surface Water  Groundwater  Sample Identification ATR-MW25 (48.2)  
 Project Number 3359-15-1040 (Use: Well name)  
 Sampling Personnel LH Date 6/15/16 Start Time 1100 Weather Sunny 75°F

### MEASUREMENT SUMMARY:

Measuring Point 70C Depth to Water 8.18 Depth to Product      Product Thickness       
 Total Casing Depth 44.83 Borehole Diameter      Approx. Pump Depth 39 Feet  
 Screen Interval top      bottom      Feet

### SAMPLING SUMMARY:

Sampling Method: Grab  Composite  Grundfos  Bladder Pump  Peristaltic Pump  Bailer

Pump Started 1100 Pump Stopped 1135 Total Gallons 2.50

Time (24-hr)	pH (S.U.)	SC (mS/cm)	Temp (°C)	Turb. (NTU)	Flow Rate (ml/min)	DTW (ft)	Drawdown (ft)	DO (mg/L)	ORP (mV)
<u>1105</u>	<u>6.66</u>	<u>0.807</u>	<u>15.74</u>	<u>4.6</u>	<u>~400</u>	<u>8.13</u>	<u>0.00</u>	<u>0.81</u>	<u>-70.8</u>
<u>1110</u>	<u>6.36</u>	<u>1.648</u>	<u>16.90</u>	<u>1.8</u>	<u>~400</u>	<u>8.13</u>	<u>0.00</u>	<u>0.64</u>	<u>-75.2</u>
<u>1115</u>	<u>6.26</u>	<u>2.061</u>	<u>16.89</u>	<u>1.3</u>	<u>~400</u>	<u>8.13</u>	<u>0.00</u>	<u>0.60</u>	<u>-73.9</u>
<u>1120</u>	<u>6.20</u>	<u>2.205</u>	<u>17.08</u>	<u>1.1</u>	<u>~400</u>	<u>8.13</u>	<u>0.00</u>	<u>0.56</u>	<u>-75.2</u>
<u>1125</u>	<u>6.18</u>	<u>2.205</u>	<u>17.09</u>	<u>1.3</u>	<u>~400</u>	<u>8.13</u>	<u>0.00</u>	<u>0.55</u>	<u>-75.9</u>

Final:  
 Time 1125 pH 6.18 SC 2.205 Temp 17.09 Turb. 1.3 Flow Rate ~400 DTW 8.13 Drawdown 0.00 DO 0.55 ORP -75.9

Comments: flow reduced to ~250 ml/min prior to collection

Calibration: pH Calibration Buffers: 4  7  10  ORP Calibration 820 mV  
 SC Reference Solution 1.413 mS/cm Turbidity Cal. Solution 6/126 NTUs  
 Sample Name ATR-MW25(48.2) GWS16 Time 1130 VOCs  SVOCs  PAHs  TOC   
 Total Metals  Dissolved Metals  BTEX  Total Cyanide  Free Cyanide   
 Other  List: Dissolved Gases  
 MS/MSD      Blind Dup      Blind Dup Name      TB     



# GROUND-WATER/SURFACE WATER SAMPLING FORM

Project Location TFS Rochester Surface Water  Groundwater  Sample Identification ATR- MW 26 (17.5)  
 Project Number 3359-15-1040 (Use: Well name)  
 Sampling Personnel LH Date 6/14/16 Start Time 1025 Weather Cloudy, 65F

**MEASUREMENT SUMMARY:**

Measuring Point 40C Depth to Water 10.27 Depth to Product --- Product Thickness ---  
 Total Casing Depth 17 Borehole Diameter --- Approx. Pump Depth 13 Feet  
 Screen Interval top --- bottom --- Feet

**SAMPLING SUMMARY:**

Sampling Method: Grab  Composite  Grundfos  Bladder Pump  Peristaltic Pump  Bailer

Pump Started 1025 Pump Stopped 1105 Total Gallons 2.75

0.5  
1.0  
1.5  
2.0  
2.5

Time (24-hr)	pH (S.U.)	SC (mS/cm)	Temp (°C)	Turb. (NTU)	Flow Rate (ml/min)	DTW (ft)	Drawdown (ft)	DO (mg/L)	ORP (mV)
1035	6.52	0.844	13.29	92.1	---	10.27	0	1.27	-109.5
1040	6.71	0.844	13.16	38.5	400	10.27	0	1.28	-109.5
1045	6.85	0.823	13.08	20.2	400	10.27	0	0.96	-122.5
1050	6.92	0.816	13.05	16.5	400	10.27	0	1.02	-123.2
1055	6.97	0.816	13.03	9.5	400	10.27	0	0.90	-133.4

**Final:**

Time 1055 pH 6.97 SC 0.816 Temp 13.03 Turb. 9.5 Flow Rate 400 DTW 10.27 Drawdown 0 DO 0.90 ORP -133.4

Comments: flow rate reduced to <250 ml/min prior to collection

Calibration: pH Calibration Buffers: 4  7  10  ORP Calibration 240 mV  
 SC Reference Solution 1.913 mS/cm Turbidity Cal. Solution 0/126 NTUs

Sample Name ATR- MW 26 (17.5) Time 1100 VOCs  SVOCs  PAHs  TOC   
MW 26 (17.5) 06/14/16  
 Total Metals  Dissolved Metals  BTEX  Total Cyanide  Free Cyanide

Other  List: Dissolved Gas  
 MS/MSD \_\_\_\_\_ Blind Dup \_\_\_\_\_ Blind Dup Name \_\_\_\_\_ TB \_\_\_\_\_





# GROUND-WATER/SURFACE WATER SAMPLING FORM

Project Location TFS Rochester Surface Water  Groundwater  Sample Identification ATR-MW26(25.8)  
 Project Number 3359-15-1040 (Use: Well name)  
 Sampling Personnel LH Date 6/1/16 Start Time 1130 Weather Cloudy 60°F

**MEASUREMENT SUMMARY:**

Measuring Point Vac Depth to Water 10.18 Depth to Product — Product Thickness —  
 Total Casing Depth 28.77 Borehole Diameter — Approx. Pump Depth 24 Feet  
 Screen Interval top \_\_\_\_\_ bottom \_\_\_\_\_ Feet

**SAMPLING SUMMARY:**

Sampling Method: Grab  Composite  Grundfos  Bladder Pump  Peristaltic Pump  Bailer

Pump Started 1130 Pump Stopped 1155 Total Gallons 2.5

Time (24-hr)	pH (S.U.)	SC (mS/cm)	Temp (°C)	Turb. (NTU)	Flow Rate (ml/min)	DTW (ft)	Drawdown (ft)	DO (mg/L)	ORP (mV)
<u>1135</u>	<u>7.36</u>	<u>1.00</u>	<u>15.67</u>	<u>49.7</u>	<u>400</u>	<u>10.15</u>	<u>0</u>	<u>1.71</u>	<u>-107.8</u>
<u>1140</u>	<u>7.27</u>	<u>1.130</u>	<u>15.82</u>	<u>25.0</u>	<u>400</u>	<u>10.15</u>	<u>0</u>	<u>0.66</u>	<u>-106.5</u>
<u>1145</u>	<u>7.30</u>	<u>1.121</u>	<u>14.96</u>	<u>20.4</u>	<u>400</u>	<u>10.15</u>	<u>0</u>	<u>0.59</u>	<u>-102.4</u>
<u>1150</u>	<u>7.29</u>	<u>1.113</u>	<u>15.09</u>	<u>10.9</u>	<u>400</u>	<u>10.15</u>	<u>0</u>	<u>0.57</u>	<u>-103.7</u>

**Final:**  
 Time 1150 pH 7.29 SC 1.113 Temp 15.09 Turb. 10.9 Flow Rate 400 DTW 10.15 Drawdown 0 DO 0.57 ORP -103.7

Comments: flow rate reduced to < 250 ml/min prior to collection

Calibration: pH Calibration Buffers: 4  7  10  ORP Calibration 240 mV  
 SC Reference Solution 1.2115 mS/cm Turbidity Cal. Solution 0/126 NTUs  
 Sample Name ATR-MW26(25.8)-6061416 Time 1150 VOCs  SVOCs  PAHs  TOC   
 Total Metals  Dissolved Metals  BTEX  Total Cyanide  Free Cyanide   
 Other  List: Armed Gas  
 MS/MSD \_\_\_\_\_ Blind Dup \_\_\_\_\_ Blind Dup Name \_\_\_\_\_ TB \_\_\_\_\_

## GROUND-WATER/SURFACE WATER SAMPLING FORM

Project Location TFS Rochester Surface Water  Groundwater  Sample Identification ATR- MW26(58.2)  
 Project Number 3359-15-1040 (Use: Well name)  
 Sampling Personnel LC Date 6/14/18 Start Time 1240 Weather Overcast, 72°F

### MEASUREMENT SUMMARY:

Measuring Point SDC Depth to Water 9.68 Depth to Product — Product Thickness —  
 Total Casing Depth 58.20 Borehole Diameter — Approx. Pump Depth 53 Feet  
 Screen Interval top — bottom — Feet

### SAMPLING SUMMARY:

Sampling Method: Grab  Composite  Grundfos  Bladder Pump  Peristaltic Pump  Bailer   
 Pump Started 1240 Pump Stopped 1305 Total Gallons 2.5

Time (24-hr)	pH (S.U.)	SC (mS/cm)	Temp (°C)	Turb. (NTU)	Flow Rate (ml/min)	DTW (ft)	Drawdown (ft)	DO (mg/L)	ORP (mV)
<u>1245</u>	<u>7.66</u>	<u>0.732</u>	<u>14.43</u>	<u>6.2</u>	<u>~400</u>	<u>9.63</u>	<u>0</u>	<u>1.07</u>	<u>-98.0</u>
<u>1250</u>	<u>7.59</u>	<u>0.821</u>	<u>14.22</u>	<u>6.8</u>	<u>~400</u>	<u>9.63</u>	<u>0</u>	<u>0.72</u>	<u>-116.7</u>
<u>1255</u>	<u>7.56</u>	<u>0.933</u>	<u>14.16</u>	<u>5.9</u>	<u>~400</u>	<u>9.63</u>	<u>0</u>	<u>0.61</u>	<u>-111.0</u>
<u>1300</u>	<u>7.52</u>	<u>0.937</u>	<u>14.11</u>	<u>4.8</u>	<u>~400</u>	<u>9.63</u>	<u>0</u>	<u>0.57</u>	<u>-119.4</u>

**Final:**  
 Time 1300 pH 7.52 SC 0.937 Temp 14.11 Turb. 4.8 Flow Rate ~400 DTW 9.63 Drawdown 0 DO 0.57 ORP -119.4

Comments: flow rate reduced to ~250 ml/min prior to collection

Calibration: pH Calibration Buffers: 4  7  10  ORP Calibration 240 mV  
 SC Reference Solution 12413 mS/cm Turbidity Cal. Solution 0/126 NTUs  
 Sample Name ATR MW26(58.2) 60614 Time 1300 VOCs  SVOCs  PAHs  TOC   
 Total Metals  Dissolved Metals  BTEX  Total Cyanide  Free Cyanide   
 Other  List: Dissolved Gas  
 MS/MSD   Blind Dup   Blind Dup Name   TB  



# GROUND-WATER/SURFACE WATER SAMPLING FORM

Project Location TFS Rochester Surface Water  Groundwater  Sample Identification ATR-MW59(29)  
 Project Number 3359-15-1040 (Use: Well name)  
 Sampling Personnel SR Date 6-17-16 Start Time 0630 Weather 75°F Sunny

**MEASUREMENT SUMMARY:**

Measuring Point TOL Depth to Water 14.36 Depth to Product \_\_\_\_\_ Product Thickness \_\_\_\_\_  
 Total Casing Depth 28.81 Borehole Diameter \_\_\_\_\_ Approx. Pump Depth 24 Feet  
 Screen Interval top \_\_\_\_\_ bottom \_\_\_\_\_ Feet

**SAMPLING SUMMARY:**

Sampling Method: Grab  Composite  Grundfos  Bladder Pump  Peristaltic Pump  Bailor   
 Pump Started 0845 Pump Stopped \_\_\_\_\_ Total Gallons 1.5

Time (24-hr)	pH (S.U.)	SC (mS/cm)	Temp (°C)	Turb. (NTU)	Flow Rate (ml/min)	DTW (ft)	Drawdown (ft)	DO (mg/L)	ORP (mV)
<u>0850</u>	<u>6.60</u>	<u>0.954</u>	<u>17.17</u>	<u>16.8</u>	<u>200</u>	<u>14.48</u>		<u>1.60</u>	<u>7.6</u>
<u>0855</u>	<u>6.26</u>	<u>0.894</u>	<u>17.57</u>	<u>14.1</u>	<u>200</u>	<u>14.48</u>		<u>0.39</u>	<u>-53.6</u>
<u>0900</u>	<u>6.14</u>	<u>0.914</u>	<u>17.55</u>	<u>16.7</u>	<u>200</u>	<u>14.48</u>		<u>0.75</u>	<u>-66.4</u>
<u>0905</u>	<u>6.02</u>	<u>0.986</u>	<u>17.59</u>	<u>15.6</u>	<u>200</u>	<u>14.48</u>		<u>0.67</u>	<u>-68.8</u>
<u>0910</u>	<u>5.94</u>	<u>1.036</u>	<u>17.70</u>	<u>23.8</u>	<u>200</u>	<u>14.48</u>		<u>0.61</u>	<u>-69.5</u>
<u>0915</u>	<u>5.88</u>	<u>1.186</u>	<u>17.44</u>	<u>26.7</u>	<u>200</u>	<u>14.48</u>		<u>0.61</u>	<u>-69.5</u>
<u>0920</u>	<u>5.83</u>	<u>1.247</u>	<u>17.39</u>	<u>24.6</u>	<u>200</u>	<u>14.48</u>		<u>0.59</u>	<u>-69.0</u>

**Final:**

Time	pH	SC	Temp	Turb.	Flow Rate	DTW	Drawdown	DO	ORP
<u>0920</u>	<u>5.83</u>	<u>1.247</u>	<u>17.39</u>	<u>24.6</u>	<u>200</u>	<u>14.48</u>		<u>0.59</u>	<u>-69.0</u>

Comments: \_\_\_\_\_

Calibration: pH Calibration Buffers: 4  7  10  ORP Calibration 240 mV  
 SC Reference Solution 1.413 mS/cm Turbidity Cal. Solution 0/126 NTUs

Sample Name ATR-MW59(29)-6061716 Time 0925 VOCs  SVOCs  PAHs  TOC   
 Total Metals  Dissolved Metals  BTEX  Total Cyanide  Free Cyanide   
 Other  List: Dissolved Gases  
 MS/MSD \_\_\_\_\_ Blind Dup Yes Blind Dup Name ATR-MW59(29)-6061716 R TB



# GROUND-WATER/SURFACE WATER SAMPLING FORM

Project Location TFS Rochester Surface Water  Groundwater  Sample Identification ATR- mw6236  
 Project Number 3359-15-1040 (Use: Well name)  
 Sampling Personnel ZH Date 6/16/15 Start Time 1425 Weather Overcast, 73°F

### MEASUREMENT SUMMARY:

Measuring Point TOE Depth to Water 25.90 Depth to Product 5 Product Thickness -  
 Total Casing Depth 35.47 Borehole Diameter 2 inch Approx. Pump Depth 32 Feet  
 Screen Interval top \_\_\_\_\_ bottom \_\_\_\_\_ Feet

### SAMPLING SUMMARY:

Sampling Method: Grab  Composite  Grundfos  Bladder Pump  Peristaltic Pump  Bailor

Pump Started \_\_\_\_\_ Pump Stopped \_\_\_\_\_ Total Gallons \_\_\_\_\_

Time (24-hr)	pH (S.U.)	SC (mS/cm)	Temp (°C)	Turb. (NTU)	Flow Rate (ml/min)	DTW (ft)	Drawdown (ft)	DO (mg/L)	ORP (mV)
1430	6.49	0.624	16.12	6.8	~350	25.90	0.0	0.75	-82.4
1435	6.44	0.626	16.25	4.7	~350	25.90	0	0.67	-85.5
1440	6.54	0.626	18.09	7.3	~350	25.90	0	0.62	-92.1
1445	6.56	0.625	19.20	4.9	~350	25.90	0	0.61	-103.9
1450	6.56	0.625	14.60	55.2	~350	25.90	0	0.58	-116.0
1455	6.56	0.625	19.62	62.9	~350	25.90	0	0.57	-118.3
1500	6.48	0.624	19.01	52.6	~350	25.90	0	0.56	-120.6

**Final:**  
 Time 1500 pH 6.48 SC 0.624 Temp 19.01 Turb. 52.6 Flow Rate ~350 DTW 25.90 Drawdown 0 DO 0.56 ORP -120.6

Comments: flow reduced to ~250 ml/min prior to collection

Calibration: pH Calibration Buffers: 4  7  10  ORP Calibration 240 mV  
 SC Reference Solution 1.413 mS/cm Turbidity Cal. Solution 0/126 NTUs  
 Sample Name ATR- mw6236-061615 Time 1500 VOCs  SVOCs  PAHs  TOC   
 Total Metals  Dissolved Metals  BTEX  Total Cyanide  Free Cyanide   
 Other  List: Dissolved Causes  
 MS/MSD \_\_\_\_\_ Blind Dup \_\_\_\_\_ Blind Dup Name \_\_\_\_\_ TB \_\_\_\_\_



## GROUND-WATER/SURFACE WATER SAMPLING FORM

Project Location TFS Rochester Surface Water  Groundwater  Sample Identification ATR- mw67  
 Project Number 3359-15-1040 (Use: Well name)  
 Sampling Personnel SP Date 6-20-16 Start Time 1315 Weather 92°F

### MEASUREMENT SUMMARY:

Measuring Point 10C Depth to Water 24.42 Depth to Product \_\_\_\_\_ Product Thickness \_\_\_\_\_  
 Total Casing Depth 30.21 Borehole Diameter \_\_\_\_\_ Approx. Pump Depth \_\_\_\_\_ Feet  
 Screen Interval top \_\_\_\_\_ bottom \_\_\_\_\_ Feet

### SAMPLING SUMMARY:

Sampling Method: Grab  Composite  Grundfos  Bladder Pump  Peristaltic Pump  Bailor   
 Pump Started \_\_\_\_\_ Pump Stopped \_\_\_\_\_ Total Gallons 1.06

Time (24-hr)	pH (S.U.)	SC (mS/cm)	Temp (°C)	Turb. (NTU)	Flow Rate (ml/min)	DTW (ft)	Drawdown (ft)	DO (mg/L)	ORP (mV)
<u>1330</u>	<u>7.18</u>	<u>1.452</u>	<u>17.97</u>	<u>1962</u>	_____	_____	_____	<u>2.34</u>	<u>14.9</u>
<u>1337</u>	<u>6.32</u>	<u>1.456</u>	<u>17.82</u>	<u>2194</u>	_____	_____	_____	<u>3.80</u>	<u>-73.9</u>
<u>1344</u>	<u>6.36</u>	<u>1.439</u>	<u>17.77</u>	<u>2192</u>	_____	_____	_____	<u>3.69</u>	<u>-81.3</u>

0.5  
1.0  
1.0

**Final:**  
 Time 1344 pH 6.36 SC 1.439 Temp 17.77 Turb. 2192 Flow Rate \_\_\_\_\_ DTW \_\_\_\_\_ Drawdown \_\_\_\_\_ DO 3.69 ORP -81.3

Comments: \_\_\_\_\_

Calibration: pH Calibration Buffers: 4  7  10  ORP Calibration 240 mV  
 SC Reference Solution 1.413 mS/cm Turbidity Cal. Solution 0/126 NTUs  
 Sample Name ATR- mw67 + G060010 Time 1350 VOCs  SVOCs  PAHs  TOC   
 Total Metals  Dissolved Metals  BTEX  Total Cyanide  Free Cyanide   
 Other  List: Dry placed cassettes  
 MS/MSD \_\_\_\_\_ Blind Dup \_\_\_\_\_ Blind Dup Name \_\_\_\_\_ TB \_\_\_\_\_



## GROUND-WATER/SURFACE WATER SAMPLING FORM

Project Location TFS Rochester Surface Water  Groundwater  Sample Identification ATR-MW 08  
 Project Number 3359-15-1040 (Use: Well name)  
 Sampling Personnel SNO/LH Date 6-12-10 Start Time 1050 Weather 77 Sunny

**MEASUREMENT SUMMARY:**

Measuring Point TOC Depth to Water 24.85 Depth to Product \_\_\_\_\_ Product Thickness \_\_\_\_\_  
 Total Casing Depth 31.49 Borehole Diameter \_\_\_\_\_ Approx. Pump Depth \_\_\_\_\_ Feet  
 Screen Interval top \_\_\_\_\_ bottom \_\_\_\_\_ Feet

**SAMPLING SUMMARY:**

Sampling Method: Grab  Composite  Grundfos  Bladder Pump  Peristaltic Pump  Bailor   
 Pump Started \_\_\_\_\_ Pump Stopped \_\_\_\_\_ Total Gallons \_\_\_\_\_

Time (24-hr)	pH (S.U.)	SC (mS/cm)	Temp (°C)	Turb. (NTU)	Flow Rate (ml/min)	DTW (ft)	Drawdown (ft)	DO (mg/L)	ORP (mV)
<u>1110</u>	<u>5.06</u>	<u>1.150</u>	<u>19.22</u>	<u>161.3</u>				<u>3.98</u>	<u>63.2</u>
<u>1115</u>	<u>5.21</u>	<u>1.197</u>	<u>17.88</u>	<u>337.3</u>				<u>4.83</u>	<u>70.2</u>
<u>1120</u>	<u>5.08</u>	<u>0.903</u>	<u>17.68</u>	<u>565.4</u>				<u>4.10</u>	<u>-36.7</u>

Crater  
05  
105  
2.0

**Final:**  
 Time 1120 pH 5.08 SC 0.903 Temp 17.68 Turb. 565.4 Flow Rate \_\_\_\_\_ DTW \_\_\_\_\_ Drawdown \_\_\_\_\_ DO 4.10 ORP -36.7

Comments: \_\_\_\_\_

Calibration: pH Calibration Buffers: 4  7  10  ORP Calibration 240 mV  
 SC Reference Solution 1.413 mS/cm Turbidity Cal. Solution 0/126 NTUs  
 Sample Name ATR-MW08-606176 Time 1130 VOCs  SVOCs  PAHs  TOC   
 Total Metals  Dissolved Metals  BTEX  Total Cyanide  Free Cyanide   
 Other  List: Discarded Glasses  
 MS/MSD \_\_\_\_\_ Blind Dup \_\_\_\_\_ Blind Dup Name \_\_\_\_\_ TB \_\_\_\_\_



## GROUND-WATER/SURFACE WATER SAMPLING FORM

Project Location TFS Rochester Surface Water  Groundwater  Sample Identification ATR- MW-71  
 Project Number 3359-15-1040 (Use: Well name)  
 Sampling Personnel SP/2H Date 6-20-16 Start Time 1:55 Weather 90° F

**MEASUREMENT SUMMARY:**

Measuring Point TOC Depth to Water 24.00 Depth to Product \_\_\_\_\_ Product Thickness \_\_\_\_\_  
 Total Casing Depth 31.98 Borehole Diameter \_\_\_\_\_ Approx. Pump Depth \_\_\_\_\_ Feet  
 Screen Interval top \_\_\_\_\_ bottom \_\_\_\_\_ Feet

**SAMPLING SUMMARY:**

Sampling Method: Grab  Composite  Grundfos  Bladder Pump  Peristaltic Pump  Bailor   
 Pump Started \_\_\_\_\_ Pump Stopped \_\_\_\_\_ Total Gallons 2.25

1  
1.5  
2.25

Time (24-hr)	pH (S.U.)	SC (mS/cm)	Temp (°C)	Turb. (NTU)	Flow Rate (ml/min)	DTW (ft)	Drawdown (ft)	DO (mg/L)	ORP (mV)
<u>12:25</u>	<u>6.57</u>	<u>3.218</u>	<u>19.56</u>	<u>126.8</u>				<u>3.32</u>	<u>0.0</u>
<u>12:30</u>	<u>5.71</u>	<u>4.077</u>	<u>18.27</u>	<u>281.0</u>				<u>3.03</u>	<u>-17.4</u>
<u>12:35</u>	<u>5.87</u>	<u>3.470</u>	<u>19.39</u>	<u>294.8</u>				<u>3.95</u>	<u>-30.0</u>

**Final:**

Time 12:35 pH 5.87 SC 3.470 Temp 19.39 Turb. 294.8 Flow Rate \_\_\_\_\_ DTW \_\_\_\_\_ Drawdown \_\_\_\_\_ DO 3.95 ORP -30.0

Comments: \_\_\_\_\_

Calibration: pH Calibration Buffers: 4  7  10  ORP Calibration 240 mV  
 SC Reference Solution 1.413 mS/cm Turbidity Cal. Solution 0/126 NTUs

Sample Name ATR- MW-71 - G062016 Time 12:40 VOCs  SVOCs  PAHs  TOC   
 Total Metals  Dissolved Metals  BTEX  Total Cyanide  Free Cyanide   
 Other  List: Dissolved Gases  
 MS/MSD \_\_\_\_\_ Blind Dup \_\_\_\_\_ Blind Dup Name \_\_\_\_\_ TB \_\_\_\_\_





## GROUND-WATER/SURFACE WATER SAMPLING FORM

Project Location TFS Rochester Surface Water  Groundwater  Sample Identification ATR- MW72  
 Project Number 3359-15-1040 (Use: Well name)  
 Sampling Personnel SP Date 6-20-16 Start Time 1430 Weather 94°F

### MEASUREMENT SUMMARY:

Measuring Point TOC Depth to Water 23.83 Depth to Product \_\_\_\_\_ Product Thickness \_\_\_\_\_  
 Total Casing Depth 31.69 Borehole Diameter \_\_\_\_\_ Approx. Pump Depth \_\_\_\_\_ Feet  
 Screen Interval top \_\_\_\_\_ bottom \_\_\_\_\_ Feet

### SAMPLING SUMMARY:

Sampling Method: Grab  Composite  Grundfos  Bladder Pump  Peristaltic Pump  Bailor

Pump Started \_\_\_\_\_ Pump Stopped \_\_\_\_\_ Total Gallons 2.2

Time (24-hr)	pH (S.U.)	SC (mS/cm)	Temp (°C)	Turb. (NTU)	Flow Rate (ml/min)	DTW (ft)	Drawdown (ft)	DO (mg/L)	ORP (mV)
<u>1450</u>	<u>5.84</u>	<u>2.767</u>	<u>18.48</u>	<u>1429</u>	_____	_____	_____	<u>3.21</u>	<u>-45.4</u>
<u>1500</u>	<u>5.80</u>	<u>3.266</u>	<u>18.09</u>	<u>452</u>	_____	_____	_____	<u>3.98</u>	<u>-68.6</u>
<u>1505</u>	<u>5.61</u>	<u>2.838</u>	<u>17.54</u>	<u>273</u>	_____	_____	_____	<u>3.06</u>	<u>-62.3</u>

Gpal  
 1.0  
 1.5  
 2.2

**Final:**

Time	pH	SC	Temp	Turb.	Flow Rate	DTW	Drawdown	DO	ORP
<u>1505</u>	<u>5.61</u>	<u>2.838</u>	<u>17.54</u>	<u>273</u>	_____	_____	_____	<u>3.06</u>	<u>-62.3</u>

Comments: \_\_\_\_\_

Calibration: pH Calibration Buffers: 4  7  10  ORP Calibration 248 mV  
 SC Reference Solution 1.413 mS/cm Turbidity Cal. Solution 0/126 NTUs

Sample Name ATR- MW72-6062016 Time 1515 VOCs  SVOCs  PAHs  TOC

Total Metals  Dissolved Metals  BTEX  Total Cyanide  Free Cyanide

Other  List: Dissolved Gases

MS/MSD \_\_\_\_\_ Blind Dup \_\_\_\_\_ Blind Dup Name \_\_\_\_\_ TB \_\_\_\_\_



# GROUND-WATER/SURFACE WATER SAMPLING FORM

Project Location TFS Rochester Surface Water  Groundwater  Sample Identification ATR- MW-76(30)  
 Project Number 3359-15-1040 (Use: Well name)  
 Sampling Personnel LH Date 6/20/16 Start Time 1530 Weather Sunny 90°F

**MEASUREMENT SUMMARY:**

Measuring Point TOC Depth to Water 24.30 Depth to Product \_\_\_\_\_ Product Thickness \_\_\_\_\_  
 Total Casing Depth 30.70 Borehole Diameter 2 in. Approx. Pump Depth 26' Feet  
 Screen Interval top \_\_\_\_\_ bottom \_\_\_\_\_ Feet

**SAMPLING SUMMARY:**

Sampling Method: Grab  Composite  Grundfos  Bladder Pump  Peristaltic Pump  Bailor   
 Pump Started 1530 Pump Stopped 1605 Total Gallons 3.5

Time (24-hr)	pH (S.U.)	SC (mS/cm)	Temp (°C)	Turb. (NTU)	Flow Rate (ml/min)	DTW (ft)	Drawdown (ft)	DO (mg/L)	ORP (mV)
1535	6.30	1.680	19.53	187.5	~300	24.30	0	0.70	-25.6
1540	5.97	1.728	17.86	450	~300	24.30	0	0.57	-39.8
1545	5.89	1.784	17.59	13.5	~300	24.30	0	0.57	-44.3
1550	5.84	1.881	17.51	13.3	~300	24.30	0	0.56	-47.7
1555	5.81	1.882	17.48	11.1	~250	24.30	0	0.55	-50.7
1600	5.76	1.912	17.48	11.7	~250	24.30	0	0.54	-55.2

**Final:**  
 Time 1600 pH 5.60 SC 1.912 Temp 17.48 Turb. 11.7 Flow Rate ~250 DTW 24.30 Drawdown 0 DO 0.54 ORP -55.2

Comments: Reg Pre kPa: 9.0 Post kPa:

Calibration: pH Calibration Buffers: 4  7  10  ORP Calibration 240 mV  
 SC Reference Solution 1.413 mS/cm Turbidity Cal. Solution 0/126 NTUs  
 Sample Name ATR- MW-76(30)-G02016 Time 1600 VOCs  SVOCs  PAHs  TOC   
 Total Metals  Dissolved Metals  BTEX  Total Cyanide  Free Cyanide   
 Other  List: Dissolved Gas  
 MS/MSD \_\_\_\_\_ Blind Dup \_\_\_\_\_ Blind Dup Name \_\_\_\_\_ TB \_\_\_\_\_



## GROUND-WATER/SURFACE WATER SAMPLING FORM

Project Location TFS Rochester Surface Water  Groundwater  Sample Identification ATR- MW-77  
 Project Number 3359-15-1040 (Use: Well name)  
 Sampling Personnel LT Date 6/20/16 Start Time 1410 Weather Inside Facility

### MEASUREMENT SUMMARY:

Measuring Point JOC Depth to Water 24.59 Depth to Product — Product Thickness —  
 Total Casing Depth 40.56 Borehole Diameter 2.0 Approx. Pump Depth — Feet  
 Screen Interval top — bottom — Feet

### SAMPLING SUMMARY:

Sampling Method: Grab  Composite  Grundfos  Bladder Pump  Peristaltic Pump  Bailor   
 Pump Started 1410 Pump Stopped 1445 Total Gallons 3.25

Time (24-hr)	pH (S.U.)	SC (mS/cm)	Temp (°C)	Turb. (NTU)	Flow Rate (ml/min)	DTW (ft)	Drawdown (ft)	DO (mg/L)	ORP (mV)
<u>1415</u>	<u>6.80</u>	<u>0.580</u>	<u>17.95</u>	<u>2.5</u>	<u>~300</u>	<u>24.59</u>	<u>0.00</u>	<u>0.96</u>	<u>29.1</u>
<u>1420</u>	<u>6.82</u>	<u>0.582</u>	<u>17.09</u>	<u>7.1</u>	<u>~300</u>	<u>24.59</u>	<u>0.0</u>	<u>0.72</u>	<u>-33.5</u>
<u>1425</u>	<u>6.86</u>	<u>0.596</u>	<u>16.29</u>	<u>7.1</u>	<u>~300</u>	<u>24.59</u>	<u>0</u>	<u>0.62</u>	<u>-62.0</u>
<u>1430</u>	<u>6.91</u>	<u>0.599</u>	<u>16.19</u>	<u>7.7</u>	<u>~300</u>	<u>24.59</u>	<u>0</u>	<u>0.63</u>	<u>-68.1</u>
<u>1435</u>	<u>6.97</u>	<u>0.600</u>	<u>16.09</u>	<u>3.8</u>	<u>~300</u>	<u>24.59</u>	<u>0</u>	<u>0.57</u>	<u>-75.2</u>
<u>1440</u>	<u>7.01</u>	<u>0.598</u>	<u>16.06</u>	<u>3.3</u>	<u>~300</u>	<u>24.59</u>	<u>0</u>	<u>0.57</u>	<u>-79.0</u>

### Final:

Time 1440 pH 7.01 SC 0.598 Temp 16.06 Turb. 3.3 Flow Rate ~300 DTW 24.59 Drawdown 0 DO 0.57 ORP -79.0

Comments: Reg Pre: 9.5 kPa, Post: 9.0 kPa

Calibration: pH Calibration Buffers: 4  7  10  ORP Calibration 248 mV  
 SC Reference Solution 2.413 mS/cm Turbidity Cal. Solution 0.106 NTUs  
 Sample Name ATR- MW-77-6062016 Time 1440 VOCs  SVOCs  PAHs  TOC   
 Total Metals  Dissolved Metals  BTEX  Total Cyanide  Free Cyanide   
 Other  List: Dissolved Gas  
 MS/MSD   Blind Dup   Blind Dup Name   TB  



# GROUND-WATER/SURFACE WATER SAMPLING FORM

Project Location TFS Rochester Surface Water  Groundwater  Sample Identification ATR- MW 78  
 Project Number 3359-15-1040 (Use: Well name)  
 Sampling Personnel SP Date 1540 Start Time 6:20-16 Weather 94°F

**MEASUREMENT SUMMARY:**

Measuring Point TOE Depth to Water 24.34 Depth to Product \_\_\_\_\_ Product Thickness \_\_\_\_\_  
 Total Casing Depth 35.24 Borehole Diameter \_\_\_\_\_ Approx. Pump Depth 32 Feet  
 Screen Interval top bottom \_\_\_\_\_ Feet

**SAMPLING SUMMARY:**

Sampling Method: Grab  Composite  Grundfos  Bladder Pump  Peristaltic Pump  Bailor

Pump Started 1600 Pump Stopped \_\_\_\_\_ Total Gallons 1.5

Time (24-hr)	pH (S.U.)	SC (mS/cm)	Temp (°C)	Turb. (NTU)	Flow Rate (ml/min)	DTW (ft)	Drawdown (ft)	DO (mg/L)	ORP (mV)
<u>1605</u>	<u>5.82</u>	<u>1.532</u>	<u>22.65</u>	<u>446.0</u>	<u>250</u>	<u>24.44</u>		<u>0.77</u>	<u>17.0</u>
<u>1610</u>	<u>5.80</u>	<u>1.547</u>	<u>22.69</u>	<u>420.0</u>	<u>250</u>	<u>24.44</u>		<u>0.74</u>	<u>19.8</u>
<u>1615</u>	<u>5.83</u>	<u>1.590</u>	<u>22.96</u>	<u>387.2</u>	<u>250</u>	<u>24.44</u>		<u>0.69</u>	<u>9.6</u>
<u>1620</u>	<u>5.89</u>	<u>1.625</u>	<u>23.09</u>	<u>374.6</u>	<u>250</u>	<u>24.41</u>		<u>0.68</u>	<u>-18.4</u>
<u>1625</u>	<u>5.90</u>	<u>1.629</u>	<u>23.18</u>	<u>352.9</u>	<u>250</u>	<u>24.41</u>		<u>0.66</u>	<u>-20.4</u>
<u>1630</u>	<u>5.89</u>	<u>1.633</u>	<u>23.21</u>	<u>318.0</u>	<u>250</u>	<u>24.44</u>		<u>0.66</u>	<u>-23.0</u>

**Final:**

Time	pH	SC	Temp	Turb.	Flow Rate	DTW	Drawdown	DO	ORP
<u>1630</u>	<u>5.89</u>	<u>1.633</u>	<u>23.21</u>	<u>318.0</u>	<u>250</u>	<u>24.44</u>		<u>0.66</u>	<u>-23.0</u>

Comments: \* Pump water forms high concentration of bio-accumulation. Water turbid

Calibration: pH Calibration Buffers: 4  7  10  ORP Calibration 2410 mV  
 SC Reference Solution 1.413 mS/cm Turbidity Cal. Solution 0/126 NTUs  
 Sample Name ATR- MW78-G062010 Time 1635 VOCs  SVOCs  PAHs  TOC   
 Total Metals  Dissolved Metals  BTEX  Total Cyanide  Free Cyanide   
 Other  List: Dissolved Gases  
 MS/MSD \_\_\_\_\_ Blind Dup \_\_\_\_\_ Blind Dup Name \_\_\_\_\_ TB \_\_\_\_\_



## GROUND-WATER/SURFACE WATER SAMPLING FORM

Project Location TFS Rochester Surface Water  Groundwater  Sample Identification ATR- MW31(27)  
 Project Number 3359-15-1040 (Use: Well name)  
 Sampling Personnel SP Date 6-16-16 Start Time 1525 Weather 70° overcast

### MEASUREMENT SUMMARY:

Measuring Point JCC Depth to Water 12.87 Depth to Product \_\_\_\_\_ Product Thickness \_\_\_\_\_  
 Total Casing Depth 2760 Borehole Diameter \_\_\_\_\_ Approx. Pump Depth 94 Feet  
 Screen Interval top \_\_\_\_\_ bottom \_\_\_\_\_ Feet

### SAMPLING SUMMARY:

Sampling Method: Grab  Composite  Grundfos  Bladder Pump  Peristaltic Pump  Bailor

Pump Started 1540 Pump Stopped \_\_\_\_\_ Total Gallons \_\_\_\_\_

Time (24-hr)	pH (S.U.)	SC (mS/cm)	Temp (°C)	Turb. (NTU)	Flow Rate (ml/min)	DTW (ft)	Drawdown (ft)	DO (mg/L)	ORP (mV)
<u>1545</u>	<u>6.40</u>	<u>0.991</u>	<u>16.04</u>	<u>9.7</u>	<u>200</u>	<u>13.36</u>		<u>1.34</u>	<u>-59.5</u>
<u>1550</u>	<u>5.74</u>	<u>0.973</u>	<u>15.12</u>	<u>5.7</u>	<u>200</u>	<u>13.50</u>		<u>0.88</u>	<u>-50.2</u>
<u>1555</u>	<u>5.63</u>	<u>0.961</u>	<u>15.06</u>	<u>5.8</u>	<u>200</u>	<u>13.50</u>		<u>0.67</u>	<u>-50.5</u>
<u>1600</u>	<u>5.60</u>	<u>0.961</u>	<u>14.95</u>	<u>9.9</u>	<u>200</u>	<u>13.50</u>		<u>0.61</u>	<u>-53.8</u>
<u>1605</u>	<u>5.59</u>	<u>0.961</u>	<u>14.86</u>	<u>9.0</u>	<u>200</u>	<u>13.50</u>		<u>0.57</u>	<u>-55.1</u>

**Final:**  
 Time 1605 pH 5.59 SC 0.961 Temp 14.96 Turb. 9.0 Flow Rate 200 DTW 13.50 Drawdown \_\_\_\_\_ DO 0.57 ORP -55.1

Comments: \_\_\_\_\_

Calibration: pH Calibration Buffers: 4  7  10  ORP Calibration 240 mV  
 SC Reference Solution 1.413 mS/cm Turbidity Cal. Solution 0/126 NTUs  
 Sample Name ATR- MW31(27) - 6061616 Time 1610 VOCs  SVOCs  PAHs  TOC   
 Total Metals  Dissolved Metals  BTEX  Total Cyanide  Free Cyanide   
 Other  List: Dissolved Gases  
 MS/MSD \_\_\_\_\_ Blind Dup \_\_\_\_\_ Blind Dup Name \_\_\_\_\_ TB \_\_\_\_\_



# GROUND-WATER/SURFACE WATER SAMPLING FORM

Project Location TFS Rochester Surface Water  Groundwater  Sample Identification ATR- MW-82  
 Project Number 3359-15-1040 (Use: Well name)  
 Sampling Personnel LH Date 6/16/16 Start Time 0830 Weather Sunny, 70°F

**MEASUREMENT SUMMARY:**

Measuring Point 400 Depth to Water 22.60 Depth to Product --- Product Thickness ---  
 Total Casing Depth 58.29 Borehole Diameter 1 in. Approx. Pump Depth 53' Feet  
 Screen Interval top \_\_\_\_\_ bottom \_\_\_\_\_ Feet

**SAMPLING SUMMARY:**

Sampling Method: Grab  Composite  Grundfos  Bladder Pump  Peristaltic Pump  Bailer

Pump Started 0830 Pump Stopped 0905 Total Gallons 3.0

Time (24-hr)	pH (S.U.)	SC (mS/cm)	Temp (°C)	Turb. (NTU)	Flow Rate (ml/min)	DTW (ft)	Drawdown (ft)	DO (mg/L)	ORP (mV)
<u>0835</u>	<u>6.41</u>	<u>0.843</u>	<u>15.37</u>	<u>14.6</u>	<u>~400</u>	<u>22.60</u>	<u>0.00</u>	<u>0.78</u>	<u>-454</u>
<u>0840</u>	<u>6.19</u>	<u>0.891</u>	<u>16.20</u>	<u>17.9</u>	<u>~400</u>	<u>22.60</u>	<u>0.00</u>	<u>0.570</u>	<u>-105.6</u>
<u>0845</u>	<u>6.28</u>	<u>0.943</u>	<u>16.21</u>	<u>18.2</u>	<u>~400</u>	<u>22.60</u>	<u>0.00</u>	<u>0.62</u>	<u>-115.8</u>
<u>0850</u>	<u>6.35</u>	<u>0.983</u>	<u>16.06</u>	<u>18.7</u>	<u>~400</u>	<u>22.60</u>	<u>0.00</u>	<u>0.59</u>	<u>-123.1</u>
<u>0855</u>	<u>6.38</u>	<u>0.991</u>	<u>15.78</u>	<u>19.5</u>	<u>~400</u>	<u>22.60</u>	<u>0.00</u>	<u>0.57</u>	<u>-124.5</u>

**Final:**  
 Time 0805 pH 6.38 SC 0.991 Temp 15.98 Turb. 19.5 Flow Rate ~400 DTW 22.60 Drawdown 0.00 DO 0.57 ORP -124.5

Comments: Flow reduced to <200 ml/min prior to collection

Calibration: pH Calibration Buffers: 4  7  10  ORP Calibration 240 mV  
 SC Reference Solution 1.413 mS/cm Turbidity Cal. Solution \_\_\_\_\_ NTUs  
 Sample Name ATR- MW-82 Time 0900 VOCs  SVOCs  PAHs  TOC   
 Total Metals  Dissolved Metals  BTEX  Total Cyanide  Free Cyanide   
 Other  List: Dissolved Oas  
 MS/MSD \_\_\_\_\_ Blind Dup \_\_\_\_\_ Blind Dup Name \_\_\_\_\_ TB \_\_\_\_\_





Textron, Inc.  
TORX Facility Remediation  
Report of Performance Monitoring

## **APPENDIX B**

### **LABORATORY REPORTS AND DATA VALIDATION REPORTS**





30-Jun-2016

Paul Stork  
AMEC Foster Wheeler  
521 Byers Road, Suite 204  
Miamisburg, OH 45342

Re: **TFS #3359151040**

Work Order: **16061162**

Dear Paul,

ALS Environmental received 44 samples on 18-Jun-2016 09:00 AM for the analyses presented in the following report.

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

Sample results are compliant with NELAP standard requirements and QC 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 131.

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

Sincerely,

A handwritten signature in black ink that reads "Joseph Ribar".

Electronically approved by: Joseph Ribar

Joseph Ribar  
Project Manager



Certificate No: IN: C-MI-08

### Report of Laboratory Analysis

ADDRESS 3352 128th Avenue Holland, Michigan 49424-9263 | PHONE (616) 399-6070 | FAX (616) 399-6185

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Environmental ALS Environmental logo icon consisting of a stylized green and blue shape.

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RIGHT SOLUTIONS RIGHT PARTNER

**Client:** AMEC Foster Wheeler  
**Project:** TFS #3359151040  
**Work Order:** 16061162

**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>
16061162-01	ATR-MW17-G061416	Groundwater		6/14/2016 11:05	6/18/2016 09:00	<input type="checkbox"/>
16061162-02	ATR-OW5(16)-G061416	Groundwater		6/14/2016 13:00	6/18/2016 09:00	<input type="checkbox"/>
16061162-03	ATR-OW5(35)-G061416	Groundwater		6/14/2016 13:45	6/18/2016 09:00	<input type="checkbox"/>
16061162-04	ATR-OW5(45)-G061416	Groundwater		6/14/2016 14:40	6/18/2016 09:00	<input type="checkbox"/>
16061162-05	ATR-MW16-G061416	Groundwater		6/14/2016 15:55	6/18/2016 09:00	<input type="checkbox"/>
16061162-06	ATR-MW26(17.5)-G061416	Groundwater		6/14/2016 11:00	6/18/2016 09:00	<input type="checkbox"/>
16061162-07	ATR-MW26(28.8)-G061416	Groundwater		6/14/2016 11:50	6/18/2016 09:00	<input type="checkbox"/>
16061162-08	ATR-MW26(58.2)-G061416	Groundwater		6/14/2016 13:00	6/18/2016 09:00	<input type="checkbox"/>
16061162-09	ATR-ZVI2(17.5)-G061416	Groundwater		6/14/2016 15:05	6/18/2016 09:00	<input type="checkbox"/>
16061162-10	ATR-ZVI2(32.5)-G061416	Groundwater		6/14/2016 15:50	6/18/2016 09:00	<input type="checkbox"/>
16061162-11	ATR-OW2(53)-G061616	Groundwater		6/16/2016 09:05	6/18/2016 09:00	<input type="checkbox"/>
16061162-12	ATR-EB001-G061616	Groundwater		6/16/2016 09:30	6/18/2016 09:00	<input type="checkbox"/>
16061162-13	ATR-OW1(39)-G061616	Groundwater		6/16/2016 11:05	6/18/2016 09:00	<input type="checkbox"/>
16061162-14	ATR-OW1(28)-G061616	Groundwater		6/16/2016 12:25	6/18/2016 09:00	<input type="checkbox"/>
16061162-15	ATR-MW20(51)-G061616	Groundwater		6/16/2016 14:00	6/18/2016 09:00	<input type="checkbox"/>
16061162-16	ATR-MW20(35)-G061616	Groundwater		6/16/2016 14:55	6/18/2016 09:00	<input type="checkbox"/>
16061162-17	ATR-MW81(27)-G061616	Groundwater		6/16/2016 16:10	6/18/2016 09:00	<input type="checkbox"/>
16061162-18	ATR-MW20(35)-G061616R	Groundwater		6/16/2016 14:55	6/18/2016 09:00	<input type="checkbox"/>
16061162-19	ATR-MW15-G061516	Groundwater		6/15/2016 09:55	6/18/2016 09:00	<input type="checkbox"/>
16061162-20	ATR-OW4(54)-G061516	Groundwater		6/15/2016 11:00	6/18/2016 09:00	<input type="checkbox"/>
16061162-21	ATR-OW4(35)-G061516	Groundwater		6/15/2016 11:45	6/18/2016 09:00	<input type="checkbox"/>
16061162-22	ATR-OW3(55)-G061516	Groundwater		6/15/2016 13:20	6/18/2016 09:00	<input type="checkbox"/>
16061162-23	ATR-OW3(35)-G061516	Groundwater		6/15/2016 14:15	6/18/2016 09:00	<input type="checkbox"/>
16061162-24	ATR-OW2(33)-G061516	Groundwater		6/15/2016 15:35	6/18/2016 09:00	<input type="checkbox"/>
16061162-25	ATR-MW25(16.4)-G061516	Groundwater		6/15/2016 09:25	6/18/2016 09:00	<input type="checkbox"/>
16061162-26	ATR-MW25(32.6)-G061516	Groundwater		6/15/2016 10:30	6/18/2016 09:00	<input type="checkbox"/>
16061162-27	ATR-MW25(45.2)-G061516	Groundwater		6/15/2016 11:30	6/18/2016 09:00	<input type="checkbox"/>
16061162-28	ATR-MW24(24.8)-G061516	Groundwater		6/15/2016 12:50	6/18/2016 09:00	<input type="checkbox"/>
16061162-29	ATR-MW24(55.4)-G061516	Groundwater		6/15/2016 13:55	6/18/2016 09:00	<input type="checkbox"/>
16061162-30	ATR-MW14-G061516	Groundwater		6/15/2016 15:30	6/18/2016 09:00	<input type="checkbox"/>
16061162-31	ATR-EB003-G061716	Groundwater		6/17/2016 10:30	6/18/2016 09:00	<input type="checkbox"/>
16061162-32	ATR-PM3-G061716	Groundwater		6/17/2016 09:50	6/18/2016 09:00	<input type="checkbox"/>
16061162-33	ATR-MW68-G061716	Groundwater		6/17/2016 11:30	6/18/2016 09:00	<input type="checkbox"/>
16061162-34	Trip Blank - 061716	Water		6/17/2016	6/18/2016 09:00	<input type="checkbox"/>
16061162-35	ATR-MW59(29)-G061716	Groundwater		6/17/2016 09:25	6/18/2016 09:00	<input type="checkbox"/>
16061162-36	ATR-MW59(29)-G061716R	Groundwater		6/17/2016 09:25	6/18/2016 09:00	<input type="checkbox"/>
16061162-37	ATR-MW82-G061616	Groundwater		6/16/2016 09:00	6/18/2016 09:00	<input type="checkbox"/>
16061162-38	ATR-EB002-G061616	Groundwater		6/16/2016 09:30	6/18/2016 09:00	<input type="checkbox"/>
16061162-39	ATR-MW12-G061616	Groundwater		6/16/2016 10:50	6/18/2016 09:00	<input type="checkbox"/>

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**Client:** AMEC Foster Wheeler  
**Project:** TFS #3359151040  
**Work Order:** 16061162

## Work Order Sample Summary

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<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>
16061162-40	ATR-MW13-G061616	Groundwater		6/16/2016 11:50	6/18/2016 09:00	<input type="checkbox"/>
16061162-41	ATR-MW6C-G061616	Groundwater		6/16/2016 13:20	6/18/2016 09:00	<input type="checkbox"/>
16061162-42	ATR-MW62-G061616	Groundwater		6/16/2016 15:00	6/18/2016 09:00	<input type="checkbox"/>
16061162-43	ATR-PM2-G061616	Groundwater		6/16/2016 16:30	6/18/2016 09:00	<input type="checkbox"/>
16061162-44	ATR-4377NOUHWY31-061416	Groundwater		6/14/2016 11:50	6/18/2016 09:00	<input type="checkbox"/>

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**Client:** AMEC Foster Wheeler  
**Project:** TFS #3359151040  
**Work Order:** 16061162

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**Case Narrative**

Samples for the above noted Work Order were received on 06/18/2016. 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.

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

**Volatile Organics:**

Batch R190242, Method 8260, Sample 16061162-13A MS: The MS and/or MSD recovery was above the upper control limit. The corresponding result in the parent sample was non-detect, therefore no qualification is necessary: 1,1,1-Trichloroethane and Benzene

Batch R190242, Method 8260, Sample 16061162-19A: Verification of sample preservation indicated a pH >2

Batch R190265, Method 8260, Sample 16061162-24A MS: The MS and MSD recoveries were below the lower control limit. The corresponding result in the parent sample may be biased low for this analyte: trans-1,3-Dichloropropene

Batch R190272, Method 8260, Sample VLCSW3-160626: The MS/MSD did not run due to instrument error.

Batch R190304, Method 8260, Sample 16061162-19A MS: The MS and/or MSD recovery was above the upper control limit. The corresponding result in the parent sample was non-detect, therefore no qualification is necessary: Multiple

Batch R190389, Method 8260, Sample 16061162-17A MS: The MS recovery was below the lower control limit. The corresponding result in the parent sample may be biased low for this analyte: trans 1,3 Dichloropropene

Batch R190408, Method 8260, Sample 16061162-03A MS: The MS and MSD recoveries were below the lower control limit. The corresponding result in the parent sample may be

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**Client:** AMEC Foster Wheeler  
**Project:** TFS #3359151040  
**Work Order:** 16061162

**Case Narrative**

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biased low for this analyte: trans-1,3-dichloropropene

Batch R190408, Method 8260, Sample 16061162-03A MSD: The RPD between the MS and MSD was outside the control limit. The corresponding result in the parent sample should be considered estimated for this analyte: Bromomethane

No other deviations or anomalies were noted.

Wet Chemistry:

No other deviations or anomalies were noted.

**ALS Group USA, Corp**

Date: 30-Jun-16

**Client:** AMEC Foster Wheeler  
**Project:** TFS #3359151040  
**Sample ID:** ATR-MW17-G061416  
**Collection Date:** 6/14/2016 11:05 AM

**Work Order:** 16061162  
**Lab ID:** 16061162-01  
**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>		Analyst: <b>LSY</b>	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	6/27/2016 04:24 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	6/27/2016 04:24 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	6/27/2016 04:24 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	6/27/2016 04:24 PM
1,1-Dichloroethene	ND		1.0	µg/L	1	6/27/2016 04:24 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	6/27/2016 04:24 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	6/27/2016 04:24 PM
2-Butanone	ND		5.0	µg/L	1	6/27/2016 04:24 PM
2-Hexanone	ND		5.0	µg/L	1	6/27/2016 04:24 PM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	6/27/2016 04:24 PM
Acetone	ND		10	µg/L	1	6/27/2016 04:24 PM
Benzene	ND		1.0	µg/L	1	6/27/2016 04:24 PM
Bromodichloromethane	ND		1.0	µg/L	1	6/27/2016 04:24 PM
Bromoform	ND		1.0	µg/L	1	6/27/2016 04:24 PM
Bromomethane	ND		1.0	µg/L	1	6/27/2016 04:24 PM
Carbon disulfide	ND		1.0	µg/L	1	6/27/2016 04:24 PM
Carbon tetrachloride	ND		1.0	µg/L	1	6/27/2016 04:24 PM
Chlorobenzene	ND		1.0	µg/L	1	6/27/2016 04:24 PM
Chloroethane	ND		1.0	µg/L	1	6/27/2016 04:24 PM
Chloroform	ND		1.0	µg/L	1	6/27/2016 04:24 PM
Chloromethane	ND		1.0	µg/L	1	6/27/2016 04:24 PM
<b>cis-1,2-Dichloroethene</b>	<b>41</b>		<b>1.0</b>	<b>µg/L</b>	1	6/27/2016 04:24 PM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	6/27/2016 04:24 PM
Dibromochloromethane	ND		1.0	µg/L	1	6/27/2016 04:24 PM
Ethylbenzene	ND		1.0	µg/L	1	6/27/2016 04:24 PM
m,p-Xylene	ND		2.0	µg/L	1	6/27/2016 04:24 PM
Methylene chloride	ND		5.0	µg/L	1	6/27/2016 04:24 PM
o-Xylene	ND		1.0	µg/L	1	6/27/2016 04:24 PM
Styrene	ND		1.0	µg/L	1	6/27/2016 04:24 PM
Tetrachloroethene	ND		1.0	µg/L	1	6/27/2016 04:24 PM
Toluene	ND		1.0	µg/L	1	6/27/2016 04:24 PM
<b>trans-1,2-Dichloroethene</b>	<b>1.8</b>		<b>1.0</b>	<b>µg/L</b>	1	6/27/2016 04:24 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	6/27/2016 04:24 PM
<b>Trichloroethene</b>	<b>220</b>		<b>5.0</b>	<b>µg/L</b>	5	6/25/2016 05:52 AM
Vinyl chloride	ND		1.0	µg/L	1	6/27/2016 04:24 PM
Xylenes, Total	ND		3.0	µg/L	1	6/27/2016 04:24 PM
Surr: 1,2-Dichloroethane-d4	109		75-120	%REC	5	6/25/2016 05:52 AM
Surr: 1,2-Dichloroethane-d4	111		75-120	%REC	1	6/27/2016 04:24 PM
Surr: 4-Bromofluorobenzene	92.6		80-110	%REC	5	6/25/2016 05:52 AM

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

**ALS Group USA, Corp**

Date: 30-Jun-16

**Client:** AMEC Foster Wheeler  
**Project:** TFS #3359151040  
**Sample ID:** ATR-MW17-G061416  
**Collection Date:** 6/14/2016 11:05 AM

**Work Order:** 16061162  
**Lab ID:** 16061162-01  
**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 4-Bromofluorobenzene	92.2		80-110	%REC	1	6/27/2016 04:24 PM
Surr: Dibromofluoromethane	109		85-115	%REC	5	6/25/2016 05:52 AM
Surr: Dibromofluoromethane	112		85-115	%REC	1	6/27/2016 04:24 PM
Surr: Toluene-d8	97.4		85-110	%REC	5	6/25/2016 05:52 AM
Surr: Toluene-d8	95.0		85-110	%REC	1	6/27/2016 04:24 PM
<b>ORGANIC CARBON, TOTAL</b>			<b>SW9060A</b>			Analyst: <b>JJG</b>
Organic Carbon, Total	6.2		0.50	mg/L	1	6/23/2016 01:51 PM

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

**ALS Group USA, Corp**

Date: 30-Jun-16

**Client:** AMEC Foster Wheeler  
**Project:** TFS #3359151040  
**Sample ID:** ATR-OW5(16)-G061416  
**Collection Date:** 6/14/2016 01:00 PM

**Work Order:** 16061162  
**Lab ID:** 16061162-02  
**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>		Analyst: <b>AK</b>	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	6/28/2016 06:01 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	6/28/2016 06:01 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	6/28/2016 06:01 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	6/28/2016 06:01 PM
1,1-Dichloroethene	ND		1.0	µg/L	1	6/28/2016 06:01 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	6/28/2016 06:01 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	6/28/2016 06:01 PM
2-Butanone	ND		5.0	µg/L	1	6/28/2016 06:01 PM
2-Hexanone	ND		5.0	µg/L	1	6/28/2016 06:01 PM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	6/28/2016 06:01 PM
Acetone	ND		10	µg/L	1	6/28/2016 06:01 PM
Benzene	ND		1.0	µg/L	1	6/28/2016 06:01 PM
Bromodichloromethane	ND		1.0	µg/L	1	6/28/2016 06:01 PM
Bromoform	ND		1.0	µg/L	1	6/28/2016 06:01 PM
Bromomethane	ND		1.0	µg/L	1	6/28/2016 06:01 PM
Carbon disulfide	ND		1.0	µg/L	1	6/28/2016 06:01 PM
Carbon tetrachloride	ND		1.0	µg/L	1	6/28/2016 06:01 PM
Chlorobenzene	ND		1.0	µg/L	1	6/28/2016 06:01 PM
Chloroethane	ND		1.0	µg/L	1	6/28/2016 06:01 PM
Chloroform	ND		1.0	µg/L	1	6/28/2016 06:01 PM
Chloromethane	ND		1.0	µg/L	1	6/28/2016 06:01 PM
<b>cis-1,2-Dichloroethene</b>	<b>230</b>		<b>20</b>	<b>µg/L</b>	20	6/25/2016 07:31 AM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	6/28/2016 06:01 PM
Dibromochloromethane	ND		1.0	µg/L	1	6/28/2016 06:01 PM
Ethylbenzene	ND		1.0	µg/L	1	6/28/2016 06:01 PM
m,p-Xylene	ND		2.0	µg/L	1	6/28/2016 06:01 PM
Methylene chloride	ND		5.0	µg/L	1	6/28/2016 06:01 PM
o-Xylene	ND		1.0	µg/L	1	6/28/2016 06:01 PM
Styrene	ND		1.0	µg/L	1	6/28/2016 06:01 PM
Tetrachloroethene	ND		1.0	µg/L	1	6/28/2016 06:01 PM
Toluene	ND		1.0	µg/L	1	6/28/2016 06:01 PM
<b>trans-1,2-Dichloroethene</b>	<b>1.2</b>		<b>1.0</b>	<b>µg/L</b>	1	6/28/2016 06:01 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	6/28/2016 06:01 PM
Trichloroethene	ND		1.0	µg/L	1	6/28/2016 06:01 PM
<b>Vinyl chloride</b>	<b>47</b>		<b>1.0</b>	<b>µg/L</b>	1	6/28/2016 06:01 PM
Xylenes, Total	ND		3.0	µg/L	1	6/28/2016 06:01 PM
Surr: 1,2-Dichloroethane-d4	110		75-120	%REC	20	6/25/2016 07:31 AM
Surr: 1,2-Dichloroethane-d4	101		75-120	%REC	1	6/28/2016 06:01 PM
Surr: 4-Bromofluorobenzene	95.0		80-110	%REC	20	6/25/2016 07:31 AM

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



**ALS Group USA, Corp**

Date: 30-Jun-16

**Client:** AMEC Foster Wheeler  
**Project:** TFS #3359151040  
**Sample ID:** ATR-OW5(16)-G061416  
**Collection Date:** 6/14/2016 01:00 PM

**Work Order:** 16061162  
**Lab ID:** 16061162-02  
**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 4-Bromofluorobenzene	91.6		80-110	%REC	1	6/28/2016 06:01 PM
Surr: Dibromofluoromethane	106		85-115	%REC	20	6/25/2016 07:31 AM
Surr: Dibromofluoromethane	98.8		85-115	%REC	1	6/28/2016 06:01 PM
Surr: Toluene-d8	98.5		85-110	%REC	20	6/25/2016 07:31 AM
Surr: Toluene-d8	99.6		85-110	%REC	1	6/28/2016 06:01 PM
<b>ORGANIC CARBON, TOTAL</b>			<b>SW9060A</b>			Analyst: <b>JJG</b>
Organic Carbon, Total	12		10	mg/L	20	6/23/2016 01:51 PM

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

# ALS Group USA, Corp

Date: 30-Jun-16

**Client:** AMEC Foster Wheeler  
**Project:** TFS #3359151040  
**Sample ID:** ATR-OW5(35)-G061416  
**Collection Date:** 6/14/2016 01:45 PM

**Work Order:** 16061162  
**Lab ID:** 16061162-03  
**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>		Analyst: <b>AK</b>	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	6/28/2016 06:25 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	6/28/2016 06:25 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	6/28/2016 06:25 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	6/28/2016 06:25 PM
1,1-Dichloroethene	ND		1.0	µg/L	1	6/28/2016 06:25 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	6/28/2016 06:25 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	6/28/2016 06:25 PM
<b>2-Butanone</b>	<b>17</b>		<b>5.0</b>	<b>µg/L</b>	1	6/28/2016 06:25 PM
2-Hexanone	ND		5.0	µg/L	1	6/28/2016 06:25 PM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	6/28/2016 06:25 PM
Acetone	ND		10	µg/L	1	6/28/2016 06:25 PM
Benzene	ND		1.0	µg/L	1	6/28/2016 06:25 PM
Bromodichloromethane	ND		1.0	µg/L	1	6/28/2016 06:25 PM
Bromoform	ND		1.0	µg/L	1	6/28/2016 06:25 PM
Bromomethane	ND		1.0	µg/L	1	6/28/2016 06:25 PM
Carbon disulfide	ND		1.0	µg/L	1	6/28/2016 06:25 PM
Carbon tetrachloride	ND		1.0	µg/L	1	6/28/2016 06:25 PM
Chlorobenzene	ND		1.0	µg/L	1	6/28/2016 06:25 PM
Chloroethane	ND		1.0	µg/L	1	6/28/2016 06:25 PM
Chloroform	ND		1.0	µg/L	1	6/28/2016 06:25 PM
Chloromethane	ND		1.0	µg/L	1	6/28/2016 06:25 PM
<b>cis-1,2-Dichloroethene</b>	<b>32</b>		<b>1.0</b>	<b>µg/L</b>	1	6/28/2016 06:25 PM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	6/28/2016 06:25 PM
Dibromochloromethane	ND		1.0	µg/L	1	6/28/2016 06:25 PM
Ethylbenzene	ND		1.0	µg/L	1	6/28/2016 06:25 PM
m,p-Xylene	ND		2.0	µg/L	1	6/28/2016 06:25 PM
Methylene chloride	ND		5.0	µg/L	1	6/28/2016 06:25 PM
o-Xylene	ND		1.0	µg/L	1	6/28/2016 06:25 PM
Styrene	ND		1.0	µg/L	1	6/28/2016 06:25 PM
Tetrachloroethene	ND		1.0	µg/L	1	6/28/2016 06:25 PM
Toluene	ND		1.0	µg/L	1	6/28/2016 06:25 PM
<b>trans-1,2-Dichloroethene</b>	<b>2.1</b>		<b>1.0</b>	<b>µg/L</b>	1	6/28/2016 06:25 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	6/28/2016 06:25 PM
Trichloroethene	ND		1.0	µg/L	1	6/28/2016 06:25 PM
<b>Vinyl chloride</b>	<b>170</b>		<b>20</b>	<b>µg/L</b>	20	6/25/2016 07:56 AM
Xylenes, Total	ND		3.0	µg/L	1	6/28/2016 06:25 PM
Surr: 1,2-Dichloroethane-d4	108		75-120	%REC	20	6/25/2016 07:56 AM
Surr: 1,2-Dichloroethane-d4	101		75-120	%REC	1	6/28/2016 06:25 PM
Surr: 4-Bromofluorobenzene	93.3		80-110	%REC	20	6/25/2016 07:56 AM

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

**ALS Group USA, Corp**

Date: 30-Jun-16

**Client:** AMEC Foster Wheeler  
**Project:** TFS #3359151040  
**Sample ID:** ATR-OW5(35)-G061416  
**Collection Date:** 6/14/2016 01:45 PM

**Work Order:** 16061162  
**Lab ID:** 16061162-03  
**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 4-Bromofluorobenzene	94.0		80-110	%REC	1	6/28/2016 06:25 PM
Surr: Dibromofluoromethane	105		85-115	%REC	20	6/25/2016 07:56 AM
Surr: Dibromofluoromethane	99.2		85-115	%REC	1	6/28/2016 06:25 PM
Surr: Toluene-d8	98.2		85-110	%REC	20	6/25/2016 07:56 AM
Surr: Toluene-d8	98.6		85-110	%REC	1	6/28/2016 06:25 PM
<b>ORGANIC CARBON, TOTAL</b>			<b>SW9060A</b>			Analyst: <b>JJG</b>
Organic Carbon, Total	110		20	mg/L	40	6/23/2016 01:51 PM

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

ALS Group USA, Corp

Date: 30-Jun-16

Client: AMEC Foster Wheeler  
 Project: TFS #3359151040  
 Sample ID: ATR-OW5(45)-G061416  
 Collection Date: 6/14/2016 02:40 PM

Work Order: 16061162  
 Lab ID: 16061162-04  
 Matrix: GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>		Analyst: <b>LSY</b>	
1,1,1-Trichloroethane	ND		5.0	µg/L	5	6/27/2016 06:52 PM
1,1,2,2-Tetrachloroethane	ND		5.0	µg/L	5	6/27/2016 06:52 PM
1,1,2-Trichloroethane	ND		5.0	µg/L	5	6/27/2016 06:52 PM
1,1-Dichloroethane	ND		5.0	µg/L	5	6/27/2016 06:52 PM
1,1-Dichloroethene	ND		5.0	µg/L	5	6/27/2016 06:52 PM
1,2-Dichloroethane	ND		5.0	µg/L	5	6/27/2016 06:52 PM
1,2-Dichloropropane	ND		5.0	µg/L	5	6/27/2016 06:52 PM
<b>2-Butanone</b>	<b>180</b>		<b>25</b>	<b>µg/L</b>	5	6/27/2016 06:52 PM
2-Hexanone	ND		25	µg/L	5	6/27/2016 06:52 PM
4-Methyl-2-pentanone	ND		5.0	µg/L	5	6/27/2016 06:52 PM
Acetone	ND		50	µg/L	5	6/27/2016 06:52 PM
Benzene	ND		5.0	µg/L	5	6/27/2016 06:52 PM
Bromodichloromethane	ND		5.0	µg/L	5	6/27/2016 06:52 PM
Bromoform	ND		5.0	µg/L	5	6/27/2016 06:52 PM
Bromomethane	ND		5.0	µg/L	5	6/27/2016 06:52 PM
Carbon disulfide	ND		5.0	µg/L	5	6/27/2016 06:52 PM
Carbon tetrachloride	ND		5.0	µg/L	5	6/27/2016 06:52 PM
Chlorobenzene	ND		5.0	µg/L	5	6/27/2016 06:52 PM
Chloroethane	ND		5.0	µg/L	5	6/27/2016 06:52 PM
Chloroform	ND		5.0	µg/L	5	6/27/2016 06:52 PM
Chloromethane	ND		5.0	µg/L	5	6/27/2016 06:52 PM
<b>cis-1,2-Dichloroethene</b>	<b>1,000</b>		<b>100</b>	<b>µg/L</b>	100	6/25/2016 09:59 AM
cis-1,3-Dichloropropene	ND		5.0	µg/L	5	6/27/2016 06:52 PM
Dibromochloromethane	ND		5.0	µg/L	5	6/27/2016 06:52 PM
Ethylbenzene	ND		5.0	µg/L	5	6/27/2016 06:52 PM
m,p-Xylene	ND		10	µg/L	5	6/27/2016 06:52 PM
Methylene chloride	ND		25	µg/L	5	6/27/2016 06:52 PM
o-Xylene	ND		5.0	µg/L	5	6/27/2016 06:52 PM
Styrene	ND		5.0	µg/L	5	6/27/2016 06:52 PM
Tetrachloroethene	ND		5.0	µg/L	5	6/27/2016 06:52 PM
Toluene	ND		5.0	µg/L	5	6/27/2016 06:52 PM
trans-1,2-Dichloroethene	ND		5.0	µg/L	5	6/27/2016 06:52 PM
trans-1,3-Dichloropropene	ND		5.0	µg/L	5	6/27/2016 06:52 PM
Trichloroethene	ND		5.0	µg/L	5	6/27/2016 06:52 PM
<b>Vinyl chloride</b>	<b>670</b>		<b>100</b>	<b>µg/L</b>	100	6/25/2016 09:59 AM
Xylenes, Total	ND		15	µg/L	5	6/27/2016 06:52 PM
Surr: 1,2-Dichloroethane-d4	108		75-120	%REC	100	6/25/2016 09:59 AM
Surr: 1,2-Dichloroethane-d4	110		75-120	%REC	5	6/27/2016 06:52 PM
Surr: 4-Bromofluorobenzene	93.8		80-110	%REC	100	6/25/2016 09:59 AM

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

**ALS Group USA, Corp**

Date: 30-Jun-16

**Client:** AMEC Foster Wheeler  
**Project:** TFS #3359151040  
**Sample ID:** ATR-OW5(45)-G061416  
**Collection Date:** 6/14/2016 02:40 PM

**Work Order:** 16061162  
**Lab ID:** 16061162-04  
**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 4-Bromofluorobenzene	92.0		80-110	%REC	5	6/27/2016 06:52 PM
Surr: Dibromofluoromethane	106		85-115	%REC	100	6/25/2016 09:59 AM
Surr: Dibromofluoromethane	113		85-115	%REC	5	6/27/2016 06:52 PM
Surr: Toluene-d8	98.0		85-110	%REC	100	6/25/2016 09:59 AM
Surr: Toluene-d8	95.4		85-110	%REC	5	6/27/2016 06:52 PM
<b>ORGANIC CARBON, TOTAL</b>			<b>SW9060A</b>			Analyst: <b>JJG</b>
Organic Carbon, Total	<b>280</b>		<b>20</b>	mg/L	40	6/24/2016 02:52 PM

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

**ALS Group USA, Corp**

Date: 30-Jun-16

**Client:** AMEC Foster Wheeler  
**Project:** TFS #3359151040  
**Sample ID:** ATR-MW16-G061416  
**Collection Date:** 6/14/2016 03:55 PM

**Work Order:** 16061162  
**Lab ID:** 16061162-05  
**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>			Analyst: <b>LSY</b>
1,1,1-Trichloroethane	ND		1.0	µg/L	1	6/27/2016 04:49 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	6/27/2016 04:49 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	6/27/2016 04:49 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	6/27/2016 04:49 PM
1,1-Dichloroethene	ND		1.0	µg/L	1	6/27/2016 04:49 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	6/27/2016 04:49 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	6/27/2016 04:49 PM
<b>2-Butanone</b>	<b>63</b>		<b>5.0</b>	<b>µg/L</b>	1	6/27/2016 04:49 PM
2-Hexanone	ND		5.0	µg/L	1	6/27/2016 04:49 PM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	6/27/2016 04:49 PM
Acetone	ND		10	µg/L	1	6/27/2016 04:49 PM
Benzene	ND		1.0	µg/L	1	6/27/2016 04:49 PM
Bromodichloromethane	ND		1.0	µg/L	1	6/27/2016 04:49 PM
Bromoform	ND		1.0	µg/L	1	6/27/2016 04:49 PM
Bromomethane	ND		1.0	µg/L	1	6/27/2016 04:49 PM
Carbon disulfide	ND		1.0	µg/L	1	6/27/2016 04:49 PM
Carbon tetrachloride	ND		1.0	µg/L	1	6/27/2016 04:49 PM
Chlorobenzene	ND		1.0	µg/L	1	6/27/2016 04:49 PM
Chloroethane	ND		1.0	µg/L	1	6/27/2016 04:49 PM
Chloroform	ND		1.0	µg/L	1	6/27/2016 04:49 PM
Chloromethane	ND		1.0	µg/L	1	6/27/2016 04:49 PM
<b>cis-1,2-Dichloroethene</b>	<b>320</b>		<b>10</b>	<b>µg/L</b>	10	6/25/2016 08:21 AM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	6/27/2016 04:49 PM
Dibromochloromethane	ND		1.0	µg/L	1	6/27/2016 04:49 PM
Ethylbenzene	ND		1.0	µg/L	1	6/27/2016 04:49 PM
m,p-Xylene	ND		2.0	µg/L	1	6/27/2016 04:49 PM
Methylene chloride	ND		5.0	µg/L	1	6/27/2016 04:49 PM
o-Xylene	ND		1.0	µg/L	1	6/27/2016 04:49 PM
Styrene	ND		1.0	µg/L	1	6/27/2016 04:49 PM
Tetrachloroethene	ND		1.0	µg/L	1	6/27/2016 04:49 PM
Toluene	ND		1.0	µg/L	1	6/27/2016 04:49 PM
<b>trans-1,2-Dichloroethene</b>	<b>2.4</b>		<b>1.0</b>	<b>µg/L</b>	1	6/27/2016 04:49 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	6/27/2016 04:49 PM
Trichloroethene	ND		1.0	µg/L	1	6/27/2016 04:49 PM
<b>Vinyl chloride</b>	<b>270</b>		<b>10</b>	<b>µg/L</b>	10	6/25/2016 08:21 AM
Xylenes, Total	ND		3.0	µg/L	1	6/27/2016 04:49 PM
Surr: 1,2-Dichloroethane-d4	107		75-120	%REC	10	6/25/2016 08:21 AM
Surr: 1,2-Dichloroethane-d4	112		75-120	%REC	1	6/27/2016 04:49 PM
Surr: 4-Bromofluorobenzene	90.5		80-110	%REC	10	6/25/2016 08:21 AM

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

**ALS Group USA, Corp**

Date: 30-Jun-16

**Client:** AMEC Foster Wheeler

**Project:** TFS #3359151040

**Sample ID:** ATR-MW16-G061416

**Collection Date:** 6/14/2016 03:55 PM

**Work Order:** 16061162

**Lab ID:** 16061162-05

**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 4-Bromofluorobenzene	91.0		80-110	%REC	1	6/27/2016 04:49 PM
Surr: Dibromofluoromethane	109		85-115	%REC	10	6/25/2016 08:21 AM
Surr: Dibromofluoromethane	106		85-115	%REC	1	6/27/2016 04:49 PM
Surr: Toluene-d8	95.6		85-110	%REC	10	6/25/2016 08:21 AM
Surr: Toluene-d8	93.9		85-110	%REC	1	6/27/2016 04:49 PM
<b>ORGANIC CARBON, TOTAL</b>			<b>SW9060A</b>			Analyst: <b>JJG</b>
Organic Carbon, Total	<b>220</b>		<b>20</b>	mg/L	40	6/24/2016 02:52 PM

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

**ALS Group USA, Corp**

Date: 30-Jun-16

**Client:** AMEC Foster Wheeler  
**Project:** TFS #3359151040  
**Sample ID:** ATR-MW26(17.5)-G061416  
**Collection Date:** 6/14/2016 11:00 AM

**Work Order:** 16061162  
**Lab ID:** 16061162-06  
**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>		Analyst: <b>LSY</b>	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	6/27/2016 12:43 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	6/27/2016 12:43 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	6/27/2016 12:43 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	6/27/2016 12:43 PM
1,1-Dichloroethene	ND		1.0	µg/L	1	6/27/2016 12:43 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	6/27/2016 12:43 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	6/27/2016 12:43 PM
<b>2-Butanone</b>	<b>16</b>		<b>5.0</b>	<b>µg/L</b>	1	6/27/2016 12:43 PM
2-Hexanone	ND		5.0	µg/L	1	6/27/2016 12:43 PM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	6/27/2016 12:43 PM
Acetone	ND		10	µg/L	1	6/27/2016 12:43 PM
Benzene	ND		1.0	µg/L	1	6/27/2016 12:43 PM
Bromodichloromethane	ND		1.0	µg/L	1	6/27/2016 12:43 PM
Bromoform	ND		1.0	µg/L	1	6/27/2016 12:43 PM
Bromomethane	ND		1.0	µg/L	1	6/27/2016 12:43 PM
Carbon disulfide	ND		1.0	µg/L	1	6/27/2016 12:43 PM
Carbon tetrachloride	ND		1.0	µg/L	1	6/27/2016 12:43 PM
Chlorobenzene	ND		1.0	µg/L	1	6/27/2016 12:43 PM
Chloroethane	ND		1.0	µg/L	1	6/27/2016 12:43 PM
Chloroform	ND		1.0	µg/L	1	6/27/2016 12:43 PM
Chloromethane	ND		1.0	µg/L	1	6/27/2016 12:43 PM
<b>cis-1,2-Dichloroethene</b>	<b>13</b>		<b>1.0</b>	<b>µg/L</b>	1	6/27/2016 12:43 PM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	6/27/2016 12:43 PM
Dibromochloromethane	ND		1.0	µg/L	1	6/27/2016 12:43 PM
Ethylbenzene	ND		1.0	µg/L	1	6/27/2016 12:43 PM
m,p-Xylene	ND		2.0	µg/L	1	6/27/2016 12:43 PM
Methylene chloride	ND		5.0	µg/L	1	6/27/2016 12:43 PM
o-Xylene	ND		1.0	µg/L	1	6/27/2016 12:43 PM
Styrene	ND		1.0	µg/L	1	6/27/2016 12:43 PM
Tetrachloroethene	ND		1.0	µg/L	1	6/27/2016 12:43 PM
Toluene	ND		1.0	µg/L	1	6/27/2016 12:43 PM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	6/27/2016 12:43 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	6/27/2016 12:43 PM
Trichloroethene	ND		1.0	µg/L	1	6/27/2016 12:43 PM
<b>Vinyl chloride</b>	<b>11</b>		<b>1.0</b>	<b>µg/L</b>	1	6/27/2016 12:43 PM
Xylenes, Total	ND		3.0	µg/L	1	6/27/2016 12:43 PM
Surr: 1,2-Dichloroethane-d4	110		75-120	%REC	1	6/27/2016 12:43 PM
Surr: 4-Bromofluorobenzene	91.2		80-110	%REC	1	6/27/2016 12:43 PM
Surr: Dibromofluoromethane	112		85-115	%REC	1	6/27/2016 12:43 PM

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



**ALS Group USA, Corp**

**Date:** 30-Jun-16

**Client:** AMEC Foster Wheeler  
**Project:** TFS #3359151040  
**Sample ID:** ATR-MW26(17.5)-G061416  
**Collection Date:** 6/14/2016 11:00 AM

**Work Order:** 16061162  
**Lab ID:** 16061162-06  
**Matrix:** GROUNDWATER

<b>Analyses</b>	<b>Result</b>	<b>Qual</b>	<b>Report Limit</b>	<b>Units</b>	<b>Dilution Factor</b>	<b>Date Analyzed</b>
<i>Surr: Toluene-d8</i>	97.6		85-110	%REC	1	6/27/2016 12:43 PM
<b>ORGANIC CARBON, TOTAL</b>			<b>SW9060A</b>			Analyst: <b>JJG</b>
Organic Carbon, Total	46		10	mg/L	20	6/23/2016 01:51 PM

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

**ALS Group USA, Corp**

Date: 30-Jun-16

**Client:** AMEC Foster Wheeler  
**Project:** TFS #3359151040  
**Sample ID:** ATR-MW26(28.8)-G061416  
**Collection Date:** 6/14/2016 11:50 AM

**Work Order:** 16061162  
**Lab ID:** 16061162-07  
**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>		Analyst: <b>AK</b>	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	6/25/2016 02:35 AM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	6/25/2016 02:35 AM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	6/25/2016 02:35 AM
1,1-Dichloroethane	ND		1.0	µg/L	1	6/25/2016 02:35 AM
1,1-Dichloroethene	ND		1.0	µg/L	1	6/25/2016 02:35 AM
1,2-Dichloroethane	ND		1.0	µg/L	1	6/25/2016 02:35 AM
1,2-Dichloropropane	ND		1.0	µg/L	1	6/25/2016 02:35 AM
2-Butanone	ND		5.0	µg/L	1	6/25/2016 02:35 AM
2-Hexanone	ND		5.0	µg/L	1	6/25/2016 02:35 AM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	6/25/2016 02:35 AM
Acetone	ND		10	µg/L	1	6/25/2016 02:35 AM
Benzene	ND		1.0	µg/L	1	6/25/2016 02:35 AM
Bromodichloromethane	ND		1.0	µg/L	1	6/25/2016 02:35 AM
Bromoform	ND		1.0	µg/L	1	6/25/2016 02:35 AM
Bromomethane	ND		1.0	µg/L	1	6/25/2016 02:35 AM
Carbon disulfide	ND		1.0	µg/L	1	6/25/2016 02:35 AM
Carbon tetrachloride	ND		1.0	µg/L	1	6/25/2016 02:35 AM
Chlorobenzene	ND		1.0	µg/L	1	6/25/2016 02:35 AM
Chloroethane	ND		1.0	µg/L	1	6/25/2016 02:35 AM
Chloroform	ND		1.0	µg/L	1	6/25/2016 02:35 AM
Chloromethane	ND		1.0	µg/L	1	6/25/2016 02:35 AM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	6/25/2016 02:35 AM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	6/25/2016 02:35 AM
Dibromochloromethane	ND		1.0	µg/L	1	6/25/2016 02:35 AM
Ethylbenzene	ND		1.0	µg/L	1	6/25/2016 02:35 AM
m,p-Xylene	ND		2.0	µg/L	1	6/25/2016 02:35 AM
Methylene chloride	ND		5.0	µg/L	1	6/25/2016 02:35 AM
o-Xylene	ND		1.0	µg/L	1	6/25/2016 02:35 AM
Styrene	ND		1.0	µg/L	1	6/25/2016 02:35 AM
Tetrachloroethene	ND		1.0	µg/L	1	6/25/2016 02:35 AM
Toluene	ND		1.0	µg/L	1	6/25/2016 02:35 AM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	6/25/2016 02:35 AM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	6/25/2016 02:35 AM
Trichloroethene	ND		1.0	µg/L	1	6/25/2016 02:35 AM
Vinyl chloride	ND		1.0	µg/L	1	6/25/2016 02:35 AM
Xylenes, Total	ND		3.0	µg/L	1	6/25/2016 02:35 AM
Surr: 1,2-Dichloroethane-d4	104		75-120	%REC	1	6/25/2016 02:35 AM
Surr: 4-Bromofluorobenzene	94.2		80-110	%REC	1	6/25/2016 02:35 AM
Surr: Dibromofluoromethane	104		85-115	%REC	1	6/25/2016 02:35 AM

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

**ALS Group USA, Corp**

**Date:** 30-Jun-16

**Client:** AMEC Foster Wheeler  
**Project:** TFS #3359151040  
**Sample ID:** ATR-MW26(28.8)-G061416  
**Collection Date:** 6/14/2016 11:50 AM

**Work Order:** 16061162  
**Lab ID:** 16061162-07  
**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	97.4		85-110	%REC	1	6/25/2016 02:35 AM
<b>ORGANIC CARBON, TOTAL</b>			<b>SW9060A</b>			Analyst: <b>JJG</b>
Organic Carbon, Total	7.9		5.0	mg/L	10	6/23/2016 01:51 PM

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

**ALS Group USA, Corp**

Date: 30-Jun-16

**Client:** AMEC Foster Wheeler  
**Project:** TFS #3359151040  
**Sample ID:** ATR-MW26(58.2)-G061416  
**Collection Date:** 6/14/2016 01:00 PM

**Work Order:** 16061162  
**Lab ID:** 16061162-08  
**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>		Analyst: <b>AK</b>	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	6/25/2016 03:00 AM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	6/25/2016 03:00 AM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	6/25/2016 03:00 AM
1,1-Dichloroethane	ND		1.0	µg/L	1	6/25/2016 03:00 AM
1,1-Dichloroethene	ND		1.0	µg/L	1	6/25/2016 03:00 AM
1,2-Dichloroethane	ND		1.0	µg/L	1	6/25/2016 03:00 AM
1,2-Dichloropropane	ND		1.0	µg/L	1	6/25/2016 03:00 AM
<b>2-Butanone</b>	<b>66</b>		<b>5.0</b>	<b>µg/L</b>	1	6/25/2016 03:00 AM
2-Hexanone	ND		5.0	µg/L	1	6/25/2016 03:00 AM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	6/25/2016 03:00 AM
Acetone	ND		10	µg/L	1	6/25/2016 03:00 AM
Benzene	ND		1.0	µg/L	1	6/25/2016 03:00 AM
Bromodichloromethane	ND		1.0	µg/L	1	6/25/2016 03:00 AM
Bromoform	ND		1.0	µg/L	1	6/25/2016 03:00 AM
Bromomethane	ND		1.0	µg/L	1	6/25/2016 03:00 AM
Carbon disulfide	ND		1.0	µg/L	1	6/25/2016 03:00 AM
Carbon tetrachloride	ND		1.0	µg/L	1	6/25/2016 03:00 AM
Chlorobenzene	ND		1.0	µg/L	1	6/25/2016 03:00 AM
Chloroethane	ND		1.0	µg/L	1	6/25/2016 03:00 AM
Chloroform	ND		1.0	µg/L	1	6/25/2016 03:00 AM
Chloromethane	ND		1.0	µg/L	1	6/25/2016 03:00 AM
<b>cis-1,2-Dichloroethene</b>	<b>10</b>		<b>1.0</b>	<b>µg/L</b>	1	6/25/2016 03:00 AM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	6/25/2016 03:00 AM
Dibromochloromethane	ND		1.0	µg/L	1	6/25/2016 03:00 AM
Ethylbenzene	ND		1.0	µg/L	1	6/25/2016 03:00 AM
m,p-Xylene	ND		2.0	µg/L	1	6/25/2016 03:00 AM
Methylene chloride	ND		5.0	µg/L	1	6/25/2016 03:00 AM
o-Xylene	ND		1.0	µg/L	1	6/25/2016 03:00 AM
Styrene	ND		1.0	µg/L	1	6/25/2016 03:00 AM
Tetrachloroethene	ND		1.0	µg/L	1	6/25/2016 03:00 AM
Toluene	ND		1.0	µg/L	1	6/25/2016 03:00 AM
<b>trans-1,2-Dichloroethene</b>	<b>1.1</b>		<b>1.0</b>	<b>µg/L</b>	1	6/25/2016 03:00 AM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	6/25/2016 03:00 AM
Trichloroethene	ND		1.0	µg/L	1	6/25/2016 03:00 AM
<b>Vinyl chloride</b>	<b>26</b>		<b>1.0</b>	<b>µg/L</b>	1	6/25/2016 03:00 AM
Xylenes, Total	ND		3.0	µg/L	1	6/25/2016 03:00 AM
Surr: 1,2-Dichloroethane-d4	105		75-120	%REC	1	6/25/2016 03:00 AM
Surr: 4-Bromofluorobenzene	95.3		80-110	%REC	1	6/25/2016 03:00 AM
Surr: Dibromofluoromethane	104		85-115	%REC	1	6/25/2016 03:00 AM

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

**ALS Group USA, Corp**

Date: 30-Jun-16

**Client:** AMEC Foster Wheeler  
**Project:** TFS #3359151040  
**Sample ID:** ATR-MW26(58.2)-G061416  
**Collection Date:** 6/14/2016 01:00 PM

**Work Order:** 16061162  
**Lab ID:** 16061162-08  
**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	97.0		85-110	%REC	1	6/25/2016 03:00 AM
<b>ORGANIC CARBON, TOTAL</b>			<b>SW9060A</b>			Analyst: <b>JJG</b>
Organic Carbon, Total	130		50	mg/L	100	6/24/2016 02:52 PM

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

**ALS Group USA, Corp**

Date: 30-Jun-16

**Client:** AMEC Foster Wheeler  
**Project:** TFS #3359151040  
**Sample ID:** ATR-ZVI2(17.5)-G061416  
**Collection Date:** 6/14/2016 03:05 PM

**Work Order:** 16061162  
**Lab ID:** 16061162-09  
**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>		Analyst: <b>AK</b>	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	6/25/2016 03:24 AM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	6/25/2016 03:24 AM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	6/25/2016 03:24 AM
1,1-Dichloroethane	ND		1.0	µg/L	1	6/25/2016 03:24 AM
1,1-Dichloroethene	ND		1.0	µg/L	1	6/25/2016 03:24 AM
1,2-Dichloroethane	ND		1.0	µg/L	1	6/25/2016 03:24 AM
1,2-Dichloropropane	ND		1.0	µg/L	1	6/25/2016 03:24 AM
<b>2-Butanone</b>	<b>8.7</b>		<b>5.0</b>	<b>µg/L</b>	1	6/25/2016 03:24 AM
2-Hexanone	ND		5.0	µg/L	1	6/25/2016 03:24 AM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	6/25/2016 03:24 AM
Acetone	ND		10	µg/L	1	6/25/2016 03:24 AM
Benzene	ND		1.0	µg/L	1	6/25/2016 03:24 AM
Bromodichloromethane	ND		1.0	µg/L	1	6/25/2016 03:24 AM
Bromoform	ND		1.0	µg/L	1	6/25/2016 03:24 AM
Bromomethane	ND		1.0	µg/L	1	6/25/2016 03:24 AM
Carbon disulfide	ND		1.0	µg/L	1	6/25/2016 03:24 AM
Carbon tetrachloride	ND		1.0	µg/L	1	6/25/2016 03:24 AM
Chlorobenzene	ND		1.0	µg/L	1	6/25/2016 03:24 AM
Chloroethane	ND		1.0	µg/L	1	6/25/2016 03:24 AM
Chloroform	ND		1.0	µg/L	1	6/25/2016 03:24 AM
Chloromethane	ND		1.0	µg/L	1	6/25/2016 03:24 AM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	6/25/2016 03:24 AM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	6/25/2016 03:24 AM
Dibromochloromethane	ND		1.0	µg/L	1	6/25/2016 03:24 AM
Ethylbenzene	ND		1.0	µg/L	1	6/25/2016 03:24 AM
m,p-Xylene	ND		2.0	µg/L	1	6/25/2016 03:24 AM
Methylene chloride	ND		5.0	µg/L	1	6/25/2016 03:24 AM
o-Xylene	ND		1.0	µg/L	1	6/25/2016 03:24 AM
Styrene	ND		1.0	µg/L	1	6/25/2016 03:24 AM
Tetrachloroethene	ND		1.0	µg/L	1	6/25/2016 03:24 AM
Toluene	ND		1.0	µg/L	1	6/25/2016 03:24 AM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	6/25/2016 03:24 AM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	6/25/2016 03:24 AM
Trichloroethene	ND		1.0	µg/L	1	6/25/2016 03:24 AM
Vinyl chloride	ND		1.0	µg/L	1	6/25/2016 03:24 AM
Xylenes, Total	ND		3.0	µg/L	1	6/25/2016 03:24 AM
Surr: 1,2-Dichloroethane-d4	106		75-120	%REC	1	6/25/2016 03:24 AM
Surr: 4-Bromofluorobenzene	94.3		80-110	%REC	1	6/25/2016 03:24 AM
Surr: Dibromofluoromethane	107		85-115	%REC	1	6/25/2016 03:24 AM

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

**ALS Group USA, Corp**

**Date:** 30-Jun-16

**Client:** AMEC Foster Wheeler  
**Project:** TFS #3359151040  
**Sample ID:** ATR-ZVI2(17.5)-G061416  
**Collection Date:** 6/14/2016 03:05 PM

**Work Order:** 16061162  
**Lab ID:** 16061162-09  
**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	98.4		85-110	%REC	1	6/25/2016 03:24 AM
<b>ORGANIC CARBON, TOTAL</b>			<b>SW9060A</b>			Analyst: <b>JJG</b>
Organic Carbon, Total	17		5.0	mg/L	10	6/23/2016 01:51 PM

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

**ALS Group USA, Corp**

Date: 30-Jun-16

**Client:** AMEC Foster Wheeler  
**Project:** TFS #3359151040  
**Sample ID:** ATR-ZVI2(32.5)-G061416  
**Collection Date:** 6/14/2016 03:50 PM

**Work Order:** 16061162  
**Lab ID:** 16061162-10  
**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>		Analyst: <b>LSY</b>	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	6/27/2016 01:07 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	6/27/2016 01:07 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	6/27/2016 01:07 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	6/27/2016 01:07 PM
1,1-Dichloroethene	ND		1.0	µg/L	1	6/27/2016 01:07 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	6/27/2016 01:07 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	6/27/2016 01:07 PM
2-Butanone	ND		5.0	µg/L	1	6/27/2016 01:07 PM
2-Hexanone	ND		5.0	µg/L	1	6/27/2016 01:07 PM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	6/27/2016 01:07 PM
Acetone	ND		10	µg/L	1	6/27/2016 01:07 PM
Benzene	ND		1.0	µg/L	1	6/27/2016 01:07 PM
Bromodichloromethane	ND		1.0	µg/L	1	6/27/2016 01:07 PM
Bromoform	ND		1.0	µg/L	1	6/27/2016 01:07 PM
Bromomethane	ND		1.0	µg/L	1	6/27/2016 01:07 PM
Carbon disulfide	ND		1.0	µg/L	1	6/27/2016 01:07 PM
Carbon tetrachloride	ND		1.0	µg/L	1	6/27/2016 01:07 PM
Chlorobenzene	ND		1.0	µg/L	1	6/27/2016 01:07 PM
Chloroethane	ND		1.0	µg/L	1	6/27/2016 01:07 PM
Chloroform	ND		1.0	µg/L	1	6/27/2016 01:07 PM
Chloromethane	ND		1.0	µg/L	1	6/27/2016 01:07 PM
<b>cis-1,2-Dichloroethene</b>	<b>30</b>		<b>1.0</b>	<b>µg/L</b>	1	6/27/2016 01:07 PM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	6/27/2016 01:07 PM
Dibromochloromethane	ND		1.0	µg/L	1	6/27/2016 01:07 PM
Ethylbenzene	ND		1.0	µg/L	1	6/27/2016 01:07 PM
m,p-Xylene	ND		2.0	µg/L	1	6/27/2016 01:07 PM
Methylene chloride	ND		5.0	µg/L	1	6/27/2016 01:07 PM
o-Xylene	ND		1.0	µg/L	1	6/27/2016 01:07 PM
Styrene	ND		1.0	µg/L	1	6/27/2016 01:07 PM
Tetrachloroethene	ND		1.0	µg/L	1	6/27/2016 01:07 PM
Toluene	ND		1.0	µg/L	1	6/27/2016 01:07 PM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	6/27/2016 01:07 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	6/27/2016 01:07 PM
Trichloroethene	ND		1.0	µg/L	1	6/27/2016 01:07 PM
<b>Vinyl chloride</b>	<b>65</b>		<b>1.0</b>	<b>µg/L</b>	1	6/27/2016 01:07 PM
Xylenes, Total	ND		3.0	µg/L	1	6/27/2016 01:07 PM
Surr: 1,2-Dichloroethane-d4	112		75-120	%REC	1	6/27/2016 01:07 PM
Surr: 4-Bromofluorobenzene	91.4		80-110	%REC	1	6/27/2016 01:07 PM
Surr: Dibromofluoromethane	111		85-115	%REC	1	6/27/2016 01:07 PM

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



**ALS Group USA, Corp**

Date: 30-Jun-16

**Client:** AMEC Foster Wheeler  
**Project:** TFS #3359151040  
**Sample ID:** ATR-ZVI2(32.5)-G061416  
**Collection Date:** 6/14/2016 03:50 PM

**Work Order:** 16061162  
**Lab ID:** 16061162-10  
**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	96.0		85-110	%REC	1	6/27/2016 01:07 PM
<b>ORGANIC CARBON, TOTAL</b>			<b>SW9060A</b>			Analyst: <b>JJG</b>
Organic Carbon, Total	9.7		2.0	mg/L	4	6/24/2016 02:52 PM

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

**ALS Group USA, Corp**

Date: 30-Jun-16

**Client:** AMEC Foster Wheeler  
**Project:** TFS #3359151040  
**Sample ID:** ATR-OW2(53)-G061616  
**Collection Date:** 6/16/2016 09:05 AM

**Work Order:** 16061162  
**Lab ID:** 16061162-11  
**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>		Analyst: <b>LSY</b>	
1,1,1-Trichloroethane	ND		5.0	µg/L	5	6/27/2016 01:32 PM
1,1,2,2-Tetrachloroethane	ND		5.0	µg/L	5	6/27/2016 01:32 PM
1,1,2-Trichloroethane	ND		5.0	µg/L	5	6/27/2016 01:32 PM
1,1-Dichloroethane	ND		5.0	µg/L	5	6/27/2016 01:32 PM
1,1-Dichloroethene	ND		5.0	µg/L	5	6/27/2016 01:32 PM
1,2-Dichloroethane	ND		5.0	µg/L	5	6/27/2016 01:32 PM
1,2-Dichloropropane	ND		5.0	µg/L	5	6/27/2016 01:32 PM
2-Butanone	ND		25	µg/L	5	6/27/2016 01:32 PM
2-Hexanone	ND		25	µg/L	5	6/27/2016 01:32 PM
4-Methyl-2-pentanone	ND		5.0	µg/L	5	6/27/2016 01:32 PM
Acetone	ND		50	µg/L	5	6/27/2016 01:32 PM
Benzene	ND		5.0	µg/L	5	6/27/2016 01:32 PM
Bromodichloromethane	ND		5.0	µg/L	5	6/27/2016 01:32 PM
Bromoform	ND		5.0	µg/L	5	6/27/2016 01:32 PM
Bromomethane	ND		5.0	µg/L	5	6/27/2016 01:32 PM
Carbon disulfide	ND		5.0	µg/L	5	6/27/2016 01:32 PM
Carbon tetrachloride	ND		5.0	µg/L	5	6/27/2016 01:32 PM
Chlorobenzene	ND		5.0	µg/L	5	6/27/2016 01:32 PM
Chloroethane	ND		5.0	µg/L	5	6/27/2016 01:32 PM
Chloroform	ND		5.0	µg/L	5	6/27/2016 01:32 PM
Chloromethane	ND		5.0	µg/L	5	6/27/2016 01:32 PM
cis-1,2-Dichloroethene	ND		5.0	µg/L	5	6/27/2016 01:32 PM
cis-1,3-Dichloropropene	ND		5.0	µg/L	5	6/27/2016 01:32 PM
Dibromochloromethane	ND		5.0	µg/L	5	6/27/2016 01:32 PM
Ethylbenzene	ND		5.0	µg/L	5	6/27/2016 01:32 PM
m,p-Xylene	ND		10	µg/L	5	6/27/2016 01:32 PM
Methylene chloride	ND		25	µg/L	5	6/27/2016 01:32 PM
o-Xylene	ND		5.0	µg/L	5	6/27/2016 01:32 PM
Styrene	ND		5.0	µg/L	5	6/27/2016 01:32 PM
Tetrachloroethene	ND		5.0	µg/L	5	6/27/2016 01:32 PM
Toluene	ND		5.0	µg/L	5	6/27/2016 01:32 PM
trans-1,2-Dichloroethene	ND		5.0	µg/L	5	6/27/2016 01:32 PM
trans-1,3-Dichloropropene	ND		5.0	µg/L	5	6/27/2016 01:32 PM
Trichloroethene	ND		5.0	µg/L	5	6/27/2016 01:32 PM
Vinyl chloride	ND		5.0	µg/L	5	6/27/2016 01:32 PM
Xylenes, Total	ND		15	µg/L	5	6/27/2016 01:32 PM
Surr: 1,2-Dichloroethane-d4	111		75-120	%REC	5	6/27/2016 01:32 PM
Surr: 4-Bromofluorobenzene	93.7		80-110	%REC	5	6/27/2016 01:32 PM
Surr: Dibromofluoromethane	103		85-115	%REC	5	6/27/2016 01:32 PM

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

**ALS Group USA, Corp**

Date: 30-Jun-16

**Client:** AMEC Foster Wheeler  
**Project:** TFS #3359151040  
**Sample ID:** ATR-OW2(53)-G061616  
**Collection Date:** 6/16/2016 09:05 AM

**Work Order:** 16061162  
**Lab ID:** 16061162-11  
**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	97.9		85-110	%REC	5	6/27/2016 01:32 PM
<b>ORGANIC CARBON, TOTAL</b>			<b>SW9060A</b>			Analyst: <b>JJG</b>
Organic Carbon, Total	320		50	mg/L	100	6/23/2016 01:51 PM

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

# ALS Group USA, Corp

Date: 30-Jun-16

Client: AMEC Foster Wheeler  
 Project: TFS #3359151040  
 Sample ID: ATR-EB001-G061616  
 Collection Date: 6/16/2016 09:30 AM

Work Order: 16061162  
 Lab ID: 16061162-12  
 Matrix: GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>		Analyst: <b>LSY</b>	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	6/27/2016 11:29 AM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	6/27/2016 11:29 AM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	6/27/2016 11:29 AM
1,1-Dichloroethane	ND		1.0	µg/L	1	6/27/2016 11:29 AM
1,1-Dichloroethene	ND		1.0	µg/L	1	6/27/2016 11:29 AM
1,2-Dichloroethane	ND		1.0	µg/L	1	6/27/2016 11:29 AM
1,2-Dichloropropane	ND		1.0	µg/L	1	6/27/2016 11:29 AM
2-Butanone	ND		5.0	µg/L	1	6/27/2016 11:29 AM
2-Hexanone	ND		5.0	µg/L	1	6/27/2016 11:29 AM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	6/27/2016 11:29 AM
Acetone	ND		10	µg/L	1	6/27/2016 11:29 AM
Benzene	ND		1.0	µg/L	1	6/27/2016 11:29 AM
<b>Bromodichloromethane</b>	<b>2.5</b>		<b>1.0</b>	<b>µg/L</b>	1	6/27/2016 11:29 AM
Bromoform	ND		1.0	µg/L	1	6/27/2016 11:29 AM
Bromomethane	ND		1.0	µg/L	1	6/27/2016 11:29 AM
Carbon disulfide	ND		1.0	µg/L	1	6/27/2016 11:29 AM
Carbon tetrachloride	ND		1.0	µg/L	1	6/27/2016 11:29 AM
Chlorobenzene	ND		1.0	µg/L	1	6/27/2016 11:29 AM
Chloroethane	ND		1.0	µg/L	1	6/27/2016 11:29 AM
<b>Chloroform</b>	<b>9.9</b>		<b>1.0</b>	<b>µg/L</b>	1	6/27/2016 11:29 AM
Chloromethane	ND		1.0	µg/L	1	6/27/2016 11:29 AM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	6/27/2016 11:29 AM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	6/27/2016 11:29 AM
Dibromochloromethane	ND		1.0	µg/L	1	6/27/2016 11:29 AM
Ethylbenzene	ND		1.0	µg/L	1	6/27/2016 11:29 AM
m,p-Xylene	ND		2.0	µg/L	1	6/27/2016 11:29 AM
Methylene chloride	ND		5.0	µg/L	1	6/27/2016 11:29 AM
o-Xylene	ND		1.0	µg/L	1	6/27/2016 11:29 AM
Styrene	ND		1.0	µg/L	1	6/27/2016 11:29 AM
Tetrachloroethene	ND		1.0	µg/L	1	6/27/2016 11:29 AM
Toluene	ND		1.0	µg/L	1	6/27/2016 11:29 AM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	6/27/2016 11:29 AM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	6/27/2016 11:29 AM
Trichloroethene	ND		1.0	µg/L	1	6/27/2016 11:29 AM
Vinyl chloride	ND		1.0	µg/L	1	6/27/2016 11:29 AM
Xylenes, Total	ND		3.0	µg/L	1	6/27/2016 11:29 AM
Surr: 1,2-Dichloroethane-d4	109		75-120	%REC	1	6/27/2016 11:29 AM
Surr: 4-Bromofluorobenzene	94.6		80-110	%REC	1	6/27/2016 11:29 AM
Surr: Dibromofluoromethane	109		85-115	%REC	1	6/27/2016 11:29 AM

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

**ALS Group USA, Corp**

Date: 30-Jun-16

**Client:** AMEC Foster Wheeler

**Project:** TFS #3359151040

**Sample ID:** ATR-EB001-G061616

**Collection Date:** 6/16/2016 09:30 AM

**Work Order:** 16061162

**Lab ID:** 16061162-12

**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	98.2		85-110	%REC	1	6/27/2016 11:29 AM
<b>ORGANIC CARBON, TOTAL</b>			<b>SW9060A</b>			Analyst: <b>JJG</b>
Organic Carbon, Total	2.6		0.50	mg/L	1	6/23/2016 01:51 PM

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

**ALS Group USA, Corp**

Date: 30-Jun-16

**Client:** AMEC Foster Wheeler  
**Project:** TFS #3359151040  
**Sample ID:** ATR-OW1(39)-G061616  
**Collection Date:** 6/16/2016 11:05 AM

**Work Order:** 16061162  
**Lab ID:** 16061162-13  
**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>		Analyst: <b>AK</b>	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	6/25/2016 03:49 AM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	6/25/2016 03:49 AM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	6/25/2016 03:49 AM
1,1-Dichloroethane	ND		1.0	µg/L	1	6/25/2016 03:49 AM
1,1-Dichloroethene	ND		1.0	µg/L	1	6/25/2016 03:49 AM
1,2-Dichloroethane	ND		1.0	µg/L	1	6/25/2016 03:49 AM
1,2-Dichloropropane	ND		1.0	µg/L	1	6/25/2016 03:49 AM
2-Butanone	ND		5.0	µg/L	1	6/25/2016 03:49 AM
2-Hexanone	ND		5.0	µg/L	1	6/25/2016 03:49 AM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	6/25/2016 03:49 AM
Acetone	ND		10	µg/L	1	6/25/2016 03:49 AM
Benzene	ND		1.0	µg/L	1	6/25/2016 03:49 AM
Bromodichloromethane	ND		1.0	µg/L	1	6/25/2016 03:49 AM
Bromoform	ND		1.0	µg/L	1	6/25/2016 03:49 AM
Bromomethane	ND		1.0	µg/L	1	6/25/2016 03:49 AM
Carbon disulfide	ND		1.0	µg/L	1	6/25/2016 03:49 AM
Carbon tetrachloride	ND		1.0	µg/L	1	6/25/2016 03:49 AM
Chlorobenzene	ND		1.0	µg/L	1	6/25/2016 03:49 AM
Chloroethane	ND		1.0	µg/L	1	6/25/2016 03:49 AM
Chloroform	ND		1.0	µg/L	1	6/25/2016 03:49 AM
Chloromethane	ND		1.0	µg/L	1	6/25/2016 03:49 AM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	6/25/2016 03:49 AM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	6/25/2016 03:49 AM
Dibromochloromethane	ND		1.0	µg/L	1	6/25/2016 03:49 AM
Ethylbenzene	ND		1.0	µg/L	1	6/25/2016 03:49 AM
m,p-Xylene	ND		2.0	µg/L	1	6/25/2016 03:49 AM
Methylene chloride	ND		5.0	µg/L	1	6/25/2016 03:49 AM
o-Xylene	ND		1.0	µg/L	1	6/25/2016 03:49 AM
Styrene	ND		1.0	µg/L	1	6/25/2016 03:49 AM
Tetrachloroethene	ND		1.0	µg/L	1	6/25/2016 03:49 AM
Toluene	ND		1.0	µg/L	1	6/25/2016 03:49 AM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	6/25/2016 03:49 AM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	6/25/2016 03:49 AM
Trichloroethene	ND		1.0	µg/L	1	6/25/2016 03:49 AM
Vinyl chloride	ND		1.0	µg/L	1	6/25/2016 03:49 AM
Xylenes, Total	ND		3.0	µg/L	1	6/25/2016 03:49 AM
Surr: 1,2-Dichloroethane-d4	105		75-120	%REC	1	6/25/2016 03:49 AM
Surr: 4-Bromofluorobenzene	95.2		80-110	%REC	1	6/25/2016 03:49 AM
Surr: Dibromofluoromethane	105		85-115	%REC	1	6/25/2016 03:49 AM

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

**ALS Group USA, Corp**

**Date:** 30-Jun-16

**Client:** AMEC Foster Wheeler  
**Project:** TFS #3359151040  
**Sample ID:** ATR-OW1(39)-G061616  
**Collection Date:** 6/16/2016 11:05 AM

**Work Order:** 16061162  
**Lab ID:** 16061162-13  
**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	97.5		85-110	%REC	1	6/25/2016 03:49 AM
<b>ORGANIC CARBON, TOTAL</b>			<b>SW9060A</b>			Analyst: <b>JJG</b>
Organic Carbon, Total	7.7		2.0	mg/L	4	6/23/2016 01:51 PM

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

**ALS Group USA, Corp**

Date: 30-Jun-16

**Client:** AMEC Foster Wheeler  
**Project:** TFS #3359151040  
**Sample ID:** ATR-OW1(28)-G061616  
**Collection Date:** 6/16/2016 12:25 PM

**Work Order:** 16061162  
**Lab ID:** 16061162-14  
**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>		Analyst: <b>LSY</b>	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	6/27/2016 01:57 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	6/27/2016 01:57 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	6/27/2016 01:57 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	6/27/2016 01:57 PM
1,1-Dichloroethene	ND		1.0	µg/L	1	6/27/2016 01:57 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	6/27/2016 01:57 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	6/27/2016 01:57 PM
<b>2-Butanone</b>	<b>13</b>		<b>5.0</b>	<b>µg/L</b>	1	6/27/2016 01:57 PM
2-Hexanone	ND		5.0	µg/L	1	6/27/2016 01:57 PM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	6/27/2016 01:57 PM
Acetone	ND		10	µg/L	1	6/27/2016 01:57 PM
Benzene	ND		1.0	µg/L	1	6/27/2016 01:57 PM
Bromodichloromethane	ND		1.0	µg/L	1	6/27/2016 01:57 PM
Bromoform	ND		1.0	µg/L	1	6/27/2016 01:57 PM
Bromomethane	ND		1.0	µg/L	1	6/27/2016 01:57 PM
Carbon disulfide	ND		1.0	µg/L	1	6/27/2016 01:57 PM
Carbon tetrachloride	ND		1.0	µg/L	1	6/27/2016 01:57 PM
Chlorobenzene	ND		1.0	µg/L	1	6/27/2016 01:57 PM
Chloroethane	ND		1.0	µg/L	1	6/27/2016 01:57 PM
Chloroform	ND		1.0	µg/L	1	6/27/2016 01:57 PM
Chloromethane	ND		1.0	µg/L	1	6/27/2016 01:57 PM
<b>cis-1,2-Dichloroethene</b>	<b>18</b>		<b>1.0</b>	<b>µg/L</b>	1	6/27/2016 01:57 PM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	6/27/2016 01:57 PM
Dibromochloromethane	ND		1.0	µg/L	1	6/27/2016 01:57 PM
Ethylbenzene	ND		1.0	µg/L	1	6/27/2016 01:57 PM
m,p-Xylene	ND		2.0	µg/L	1	6/27/2016 01:57 PM
Methylene chloride	ND		5.0	µg/L	1	6/27/2016 01:57 PM
o-Xylene	ND		1.0	µg/L	1	6/27/2016 01:57 PM
Styrene	ND		1.0	µg/L	1	6/27/2016 01:57 PM
Tetrachloroethene	ND		1.0	µg/L	1	6/27/2016 01:57 PM
Toluene	ND		1.0	µg/L	1	6/27/2016 01:57 PM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	6/27/2016 01:57 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	6/27/2016 01:57 PM
Trichloroethene	ND		1.0	µg/L	1	6/27/2016 01:57 PM
<b>Vinyl chloride</b>	<b>26</b>		<b>1.0</b>	<b>µg/L</b>	1	6/27/2016 01:57 PM
Xylenes, Total	ND		3.0	µg/L	1	6/27/2016 01:57 PM
Surr: 1,2-Dichloroethane-d4	110		75-120	%REC	1	6/27/2016 01:57 PM
Surr: 4-Bromofluorobenzene	93.0		80-110	%REC	1	6/27/2016 01:57 PM
Surr: Dibromofluoromethane	110		85-115	%REC	1	6/27/2016 01:57 PM

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



**ALS Group USA, Corp**

**Date:** 30-Jun-16

**Client:** AMEC Foster Wheeler  
**Project:** TFS #3359151040  
**Sample ID:** ATR-OW1(28)-G061616  
**Collection Date:** 6/16/2016 12:25 PM

**Work Order:** 16061162  
**Lab ID:** 16061162-14  
**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	96.8		85-110	%REC	1	6/27/2016 01:57 PM
<b>ORGANIC CARBON, TOTAL</b>			<b>SW9060A</b>			Analyst: <b>JJG</b>
Organic Carbon, Total	20		10	mg/L	20	6/24/2016 02:52 PM

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

**ALS Group USA, Corp**

Date: 30-Jun-16

**Client:** AMEC Foster Wheeler  
**Project:** TFS #3359151040  
**Sample ID:** ATR-MW20(51)-G061616  
**Collection Date:** 6/16/2016 02:00 PM

**Work Order:** 16061162  
**Lab ID:** 16061162-15  
**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>		Analyst: <b>AK</b>	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	6/25/2016 04:14 AM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	6/25/2016 04:14 AM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	6/25/2016 04:14 AM
1,1-Dichloroethane	ND		1.0	µg/L	1	6/25/2016 04:14 AM
1,1-Dichloroethene	ND		1.0	µg/L	1	6/25/2016 04:14 AM
1,2-Dichloroethane	ND		1.0	µg/L	1	6/25/2016 04:14 AM
1,2-Dichloropropane	ND		1.0	µg/L	1	6/25/2016 04:14 AM
<b>2-Butanone</b>	<b>24</b>		<b>5.0</b>	<b>µg/L</b>	1	6/25/2016 04:14 AM
2-Hexanone	ND		5.0	µg/L	1	6/25/2016 04:14 AM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	6/25/2016 04:14 AM
Acetone	ND		10	µg/L	1	6/25/2016 04:14 AM
Benzene	ND		1.0	µg/L	1	6/25/2016 04:14 AM
Bromodichloromethane	ND		1.0	µg/L	1	6/25/2016 04:14 AM
Bromoform	ND		1.0	µg/L	1	6/25/2016 04:14 AM
Bromomethane	ND		1.0	µg/L	1	6/25/2016 04:14 AM
Carbon disulfide	ND		1.0	µg/L	1	6/25/2016 04:14 AM
Carbon tetrachloride	ND		1.0	µg/L	1	6/25/2016 04:14 AM
Chlorobenzene	ND		1.0	µg/L	1	6/25/2016 04:14 AM
Chloroethane	ND		1.0	µg/L	1	6/25/2016 04:14 AM
Chloroform	ND		1.0	µg/L	1	6/25/2016 04:14 AM
Chloromethane	ND		1.0	µg/L	1	6/25/2016 04:14 AM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	6/25/2016 04:14 AM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	6/25/2016 04:14 AM
Dibromochloromethane	ND		1.0	µg/L	1	6/25/2016 04:14 AM
Ethylbenzene	ND		1.0	µg/L	1	6/25/2016 04:14 AM
m,p-Xylene	ND		2.0	µg/L	1	6/25/2016 04:14 AM
Methylene chloride	ND		5.0	µg/L	1	6/25/2016 04:14 AM
o-Xylene	ND		1.0	µg/L	1	6/25/2016 04:14 AM
Styrene	ND		1.0	µg/L	1	6/25/2016 04:14 AM
Tetrachloroethene	ND		1.0	µg/L	1	6/25/2016 04:14 AM
Toluene	ND		1.0	µg/L	1	6/25/2016 04:14 AM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	6/25/2016 04:14 AM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	6/25/2016 04:14 AM
Trichloroethene	ND		1.0	µg/L	1	6/25/2016 04:14 AM
Vinyl chloride	ND		1.0	µg/L	1	6/25/2016 04:14 AM
Xylenes, Total	ND		3.0	µg/L	1	6/25/2016 04:14 AM
Surr: 1,2-Dichloroethane-d4	106		75-120	%REC	1	6/25/2016 04:14 AM
Surr: 4-Bromofluorobenzene	95.8		80-110	%REC	1	6/25/2016 04:14 AM
Surr: Dibromofluoromethane	106		85-115	%REC	1	6/25/2016 04:14 AM

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

**ALS Group USA, Corp**

**Date:** 30-Jun-16

**Client:** AMEC Foster Wheeler  
**Project:** TFS #3359151040  
**Sample ID:** ATR-MW20(51)-G061616  
**Collection Date:** 6/16/2016 02:00 PM

**Work Order:** 16061162  
**Lab ID:** 16061162-15  
**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	99.5		85-110	%REC	1	6/25/2016 04:14 AM
<b>ORGANIC CARBON, TOTAL</b>			<b>SW9060A</b>			Analyst: <b>JJG</b>
Organic Carbon, Total	83		10	mg/L	20	6/23/2016 01:51 PM

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

**ALS Group USA, Corp**

Date: 30-Jun-16

**Client:** AMEC Foster Wheeler  
**Project:** TFS #3359151040  
**Sample ID:** ATR-MW20(35)-G061616  
**Collection Date:** 6/16/2016 02:55 PM

**Work Order:** 16061162  
**Lab ID:** 16061162-16  
**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>		Analyst: <b>AK</b>	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	6/25/2016 04:38 AM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	6/25/2016 04:38 AM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	6/25/2016 04:38 AM
1,1-Dichloroethane	ND		1.0	µg/L	1	6/25/2016 04:38 AM
1,1-Dichloroethene	ND		1.0	µg/L	1	6/25/2016 04:38 AM
1,2-Dichloroethane	ND		1.0	µg/L	1	6/25/2016 04:38 AM
1,2-Dichloropropane	ND		1.0	µg/L	1	6/25/2016 04:38 AM
2-Butanone	ND		5.0	µg/L	1	6/25/2016 04:38 AM
2-Hexanone	ND		5.0	µg/L	1	6/25/2016 04:38 AM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	6/25/2016 04:38 AM
Acetone	ND		10	µg/L	1	6/25/2016 04:38 AM
Benzene	ND		1.0	µg/L	1	6/25/2016 04:38 AM
Bromodichloromethane	ND		1.0	µg/L	1	6/25/2016 04:38 AM
Bromoform	ND		1.0	µg/L	1	6/25/2016 04:38 AM
Bromomethane	ND		1.0	µg/L	1	6/25/2016 04:38 AM
Carbon disulfide	ND		1.0	µg/L	1	6/25/2016 04:38 AM
Carbon tetrachloride	ND		1.0	µg/L	1	6/25/2016 04:38 AM
Chlorobenzene	ND		1.0	µg/L	1	6/25/2016 04:38 AM
Chloroethane	ND		1.0	µg/L	1	6/25/2016 04:38 AM
Chloroform	ND		1.0	µg/L	1	6/25/2016 04:38 AM
Chloromethane	ND		1.0	µg/L	1	6/25/2016 04:38 AM
<b>cis-1,2-Dichloroethene</b>	<b>1.7</b>		<b>1.0</b>	<b>µg/L</b>	1	6/25/2016 04:38 AM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	6/25/2016 04:38 AM
Dibromochloromethane	ND		1.0	µg/L	1	6/25/2016 04:38 AM
Ethylbenzene	ND		1.0	µg/L	1	6/25/2016 04:38 AM
m,p-Xylene	ND		2.0	µg/L	1	6/25/2016 04:38 AM
Methylene chloride	ND		5.0	µg/L	1	6/25/2016 04:38 AM
o-Xylene	ND		1.0	µg/L	1	6/25/2016 04:38 AM
Styrene	ND		1.0	µg/L	1	6/25/2016 04:38 AM
Tetrachloroethene	ND		1.0	µg/L	1	6/25/2016 04:38 AM
Toluene	ND		1.0	µg/L	1	6/25/2016 04:38 AM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	6/25/2016 04:38 AM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	6/25/2016 04:38 AM
Trichloroethene	ND		1.0	µg/L	1	6/25/2016 04:38 AM
<b>Vinyl chloride</b>	<b>12</b>		<b>1.0</b>	<b>µg/L</b>	1	6/25/2016 04:38 AM
Xylenes, Total	ND		3.0	µg/L	1	6/25/2016 04:38 AM
Surr: 1,2-Dichloroethane-d4	106		75-120	%REC	1	6/25/2016 04:38 AM
Surr: 4-Bromofluorobenzene	95.2		80-110	%REC	1	6/25/2016 04:38 AM
Surr: Dibromofluoromethane	108		85-115	%REC	1	6/25/2016 04:38 AM

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

**ALS Group USA, Corp**

**Date:** 30-Jun-16

**Client:** AMEC Foster Wheeler  
**Project:** TFS #3359151040  
**Sample ID:** ATR-MW20(35)-G061616  
**Collection Date:** 6/16/2016 02:55 PM

**Work Order:** 16061162  
**Lab ID:** 16061162-16  
**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	99.5		85-110	%REC	1	6/25/2016 04:38 AM
<b>ORGANIC CARBON, TOTAL</b>			<b>SW9060A</b>			Analyst: <b>JJG</b>
Organic Carbon, Total	67		10	mg/L	20	6/23/2016 01:51 PM

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

**ALS Group USA, Corp**

Date: 30-Jun-16

**Client:** AMEC Foster Wheeler  
**Project:** TFS #3359151040  
**Sample ID:** ATR-MW81(27)-G061616  
**Collection Date:** 6/16/2016 04:10 PM

**Work Order:** 16061162  
**Lab ID:** 16061162-17  
**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>		Analyst: <b>LSY</b>	
1,1,1-Trichloroethane	ND		100	µg/L	100	6/28/2016 03:55 AM
1,1,2,2-Tetrachloroethane	ND		100	µg/L	100	6/28/2016 03:55 AM
1,1,2-Trichloroethane	ND		100	µg/L	100	6/28/2016 03:55 AM
1,1-Dichloroethane	ND		100	µg/L	100	6/28/2016 03:55 AM
1,1-Dichloroethene	ND		100	µg/L	100	6/28/2016 03:55 AM
1,2-Dichloroethane	ND		100	µg/L	100	6/28/2016 03:55 AM
1,2-Dichloropropane	ND		100	µg/L	100	6/28/2016 03:55 AM
2-Butanone	ND		500	µg/L	100	6/28/2016 03:55 AM
2-Hexanone	ND		500	µg/L	100	6/28/2016 03:55 AM
4-Methyl-2-pentanone	ND		100	µg/L	100	6/28/2016 03:55 AM
Acetone	ND		1,000	µg/L	100	6/28/2016 03:55 AM
Benzene	ND		100	µg/L	100	6/28/2016 03:55 AM
Bromodichloromethane	ND		100	µg/L	100	6/28/2016 03:55 AM
Bromoform	ND		100	µg/L	100	6/28/2016 03:55 AM
Bromomethane	ND		100	µg/L	100	6/28/2016 03:55 AM
Carbon disulfide	ND		100	µg/L	100	6/28/2016 03:55 AM
Carbon tetrachloride	ND		100	µg/L	100	6/28/2016 03:55 AM
Chlorobenzene	ND		100	µg/L	100	6/28/2016 03:55 AM
Chloroethane	ND		100	µg/L	100	6/28/2016 03:55 AM
Chloroform	ND		100	µg/L	100	6/28/2016 03:55 AM
Chloromethane	ND		100	µg/L	100	6/28/2016 03:55 AM
<b>cis-1,2-Dichloroethene</b>	<b>57,000</b>		<b>1,000</b>	<b>µg/L</b>	1000	6/28/2016 12:13 PM
cis-1,3-Dichloropropene	ND		100	µg/L	100	6/28/2016 03:55 AM
Dibromochloromethane	ND		100	µg/L	100	6/28/2016 03:55 AM
Ethylbenzene	ND		100	µg/L	100	6/28/2016 03:55 AM
m,p-Xylene	ND		200	µg/L	100	6/28/2016 03:55 AM
Methylene chloride	ND		500	µg/L	100	6/28/2016 03:55 AM
o-Xylene	ND		100	µg/L	100	6/28/2016 03:55 AM
Styrene	ND		100	µg/L	100	6/28/2016 03:55 AM
Tetrachloroethene	ND		100	µg/L	100	6/28/2016 03:55 AM
Toluene	ND		100	µg/L	100	6/28/2016 03:55 AM
<b>trans-1,2-Dichloroethene</b>	<b>320</b>		<b>100</b>	<b>µg/L</b>	100	6/28/2016 03:55 AM
trans-1,3-Dichloropropene	ND		100	µg/L	100	6/28/2016 03:55 AM
Trichloroethene	ND		100	µg/L	100	6/28/2016 03:55 AM
<b>Vinyl chloride</b>	<b>43,000</b>		<b>1,000</b>	<b>µg/L</b>	1000	6/28/2016 12:13 PM
Xylenes, Total	ND		300	µg/L	100	6/28/2016 03:55 AM
Surr: 1,2-Dichloroethane-d4	109		75-120	%REC	100	6/28/2016 03:55 AM
Surr: 1,2-Dichloroethane-d4	107		75-120	%REC	1000	6/28/2016 12:13 PM
Surr: 4-Bromofluorobenzene	92.1		80-110	%REC	100	6/28/2016 03:55 AM

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

**ALS Group USA, Corp**

Date: 30-Jun-16

**Client:** AMEC Foster Wheeler  
**Project:** TFS #3359151040  
**Sample ID:** ATR-MW81(27)-G061616  
**Collection Date:** 6/16/2016 04:10 PM

**Work Order:** 16061162  
**Lab ID:** 16061162-17  
**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 4-Bromofluorobenzene	93.2		80-110	%REC	1000	6/28/2016 12:13 PM
Surr: Dibromofluoromethane	111		85-115	%REC	100	6/28/2016 03:55 AM
Surr: Dibromofluoromethane	108		85-115	%REC	1000	6/28/2016 12:13 PM
Surr: Toluene-d8	95.8		85-110	%REC	100	6/28/2016 03:55 AM
Surr: Toluene-d8	95.5		85-110	%REC	1000	6/28/2016 12:13 PM
<b>ORGANIC CARBON, TOTAL</b>			<b>SW9060A</b>			Analyst: <b>JJG</b>
Organic Carbon, Total	<b>220</b>		<b>50</b>	mg/L	100	6/23/2016 01:51 PM

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

**ALS Group USA, Corp**

Date: 30-Jun-16

**Client:** AMEC Foster Wheeler  
**Project:** TFS #3359151040  
**Sample ID:** ATR-MW20(35)-G061616R  
**Collection Date:** 6/16/2016 02:55 PM

**Work Order:** 16061162  
**Lab ID:** 16061162-18  
**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>		Analyst: <b>AK</b>	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	6/25/2016 05:03 AM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	6/25/2016 05:03 AM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	6/25/2016 05:03 AM
1,1-Dichloroethane	ND		1.0	µg/L	1	6/25/2016 05:03 AM
1,1-Dichloroethene	ND		1.0	µg/L	1	6/25/2016 05:03 AM
1,2-Dichloroethane	ND		1.0	µg/L	1	6/25/2016 05:03 AM
1,2-Dichloropropane	ND		1.0	µg/L	1	6/25/2016 05:03 AM
2-Butanone	ND		5.0	µg/L	1	6/25/2016 05:03 AM
2-Hexanone	ND		5.0	µg/L	1	6/25/2016 05:03 AM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	6/25/2016 05:03 AM
Acetone	ND		10	µg/L	1	6/25/2016 05:03 AM
Benzene	ND		1.0	µg/L	1	6/25/2016 05:03 AM
Bromodichloromethane	ND		1.0	µg/L	1	6/25/2016 05:03 AM
Bromoform	ND		1.0	µg/L	1	6/25/2016 05:03 AM
Bromomethane	ND		1.0	µg/L	1	6/25/2016 05:03 AM
Carbon disulfide	ND		1.0	µg/L	1	6/25/2016 05:03 AM
Carbon tetrachloride	ND		1.0	µg/L	1	6/25/2016 05:03 AM
Chlorobenzene	ND		1.0	µg/L	1	6/25/2016 05:03 AM
Chloroethane	ND		1.0	µg/L	1	6/25/2016 05:03 AM
Chloroform	ND		1.0	µg/L	1	6/25/2016 05:03 AM
Chloromethane	ND		1.0	µg/L	1	6/25/2016 05:03 AM
<b>cis-1,2-Dichloroethene</b>	<b>2.1</b>		<b>1.0</b>	<b>µg/L</b>	1	6/25/2016 05:03 AM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	6/25/2016 05:03 AM
Dibromochloromethane	ND		1.0	µg/L	1	6/25/2016 05:03 AM
Ethylbenzene	ND		1.0	µg/L	1	6/25/2016 05:03 AM
m,p-Xylene	ND		2.0	µg/L	1	6/25/2016 05:03 AM
Methylene chloride	ND		5.0	µg/L	1	6/25/2016 05:03 AM
o-Xylene	ND		1.0	µg/L	1	6/25/2016 05:03 AM
Styrene	ND		1.0	µg/L	1	6/25/2016 05:03 AM
Tetrachloroethene	ND		1.0	µg/L	1	6/25/2016 05:03 AM
Toluene	ND		1.0	µg/L	1	6/25/2016 05:03 AM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	6/25/2016 05:03 AM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	6/25/2016 05:03 AM
Trichloroethene	ND		1.0	µg/L	1	6/25/2016 05:03 AM
<b>Vinyl chloride</b>	<b>12</b>		<b>1.0</b>	<b>µg/L</b>	1	6/25/2016 05:03 AM
Xylenes, Total	ND		3.0	µg/L	1	6/25/2016 05:03 AM
Surr: 1,2-Dichloroethane-d4	106		75-120	%REC	1	6/25/2016 05:03 AM
Surr: 4-Bromofluorobenzene	94.6		80-110	%REC	1	6/25/2016 05:03 AM
Surr: Dibromofluoromethane	107		85-115	%REC	1	6/25/2016 05:03 AM

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



**ALS Group USA, Corp**

**Date:** 30-Jun-16

**Client:** AMEC Foster Wheeler  
**Project:** TFS #3359151040  
**Sample ID:** ATR-MW20(35)-G061616R  
**Collection Date:** 6/16/2016 02:55 PM

**Work Order:** 16061162  
**Lab ID:** 16061162-18  
**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	98.4		85-110	%REC	1	6/25/2016 05:03 AM
<b>ORGANIC CARBON, TOTAL</b>			<b>SW9060A</b>			Analyst: <b>JJG</b>
Organic Carbon, Total	67		10	mg/L	20	6/23/2016 01:51 PM

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

**ALS Group USA, Corp**

Date: 30-Jun-16

**Client:** AMEC Foster Wheeler  
**Project:** TFS #3359151040  
**Sample ID:** ATR-MW15-G061516  
**Collection Date:** 6/15/2016 09:55 AM

**Work Order:** 16061162  
**Lab ID:** 16061162-19  
**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>		Analyst: <b>AK</b>	
1,1,1-Trichloroethane	ND		10	µg/L	10	6/25/2016 09:34 AM
1,1,2,2-Tetrachloroethane	ND		10	µg/L	10	6/25/2016 09:34 AM
1,1,2-Trichloroethane	ND		10	µg/L	10	6/25/2016 09:34 AM
1,1-Dichloroethane	ND		10	µg/L	10	6/25/2016 09:34 AM
<b>1,1-Dichloroethene</b>	<b>22</b>		<b>10</b>	<b>µg/L</b>	10	6/25/2016 09:34 AM
1,2-Dichloroethane	ND		10	µg/L	10	6/25/2016 09:34 AM
1,2-Dichloropropane	ND		10	µg/L	10	6/25/2016 09:34 AM
<b>2-Butanone</b>	<b>840</b>		<b>50</b>	<b>µg/L</b>	10	6/25/2016 09:34 AM
2-Hexanone	ND		50	µg/L	10	6/25/2016 09:34 AM
4-Methyl-2-pentanone	ND		10	µg/L	10	6/25/2016 09:34 AM
Acetone	ND		100	µg/L	10	6/25/2016 09:34 AM
Benzene	ND		10	µg/L	10	6/25/2016 09:34 AM
Bromodichloromethane	ND		10	µg/L	10	6/25/2016 09:34 AM
Bromoform	ND		10	µg/L	10	6/25/2016 09:34 AM
Bromomethane	ND		10	µg/L	10	6/25/2016 09:34 AM
Carbon disulfide	ND		10	µg/L	10	6/25/2016 09:34 AM
Carbon tetrachloride	ND		10	µg/L	10	6/25/2016 09:34 AM
Chlorobenzene	ND		10	µg/L	10	6/25/2016 09:34 AM
Chloroethane	ND		10	µg/L	10	6/25/2016 09:34 AM
Chloroform	ND		10	µg/L	10	6/25/2016 09:34 AM
Chloromethane	ND		10	µg/L	10	6/25/2016 09:34 AM
<b>cis-1,2-Dichloroethene</b>	<b>4,300</b>		<b>100</b>	<b>µg/L</b>	100	6/27/2016 03:35 PM
cis-1,3-Dichloropropene	ND		10	µg/L	10	6/25/2016 09:34 AM
Dibromochloromethane	ND		10	µg/L	10	6/25/2016 09:34 AM
Ethylbenzene	ND		10	µg/L	10	6/25/2016 09:34 AM
m,p-Xylene	ND		20	µg/L	10	6/25/2016 09:34 AM
Methylene chloride	ND		50	µg/L	10	6/25/2016 09:34 AM
o-Xylene	ND		10	µg/L	10	6/25/2016 09:34 AM
Styrene	ND		10	µg/L	10	6/25/2016 09:34 AM
Tetrachloroethene	ND		10	µg/L	10	6/25/2016 09:34 AM
Toluene	ND		10	µg/L	10	6/25/2016 09:34 AM
<b>trans-1,2-Dichloroethene</b>	<b>140</b>		<b>10</b>	<b>µg/L</b>	10	6/25/2016 09:34 AM
trans-1,3-Dichloropropene	ND		10	µg/L	10	6/25/2016 09:34 AM
Trichloroethene	ND		10	µg/L	10	6/25/2016 09:34 AM
<b>Vinyl chloride</b>	<b>340</b>		<b>10</b>	<b>µg/L</b>	10	6/25/2016 09:34 AM
Xylenes, Total	ND		30	µg/L	10	6/25/2016 09:34 AM
Surr: 1,2-Dichloroethane-d4	108		75-120	%REC	10	6/25/2016 09:34 AM
Surr: 1,2-Dichloroethane-d4	111		75-120	%REC	100	6/27/2016 03:35 PM
Surr: 4-Bromofluorobenzene	92.6		80-110	%REC	10	6/25/2016 09:34 AM

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

**ALS Group USA, Corp**

Date: 30-Jun-16

**Client:** AMEC Foster Wheeler

**Project:** TFS #3359151040

**Sample ID:** ATR-MW15-G061516

**Collection Date:** 6/15/2016 09:55 AM

**Work Order:** 16061162

**Lab ID:** 16061162-19

**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 4-Bromofluorobenzene	91.2		80-110	%REC	100	6/27/2016 03:35 PM
Surr: Dibromofluoromethane	110		85-115	%REC	10	6/25/2016 09:34 AM
Surr: Dibromofluoromethane	111		85-115	%REC	100	6/27/2016 03:35 PM
Surr: Toluene-d8	96.6		85-110	%REC	10	6/25/2016 09:34 AM
Surr: Toluene-d8	95.2		85-110	%REC	100	6/27/2016 03:35 PM
<b>ORGANIC CARBON, TOTAL</b>			<b>SW9060A</b>			Analyst: <b>JJG</b>
Organic Carbon, Total	<b>1,000</b>		<b>120</b>	mg/L	250	6/24/2016 02:52 PM

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

**ALS Group USA, Corp**

Date: 30-Jun-16

**Client:** AMEC Foster Wheeler  
**Project:** TFS #3359151040  
**Sample ID:** ATR-OW4(54)-G061516  
**Collection Date:** 6/15/2016 11:00 AM

**Work Order:** 16061162  
**Lab ID:** 16061162-20  
**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>		Analyst: <b>AK</b>	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	6/25/2016 05:28 AM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	6/25/2016 05:28 AM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	6/25/2016 05:28 AM
1,1-Dichloroethane	ND		1.0	µg/L	1	6/25/2016 05:28 AM
1,1-Dichloroethene	ND		1.0	µg/L	1	6/25/2016 05:28 AM
1,2-Dichloroethane	ND		1.0	µg/L	1	6/25/2016 05:28 AM
1,2-Dichloropropane	ND		1.0	µg/L	1	6/25/2016 05:28 AM
2-Butanone	ND		5.0	µg/L	1	6/25/2016 05:28 AM
2-Hexanone	ND		5.0	µg/L	1	6/25/2016 05:28 AM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	6/25/2016 05:28 AM
Acetone	ND		10	µg/L	1	6/25/2016 05:28 AM
Benzene	ND		1.0	µg/L	1	6/25/2016 05:28 AM
Bromodichloromethane	ND		1.0	µg/L	1	6/25/2016 05:28 AM
Bromoform	ND		1.0	µg/L	1	6/25/2016 05:28 AM
Bromomethane	ND		1.0	µg/L	1	6/25/2016 05:28 AM
Carbon disulfide	ND		1.0	µg/L	1	6/25/2016 05:28 AM
Carbon tetrachloride	ND		1.0	µg/L	1	6/25/2016 05:28 AM
Chlorobenzene	ND		1.0	µg/L	1	6/25/2016 05:28 AM
Chloroethane	ND		1.0	µg/L	1	6/25/2016 05:28 AM
Chloroform	ND		1.0	µg/L	1	6/25/2016 05:28 AM
Chloromethane	ND		1.0	µg/L	1	6/25/2016 05:28 AM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	6/25/2016 05:28 AM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	6/25/2016 05:28 AM
Dibromochloromethane	ND		1.0	µg/L	1	6/25/2016 05:28 AM
Ethylbenzene	ND		1.0	µg/L	1	6/25/2016 05:28 AM
m,p-Xylene	ND		2.0	µg/L	1	6/25/2016 05:28 AM
Methylene chloride	ND		5.0	µg/L	1	6/25/2016 05:28 AM
o-Xylene	ND		1.0	µg/L	1	6/25/2016 05:28 AM
Styrene	ND		1.0	µg/L	1	6/25/2016 05:28 AM
Tetrachloroethene	ND		1.0	µg/L	1	6/25/2016 05:28 AM
Toluene	ND		1.0	µg/L	1	6/25/2016 05:28 AM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	6/25/2016 05:28 AM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	6/25/2016 05:28 AM
Trichloroethene	ND		1.0	µg/L	1	6/25/2016 05:28 AM
Vinyl chloride	ND		1.0	µg/L	1	6/25/2016 05:28 AM
Xylenes, Total	ND		3.0	µg/L	1	6/25/2016 05:28 AM
Surr: 1,2-Dichloroethane-d4	109		75-120	%REC	1	6/25/2016 05:28 AM
Surr: 4-Bromofluorobenzene	93.6		80-110	%REC	1	6/25/2016 05:28 AM
Surr: Dibromofluoromethane	109		85-115	%REC	1	6/25/2016 05:28 AM

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

**ALS Group USA, Corp**

Date: 30-Jun-16

**Client:** AMEC Foster Wheeler  
**Project:** TFS #3359151040  
**Sample ID:** ATR-OW4(54)-G061516  
**Collection Date:** 6/15/2016 11:00 AM

**Work Order:** 16061162  
**Lab ID:** 16061162-20  
**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	95.4		85-110	%REC	1	6/25/2016 05:28 AM
<b>ORGANIC CARBON, TOTAL</b>			<b>SW9060A</b>			Analyst: <b>JJG</b>
Organic Carbon, Total	4.2		0.50	mg/L	1	6/23/2016 01:51 PM

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

# ALS Group USA, Corp

Date: 30-Jun-16

**Client:** AMEC Foster Wheeler  
**Project:** TFS #3359151040  
**Sample ID:** ATR-OW4(35)-G061516  
**Collection Date:** 6/15/2016 11:45 AM

**Work Order:** 16061162  
**Lab ID:** 16061162-21  
**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>		Analyst: <b>LSY</b>	
1,1,1-Trichloroethane	ND		5.0	µg/L	5	6/28/2016 03:30 AM
1,1,2,2-Tetrachloroethane	ND		5.0	µg/L	5	6/28/2016 03:30 AM
1,1,2-Trichloroethane	ND		5.0	µg/L	5	6/28/2016 03:30 AM
1,1-Dichloroethane	ND		5.0	µg/L	5	6/28/2016 03:30 AM
1,1-Dichloroethene	ND		5.0	µg/L	5	6/28/2016 03:30 AM
1,2-Dichloroethane	ND		5.0	µg/L	5	6/28/2016 03:30 AM
1,2-Dichloropropane	ND		5.0	µg/L	5	6/28/2016 03:30 AM
<b>2-Butanone</b>	<b>260</b>		<b>25</b>	<b>µg/L</b>	5	6/28/2016 03:30 AM
2-Hexanone	ND		25	µg/L	5	6/28/2016 03:30 AM
4-Methyl-2-pentanone	ND		5.0	µg/L	5	6/28/2016 03:30 AM
Acetone	ND		50	µg/L	5	6/28/2016 03:30 AM
Benzene	ND		5.0	µg/L	5	6/28/2016 03:30 AM
Bromodichloromethane	ND		5.0	µg/L	5	6/28/2016 03:30 AM
Bromoform	ND		5.0	µg/L	5	6/28/2016 03:30 AM
Bromomethane	ND		5.0	µg/L	5	6/28/2016 03:30 AM
Carbon disulfide	ND		5.0	µg/L	5	6/28/2016 03:30 AM
Carbon tetrachloride	ND		5.0	µg/L	5	6/28/2016 03:30 AM
Chlorobenzene	ND		5.0	µg/L	5	6/28/2016 03:30 AM
Chloroethane	ND		5.0	µg/L	5	6/28/2016 03:30 AM
Chloroform	ND		5.0	µg/L	5	6/28/2016 03:30 AM
Chloromethane	ND		5.0	µg/L	5	6/28/2016 03:30 AM
<b>cis-1,2-Dichloroethene</b>	<b>290</b>		<b>5.0</b>	<b>µg/L</b>	5	6/28/2016 03:30 AM
cis-1,3-Dichloropropene	ND		5.0	µg/L	5	6/28/2016 03:30 AM
Dibromochloromethane	ND		5.0	µg/L	5	6/28/2016 03:30 AM
Ethylbenzene	ND		5.0	µg/L	5	6/28/2016 03:30 AM
m,p-Xylene	ND		10	µg/L	5	6/28/2016 03:30 AM
Methylene chloride	ND		25	µg/L	5	6/28/2016 03:30 AM
o-Xylene	ND		5.0	µg/L	5	6/28/2016 03:30 AM
Styrene	ND		5.0	µg/L	5	6/28/2016 03:30 AM
Tetrachloroethene	ND		5.0	µg/L	5	6/28/2016 03:30 AM
Toluene	ND		5.0	µg/L	5	6/28/2016 03:30 AM
trans-1,2-Dichloroethene	ND		5.0	µg/L	5	6/28/2016 03:30 AM
trans-1,3-Dichloropropene	ND		5.0	µg/L	5	6/28/2016 03:30 AM
Trichloroethene	ND		5.0	µg/L	5	6/28/2016 03:30 AM
<b>Vinyl chloride</b>	<b>930</b>		<b>20</b>	<b>µg/L</b>	20	6/25/2016 03:44 PM
Xylenes, Total	ND		15	µg/L	5	6/28/2016 03:30 AM
Surr: 1,2-Dichloroethane-d4	108		75-120	%REC	20	6/25/2016 03:44 PM
Surr: 1,2-Dichloroethane-d4	110		75-120	%REC	5	6/28/2016 03:30 AM
Surr: 4-Bromofluorobenzene	93.9		80-110	%REC	20	6/25/2016 03:44 PM

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

**ALS Group USA, Corp**

Date: 30-Jun-16

**Client:** AMEC Foster Wheeler  
**Project:** TFS #3359151040  
**Sample ID:** ATR-OW4(35)-G061516  
**Collection Date:** 6/15/2016 11:45 AM

**Work Order:** 16061162  
**Lab ID:** 16061162-21  
**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 4-Bromofluorobenzene	93.0		80-110	%REC	5	6/28/2016 03:30 AM
Surr: Dibromofluoromethane	98.2		85-115	%REC	20	6/25/2016 03:44 PM
Surr: Dibromofluoromethane	109		85-115	%REC	5	6/28/2016 03:30 AM
Surr: Toluene-d8	97.4		85-110	%REC	20	6/25/2016 03:44 PM
Surr: Toluene-d8	93.6		85-110	%REC	5	6/28/2016 03:30 AM
<b>ORGANIC CARBON, TOTAL</b>			<b>SW9060A</b>			Analyst: <b>JJG</b>
Organic Carbon, Total	<b>730</b>		<b>250</b>	mg/L	500	6/24/2016 02:52 PM

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

ALS Group USA, Corp

Date: 30-Jun-16

Client: AMEC Foster Wheeler  
 Project: TFS #3359151040  
 Sample ID: ATR-OW3(55)-G061516  
 Collection Date: 6/15/2016 01:20 PM

Work Order: 16061162  
 Lab ID: 16061162-22  
 Matrix: GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>		Analyst: <b>LSY</b>	
1,1,1-Trichloroethane	ND		2.0	µg/L	2	6/28/2016 04:20 AM
1,1,2,2-Tetrachloroethane	ND		2.0	µg/L	2	6/28/2016 04:20 AM
1,1,2-Trichloroethane	ND		2.0	µg/L	2	6/28/2016 04:20 AM
1,1-Dichloroethane	ND		2.0	µg/L	2	6/28/2016 04:20 AM
1,1-Dichloroethene	ND		2.0	µg/L	2	6/28/2016 04:20 AM
1,2-Dichloroethane	ND		2.0	µg/L	2	6/28/2016 04:20 AM
1,2-Dichloropropane	ND		2.0	µg/L	2	6/28/2016 04:20 AM
<b>2-Butanone</b>	<b>230</b>		<b>120</b>	<b>µg/L</b>	25	6/25/2016 04:09 PM
2-Hexanone	ND		10	µg/L	2	6/28/2016 04:20 AM
4-Methyl-2-pentanone	ND		2.0	µg/L	2	6/28/2016 04:20 AM
Acetone	ND		20	µg/L	2	6/28/2016 04:20 AM
Benzene	ND		2.0	µg/L	2	6/28/2016 04:20 AM
Bromodichloromethane	ND		2.0	µg/L	2	6/28/2016 04:20 AM
Bromoform	ND		2.0	µg/L	2	6/28/2016 04:20 AM
Bromomethane	ND		2.0	µg/L	2	6/28/2016 04:20 AM
Carbon disulfide	ND		2.0	µg/L	2	6/28/2016 04:20 AM
Carbon tetrachloride	ND		2.0	µg/L	2	6/28/2016 04:20 AM
Chlorobenzene	ND		2.0	µg/L	2	6/28/2016 04:20 AM
Chloroethane	ND		2.0	µg/L	2	6/28/2016 04:20 AM
Chloroform	ND		2.0	µg/L	2	6/28/2016 04:20 AM
Chloromethane	ND		2.0	µg/L	2	6/28/2016 04:20 AM
<b>cis-1,2-Dichloroethene</b>	<b>700</b>		<b>25</b>	<b>µg/L</b>	25	6/25/2016 04:09 PM
cis-1,3-Dichloropropene	ND		2.0	µg/L	2	6/28/2016 04:20 AM
Dibromochloromethane	ND		2.0	µg/L	2	6/28/2016 04:20 AM
Ethylbenzene	ND		2.0	µg/L	2	6/28/2016 04:20 AM
m,p-Xylene	ND		4.0	µg/L	2	6/28/2016 04:20 AM
Methylene chloride	ND		10	µg/L	2	6/28/2016 04:20 AM
o-Xylene	ND		2.0	µg/L	2	6/28/2016 04:20 AM
Styrene	ND		2.0	µg/L	2	6/28/2016 04:20 AM
Tetrachloroethene	ND		2.0	µg/L	2	6/28/2016 04:20 AM
Toluene	ND		2.0	µg/L	2	6/28/2016 04:20 AM
<b>trans-1,2-Dichloroethene</b>	<b>22</b>		<b>2.0</b>	<b>µg/L</b>	2	6/28/2016 04:20 AM
trans-1,3-Dichloropropene	ND		2.0	µg/L	2	6/28/2016 04:20 AM
Trichloroethene	ND		2.0	µg/L	2	6/28/2016 04:20 AM
<b>Vinyl chloride</b>	<b>80</b>		<b>2.0</b>	<b>µg/L</b>	2	6/28/2016 04:20 AM
Xylenes, Total	ND		6.0	µg/L	2	6/28/2016 04:20 AM
Surr: 1,2-Dichloroethane-d4	109		75-120	%REC	25	6/25/2016 04:09 PM
Surr: 1,2-Dichloroethane-d4	110		75-120	%REC	2	6/28/2016 04:20 AM
Surr: 4-Bromofluorobenzene	93.8		80-110	%REC	25	6/25/2016 04:09 PM

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



# ALS Group USA, Corp

Date: 30-Jun-16

**Client:** AMEC Foster Wheeler  
**Project:** TFS #3359151040  
**Sample ID:** ATR-OW3(55)-G061516  
**Collection Date:** 6/15/2016 01:20 PM

**Work Order:** 16061162  
**Lab ID:** 16061162-22  
**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 4-Bromofluorobenzene	93.0		80-110	%REC	2	6/28/2016 04:20 AM
Surr: Dibromofluoromethane	110		85-115	%REC	25	6/25/2016 04:09 PM
Surr: Dibromofluoromethane	114		85-115	%REC	2	6/28/2016 04:20 AM
Surr: Toluene-d8	97.4		85-110	%REC	25	6/25/2016 04:09 PM
Surr: Toluene-d8	96.4		85-110	%REC	2	6/28/2016 04:20 AM
<b>ORGANIC CARBON, TOTAL</b>			<b>SW9060A</b>			Analyst: <b>JJG</b>
Organic Carbon, Total	410		250	mg/L	500	6/24/2016 02:52 PM

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

**ALS Group USA, Corp**

Date: 30-Jun-16

**Client:** AMEC Foster Wheeler  
**Project:** TFS #3359151040  
**Sample ID:** ATR-OW3(35)-G061516  
**Collection Date:** 6/15/2016 02:15 PM

**Work Order:** 16061162  
**Lab ID:** 16061162-23  
**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>		Analyst: <b>AK</b>	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	6/25/2016 02:30 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	6/25/2016 02:30 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	6/25/2016 02:30 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	6/25/2016 02:30 PM
1,1-Dichloroethene	ND		1.0	µg/L	1	6/25/2016 02:30 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	6/25/2016 02:30 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	6/25/2016 02:30 PM
2-Butanone	ND		5.0	µg/L	1	6/25/2016 02:30 PM
2-Hexanone	ND		5.0	µg/L	1	6/25/2016 02:30 PM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	6/25/2016 02:30 PM
Acetone	ND		10	µg/L	1	6/25/2016 02:30 PM
Benzene	ND		1.0	µg/L	1	6/25/2016 02:30 PM
Bromodichloromethane	ND		1.0	µg/L	1	6/25/2016 02:30 PM
Bromoform	ND		1.0	µg/L	1	6/25/2016 02:30 PM
Bromomethane	ND		1.0	µg/L	1	6/25/2016 02:30 PM
Carbon disulfide	ND		1.0	µg/L	1	6/25/2016 02:30 PM
Carbon tetrachloride	ND		1.0	µg/L	1	6/25/2016 02:30 PM
Chlorobenzene	ND		1.0	µg/L	1	6/25/2016 02:30 PM
Chloroethane	ND		1.0	µg/L	1	6/25/2016 02:30 PM
Chloroform	ND		1.0	µg/L	1	6/25/2016 02:30 PM
Chloromethane	ND		1.0	µg/L	1	6/25/2016 02:30 PM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	6/25/2016 02:30 PM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	6/25/2016 02:30 PM
Dibromochloromethane	ND		1.0	µg/L	1	6/25/2016 02:30 PM
Ethylbenzene	ND		1.0	µg/L	1	6/25/2016 02:30 PM
m,p-Xylene	ND		2.0	µg/L	1	6/25/2016 02:30 PM
Methylene chloride	ND		5.0	µg/L	1	6/25/2016 02:30 PM
o-Xylene	ND		1.0	µg/L	1	6/25/2016 02:30 PM
Styrene	ND		1.0	µg/L	1	6/25/2016 02:30 PM
Tetrachloroethene	ND		1.0	µg/L	1	6/25/2016 02:30 PM
Toluene	ND		1.0	µg/L	1	6/25/2016 02:30 PM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	6/25/2016 02:30 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	6/25/2016 02:30 PM
Trichloroethene	ND		1.0	µg/L	1	6/25/2016 02:30 PM
<b>Vinyl chloride</b>	<b>3.0</b>		<b>1.0</b>	<b>µg/L</b>	1	6/25/2016 02:30 PM
Xylenes, Total	ND		3.0	µg/L	1	6/25/2016 02:30 PM
Surr: 1,2-Dichloroethane-d4	108		75-120	%REC	1	6/25/2016 02:30 PM
Surr: 4-Bromofluorobenzene	93.6		80-110	%REC	1	6/25/2016 02:30 PM
Surr: Dibromofluoromethane	108		85-115	%REC	1	6/25/2016 02:30 PM

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

**ALS Group USA, Corp**

**Date:** 30-Jun-16

**Client:** AMEC Foster Wheeler  
**Project:** TFS #3359151040  
**Sample ID:** ATR-OW3(35)-G061516  
**Collection Date:** 6/15/2016 02:15 PM

**Work Order:** 16061162  
**Lab ID:** 16061162-23  
**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	98.3		85-110	%REC	1	6/25/2016 02:30 PM
<b>ORGANIC CARBON, TOTAL</b>			<b>SW9060A</b>			Analyst: <b>JJG</b>
Organic Carbon, Total	5.3		0.50	mg/L	1	6/25/2016 04:07 PM

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

**ALS Group USA, Corp**

Date: 30-Jun-16

**Client:** AMEC Foster Wheeler  
**Project:** TFS #3359151040  
**Sample ID:** ATR-OW2(33)-G061516  
**Collection Date:** 6/15/2016 03:35 PM

**Work Order:** 16061162  
**Lab ID:** 16061162-24  
**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>		Analyst: <b>LSY</b>	
1,1,1-Trichloroethane	ND		5.0	µg/L	5	6/28/2016 02:16 AM
1,1,2,2-Tetrachloroethane	ND		5.0	µg/L	5	6/28/2016 02:16 AM
1,1,2-Trichloroethane	ND		5.0	µg/L	5	6/28/2016 02:16 AM
1,1-Dichloroethane	ND		5.0	µg/L	5	6/28/2016 02:16 AM
<b>1,1-Dichloroethene</b>	<b>7.1</b>		<b>5.0</b>	<b>µg/L</b>	5	6/28/2016 02:16 AM
1,2-Dichloroethane	ND		5.0	µg/L	5	6/28/2016 02:16 AM
1,2-Dichloropropane	ND		5.0	µg/L	5	6/28/2016 02:16 AM
2-Butanone	ND		25	µg/L	5	6/28/2016 02:16 AM
2-Hexanone	ND		25	µg/L	5	6/28/2016 02:16 AM
4-Methyl-2-pentanone	ND		5.0	µg/L	5	6/28/2016 02:16 AM
Acetone	ND		50	µg/L	5	6/28/2016 02:16 AM
Benzene	ND		5.0	µg/L	5	6/28/2016 02:16 AM
Bromodichloromethane	ND		5.0	µg/L	5	6/28/2016 02:16 AM
Bromoform	ND		5.0	µg/L	5	6/28/2016 02:16 AM
Bromomethane	ND		5.0	µg/L	5	6/28/2016 02:16 AM
Carbon disulfide	ND		5.0	µg/L	5	6/28/2016 02:16 AM
Carbon tetrachloride	ND		5.0	µg/L	5	6/28/2016 02:16 AM
Chlorobenzene	ND		5.0	µg/L	5	6/28/2016 02:16 AM
Chloroethane	ND		5.0	µg/L	5	6/28/2016 02:16 AM
Chloroform	ND		5.0	µg/L	5	6/28/2016 02:16 AM
Chloromethane	ND		5.0	µg/L	5	6/28/2016 02:16 AM
<b>cis-1,2-Dichloroethene</b>	<b>2,300</b>		<b>50</b>	<b>µg/L</b>	50	6/25/2016 04:33 PM
cis-1,3-Dichloropropene	ND		5.0	µg/L	5	6/28/2016 02:16 AM
Dibromochloromethane	ND		5.0	µg/L	5	6/28/2016 02:16 AM
Ethylbenzene	ND		5.0	µg/L	5	6/28/2016 02:16 AM
m,p-Xylene	ND		10	µg/L	5	6/28/2016 02:16 AM
Methylene chloride	ND		25	µg/L	5	6/28/2016 02:16 AM
o-Xylene	ND		5.0	µg/L	5	6/28/2016 02:16 AM
Styrene	ND		5.0	µg/L	5	6/28/2016 02:16 AM
Tetrachloroethene	ND		5.0	µg/L	5	6/28/2016 02:16 AM
Toluene	ND		5.0	µg/L	5	6/28/2016 02:16 AM
<b>trans-1,2-Dichloroethene</b>	<b>11</b>		<b>5.0</b>	<b>µg/L</b>	5	6/28/2016 02:16 AM
trans-1,3-Dichloropropene	ND		5.0	µg/L	5	6/28/2016 02:16 AM
Trichloroethene	ND		5.0	µg/L	5	6/28/2016 02:16 AM
<b>Vinyl chloride</b>	<b>1,600</b>		<b>50</b>	<b>µg/L</b>	50	6/25/2016 04:33 PM
Xylenes, Total	ND		15	µg/L	5	6/28/2016 02:16 AM
Surr: 1,2-Dichloroethane-d4	108		75-120	%REC	50	6/25/2016 04:33 PM
Surr: 1,2-Dichloroethane-d4	108		75-120	%REC	5	6/28/2016 02:16 AM
Surr: 4-Bromofluorobenzene	92.2		80-110	%REC	50	6/25/2016 04:33 PM

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

**ALS Group USA, Corp**

Date: 30-Jun-16

**Client:** AMEC Foster Wheeler  
**Project:** TFS #3359151040  
**Sample ID:** ATR-OW2(33)-G061516  
**Collection Date:** 6/15/2016 03:35 PM

**Work Order:** 16061162  
**Lab ID:** 16061162-24  
**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 4-Bromofluorobenzene	90.6		80-110	%REC	5	6/28/2016 02:16 AM
Surr: Dibromofluoromethane	107		85-115	%REC	50	6/25/2016 04:33 PM
Surr: Dibromofluoromethane	110		85-115	%REC	5	6/28/2016 02:16 AM
Surr: Toluene-d8	99.4		85-110	%REC	50	6/25/2016 04:33 PM
Surr: Toluene-d8	96.2		85-110	%REC	5	6/28/2016 02:16 AM
<b>ORGANIC CARBON, TOTAL</b>			<b>SW9060A</b>			Analyst: <b>JJG</b>
Organic Carbon, Total	6.4		0.50	mg/L	1	6/25/2016 04:07 PM

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

**ALS Group USA, Corp**

Date: 30-Jun-16

**Client:** AMEC Foster Wheeler  
**Project:** TFS #3359151040  
**Sample ID:** ATR-MW25(16.4)-G061516  
**Collection Date:** 6/15/2016 09:25 AM

**Work Order:** 16061162  
**Lab ID:** 16061162-25  
**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>		Analyst: <b>LSY</b>	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	6/27/2016 02:21 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	6/27/2016 02:21 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	6/27/2016 02:21 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	6/27/2016 02:21 PM
1,1-Dichloroethene	ND		1.0	µg/L	1	6/27/2016 02:21 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	6/27/2016 02:21 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	6/27/2016 02:21 PM
<b>2-Butanone</b>	<b>75</b>		<b>5.0</b>	<b>µg/L</b>	1	6/27/2016 02:21 PM
2-Hexanone	ND		5.0	µg/L	1	6/27/2016 02:21 PM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	6/27/2016 02:21 PM
Acetone	ND		10	µg/L	1	6/27/2016 02:21 PM
Benzene	ND		1.0	µg/L	1	6/27/2016 02:21 PM
Bromodichloromethane	ND		1.0	µg/L	1	6/27/2016 02:21 PM
Bromoform	ND		1.0	µg/L	1	6/27/2016 02:21 PM
Bromomethane	ND		1.0	µg/L	1	6/27/2016 02:21 PM
Carbon disulfide	ND		1.0	µg/L	1	6/27/2016 02:21 PM
Carbon tetrachloride	ND		1.0	µg/L	1	6/27/2016 02:21 PM
Chlorobenzene	ND		1.0	µg/L	1	6/27/2016 02:21 PM
Chloroethane	ND		1.0	µg/L	1	6/27/2016 02:21 PM
Chloroform	ND		1.0	µg/L	1	6/27/2016 02:21 PM
Chloromethane	ND		1.0	µg/L	1	6/27/2016 02:21 PM
<b>cis-1,2-Dichloroethene</b>	<b>49</b>		<b>1.0</b>	<b>µg/L</b>	1	6/27/2016 02:21 PM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	6/27/2016 02:21 PM
Dibromochloromethane	ND		1.0	µg/L	1	6/27/2016 02:21 PM
Ethylbenzene	ND		1.0	µg/L	1	6/27/2016 02:21 PM
m,p-Xylene	ND		2.0	µg/L	1	6/27/2016 02:21 PM
Methylene chloride	ND		5.0	µg/L	1	6/27/2016 02:21 PM
o-Xylene	ND		1.0	µg/L	1	6/27/2016 02:21 PM
Styrene	ND		1.0	µg/L	1	6/27/2016 02:21 PM
Tetrachloroethene	ND		1.0	µg/L	1	6/27/2016 02:21 PM
Toluene	ND		1.0	µg/L	1	6/27/2016 02:21 PM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	6/27/2016 02:21 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	6/27/2016 02:21 PM
Trichloroethene	ND		1.0	µg/L	1	6/27/2016 02:21 PM
<b>Vinyl chloride</b>	<b>16</b>		<b>1.0</b>	<b>µg/L</b>	1	6/27/2016 02:21 PM
Xylenes, Total	ND		3.0	µg/L	1	6/27/2016 02:21 PM
Surr: 1,2-Dichloroethane-d4	112		75-120	%REC	1	6/27/2016 02:21 PM
Surr: 4-Bromofluorobenzene	92.0		80-110	%REC	1	6/27/2016 02:21 PM
Surr: Dibromofluoromethane	112		85-115	%REC	1	6/27/2016 02:21 PM

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

**ALS Group USA, Corp**

Date: 30-Jun-16

**Client:** AMEC Foster Wheeler  
**Project:** TFS #3359151040  
**Sample ID:** ATR-MW25(16.4)-G061516  
**Collection Date:** 6/15/2016 09:25 AM

**Work Order:** 16061162  
**Lab ID:** 16061162-25  
**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	97.6		85-110	%REC	1	6/27/2016 02:21 PM
<b>ORGANIC CARBON, TOTAL</b>			<b>SW9060A</b>			Analyst: <b>JJG</b>
Organic Carbon, Total	56		10	mg/L	20	6/24/2016 02:52 PM

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

**ALS Group USA, Corp**

Date: 30-Jun-16

**Client:** AMEC Foster Wheeler  
**Project:** TFS #3359151040  
**Sample ID:** ATR-MW25(32.6)-G061516  
**Collection Date:** 6/15/2016 10:30 AM

**Work Order:** 16061162  
**Lab ID:** 16061162-26  
**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>		Analyst: <b>LSY</b>	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	6/27/2016 02:46 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	6/27/2016 02:46 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	6/27/2016 02:46 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	6/27/2016 02:46 PM
1,1-Dichloroethene	ND		1.0	µg/L	1	6/27/2016 02:46 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	6/27/2016 02:46 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	6/27/2016 02:46 PM
<b>2-Butanone</b>	<b>52</b>		<b>5.0</b>	<b>µg/L</b>	1	6/27/2016 02:46 PM
2-Hexanone	ND		5.0	µg/L	1	6/27/2016 02:46 PM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	6/27/2016 02:46 PM
Acetone	ND		10	µg/L	1	6/27/2016 02:46 PM
Benzene	ND		1.0	µg/L	1	6/27/2016 02:46 PM
Bromodichloromethane	ND		1.0	µg/L	1	6/27/2016 02:46 PM
Bromoform	ND		1.0	µg/L	1	6/27/2016 02:46 PM
Bromomethane	ND		1.0	µg/L	1	6/27/2016 02:46 PM
Carbon disulfide	ND		1.0	µg/L	1	6/27/2016 02:46 PM
Carbon tetrachloride	ND		1.0	µg/L	1	6/27/2016 02:46 PM
Chlorobenzene	ND		1.0	µg/L	1	6/27/2016 02:46 PM
Chloroethane	ND		1.0	µg/L	1	6/27/2016 02:46 PM
Chloroform	ND		1.0	µg/L	1	6/27/2016 02:46 PM
Chloromethane	ND		1.0	µg/L	1	6/27/2016 02:46 PM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	6/27/2016 02:46 PM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	6/27/2016 02:46 PM
Dibromochloromethane	ND		1.0	µg/L	1	6/27/2016 02:46 PM
Ethylbenzene	ND		1.0	µg/L	1	6/27/2016 02:46 PM
m,p-Xylene	ND		2.0	µg/L	1	6/27/2016 02:46 PM
Methylene chloride	ND		5.0	µg/L	1	6/27/2016 02:46 PM
o-Xylene	ND		1.0	µg/L	1	6/27/2016 02:46 PM
Styrene	ND		1.0	µg/L	1	6/27/2016 02:46 PM
Tetrachloroethene	ND		1.0	µg/L	1	6/27/2016 02:46 PM
Toluene	ND		1.0	µg/L	1	6/27/2016 02:46 PM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	6/27/2016 02:46 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	6/27/2016 02:46 PM
Trichloroethene	ND		1.0	µg/L	1	6/27/2016 02:46 PM
Vinyl chloride	ND		1.0	µg/L	1	6/27/2016 02:46 PM
Xylenes, Total	ND		3.0	µg/L	1	6/27/2016 02:46 PM
Surr: 1,2-Dichloroethane-d4	95.8		75-120	%REC	1	6/27/2016 02:46 PM
Surr: 4-Bromofluorobenzene	96.7		80-110	%REC	1	6/27/2016 02:46 PM
Surr: Dibromofluoromethane	101		85-115	%REC	1	6/27/2016 02:46 PM

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



**ALS Group USA, Corp**

**Date:** 30-Jun-16

**Client:** AMEC Foster Wheeler  
**Project:** TFS #3359151040  
**Sample ID:** ATR-MW25(32.6)-G061516  
**Collection Date:** 6/15/2016 10:30 AM

**Work Order:** 16061162  
**Lab ID:** 16061162-26  
**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	92.1		85-110	%REC	1	6/27/2016 02:46 PM
<b>ORGANIC CARBON, TOTAL</b>			<b>SW9060A</b>			Analyst: <b>JJG</b>
Organic Carbon, Total	320		50	mg/L	100	6/25/2016 04:07 PM

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

**ALS Group USA, Corp**

Date: 30-Jun-16

**Client:** AMEC Foster Wheeler  
**Project:** TFS #3359151040  
**Sample ID:** ATR-MW25(45.2)-G061516  
**Collection Date:** 6/15/2016 11:30 AM

**Work Order:** 16061162  
**Lab ID:** 16061162-27  
**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>		Analyst: <b>LSY</b>	
1,1,1-Trichloroethane	ND		5.0	µg/L	5	6/28/2016 04:44 AM
1,1,2,2-Tetrachloroethane	ND		5.0	µg/L	5	6/28/2016 04:44 AM
1,1,2-Trichloroethane	ND		5.0	µg/L	5	6/28/2016 04:44 AM
1,1-Dichloroethane	ND		5.0	µg/L	5	6/28/2016 04:44 AM
<b>1,1-Dichloroethene</b>	<b>6.6</b>		<b>5.0</b>	<b>µg/L</b>	5	6/28/2016 04:44 AM
1,2-Dichloroethane	ND		5.0	µg/L	5	6/28/2016 04:44 AM
1,2-Dichloropropane	ND		5.0	µg/L	5	6/28/2016 04:44 AM
<b>2-Butanone</b>	<b>880</b>		<b>250</b>	<b>µg/L</b>	50	6/25/2016 05:47 PM
2-Hexanone	ND		25	µg/L	5	6/28/2016 04:44 AM
4-Methyl-2-pentanone	ND		5.0	µg/L	5	6/28/2016 04:44 AM
Acetone	ND		50	µg/L	5	6/28/2016 04:44 AM
Benzene	ND		5.0	µg/L	5	6/28/2016 04:44 AM
Bromodichloromethane	ND		5.0	µg/L	5	6/28/2016 04:44 AM
Bromoform	ND		5.0	µg/L	5	6/28/2016 04:44 AM
Bromomethane	ND		5.0	µg/L	5	6/28/2016 04:44 AM
Carbon disulfide	ND		5.0	µg/L	5	6/28/2016 04:44 AM
Carbon tetrachloride	ND		5.0	µg/L	5	6/28/2016 04:44 AM
Chlorobenzene	ND		5.0	µg/L	5	6/28/2016 04:44 AM
Chloroethane	ND		5.0	µg/L	5	6/28/2016 04:44 AM
Chloroform	ND		5.0	µg/L	5	6/28/2016 04:44 AM
Chloromethane	ND		5.0	µg/L	5	6/28/2016 04:44 AM
<b>cis-1,2-Dichloroethene</b>	<b>1,700</b>		<b>50</b>	<b>µg/L</b>	50	6/25/2016 05:47 PM
cis-1,3-Dichloropropene	ND		5.0	µg/L	5	6/28/2016 04:44 AM
Dibromochloromethane	ND		5.0	µg/L	5	6/28/2016 04:44 AM
Ethylbenzene	ND		5.0	µg/L	5	6/28/2016 04:44 AM
m,p-Xylene	ND		10	µg/L	5	6/28/2016 04:44 AM
Methylene chloride	ND		25	µg/L	5	6/28/2016 04:44 AM
o-Xylene	ND		5.0	µg/L	5	6/28/2016 04:44 AM
Styrene	ND		5.0	µg/L	5	6/28/2016 04:44 AM
Tetrachloroethene	ND		5.0	µg/L	5	6/28/2016 04:44 AM
Toluene	ND		5.0	µg/L	5	6/28/2016 04:44 AM
<b>trans-1,2-Dichloroethene</b>	<b>65</b>		<b>5.0</b>	<b>µg/L</b>	5	6/28/2016 04:44 AM
trans-1,3-Dichloropropene	ND		5.0	µg/L	5	6/28/2016 04:44 AM
Trichloroethene	ND		5.0	µg/L	5	6/28/2016 04:44 AM
<b>Vinyl chloride</b>	<b>870</b>		<b>50</b>	<b>µg/L</b>	50	6/25/2016 05:47 PM
Xylenes, Total	ND		15	µg/L	5	6/28/2016 04:44 AM
Surr: 1,2-Dichloroethane-d4	109		75-120	%REC	50	6/25/2016 05:47 PM
Surr: 1,2-Dichloroethane-d4	109		75-120	%REC	5	6/28/2016 04:44 AM
Surr: 4-Bromofluorobenzene	90.4		80-110	%REC	50	6/25/2016 05:47 PM

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

**ALS Group USA, Corp**

Date: 30-Jun-16

**Client:** AMEC Foster Wheeler  
**Project:** TFS #3359151040  
**Sample ID:** ATR-MW25(45.2)-G061516  
**Collection Date:** 6/15/2016 11:30 AM

**Work Order:** 16061162  
**Lab ID:** 16061162-27  
**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 4-Bromofluorobenzene	92.4		80-110	%REC	5	6/28/2016 04:44 AM
Surr: Dibromofluoromethane	106		85-115	%REC	50	6/25/2016 05:47 PM
Surr: Dibromofluoromethane	110		85-115	%REC	5	6/28/2016 04:44 AM
Surr: Toluene-d8	96.6		85-110	%REC	50	6/25/2016 05:47 PM
Surr: Toluene-d8	95.2		85-110	%REC	5	6/28/2016 04:44 AM
<b>ORGANIC CARBON, TOTAL</b>			<b>SW9060A</b>			Analyst: <b>JJG</b>
Organic Carbon, Total	710		120	mg/L	250	6/27/2016 01:26 PM

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

**ALS Group USA, Corp**

Date: 30-Jun-16

**Client:** AMEC Foster Wheeler  
**Project:** TFS #3359151040  
**Sample ID:** ATR-MW24(24.8)-G061516  
**Collection Date:** 6/15/2016 12:50 PM

**Work Order:** 16061162  
**Lab ID:** 16061162-28  
**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>		Analyst: <b>AK</b>	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	6/25/2016 02:55 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	6/25/2016 02:55 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	6/25/2016 02:55 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	6/25/2016 02:55 PM
1,1-Dichloroethene	ND		1.0	µg/L	1	6/25/2016 02:55 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	6/25/2016 02:55 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	6/25/2016 02:55 PM
2-Butanone	ND		5.0	µg/L	1	6/25/2016 02:55 PM
2-Hexanone	ND		5.0	µg/L	1	6/25/2016 02:55 PM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	6/25/2016 02:55 PM
Acetone	ND		10	µg/L	1	6/25/2016 02:55 PM
Benzene	ND		1.0	µg/L	1	6/25/2016 02:55 PM
Bromodichloromethane	ND		1.0	µg/L	1	6/25/2016 02:55 PM
Bromoform	ND		1.0	µg/L	1	6/25/2016 02:55 PM
Bromomethane	ND		1.0	µg/L	1	6/25/2016 02:55 PM
Carbon disulfide	ND		1.0	µg/L	1	6/25/2016 02:55 PM
Carbon tetrachloride	ND		1.0	µg/L	1	6/25/2016 02:55 PM
Chlorobenzene	ND		1.0	µg/L	1	6/25/2016 02:55 PM
Chloroethane	ND		1.0	µg/L	1	6/25/2016 02:55 PM
Chloroform	ND		1.0	µg/L	1	6/25/2016 02:55 PM
Chloromethane	ND		1.0	µg/L	1	6/25/2016 02:55 PM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	6/25/2016 02:55 PM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	6/25/2016 02:55 PM
Dibromochloromethane	ND		1.0	µg/L	1	6/25/2016 02:55 PM
Ethylbenzene	ND		1.0	µg/L	1	6/25/2016 02:55 PM
m,p-Xylene	ND		2.0	µg/L	1	6/25/2016 02:55 PM
Methylene chloride	ND		5.0	µg/L	1	6/25/2016 02:55 PM
o-Xylene	ND		1.0	µg/L	1	6/25/2016 02:55 PM
Styrene	ND		1.0	µg/L	1	6/25/2016 02:55 PM
Tetrachloroethene	ND		1.0	µg/L	1	6/25/2016 02:55 PM
Toluene	ND		1.0	µg/L	1	6/25/2016 02:55 PM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	6/25/2016 02:55 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	6/25/2016 02:55 PM
Trichloroethene	ND		1.0	µg/L	1	6/25/2016 02:55 PM
Vinyl chloride	ND		1.0	µg/L	1	6/25/2016 02:55 PM
Xylenes, Total	ND		3.0	µg/L	1	6/25/2016 02:55 PM
Surr: 1,2-Dichloroethane-d4	110		75-120	%REC	1	6/25/2016 02:55 PM
Surr: 4-Bromofluorobenzene	93.2		80-110	%REC	1	6/25/2016 02:55 PM
Surr: Dibromofluoromethane	108		85-115	%REC	1	6/25/2016 02:55 PM

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

**ALS Group USA, Corp**

**Date:** 30-Jun-16

**Client:** AMEC Foster Wheeler  
**Project:** TFS #3359151040  
**Sample ID:** ATR-MW24(24.8)-G061516  
**Collection Date:** 6/15/2016 12:50 PM

**Work Order:** 16061162  
**Lab ID:** 16061162-28  
**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	98.4		85-110	%REC	1	6/25/2016 02:55 PM
<b>ORGANIC CARBON, TOTAL</b>			<b>SW9060A</b>			Analyst: <b>JJG</b>
Organic Carbon, Total	4.8		1.0	mg/L	2	6/25/2016 04:07 PM

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

ALS Group USA, Corp

Date: 30-Jun-16

Client: AMEC Foster Wheeler  
 Project: TFS #3359151040  
 Sample ID: ATR-MW24(55.4)-G061516  
 Collection Date: 6/15/2016 01:55 PM

Work Order: 16061162  
 Lab ID: 16061162-29  
 Matrix: GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>		Analyst: <b>LSY</b>	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	6/27/2016 05:14 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	6/27/2016 05:14 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	6/27/2016 05:14 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	6/27/2016 05:14 PM
1,1-Dichloroethene	ND		1.0	µg/L	1	6/27/2016 05:14 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	6/27/2016 05:14 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	6/27/2016 05:14 PM
2-Butanone	ND		5.0	µg/L	1	6/27/2016 05:14 PM
2-Hexanone	ND		5.0	µg/L	1	6/27/2016 05:14 PM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	6/27/2016 05:14 PM
Acetone	ND		10	µg/L	1	6/27/2016 05:14 PM
Benzene	ND		1.0	µg/L	1	6/27/2016 05:14 PM
Bromodichloromethane	ND		1.0	µg/L	1	6/27/2016 05:14 PM
Bromoform	ND		1.0	µg/L	1	6/27/2016 05:14 PM
Bromomethane	ND		1.0	µg/L	1	6/27/2016 05:14 PM
Carbon disulfide	ND		1.0	µg/L	1	6/27/2016 05:14 PM
Carbon tetrachloride	ND		1.0	µg/L	1	6/27/2016 05:14 PM
Chlorobenzene	ND		1.0	µg/L	1	6/27/2016 05:14 PM
Chloroethane	ND		1.0	µg/L	1	6/27/2016 05:14 PM
Chloroform	ND		1.0	µg/L	1	6/27/2016 05:14 PM
Chloromethane	ND		1.0	µg/L	1	6/27/2016 05:14 PM
<b>cis-1,2-Dichloroethene</b>	<b>47</b>		<b>1.0</b>	<b>µg/L</b>	1	6/27/2016 05:14 PM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	6/27/2016 05:14 PM
Dibromochloromethane	ND		1.0	µg/L	1	6/27/2016 05:14 PM
Ethylbenzene	ND		1.0	µg/L	1	6/27/2016 05:14 PM
m,p-Xylene	ND		2.0	µg/L	1	6/27/2016 05:14 PM
Methylene chloride	ND		5.0	µg/L	1	6/27/2016 05:14 PM
o-Xylene	ND		1.0	µg/L	1	6/27/2016 05:14 PM
Styrene	ND		1.0	µg/L	1	6/27/2016 05:14 PM
Tetrachloroethene	ND		1.0	µg/L	1	6/27/2016 05:14 PM
Toluene	ND		1.0	µg/L	1	6/27/2016 05:14 PM
<b>trans-1,2-Dichloroethene</b>	<b>2.2</b>		<b>1.0</b>	<b>µg/L</b>	1	6/27/2016 05:14 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	6/27/2016 05:14 PM
<b>Trichloroethene</b>	<b>110</b>		<b>5.0</b>	<b>µg/L</b>	5	6/25/2016 06:12 PM
Vinyl chloride	ND		1.0	µg/L	1	6/27/2016 05:14 PM
Xylenes, Total	ND		3.0	µg/L	1	6/27/2016 05:14 PM
Surr: 1,2-Dichloroethane-d4	111		75-120	%REC	5	6/25/2016 06:12 PM
Surr: 1,2-Dichloroethane-d4	110		75-120	%REC	1	6/27/2016 05:14 PM
Surr: 4-Bromofluorobenzene	90.4		80-110	%REC	5	6/25/2016 06:12 PM

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

# ALS Group USA, Corp

Date: 30-Jun-16

**Client:** AMEC Foster Wheeler

**Project:** TFS #3359151040

**Sample ID:** ATR-MW24(55.4)-G061516

**Collection Date:** 6/15/2016 01:55 PM

**Work Order:** 16061162

**Lab ID:** 16061162-29

**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 4-Bromofluorobenzene	92.7		80-110	%REC	1	6/27/2016 05:14 PM
Surr: Dibromofluoromethane	109		85-115	%REC	5	6/25/2016 06:12 PM
Surr: Dibromofluoromethane	110		85-115	%REC	1	6/27/2016 05:14 PM
Surr: Toluene-d8	97.4		85-110	%REC	5	6/25/2016 06:12 PM
Surr: Toluene-d8	95.6		85-110	%REC	1	6/27/2016 05:14 PM
<b>ORGANIC CARBON, TOTAL</b>			<b>SW9060A</b>			Analyst: <b>JJG</b>
Organic Carbon, Total	5.7		0.50	mg/L	1	6/24/2016 02:52 PM

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

**ALS Group USA, Corp**

Date: 30-Jun-16

**Client:** AMEC Foster Wheeler  
**Project:** TFS #3359151040  
**Sample ID:** ATR-MW14-G061516  
**Collection Date:** 6/15/2016 03:30 PM

**Work Order:** 16061162  
**Lab ID:** 16061162-30  
**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>		Analyst: <b>LSY</b>	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	6/27/2016 11:48 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	6/27/2016 11:48 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	6/27/2016 11:48 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	6/27/2016 11:48 PM
1,1-Dichloroethene	ND		1.0	µg/L	1	6/27/2016 11:48 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	6/27/2016 11:48 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	6/27/2016 11:48 PM
<b>2-Butanone</b>	<b>41</b>		<b>5.0</b>	<b>µg/L</b>	1	6/27/2016 11:48 PM
2-Hexanone	ND		5.0	µg/L	1	6/27/2016 11:48 PM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	6/27/2016 11:48 PM
Acetone	ND		10	µg/L	1	6/27/2016 11:48 PM
Benzene	ND		1.0	µg/L	1	6/27/2016 11:48 PM
Bromodichloromethane	ND		1.0	µg/L	1	6/27/2016 11:48 PM
Bromoform	ND		1.0	µg/L	1	6/27/2016 11:48 PM
Bromomethane	ND		1.0	µg/L	1	6/27/2016 11:48 PM
Carbon disulfide	ND		1.0	µg/L	1	6/27/2016 11:48 PM
Carbon tetrachloride	ND		1.0	µg/L	1	6/27/2016 11:48 PM
Chlorobenzene	ND		1.0	µg/L	1	6/27/2016 11:48 PM
Chloroethane	ND		1.0	µg/L	1	6/27/2016 11:48 PM
Chloroform	ND		1.0	µg/L	1	6/27/2016 11:48 PM
Chloromethane	ND		1.0	µg/L	1	6/27/2016 11:48 PM
<b>cis-1,2-Dichloroethene</b>	<b>20</b>		<b>1.0</b>	<b>µg/L</b>	1	6/27/2016 11:48 PM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	6/27/2016 11:48 PM
Dibromochloromethane	ND		1.0	µg/L	1	6/27/2016 11:48 PM
Ethylbenzene	ND		1.0	µg/L	1	6/27/2016 11:48 PM
m,p-Xylene	ND		2.0	µg/L	1	6/27/2016 11:48 PM
Methylene chloride	ND		5.0	µg/L	1	6/27/2016 11:48 PM
o-Xylene	ND		1.0	µg/L	1	6/27/2016 11:48 PM
Styrene	ND		1.0	µg/L	1	6/27/2016 11:48 PM
Tetrachloroethene	ND		1.0	µg/L	1	6/27/2016 11:48 PM
Toluene	ND		1.0	µg/L	1	6/27/2016 11:48 PM
<b>trans-1,2-Dichloroethene</b>	<b>1.5</b>		<b>1.0</b>	<b>µg/L</b>	1	6/27/2016 11:48 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	6/27/2016 11:48 PM
<b>Trichloroethene</b>	<b>2.2</b>		<b>1.0</b>	<b>µg/L</b>	1	6/27/2016 11:48 PM
<b>Vinyl chloride</b>	<b>23</b>		<b>1.0</b>	<b>µg/L</b>	1	6/27/2016 11:48 PM
Xylenes, Total	ND		3.0	µg/L	1	6/27/2016 11:48 PM
Surr: 1,2-Dichloroethane-d4	107		75-120	%REC	1	6/27/2016 11:48 PM
Surr: 4-Bromofluorobenzene	94.6		80-110	%REC	1	6/27/2016 11:48 PM
Surr: Dibromofluoromethane	107		85-115	%REC	1	6/27/2016 11:48 PM

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



**ALS Group USA, Corp**

**Date:** 30-Jun-16

**Client:** AMEC Foster Wheeler  
**Project:** TFS #3359151040  
**Sample ID:** ATR-MW14-G061516  
**Collection Date:** 6/15/2016 03:30 PM

**Work Order:** 16061162  
**Lab ID:** 16061162-30  
**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	97.8		85-110	%REC	1	6/27/2016 11:48 PM
<b>ORGANIC CARBON, TOTAL</b>			<b>SW9060A</b>			Analyst: <b>JJG</b>
Organic Carbon, Total	240		50	mg/L	100	6/25/2016 04:07 PM

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

**ALS Group USA, Corp**

Date: 30-Jun-16

**Client:** AMEC Foster Wheeler  
**Project:** TFS #3359151040  
**Sample ID:** ATR-EB003-G061716  
**Collection Date:** 6/17/2016 10:30 AM

**Work Order:** 16061162  
**Lab ID:** 16061162-31  
**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>		Analyst: <b>LSY</b>	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	6/27/2016 11:53 AM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	6/27/2016 11:53 AM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	6/27/2016 11:53 AM
1,1-Dichloroethane	ND		1.0	µg/L	1	6/27/2016 11:53 AM
1,1-Dichloroethene	ND		1.0	µg/L	1	6/27/2016 11:53 AM
1,2-Dichloroethane	ND		1.0	µg/L	1	6/27/2016 11:53 AM
1,2-Dichloropropane	ND		1.0	µg/L	1	6/27/2016 11:53 AM
2-Butanone	ND		5.0	µg/L	1	6/27/2016 11:53 AM
2-Hexanone	ND		5.0	µg/L	1	6/27/2016 11:53 AM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	6/27/2016 11:53 AM
Acetone	ND		10	µg/L	1	6/27/2016 11:53 AM
Benzene	ND		1.0	µg/L	1	6/27/2016 11:53 AM
<b>Bromodichloromethane</b>	<b>2.5</b>		<b>1.0</b>	<b>µg/L</b>	1	6/27/2016 11:53 AM
Bromoform	ND		1.0	µg/L	1	6/27/2016 11:53 AM
Bromomethane	ND		1.0	µg/L	1	6/27/2016 11:53 AM
Carbon disulfide	ND		1.0	µg/L	1	6/27/2016 11:53 AM
Carbon tetrachloride	ND		1.0	µg/L	1	6/27/2016 11:53 AM
Chlorobenzene	ND		1.0	µg/L	1	6/27/2016 11:53 AM
Chloroethane	ND		1.0	µg/L	1	6/27/2016 11:53 AM
<b>Chloroform</b>	<b>9.5</b>		<b>1.0</b>	<b>µg/L</b>	1	6/27/2016 11:53 AM
Chloromethane	ND		1.0	µg/L	1	6/27/2016 11:53 AM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	6/27/2016 11:53 AM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	6/27/2016 11:53 AM
Dibromochloromethane	ND		1.0	µg/L	1	6/27/2016 11:53 AM
Ethylbenzene	ND		1.0	µg/L	1	6/27/2016 11:53 AM
m,p-Xylene	ND		2.0	µg/L	1	6/27/2016 11:53 AM
Methylene chloride	ND		5.0	µg/L	1	6/27/2016 11:53 AM
o-Xylene	ND		1.0	µg/L	1	6/27/2016 11:53 AM
Styrene	ND		1.0	µg/L	1	6/27/2016 11:53 AM
Tetrachloroethene	ND		1.0	µg/L	1	6/27/2016 11:53 AM
Toluene	ND		1.0	µg/L	1	6/27/2016 11:53 AM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	6/27/2016 11:53 AM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	6/27/2016 11:53 AM
Trichloroethene	ND		1.0	µg/L	1	6/27/2016 11:53 AM
Vinyl chloride	ND		1.0	µg/L	1	6/27/2016 11:53 AM
Xylenes, Total	ND		3.0	µg/L	1	6/27/2016 11:53 AM
Surr: 1,2-Dichloroethane-d4	108		75-120	%REC	1	6/27/2016 11:53 AM
Surr: 4-Bromofluorobenzene	92.7		80-110	%REC	1	6/27/2016 11:53 AM
Surr: Dibromofluoromethane	109		85-115	%REC	1	6/27/2016 11:53 AM

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

**ALS Group USA, Corp**

Date: 30-Jun-16

**Client:** AMEC Foster Wheeler

**Project:** TFS #3359151040

**Sample ID:** ATR-EB003-G061716

**Collection Date:** 6/17/2016 10:30 AM

**Work Order:** 16061162

**Lab ID:** 16061162-31

**Matrix:** GROUNDWATER

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Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	97.2		85-110	%REC	1	6/27/2016 11:53 AM
<b>ORGANIC CARBON, TOTAL</b>			<b>SW9060A</b>			Analyst: <b>JJG</b>
Organic Carbon, Total	3.4		0.50	mg/L	1	6/24/2016 02:52 PM

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

ALS Group USA, Corp

Date: 30-Jun-16

Client: AMEC Foster Wheeler  
 Project: TFS #3359151040  
 Sample ID: ATR-PM3-G061716  
 Collection Date: 6/17/2016 09:50 AM

Work Order: 16061162  
 Lab ID: 16061162-32  
 Matrix: GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>		Analyst: <b>LSY</b>	
1,1,1-Trichloroethane	ND		50	µg/L	50	6/28/2016 03:06 AM
1,1,2,2-Tetrachloroethane	ND		50	µg/L	50	6/28/2016 03:06 AM
1,1,2-Trichloroethane	ND		50	µg/L	50	6/28/2016 03:06 AM
1,1-Dichloroethane	ND		50	µg/L	50	6/28/2016 03:06 AM
<b>1,1-Dichloroethene</b>	<b>88</b>		<b>50</b>	<b>µg/L</b>	50	6/28/2016 03:06 AM
1,2-Dichloroethane	ND		50	µg/L	50	6/28/2016 03:06 AM
1,2-Dichloropropane	ND		50	µg/L	50	6/28/2016 03:06 AM
2-Butanone	ND		250	µg/L	50	6/28/2016 03:06 AM
2-Hexanone	ND		250	µg/L	50	6/28/2016 03:06 AM
4-Methyl-2-pentanone	ND		50	µg/L	50	6/28/2016 03:06 AM
Acetone	ND		500	µg/L	50	6/28/2016 03:06 AM
Benzene	ND		50	µg/L	50	6/28/2016 03:06 AM
Bromodichloromethane	ND		50	µg/L	50	6/28/2016 03:06 AM
Bromoform	ND		50	µg/L	50	6/28/2016 03:06 AM
Bromomethane	ND		50	µg/L	50	6/28/2016 03:06 AM
Carbon disulfide	ND		50	µg/L	50	6/28/2016 03:06 AM
Carbon tetrachloride	ND		50	µg/L	50	6/28/2016 03:06 AM
Chlorobenzene	ND		50	µg/L	50	6/28/2016 03:06 AM
Chloroethane	ND		50	µg/L	50	6/28/2016 03:06 AM
Chloroform	ND		50	µg/L	50	6/28/2016 03:06 AM
Chloromethane	ND		50	µg/L	50	6/28/2016 03:06 AM
<b>cis-1,2-Dichloroethene</b>	<b>13,000</b>		<b>500</b>	<b>µg/L</b>	500	6/25/2016 07:01 PM
cis-1,3-Dichloropropene	ND		50	µg/L	50	6/28/2016 03:06 AM
Dibromochloromethane	ND		50	µg/L	50	6/28/2016 03:06 AM
Ethylbenzene	ND		50	µg/L	50	6/28/2016 03:06 AM
m,p-Xylene	ND		100	µg/L	50	6/28/2016 03:06 AM
Methylene chloride	ND		250	µg/L	50	6/28/2016 03:06 AM
o-Xylene	ND		50	µg/L	50	6/28/2016 03:06 AM
Styrene	ND		50	µg/L	50	6/28/2016 03:06 AM
Tetrachloroethene	ND		50	µg/L	50	6/28/2016 03:06 AM
Toluene	ND		50	µg/L	50	6/28/2016 03:06 AM
<b>trans-1,2-Dichloroethene</b>	<b>180</b>		<b>50</b>	<b>µg/L</b>	50	6/28/2016 03:06 AM
trans-1,3-Dichloropropene	ND		50	µg/L	50	6/28/2016 03:06 AM
Trichloroethene	ND		50	µg/L	50	6/28/2016 03:06 AM
<b>Vinyl chloride</b>	<b>25,000</b>		<b>500</b>	<b>µg/L</b>	500	6/25/2016 07:01 PM
Xylenes, Total	ND		150	µg/L	50	6/28/2016 03:06 AM
Surr: 1,2-Dichloroethane-d4	108		75-120	%REC	500	6/25/2016 07:01 PM
Surr: 1,2-Dichloroethane-d4	107		75-120	%REC	50	6/28/2016 03:06 AM
Surr: 4-Bromofluorobenzene	92.4		80-110	%REC	500	6/25/2016 07:01 PM

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

**ALS Group USA, Corp**

Date: 30-Jun-16

**Client:** AMEC Foster Wheeler

**Project:** TFS #3359151040

**Sample ID:** ATR-PM3-G061716

**Collection Date:** 6/17/2016 09:50 AM

**Work Order:** 16061162

**Lab ID:** 16061162-32

**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 4-Bromofluorobenzene	91.8		80-110	%REC	50	6/28/2016 03:06 AM
Surr: Dibromofluoromethane	106		85-115	%REC	500	6/25/2016 07:01 PM
Surr: Dibromofluoromethane	111		85-115	%REC	50	6/28/2016 03:06 AM
Surr: Toluene-d8	98.3		85-110	%REC	500	6/25/2016 07:01 PM
Surr: Toluene-d8	94.3		85-110	%REC	50	6/28/2016 03:06 AM
<b>ORGANIC CARBON, TOTAL</b>			<b>SW9060A</b>			Analyst: <b>JJG</b>
Organic Carbon, Total	760		500	mg/L	1000	6/24/2016 02:52 PM

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

**ALS Group USA, Corp**

Date: 30-Jun-16

**Client:** AMEC Foster Wheeler  
**Project:** TFS #3359151040  
**Sample ID:** ATR-MW68-G061716  
**Collection Date:** 6/17/2016 11:30 AM

**Work Order:** 16061162  
**Lab ID:** 16061162-33  
**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>		Analyst: <b>LSY</b>	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	6/27/2016 05:38 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	6/27/2016 05:38 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	6/27/2016 05:38 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	6/27/2016 05:38 PM
<b>1,1-Dichloroethene</b>	<b>2.1</b>		<b>1.0</b>	<b>µg/L</b>	1	6/27/2016 05:38 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	6/27/2016 05:38 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	6/27/2016 05:38 PM
2-Butanone	ND		5.0	µg/L	1	6/27/2016 05:38 PM
2-Hexanone	ND		5.0	µg/L	1	6/27/2016 05:38 PM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	6/27/2016 05:38 PM
<b>Acetone</b>	<b>24</b>		<b>10</b>	<b>µg/L</b>	1	6/27/2016 05:38 PM
Benzene	ND		1.0	µg/L	1	6/27/2016 05:38 PM
Bromodichloromethane	ND		1.0	µg/L	1	6/27/2016 05:38 PM
Bromoform	ND		1.0	µg/L	1	6/27/2016 05:38 PM
Bromomethane	ND		1.0	µg/L	1	6/27/2016 05:38 PM
Carbon disulfide	ND		1.0	µg/L	1	6/27/2016 05:38 PM
Carbon tetrachloride	ND		1.0	µg/L	1	6/27/2016 05:38 PM
Chlorobenzene	ND		1.0	µg/L	1	6/27/2016 05:38 PM
Chloroethane	ND		1.0	µg/L	1	6/27/2016 05:38 PM
Chloroform	ND		1.0	µg/L	1	6/27/2016 05:38 PM
Chloromethane	ND		1.0	µg/L	1	6/27/2016 05:38 PM
<b>cis-1,2-Dichloroethene</b>	<b>190</b>		<b>10</b>	<b>µg/L</b>	10	6/25/2016 07:26 PM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	6/27/2016 05:38 PM
Dibromochloromethane	ND		1.0	µg/L	1	6/27/2016 05:38 PM
Ethylbenzene	ND		1.0	µg/L	1	6/27/2016 05:38 PM
m,p-Xylene	ND		2.0	µg/L	1	6/27/2016 05:38 PM
Methylene chloride	ND		5.0	µg/L	1	6/27/2016 05:38 PM
o-Xylene	ND		1.0	µg/L	1	6/27/2016 05:38 PM
Styrene	ND		1.0	µg/L	1	6/27/2016 05:38 PM
Tetrachloroethene	ND		1.0	µg/L	1	6/27/2016 05:38 PM
Toluene	ND		1.0	µg/L	1	6/27/2016 05:38 PM
<b>trans-1,2-Dichloroethene</b>	<b>5.0</b>		<b>1.0</b>	<b>µg/L</b>	1	6/27/2016 05:38 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	6/27/2016 05:38 PM
Trichloroethene	ND		1.0	µg/L	1	6/27/2016 05:38 PM
<b>Vinyl chloride</b>	<b>89</b>		<b>10</b>	<b>µg/L</b>	10	6/25/2016 07:26 PM
Xylenes, Total	ND		3.0	µg/L	1	6/27/2016 05:38 PM
Surr: 1,2-Dichloroethane-d4	110		75-120	%REC	10	6/25/2016 07:26 PM
Surr: 1,2-Dichloroethane-d4	110		75-120	%REC	1	6/27/2016 05:38 PM
Surr: 4-Bromofluorobenzene	92.6		80-110	%REC	10	6/25/2016 07:26 PM

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

**ALS Group USA, Corp**

Date: 30-Jun-16

**Client:** AMEC Foster Wheeler  
**Project:** TFS #3359151040  
**Sample ID:** ATR-MW68-G061716  
**Collection Date:** 6/17/2016 11:30 AM

**Work Order:** 16061162  
**Lab ID:** 16061162-33  
**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 4-Bromofluorobenzene	95.0		80-110	%REC	1	6/27/2016 05:38 PM
Surr: Dibromofluoromethane	107		85-115	%REC	10	6/25/2016 07:26 PM
Surr: Dibromofluoromethane	104		85-115	%REC	1	6/27/2016 05:38 PM
Surr: Toluene-d8	97.2		85-110	%REC	10	6/25/2016 07:26 PM
Surr: Toluene-d8	95.2		85-110	%REC	1	6/27/2016 05:38 PM
<b>ORGANIC CARBON, TOTAL</b>			<b>SW9060A</b>			Analyst: <b>JJG</b>
Organic Carbon, Total	<b>350</b>		<b>250</b>	mg/L	500	6/24/2016 02:52 PM

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

**ALS Group USA, Corp**

Date: 30-Jun-16

**Client:** AMEC Foster Wheeler

**Project:** TFS #3359151040

**Work Order:** 16061162

**Sample ID:** Trip Blank - 061716

**Lab ID:** 16061162-34

**Collection Date:** 6/17/2016

**Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>		Analyst: <b>LSY</b>	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	6/27/2016 11:04 AM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	6/27/2016 11:04 AM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	6/27/2016 11:04 AM
1,1-Dichloroethane	ND		1.0	µg/L	1	6/27/2016 11:04 AM
1,1-Dichloroethene	ND		1.0	µg/L	1	6/27/2016 11:04 AM
1,2-Dichloroethane	ND		1.0	µg/L	1	6/27/2016 11:04 AM
1,2-Dichloropropane	ND		1.0	µg/L	1	6/27/2016 11:04 AM
2-Butanone	ND		5.0	µg/L	1	6/27/2016 11:04 AM
2-Hexanone	ND		5.0	µg/L	1	6/27/2016 11:04 AM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	6/27/2016 11:04 AM
Acetone	ND		10	µg/L	1	6/27/2016 11:04 AM
Benzene	ND		1.0	µg/L	1	6/27/2016 11:04 AM
Bromodichloromethane	ND		1.0	µg/L	1	6/27/2016 11:04 AM
Bromoform	ND		1.0	µg/L	1	6/27/2016 11:04 AM
Bromomethane	ND		1.0	µg/L	1	6/27/2016 11:04 AM
Carbon disulfide	ND		1.0	µg/L	1	6/27/2016 11:04 AM
Carbon tetrachloride	ND		1.0	µg/L	1	6/27/2016 11:04 AM
Chlorobenzene	ND		1.0	µg/L	1	6/27/2016 11:04 AM
Chloroethane	ND		1.0	µg/L	1	6/27/2016 11:04 AM
Chloroform	ND		1.0	µg/L	1	6/27/2016 11:04 AM
Chloromethane	ND		1.0	µg/L	1	6/27/2016 11:04 AM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	6/27/2016 11:04 AM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	6/27/2016 11:04 AM
Dibromochloromethane	ND		1.0	µg/L	1	6/27/2016 11:04 AM
Ethylbenzene	ND		1.0	µg/L	1	6/27/2016 11:04 AM
m,p-Xylene	ND		2.0	µg/L	1	6/27/2016 11:04 AM
Methylene chloride	ND		5.0	µg/L	1	6/27/2016 11:04 AM
o-Xylene	ND		1.0	µg/L	1	6/27/2016 11:04 AM
Styrene	ND		1.0	µg/L	1	6/27/2016 11:04 AM
Tetrachloroethene	ND		1.0	µg/L	1	6/27/2016 11:04 AM
Toluene	ND		1.0	µg/L	1	6/27/2016 11:04 AM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	6/27/2016 11:04 AM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	6/27/2016 11:04 AM
Trichloroethene	ND		1.0	µg/L	1	6/27/2016 11:04 AM
Vinyl chloride	ND		1.0	µg/L	1	6/27/2016 11:04 AM
Xylenes, Total	ND		3.0	µg/L	1	6/27/2016 11:04 AM
Surr: 1,2-Dichloroethane-d4	108		75-120	%REC	1	6/27/2016 11:04 AM
Surr: 4-Bromofluorobenzene	92.2		80-110	%REC	1	6/27/2016 11:04 AM
Surr: Dibromofluoromethane	107		85-115	%REC	1	6/27/2016 11:04 AM

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



**ALS Group USA, Corp**

**Date:** 30-Jun-16

**Client:** AMEC Foster Wheeler

**Project:** TFS #3359151040

**Work Order:** 16061162

**Sample ID:** Trip Blank - 061716

**Lab ID:** 16061162-34

**Collection Date:** 6/17/2016

**Matrix:** WATER

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<b>Analyses</b>	<b>Result</b>	<b>Qual</b>	<b>Report Limit</b>	<b>Units</b>	<b>Dilution Factor</b>	<b>Date Analyzed</b>
<i>Surr: Toluene-d8</i>	97.3		85-110	%REC	1	6/27/2016 11:04 AM

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

**ALS Group USA, Corp**

Date: 30-Jun-16

**Client:** AMEC Foster Wheeler  
**Project:** TFS #3359151040  
**Sample ID:** ATR-MW59(29)-G061716  
**Collection Date:** 6/17/2016 09:25 AM

**Work Order:** 16061162  
**Lab ID:** 16061162-35  
**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>		Analyst: <b>LSY</b>	
1,1,1-Trichloroethane	ND		25	µg/L	25	6/28/2016 01:27 AM
1,1,2,2-Tetrachloroethane	ND		25	µg/L	25	6/28/2016 01:27 AM
1,1,2-Trichloroethane	ND		25	µg/L	25	6/28/2016 01:27 AM
1,1-Dichloroethane	ND		25	µg/L	25	6/28/2016 01:27 AM
1,1-Dichloroethene	ND		25	µg/L	25	6/28/2016 01:27 AM
1,2-Dichloroethane	ND		25	µg/L	25	6/28/2016 01:27 AM
1,2-Dichloropropane	ND		25	µg/L	25	6/28/2016 01:27 AM
2-Butanone	ND		120	µg/L	25	6/28/2016 01:27 AM
2-Hexanone	ND		120	µg/L	25	6/28/2016 01:27 AM
4-Methyl-2-pentanone	ND		25	µg/L	25	6/28/2016 01:27 AM
Acetone	ND		250	µg/L	25	6/28/2016 01:27 AM
Benzene	ND		25	µg/L	25	6/28/2016 01:27 AM
Bromodichloromethane	ND		25	µg/L	25	6/28/2016 01:27 AM
Bromoform	ND		25	µg/L	25	6/28/2016 01:27 AM
Bromomethane	ND		25	µg/L	25	6/28/2016 01:27 AM
Carbon disulfide	ND		25	µg/L	25	6/28/2016 01:27 AM
Carbon tetrachloride	ND		25	µg/L	25	6/28/2016 01:27 AM
Chlorobenzene	ND		25	µg/L	25	6/28/2016 01:27 AM
Chloroethane	ND		25	µg/L	25	6/28/2016 01:27 AM
Chloroform	ND		25	µg/L	25	6/28/2016 01:27 AM
Chloromethane	ND		25	µg/L	25	6/28/2016 01:27 AM
cis-1,2-Dichloroethene	ND		25	µg/L	25	6/28/2016 01:27 AM
cis-1,3-Dichloropropene	ND		25	µg/L	25	6/28/2016 01:27 AM
Dibromochloromethane	ND		25	µg/L	25	6/28/2016 01:27 AM
Ethylbenzene	ND		25	µg/L	25	6/28/2016 01:27 AM
m,p-Xylene	ND		50	µg/L	25	6/28/2016 01:27 AM
Methylene chloride	ND		120	µg/L	25	6/28/2016 01:27 AM
o-Xylene	ND		25	µg/L	25	6/28/2016 01:27 AM
Styrene	ND		25	µg/L	25	6/28/2016 01:27 AM
Tetrachloroethene	ND		25	µg/L	25	6/28/2016 01:27 AM
Toluene	ND		25	µg/L	25	6/28/2016 01:27 AM
trans-1,2-Dichloroethene	ND		25	µg/L	25	6/28/2016 01:27 AM
trans-1,3-Dichloropropene	ND		25	µg/L	25	6/28/2016 01:27 AM
Trichloroethene	ND		25	µg/L	25	6/28/2016 01:27 AM
<b>Vinyl chloride</b>	<b>11,000</b>		<b>200</b>	<b>µg/L</b>	200	6/25/2016 07:50 PM
Xylenes, Total	ND		75	µg/L	25	6/28/2016 01:27 AM
Surr: 1,2-Dichloroethane-d4	110		75-120	%REC	200	6/25/2016 07:50 PM
Surr: 1,2-Dichloroethane-d4	107		75-120	%REC	25	6/28/2016 01:27 AM
Surr: 4-Bromofluorobenzene	92.0		80-110	%REC	200	6/25/2016 07:50 PM

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

# ALS Group USA, Corp

Date: 30-Jun-16

**Client:** AMEC Foster Wheeler  
**Project:** TFS #3359151040  
**Sample ID:** ATR-MW59(29)-G061716  
**Collection Date:** 6/17/2016 09:25 AM

**Work Order:** 16061162  
**Lab ID:** 16061162-35  
**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 4-Bromofluorobenzene	92.0		80-110	%REC	25	6/28/2016 01:27 AM
Surr: Dibromofluoromethane	110		85-115	%REC	200	6/25/2016 07:50 PM
Surr: Dibromofluoromethane	112		85-115	%REC	25	6/28/2016 01:27 AM
Surr: Toluene-d8	97.2		85-110	%REC	200	6/25/2016 07:50 PM
Surr: Toluene-d8	95.0		85-110	%REC	25	6/28/2016 01:27 AM
<b>ORGANIC CARBON, TOTAL</b>			<b>SW9060A</b>			Analyst: <b>JJG</b>
Organic Carbon, Total	150		20	mg/L	40	6/24/2016 02:52 PM

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

**ALS Group USA, Corp**

Date: 30-Jun-16

**Client:** AMEC Foster Wheeler  
**Project:** TFS #3359151040  
**Sample ID:** ATR-MW59(29)-G061716R  
**Collection Date:** 6/17/2016 09:25 AM

**Work Order:** 16061162  
**Lab ID:** 16061162-36  
**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>		Analyst: <b>LSY</b>	
1,1,1-Trichloroethane	ND		25	µg/L	25	6/28/2016 01:52 AM
1,1,2,2-Tetrachloroethane	ND		25	µg/L	25	6/28/2016 01:52 AM
1,1,2-Trichloroethane	ND		25	µg/L	25	6/28/2016 01:52 AM
1,1-Dichloroethane	ND		25	µg/L	25	6/28/2016 01:52 AM
1,1-Dichloroethene	ND		25	µg/L	25	6/28/2016 01:52 AM
1,2-Dichloroethane	ND		25	µg/L	25	6/28/2016 01:52 AM
1,2-Dichloropropane	ND		25	µg/L	25	6/28/2016 01:52 AM
2-Butanone	ND		120	µg/L	25	6/28/2016 01:52 AM
2-Hexanone	ND		120	µg/L	25	6/28/2016 01:52 AM
4-Methyl-2-pentanone	ND		25	µg/L	25	6/28/2016 01:52 AM
Acetone	ND		250	µg/L	25	6/28/2016 01:52 AM
Benzene	ND		25	µg/L	25	6/28/2016 01:52 AM
Bromodichloromethane	ND		25	µg/L	25	6/28/2016 01:52 AM
Bromoform	ND		25	µg/L	25	6/28/2016 01:52 AM
Bromomethane	ND		25	µg/L	25	6/28/2016 01:52 AM
Carbon disulfide	ND		25	µg/L	25	6/28/2016 01:52 AM
Carbon tetrachloride	ND		25	µg/L	25	6/28/2016 01:52 AM
Chlorobenzene	ND		25	µg/L	25	6/28/2016 01:52 AM
Chloroethane	ND		25	µg/L	25	6/28/2016 01:52 AM
Chloroform	ND		25	µg/L	25	6/28/2016 01:52 AM
Chloromethane	ND		25	µg/L	25	6/28/2016 01:52 AM
cis-1,2-Dichloroethene	ND		25	µg/L	25	6/28/2016 01:52 AM
cis-1,3-Dichloropropene	ND		25	µg/L	25	6/28/2016 01:52 AM
Dibromochloromethane	ND		25	µg/L	25	6/28/2016 01:52 AM
Ethylbenzene	ND		25	µg/L	25	6/28/2016 01:52 AM
m,p-Xylene	ND		50	µg/L	25	6/28/2016 01:52 AM
Methylene chloride	ND		120	µg/L	25	6/28/2016 01:52 AM
o-Xylene	ND		25	µg/L	25	6/28/2016 01:52 AM
Styrene	ND		25	µg/L	25	6/28/2016 01:52 AM
Tetrachloroethene	ND		25	µg/L	25	6/28/2016 01:52 AM
Toluene	ND		25	µg/L	25	6/28/2016 01:52 AM
trans-1,2-Dichloroethene	ND		25	µg/L	25	6/28/2016 01:52 AM
trans-1,3-Dichloropropene	ND		25	µg/L	25	6/28/2016 01:52 AM
Trichloroethene	ND		25	µg/L	25	6/28/2016 01:52 AM
<b>Vinyl chloride</b>	<b>11,000</b>		<b>200</b>	<b>µg/L</b>	200	6/25/2016 08:15 PM
Xylenes, Total	ND		75	µg/L	25	6/28/2016 01:52 AM
<i>Surr: 1,2-Dichloroethane-d4</i>	110		75-120	%REC	200	6/25/2016 08:15 PM
<i>Surr: 1,2-Dichloroethane-d4</i>	110		75-120	%REC	25	6/28/2016 01:52 AM
<i>Surr: 4-Bromofluorobenzene</i>	93.2		80-110	%REC	200	6/25/2016 08:15 PM

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

**ALS Group USA, Corp**

Date: 30-Jun-16

**Client:** AMEC Foster Wheeler  
**Project:** TFS #3359151040  
**Sample ID:** ATR-MW59(29)-G061716R  
**Collection Date:** 6/17/2016 09:25 AM

**Work Order:** 16061162  
**Lab ID:** 16061162-36  
**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 4-Bromofluorobenzene	92.9		80-110	%REC	25	6/28/2016 01:52 AM
Surr: Dibromofluoromethane	108		85-115	%REC	200	6/25/2016 08:15 PM
Surr: Dibromofluoromethane	110		85-115	%REC	25	6/28/2016 01:52 AM
Surr: Toluene-d8	98.4		85-110	%REC	200	6/25/2016 08:15 PM
Surr: Toluene-d8	97.4		85-110	%REC	25	6/28/2016 01:52 AM
<b>ORGANIC CARBON, TOTAL</b>			<b>SW9060A</b>			Analyst: <b>JJG</b>
Organic Carbon, Total	140		10	mg/L	20	6/25/2016 04:07 PM

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

**ALS Group USA, Corp**

Date: 30-Jun-16

**Client:** AMEC Foster Wheeler  
**Project:** TFS #3359151040  
**Sample ID:** ATR-MW82-G061616  
**Collection Date:** 6/16/2016 09:00 AM

**Work Order:** 16061162  
**Lab ID:** 16061162-37  
**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>		Analyst: <b>AK</b>	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	6/25/2016 03:19 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	6/25/2016 03:19 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	6/25/2016 03:19 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	6/25/2016 03:19 PM
1,1-Dichloroethene	ND		1.0	µg/L	1	6/25/2016 03:19 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	6/25/2016 03:19 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	6/25/2016 03:19 PM
2-Butanone	ND		5.0	µg/L	1	6/25/2016 03:19 PM
2-Hexanone	ND		5.0	µg/L	1	6/25/2016 03:19 PM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	6/25/2016 03:19 PM
Acetone	ND		10	µg/L	1	6/25/2016 03:19 PM
Benzene	ND		1.0	µg/L	1	6/25/2016 03:19 PM
Bromodichloromethane	ND		1.0	µg/L	1	6/25/2016 03:19 PM
Bromoform	ND		1.0	µg/L	1	6/25/2016 03:19 PM
Bromomethane	ND		1.0	µg/L	1	6/25/2016 03:19 PM
Carbon disulfide	ND		1.0	µg/L	1	6/25/2016 03:19 PM
Carbon tetrachloride	ND		1.0	µg/L	1	6/25/2016 03:19 PM
Chlorobenzene	ND		1.0	µg/L	1	6/25/2016 03:19 PM
Chloroethane	ND		1.0	µg/L	1	6/25/2016 03:19 PM
Chloroform	ND		1.0	µg/L	1	6/25/2016 03:19 PM
Chloromethane	ND		1.0	µg/L	1	6/25/2016 03:19 PM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	6/25/2016 03:19 PM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	6/25/2016 03:19 PM
Dibromochloromethane	ND		1.0	µg/L	1	6/25/2016 03:19 PM
Ethylbenzene	ND		1.0	µg/L	1	6/25/2016 03:19 PM
m,p-Xylene	ND		2.0	µg/L	1	6/25/2016 03:19 PM
Methylene chloride	ND		5.0	µg/L	1	6/25/2016 03:19 PM
o-Xylene	ND		1.0	µg/L	1	6/25/2016 03:19 PM
Styrene	ND		1.0	µg/L	1	6/25/2016 03:19 PM
Tetrachloroethene	ND		1.0	µg/L	1	6/25/2016 03:19 PM
Toluene	ND		1.0	µg/L	1	6/25/2016 03:19 PM
<b>trans-1,2-Dichloroethene</b>	<b>1.1</b>		<b>1.0</b>	<b>µg/L</b>	1	6/25/2016 03:19 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	6/25/2016 03:19 PM
Trichloroethene	ND		1.0	µg/L	1	6/25/2016 03:19 PM
Vinyl chloride	ND		1.0	µg/L	1	6/25/2016 03:19 PM
Xylenes, Total	ND		3.0	µg/L	1	6/25/2016 03:19 PM
Surr: 1,2-Dichloroethane-d4	112		75-120	%REC	1	6/25/2016 03:19 PM
Surr: 4-Bromofluorobenzene	93.5		80-110	%REC	1	6/25/2016 03:19 PM
Surr: Dibromofluoromethane	102		85-115	%REC	1	6/25/2016 03:19 PM

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

**ALS Group USA, Corp**

**Date:** 30-Jun-16

**Client:** AMEC Foster Wheeler

**Project:** TFS #3359151040

**Sample ID:** ATR-MW82-G061616

**Collection Date:** 6/16/2016 09:00 AM

**Work Order:** 16061162

**Lab ID:** 16061162-37

**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	99.2		85-110	%REC	1	6/25/2016 03:19 PM
<b>ORGANIC CARBON, TOTAL</b>			<b>SW9060A</b>			Analyst: <b>JJG</b>
Organic Carbon, Total	<b>280</b>		<b>20</b>	mg/L	40	6/25/2016 04:07 PM

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

**ALS Group USA, Corp**

Date: 30-Jun-16

**Client:** AMEC Foster Wheeler  
**Project:** TFS #3359151040  
**Sample ID:** ATR-EB002-G061616  
**Collection Date:** 6/16/2016 09:30 AM

**Work Order:** 16061162  
**Lab ID:** 16061162-38  
**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>		Analyst: <b>LSY</b>	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	6/27/2016 12:18 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	6/27/2016 12:18 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	6/27/2016 12:18 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	6/27/2016 12:18 PM
1,1-Dichloroethene	ND		1.0	µg/L	1	6/27/2016 12:18 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	6/27/2016 12:18 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	6/27/2016 12:18 PM
2-Butanone	ND		5.0	µg/L	1	6/27/2016 12:18 PM
2-Hexanone	ND		5.0	µg/L	1	6/27/2016 12:18 PM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	6/27/2016 12:18 PM
Acetone	ND		10	µg/L	1	6/27/2016 12:18 PM
Benzene	ND		1.0	µg/L	1	6/27/2016 12:18 PM
<b>Bromodichloromethane</b>	<b>2.3</b>		<b>1.0</b>	<b>µg/L</b>	1	6/27/2016 12:18 PM
Bromoform	ND		1.0	µg/L	1	6/27/2016 12:18 PM
Bromomethane	ND		1.0	µg/L	1	6/27/2016 12:18 PM
Carbon disulfide	ND		1.0	µg/L	1	6/27/2016 12:18 PM
Carbon tetrachloride	ND		1.0	µg/L	1	6/27/2016 12:18 PM
Chlorobenzene	ND		1.0	µg/L	1	6/27/2016 12:18 PM
Chloroethane	ND		1.0	µg/L	1	6/27/2016 12:18 PM
<b>Chloroform</b>	<b>7.9</b>		<b>1.0</b>	<b>µg/L</b>	1	6/27/2016 12:18 PM
Chloromethane	ND		1.0	µg/L	1	6/27/2016 12:18 PM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	6/27/2016 12:18 PM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	6/27/2016 12:18 PM
Dibromochloromethane	ND		1.0	µg/L	1	6/27/2016 12:18 PM
Ethylbenzene	ND		1.0	µg/L	1	6/27/2016 12:18 PM
m,p-Xylene	ND		2.0	µg/L	1	6/27/2016 12:18 PM
Methylene chloride	ND		5.0	µg/L	1	6/27/2016 12:18 PM
o-Xylene	ND		1.0	µg/L	1	6/27/2016 12:18 PM
Styrene	ND		1.0	µg/L	1	6/27/2016 12:18 PM
Tetrachloroethene	ND		1.0	µg/L	1	6/27/2016 12:18 PM
Toluene	ND		1.0	µg/L	1	6/27/2016 12:18 PM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	6/27/2016 12:18 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	6/27/2016 12:18 PM
Trichloroethene	ND		1.0	µg/L	1	6/27/2016 12:18 PM
Vinyl chloride	ND		1.0	µg/L	1	6/27/2016 12:18 PM
Xylenes, Total	ND		3.0	µg/L	1	6/27/2016 12:18 PM
Surr: 1,2-Dichloroethane-d4	108		75-120	%REC	1	6/27/2016 12:18 PM
Surr: 4-Bromofluorobenzene	91.2		80-110	%REC	1	6/27/2016 12:18 PM
Surr: Dibromofluoromethane	110		85-115	%REC	1	6/27/2016 12:18 PM

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



**ALS Group USA, Corp**

**Date:** 30-Jun-16

**Client:** AMEC Foster Wheeler

**Project:** TFS #3359151040

**Sample ID:** ATR-EB002-G061616

**Collection Date:** 6/16/2016 09:30 AM

**Work Order:** 16061162

**Lab ID:** 16061162-38

**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	97.0		85-110	%REC	1	6/27/2016 12:18 PM
<b>ORGANIC CARBON, TOTAL</b>			<b>SW9060A</b>			Analyst: <b>JJG</b>
Organic Carbon, Total	2.5		0.50	mg/L	1	6/25/2016 04:07 PM

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

**ALS Group USA, Corp**

Date: 30-Jun-16

**Client:** AMEC Foster Wheeler  
**Project:** TFS #3359151040  
**Sample ID:** ATR-MW12-G061616  
**Collection Date:** 6/16/2016 10:50 AM

**Work Order:** 16061162  
**Lab ID:** 16061162-39  
**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>		Analyst: <b>LSY</b>	
1,1,1-Trichloroethane	ND		5.0	µg/L	5	6/28/2016 02:41 AM
1,1,2,2-Tetrachloroethane	ND		5.0	µg/L	5	6/28/2016 02:41 AM
1,1,2-Trichloroethane	ND		5.0	µg/L	5	6/28/2016 02:41 AM
1,1-Dichloroethane	ND		5.0	µg/L	5	6/28/2016 02:41 AM
1,1-Dichloroethene	ND		5.0	µg/L	5	6/28/2016 02:41 AM
1,2-Dichloroethane	ND		5.0	µg/L	5	6/28/2016 02:41 AM
1,2-Dichloropropane	ND		5.0	µg/L	5	6/28/2016 02:41 AM
2-Butanone	ND		25	µg/L	5	6/28/2016 02:41 AM
2-Hexanone	ND		25	µg/L	5	6/28/2016 02:41 AM
4-Methyl-2-pentanone	ND		5.0	µg/L	5	6/28/2016 02:41 AM
Acetone	ND		50	µg/L	5	6/28/2016 02:41 AM
Benzene	ND		5.0	µg/L	5	6/28/2016 02:41 AM
Bromodichloromethane	ND		5.0	µg/L	5	6/28/2016 02:41 AM
Bromoform	ND		5.0	µg/L	5	6/28/2016 02:41 AM
Bromomethane	ND		5.0	µg/L	5	6/28/2016 02:41 AM
Carbon disulfide	ND		5.0	µg/L	5	6/28/2016 02:41 AM
Carbon tetrachloride	ND		5.0	µg/L	5	6/28/2016 02:41 AM
Chlorobenzene	ND		5.0	µg/L	5	6/28/2016 02:41 AM
Chloroethane	ND		5.0	µg/L	5	6/28/2016 02:41 AM
Chloroform	ND		5.0	µg/L	5	6/28/2016 02:41 AM
Chloromethane	ND		5.0	µg/L	5	6/28/2016 02:41 AM
<b>cis-1,2-Dichloroethene</b>	<b>630</b>		<b>50</b>	<b>µg/L</b>	50	6/25/2016 08:40 PM
cis-1,3-Dichloropropene	ND		5.0	µg/L	5	6/28/2016 02:41 AM
Dibromochloromethane	ND		5.0	µg/L	5	6/28/2016 02:41 AM
Ethylbenzene	ND		5.0	µg/L	5	6/28/2016 02:41 AM
m,p-Xylene	ND		10	µg/L	5	6/28/2016 02:41 AM
Methylene chloride	ND		25	µg/L	5	6/28/2016 02:41 AM
o-Xylene	ND		5.0	µg/L	5	6/28/2016 02:41 AM
Styrene	ND		5.0	µg/L	5	6/28/2016 02:41 AM
Tetrachloroethene	ND		5.0	µg/L	5	6/28/2016 02:41 AM
Toluene	ND		5.0	µg/L	5	6/28/2016 02:41 AM
trans-1,2-Dichloroethene	ND		5.0	µg/L	5	6/28/2016 02:41 AM
trans-1,3-Dichloropropene	ND		5.0	µg/L	5	6/28/2016 02:41 AM
Trichloroethene	ND		5.0	µg/L	5	6/28/2016 02:41 AM
<b>Vinyl chloride</b>	<b>1,300</b>		<b>50</b>	<b>µg/L</b>	50	6/25/2016 08:40 PM
Xylenes, Total	ND		15	µg/L	5	6/28/2016 02:41 AM
Surr: 1,2-Dichloroethane-d4	109		75-120	%REC	50	6/25/2016 08:40 PM
Surr: 1,2-Dichloroethane-d4	110		75-120	%REC	5	6/28/2016 02:41 AM
Surr: 4-Bromofluorobenzene	92.5		80-110	%REC	50	6/25/2016 08:40 PM

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

**ALS Group USA, Corp**

Date: 30-Jun-16

**Client:** AMEC Foster Wheeler  
**Project:** TFS #3359151040  
**Sample ID:** ATR-MW12-G061616  
**Collection Date:** 6/16/2016 10:50 AM

**Work Order:** 16061162  
**Lab ID:** 16061162-39  
**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 4-Bromofluorobenzene	90.8		80-110	%REC	5	6/28/2016 02:41 AM
Surr: Dibromofluoromethane	109		85-115	%REC	50	6/25/2016 08:40 PM
Surr: Dibromofluoromethane	114		85-115	%REC	5	6/28/2016 02:41 AM
Surr: Toluene-d8	99.3		85-110	%REC	50	6/25/2016 08:40 PM
Surr: Toluene-d8	96.9		85-110	%REC	5	6/28/2016 02:41 AM
<b>ORGANIC CARBON, TOTAL</b>			<b>SW9060A</b>			Analyst: <b>JJG</b>
Organic Carbon, Total	64		10	mg/L	20	6/25/2016 04:07 PM

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

**ALS Group USA, Corp**

Date: 30-Jun-16

**Client:** AMEC Foster Wheeler  
**Project:** TFS #3359151040  
**Sample ID:** ATR-MW13-G061616  
**Collection Date:** 6/16/2016 11:50 AM

**Work Order:** 16061162  
**Lab ID:** 16061162-40  
**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>		Analyst: <b>LSY</b>	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	6/27/2016 04:00 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	6/27/2016 04:00 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	6/27/2016 04:00 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	6/27/2016 04:00 PM
1,1-Dichloroethene	ND		1.0	µg/L	1	6/27/2016 04:00 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	6/27/2016 04:00 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	6/27/2016 04:00 PM
<b>2-Butanone</b>	<b>76</b>		<b>5.0</b>	<b>µg/L</b>	1	6/27/2016 04:00 PM
2-Hexanone	ND		5.0	µg/L	1	6/27/2016 04:00 PM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	6/27/2016 04:00 PM
<b>Acetone</b>	<b>24</b>		<b>10</b>	<b>µg/L</b>	1	6/27/2016 04:00 PM
Benzene	ND		1.0	µg/L	1	6/27/2016 04:00 PM
Bromodichloromethane	ND		1.0	µg/L	1	6/27/2016 04:00 PM
Bromoform	ND		1.0	µg/L	1	6/27/2016 04:00 PM
Bromomethane	ND		1.0	µg/L	1	6/27/2016 04:00 PM
Carbon disulfide	ND		1.0	µg/L	1	6/27/2016 04:00 PM
Carbon tetrachloride	ND		1.0	µg/L	1	6/27/2016 04:00 PM
Chlorobenzene	ND		1.0	µg/L	1	6/27/2016 04:00 PM
Chloroethane	ND		1.0	µg/L	1	6/27/2016 04:00 PM
Chloroform	ND		1.0	µg/L	1	6/27/2016 04:00 PM
Chloromethane	ND		1.0	µg/L	1	6/27/2016 04:00 PM
<b>cis-1,2-Dichloroethene</b>	<b>190</b>		<b>5.0</b>	<b>µg/L</b>	5	6/27/2016 03:11 PM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	6/27/2016 04:00 PM
Dibromochloromethane	ND		1.0	µg/L	1	6/27/2016 04:00 PM
Ethylbenzene	ND		1.0	µg/L	1	6/27/2016 04:00 PM
m,p-Xylene	ND		2.0	µg/L	1	6/27/2016 04:00 PM
Methylene chloride	ND		5.0	µg/L	1	6/27/2016 04:00 PM
o-Xylene	ND		1.0	µg/L	1	6/27/2016 04:00 PM
Styrene	ND		1.0	µg/L	1	6/27/2016 04:00 PM
Tetrachloroethene	ND		1.0	µg/L	1	6/27/2016 04:00 PM
Toluene	ND		1.0	µg/L	1	6/27/2016 04:00 PM
<b>trans-1,2-Dichloroethene</b>	<b>1.0</b>		<b>1.0</b>	<b>µg/L</b>	1	6/27/2016 04:00 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	6/27/2016 04:00 PM
Trichloroethene	ND		1.0	µg/L	1	6/27/2016 04:00 PM
<b>Vinyl chloride</b>	<b>96</b>		<b>1.0</b>	<b>µg/L</b>	1	6/27/2016 04:00 PM
Xylenes, Total	ND		3.0	µg/L	1	6/27/2016 04:00 PM
Surr: 1,2-Dichloroethane-d4	111		75-120	%REC	5	6/27/2016 03:11 PM
Surr: 1,2-Dichloroethane-d4	112		75-120	%REC	1	6/27/2016 04:00 PM
Surr: 4-Bromofluorobenzene	95.1		80-110	%REC	5	6/27/2016 03:11 PM

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

**ALS Group USA, Corp**

Date: 30-Jun-16

**Client:** AMEC Foster Wheeler  
**Project:** TFS #3359151040  
**Sample ID:** ATR-MW13-G061616  
**Collection Date:** 6/16/2016 11:50 AM

**Work Order:** 16061162  
**Lab ID:** 16061162-40  
**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 4-Bromofluorobenzene	92.7		80-110	%REC	1	6/27/2016 04:00 PM
Surr: Dibromofluoromethane	113		85-115	%REC	5	6/27/2016 03:11 PM
Surr: Dibromofluoromethane	112		85-115	%REC	1	6/27/2016 04:00 PM
Surr: Toluene-d8	96.3		85-110	%REC	5	6/27/2016 03:11 PM
Surr: Toluene-d8	96.4		85-110	%REC	1	6/27/2016 04:00 PM
<b>ORGANIC CARBON, TOTAL</b>			<b>SW9060A</b>			Analyst: <b>JJG</b>
Organic Carbon, Total	11		1.0	mg/L	2	6/27/2016 01:26 PM

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

**ALS Group USA, Corp**

Date: 30-Jun-16

**Client:** AMEC Foster Wheeler  
**Project:** TFS #3359151040  
**Sample ID:** ATR-MW6C-G061616  
**Collection Date:** 6/16/2016 01:20 PM

**Work Order:** 16061162  
**Lab ID:** 16061162-41  
**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>		Analyst: <b>LSY</b>	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	6/28/2016 01:02 AM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	6/28/2016 01:02 AM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	6/28/2016 01:02 AM
1,1-Dichloroethane	ND		1.0	µg/L	1	6/28/2016 01:02 AM
1,1-Dichloroethene	ND		1.0	µg/L	1	6/28/2016 01:02 AM
1,2-Dichloroethane	ND		1.0	µg/L	1	6/28/2016 01:02 AM
1,2-Dichloropropane	ND		1.0	µg/L	1	6/28/2016 01:02 AM
2-Butanone	ND		5.0	µg/L	1	6/28/2016 01:02 AM
2-Hexanone	ND		5.0	µg/L	1	6/28/2016 01:02 AM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	6/28/2016 01:02 AM
Acetone	ND		10	µg/L	1	6/28/2016 01:02 AM
Benzene	ND		1.0	µg/L	1	6/28/2016 01:02 AM
Bromodichloromethane	ND		1.0	µg/L	1	6/28/2016 01:02 AM
Bromoform	ND		1.0	µg/L	1	6/28/2016 01:02 AM
Bromomethane	ND		1.0	µg/L	1	6/28/2016 01:02 AM
Carbon disulfide	ND		1.0	µg/L	1	6/28/2016 01:02 AM
Carbon tetrachloride	ND		1.0	µg/L	1	6/28/2016 01:02 AM
Chlorobenzene	ND		1.0	µg/L	1	6/28/2016 01:02 AM
Chloroethane	ND		1.0	µg/L	1	6/28/2016 01:02 AM
Chloroform	ND		1.0	µg/L	1	6/28/2016 01:02 AM
Chloromethane	ND		1.0	µg/L	1	6/28/2016 01:02 AM
<b>cis-1,2-Dichloroethene</b>	<b>50</b>		<b>1.0</b>	<b>µg/L</b>	1	6/28/2016 01:02 AM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	6/28/2016 01:02 AM
Dibromochloromethane	ND		1.0	µg/L	1	6/28/2016 01:02 AM
Ethylbenzene	ND		1.0	µg/L	1	6/28/2016 01:02 AM
m,p-Xylene	ND		2.0	µg/L	1	6/28/2016 01:02 AM
Methylene chloride	ND		5.0	µg/L	1	6/28/2016 01:02 AM
o-Xylene	ND		1.0	µg/L	1	6/28/2016 01:02 AM
Styrene	ND		1.0	µg/L	1	6/28/2016 01:02 AM
Tetrachloroethene	ND		1.0	µg/L	1	6/28/2016 01:02 AM
Toluene	ND		1.0	µg/L	1	6/28/2016 01:02 AM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	6/28/2016 01:02 AM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	6/28/2016 01:02 AM
Trichloroethene	ND		1.0	µg/L	1	6/28/2016 01:02 AM
<b>Vinyl chloride</b>	<b>170</b>		<b>5.0</b>	<b>µg/L</b>	5	6/25/2016 09:29 PM
Xylenes, Total	ND		3.0	µg/L	1	6/28/2016 01:02 AM
Surr: 1,2-Dichloroethane-d4	111		75-120	%REC	5	6/25/2016 09:29 PM
Surr: 1,2-Dichloroethane-d4	113		75-120	%REC	1	6/28/2016 01:02 AM
Surr: 4-Bromofluorobenzene	93.3		80-110	%REC	5	6/25/2016 09:29 PM

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

# ALS Group USA, Corp

Date: 30-Jun-16

**Client:** AMEC Foster Wheeler  
**Project:** TFS #3359151040  
**Sample ID:** ATR-MW6C-G061616  
**Collection Date:** 6/16/2016 01:20 PM

**Work Order:** 16061162  
**Lab ID:** 16061162-41  
**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 4-Bromofluorobenzene	91.6		80-110	%REC	1	6/28/2016 01:02 AM
Surr: Dibromofluoromethane	109		85-115	%REC	5	6/25/2016 09:29 PM
Surr: Dibromofluoromethane	112		85-115	%REC	1	6/28/2016 01:02 AM
Surr: Toluene-d8	99.5		85-110	%REC	5	6/25/2016 09:29 PM
Surr: Toluene-d8	92.6		85-110	%REC	1	6/28/2016 01:02 AM
<b>ORGANIC CARBON, TOTAL</b>			<b>SW9060A</b>			Analyst: <b>JJG</b>
Organic Carbon, Total	7.3		1.0	mg/L	2	6/25/2016 04:07 PM

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

**ALS Group USA, Corp**

Date: 30-Jun-16

**Client:** AMEC Foster Wheeler  
**Project:** TFS #3359151040  
**Sample ID:** ATR-MW62-G061616  
**Collection Date:** 6/16/2016 03:00 PM

**Work Order:** 16061162  
**Lab ID:** 16061162-42  
**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>		Analyst: <b>LSY</b>	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	6/27/2016 11:23 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	6/27/2016 11:23 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	6/27/2016 11:23 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	6/27/2016 11:23 PM
1,1-Dichloroethene	ND		1.0	µg/L	1	6/27/2016 11:23 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	6/27/2016 11:23 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	6/27/2016 11:23 PM
2-Butanone	ND		5.0	µg/L	1	6/27/2016 11:23 PM
2-Hexanone	ND		5.0	µg/L	1	6/27/2016 11:23 PM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	6/27/2016 11:23 PM
Acetone	ND		10	µg/L	1	6/27/2016 11:23 PM
Benzene	ND		1.0	µg/L	1	6/27/2016 11:23 PM
Bromodichloromethane	ND		1.0	µg/L	1	6/27/2016 11:23 PM
Bromoform	ND		1.0	µg/L	1	6/27/2016 11:23 PM
Bromomethane	ND		1.0	µg/L	1	6/27/2016 11:23 PM
Carbon disulfide	ND		1.0	µg/L	1	6/27/2016 11:23 PM
Carbon tetrachloride	ND		1.0	µg/L	1	6/27/2016 11:23 PM
Chlorobenzene	ND		1.0	µg/L	1	6/27/2016 11:23 PM
Chloroethane	ND		1.0	µg/L	1	6/27/2016 11:23 PM
Chloroform	ND		1.0	µg/L	1	6/27/2016 11:23 PM
Chloromethane	ND		1.0	µg/L	1	6/27/2016 11:23 PM
<b>cis-1,2-Dichloroethene</b>	<b>4.8</b>		<b>1.0</b>	<b>µg/L</b>	1	6/27/2016 11:23 PM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	6/27/2016 11:23 PM
Dibromochloromethane	ND		1.0	µg/L	1	6/27/2016 11:23 PM
Ethylbenzene	ND		1.0	µg/L	1	6/27/2016 11:23 PM
m,p-Xylene	ND		2.0	µg/L	1	6/27/2016 11:23 PM
Methylene chloride	ND		5.0	µg/L	1	6/27/2016 11:23 PM
o-Xylene	ND		1.0	µg/L	1	6/27/2016 11:23 PM
Styrene	ND		1.0	µg/L	1	6/27/2016 11:23 PM
Tetrachloroethene	ND		1.0	µg/L	1	6/27/2016 11:23 PM
Toluene	ND		1.0	µg/L	1	6/27/2016 11:23 PM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	6/27/2016 11:23 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	6/27/2016 11:23 PM
Trichloroethene	ND		1.0	µg/L	1	6/27/2016 11:23 PM
<b>Vinyl chloride</b>	<b>39</b>		<b>1.0</b>	<b>µg/L</b>	1	6/27/2016 11:23 PM
Xylenes, Total	ND		3.0	µg/L	1	6/27/2016 11:23 PM
Surr: 1,2-Dichloroethane-d4	107		75-120	%REC	1	6/27/2016 11:23 PM
Surr: 4-Bromofluorobenzene	93.0		80-110	%REC	1	6/27/2016 11:23 PM
Surr: Dibromofluoromethane	109		85-115	%REC	1	6/27/2016 11:23 PM

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



**ALS Group USA, Corp**

**Date:** 30-Jun-16

**Client:** AMEC Foster Wheeler

**Project:** TFS #3359151040

**Sample ID:** ATR-MW62-G061616

**Collection Date:** 6/16/2016 03:00 PM

**Work Order:** 16061162

**Lab ID:** 16061162-42

**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	96.4		85-110	%REC	1	6/27/2016 11:23 PM
<b>ORGANIC CARBON, TOTAL</b>			<b>SW9060A</b>			Analyst: <b>JJG</b>
Organic Carbon, Total	47		5.0	mg/L	10	6/25/2016 04:07 PM

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

**ALS Group USA, Corp**

Date: 30-Jun-16

**Client:** AMEC Foster Wheeler

**Project:** TFS #3359151040

**Work Order:** 16061162

**Sample ID:** ATR-PM2-G061616

**Lab ID:** 16061162-43

**Collection Date:** 6/16/2016 04:30 PM

**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>		Analyst: <b>LSY</b>	
1,1,1-Trichloroethane	ND		10	µg/L	10	6/28/2016 12:38 PM
1,1,2,2-Tetrachloroethane	ND		10	µg/L	10	6/28/2016 12:38 PM
1,1,2-Trichloroethane	ND		10	µg/L	10	6/28/2016 12:38 PM
1,1-Dichloroethane	ND		10	µg/L	10	6/28/2016 12:38 PM
1,1-Dichloroethene	ND		10	µg/L	10	6/28/2016 12:38 PM
1,2-Dichloroethane	ND		10	µg/L	10	6/28/2016 12:38 PM
1,2-Dichloropropane	ND		10	µg/L	10	6/28/2016 12:38 PM
2-Butanone	ND		50	µg/L	10	6/28/2016 12:38 PM
2-Hexanone	ND		50	µg/L	10	6/28/2016 12:38 PM
4-Methyl-2-pentanone	ND		10	µg/L	10	6/28/2016 12:38 PM
Acetone	ND		100	µg/L	10	6/28/2016 12:38 PM
Benzene	ND		10	µg/L	10	6/28/2016 12:38 PM
Bromodichloromethane	ND		10	µg/L	10	6/28/2016 12:38 PM
Bromoform	ND		10	µg/L	10	6/28/2016 12:38 PM
Bromomethane	ND		10	µg/L	10	6/28/2016 12:38 PM
Carbon disulfide	ND		10	µg/L	10	6/28/2016 12:38 PM
Carbon tetrachloride	ND		10	µg/L	10	6/28/2016 12:38 PM
Chlorobenzene	ND		10	µg/L	10	6/28/2016 12:38 PM
Chloroethane	ND		10	µg/L	10	6/28/2016 12:38 PM
Chloroform	ND		10	µg/L	10	6/28/2016 12:38 PM
Chloromethane	ND		10	µg/L	10	6/28/2016 12:38 PM
<b>cis-1,2-Dichloroethene</b>	<b>20</b>		<b>10</b>	<b>µg/L</b>	10	6/28/2016 12:38 PM
cis-1,3-Dichloropropene	ND		10	µg/L	10	6/28/2016 12:38 PM
Dibromochloromethane	ND		10	µg/L	10	6/28/2016 12:38 PM
Ethylbenzene	ND		10	µg/L	10	6/28/2016 12:38 PM
m,p-Xylene	ND		20	µg/L	10	6/28/2016 12:38 PM
Methylene chloride	ND		50	µg/L	10	6/28/2016 12:38 PM
o-Xylene	ND		10	µg/L	10	6/28/2016 12:38 PM
Styrene	ND		10	µg/L	10	6/28/2016 12:38 PM
Tetrachloroethene	ND		10	µg/L	10	6/28/2016 12:38 PM
Toluene	ND		10	µg/L	10	6/28/2016 12:38 PM
trans-1,2-Dichloroethene	ND		10	µg/L	10	6/28/2016 12:38 PM
trans-1,3-Dichloropropene	ND		10	µg/L	10	6/28/2016 12:38 PM
Trichloroethene	ND		10	µg/L	10	6/28/2016 12:38 PM
<b>Vinyl chloride</b>	<b>5,300</b>		<b>100</b>	<b>µg/L</b>	100	6/25/2016 10:18 PM
Xylenes, Total	ND		30	µg/L	10	6/28/2016 12:38 PM
Surr: 1,2-Dichloroethane-d4	110		75-120	%REC	100	6/25/2016 10:18 PM
Surr: 1,2-Dichloroethane-d4	107		75-120	%REC	10	6/28/2016 12:38 PM
Surr: 4-Bromofluorobenzene	94.8		80-110	%REC	100	6/25/2016 10:18 PM

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

**ALS Group USA, Corp**

Date: 30-Jun-16

**Client:** AMEC Foster Wheeler

**Project:** TFS #3359151040

**Sample ID:** ATR-PM2-G061616

**Collection Date:** 6/16/2016 04:30 PM

**Work Order:** 16061162

**Lab ID:** 16061162-43

**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 4-Bromofluorobenzene	93.1		80-110	%REC	10	6/28/2016 12:38 PM
Surr: Dibromofluoromethane	106		85-115	%REC	100	6/25/2016 10:18 PM
Surr: Dibromofluoromethane	111		85-115	%REC	10	6/28/2016 12:38 PM
Surr: Toluene-d8	98.9		85-110	%REC	100	6/25/2016 10:18 PM
Surr: Toluene-d8	96.8		85-110	%REC	10	6/28/2016 12:38 PM
<b>ORGANIC CARBON, TOTAL</b>			<b>SW9060A</b>			Analyst: <b>JJG</b>
Organic Carbon, Total	44		10	mg/L	20	6/25/2016 04:07 PM

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

**ALS Group USA, Corp**

Date: 30-Jun-16

**Client:** AMEC Foster Wheeler

**Project:** TFS #3359151040

**Work Order:** 16061162

**Sample ID:** ATR-4377NOUHWY31-061416

**Lab ID:** 16061162-44

**Collection Date:** 6/14/2016 11:50 AM

**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>		Analyst: <b>AK</b>	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	6/25/2016 02:10 AM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	6/25/2016 02:10 AM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	6/25/2016 02:10 AM
1,1-Dichloroethane	ND		1.0	µg/L	1	6/25/2016 02:10 AM
1,1-Dichloroethene	ND		1.0	µg/L	1	6/25/2016 02:10 AM
1,2-Dichloroethane	ND		1.0	µg/L	1	6/25/2016 02:10 AM
1,2-Dichloropropane	ND		1.0	µg/L	1	6/25/2016 02:10 AM
2-Butanone	ND		5.0	µg/L	1	6/25/2016 02:10 AM
2-Hexanone	ND		5.0	µg/L	1	6/25/2016 02:10 AM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	6/25/2016 02:10 AM
Acetone	ND		10	µg/L	1	6/25/2016 02:10 AM
Benzene	ND		1.0	µg/L	1	6/25/2016 02:10 AM
Bromodichloromethane	ND		1.0	µg/L	1	6/25/2016 02:10 AM
Bromoform	ND		1.0	µg/L	1	6/25/2016 02:10 AM
Bromomethane	ND		1.0	µg/L	1	6/25/2016 02:10 AM
Carbon disulfide	ND		1.0	µg/L	1	6/25/2016 02:10 AM
Carbon tetrachloride	ND		1.0	µg/L	1	6/25/2016 02:10 AM
Chlorobenzene	ND		1.0	µg/L	1	6/25/2016 02:10 AM
Chloroethane	ND		1.0	µg/L	1	6/25/2016 02:10 AM
Chloroform	ND		1.0	µg/L	1	6/25/2016 02:10 AM
Chloromethane	ND		1.0	µg/L	1	6/25/2016 02:10 AM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	6/25/2016 02:10 AM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	6/25/2016 02:10 AM
Dibromochloromethane	ND		1.0	µg/L	1	6/25/2016 02:10 AM
Ethylbenzene	ND		1.0	µg/L	1	6/25/2016 02:10 AM
m,p-Xylene	ND		2.0	µg/L	1	6/25/2016 02:10 AM
Methylene chloride	ND		5.0	µg/L	1	6/25/2016 02:10 AM
o-Xylene	ND		1.0	µg/L	1	6/25/2016 02:10 AM
Styrene	ND		1.0	µg/L	1	6/25/2016 02:10 AM
Tetrachloroethene	ND		1.0	µg/L	1	6/25/2016 02:10 AM
Toluene	ND		1.0	µg/L	1	6/25/2016 02:10 AM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	6/25/2016 02:10 AM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	6/25/2016 02:10 AM
Trichloroethene	ND		1.0	µg/L	1	6/25/2016 02:10 AM
Vinyl chloride	ND		1.0	µg/L	1	6/25/2016 02:10 AM
Xylenes, Total	ND		3.0	µg/L	1	6/25/2016 02:10 AM
Surr: 1,2-Dichloroethane-d4	103		75-120	%REC	1	6/25/2016 02:10 AM
Surr: 4-Bromofluorobenzene	94.4		80-110	%REC	1	6/25/2016 02:10 AM
Surr: Dibromofluoromethane	104		85-115	%REC	1	6/25/2016 02:10 AM

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

**ALS Group USA, Corp**

**Date:** 30-Jun-16

**Client:** AMEC Foster Wheeler

**Project:** TFS #3359151040

**Work Order:** 16061162

**Sample ID:** ATR-4377NOUHWY31-061416

**Lab ID:** 16061162-44

**Collection Date:** 6/14/2016 11:50 AM

**Matrix:** GROUNDWATER

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<b>Analyses</b>	<b>Result</b>	<b>Qual</b>	<b>Report Limit</b>	<b>Units</b>	<b>Dilution Factor</b>	<b>Date Analyzed</b>
<i>Surr: Toluene-d8</i>	99.1		85-110	%REC	1	6/25/2016 02:10 AM

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

**Client:** AMEC Foster Wheeler  
**Project:** TFS #3359151040  
**WorkOrder:** 16061162

**QUALIFIERS,  
ACRONYMS, UNITS**

<u>Qualifier</u>	<u>Description</u>
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte is present at an estimated concentration between the MDL and Report Limit
n	Not offered for accreditation
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
mg/L	Milligrams per Liter

**Client:** AMEC Foster Wheeler  
**Work Order:** 16061162  
**Project:** TFS #3359151040

**QC BATCH REPORT**

Batch ID: **R190242** Instrument ID **VMS9** Method: **SW8260B**

MBLK		Sample ID: <b>VBK2-160624-R190242</b>				Units: <b>µg/L</b>		Analysis Date: <b>6/25/2016 01:46 AM</b>		
Client ID:		Run ID: <b>VMS9_160624A</b>				SeqNo: <b>3892701</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloroethane	ND	1.0								
1,2-Dichloropropane	ND	1.0								
2-Butanone	ND	5.0								
2-Hexanone	ND	5.0								
4-Methyl-2-pentanone	ND	1.0								
Acetone	ND	10								
Benzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	1.0								
Carbon disulfide	ND	1.0								
Carbon tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	1.0								
Chloroform	ND	1.0								
Chloromethane	ND	1.0								
cis-1,2-Dichloroethene	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
Dibromochloromethane	ND	1.0								
Ethylbenzene	ND	1.0								
m,p-Xylene	ND	2.0								
Methylene chloride	ND	5.0								
o-Xylene	ND	1.0								
Styrene	ND	1.0								
Tetrachloroethene	ND	1.0								
Toluene	ND	1.0								
trans-1,2-Dichloroethene	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
Trichloroethene	ND	1.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	3.0								
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>20.47</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>102</i>	<i>75-120</i>	<i>0</i>			
<i>Surr: 4-Bromofluorobenzene</i>	<i>18.85</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>94.2</i>	<i>80-110</i>	<i>0</i>			
<i>Surr: Dibromofluoromethane</i>	<i>20.51</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>103</i>	<i>85-115</i>	<i>0</i>			
<i>Surr: Toluene-d8</i>	<i>19.73</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>98.6</i>	<i>85-110</i>	<i>0</i>			

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

Client: AMEC Foster Wheeler  
 Work Order: 16061162  
 Project: TFS #3359151040

# QC BATCH REPORT

Batch ID: R190242 Instrument ID VMS9 Method: SW8260B

LCS		Sample ID: VLCSW3-160624-R190242				Units: µg/L		Analysis Date: 6/25/2016 12:32 PM		
Client ID:		Run ID: VMS9_160624A			SeqNo: 3892724		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	22.69	1.0	20	0	113	75-130	0			
1,1,2,2-Tetrachloroethane	22.27	1.0	20	0	111	75-130	0			
1,1,2-Trichloroethane	21.22	1.0	20	0	106	75-125	0			
1,1-Dichloroethane	21.89	1.0	20	0	109	75-133	0			
1,1-Dichloroethene	23.53	1.0	20	0	118	70-145	0			
1,2-Dichloroethane	19.06	1.0	20	0	95.3	78-125	0			
1,2-Dichloropropane	21.15	1.0	20	0	106	75-125	0			
2-Butanone	17.88	5.0	20	0	89.4	55-150	0			
2-Hexanone	17.22	5.0	20	0	86.1	60-135	0			
4-Methyl-2-pentanone	18.17	1.0	20	0	90.8	77-178	0			
Acetone	18.39	10	20	0	92	60-160	0			
Benzene	21.92	1.0	20	0	110	85-125	0			
Bromodichloromethane	19.76	1.0	20	0	98.8	75-125	0			
Bromoform	18.09	1.0	20	0	90.4	60-125	0			
Bromomethane	17.99	1.0	20	0	90	30-185	0			
Carbon disulfide	21.65	1.0	20	0	108	60-165	0			
Carbon tetrachloride	19.58	1.0	20	0	97.9	65-140	0			
Chlorobenzene	21.56	1.0	20	0	108	80-120	0			
Chloroethane	20.75	1.0	20	0	104	50-140	0			
Chloroform	21.6	1.0	20	0	108	80-130	0			
Chloromethane	19.18	1.0	20	0	95.9	50-130	0			
cis-1,2-Dichloroethene	22.4	1.0	20	0	112	75-134	0			
cis-1,3-Dichloropropene	19.11	1.0	20	0	95.6	70-130	0			
Dibromochloromethane	15.99	1.0	20	0	80	60-115	0			
Ethylbenzene	22.17	1.0	20	0	111	85-125	0			
m,p-Xylene	44.46	2.0	40	0	111	75-130	0			
Methylene chloride	20.43	5.0	20	0	102	75-140	0			
o-Xylene	19.73	1.0	20	0	98.6	80-125	0			
Styrene	20.12	1.0	20	0	101	85-125	0			
Tetrachloroethene	22.37	1.0	20	0	112	77-138	0			
Toluene	22.1	1.0	20	0	110	85-125	0			
trans-1,2-Dichloroethene	22.74	1.0	20	0	114	80-140	0			
trans-1,3-Dichloropropene	16.94	1.0	20	0	84.7	81-123	0			
Trichloroethene	21.86	1.0	20	0	109	84-130	0			
Vinyl chloride	20.84	1.0	20	0	104	50-136	0			
Xylenes, Total	64.19	3.0	60	0	107	80-126	0			
Surr: 1,2-Dichloroethane-d4	19.79	0	20	0	99	75-120	0			
Surr: 4-Bromofluorobenzene	20.25	0	20	0	101	80-110	0			
Surr: Dibromofluoromethane	20.81	0	20	0	104	85-115	0			
Surr: Toluene-d8	19.71	0	20	0	98.6	85-110	0			

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



Client: AMEC Foster Wheeler  
 Work Order: 16061162  
 Project: TFS #3359151040

# QC BATCH REPORT

Batch ID: R190242 Instrument ID VMS9 Method: SW8260B

MS		Sample ID: 16061162-13A MS				Units: µg/L		Analysis Date: 6/25/2016 10:24 AM		
Client ID: ATR-OW1(39)-G061616		Run ID: VMS9_160624A		SeqNo: 3892722		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	26.45	1.0	20	0	132	75-130	0			S
1,1,2,2-Tetrachloroethane	22.89	1.0	20	0	114	75-130	0			
1,1,2-Trichloroethane	22.68	1.0	20	0	113	75-125	0			
1,1-Dichloroethane	24.35	1.0	20	0	122	75-133	0			
1,1-Dichloroethene	25.96	1.0	20	0	130	70-145	0			
1,2-Dichloroethane	22.1	1.0	20	0	110	78-125	0			
1,2-Dichloropropane	23.76	1.0	20	0	119	75-125	0			
2-Butanone	18.54	5.0	20	0	92.7	55-150	0			
2-Hexanone	17.46	5.0	20	0	87.3	60-135	0			
4-Methyl-2-pentanone	17.46	1.0	20	0	87.3	77-178	0			
Acetone	19.33	10	20	0	96.6	60-160	0			
Benzene	25.1	1.0	20	0	126	85-125	0			S
Bromodichloromethane	21.7	1.0	20	0	108	75-125	0			
Bromoform	18.56	1.0	20	0	92.8	60-125	0			
Bromomethane	12.96	1.0	20	0	64.8	30-185	0			
Carbon disulfide	23.12	1.0	20	0	116	60-165	0			
Carbon tetrachloride	23.74	1.0	20	0	119	65-140	0			
Chlorobenzene	22.89	1.0	20	0	114	80-120	0			
Chloroethane	23.66	1.0	20	0	118	50-140	0			
Chloroform	22.18	1.0	20	0	111	80-130	0			
Chloromethane	20.57	1.0	20	0	103	50-130	0			
cis-1,2-Dichloroethene	22.89	1.0	20	0	114	75-134	0			
cis-1,3-Dichloropropene	19.55	1.0	20	0	97.8	70-130	0			
Dibromochloromethane	16.33	1.0	20	0	81.6	60-115	0			
Ethylbenzene	22.99	1.0	20	0	115	85-125	0			
m,p-Xylene	47.72	2.0	40	0	119	75-130	0			
Methylene chloride	21.61	5.0	20	0	108	75-140	0			
o-Xylene	20.54	1.0	20	0	103	80-125	0			
Styrene	21.2	1.0	20	0	106	85-125	0			
Tetrachloroethene	23.19	1.0	20	0	116	77-138	0			
Toluene	22.73	1.0	20	0	114	85-125	0			
trans-1,2-Dichloroethene	24.73	1.0	20	0	124	80-140	0			
trans-1,3-Dichloropropene	16.28	1.0	20	0	81.4	81-123	0			
Trichloroethene	24.85	1.0	20	0	124	84-130	0			
Vinyl chloride	23.22	1.0	20	0	116	50-136	0			
Xylenes, Total	68.26	3.0	60	0	114	80-126	0			
Surr: 1,2-Dichloroethane-d4	21.85	0	20	0	109	75-120	0			
Surr: 4-Bromofluorobenzene	20.16	0	20	0	101	80-110	0			
Surr: Dibromofluoromethane	22.31	0	20	0	112	85-115	0			
Surr: Toluene-d8	19.69	0	20	0	98.4	85-110	0			

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

Client: AMEC Foster Wheeler  
 Work Order: 16061162  
 Project: TFS #3359151040

# QC BATCH REPORT

Batch ID: R190242 Instrument ID VMS9 Method: SW8260B

MSD		Sample ID: 16061162-13A MSD				Units: µg/L		Analysis Date: 6/25/2016 10:48 AM		
Client ID: ATR-OW1(39)-G061616		Run ID: VMS9_160624A		SeqNo: 3892723		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	27.21	1.0	20	0	136	75-130	26.45	2.83	30	S
1,1,2,2-Tetrachloroethane	23.8	1.0	20	0	119	75-130	22.89	3.9	30	
1,1,2-Trichloroethane	22.81	1.0	20	0	114	75-125	22.68	0.572	30	
1,1-Dichloroethane	24.64	1.0	20	0	123	75-133	24.35	1.18	30	
1,1-Dichloroethene	27.02	1.0	20	0	135	70-145	25.96	4	30	
1,2-Dichloroethane	22.14	1.0	20	0	111	78-125	22.1	0.181	30	
1,2-Dichloropropane	24.05	1.0	20	0	120	75-125	23.76	1.21	30	
2-Butanone	18.86	5.0	20	0	94.3	55-150	18.54	1.71	30	
2-Hexanone	18.75	5.0	20	0	93.8	60-135	17.46	7.13	30	
4-Methyl-2-pentanone	18.94	1.0	20	0	94.7	77-178	17.46	8.13	30	
Acetone	20.77	10	20	0	104	60-160	19.33	7.18	30	
Benzene	24.99	1.0	20	0	125	85-125	25.1	0.439	30	
Bromodichloromethane	22.26	1.0	20	0	111	75-125	21.7	2.55	30	
Bromoform	18.93	1.0	20	0	94.6	60-125	18.56	1.97	30	
Bromomethane	14.62	1.0	20	0	73.1	30-185	12.96	12	30	
Carbon disulfide	24.04	1.0	20	0	120	60-165	23.12	3.9	30	
Carbon tetrachloride	24.5	1.0	20	0	122	65-140	23.74	3.15	30	
Chlorobenzene	23.37	1.0	20	0	117	80-120	22.89	2.08	30	
Chloroethane	25.43	1.0	20	0	127	50-140	23.66	7.21	30	
Chloroform	24.17	1.0	20	0	121	80-130	22.18	8.59	30	
Chloromethane	21.11	1.0	20	0	106	50-130	20.57	2.59	30	
cis-1,2-Dichloroethene	23.55	1.0	20	0	118	75-134	22.89	2.84	30	
cis-1,3-Dichloropropene	19.5	1.0	20	0	97.5	70-130	19.55	0.256	30	
Dibromochloromethane	16.68	1.0	20	0	83.4	60-115	16.33	2.12	30	
Ethylbenzene	23.83	1.0	20	0	119	85-125	22.99	3.59	30	
m,p-Xylene	48.8	2.0	40	0	122	75-130	47.72	2.24	30	
Methylene chloride	22.7	5.0	20	0	114	75-140	21.61	4.92	30	
o-Xylene	21.18	1.0	20	0	106	80-125	20.54	3.07	30	
Styrene	21.34	1.0	20	0	107	85-125	21.2	0.658	30	
Tetrachloroethene	24.1	1.0	20	0	120	77-138	23.19	3.85	30	
Toluene	23.75	1.0	20	0	119	85-125	22.73	4.39	30	
trans-1,2-Dichloroethene	25.6	1.0	20	0	128	80-140	24.73	3.46	30	
trans-1,3-Dichloropropene	16.95	1.0	20	0	84.8	81-123	16.28	4.03	30	
Trichloroethene	25.01	1.0	20	0	125	84-130	24.85	0.642	30	
Vinyl chloride	24.17	1.0	20	0	121	50-136	23.22	4.01	30	
Xylenes, Total	69.98	3.0	60	0	117	80-126	68.26	2.49	30	
Surr: 1,2-Dichloroethane-d4	21.28	0	20	0	106	75-120	21.85	2.64	30	
Surr: 4-Bromofluorobenzene	20.31	0	20	0	102	80-110	20.16	0.741	30	
Surr: Dibromofluoromethane	22.15	0	20	0	111	85-115	22.31	0.72	30	
Surr: Toluene-d8	19.75	0	20	0	98.8	85-110	19.69	0.304	30	

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

**Client:** AMEC Foster Wheeler  
**Work Order:** 16061162  
**Project:** TFS #3359151040

# QC BATCH REPORT

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Batch ID: **R190242**      Instrument ID **VMS9**      Method: **SW8260B**

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**The following samples were analyzed in this batch:**

16061162-01A	16061162-02A	16061162-03A
16061162-04A	16061162-05A	16061162-06A
16061162-07A	16061162-08A	16061162-09A
16061162-10A	16061162-11A	16061162-13A
16061162-14A	16061162-15A	16061162-16A
16061162-17A	16061162-18A	16061162-19A
16061162-20A	16061162-44A	

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

Client: AMEC Foster Wheeler  
 Work Order: 16061162  
 Project: TFS #3359151040

# QC BATCH REPORT

Batch ID: R190265 Instrument ID VMS9 Method: SW8260B

MBLK		Sample ID: VBLKW3-160624-R190265				Units: µg/L		Analysis Date: 6/25/2016 02:05 PM		
Client ID:		Run ID: VMS9_160624B		SeqNo: 3892825		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	21.66	0	20	0	108	75-120	0			
Surr: 4-Bromofluorobenzene	18.3	0	20	0	91.5	80-110	0			
Surr: Dibromofluoromethane	21.1	0	20	0	106	85-115	0			
Surr: Toluene-d8	19.31	0	20	0	96.6	85-110	0			

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

Client: AMEC Foster Wheeler  
 Work Order: 16061162  
 Project: TFS #3359151040

# QC BATCH REPORT

Batch ID: R190265 Instrument ID VMS9 Method: SW8260B

LCS		Sample ID: VLCSW4-160624-R190265				Units: µg/L		Analysis Date: 6/25/2016 12:51 PM		
Client ID:		Run ID: VMS9_160624B			SeqNo: 3892824		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	24.04	1.0	20	0	120	75-130	0			
1,1,2,2-Tetrachloroethane	22.71	1.0	20	0	114	75-130	0			
1,1,2-Trichloroethane	22.31	1.0	20	0	112	75-125	0			
1,1-Dichloroethane	21.96	1.0	20	0	110	75-133	0			
1,1-Dichloroethene	23.03	1.0	20	0	115	70-145	0			
1,2-Dichloroethane	20.68	1.0	20	0	103	78-125	0			
1,2-Dichloropropane	21.82	1.0	20	0	109	75-125	0			
2-Butanone	17.63	5.0	20	0	88.2	55-150	0			
2-Hexanone	17.34	5.0	20	0	86.7	60-135	0			
4-Methyl-2-pentanone	23.13	1.0	20	0	116	77-178	0			
Acetone	19.79	10	20	0	99	60-160	0			
Benzene	22.66	1.0	20	0	113	85-125	0			
Bromodichloromethane	20.68	1.0	20	0	103	75-125	0			
Bromoform	19.03	1.0	20	0	95.2	60-125	0			
Bromomethane	14.42	1.0	20	0	72.1	30-185	0			
Carbon disulfide	21.02	1.0	20	0	105	60-165	0			
Carbon tetrachloride	20.06	1.0	20	0	100	65-140	0			
Chlorobenzene	21.78	1.0	20	0	109	80-120	0			
Chloroethane	21.02	1.0	20	0	105	50-140	0			
Chloroform	21.3	1.0	20	0	106	80-130	0			
Chloromethane	19.43	1.0	20	0	97.2	50-130	0			
cis-1,2-Dichloroethene	20.35	1.0	20	0	102	75-134	0			
cis-1,3-Dichloropropene	18.82	1.0	20	0	94.1	70-130	0			
Dibromochloromethane	16.21	1.0	20	0	81	60-115	0			
Ethylbenzene	21.65	1.0	20	0	108	85-125	0			
m,p-Xylene	43.89	2.0	40	0	110	75-130	0			
Methylene chloride	20.88	5.0	20	0	104	75-140	0			
o-Xylene	19.5	1.0	20	0	97.5	80-125	0			
Styrene	20.23	1.0	20	0	101	85-125	0			
Tetrachloroethene	21.7	1.0	20	0	108	77-138	0			
Toluene	21.73	1.0	20	0	109	85-125	0			
trans-1,2-Dichloroethene	22.35	1.0	20	0	112	80-140	0			
trans-1,3-Dichloropropene	16.28	1.0	20	0	81.4	81-123	0			
Trichloroethene	22.3	1.0	20	0	112	84-130	0			
Vinyl chloride	20.16	1.0	20	0	101	50-136	0			
Xylenes, Total	63.39	3.0	60	0	106	80-126	0			
Surr: 1,2-Dichloroethane-d4	20.99	0	20	0	105	75-120	0			
Surr: 4-Bromofluorobenzene	20.64	0	20	0	103	80-110	0			
Surr: Dibromofluoromethane	22	0	20	0	110	85-115	0			
Surr: Toluene-d8	19.68	0	20	0	98.4	85-110	0			

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

Client: AMEC Foster Wheeler  
 Work Order: 16061162  
 Project: TFS #3359151040

# QC BATCH REPORT

Batch ID: R190265 Instrument ID VMS9 Method: SW8260B

MS		Sample ID: 16061162-24A MS				Units: µg/L		Analysis Date: 6/25/2016 10:43 PM		
Client ID: ATR-OW2(33)-G061516		Run ID: VMS9_160624B		SeqNo: 3892846		Prep Date:		DF: 50		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	1258	50	1000	0	126	75-130	0			
1,1,2,2-Tetrachloroethane	1116	50	1000	0	112	75-130	0			
1,1,2-Trichloroethane	1112	50	1000	0	111	75-125	0			
1,1-Dichloroethane	1164	50	1000	0	116	75-133	0			
1,1-Dichloroethene	1248	50	1000	0	125	70-145	0			
1,2-Dichloroethane	1048	50	1000	0	105	78-125	0			
1,2-Dichloropropane	1118	50	1000	0	112	75-125	0			
2-Butanone	862	250	1000	0	86.2	55-150	0			
2-Hexanone	770.5	250	1000	0	77	60-135	0			
4-Methyl-2-pentanone	815.5	50	1000	0	81.6	77-178	0			
Acetone	964.5	500	1000	0	96.4	60-160	0			
Benzene	1192	50	1000	0	119	85-125	0			
Bromodichloromethane	1035	50	1000	0	104	75-125	0			
Bromoform	900.5	50	1000	0	90	60-125	0			
Bromomethane	763.5	50	1000	0	76.4	30-185	0			
Carbon disulfide	1088	50	1000	0	109	60-165	0			
Carbon tetrachloride	1108	50	1000	0	111	65-140	0			
Chlorobenzene	1104	50	1000	0	110	80-120	0			
Chloroethane	1073	50	1000	0	107	50-140	0			
Chloroform	1052	50	1000	0	105	80-130	0			
Chloromethane	1008	50	1000	0	101	50-130	0			
cis-1,2-Dichloroethene	3378	50	1000	2305	107	75-134	0			
cis-1,3-Dichloropropene	881.5	50	1000	0	88.2	70-130	0			
Dibromochloromethane	790.5	50	1000	0	79	60-115	0			
Ethylbenzene	1098	50	1000	0	110	85-125	0			
m,p-Xylene	2302	100	2000	0	115	75-130	0			
Methylene chloride	1038	250	1000	0	104	75-140	0			
o-Xylene	988	50	1000	0	98.8	80-125	0			
Styrene	1026	50	1000	0	103	85-125	0			
Tetrachloroethene	1122	50	1000	0	112	77-138	0			
Toluene	1112	50	1000	0	111	85-125	0			
trans-1,2-Dichloroethene	1202	50	1000	0	120	80-140	0			
trans-1,3-Dichloropropene	744	50	1000	0	74.4	81-123	0			S
Trichloroethene	1169	50	1000	0	117	84-130	0			
Vinyl chloride	2729	50	1000	1588	114	50-136	0			
Xylenes, Total	3290	150	3000	0	110	80-126	0			
Surr: 1,2-Dichloroethane-d4	1099	0	1000	0	110	75-120	0			
Surr: 4-Bromofluorobenzene	1026	0	1000	0	103	80-110	0			
Surr: Dibromofluoromethane	1114	0	1000	0	111	85-115	0			
Surr: Toluene-d8	986	0	1000	0	98.6	85-110	0			

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

Client: AMEC Foster Wheeler  
 Work Order: 16061162  
 Project: TFS #3359151040

# QC BATCH REPORT

Batch ID: R190265 Instrument ID VMS9 Method: SW8260B

MSD		Sample ID: 16061162-24A MSD				Units: µg/L		Analysis Date: 6/25/2016 11:07 PM		
Client ID: ATR-OW2(33)-G061516		Run ID: VMS9_160624B		SeqNo: 3892847		Prep Date:		DF: 50		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	1158	50	1000	0	116	75-130	1258	8.28	30	
1,1,2,2-Tetrachloroethane	1055	50	1000	0	106	75-130	1116	5.66	30	
1,1,2-Trichloroethane	1046	50	1000	0	105	75-125	1112	6.07	30	
1,1-Dichloroethane	1072	50	1000	0	107	75-133	1164	8.28	30	
1,1-Dichloroethene	1168	50	1000	0	117	70-145	1248	6.66	30	
1,2-Dichloroethane	986.5	50	1000	0	98.6	78-125	1048	6.05	30	
1,2-Dichloropropane	1034	50	1000	0	103	75-125	1118	7.71	30	
2-Butanone	832.5	250	1000	0	83.2	55-150	862	3.48	30	
2-Hexanone	769	250	1000	0	76.9	60-135	770.5	0.195	30	
4-Methyl-2-pentanone	1019	50	1000	0	102	77-178	815.5	22.2	30	
Acetone	944.5	500	1000	0	94.4	60-160	964.5	2.1	30	
Benzene	1088	50	1000	0	109	85-125	1192	9.13	30	
Bromodichloromethane	952.5	50	1000	0	95.2	75-125	1035	8.3	30	
Bromoform	866.5	50	1000	0	86.6	60-125	900.5	3.85	30	
Bromomethane	736.5	50	1000	0	73.6	30-185	763.5	3.6	30	
Carbon disulfide	1004	50	1000	0	100	60-165	1088	8.03	30	
Carbon tetrachloride	1036	50	1000	0	104	65-140	1108	6.62	30	
Chlorobenzene	1049	50	1000	0	105	80-120	1104	5.06	30	
Chloroethane	993.5	50	1000	0	99.4	50-140	1073	7.69	30	
Chloroform	1040	50	1000	0	104	80-130	1052	1.1	30	
Chloromethane	933.5	50	1000	0	93.4	50-130	1008	7.72	30	
cis-1,2-Dichloroethene	3227	50	1000	2305	92.2	75-134	3378	4.57	30	
cis-1,3-Dichloropropene	825	50	1000	0	82.5	70-130	881.5	6.62	30	
Dibromochloromethane	760.5	50	1000	0	76	60-115	790.5	3.87	30	
Ethylbenzene	1050	50	1000	0	105	85-125	1098	4.47	30	
m,p-Xylene	2140	100	2000	0	107	75-130	2302	7.27	30	
Methylene chloride	984.5	250	1000	0	98.4	75-140	1038	5.24	30	
o-Xylene	933	50	1000	0	93.3	80-125	988	5.73	30	
Styrene	976.5	50	1000	0	97.6	85-125	1026	4.9	30	
Tetrachloroethene	1054	50	1000	0	105	77-138	1122	6.2	30	
Toluene	1040	50	1000	0	104	85-125	1112	6.74	30	
trans-1,2-Dichloroethene	1116	50	1000	0	112	80-140	1202	7.46	30	
trans-1,3-Dichloropropene	719	50	1000	0	71.9	81-123	744	3.42	30	S
Trichloroethene	1070	50	1000	0	107	84-130	1169	8.84	30	
Vinyl chloride	2591	50	1000	1588	100	50-136	2729	5.19	30	
Xylenes, Total	3073	150	3000	0	102	80-126	3290	6.81	30	
Surr: 1,2-Dichloroethane-d4	1074	0	1000	0	107	75-120	1099	2.35	30	
Surr: 4-Bromofluorobenzene	1032	0	1000	0	103	80-110	1026	0.632	30	
Surr: Dibromofluoromethane	1088	0	1000	0	109	85-115	1114	2.36	30	
Surr: Toluene-d8	992	0	1000	0	99.2	85-110	986	0.607	30	

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

**Client:** AMEC Foster Wheeler  
**Work Order:** 16061162  
**Project:** TFS #3359151040

# QC BATCH REPORT

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Batch ID: **R190265**      Instrument ID **VMS9**      Method: **SW8260B**

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**The following samples were analyzed in this batch:**

16061162-21A	16061162-22A	16061162-23A
16061162-24A	16061162-25A	16061162-26A
16061162-27A	16061162-28A	16061162-29A
16061162-30A	16061162-32A	16061162-33A
16061162-35A	16061162-36A	16061162-37A
16061162-39A	16061162-40A	16061162-41A
16061162-42A	16061162-43A	

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



Client: AMEC Foster Wheeler  
 Work Order: 16061162  
 Project: TFS #3359151040

# QC BATCH REPORT

Batch ID: **R190304** Instrument ID **VMS9** Method: **SW8260B**

MBLK		Sample ID: <b>VBLKW1-160627-R190304</b>				Units: <b>µg/L</b>		Analysis Date: <b>6/27/2016 10:40 AM</b>		
Client ID:		Run ID: <b>VMS9_160627A</b>		SeqNo: <b>3896404</b>		Prep Date:		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloroethane	ND	1.0								
1,2-Dichloropropane	ND	1.0								
2-Butanone	ND	5.0								
2-Hexanone	ND	5.0								
4-Methyl-2-pentanone	ND	1.0								
Acetone	ND	10								
Benzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	1.0								
Carbon disulfide	ND	1.0								
Carbon tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	1.0								
Chloroform	ND	1.0								
Chloromethane	ND	1.0								
cis-1,2-Dichloroethene	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
Dibromochloromethane	ND	1.0								
Ethylbenzene	ND	1.0								
m,p-Xylene	ND	2.0								
Methylene chloride	ND	5.0								
o-Xylene	ND	1.0								
Styrene	ND	1.0								
Tetrachloroethene	ND	1.0								
Toluene	ND	1.0								
trans-1,2-Dichloroethene	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
Trichloroethene	ND	1.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	3.0								
<i>Surr: 1,2-Dichloroethane-d4</i>	21.55	0	20	0	108	75-120	0			
<i>Surr: 4-Bromofluorobenzene</i>	19.05	0	20	0	95.2	80-110	0			
<i>Surr: Dibromofluoromethane</i>	21.02	0	20	0	105	85-115	0			
<i>Surr: Toluene-d8</i>	19.47	0	20	0	97.4	85-110	0			

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

Client: AMEC Foster Wheeler  
 Work Order: 16061162  
 Project: TFS #3359151040

# QC BATCH REPORT

Batch ID: R190304 Instrument ID VMS9 Method: SW8260B

LCS		Sample ID: VLCSW1-160627-R190304				Units: µg/L		Analysis Date: 6/27/2016 09:26 AM		
Client ID:		Run ID: VMS9_160627A			SeqNo: 3896403		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	21.96	1.0	20	0	110	75-130	0			
1,1,2,2-Tetrachloroethane	20.39	1.0	20	0	102	75-130	0			
1,1,2-Trichloroethane	20.27	1.0	20	0	101	75-125	0			
1,1-Dichloroethane	21.46	1.0	20	0	107	75-133	0			
1,1-Dichloroethene	22.13	1.0	20	0	111	70-145	0			
1,2-Dichloroethane	19.51	1.0	20	0	97.6	78-125	0			
1,2-Dichloropropane	20.99	1.0	20	0	105	75-125	0			
2-Butanone	19.34	5.0	20	0	96.7	55-150	0			
2-Hexanone	17.52	5.0	20	0	87.6	60-135	0			
4-Methyl-2-pentanone	23.03	1.0	20	0	115	77-178	0			
Acetone	18.01	10	20	0	90	60-160	0			
Benzene	21.53	1.0	20	0	108	85-125	0			
Bromodichloromethane	19.87	1.0	20	0	99.4	75-125	0			
Bromoform	18.38	1.0	20	0	91.9	60-125	0			
Bromomethane	16.25	1.0	20	0	81.2	30-185	0			
Carbon disulfide	23.67	1.0	20	0	118	60-165	0			
Carbon tetrachloride	18.71	1.0	20	0	93.6	65-140	0			
Chlorobenzene	20.53	1.0	20	0	103	80-120	0			
Chloroethane	19.53	1.0	20	0	97.6	50-140	0			
Chloroform	20.3	1.0	20	0	102	80-130	0			
Chloromethane	17.09	1.0	20	0	85.4	50-130	0			
cis-1,2-Dichloroethene	21.32	1.0	20	0	107	75-134	0			
cis-1,3-Dichloropropene	19.22	1.0	20	0	96.1	70-130	0			
Dibromochloromethane	15.78	1.0	20	0	78.9	60-115	0			
Ethylbenzene	20.38	1.0	20	0	102	85-125	0			
m,p-Xylene	42.23	2.0	40	0	106	75-130	0			
Methylene chloride	19.61	5.0	20	0	98	75-140	0			
o-Xylene	18.59	1.0	20	0	93	80-125	0			
Styrene	19.29	1.0	20	0	96.4	85-125	0			
Tetrachloroethene	21.09	1.0	20	0	105	77-138	0			
Toluene	20.32	1.0	20	0	102	85-125	0			
trans-1,2-Dichloroethene	22.23	1.0	20	0	111	80-140	0			
trans-1,3-Dichloropropene	16.4	1.0	20	0	82	81-123	0			
Trichloroethene	21.53	1.0	20	0	108	84-130	0			
Vinyl chloride	18.03	1.0	20	0	90.2	50-136	0			
Xylenes, Total	60.82	3.0	60	0	101	80-126	0			
Surr: 1,2-Dichloroethane-d4	20.69	0	20	0	103	75-120	0			
Surr: 4-Bromofluorobenzene	20.55	0	20	0	103	80-110	0			
Surr: Dibromofluoromethane	20.61	0	20	0	103	85-115	0			
Surr: Toluene-d8	19.61	0	20	0	98	85-110	0			

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

Client: AMEC Foster Wheeler  
 Work Order: 16061162  
 Project: TFS #3359151040

# QC BATCH REPORT

Batch ID: R190304 Instrument ID VMS9 Method: SW8260B

MS		Sample ID: 16061162-19A MS				Units: µg/L		Analysis Date: 6/27/2016 07:17 PM		
Client ID: ATR-MW15-G061516		Run ID: VMS9_160627A		SeqNo: 3896425		Prep Date:		DF: 100		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	2667	100	2000	0	133	75-130	0			S
1,1,2,2-Tetrachloroethane	2412	100	2000	0	121	75-130	0			
1,1,2-Trichloroethane	2293	100	2000	0	115	75-125	0			
1,1-Dichloroethane	2371	100	2000	0	119	75-133	0			
1,1-Dichloroethene	2541	100	2000	0	127	70-145	0			
1,2-Dichloroethane	2183	100	2000	0	109	78-125	0			
1,2-Dichloropropane	2340	100	2000	0	117	75-125	0			
2-Butanone	3003	500	2000	708	115	55-150	0			
2-Hexanone	2161	500	2000	0	108	60-135	0			
4-Methyl-2-pentanone	2850	100	2000	0	142	77-178	0			
Acetone	2218	1,000	2000	0	111	60-160	0			
Benzene	2409	100	2000	0	120	85-125	0			
Bromodichloromethane	2167	100	2000	0	108	75-125	0			
Bromoform	1966	100	2000	0	98.3	60-125	0			
Bromomethane	856	100	2000	0	42.8	30-185	0			
Carbon disulfide	2369	100	2000	0	118	60-165	0			
Carbon tetrachloride	2393	100	2000	0	120	65-140	0			
Chlorobenzene	2299	100	2000	0	115	80-120	0			
Chloroethane	2168	100	2000	0	108	50-140	0			
Chloroform	2365	100	2000	0	118	80-130	0			
Chloromethane	1708	100	2000	0	85.4	50-130	0			
cis-1,2-Dichloroethene	6554	100	2000	4339	111	75-134	0			
cis-1,3-Dichloropropene	2046	100	2000	0	102	70-130	0			
Dibromochloromethane	1691	100	2000	0	84.6	60-115	0			
Ethylbenzene	2300	100	2000	0	115	85-125	0			
m,p-Xylene	4819	200	4000	0	120	75-130	0			
Methylene chloride	2098	500	2000	0	105	75-140	0			
o-Xylene	2049	100	2000	0	102	80-125	0			
Styrene	2192	100	2000	0	110	85-125	0			
Tetrachloroethene	2470	100	2000	0	124	77-138	0			
Toluene	2339	100	2000	0	117	85-125	0			
trans-1,2-Dichloroethene	2551	100	2000	141	120	80-140	0			
trans-1,3-Dichloropropene	1732	100	2000	0	86.6	81-123	0			
Trichloroethene	2499	100	2000	0	125	84-130	0			
Vinyl chloride	2326	100	2000	337	99.4	50-136	0			
Xylenes, Total	6868	300	6000	0	114	80-126	0			
Surr: 1,2-Dichloroethane-d4	2128	0	2000	0	106	75-120	0			
Surr: 4-Bromofluorobenzene	2033	0	2000	0	102	80-110	0			
Surr: Dibromofluoromethane	2250	0	2000	0	112	85-115	0			
Surr: Toluene-d8	1960	0	2000	0	98	85-110	0			

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

Client: AMEC Foster Wheeler  
 Work Order: 16061162  
 Project: TFS #3359151040

# QC BATCH REPORT

Batch ID: R190304 Instrument ID VMS9 Method: SW8260B

MSD		Sample ID: 16061162-19A MSD				Units: µg/L		Analysis Date: 6/27/2016 07:42 PM		
Client ID: ATR-MW15-G061516		Run ID: VMS9_160627A				SeqNo: 3896426		Prep Date:		DF: 100
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	2757	100	2000	0	138	75-130	2667	3.32	30	S
1,1,2,2-Tetrachloroethane	2430	100	2000	0	122	75-130	2412	0.743	30	
1,1,2-Trichloroethane	2385	100	2000	0	119	75-125	2293	3.93	30	
1,1-Dichloroethane	2446	100	2000	0	122	75-133	2371	3.11	30	
1,1-Dichloroethene	2573	100	2000	0	129	70-145	2541	1.25	30	
1,2-Dichloroethane	2221	100	2000	0	111	78-125	2183	1.73	30	
1,2-Dichloropropane	2431	100	2000	0	122	75-125	2340	3.81	30	
2-Butanone	2884	500	2000	708	109	55-150	3003	4.04	30	
2-Hexanone	2344	500	2000	0	117	60-135	2161	8.12	30	
4-Methyl-2-pentanone	2834	100	2000	0	142	77-178	2850	0.563	30	
Acetone	2325	1,000	2000	0	116	60-160	2218	4.71	30	
Benzene	2512	100	2000	0	126	85-125	2409	4.19	30	S
Bromodichloromethane	2250	100	2000	0	112	75-125	2167	3.76	30	
Bromoform	1971	100	2000	0	98.6	60-125	1966	0.254	30	
Bromomethane	1026	100	2000	0	51.3	30-185	856	18.1	30	
Carbon disulfide	2494	100	2000	0	125	60-165	2369	5.14	30	
Carbon tetrachloride	2457	100	2000	0	123	65-140	2393	2.64	30	
Chlorobenzene	2372	100	2000	0	119	80-120	2299	3.13	30	
Chloroethane	2284	100	2000	0	114	50-140	2168	5.21	30	
Chloroform	2435	100	2000	0	122	80-130	2365	2.92	30	
Chloromethane	1748	100	2000	0	87.4	50-130	1708	2.31	30	
cis-1,2-Dichloroethene	6505	100	2000	4339	108	75-134	6554	0.75	30	
cis-1,3-Dichloropropene	2083	100	2000	0	104	70-130	2046	1.79	30	
Dibromochloromethane	1709	100	2000	0	85.4	60-115	1691	1.06	30	
Ethylbenzene	2392	100	2000	0	120	85-125	2300	3.92	30	
m,p-Xylene	4947	200	4000	0	124	75-130	4819	2.62	30	
Methylene chloride	2152	500	2000	0	108	75-140	2098	2.54	30	
o-Xylene	2126	100	2000	0	106	80-125	2049	3.69	30	
Styrene	2224	100	2000	0	111	85-125	2192	1.45	30	
Tetrachloroethene	2468	100	2000	0	123	77-138	2470	0.081	30	
Toluene	2370	100	2000	0	118	85-125	2339	1.32	30	
trans-1,2-Dichloroethene	2597	100	2000	141	123	80-140	2551	1.79	30	
trans-1,3-Dichloropropene	1795	100	2000	0	89.8	81-123	1732	3.57	30	
Trichloroethene	2638	100	2000	0	132	84-130	2499	5.41	30	S
Vinyl chloride	2406	100	2000	337	103	50-136	2326	3.38	30	
Xylenes, Total	7073	300	6000	0	118	80-126	6868	2.94	30	
Surr: 1,2-Dichloroethane-d4	2121	0	2000	0	106	75-120	2128	0.329	30	
Surr: 4-Bromofluorobenzene	2027	0	2000	0	101	80-110	2033	0.296	30	
Surr: Dibromofluoromethane	2227	0	2000	0	111	85-115	2250	1.03	30	
Surr: Toluene-d8	1960	0	2000	0	98	85-110	1960	0	30	

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

**Client:** AMEC Foster Wheeler  
**Work Order:** 16061162  
**Project:** TFS #3359151040

# QC BATCH REPORT

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Batch ID: **R190304**      Instrument ID **VMS9**      Method: **SW8260B**

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**The following samples were analyzed in this batch:**

16061162-01A	16061162-02A	16061162-03A
16061162-04A	16061162-05A	16061162-06A
16061162-10A	16061162-11A	16061162-12A
16061162-14A	16061162-19A	16061162-25A
16061162-26A	16061162-29A	16061162-31A
16061162-33A	16061162-34A	16061162-38A
16061162-40A		

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

Client: AMEC Foster Wheeler  
 Work Order: 16061162  
 Project: TFS #3359151040

# QC BATCH REPORT

Batch ID: **R190389** Instrument ID **VMS9** Method: **SW8260B**

MBLK		Sample ID: <b>VBLKW2-160627-R190389</b>				Units: <b>µg/L</b>		Analysis Date: <b>6/27/2016 10:59 PM</b>		
Client ID:		Run ID: <b>VMS9_160627B</b>		SeqNo: <b>3896600</b>		Prep Date:		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloroethane	ND	1.0								
1,2-Dichloropropane	ND	1.0								
2-Butanone	ND	5.0								
2-Hexanone	ND	5.0								
4-Methyl-2-pentanone	ND	1.0								
Acetone	ND	10								
Benzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	1.0								
Carbon disulfide	ND	1.0								
Carbon tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	1.0								
Chloroform	ND	1.0								
Chloromethane	ND	1.0								
cis-1,2-Dichloroethene	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
Dibromochloromethane	ND	1.0								
Ethylbenzene	ND	1.0								
m,p-Xylene	ND	2.0								
Methylene chloride	ND	5.0								
o-Xylene	ND	1.0								
Styrene	ND	1.0								
Tetrachloroethene	ND	1.0								
Toluene	ND	1.0								
trans-1,2-Dichloroethene	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
Trichloroethene	ND	1.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	3.0								
<i>Surr: 1,2-Dichloroethane-d4</i>	21.25	0	20	0	106	75-120	0			
<i>Surr: 4-Bromofluorobenzene</i>	18.62	0	20	0	93.1	80-110	0			
<i>Surr: Dibromofluoromethane</i>	21.35	0	20	0	107	85-115	0			
<i>Surr: Toluene-d8</i>	19.23	0	20	0	96.2	85-110	0			

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

Client: AMEC Foster Wheeler  
 Work Order: 16061162  
 Project: TFS #3359151040

# QC BATCH REPORT

Batch ID: R190389 Instrument ID VMS9 Method: SW8260B

LCS		Sample ID: VLCSW2-160627-R190389				Units: µg/L		Analysis Date: 6/27/2016 09:45 PM		
Client ID:		Run ID: VMS9_160627B			SeqNo: 3896599		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	24.15	1.0	20	0	121	75-130	0			
1,1,2,2-Tetrachloroethane	23.01	1.0	20	0	115	75-130	0			
1,1,2-Trichloroethane	21.95	1.0	20	0	110	75-125	0			
1,1-Dichloroethane	21.65	1.0	20	0	108	75-133	0			
1,1-Dichloroethene	22.36	1.0	20	0	112	70-145	0			
1,2-Dichloroethane	19.84	1.0	20	0	99.2	78-125	0			
1,2-Dichloropropane	21.82	1.0	20	0	109	75-125	0			
2-Butanone	20.77	5.0	20	0	104	55-150	0			
2-Hexanone	20.39	5.0	20	0	102	60-135	0			
4-Methyl-2-pentanone	20.03	1.0	20	0	100	77-178	0			
Acetone	20.87	10	20	0	104	60-160	0			
Benzene	22.65	1.0	20	0	113	85-125	0			
Bromodichloromethane	20.59	1.0	20	0	103	75-125	0			
Bromoform	18.97	1.0	20	0	94.8	60-125	0			
Bromomethane	12.22	1.0	20	0	61.1	30-185	0			
Carbon disulfide	23.13	1.0	20	0	116	60-165	0			
Carbon tetrachloride	20.13	1.0	20	0	101	65-140	0			
Chlorobenzene	21.41	1.0	20	0	107	80-120	0			
Chloroethane	20.85	1.0	20	0	104	50-140	0			
Chloroform	21.28	1.0	20	0	106	80-130	0			
Chloromethane	16.49	1.0	20	0	82.4	50-130	0			
cis-1,2-Dichloroethene	20.6	1.0	20	0	103	75-134	0			
cis-1,3-Dichloropropene	19.88	1.0	20	0	99.4	70-130	0			
Dibromochloromethane	16.05	1.0	20	0	80.2	60-115	0			
Ethylbenzene	21.54	1.0	20	0	108	85-125	0			
m,p-Xylene	44.37	2.0	40	0	111	75-130	0			
Methylene chloride	19.24	5.0	20	0	96.2	75-140	0			
o-Xylene	19.42	1.0	20	0	97.1	80-125	0			
Styrene	20.68	1.0	20	0	103	85-125	0			
Tetrachloroethene	22.7	1.0	20	0	114	77-138	0			
Toluene	21.18	1.0	20	0	106	85-125	0			
trans-1,2-Dichloroethene	21.66	1.0	20	0	108	80-140	0			
trans-1,3-Dichloropropene	16.97	1.0	20	0	84.8	81-123	0			
Trichloroethene	22.86	1.0	20	0	114	84-130	0			
Vinyl chloride	18.41	1.0	20	0	92	50-136	0			
Xylenes, Total	63.79	3.0	60	0	106	80-126	0			
Surr: 1,2-Dichloroethane-d4	21.01	0	20	0	105	75-120	0			
Surr: 4-Bromofluorobenzene	19.99	0	20	0	100	80-110	0			
Surr: Dibromofluoromethane	22.28	0	20	0	111	85-115	0			
Surr: Toluene-d8	20.12	0	20	0	101	85-110	0			

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

Client: AMEC Foster Wheeler  
 Work Order: 16061162  
 Project: TFS #3359151040

# QC BATCH REPORT

Batch ID: R190389 Instrument ID VMS9 Method: SW8260B

MS		Sample ID: 16061162-17A MS				Units: µg/L		Analysis Date: 6/28/2016 07:37 AM		
Client ID: ATR-MW81(27)-G061616		Run ID: VMS9_160627B		SeqNo: 3896619		Prep Date:		DF: 1000		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	23260	1,000	20000	0	116	75-130	0			
1,1,2,2-Tetrachloroethane	21820	1,000	20000	0	109	75-130	0			
1,1,2-Trichloroethane	22160	1,000	20000	0	111	75-125	0			
1,1-Dichloroethane	21810	1,000	20000	0	109	75-133	0			
1,1-Dichloroethene	22600	1,000	20000	0	113	70-145	0			
1,2-Dichloroethane	19310	1,000	20000	0	96.6	78-125	0			
1,2-Dichloropropane	21730	1,000	20000	0	109	75-125	0			
2-Butanone	20450	5,000	20000	0	102	55-150	0			
2-Hexanone	19840	5,000	20000	0	99.2	60-135	0			
4-Methyl-2-pentanone	25670	1,000	20000	0	128	77-178	0			
Acetone	19560	10,000	20000	0	97.8	60-160	0			
Benzene	23170	1,000	20000	0	116	85-125	0			
Bromodichloromethane	18330	1,000	20000	0	91.6	75-125	0			
Bromoform	16680	1,000	20000	0	83.4	60-125	0			
Bromomethane	11230	1,000	20000	0	56.2	30-185	0			
Carbon disulfide	19560	1,000	20000	0	97.8	60-165	0			
Carbon tetrachloride	19670	1,000	20000	0	98.4	65-140	0			
Chlorobenzene	22740	1,000	20000	0	114	80-120	0			
Chloroethane	18570	1,000	20000	0	92.8	50-140	0			
Chloroform	21520	1,000	20000	0	108	80-130	0			
Chloromethane	15370	1,000	20000	0	76.8	50-130	0			
cis-1,2-Dichloroethene	77360	1,000	20000	56890	102	75-134	0			
cis-1,3-Dichloropropene	18630	1,000	20000	0	93.2	70-130	0			
Dibromochloromethane	14590	1,000	20000	0	73	60-115	0			
Ethylbenzene	23280	1,000	20000	0	116	85-125	0			
m,p-Xylene	46530	2,000	40000	0	116	75-130	0			
Methylene chloride	18750	5,000	20000	0	93.8	75-140	0			
o-Xylene	20860	1,000	20000	0	104	80-125	0			
Styrene	21310	1,000	20000	0	107	85-125	0			
Tetrachloroethene	23720	1,000	20000	0	119	77-138	0			
Toluene	23330	1,000	20000	0	117	85-125	0			
trans-1,2-Dichloroethene	22220	1,000	20000	0	111	80-140	0			
trans-1,3-Dichloropropene	16010	1,000	20000	0	80	81-123	0			S
Trichloroethene	23720	1,000	20000	0	119	84-130	0			
Vinyl chloride	55690	1,000	20000	43370	61.6	50-136	0			
Xylenes, Total	67390	3,000	60000	0	112	80-126	0			
Surr: 1,2-Dichloroethane-d4	18340	0	20000	0	91.7	75-120	0			
Surr: 4-Bromofluorobenzene	20050	0	20000	0	100	80-110	0			
Surr: Dibromofluoromethane	19820	0	20000	0	99.1	85-115	0			
Surr: Toluene-d8	19640	0	20000	0	98.2	85-110	0			

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



Client: AMEC Foster Wheeler  
 Work Order: 16061162  
 Project: TFS #3359151040

# QC BATCH REPORT

Batch ID: R190389 Instrument ID VMS9 Method: SW8260B

MSD		Sample ID: 16061162-17A MSD				Units: µg/L		Analysis Date: 6/28/2016 08:01 AM		
Client ID: ATR-MW81(27)-G061616		Run ID: VMS9_160627B		SeqNo: 3896620		Prep Date:		DF: 1000		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	23690	1,000	20000	0	118	75-130	23260	1.83	30	
1,1,2,2-Tetrachloroethane	22510	1,000	20000	0	113	75-130	21820	3.11	30	
1,1,2-Trichloroethane	22340	1,000	20000	0	112	75-125	22160	0.809	30	
1,1-Dichloroethane	22820	1,000	20000	0	114	75-133	21810	4.53	30	
1,1-Dichloroethene	23600	1,000	20000	0	118	70-145	22600	4.33	30	
1,2-Dichloroethane	19400	1,000	20000	0	97	78-125	19310	0.465	30	
1,2-Dichloropropane	21240	1,000	20000	0	106	75-125	21730	2.28	30	
2-Butanone	20680	5,000	20000	0	103	55-150	20450	1.12	30	
2-Hexanone	21540	5,000	20000	0	108	60-135	19840	8.22	30	
4-Methyl-2-pentanone	27150	1,000	20000	0	136	77-178	25670	5.6	30	
Acetone	20500	10,000	20000	0	102	60-160	19560	4.69	30	
Benzene	23150	1,000	20000	0	116	85-125	23170	0.0864	30	
Bromodichloromethane	18830	1,000	20000	0	94.2	75-125	18330	2.69	30	
Bromoform	17580	1,000	20000	0	87.9	60-125	16680	5.25	30	
Bromomethane	12520	1,000	20000	0	62.6	30-185	11230	10.9	30	
Carbon disulfide	21870	1,000	20000	0	109	60-165	19560	11.2	30	
Carbon tetrachloride	19930	1,000	20000	0	99.6	65-140	19670	1.31	30	
Chlorobenzene	23010	1,000	20000	0	115	80-120	22740	1.18	30	
Chloroethane	19350	1,000	20000	0	96.8	50-140	18570	4.11	30	
Chloroform	22120	1,000	20000	0	111	80-130	21520	2.75	30	
Chloromethane	15970	1,000	20000	0	79.8	50-130	15370	3.83	30	
cis-1,2-Dichloroethene	74890	1,000	20000	56890	90	75-134	77360	3.24	30	
cis-1,3-Dichloropropene	19230	1,000	20000	0	96.2	70-130	18630	3.17	30	
Dibromochloromethane	15250	1,000	20000	0	76.2	60-115	14590	4.42	30	
Ethylbenzene	23980	1,000	20000	0	120	85-125	23280	2.96	30	
m,p-Xylene	47600	2,000	40000	0	119	75-130	46530	2.27	30	
Methylene chloride	20040	5,000	20000	0	100	75-140	18750	6.65	30	
o-Xylene	21130	1,000	20000	0	106	80-125	20860	1.29	30	
Styrene	21350	1,000	20000	0	107	85-125	21310	0.188	30	
Tetrachloroethene	23880	1,000	20000	0	119	77-138	23720	0.672	30	
Toluene	23490	1,000	20000	0	117	85-125	23330	0.683	30	
trans-1,2-Dichloroethene	23480	1,000	20000	0	117	80-140	22220	5.51	30	
trans-1,3-Dichloropropene	16430	1,000	20000	0	82.2	81-123	16010	2.59	30	
Trichloroethene	23870	1,000	20000	0	119	84-130	23720	0.63	30	
Vinyl chloride	58910	1,000	20000	43370	77.7	50-136	55690	5.62	30	
Xylenes, Total	68730	3,000	60000	0	115	80-126	67390	1.97	30	
Surr: 1,2-Dichloroethane-d4	18910	0	20000	0	94.6	75-120	18340	3.06	30	
Surr: 4-Bromofluorobenzene	20080	0	20000	0	100	80-110	20050	0.15	30	
Surr: Dibromofluoromethane	19670	0	20000	0	98.4	85-115	19820	0.76	30	
Surr: Toluene-d8	19850	0	20000	0	99.2	85-110	19640	1.06	30	

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

**Client:** AMEC Foster Wheeler  
**Work Order:** 16061162  
**Project:** TFS #3359151040

# QC BATCH REPORT

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Batch ID: **R190389**      Instrument ID **VMS9**      Method: **SW8260B**

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**The following samples were analyzed in this batch:**

16061162-17A	16061162-21A	16061162-22A
16061162-24A	16061162-27A	16061162-30A
16061162-32A	16061162-35A	16061162-36A
16061162-39A	16061162-41A	16061162-42A
16061162-43A		

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

Client: AMEC Foster Wheeler  
 Work Order: 16061162  
 Project: TFS #3359151040

# QC BATCH REPORT

Batch ID: **R190408** Instrument ID **VMS9** Method: **SW8260B**

MBLK		Sample ID: <b>VBLKW1-160628-R190408</b>				Units: <b>µg/L</b>		Analysis Date: <b>6/28/2016 11:26 AM</b>		
Client ID:		Run ID: <b>VMS9_160628A</b>		SeqNo: <b>3897685</b>		Prep Date:		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloroethane	ND	1.0								
1,2-Dichloropropane	ND	1.0								
2-Butanone	ND	5.0								
2-Hexanone	ND	5.0								
4-Methyl-2-pentanone	ND	1.0								
Acetone	ND	10								
Benzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	1.0								
Carbon disulfide	ND	1.0								
Carbon tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	1.0								
Chloroform	ND	1.0								
Chloromethane	ND	1.0								
cis-1,2-Dichloroethene	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
Dibromochloromethane	ND	1.0								
Ethylbenzene	ND	1.0								
m,p-Xylene	ND	2.0								
Methylene chloride	ND	5.0								
o-Xylene	ND	1.0								
Styrene	ND	1.0								
Tetrachloroethene	ND	1.0								
Toluene	ND	1.0								
trans-1,2-Dichloroethene	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
Trichloroethene	ND	1.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	3.0								
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>19.11</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>95.6</i>	<i>75-120</i>	<i>0</i>			
<i>Surr: 4-Bromofluorobenzene</i>	<i>19.14</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>95.7</i>	<i>80-110</i>	<i>0</i>			
<i>Surr: Dibromofluoromethane</i>	<i>19.02</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>95.1</i>	<i>85-115</i>	<i>0</i>			
<i>Surr: Toluene-d8</i>	<i>19.99</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>100</i>	<i>85-110</i>	<i>0</i>			

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

Client: AMEC Foster Wheeler  
 Work Order: 16061162  
 Project: TFS #3359151040

# QC BATCH REPORT

Batch ID: R190408 Instrument ID VMS9 Method: SW8260B

LCS		Sample ID: VLCSW1-160628-R190408				Units: µg/L		Analysis Date: 6/28/2016 10:12 AM		
Client ID:		Run ID: VMS9_160628A			SeqNo: 3897684		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	21.2	1.0	20	0	106	75-130	0			
1,1,2,2-Tetrachloroethane	20.3	1.0	20	0	102	75-130	0			
1,1,2-Trichloroethane	20.54	1.0	20	0	103	75-125	0			
1,1-Dichloroethane	20.05	1.0	20	0	100	75-133	0			
1,1-Dichloroethene	20.05	1.0	20	0	100	70-145	0			
1,2-Dichloroethane	18.05	1.0	20	0	90.2	78-125	0			
1,2-Dichloropropane	19.67	1.0	20	0	98.4	75-125	0			
2-Butanone	17.64	5.0	20	0	88.2	55-150	0			
2-Hexanone	18.44	5.0	20	0	92.2	60-135	0			
4-Methyl-2-pentanone	23.06	1.0	20	0	115	77-178	0			
Acetone	16.51	10	20	0	82.6	60-160	0			
Benzene	20.89	1.0	20	0	104	85-125	0			
Bromodichloromethane	18.35	1.0	20	0	91.8	75-125	0			
Bromoform	16.56	1.0	20	0	82.8	60-125	0			
Bromomethane	11.5	1.0	20	0	57.5	30-185	0			
Carbon disulfide	20.28	1.0	20	0	101	60-165	0			
Carbon tetrachloride	17.1	1.0	20	0	85.5	65-140	0			
Chlorobenzene	20.81	1.0	20	0	104	80-120	0			
Chloroethane	17.1	1.0	20	0	85.5	50-140	0			
Chloroform	18.5	1.0	20	0	92.5	80-130	0			
Chloromethane	13.92	1.0	20	0	69.6	50-130	0			
cis-1,2-Dichloroethene	19.89	1.0	20	0	99.4	75-134	0			
cis-1,3-Dichloropropene	18.68	1.0	20	0	93.4	70-130	0			
Dibromochloromethane	14.77	1.0	20	0	73.8	60-115	0			
Ethylbenzene	21.24	1.0	20	0	106	85-125	0			
m,p-Xylene	43.11	2.0	40	0	108	75-130	0			
Methylene chloride	17.93	5.0	20	0	89.6	75-140	0			
o-Xylene	19.14	1.0	20	0	95.7	80-125	0			
Styrene	19.46	1.0	20	0	97.3	85-125	0			
Tetrachloroethene	21.81	1.0	20	0	109	77-138	0			
Toluene	20.88	1.0	20	0	104	85-125	0			
trans-1,2-Dichloroethene	20.32	1.0	20	0	102	80-140	0			
trans-1,3-Dichloropropene	16.52	1.0	20	0	82.6	81-123	0			
Trichloroethene	21.3	1.0	20	0	106	84-130	0			
Vinyl chloride	15.66	1.0	20	0	78.3	50-136	0			
Xylenes, Total	62.25	3.0	60	0	104	80-126	0			
Surr: 1,2-Dichloroethane-d4	18.9	0	20	0	94.5	75-120	0			
Surr: 4-Bromofluorobenzene	19.88	0	20	0	99.4	80-110	0			
Surr: Dibromofluoromethane	20.33	0	20	0	102	85-115	0			
Surr: Toluene-d8	19.68	0	20	0	98.4	85-110	0			

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

Client: AMEC Foster Wheeler  
 Work Order: 16061162  
 Project: TFS #3359151040

# QC BATCH REPORT

Batch ID: R190408 Instrument ID VMS9 Method: SW8260B

MS		Sample ID: 16061162-03A MS				Units: µg/L		Analysis Date: 6/28/2016 07:39 PM		
Client ID: ATR-OW5(35)-G061416		Run ID: VMS9_160628A		SeqNo: 3897688		Prep Date:		DF: 10		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	229.5	10	200	0	115	75-130	0			
1,1,2,2-Tetrachloroethane	214.2	10	200	0	107	75-130	0			
1,1,2-Trichloroethane	208	10	200	0	104	75-125	0			
1,1-Dichloroethane	205.5	10	200	0	103	75-133	0			
1,1-Dichloroethene	213.3	10	200	0	107	70-145	0			
1,2-Dichloroethane	190.7	10	200	0	95.4	78-125	0			
1,2-Dichloropropane	209.9	10	200	0	105	75-125	0			
2-Butanone	244.5	50	200	16.9	114	55-150	0			
2-Hexanone	216.7	50	200	0	108	60-135	0			
4-Methyl-2-pentanone	213.4	10	200	0	107	77-178	0			
Acetone	203.2	100	200	3.08	100	60-160	0			
Benzene	221.8	10	200	0	111	85-125	0			
Bromodichloromethane	180	10	200	0	90	75-125	0			
Bromoform	159.7	10	200	0	79.8	60-125	0			
Bromomethane	100.9	10	200	0	50.4	30-185	0			
Carbon disulfide	185	10	200	0	92.5	60-165	0			
Carbon tetrachloride	188.5	10	200	0	94.2	65-140	0			
Chlorobenzene	212.9	10	200	0	106	80-120	0			
Chloroethane	156.7	10	200	0	78.4	50-140	0			
Chloroform	207.7	10	200	0	104	80-130	0			
Chloromethane	153.9	10	200	0	77	50-130	0			
cis-1,2-Dichloroethene	243.7	10	200	31.96	106	75-134	0			
cis-1,3-Dichloropropene	185.4	10	200	0	92.7	70-130	0			
Dibromochloromethane	139.3	10	200	0	69.6	60-115	0			
Ethylbenzene	216.6	10	200	0	108	85-125	0			
m,p-Xylene	442.7	20	400	0	111	75-130	0			
Methylene chloride	185.7	50	200	0	92.8	75-140	0			
o-Xylene	193.5	10	200	0	96.8	80-125	0			
Styrene	198.5	10	200	0	99.2	85-125	0			
Tetrachloroethene	225.4	10	200	0	113	77-138	0			
Toluene	216.2	10	200	0	108	85-125	0			
trans-1,2-Dichloroethene	211.5	10	200	2.12	105	80-140	0			
trans-1,3-Dichloropropene	156.5	10	200	0	78.2	81-123	0			S
Trichloroethene	221.8	10	200	0	111	84-130	0			
Vinyl chloride	261	10	200	125.9	67.6	50-136	0			
Xylenes, Total	636.2	30	600	0	106	80-126	0			
Surr: 1,2-Dichloroethane-d4	199.3	0	200	0	99.6	75-120	0			
Surr: 4-Bromofluorobenzene	198.7	0	200	0	99.4	80-110	0			
Surr: Dibromofluoromethane	209.5	0	200	0	105	85-115	0			
Surr: Toluene-d8	199	0	200	0	99.5	85-110	0			

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

Client: AMEC Foster Wheeler  
 Work Order: 16061162  
 Project: TFS #3359151040

# QC BATCH REPORT

Batch ID: R190408 Instrument ID VMS9 Method: SW8260B

MSD		Sample ID: 16061162-03A MSD				Units: µg/L		Analysis Date: 6/28/2016 08:04 PM		
Client ID: ATR-OW5(35)-G061416		Run ID: VMS9_160628A		SeqNo: 3897689		Prep Date:		DF: 10		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	216.3	10	200	0	108	75-130	229.5	5.92	30	
1,1,2,2-Tetrachloroethane	217.2	10	200	0	109	75-130	214.2	1.39	30	
1,1,2-Trichloroethane	210.5	10	200	0	105	75-125	208	1.19	30	
1,1-Dichloroethane	196.5	10	200	0	98.2	75-133	205.5	4.48	30	
1,1-Dichloroethene	204.6	10	200	0	102	70-145	213.3	4.16	30	
1,2-Dichloroethane	189.3	10	200	0	94.6	78-125	190.7	0.737	30	
1,2-Dichloropropane	204.6	10	200	0	102	75-125	209.9	2.56	30	
2-Butanone	227.9	50	200	16.9	106	55-150	244.5	7.03	30	
2-Hexanone	213.5	50	200	0	107	60-135	216.7	1.49	30	
4-Methyl-2-pentanone	261.2	10	200	0	131	77-178	213.4	20.1	30	
Acetone	203.2	100	200	3.08	100	60-160	203.2	0	30	
Benzene	211.1	10	200	0	106	85-125	221.8	4.94	30	
Bromodichloromethane	178.7	10	200	0	89.4	75-125	180	0.725	30	
Bromoform	162.1	10	200	0	81	60-125	159.7	1.49	30	
Bromomethane	137.7	10	200	0	68.8	30-185	100.9	30.8	30	R
Carbon disulfide	182.9	10	200	0	91.4	60-165	185	1.14	30	
Carbon tetrachloride	177.3	10	200	0	88.6	65-140	188.5	6.12	30	
Chlorobenzene	210.1	10	200	0	105	80-120	212.9	1.32	30	
Chloroethane	177.4	10	200	0	88.7	50-140	156.7	12.4	30	
Chloroform	201.4	10	200	0	101	80-130	207.7	3.08	30	
Chloromethane	150	10	200	0	75	50-130	153.9	2.57	30	
cis-1,2-Dichloroethene	236.3	10	200	31.96	102	75-134	243.7	3.08	30	
cis-1,3-Dichloropropene	177.9	10	200	0	89	70-130	185.4	4.13	30	
Dibromochloromethane	142.5	10	200	0	71.2	60-115	139.3	2.27	30	
Ethylbenzene	209.6	10	200	0	105	85-125	216.6	3.28	30	
m,p-Xylene	418.1	20	400	0	105	75-130	442.7	5.72	30	
Methylene chloride	177.8	50	200	0	88.9	75-140	185.7	4.35	30	
o-Xylene	188.5	10	200	0	94.2	80-125	193.5	2.62	30	
Styrene	190.1	10	200	0	95	85-125	198.5	4.32	30	
Tetrachloroethene	218.6	10	200	0	109	77-138	225.4	3.06	30	
Toluene	204	10	200	0	102	85-125	216.2	5.81	30	
trans-1,2-Dichloroethene	201.2	10	200	2.12	99.5	80-140	211.5	4.99	30	
trans-1,3-Dichloropropene	159.5	10	200	0	79.8	81-123	156.5	1.9	30	S
Trichloroethene	218.3	10	200	0	109	84-130	221.8	1.59	30	
Vinyl chloride	242.5	10	200	125.9	58.3	50-136	261	7.35	30	
Xylenes, Total	606.6	30	600	0	101	80-126	636.2	4.76	30	
Surr: 1,2-Dichloroethane-d4	198.8	0	200	0	99.4	75-120	199.3	0.251	30	
Surr: 4-Bromofluorobenzene	201.8	0	200	0	101	80-110	198.7	1.55	30	
Surr: Dibromofluoromethane	206.8	0	200	0	103	85-115	209.5	1.3	30	
Surr: Toluene-d8	200.1	0	200	0	100	85-110	199	0.551	30	

The following samples were analyzed in this batch:

16061162-02A	16061162-03A
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Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: AMEC Foster Wheeler  
 Work Order: 16061162  
 Project: TFS #3359151040

# QC BATCH REPORT

Batch ID: **R190218** Instrument ID **TOC2** Method: **SW9060A**

MBLK		Sample ID: <b>MBLK-R190218</b>				Units: <b>mg/L</b>		Analysis Date: <b>6/23/2016 01:51 PM</b>		
Client ID:		Run ID: <b>TOC2_160623A</b>				SeqNo: <b>3891371</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Organic Carbon, Total ND 0.50

LCS		Sample ID: <b>LCS-R190218</b>				Units: <b>mg/L</b>		Analysis Date: <b>6/23/2016 01:51 PM</b>		
Client ID:		Run ID: <b>TOC2_160623A</b>				SeqNo: <b>3891372</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Organic Carbon, Total 5.117 0.50 5 0 102 91-110 0

MS		Sample ID: <b>16061162-01B MS</b>				Units: <b>mg/L</b>		Analysis Date: <b>6/23/2016 01:51 PM</b>		
Client ID: <b>ATR-MW17-G061416</b>		Run ID: <b>TOC2_160623A</b>				SeqNo: <b>3891374</b>		Prep Date:		DF: <b>4</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Organic Carbon, Total 26.72 2.0 20 6.174 103 87-120 0

MS		Sample ID: <b>16061162-13BMS</b>				Units: <b>mg/L</b>		Analysis Date: <b>6/23/2016 01:51 PM</b>		
Client ID: <b>ATR-OW1(39)-G061616</b>		Run ID: <b>TOC2_160623A</b>				SeqNo: <b>3891397</b>		Prep Date:		DF: <b>4</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Organic Carbon, Total 27.59 2.0 20 7.676 99.6 87-120 0

MSD		Sample ID: <b>16061162-01B MSD</b>				Units: <b>mg/L</b>		Analysis Date: <b>6/23/2016 01:51 PM</b>		
Client ID: <b>ATR-MW17-G061416</b>		Run ID: <b>TOC2_160623A</b>				SeqNo: <b>3891375</b>		Prep Date:		DF: <b>4</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Organic Carbon, Total 26.59 2.0 20 6.174 102 87-120 26.72 0.465 10

MSD		Sample ID: <b>16061162-13BMSD</b>				Units: <b>mg/L</b>		Analysis Date: <b>6/23/2016 01:51 PM</b>		
Client ID: <b>ATR-OW1(39)-G061616</b>		Run ID: <b>TOC2_160623A</b>				SeqNo: <b>3891403</b>		Prep Date:		DF: <b>4</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Organic Carbon, Total 27.44 2.0 20 7.676 98.8 87-120 27.59 0.538 10

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

**Client:** AMEC Foster Wheeler  
**Work Order:** 16061162  
**Project:** TFS #3359151040

# QC BATCH REPORT

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Batch ID: **R190218**      Instrument ID **TOC2**      Method: **SW9060A**

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**The following samples were analyzed in this batch:**

16061162-01B	16061162-02B	16061162-03B
16061162-04B	16061162-05B	16061162-06B
16061162-07B	16061162-08B	16061162-09B
16061162-10B	16061162-11B	16061162-12B
16061162-13B	16061162-14B	16061162-15B
16061162-16B	16061162-17B	16061162-18B
16061162-19B	16061162-20B	

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



Client: AMEC Foster Wheeler  
 Work Order: 16061162  
 Project: TFS #3359151040

# QC BATCH REPORT

Batch ID: **R190261** Instrument ID **TOC2** Method: **SW9060A**

MBLK		Sample ID: <b>MBLK-R190261</b>				Units: <b>mg/L</b>		Analysis Date: <b>6/24/2016 02:52 PM</b>		
Client ID:		Run ID: <b>TOC2_160624A</b>				SeqNo: <b>3892636</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Organic Carbon, Total ND 0.50

LCS		Sample ID: <b>LCS-R190261</b>				Units: <b>mg/L</b>		Analysis Date: <b>6/24/2016 02:52 PM</b>		
Client ID:		Run ID: <b>TOC2_160624A</b>				SeqNo: <b>3892637</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Organic Carbon, Total 5.148 0.50 5 0 103 91-110 0

MS		Sample ID: <b>16061162-10B MS</b>				Units: <b>mg/L</b>		Analysis Date: <b>6/24/2016 02:52 PM</b>		
Client ID: <b>ATR-ZVI2(32.5)-G061416</b>		Run ID: <b>TOC2_160624A</b>				SeqNo: <b>3892643</b>		Prep Date:		DF: <b>4</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Organic Carbon, Total 29.81 2.0 20 9.748 100 87-120 0

MS		Sample ID: <b>16061162-24BMS</b>				Units: <b>mg/L</b>		Analysis Date: <b>6/24/2016 02:52 PM</b>		
Client ID: <b>ATR-OW2(33)-G061516</b>		Run ID: <b>TOC2_160624A</b>				SeqNo: <b>3892653</b>		Prep Date:		DF: <b>20</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Organic Carbon, Total 113.5 10 100 6.5 107 87-120 0

MSD		Sample ID: <b>16061162-10B MSD</b>				Units: <b>mg/L</b>		Analysis Date: <b>6/24/2016 02:52 PM</b>		
Client ID: <b>ATR-ZVI2(32.5)-G061416</b>		Run ID: <b>TOC2_160624A</b>				SeqNo: <b>3892646</b>		Prep Date:		DF: <b>4</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Organic Carbon, Total 30.1 2.0 20 9.748 102 87-120 29.81 0.961 10

MSD		Sample ID: <b>16061162-24BMSD</b>				Units: <b>mg/L</b>		Analysis Date: <b>6/24/2016 02:52 PM</b>		
Client ID: <b>ATR-OW2(33)-G061516</b>		Run ID: <b>TOC2_160624A</b>				SeqNo: <b>3892657</b>		Prep Date:		DF: <b>20</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Organic Carbon, Total 113.2 10 100 6.5 107 87-120 113.5 0.229 10

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

**Client:** AMEC Foster Wheeler  
**Work Order:** 16061162  
**Project:** TFS #3359151040

# QC BATCH REPORT

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Batch ID: **R190261**      Instrument ID **TOC2**      Method: **SW9060A**

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**The following samples were analyzed in this batch:**

16061162-04B	16061162-05B	16061162-08B
16061162-10B	16061162-14B	16061162-19B
16061162-21B	16061162-22B	16061162-23B
16061162-24B	16061162-25B	16061162-26B
16061162-27B	16061162-28B	16061162-29B
16061162-30B	16061162-31B	16061162-32B
16061162-33B	16061162-35B	

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

Client: AMEC Foster Wheeler  
 Work Order: 16061162  
 Project: TFS #3359151040

# QC BATCH REPORT

Batch ID: **R190278B** Instrument ID **TOC2** Method: **SW9060A**

MBLK		Sample ID: <b>MBLK-R190278B</b>				Units: <b>mg/L</b>		Analysis Date: <b>6/25/2016 04:07 PM</b>		
Client ID:		Run ID: <b>TOC2_160625A</b>				SeqNo: <b>3893349</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Organic Carbon, Total ND 0.50

LCS		Sample ID: <b>LCS-R190278B</b>				Units: <b>mg/L</b>		Analysis Date: <b>6/25/2016 04:07 PM</b>		
Client ID:		Run ID: <b>TOC2_160625A</b>				SeqNo: <b>3893350</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Organic Carbon, Total 5.166 0.50 5 0 103 91-110 0

MS		Sample ID: <b>16061162-24BMS</b>				Units: <b>mg/L</b>		Analysis Date: <b>6/25/2016 04:07 PM</b>		
Client ID: <b>ATR-OW2(33)-G061516</b>		Run ID: <b>TOC2_160625A</b>				SeqNo: <b>3893322</b>		Prep Date:		DF: <b>4</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Organic Carbon, Total 26.72 2.0 20 6.354 102 87-120 0

MSD		Sample ID: <b>16061162-24BMSD</b>				Units: <b>mg/L</b>		Analysis Date: <b>6/25/2016 04:07 PM</b>		
Client ID: <b>ATR-OW2(33)-G061516</b>		Run ID: <b>TOC2_160625A</b>				SeqNo: <b>3893328</b>		Prep Date:		DF: <b>4</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Organic Carbon, Total 26.63 2.0 20 6.354 101 87-120 26.72 0.345 10

The following samples were analyzed in this batch:

16061162-23B	16061162-24B	16061162-26B
16061162-27B	16061162-28B	16061162-30B
16061162-36B	16061162-37B	16061162-38B
16061162-39B	16061162-40B	16061162-41B
16061162-42B	16061162-43B	

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

Client: AMEC Foster Wheeler  
 Work Order: 16061162  
 Project: TFS #3359151040

# QC BATCH REPORT

Batch ID: R190397A Instrument ID TOC2 Method: SW9060A

<b>MBLK</b>	Sample ID: <b>MBLK-R190397A</b>		Units: <b>mg/L</b>		Analysis Date: <b>6/27/2016 01:26 PM</b>					
Client ID:	Run ID: <b>TOC2_160627A</b>		SeqNo: <b>3895876</b>		Prep Date:		DF: <b>1</b>			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Organic Carbon, Total ND 0.50

<b>LCS</b>	Sample ID: <b>LCS-R190397A</b>		Units: <b>mg/L</b>		Analysis Date: <b>6/27/2016 01:26 PM</b>					
Client ID:	Run ID: <b>TOC2_160627A</b>		SeqNo: <b>3895877</b>		Prep Date:		DF: <b>1</b>			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Organic Carbon, Total 5.132 0.50 5 0 103 91-110 0

<b>MS</b>	Sample ID: <b>16061293-06F MS</b>		Units: <b>mg/L</b>		Analysis Date: <b>6/27/2016 01:26 PM</b>					
Client ID:	Run ID: <b>TOC2_160627A</b>		SeqNo: <b>3895881</b>		Prep Date:		DF: <b>4</b>			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Organic Carbon, Total 21.05 2.0 20 1.714 96.7 87-120 0

<b>MSD</b>	Sample ID: <b>16061293-06F MSD</b>		Units: <b>mg/L</b>		Analysis Date: <b>6/27/2016 01:26 PM</b>					
Client ID:	Run ID: <b>TOC2_160627A</b>		SeqNo: <b>3895882</b>		Prep Date:		DF: <b>4</b>			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Organic Carbon, Total 22.56 2.0 20 1.714 104 87-120 21.05 6.92 10

The following samples were analyzed in this batch:

16061162-27B	16061162-40B
--------------	--------------

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



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ALS Project Manager:

ALS Work Order #: 16061162

Customer Information		Project Information		Parameter/Method Request for Analysis												
Purchase Order	* *	Project Name	TFS	A	* VOCs	C012606117										
Work Order		Project Number	3359151040	B	* TOC	C012605142										
Company Name	AMEC Foster Wheeler	Bill To Company	AMEC Foster Wheeler	C												
Send Report To	Paul Stork	Invoice Attn	Paul Stork	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		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-MW17-6061416	6-14-16	1105	GW	1/3	4	X	X									
2	ATR-OWS(16)-6061416	6-14-16	1300	GW	1/3		X	X									
3	ATR-OWS(35)-6061416	6-14-16	1345	GW	1/3		X	X									
4	ATR-OWS(45)-6061416	6-14-16	1440	GW			X	X									
5	ATR-MW16-6061416	6-14-16	1555	GW			X	X									
6	ATR-MW26(17.5)-6061416	6-14-16	1100	GW			X	X									
7	ATR-MW26(28.8)-6061416	6-14-16	1150	GW			X	X									
8	ATR-MW26(58.2)-6061416	6-14-16	1300	GW			X	X									
9	ATR-ZVI2(17.5)-6061416	6-14-16	1505	GW			X	X									
10	ATR-ZVI2(32.5)-6061416	6-14-16	1550	GW			X	X									

Sampler(s) Please Print & Sign <i>[Signature]</i>		Shipment Method <i>Cooler</i>		Turnaround Time in Business Days (BD) <input type="checkbox"/> 10 BD <input type="checkbox"/> 5 BD <input type="checkbox"/> 3 BD <input type="checkbox"/> 2 BD <input type="checkbox"/> 1 BD				Other _____		Results Due Date:	
Relinquished by <i>[Signature]</i>	Date: 6/17/16	Time: 1350	Received by: <i>[Signature]</i>		Notes:						
Relinquished by <i>[Signature]</i>	Date: 6/17/16	Time: 6/18/16 900	Received by (Laboratory): <i>[Signature]</i>		Cooler ID	Cooler Temp	QC Package: (Check One Box Below)				
Logged by (Laboratory): <i>MB</i>	Date: 6/20/16	Time: 1150	Checked by (Laboratory):			24C	<input type="checkbox"/> Level II Std QC	<input type="checkbox"/> TRRP Checklist			
Preservative Key: 1-HCl 2-HNO <sub>3</sub> 3-H <sub>2</sub> SO <sub>4</sub> 4-NaOH 5-Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> 6-NaHSO <sub>3</sub> 7-Other 8-4°C 9-5035						20	<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 _____				

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Page 2 of 5

COC ID: 29692

## Environmental

ALS Project Manager:

ALS Work Order #: 10001162

Customer Information		Project Information		Parameter/Method Request for Analysis											
Purchase Order	**	Project Name	TFS	A	VOCs * <u>CO12606117</u>										
Work Order		Project Number	<u>3359151040</u>	B	TOC * <u>CO12605142</u>										
Company Name	AMEC Foster Wheeler	Bill To Company	AMEC Foster Wheeler	C											
Send Report To	Paul Stork	Invoice Attn	Paul Stork	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		e-Mail Address		J											

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
11	ATR-OW2 (53)-6061616	6-16-16	0905	EW	1 3	4	X	X									
12	ATR-EB201-6061616	6-16-16	0930			4	X	X									
13	ATR-OW1 (38)-6061616	6-16-16	1155			4	X	X									
14	ATR-OW1 (39)-6061616 ms	6-16-16	1105		X 1	3	X										
15	ATR-OW1 (38)-6061616 MSD	6-16-16	1105		X 1	3	X										
16	ATR-OW1 (38)-6061616	6-16-16	1225			4	X	X									
17	ATR-MW20(S1)-6061616	6-16-16	1400			4	X	X									
18	ATR-MW20(35)-6061616	6-16-16	1455			4	X	X									
19	ATR-MW20(35)-6061616	6-16-16	1610			4	X	X									
20	ATR-MW20(35)-6061616 R	6-16-16	1455			4	X	X									

Sampler(s) Please Print & Sign <i>[Signature]</i>		Shipment Method <u>Courier</u>		Turnaround Time in Business Days (BD) <input type="checkbox"/> 10 BD <input type="checkbox"/> 5 BD <input type="checkbox"/> 3 BD <input type="checkbox"/> 2 BD <input type="checkbox"/> 1 BD				Results Due Date:	
Relinquished by: <i>[Signature]</i>	Date: <u>6/17/16</u>	Time: <u>1350</u>	Received by: <i>[Signature]</i>	Notes:					
Relinquished by: <i>[Signature]</i>	Date: <u>6/17/16</u>	Time:	Received by (Laboratory): <i>[Signature]</i> <u>Call 18/16 900</u>	Cooler ID:	Cooler Temp: <u>2.4</u> <u>2.0</u>	QC Package: (Check One Box Below)			
Logged by (Laboratory): <u>MSB</u>	Date: <u>6/20/16</u>	Time:	Checked by (Laboratory):	<input type="checkbox"/> Level II Std QC	<input type="checkbox"/> TRRP Checklist				
Preservative Key: 1-HCl 2-HNO <sub>3</sub> 3-H <sub>2</sub> SO <sub>4</sub> 4-NaOH 5-Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> 6-NaHSO <sub>4</sub> 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				

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ALS Project Manager:

ALS Work Order #: 606162

Customer Information		Project Information		Parameter/Method Request for Analysis												
Purchase Order	**	Project Name	TFS	A	VOCs * C012606117											
Work Order		Project Number	3359151040	B	TOC * C012605142											
Company Name	AMEC Foster Wheeler	Bill To Company	AMEC Foster Wheeler	C												
Send Report To	Paul Stork	Invoice Attn	Paul Stork	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		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-MW15-6061516	6-15-16	0955	GW	143	4	X	X									
2	ATR-OW4(5A)-6061516	6-15-16	1100			4	X	X									
3	ATR-OW4(35)-6061516	6-15-16	1145			4	X	X									
4	ATR-OW3(55)-6061516	6-15-16	1320			4	X	X									
5	ATR-OW3(35)-6061516	6-15-16	1415			4	X	X									
6	ATR-OW2(33)-6061516	6-15-16	1535			4	X	X									
7	ATR-OW2(33)-6061516 MS	6-15-16	1535		1	3	X	X									
8	ATR-OW2(33)-6061516 MSD	6-15-16	1535		1	3	X	X									
9	ATR-MW25(164)-6061516	6-15-16	0925		143	4	X	X									
10	ATR-MW25(326)-6061516	6-15-16	1030		143	4	X	X									

Sampler(s) Please Print & Sign		Shipment Method		Turnaround Time in Business Days (BD)				Results Due Date:	
<i>[Signature]</i>		Courier		<input type="checkbox"/> 10 BD <input type="checkbox"/> 5 BD <input type="checkbox"/> 3 BD <input type="checkbox"/> 2 BD <input type="checkbox"/> 1 BD					
Relinquished by:	Date:	Time:	Received by:	Notes:					
<i>[Signature]</i>	6/17/16	1350	<i>[Signature]</i>						
Relinquished by:	Date:	Time:	Received by (Laboratory):	Cooler ID	Cooler Temp	QC Package: (Check One Box Below)			
<i>[Signature]</i>	6/17/16		<i>[Signature]</i> 6/18/16 900		27	<input type="checkbox"/> Level II Std QC <input type="checkbox"/> TRRP Checklist <input type="checkbox"/> Level III Std QC/Raw Date <input type="checkbox"/> TRRP Level IV <input type="checkbox"/> Level IV SW846/CLP <input type="checkbox"/> Other _____			
Logged by (Laboratory):	Date:	Time:	Checked by (Laboratory):		20				
VIB	6/20/16	1050							

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York, PA  
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ALS Project Manager:

ALS Work Order #: 100001162

Customer Information		Project Information		Parameter/Method Request for Analysis												
Purchase Order	* *	Project Name	TFS	A	VOCs * C012606117											
Work Order		Project Number	3359151040	B	TOC * C012605142											
Company Name	AMEC Foster Wheeler	Bill To Company	AMEC Foster Wheeler	C												
Send Report To	Paul Stork	Invoice Attn	Paul Stork	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		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 - MW25(45.2) - G061516	6-15-16	1130	BW	193	4	X	X									
2	ATR - MW24(24.3) - G061516	6-15-16	1250			4	X	X									
3	ATR - MW24(55.4) - G061516	6-15-16	1355			4	X	X									
4	ATR - MW14 - G061516	6-15-16	1530			4	X	X									
5	ATR - E8003 - G061716	6-17-16	1030			4	X	X									
6	ATR - PM3 - G061716	6-17-16	0950			4	X	X									
7	ATR - MW68 - G061716	6-17-16	1130			4	X	X									
8	TRIP BLANK					1	X										
9																	
10																	

Sampler(s) Please Print & Sign <i>[Signature]</i>		Shipment Method <i>Local</i>		Turnaround Time in Business Days (BD) <input type="checkbox"/> 10 BD <input type="checkbox"/> 5 BD <input type="checkbox"/> 3 BD <input type="checkbox"/> 2 BD <input type="checkbox"/> 1 BD				Results Due Date:			
Relinquished by: <i>[Signature]</i>	Date: 6/17/16	Time: 1350	Received by: <i>[Signature]</i>	Notes:							
Relinquished by: <i>[Signature]</i>	Date: 6/17/16	Time:	Received by (Laboratory): <i>[Signature]</i>	Cooler ID	Cooler Temp	QC Package: (Check One Box Below)					
Logged by (Laboratory): <i>MTB</i>	Date: 6/18/16	Time: 1050	Checked by (Laboratory):		24	<input type="checkbox"/> Level II Std QC	<input type="checkbox"/> TRRP Checklist				
Preservative Key: 1-HCl 2-HNO <sub>3</sub> 3-H <sub>2</sub> SO <sub>4</sub> 4-NaOH 5-Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> 6-NaHSO <sub>4</sub> 7-Other 8-4°C 9-5035					2.0	<input type="checkbox"/> Level III Std QC/Raw Date	<input type="checkbox"/> TRRP Level IV				
						<input type="checkbox"/> Level IV SW846/CLP					
						<input type="checkbox"/> Other					

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Salt Lake City, UT  
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ALS Project Manager:

ALS Work Order #: 100061162

Customer Information		Project Information		Parameter/Method Request for Analysis											
Purchase Order	<u>**</u>	Project Name	<u>TFS</u>	A	VOCs <u>*</u> <u>CO1260617</u>										
Work Order		Project Number	<u>3359151040</u>	B	TOC <u>*</u> <u>CO12605142</u>										
Company Name	<u>AMEC Foster Wheeler</u>	Bill To Company	<u>AMEC Foster Wheeler</u>	C											
Send Report To	<u>Paul Stork</u>	Invoice Attn	<u>Paul Stork</u>	D											
Address	<u>521 Byers Road, Suite 204</u>	Address	<u>521 Byers Road, Suite 204</u>	E											
				F											
City/State/Zip	<u>Miamisburg, OH 45342</u>	City/State/Zip	<u>Miamisburg, OH 45342</u>	G											
Phone	<u>(937) 859-3600</u>	Phone	<u>(937) 859-3600</u>	H											
Fax	<u>(937) 859-7951</u>	Fax	<u>(937) 859-7951</u>	I											
e-Mail Address		e-Mail Address		J											

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	<u>ATR - MW59 (22) - 6061716</u>	<u>6-17-16</u>	<u>0925</u>	<u>GW</u>	<u>1+3</u>	<u>4</u>	<u>X</u>	<u>X</u>									
2	<u>ATR - MW59 (22) - 6061716 R</u>	<u>6-17-16</u>	<u>0925</u>			<u>4</u>	<u>X</u>	<u>X</u>									
3	<u>ATR - MW52 - 6061616</u>	<u>6-16-16</u>	<u>0900</u>			<u>4</u>	<u>X</u>	<u>X</u>									
4	<u>ATR - EB352 - 6061616</u>	<u>6-16-16</u>	<u>0930</u>			<u>4</u>	<u>X</u>	<u>X</u>									
5	<u>ATR - MW12 - 6061616</u>	<u>6-16-16</u>	<u>1050</u>			<u>4</u>	<u>X</u>	<u>X</u>									
6	<u>ATR - MW13 - 6061616</u>	<u>6-16-16</u>	<u>1150</u>			<u>4</u>	<u>X</u>	<u>X</u>									
7	<u>ATR - MW16L - 6061616</u>	<u>6-16-16</u>	<u>1320</u>			<u>4</u>	<u>X</u>	<u>X</u>									
8	<u>ATR - MW12 - 6061616</u>	<u>6-16-16</u>	<u>1500</u>			<u>4</u>	<u>X</u>	<u>X</u>									
9	<u>ATR - Am2 - 6061616</u>	<u>6-16-16</u>	<u>1630</u>			<u>4</u>	<u>X</u>	<u>X</u>									
10																	

Sample(s) Please Print & Sign <u>[Signature]</u>		Shipment Method <u>Courier</u>		Turnaround Time in Business Days (BD) <input type="checkbox"/> 10 BD <input type="checkbox"/> 5 BD <input type="checkbox"/> 3 BD <input type="checkbox"/> 2 BD <input type="checkbox"/> 1 BD				Other _____		Results Due Date:	
Relinquished by <u>[Signature]</u>	Date: <u>6/17/16</u>	Time: <u>1350</u>	Received by: <u>[Signature]</u>		Notes:						
Relinquished by <u>[Signature]</u>	Date: <u>6/17/16</u>	Time:	Received by (Laboratory): <u>[Signature]</u> <u>CO18116</u> <u>900</u>		Cooler ID	Cooler Temp	QC Package: (Check One Box Below)				
Logged by (Laboratory): <u>MB</u>	Date: <u>6/20/16</u>	Time: <u>1050</u>	Checked by (Laboratory):			<u>24</u>	<input type="checkbox"/> Level II Std QC	<input type="checkbox"/> TRRP Checklist			
Preservative Key: 1-HCl 2-HNO <sub>3</sub> 3-H <sub>2</sub> SO <sub>4</sub> 4-NaOH 5-Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> 6-NaHSO <sub>4</sub> 7-Other 8-4°C 9-5035						<u>20</u>	<input type="checkbox"/> Level III Std QC/Raw Date	<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.  
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.



**Environmental**

Cincinnati, OH  
+1 513 733 5336

Everett, WA  
+1 425 356 2600

Fort Collins, CO  
+1 970 490 1511

Holland, MI  
+1 616 399 6070

**Chain of Custody Form**

Page 1 of     

COC ID: 29694

Houston, TX  
+1 281 530 5656

Middletown, PA  
+1 717 944 5541

Spring City, PA  
+1 610 948 4903

Salt Lake City, UT  
+1 801 266 7700

South Charleston, WV  
+1 304 356 3168

York, PA  
+1 717 505 5280

ALS Project Manager: \_\_\_\_\_ ALS Work Order #: 16061162

Customer Information		Project Information		Parameter/Method Request for Analysis											
Purchase Order		Project Name	<u>TFS Rochester</u>	A	VOCs										
Work Order		Project Number	<u>3359151040</u>	B	TOC										
Company Name	<u>AMEC Foster Wheeler</u>	Bill To Company	<u>AMEC Foster Wheeler</u>	C											
Send Report To	<u>Paul Stork</u>	Invoice Attn	<u>Paul Stork</u>	D											
Address	<u>521 Byers Road, Suite 204</u>	Address	<u>521 Byers Road, Suite 204</u>	E											
				F											
City/State/Zip	<u>Miamisburg, OH 45342</u>	City/State/Zip	<u>Miamisburg, OH 45342</u>	G											
Phone	<u>(937) 859-3600</u>	Phone	<u>(937) 859-3600</u>	H											
Fax	<u>(937) 859-7951</u>	Fax	<u>(937) 859-7951</u>	I											
e-Mail Address		e-Mail Address		J											

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
<u>1</u>	<u>ATR-437 TNCHAWY31-061416</u>	<u>6/17/16</u>	<u>1150</u>	<u>Water</u>	<u>HCL</u>	<u>3</u>	<input checked="" type="checkbox"/>										
2																	
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	

Sampler(s) Please Print & Sign		Shipment Method		Turnaround Time in Business Days (BD)				Results Due Date:	
				<input type="checkbox"/> 10 BD <input type="checkbox"/> 5 BD <input type="checkbox"/> 3 BD <input type="checkbox"/> 2 BD <input type="checkbox"/> 1 BD					
Relinquished by:	Date:	Time:	Received by:	Notes:					
<u>[Signature]</u>	<u>6-17-16</u>	<u>1350</u>	<u>[Signature]</u>						
Relinquished by:	Date:	Time:	Received by (Laboratory):	Cooler ID	Cooler Temp	QC Package: (Check One Box Below)			
<u>[Signature]</u>	<u>6/17/16</u>		<u>[Signature]</u> <u>6/18/16</u> <u>900</u>		<u>2.4°C</u>	<input type="checkbox"/> Level II Std QC <input type="checkbox"/> TRRP Checklist <input type="checkbox"/> Level III Std QC/Raw Date <input type="checkbox"/> TRRP Level IV <input type="checkbox"/> Level IV SW846/CLP <input type="checkbox"/> Other _____			
Logged by (Laboratory):	Date:	Time:	Checked by (Laboratory):						
<u>[Signature]</u>	<u>6/20/16</u>	<u>1238</u>							
Preservative Key: 1-HCl 2-HNO <sub>3</sub> 3-H <sub>2</sub> SO <sub>4</sub> 4-NaOH 5-Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> 6-NaHSO <sub>4</sub> 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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Sample Receipt Checklist

Client Name: AMEC - DAYTON

Date/Time Received: 18-Jun-16 09:00

Work Order: 16061162

Received by: MEB

Checklist completed by Meghan Broadbent 20-Jun-16

Reviewed by: Joseph Ribar 21-Jun-16

Matrices: water
Carrier name: FedEx

- Shipping container/cooler in good condition? Yes [checked] No [ ] Not Present [ ]
Custody seals intact on shipping container/cooler? Yes [checked] No [ ] Not Present [ ]
Custody seals intact on sample bottles? Yes [ ] No [ ] Not Present [checked]
Chain of custody present? Yes [checked] No [ ]
Chain of custody signed when relinquished and received? Yes [checked] No [ ]
Chain of custody agrees with sample labels? Yes [checked] No [ ]
Samples in proper container/bottle? Yes [checked] No [ ]
Sample containers intact? Yes [checked] No [ ]
Sufficient sample volume for indicated test? Yes [checked] No [ ]
All samples received within holding time? Yes [checked] No [ ]
Container/Temp Blank temperature in compliance? Yes [checked] No [ ]
Sample(s) received on ice? Yes [checked] No [ ]
Temperature(s)/Thermometer(s): 2.4/2.4 2.0/2.0 SR2
Cooler(s)/Kit(s):
Date/Time sample(s) sent to storage: 6/20/2016 12:36:20 PM
Water - VOA vials have zero headspace? Yes [checked] No [ ] No VOA vials submitted [ ]
Water - pH acceptable upon receipt? Yes [checked] No [ ] N/A [ ]
pH adjusted? Yes [ ] No [checked] N/A [ ]
pH adjusted by:

Login Notes:

Client Contacted: Date Contacted: Person Contacted:
Contacted By: Regarding:

Comments:

CorrectiveAction:



07-Jul-2016

Paul Stork  
AMEC Foster Wheeler  
521 Byers Road, Suite 204  
Miamisburg, OH 45342

Re: **Textron/Torx Rochester, IN 3359151040**

Work Order: **16061409**

Dear Paul,

ALS Environmental received 28 samples on 23-Jun-2016 09:30 AM for the analyses presented in the following report.

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

Sample results are compliant with NELAP standard requirements and QC 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 86.

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

Sincerely,

A handwritten signature in black ink that reads "Joseph Ribar".

Electronically approved by: Joseph Ribar

Joseph Ribar  
Project Manager



Certificate No: IN: C-MI-08

## Report of Laboratory Analysis

ADDRESS 3352 128th Avenue Holland, Michigan 49424-9263 | PHONE (616) 399-6070 | FAX (616) 399-6185

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Environmental ALS Environmental logo icon consisting of a stylized green and blue shape.

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RIGHT SOLUTIONS RIGHT PARTNER

**Client:** AMEC Foster Wheeler  
**Project:** Textron/Torx Rochester, IN 3359151040  
**Work Order:** 16061409

**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>
16061409-01	ATR-MW71-G062016	Groundwater		6/20/2016 12:40	6/23/2016 09:30	<input type="checkbox"/>
16061409-02	ATR-MW67-G062016	Groundwater		6/20/2016 13:50	6/23/2016 09:30	<input type="checkbox"/>
16061409-03	ATR-MW72-G062016	Groundwater		6/20/2016 15:15	6/23/2016 09:30	<input type="checkbox"/>
16061409-04	ATR-MW78-G062016	Groundwater		6/20/2016 16:35	6/23/2016 09:30	<input type="checkbox"/>
16061409-05	ATR-MW77-G062016	Groundwater		6/20/2016 14:10	6/23/2016 09:30	<input type="checkbox"/>
16061409-06	ATR-MW76-G062016	Groundwater		6/20/2016 16:00	6/23/2016 09:30	<input type="checkbox"/>
16061409-07	ATR-EB001-G062116	Groundwater		6/21/2016 08:15	6/23/2016 09:30	<input type="checkbox"/>
16061409-08	ATR-EB002-G062116	Groundwater		6/21/2016 08:15	6/23/2016 09:30	<input type="checkbox"/>
16061409-09	ATR-MW57(38)-G062116	Groundwater		6/21/2016 09:25	6/23/2016 09:30	<input type="checkbox"/>
16061409-10	Trip Blank	Water		6/21/2016	6/23/2016 09:30	<input type="checkbox"/>
16061409-11	ATR-MW85(39)-G062116	Groundwater		6/21/2016 10:45	6/23/2016 09:30	<input type="checkbox"/>
16061409-12	ATR-MW37(23.3)-G062116	Groundwater		6/21/2016 12:30	6/23/2016 09:30	<input type="checkbox"/>
16061409-13	ATR-MW37(70)-G062116	Groundwater		6/21/2016 13:25	6/23/2016 09:30	<input type="checkbox"/>
16061409-14	ATR-MW37(98)-G062116	Groundwater		6/21/2016 14:15	6/23/2016 09:30	<input type="checkbox"/>
16061409-15	ATR-MW39(29.3)-G062116	Groundwater		6/21/2016 15:45	6/23/2016 09:30	<input type="checkbox"/>
16061409-16	ATR-MW38(20.8)-G062116	Groundwater		6/21/2016 16:50	6/23/2016 09:30	<input type="checkbox"/>
16061409-17	ATR-MW38(29.1)-G062116	Groundwater		6/21/2016 17:40	6/23/2016 09:30	<input type="checkbox"/>
16061409-18	ATR-MW38(69.9)-G062116	Groundwater		6/21/2016 18:20	6/23/2016 09:30	<input type="checkbox"/>
16061409-19	ATR-MW85(130)-G062116	Groundwater		6/21/2016 10:35	6/23/2016 09:30	<input type="checkbox"/>
16061409-20	ATR-MW1-G062116	Groundwater		6/21/2016 13:30	6/23/2016 09:30	<input type="checkbox"/>
16061409-21	ATR-MW39(13)-G062116	Groundwater		6/21/2016 14:35	6/23/2016 09:30	<input type="checkbox"/>
16061409-22	ATR-MW39(76.8)-G062116	Groundwater		6/21/2016 15:25	6/23/2016 09:30	<input type="checkbox"/>
16061409-23	ATR-MW38(102.5)-G062116	Groundwater		6/21/2016 16:35	6/23/2016 09:30	<input type="checkbox"/>
16061409-24	ATR-MW35(45)-G062216	Groundwater		6/22/2016 10:30	6/23/2016 09:30	<input type="checkbox"/>
16061409-25	ATR-EB001-G062216	Groundwater		6/22/2016 10:55	6/23/2016 09:30	<input type="checkbox"/>
16061409-26	ATR-MW35(90)-G062216	Groundwater		6/22/2016 11:50	6/23/2016 09:30	<input type="checkbox"/>
16061409-27	ATR-MW35(148)-G062216	Groundwater		6/22/2016 11:10	6/23/2016 09:30	<input type="checkbox"/>
16061409-28	ATR-EB002-G062216	Groundwater		6/22/2016 11:35	6/23/2016 09:30	<input type="checkbox"/>

---

**Client:** AMEC Foster Wheeler  
**Project:** Textron/Torx Rochester, IN 3359151040  
**Work Order:** 16061409

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**Case Narrative**

Samples for the above noted Work Order were received on 06/23/2016. 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.

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

**Volatile Organics:**

Batch R190470, Method 8260, Sample 16061409-19A MS: MS/MSD rerun in separate batch due to spiking error.

Batch R190470, Method 8260, Sample 16061409-10A: Verification of sample preservation indicated a pH >2

Batch R190541, Method 8260, Sample 16061409-02A: Verification of sample preservation indicated a pH >2

Batch R190541, Method 8260, Sample 16061409-19A MSD: The RPD between the MS and MSD was outside the control limit. The corresponding result in the parent sample should be considered estimated for this analyte: Bromomethane

No other deviations or anomalies were noted.

**Wet Chemistry:**

No other deviations or anomalies were noted.

# ALS Group USA, Corp

Date: 07-Jul-16

**Client:** AMEC Foster Wheeler

**Project:** Textron/Torx Rochester, IN 3359151040

**Work Order:** 16061409

**Sample ID:** ATR-MW71-G062016

**Lab ID:** 16061409-01

**Collection Date:** 6/20/2016 12:40 PM

**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>		Analyst: <b>BJB</b>	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	6/30/2016 12:00 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	6/30/2016 12:00 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	6/30/2016 12:00 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	6/30/2016 12:00 PM
1,1-Dichloroethene	ND		1.0	µg/L	1	6/30/2016 12:00 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	6/30/2016 12:00 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	6/30/2016 12:00 PM
<b>2-Butanone</b>	<b>29</b>		<b>5.0</b>	<b>µg/L</b>	1	6/30/2016 12:00 PM
2-Hexanone	ND		5.0	µg/L	1	6/30/2016 12:00 PM
<b>4-Methyl-2-pentanone</b>	<b>4.9</b>		<b>1.0</b>	<b>µg/L</b>	1	6/30/2016 12:00 PM
<b>Acetone</b>	<b>69</b>		<b>50</b>	<b>µg/L</b>	5	6/30/2016 07:41 PM
Benzene	ND		1.0	µg/L	1	6/30/2016 12:00 PM
Bromodichloromethane	ND		1.0	µg/L	1	6/30/2016 12:00 PM
Bromoform	ND		1.0	µg/L	1	6/30/2016 12:00 PM
Bromomethane	ND		1.0	µg/L	1	6/30/2016 12:00 PM
<b>Carbon disulfide</b>	<b>6.0</b>		<b>1.0</b>	<b>µg/L</b>	1	6/30/2016 12:00 PM
Carbon tetrachloride	ND		1.0	µg/L	1	6/30/2016 12:00 PM
Chlorobenzene	ND		1.0	µg/L	1	6/30/2016 12:00 PM
Chloroethane	ND		1.0	µg/L	1	6/30/2016 12:00 PM
Chloroform	ND		1.0	µg/L	1	6/30/2016 12:00 PM
Chloromethane	ND		1.0	µg/L	1	6/30/2016 12:00 PM
<b>cis-1,2-Dichloroethene</b>	<b>26</b>		<b>1.0</b>	<b>µg/L</b>	1	6/30/2016 12:00 PM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	6/30/2016 12:00 PM
Dibromochloromethane	ND		1.0	µg/L	1	6/30/2016 12:00 PM
Ethylbenzene	ND		1.0	µg/L	1	6/30/2016 12:00 PM
m,p-Xylene	ND		2.0	µg/L	1	6/30/2016 12:00 PM
Methylene chloride	ND		5.0	µg/L	1	6/30/2016 12:00 PM
o-Xylene	ND		1.0	µg/L	1	6/30/2016 12:00 PM
Styrene	ND		1.0	µg/L	1	6/30/2016 12:00 PM
Tetrachloroethene	ND		1.0	µg/L	1	6/30/2016 12:00 PM
<b>Toluene</b>	<b>36</b>		<b>1.0</b>	<b>µg/L</b>	1	6/30/2016 12:00 PM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	6/30/2016 12:00 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	6/30/2016 12:00 PM
Trichloroethene	ND		1.0	µg/L	1	6/30/2016 12:00 PM
<b>Vinyl chloride</b>	<b>300</b>		<b>50</b>	<b>µg/L</b>	50	6/28/2016 05:06 PM
Xylenes, Total	ND		3.0	µg/L	1	6/30/2016 12:00 PM
Surr: 1,2-Dichloroethane-d4	100		75-120	%REC	5	6/30/2016 07:41 PM
Surr: 1,2-Dichloroethane-d4	101		75-120	%REC	50	6/28/2016 05:06 PM
Surr: 1,2-Dichloroethane-d4	102		75-120	%REC	1	6/30/2016 12:00 PM

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

# ALS Group USA, Corp

Date: 07-Jul-16

**Client:** AMEC Foster Wheeler

**Project:** Textron/Torx Rochester, IN 3359151040

**Sample ID:** ATR-MW71-G062016

**Collection Date:** 6/20/2016 12:40 PM

**Work Order:** 16061409

**Lab ID:** 16061409-01

**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 4-Bromofluorobenzene	94.7		80-110	%REC	50	6/28/2016 05:06 PM
Surr: 4-Bromofluorobenzene	93.5		80-110	%REC	1	6/30/2016 12:00 PM
Surr: 4-Bromofluorobenzene	93.3		80-110	%REC	5	6/30/2016 07:41 PM
Surr: Dibromofluoromethane	98.4		85-115	%REC	50	6/28/2016 05:06 PM
Surr: Dibromofluoromethane	99.9		85-115	%REC	1	6/30/2016 12:00 PM
Surr: Dibromofluoromethane	96.5		85-115	%REC	5	6/30/2016 07:41 PM
Surr: Toluene-d8	97.8		85-110	%REC	50	6/28/2016 05:06 PM
Surr: Toluene-d8	95.5		85-110	%REC	1	6/30/2016 12:00 PM
Surr: Toluene-d8	96.8		85-110	%REC	5	6/30/2016 07:41 PM
<b>ORGANIC CARBON, TOTAL</b>			<b>SW9060A</b>			Analyst: <b>JJG</b>
Organic Carbon, Total	<b>590</b>		<b>120</b>	<b>mg/L</b>	250	6/28/2016 01:44 PM

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



# ALS Group USA, Corp

Date: 07-Jul-16

**Client:** AMEC Foster Wheeler

**Project:** Textron/Torx Rochester, IN 3359151040

**Work Order:** 16061409

**Sample ID:** ATR-MW67-G062016

**Lab ID:** 16061409-02

**Collection Date:** 6/20/2016 01:50 PM

**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>		Analyst: <b>BJB</b>	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	6/30/2016 12:26 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	6/30/2016 12:26 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	6/30/2016 12:26 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	6/30/2016 12:26 PM
1,1-Dichloroethene	ND		1.0	µg/L	1	6/30/2016 12:26 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	6/30/2016 12:26 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	6/30/2016 12:26 PM
2-Butanone	ND		5.0	µg/L	1	6/30/2016 12:26 PM
2-Hexanone	ND		5.0	µg/L	1	6/30/2016 12:26 PM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	6/30/2016 12:26 PM
Acetone	ND		10	µg/L	1	6/30/2016 12:26 PM
Benzene	ND		1.0	µg/L	1	6/30/2016 12:26 PM
Bromodichloromethane	ND		1.0	µg/L	1	6/30/2016 12:26 PM
Bromoform	ND		1.0	µg/L	1	6/30/2016 12:26 PM
Bromomethane	ND		1.0	µg/L	1	6/30/2016 12:26 PM
Carbon disulfide	ND		1.0	µg/L	1	6/30/2016 12:26 PM
Carbon tetrachloride	ND		1.0	µg/L	1	6/30/2016 12:26 PM
Chlorobenzene	ND		1.0	µg/L	1	6/30/2016 12:26 PM
Chloroethane	ND		1.0	µg/L	1	6/30/2016 12:26 PM
Chloroform	ND		1.0	µg/L	1	6/30/2016 12:26 PM
Chloromethane	ND		1.0	µg/L	1	6/30/2016 12:26 PM
<b>cis-1,2-Dichloroethene</b>	<b>160</b>		<b>5.0</b>	<b>µg/L</b>	5	6/28/2016 05:32 PM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	6/30/2016 12:26 PM
Dibromochloromethane	ND		1.0	µg/L	1	6/30/2016 12:26 PM
Ethylbenzene	ND		1.0	µg/L	1	6/30/2016 12:26 PM
m,p-Xylene	ND		2.0	µg/L	1	6/30/2016 12:26 PM
Methylene chloride	ND		5.0	µg/L	1	6/30/2016 12:26 PM
o-Xylene	ND		1.0	µg/L	1	6/30/2016 12:26 PM
Styrene	ND		1.0	µg/L	1	6/30/2016 12:26 PM
Tetrachloroethene	ND		1.0	µg/L	1	6/30/2016 12:26 PM
Toluene	ND		1.0	µg/L	1	6/30/2016 12:26 PM
<b>trans-1,2-Dichloroethene</b>	<b>2.1</b>		<b>1.0</b>	<b>µg/L</b>	1	6/30/2016 12:26 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	6/30/2016 12:26 PM
Trichloroethene	ND		1.0	µg/L	1	6/30/2016 12:26 PM
<b>Vinyl chloride</b>	<b>64</b>		<b>1.0</b>	<b>µg/L</b>	1	6/30/2016 12:26 PM
Xylenes, Total	ND		3.0	µg/L	1	6/30/2016 12:26 PM
Surr: 1,2-Dichloroethane-d4	98.8		75-120	%REC	5	6/28/2016 05:32 PM
Surr: 1,2-Dichloroethane-d4	100		75-120	%REC	1	6/30/2016 12:26 PM
Surr: 4-Bromofluorobenzene	94.3		80-110	%REC	5	6/28/2016 05:32 PM

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

# ALS Group USA, Corp

Date: 07-Jul-16

**Client:** AMEC Foster Wheeler

**Project:** Textron/Torx Rochester, IN 3359151040

**Sample ID:** ATR-MW67-G062016

**Collection Date:** 6/20/2016 01:50 PM

**Work Order:** 16061409

**Lab ID:** 16061409-02

**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 4-Bromofluorobenzene	95.0		80-110	%REC	1	6/30/2016 12:26 PM
Surr: Dibromofluoromethane	96.6		85-115	%REC	5	6/28/2016 05:32 PM
Surr: Dibromofluoromethane	98.2		85-115	%REC	1	6/30/2016 12:26 PM
Surr: Toluene-d8	98.0		85-110	%REC	5	6/28/2016 05:32 PM
Surr: Toluene-d8	92.5		85-110	%REC	1	6/30/2016 12:26 PM
<b>ORGANIC CARBON, TOTAL</b>			<b>SW9060A</b>			Analyst: <b>JJG</b>
Organic Carbon, Total	50		10	mg/L	20	6/27/2016 01:26 PM

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

**ALS Group USA, Corp**

Date: 07-Jul-16

**Client:** AMEC Foster Wheeler

**Project:** Textron/Torx Rochester, IN 3359151040

**Work Order:** 16061409

**Sample ID:** ATR-MW72-G062016

**Lab ID:** 16061409-03

**Collection Date:** 6/20/2016 03:15 PM

**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>		Analyst: <b>BG</b>	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	6/28/2016 06:25 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	6/28/2016 06:25 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	6/28/2016 06:25 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	6/28/2016 06:25 PM
1,1-Dichloroethene	ND		1.0	µg/L	1	6/28/2016 06:25 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	6/28/2016 06:25 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	6/28/2016 06:25 PM
<b>2-Butanone</b>	<b>37</b>		<b>5.0</b>	<b>µg/L</b>	1	6/28/2016 06:25 PM
2-Hexanone	ND		5.0	µg/L	1	6/28/2016 06:25 PM
<b>4-Methyl-2-pentanone</b>	<b>4.3</b>		<b>1.0</b>	<b>µg/L</b>	1	6/28/2016 06:25 PM
<b>Acetone</b>	<b>48</b>		<b>10</b>	<b>µg/L</b>	1	6/28/2016 06:25 PM
Benzene	ND		1.0	µg/L	1	6/28/2016 06:25 PM
Bromodichloromethane	ND		1.0	µg/L	1	6/28/2016 06:25 PM
Bromoform	ND		1.0	µg/L	1	6/28/2016 06:25 PM
Bromomethane	ND		1.0	µg/L	1	6/28/2016 06:25 PM
<b>Carbon disulfide</b>	<b>3.3</b>		<b>1.0</b>	<b>µg/L</b>	1	6/28/2016 06:25 PM
Carbon tetrachloride	ND		1.0	µg/L	1	6/28/2016 06:25 PM
Chlorobenzene	ND		1.0	µg/L	1	6/28/2016 06:25 PM
Chloroethane	ND		1.0	µg/L	1	6/28/2016 06:25 PM
Chloroform	ND		1.0	µg/L	1	6/28/2016 06:25 PM
Chloromethane	ND		1.0	µg/L	1	6/28/2016 06:25 PM
<b>cis-1,2-Dichloroethene</b>	<b>16</b>		<b>1.0</b>	<b>µg/L</b>	1	6/28/2016 06:25 PM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	6/28/2016 06:25 PM
Dibromochloromethane	ND		1.0	µg/L	1	6/28/2016 06:25 PM
Ethylbenzene	ND		1.0	µg/L	1	6/28/2016 06:25 PM
m,p-Xylene	ND		2.0	µg/L	1	6/28/2016 06:25 PM
Methylene chloride	ND		5.0	µg/L	1	6/28/2016 06:25 PM
o-Xylene	ND		1.0	µg/L	1	6/28/2016 06:25 PM
Styrene	ND		1.0	µg/L	1	6/28/2016 06:25 PM
Tetrachloroethene	ND		1.0	µg/L	1	6/28/2016 06:25 PM
<b>Toluene</b>	<b>20</b>		<b>1.0</b>	<b>µg/L</b>	1	6/28/2016 06:25 PM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	6/28/2016 06:25 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	6/28/2016 06:25 PM
Trichloroethene	ND		1.0	µg/L	1	6/28/2016 06:25 PM
<b>Vinyl chloride</b>	<b>31</b>		<b>1.0</b>	<b>µg/L</b>	1	6/28/2016 06:25 PM
Xylenes, Total	ND		3.0	µg/L	1	6/28/2016 06:25 PM
Surr: 1,2-Dichloroethane-d4	102		75-120	%REC	1	6/28/2016 06:25 PM
Surr: 4-Bromofluorobenzene	95.8		80-110	%REC	1	6/28/2016 06:25 PM
Surr: Dibromofluoromethane	101		85-115	%REC	1	6/28/2016 06:25 PM

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

**ALS Group USA, Corp**

**Date:** 07-Jul-16

**Client:** AMEC Foster Wheeler  
**Project:** Textron/Torx Rochester, IN 3359151040  
**Sample ID:** ATR-MW72-G062016  
**Collection Date:** 6/20/2016 03:15 PM

**Work Order:** 16061409  
**Lab ID:** 16061409-03  
**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	99.6		85-110	%REC	1	6/28/2016 06:25 PM
<b>ORGANIC CARBON, TOTAL</b>			<b>SW9060A</b>			Analyst: <b>JJG</b>
Organic Carbon, Total	630		50	mg/L	100	6/27/2016 01:26 PM

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

**ALS Group USA, Corp**

Date: 07-Jul-16

**Client:** AMEC Foster Wheeler

**Project:** Textron/Torx Rochester, IN 3359151040

**Work Order:** 16061409

**Sample ID:** ATR-MW78-G062016

**Lab ID:** 16061409-04

**Collection Date:** 6/20/2016 04:35 PM

**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>		Analyst: <b>BG</b>	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	6/28/2016 06:51 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	6/28/2016 06:51 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	6/28/2016 06:51 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	6/28/2016 06:51 PM
1,1-Dichloroethene	ND		1.0	µg/L	1	6/28/2016 06:51 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	6/28/2016 06:51 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	6/28/2016 06:51 PM
<b>2-Butanone</b>	<b>96</b>		<b>5.0</b>	<b>µg/L</b>	1	6/28/2016 06:51 PM
2-Hexanone	ND		5.0	µg/L	1	6/28/2016 06:51 PM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	6/28/2016 06:51 PM
<b>Acetone</b>	<b>13</b>		<b>10</b>	<b>µg/L</b>	1	6/28/2016 06:51 PM
Benzene	ND		1.0	µg/L	1	6/28/2016 06:51 PM
Bromodichloromethane	ND		1.0	µg/L	1	6/28/2016 06:51 PM
Bromoform	ND		1.0	µg/L	1	6/28/2016 06:51 PM
Bromomethane	ND		1.0	µg/L	1	6/28/2016 06:51 PM
Carbon disulfide	ND		1.0	µg/L	1	6/28/2016 06:51 PM
Carbon tetrachloride	ND		1.0	µg/L	1	6/28/2016 06:51 PM
Chlorobenzene	ND		1.0	µg/L	1	6/28/2016 06:51 PM
Chloroethane	ND		1.0	µg/L	1	6/28/2016 06:51 PM
Chloroform	ND		1.0	µg/L	1	6/28/2016 06:51 PM
Chloromethane	ND		1.0	µg/L	1	6/28/2016 06:51 PM
<b>cis-1,2-Dichloroethene</b>	<b>2.9</b>		<b>1.0</b>	<b>µg/L</b>	1	6/28/2016 06:51 PM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	6/28/2016 06:51 PM
Dibromochloromethane	ND		1.0	µg/L	1	6/28/2016 06:51 PM
Ethylbenzene	ND		1.0	µg/L	1	6/28/2016 06:51 PM
m,p-Xylene	ND		2.0	µg/L	1	6/28/2016 06:51 PM
Methylene chloride	ND		5.0	µg/L	1	6/28/2016 06:51 PM
o-Xylene	ND		1.0	µg/L	1	6/28/2016 06:51 PM
Styrene	ND		1.0	µg/L	1	6/28/2016 06:51 PM
Tetrachloroethene	ND		1.0	µg/L	1	6/28/2016 06:51 PM
Toluene	ND		1.0	µg/L	1	6/28/2016 06:51 PM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	6/28/2016 06:51 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	6/28/2016 06:51 PM
Trichloroethene	ND		1.0	µg/L	1	6/28/2016 06:51 PM
Vinyl chloride	ND		1.0	µg/L	1	6/28/2016 06:51 PM
Xylenes, Total	ND		3.0	µg/L	1	6/28/2016 06:51 PM
Surr: 1,2-Dichloroethane-d4	101		75-120	%REC	1	6/28/2016 06:51 PM
Surr: 4-Bromofluorobenzene	95.2		80-110	%REC	1	6/28/2016 06:51 PM
Surr: Dibromofluoromethane	96.8		85-115	%REC	1	6/28/2016 06:51 PM

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

**ALS Group USA, Corp**

Date: 07-Jul-16

**Client:** AMEC Foster Wheeler  
**Project:** Textron/Torx Rochester, IN 3359151040  
**Sample ID:** ATR-MW78-G062016  
**Collection Date:** 6/20/2016 04:35 PM

**Work Order:** 16061409  
**Lab ID:** 16061409-04  
**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	97.1		85-110	%REC	1	6/28/2016 06:51 PM
<b>ORGANIC CARBON, TOTAL</b>			<b>SW9060A</b>			Analyst: <b>JJG</b>
Organic Carbon, Total	340		50	mg/L	100	6/27/2016 01:26 PM

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

**ALS Group USA, Corp**

Date: 07-Jul-16

**Client:** AMEC Foster Wheeler

**Project:** Textron/Torx Rochester, IN 3359151040

**Work Order:** 16061409

**Sample ID:** ATR-MW77-G062016

**Lab ID:** 16061409-05

**Collection Date:** 6/20/2016 02:10 PM

**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>		Analyst: <b>BG</b>	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	6/28/2016 07:17 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	6/28/2016 07:17 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	6/28/2016 07:17 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	6/28/2016 07:17 PM
1,1-Dichloroethene	ND		1.0	µg/L	1	6/28/2016 07:17 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	6/28/2016 07:17 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	6/28/2016 07:17 PM
2-Butanone	ND		5.0	µg/L	1	6/28/2016 07:17 PM
2-Hexanone	ND		5.0	µg/L	1	6/28/2016 07:17 PM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	6/28/2016 07:17 PM
Acetone	ND		10	µg/L	1	6/28/2016 07:17 PM
Benzene	ND		1.0	µg/L	1	6/28/2016 07:17 PM
Bromodichloromethane	ND		1.0	µg/L	1	6/28/2016 07:17 PM
Bromoform	ND		1.0	µg/L	1	6/28/2016 07:17 PM
Bromomethane	ND		1.0	µg/L	1	6/28/2016 07:17 PM
Carbon disulfide	ND		1.0	µg/L	1	6/28/2016 07:17 PM
Carbon tetrachloride	ND		1.0	µg/L	1	6/28/2016 07:17 PM
Chlorobenzene	ND		1.0	µg/L	1	6/28/2016 07:17 PM
Chloroethane	ND		1.0	µg/L	1	6/28/2016 07:17 PM
Chloroform	ND		1.0	µg/L	1	6/28/2016 07:17 PM
Chloromethane	ND		1.0	µg/L	1	6/28/2016 07:17 PM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	6/28/2016 07:17 PM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	6/28/2016 07:17 PM
Dibromochloromethane	ND		1.0	µg/L	1	6/28/2016 07:17 PM
Ethylbenzene	ND		1.0	µg/L	1	6/28/2016 07:17 PM
m,p-Xylene	ND		2.0	µg/L	1	6/28/2016 07:17 PM
Methylene chloride	ND		5.0	µg/L	1	6/28/2016 07:17 PM
o-Xylene	ND		1.0	µg/L	1	6/28/2016 07:17 PM
Styrene	ND		1.0	µg/L	1	6/28/2016 07:17 PM
Tetrachloroethene	ND		1.0	µg/L	1	6/28/2016 07:17 PM
Toluene	ND		1.0	µg/L	1	6/28/2016 07:17 PM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	6/28/2016 07:17 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	6/28/2016 07:17 PM
Trichloroethene	ND		1.0	µg/L	1	6/28/2016 07:17 PM
<b>Vinyl chloride</b>	<b>2.7</b>		<b>1.0</b>	<b>µg/L</b>	1	6/28/2016 07:17 PM
Xylenes, Total	ND		3.0	µg/L	1	6/28/2016 07:17 PM
Surr: 1,2-Dichloroethane-d4	100		75-120	%REC	1	6/28/2016 07:17 PM
Surr: 4-Bromofluorobenzene	96.0		80-110	%REC	1	6/28/2016 07:17 PM
Surr: Dibromofluoromethane	98.2		85-115	%REC	1	6/28/2016 07:17 PM

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

# ALS Group USA, Corp

Date: 07-Jul-16

Client: AMEC Foster Wheeler

Project: Textron/Torx Rochester, IN 3359151040

Sample ID: ATR-MW77-G062016

Collection Date: 6/20/2016 02:10 PM

Work Order: 16061409

Lab ID: 16061409-05

Matrix: GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	99.2		85-110	%REC	1	6/28/2016 07:17 PM
<b>ORGANIC CARBON, TOTAL</b>			<b>SW9060A</b>			Analyst: <b>JJG</b>
Organic Carbon, Total	6.0		0.50	mg/L	1	6/27/2016 01:26 PM

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



**ALS Group USA, Corp**

Date: 07-Jul-16

**Client:** AMEC Foster Wheeler  
**Project:** Textron/Torx Rochester, IN 3359151040  
**Sample ID:** ATR-MW76-G062016  
**Collection Date:** 6/20/2016 04:00 PM

**Work Order:** 16061409  
**Lab ID:** 16061409-06  
**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>		Analyst: <b>BG</b>	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	6/29/2016 04:53 AM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	6/29/2016 04:53 AM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	6/29/2016 04:53 AM
1,1-Dichloroethane	ND		1.0	µg/L	1	6/29/2016 04:53 AM
<b>1,1-Dichloroethene</b>	<b>31</b>		<b>1.0</b>	<b>µg/L</b>	1	6/29/2016 04:53 AM
1,2-Dichloroethane	ND		1.0	µg/L	1	6/29/2016 04:53 AM
1,2-Dichloropropane	ND		1.0	µg/L	1	6/29/2016 04:53 AM
2-Butanone	ND		5.0	µg/L	1	6/29/2016 04:53 AM
2-Hexanone	ND		5.0	µg/L	1	6/29/2016 04:53 AM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	6/29/2016 04:53 AM
<b>Acetone</b>	<b>12</b>		<b>10</b>	<b>µg/L</b>	1	6/29/2016 04:53 AM
Benzene	ND		1.0	µg/L	1	6/29/2016 04:53 AM
Bromodichloromethane	ND		1.0	µg/L	1	6/29/2016 04:53 AM
Bromoform	ND		1.0	µg/L	1	6/29/2016 04:53 AM
Bromomethane	ND		1.0	µg/L	1	6/29/2016 04:53 AM
<b>Carbon disulfide</b>	<b>5.1</b>		<b>1.0</b>	<b>µg/L</b>	1	6/29/2016 04:53 AM
Carbon tetrachloride	ND		1.0	µg/L	1	6/29/2016 04:53 AM
Chlorobenzene	ND		1.0	µg/L	1	6/29/2016 04:53 AM
Chloroethane	ND		1.0	µg/L	1	6/29/2016 04:53 AM
Chloroform	ND		1.0	µg/L	1	6/29/2016 04:53 AM
Chloromethane	ND		1.0	µg/L	1	6/29/2016 04:53 AM
<b>cis-1,2-Dichloroethene</b>	<b>8,700</b>		<b>100</b>	<b>µg/L</b>	100	6/29/2016 05:53 PM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	6/29/2016 04:53 AM
Dibromochloromethane	ND		1.0	µg/L	1	6/29/2016 04:53 AM
Ethylbenzene	ND		1.0	µg/L	1	6/29/2016 04:53 AM
m,p-Xylene	ND		2.0	µg/L	1	6/29/2016 04:53 AM
Methylene chloride	ND		5.0	µg/L	1	6/29/2016 04:53 AM
o-Xylene	ND		1.0	µg/L	1	6/29/2016 04:53 AM
Styrene	ND		1.0	µg/L	1	6/29/2016 04:53 AM
Tetrachloroethene	ND		1.0	µg/L	1	6/29/2016 04:53 AM
Toluene	ND		1.0	µg/L	1	6/29/2016 04:53 AM
<b>trans-1,2-Dichloroethene</b>	<b>82</b>		<b>25</b>	<b>µg/L</b>	25	6/30/2016 12:52 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	6/29/2016 04:53 AM
Trichloroethene	ND		1.0	µg/L	1	6/29/2016 04:53 AM
<b>Vinyl chloride</b>	<b>22,000</b>		<b>500</b>	<b>µg/L</b>	500	6/30/2016 07:15 PM
Xylenes, Total	ND		3.0	µg/L	1	6/29/2016 04:53 AM
Surr: 1,2-Dichloroethane-d4	99.4		75-120	%REC	25	6/30/2016 12:52 PM
Surr: 1,2-Dichloroethane-d4	101		75-120	%REC	500	6/30/2016 07:15 PM
Surr: 1,2-Dichloroethane-d4	100		75-120	%REC	100	6/29/2016 05:53 PM

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

**ALS Group USA, Corp**

Date: 07-Jul-16

**Client:** AMEC Foster Wheeler  
**Project:** Textron/Torx Rochester, IN 3359151040  
**Sample ID:** ATR-MW76-G062016  
**Collection Date:** 6/20/2016 04:00 PM

**Work Order:** 16061409  
**Lab ID:** 16061409-06  
**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Surr: 1,2-Dichloroethane-d4	100		75-120	%REC	1	6/29/2016 04:53 AM
Surr: 4-Bromofluorobenzene	94.0		80-110	%REC	100	6/29/2016 05:53 PM
Surr: 4-Bromofluorobenzene	94.4		80-110	%REC	25	6/30/2016 12:52 PM
Surr: 4-Bromofluorobenzene	94.2		80-110	%REC	500	6/30/2016 07:15 PM
Surr: 4-Bromofluorobenzene	95.0		80-110	%REC	1	6/29/2016 04:53 AM
Surr: Dibromofluoromethane	102		85-115	%REC	1	6/29/2016 04:53 AM
Surr: Dibromofluoromethane	98.6		85-115	%REC	100	6/29/2016 05:53 PM
Surr: Dibromofluoromethane	101		85-115	%REC	25	6/30/2016 12:52 PM
Surr: Dibromofluoromethane	97.0		85-115	%REC	500	6/30/2016 07:15 PM
Surr: Toluene-d8	97.2		85-110	%REC	1	6/29/2016 04:53 AM
Surr: Toluene-d8	97.9		85-110	%REC	100	6/29/2016 05:53 PM
Surr: Toluene-d8	95.7		85-110	%REC	25	6/30/2016 12:52 PM
Surr: Toluene-d8	98.1		85-110	%REC	500	6/30/2016 07:15 PM
<b>ORGANIC CARBON, TOTAL</b>			<b>SW9060A</b>			Analyst: <b>JJG</b>
Organic Carbon, Total	140		50	mg/L	100	6/27/2016 01:26 PM

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

**ALS Group USA, Corp**

Date: 07-Jul-16

**Client:** AMEC Foster Wheeler

**Project:** Textron/Torx Rochester, IN 3359151040

**Work Order:** 16061409

**Sample ID:** ATR-EB001-G062116

**Lab ID:** 16061409-07

**Collection Date:** 6/21/2016 08:15 AM

**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>		Analyst: <b>BG</b>	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	6/29/2016 03:08 AM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	6/29/2016 03:08 AM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	6/29/2016 03:08 AM
1,1-Dichloroethane	ND		1.0	µg/L	1	6/29/2016 03:08 AM
1,1-Dichloroethene	ND		1.0	µg/L	1	6/29/2016 03:08 AM
1,2-Dichloroethane	ND		1.0	µg/L	1	6/29/2016 03:08 AM
1,2-Dichloropropane	ND		1.0	µg/L	1	6/29/2016 03:08 AM
2-Butanone	ND		5.0	µg/L	1	6/29/2016 03:08 AM
2-Hexanone	ND		5.0	µg/L	1	6/29/2016 03:08 AM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	6/29/2016 03:08 AM
<b>Acetone</b>	<b>11</b>		<b>10</b>	<b>µg/L</b>	1	6/29/2016 03:08 AM
Benzene	ND		1.0	µg/L	1	6/29/2016 03:08 AM
Bromodichloromethane	ND		1.0	µg/L	1	6/29/2016 03:08 AM
Bromoform	ND		1.0	µg/L	1	6/29/2016 03:08 AM
Bromomethane	ND		1.0	µg/L	1	6/29/2016 03:08 AM
Carbon disulfide	ND		1.0	µg/L	1	6/29/2016 03:08 AM
Carbon tetrachloride	ND		1.0	µg/L	1	6/29/2016 03:08 AM
Chlorobenzene	ND		1.0	µg/L	1	6/29/2016 03:08 AM
Chloroethane	ND		1.0	µg/L	1	6/29/2016 03:08 AM
<b>Chloroform</b>	<b>4.6</b>		<b>1.0</b>	<b>µg/L</b>	1	6/29/2016 03:08 AM
Chloromethane	ND		1.0	µg/L	1	6/29/2016 03:08 AM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	6/29/2016 03:08 AM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	6/29/2016 03:08 AM
Dibromochloromethane	ND		1.0	µg/L	1	6/29/2016 03:08 AM
Ethylbenzene	ND		1.0	µg/L	1	6/29/2016 03:08 AM
m,p-Xylene	ND		2.0	µg/L	1	6/29/2016 03:08 AM
Methylene chloride	ND		5.0	µg/L	1	6/29/2016 03:08 AM
o-Xylene	ND		1.0	µg/L	1	6/29/2016 03:08 AM
Styrene	ND		1.0	µg/L	1	6/29/2016 03:08 AM
Tetrachloroethene	ND		1.0	µg/L	1	6/29/2016 03:08 AM
Toluene	ND		1.0	µg/L	1	6/29/2016 03:08 AM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	6/29/2016 03:08 AM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	6/29/2016 03:08 AM
Trichloroethene	ND		1.0	µg/L	1	6/29/2016 03:08 AM
Vinyl chloride	ND		1.0	µg/L	1	6/29/2016 03:08 AM
Xylenes, Total	ND		3.0	µg/L	1	6/29/2016 03:08 AM
Surr: 1,2-Dichloroethane-d4	99.4		75-120	%REC	1	6/29/2016 03:08 AM
Surr: 4-Bromofluorobenzene	93.4		80-110	%REC	1	6/29/2016 03:08 AM
Surr: Dibromofluoromethane	98.8		85-115	%REC	1	6/29/2016 03:08 AM

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

**ALS Group USA, Corp**

**Date:** 07-Jul-16

**Client:** AMEC Foster Wheeler

**Project:** Textron/Torx Rochester, IN 3359151040

**Work Order:** 16061409

**Sample ID:** ATR-EB001-G062116

**Lab ID:** 16061409-07

**Collection Date:** 6/21/2016 08:15 AM

**Matrix:** GROUNDWATER

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<b>Analyses</b>	<b>Result</b>	<b>Qual</b>	<b>Report Limit</b>	<b>Units</b>	<b>Dilution Factor</b>	<b>Date Analyzed</b>
<i>Surr: Toluene-d8</i>	97.8		85-110	%REC	1	6/29/2016 03:08 AM

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

**ALS Group USA, Corp**

Date: 07-Jul-16

**Client:** AMEC Foster Wheeler

**Project:** Textron/Torx Rochester, IN 3359151040

**Work Order:** 16061409

**Sample ID:** ATR-EB002-G062116

**Lab ID:** 16061409-08

**Collection Date:** 6/21/2016 08:15 AM

**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>		Analyst: <b>BG</b>	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	6/29/2016 03:35 AM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	6/29/2016 03:35 AM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	6/29/2016 03:35 AM
1,1-Dichloroethane	ND		1.0	µg/L	1	6/29/2016 03:35 AM
1,1-Dichloroethene	ND		1.0	µg/L	1	6/29/2016 03:35 AM
1,2-Dichloroethane	ND		1.0	µg/L	1	6/29/2016 03:35 AM
1,2-Dichloropropane	ND		1.0	µg/L	1	6/29/2016 03:35 AM
2-Butanone	ND		5.0	µg/L	1	6/29/2016 03:35 AM
2-Hexanone	ND		5.0	µg/L	1	6/29/2016 03:35 AM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	6/29/2016 03:35 AM
<b>Acetone</b>	<b>12</b>		<b>10</b>	<b>µg/L</b>	1	6/29/2016 03:35 AM
Benzene	ND		1.0	µg/L	1	6/29/2016 03:35 AM
Bromodichloromethane	ND		1.0	µg/L	1	6/29/2016 03:35 AM
Bromoform	ND		1.0	µg/L	1	6/29/2016 03:35 AM
Bromomethane	ND		1.0	µg/L	1	6/29/2016 03:35 AM
Carbon disulfide	ND		1.0	µg/L	1	6/29/2016 03:35 AM
Carbon tetrachloride	ND		1.0	µg/L	1	6/29/2016 03:35 AM
Chlorobenzene	ND		1.0	µg/L	1	6/29/2016 03:35 AM
Chloroethane	ND		1.0	µg/L	1	6/29/2016 03:35 AM
<b>Chloroform</b>	<b>4.6</b>		<b>1.0</b>	<b>µg/L</b>	1	6/29/2016 03:35 AM
Chloromethane	ND		1.0	µg/L	1	6/29/2016 03:35 AM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	6/29/2016 03:35 AM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	6/29/2016 03:35 AM
Dibromochloromethane	ND		1.0	µg/L	1	6/29/2016 03:35 AM
Ethylbenzene	ND		1.0	µg/L	1	6/29/2016 03:35 AM
m,p-Xylene	ND		2.0	µg/L	1	6/29/2016 03:35 AM
Methylene chloride	ND		5.0	µg/L	1	6/29/2016 03:35 AM
o-Xylene	ND		1.0	µg/L	1	6/29/2016 03:35 AM
Styrene	ND		1.0	µg/L	1	6/29/2016 03:35 AM
Tetrachloroethene	ND		1.0	µg/L	1	6/29/2016 03:35 AM
Toluene	ND		1.0	µg/L	1	6/29/2016 03:35 AM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	6/29/2016 03:35 AM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	6/29/2016 03:35 AM
Trichloroethene	ND		1.0	µg/L	1	6/29/2016 03:35 AM
Vinyl chloride	ND		1.0	µg/L	1	6/29/2016 03:35 AM
Xylenes, Total	ND		3.0	µg/L	1	6/29/2016 03:35 AM
Surr: 1,2-Dichloroethane-d4	98.6		75-120	%REC	1	6/29/2016 03:35 AM
Surr: 4-Bromofluorobenzene	94.2		80-110	%REC	1	6/29/2016 03:35 AM
Surr: Dibromofluoromethane	97.6		85-115	%REC	1	6/29/2016 03:35 AM

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

# ALS Group USA, Corp

Date: 07-Jul-16

**Client:** AMEC Foster Wheeler

**Project:** Textron/Torx Rochester, IN 3359151040

**Sample ID:** ATR-EB002-G062116

**Collection Date:** 6/21/2016 08:15 AM

**Work Order:** 16061409

**Lab ID:** 16061409-08

**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	99.2		85-110	%REC	1	6/29/2016 03:35 AM

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

# ALS Group USA, Corp

Date: 07-Jul-16

**Client:** AMEC Foster Wheeler

**Project:** Textron/Torx Rochester, IN 3359151040

**Work Order:** 16061409

**Sample ID:** ATR-MW57(38)-G062116

**Lab ID:** 16061409-09

**Collection Date:** 6/21/2016 09:25 AM

**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>			Analyst: <b>BJB</b>
1,1,1-Trichloroethane	ND		1.0	µg/L	1	6/29/2016 05:26 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	6/29/2016 05:26 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	6/29/2016 05:26 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	6/29/2016 05:26 PM
1,1-Dichloroethene	ND		1.0	µg/L	1	6/29/2016 05:26 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	6/29/2016 05:26 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	6/29/2016 05:26 PM
2-Butanone	ND		5.0	µg/L	1	6/29/2016 05:26 PM
2-Hexanone	ND		5.0	µg/L	1	6/29/2016 05:26 PM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	6/29/2016 05:26 PM
Acetone	ND		10	µg/L	1	6/29/2016 05:26 PM
Benzene	ND		1.0	µg/L	1	6/29/2016 05:26 PM
Bromodichloromethane	ND		1.0	µg/L	1	6/29/2016 05:26 PM
Bromoform	ND		1.0	µg/L	1	6/29/2016 05:26 PM
Bromomethane	ND		1.0	µg/L	1	6/29/2016 05:26 PM
Carbon disulfide	ND		1.0	µg/L	1	6/29/2016 05:26 PM
Carbon tetrachloride	ND		1.0	µg/L	1	6/29/2016 05:26 PM
Chlorobenzene	ND		1.0	µg/L	1	6/29/2016 05:26 PM
Chloroethane	ND		1.0	µg/L	1	6/29/2016 05:26 PM
Chloroform	ND		1.0	µg/L	1	6/29/2016 05:26 PM
Chloromethane	ND		1.0	µg/L	1	6/29/2016 05:26 PM
<b>cis-1,2-Dichloroethene</b>	<b>6.3</b>		<b>1.0</b>	<b>µg/L</b>	1	6/29/2016 05:26 PM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	6/29/2016 05:26 PM
Dibromochloromethane	ND		1.0	µg/L	1	6/29/2016 05:26 PM
Ethylbenzene	ND		1.0	µg/L	1	6/29/2016 05:26 PM
m,p-Xylene	ND		2.0	µg/L	1	6/29/2016 05:26 PM
Methylene chloride	ND		5.0	µg/L	1	6/29/2016 05:26 PM
o-Xylene	ND		1.0	µg/L	1	6/29/2016 05:26 PM
Styrene	ND		1.0	µg/L	1	6/29/2016 05:26 PM
Tetrachloroethene	ND		1.0	µg/L	1	6/29/2016 05:26 PM
Toluene	ND		1.0	µg/L	1	6/29/2016 05:26 PM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	6/29/2016 05:26 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	6/29/2016 05:26 PM
<b>Trichloroethene</b>	<b>5.3</b>		<b>1.0</b>	<b>µg/L</b>	1	6/29/2016 05:26 PM
Vinyl chloride	ND		1.0	µg/L	1	6/29/2016 05:26 PM
Xylenes, Total	ND		3.0	µg/L	1	6/29/2016 05:26 PM
Surr: 1,2-Dichloroethane-d4	99.7		75-120	%REC	1	6/29/2016 05:26 PM
Surr: 4-Bromofluorobenzene	92.5		80-110	%REC	1	6/29/2016 05:26 PM
Surr: Dibromofluoromethane	98.4		85-115	%REC	1	6/29/2016 05:26 PM

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

**ALS Group USA, Corp**

**Date:** 07-Jul-16

**Client:** AMEC Foster Wheeler

**Project:** Textron/Torx Rochester, IN 3359151040

**Work Order:** 16061409

**Sample ID:** ATR-MW57(38)-G062116

**Lab ID:** 16061409-09

**Collection Date:** 6/21/2016 09:25 AM

**Matrix:** GROUNDWATER

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<b>Analyses</b>	<b>Result</b>	<b>Qual</b>	<b>Report Limit</b>	<b>Units</b>	<b>Dilution Factor</b>	<b>Date Analyzed</b>
<i>Surr: Toluene-d8</i>	96.5		85-110	%REC	1	6/29/2016 05:26 PM

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



**ALS Group USA, Corp**

Date: 07-Jul-16

**Client:** AMEC Foster Wheeler

**Project:** Textron/Torx Rochester, IN 3359151040

**Work Order:** 16061409

**Sample ID:** Trip Blank

**Lab ID:** 16061409-10

**Collection Date:** 6/21/2016

**Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>		Analyst: <b>BG</b>	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	6/29/2016 04:01 AM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	6/29/2016 04:01 AM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	6/29/2016 04:01 AM
1,1-Dichloroethane	ND		1.0	µg/L	1	6/29/2016 04:01 AM
1,1-Dichloroethene	ND		1.0	µg/L	1	6/29/2016 04:01 AM
1,2-Dichloroethane	ND		1.0	µg/L	1	6/29/2016 04:01 AM
1,2-Dichloropropane	ND		1.0	µg/L	1	6/29/2016 04:01 AM
2-Butanone	ND		5.0	µg/L	1	6/29/2016 04:01 AM
2-Hexanone	ND		5.0	µg/L	1	6/29/2016 04:01 AM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	6/29/2016 04:01 AM
Acetone	ND		10	µg/L	1	6/29/2016 04:01 AM
Benzene	ND		1.0	µg/L	1	6/29/2016 04:01 AM
Bromodichloromethane	ND		1.0	µg/L	1	6/29/2016 04:01 AM
Bromoform	ND		1.0	µg/L	1	6/29/2016 04:01 AM
Bromomethane	ND		1.0	µg/L	1	6/29/2016 04:01 AM
Carbon disulfide	ND		1.0	µg/L	1	6/29/2016 04:01 AM
Carbon tetrachloride	ND		1.0	µg/L	1	6/29/2016 04:01 AM
Chlorobenzene	ND		1.0	µg/L	1	6/29/2016 04:01 AM
Chloroethane	ND		1.0	µg/L	1	6/29/2016 04:01 AM
Chloroform	ND		1.0	µg/L	1	6/29/2016 04:01 AM
Chloromethane	ND		1.0	µg/L	1	6/29/2016 04:01 AM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	6/29/2016 04:01 AM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	6/29/2016 04:01 AM
Dibromochloromethane	ND		1.0	µg/L	1	6/29/2016 04:01 AM
Ethylbenzene	ND		1.0	µg/L	1	6/29/2016 04:01 AM
m,p-Xylene	ND		2.0	µg/L	1	6/29/2016 04:01 AM
Methylene chloride	ND		5.0	µg/L	1	6/29/2016 04:01 AM
o-Xylene	ND		1.0	µg/L	1	6/29/2016 04:01 AM
Styrene	ND		1.0	µg/L	1	6/29/2016 04:01 AM
Tetrachloroethene	ND		1.0	µg/L	1	6/29/2016 04:01 AM
Toluene	ND		1.0	µg/L	1	6/29/2016 04:01 AM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	6/29/2016 04:01 AM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	6/29/2016 04:01 AM
Trichloroethene	ND		1.0	µg/L	1	6/29/2016 04:01 AM
Vinyl chloride	ND		1.0	µg/L	1	6/29/2016 04:01 AM
Xylenes, Total	ND		3.0	µg/L	1	6/29/2016 04:01 AM
Surr: 1,2-Dichloroethane-d4	101		75-120	%REC	1	6/29/2016 04:01 AM
Surr: 4-Bromofluorobenzene	96.0		80-110	%REC	1	6/29/2016 04:01 AM
Surr: Dibromofluoromethane	99.4		85-115	%REC	1	6/29/2016 04:01 AM

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

**ALS Group USA, Corp**

**Date:** 07-Jul-16

**Client:** AMEC Foster Wheeler

**Project:** Textron/Torx Rochester, IN 3359151040

**Work Order:** 16061409

**Sample ID:** Trip Blank

**Lab ID:** 16061409-10

**Collection Date:** 6/21/2016

**Matrix:** WATER

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<b>Analyses</b>	<b>Result</b>	<b>Qual</b>	<b>Report Limit</b>	<b>Units</b>	<b>Dilution Factor</b>	<b>Date Analyzed</b>
<i>Surr: Toluene-d8</i>	98.3		85-110	%REC	1	6/29/2016 04:01 AM

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

# ALS Group USA, Corp

Date: 07-Jul-16

**Client:** AMEC Foster Wheeler

**Project:** Textron/Torx Rochester, IN 3359151040

**Work Order:** 16061409

**Sample ID:** ATR-MW85(39)-G062116

**Lab ID:** 16061409-11

**Collection Date:** 6/21/2016 10:45 AM

**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>		Analyst: <b>BJB</b>	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	6/29/2016 06:19 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	6/29/2016 06:19 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	6/29/2016 06:19 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	6/29/2016 06:19 PM
1,1-Dichloroethene	ND		1.0	µg/L	1	6/29/2016 06:19 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	6/29/2016 06:19 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	6/29/2016 06:19 PM
2-Butanone	ND		5.0	µg/L	1	6/29/2016 06:19 PM
2-Hexanone	ND		5.0	µg/L	1	6/29/2016 06:19 PM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	6/29/2016 06:19 PM
Acetone	ND		10	µg/L	1	6/29/2016 06:19 PM
Benzene	ND		1.0	µg/L	1	6/29/2016 06:19 PM
Bromodichloromethane	ND		1.0	µg/L	1	6/29/2016 06:19 PM
Bromoform	ND		1.0	µg/L	1	6/29/2016 06:19 PM
Bromomethane	ND		1.0	µg/L	1	6/29/2016 06:19 PM
Carbon disulfide	ND		1.0	µg/L	1	6/29/2016 06:19 PM
Carbon tetrachloride	ND		1.0	µg/L	1	6/29/2016 06:19 PM
Chlorobenzene	ND		1.0	µg/L	1	6/29/2016 06:19 PM
Chloroethane	ND		1.0	µg/L	1	6/29/2016 06:19 PM
Chloroform	ND		1.0	µg/L	1	6/29/2016 06:19 PM
Chloromethane	ND		1.0	µg/L	1	6/29/2016 06:19 PM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	6/29/2016 06:19 PM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	6/29/2016 06:19 PM
Dibromochloromethane	ND		1.0	µg/L	1	6/29/2016 06:19 PM
Ethylbenzene	ND		1.0	µg/L	1	6/29/2016 06:19 PM
m,p-Xylene	ND		2.0	µg/L	1	6/29/2016 06:19 PM
Methylene chloride	ND		5.0	µg/L	1	6/29/2016 06:19 PM
o-Xylene	ND		1.0	µg/L	1	6/29/2016 06:19 PM
Styrene	ND		1.0	µg/L	1	6/29/2016 06:19 PM
Tetrachloroethene	ND		1.0	µg/L	1	6/29/2016 06:19 PM
Toluene	ND		1.0	µg/L	1	6/29/2016 06:19 PM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	6/29/2016 06:19 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	6/29/2016 06:19 PM
Trichloroethene	ND		1.0	µg/L	1	6/29/2016 06:19 PM
Vinyl chloride	ND		1.0	µg/L	1	6/29/2016 06:19 PM
Xylenes, Total	ND		3.0	µg/L	1	6/29/2016 06:19 PM
Surr: 1,2-Dichloroethane-d4	101		75-120	%REC	1	6/29/2016 06:19 PM
Surr: 4-Bromofluorobenzene	95.6		80-110	%REC	1	6/29/2016 06:19 PM
Surr: Dibromofluoromethane	101		85-115	%REC	1	6/29/2016 06:19 PM

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

# ALS Group USA, Corp

Date: 07-Jul-16

**Client:** AMEC Foster Wheeler

**Project:** Textron/Torx Rochester, IN 3359151040

**Sample ID:** ATR-MW85(39)-G062116

**Collection Date:** 6/21/2016 10:45 AM

**Work Order:** 16061409

**Lab ID:** 16061409-11

**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	99.4		85-110	%REC	1	6/29/2016 06:19 PM

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

**ALS Group USA, Corp**

Date: 07-Jul-16

**Client:** AMEC Foster Wheeler

**Project:** Textron/Torx Rochester, IN 3359151040

**Work Order:** 16061409

**Sample ID:** ATR-MW37(23.3)-G062116

**Lab ID:** 16061409-12

**Collection Date:** 6/21/2016 12:30 PM

**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>			Analyst: <b>BG</b>
1,1,1-Trichloroethane	ND		1.0	µg/L	1	6/28/2016 07:43 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	6/28/2016 07:43 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	6/28/2016 07:43 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	6/28/2016 07:43 PM
1,1-Dichloroethene	ND		1.0	µg/L	1	6/28/2016 07:43 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	6/28/2016 07:43 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	6/28/2016 07:43 PM
2-Butanone	ND		5.0	µg/L	1	6/28/2016 07:43 PM
2-Hexanone	ND		5.0	µg/L	1	6/28/2016 07:43 PM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	6/28/2016 07:43 PM
Acetone	ND		10	µg/L	1	6/28/2016 07:43 PM
Benzene	ND		1.0	µg/L	1	6/28/2016 07:43 PM
Bromodichloromethane	ND		1.0	µg/L	1	6/28/2016 07:43 PM
Bromoform	ND		1.0	µg/L	1	6/28/2016 07:43 PM
Bromomethane	ND		1.0	µg/L	1	6/28/2016 07:43 PM
Carbon disulfide	ND		1.0	µg/L	1	6/28/2016 07:43 PM
Carbon tetrachloride	ND		1.0	µg/L	1	6/28/2016 07:43 PM
Chlorobenzene	ND		1.0	µg/L	1	6/28/2016 07:43 PM
Chloroethane	ND		1.0	µg/L	1	6/28/2016 07:43 PM
Chloroform	ND		1.0	µg/L	1	6/28/2016 07:43 PM
Chloromethane	ND		1.0	µg/L	1	6/28/2016 07:43 PM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	6/28/2016 07:43 PM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	6/28/2016 07:43 PM
Dibromochloromethane	ND		1.0	µg/L	1	6/28/2016 07:43 PM
Ethylbenzene	ND		1.0	µg/L	1	6/28/2016 07:43 PM
m,p-Xylene	ND		2.0	µg/L	1	6/28/2016 07:43 PM
Methylene chloride	ND		5.0	µg/L	1	6/28/2016 07:43 PM
o-Xylene	ND		1.0	µg/L	1	6/28/2016 07:43 PM
Styrene	ND		1.0	µg/L	1	6/28/2016 07:43 PM
Tetrachloroethene	ND		1.0	µg/L	1	6/28/2016 07:43 PM
Toluene	ND		1.0	µg/L	1	6/28/2016 07:43 PM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	6/28/2016 07:43 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	6/28/2016 07:43 PM
Trichloroethene	ND		1.0	µg/L	1	6/28/2016 07:43 PM
Vinyl chloride	ND		1.0	µg/L	1	6/28/2016 07:43 PM
Xylenes, Total	ND		3.0	µg/L	1	6/28/2016 07:43 PM
Surr: 1,2-Dichloroethane-d4	100		75-120	%REC	1	6/28/2016 07:43 PM
Surr: 4-Bromofluorobenzene	93.8		80-110	%REC	1	6/28/2016 07:43 PM
Surr: Dibromofluoromethane	97.6		85-115	%REC	1	6/28/2016 07:43 PM

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

# ALS Group USA, Corp

Date: 07-Jul-16

**Client:** AMEC Foster Wheeler

**Project:** Textron/Torx Rochester, IN 3359151040

**Sample ID:** ATR-MW37(23.3)-G062116

**Collection Date:** 6/21/2016 12:30 PM

**Work Order:** 16061409

**Lab ID:** 16061409-12

**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	97.8		85-110	%REC	1	6/28/2016 07:43 PM

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

**ALS Group USA, Corp**

Date: 07-Jul-16

**Client:** AMEC Foster Wheeler

**Project:** Textron/Torx Rochester, IN 3359151040

**Work Order:** 16061409

**Sample ID:** ATR-MW37(70)-G062116

**Lab ID:** 16061409-13

**Collection Date:** 6/21/2016 01:25 PM

**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>		Analyst: <b>BJB</b>	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	6/29/2016 07:38 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	6/29/2016 07:38 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	6/29/2016 07:38 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	6/29/2016 07:38 PM
1,1-Dichloroethene	ND		1.0	µg/L	1	6/29/2016 07:38 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	6/29/2016 07:38 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	6/29/2016 07:38 PM
2-Butanone	ND		5.0	µg/L	1	6/29/2016 07:38 PM
2-Hexanone	ND		5.0	µg/L	1	6/29/2016 07:38 PM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	6/29/2016 07:38 PM
Acetone	ND		10	µg/L	1	6/29/2016 07:38 PM
Benzene	ND		1.0	µg/L	1	6/29/2016 07:38 PM
Bromodichloromethane	ND		1.0	µg/L	1	6/29/2016 07:38 PM
Bromoform	ND		1.0	µg/L	1	6/29/2016 07:38 PM
Bromomethane	ND		1.0	µg/L	1	6/29/2016 07:38 PM
Carbon disulfide	ND		1.0	µg/L	1	6/29/2016 07:38 PM
Carbon tetrachloride	ND		1.0	µg/L	1	6/29/2016 07:38 PM
Chlorobenzene	ND		1.0	µg/L	1	6/29/2016 07:38 PM
Chloroethane	ND		1.0	µg/L	1	6/29/2016 07:38 PM
Chloroform	ND		1.0	µg/L	1	6/29/2016 07:38 PM
Chloromethane	ND		1.0	µg/L	1	6/29/2016 07:38 PM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	6/29/2016 07:38 PM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	6/29/2016 07:38 PM
Dibromochloromethane	ND		1.0	µg/L	1	6/29/2016 07:38 PM
Ethylbenzene	ND		1.0	µg/L	1	6/29/2016 07:38 PM
m,p-Xylene	ND		2.0	µg/L	1	6/29/2016 07:38 PM
Methylene chloride	ND		5.0	µg/L	1	6/29/2016 07:38 PM
o-Xylene	ND		1.0	µg/L	1	6/29/2016 07:38 PM
Styrene	ND		1.0	µg/L	1	6/29/2016 07:38 PM
Tetrachloroethene	ND		1.0	µg/L	1	6/29/2016 07:38 PM
Toluene	ND		1.0	µg/L	1	6/29/2016 07:38 PM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	6/29/2016 07:38 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	6/29/2016 07:38 PM
Trichloroethene	ND		1.0	µg/L	1	6/29/2016 07:38 PM
Vinyl chloride	ND		1.0	µg/L	1	6/29/2016 07:38 PM
Xylenes, Total	ND		3.0	µg/L	1	6/29/2016 07:38 PM
Surr: 1,2-Dichloroethane-d4	102		75-120	%REC	1	6/29/2016 07:38 PM
Surr: 4-Bromofluorobenzene	94.0		80-110	%REC	1	6/29/2016 07:38 PM
Surr: Dibromofluoromethane	99.2		85-115	%REC	1	6/29/2016 07:38 PM

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

**ALS Group USA, Corp**

**Date:** 07-Jul-16

**Client:** AMEC Foster Wheeler

**Project:** Textron/Torx Rochester, IN 3359151040

**Work Order:** 16061409

**Sample ID:** ATR-MW37(70)-G062116

**Lab ID:** 16061409-13

**Collection Date:** 6/21/2016 01:25 PM

**Matrix:** GROUNDWATER

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<b>Analyses</b>	<b>Result</b>	<b>Qual</b>	<b>Report Limit</b>	<b>Units</b>	<b>Dilution Factor</b>	<b>Date Analyzed</b>
<i>Surr: Toluene-d8</i>	98.6		85-110	%REC	1	6/29/2016 07:38 PM

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



**ALS Group USA, Corp**

Date: 07-Jul-16

**Client:** AMEC Foster Wheeler

**Project:** Textron/Torx Rochester, IN 3359151040

**Work Order:** 16061409

**Sample ID:** ATR-MW37(98)-G062116

**Lab ID:** 16061409-14

**Collection Date:** 6/21/2016 02:15 PM

**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>			Analyst: <b>BJB</b>
1,1,1-Trichloroethane	ND		1.0	µg/L	1	6/29/2016 07:12 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	6/29/2016 07:12 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	6/29/2016 07:12 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	6/29/2016 07:12 PM
1,1-Dichloroethene	ND		1.0	µg/L	1	6/29/2016 07:12 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	6/29/2016 07:12 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	6/29/2016 07:12 PM
2-Butanone	ND		5.0	µg/L	1	6/29/2016 07:12 PM
2-Hexanone	ND		5.0	µg/L	1	6/29/2016 07:12 PM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	6/29/2016 07:12 PM
Acetone	ND		10	µg/L	1	6/29/2016 07:12 PM
Benzene	ND		1.0	µg/L	1	6/29/2016 07:12 PM
Bromodichloromethane	ND		1.0	µg/L	1	6/29/2016 07:12 PM
Bromoform	ND		1.0	µg/L	1	6/29/2016 07:12 PM
Bromomethane	ND		1.0	µg/L	1	6/29/2016 07:12 PM
Carbon disulfide	ND		1.0	µg/L	1	6/29/2016 07:12 PM
Carbon tetrachloride	ND		1.0	µg/L	1	6/29/2016 07:12 PM
Chlorobenzene	ND		1.0	µg/L	1	6/29/2016 07:12 PM
Chloroethane	ND		1.0	µg/L	1	6/29/2016 07:12 PM
Chloroform	ND		1.0	µg/L	1	6/29/2016 07:12 PM
Chloromethane	ND		1.0	µg/L	1	6/29/2016 07:12 PM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	6/29/2016 07:12 PM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	6/29/2016 07:12 PM
Dibromochloromethane	ND		1.0	µg/L	1	6/29/2016 07:12 PM
Ethylbenzene	ND		1.0	µg/L	1	6/29/2016 07:12 PM
m,p-Xylene	ND		2.0	µg/L	1	6/29/2016 07:12 PM
Methylene chloride	ND		5.0	µg/L	1	6/29/2016 07:12 PM
o-Xylene	ND		1.0	µg/L	1	6/29/2016 07:12 PM
Styrene	ND		1.0	µg/L	1	6/29/2016 07:12 PM
Tetrachloroethene	ND		1.0	µg/L	1	6/29/2016 07:12 PM
Toluene	ND		1.0	µg/L	1	6/29/2016 07:12 PM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	6/29/2016 07:12 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	6/29/2016 07:12 PM
Trichloroethene	ND		1.0	µg/L	1	6/29/2016 07:12 PM
Vinyl chloride	ND		1.0	µg/L	1	6/29/2016 07:12 PM
Xylenes, Total	ND		3.0	µg/L	1	6/29/2016 07:12 PM
Surr: 1,2-Dichloroethane-d4	98.1		75-120	%REC	1	6/29/2016 07:12 PM
Surr: 4-Bromofluorobenzene	93.8		80-110	%REC	1	6/29/2016 07:12 PM
Surr: Dibromofluoromethane	97.3		85-115	%REC	1	6/29/2016 07:12 PM

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

# ALS Group USA, Corp

Date: 07-Jul-16

**Client:** AMEC Foster Wheeler

**Project:** Textron/Torx Rochester, IN 3359151040

**Work Order:** 16061409

**Sample ID:** ATR-MW37(98)-G062116

**Lab ID:** 16061409-14

**Collection Date:** 6/21/2016 02:15 PM

**Matrix:** GROUNDWATER

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Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	97.5		85-110	%REC	1	6/29/2016 07:12 PM

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

**ALS Group USA, Corp**

Date: 07-Jul-16

**Client:** AMEC Foster Wheeler

**Project:** Textron/Torx Rochester, IN 3359151040

**Work Order:** 16061409

**Sample ID:** ATR-MW39(29.3)-G062116

**Lab ID:** 16061409-15

**Collection Date:** 6/21/2016 03:45 PM

**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>		Analyst: <b>BJB</b>	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	6/29/2016 08:04 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	6/29/2016 08:04 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	6/29/2016 08:04 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	6/29/2016 08:04 PM
1,1-Dichloroethene	ND		1.0	µg/L	1	6/29/2016 08:04 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	6/29/2016 08:04 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	6/29/2016 08:04 PM
2-Butanone	ND		5.0	µg/L	1	6/29/2016 08:04 PM
2-Hexanone	ND		5.0	µg/L	1	6/29/2016 08:04 PM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	6/29/2016 08:04 PM
Acetone	ND		10	µg/L	1	6/29/2016 08:04 PM
Benzene	ND		1.0	µg/L	1	6/29/2016 08:04 PM
Bromodichloromethane	ND		1.0	µg/L	1	6/29/2016 08:04 PM
Bromoform	ND		1.0	µg/L	1	6/29/2016 08:04 PM
Bromomethane	ND		1.0	µg/L	1	6/29/2016 08:04 PM
Carbon disulfide	ND		1.0	µg/L	1	6/29/2016 08:04 PM
Carbon tetrachloride	ND		1.0	µg/L	1	6/29/2016 08:04 PM
Chlorobenzene	ND		1.0	µg/L	1	6/29/2016 08:04 PM
Chloroethane	ND		1.0	µg/L	1	6/29/2016 08:04 PM
Chloroform	ND		1.0	µg/L	1	6/29/2016 08:04 PM
Chloromethane	ND		1.0	µg/L	1	6/29/2016 08:04 PM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	6/29/2016 08:04 PM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	6/29/2016 08:04 PM
Dibromochloromethane	ND		1.0	µg/L	1	6/29/2016 08:04 PM
Ethylbenzene	ND		1.0	µg/L	1	6/29/2016 08:04 PM
m,p-Xylene	ND		2.0	µg/L	1	6/29/2016 08:04 PM
Methylene chloride	ND		5.0	µg/L	1	6/29/2016 08:04 PM
o-Xylene	ND		1.0	µg/L	1	6/29/2016 08:04 PM
Styrene	ND		1.0	µg/L	1	6/29/2016 08:04 PM
Tetrachloroethene	ND		1.0	µg/L	1	6/29/2016 08:04 PM
Toluene	ND		1.0	µg/L	1	6/29/2016 08:04 PM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	6/29/2016 08:04 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	6/29/2016 08:04 PM
Trichloroethene	ND		1.0	µg/L	1	6/29/2016 08:04 PM
Vinyl chloride	ND		1.0	µg/L	1	6/29/2016 08:04 PM
Xylenes, Total	ND		3.0	µg/L	1	6/29/2016 08:04 PM
Surr: 1,2-Dichloroethane-d4	100		75-120	%REC	1	6/29/2016 08:04 PM
Surr: 4-Bromofluorobenzene	93.6		80-110	%REC	1	6/29/2016 08:04 PM
Surr: Dibromofluoromethane	97.4		85-115	%REC	1	6/29/2016 08:04 PM

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

**ALS Group USA, Corp**

**Date:** 07-Jul-16

**Client:** AMEC Foster Wheeler

**Project:** Textron/Torx Rochester, IN 3359151040

**Work Order:** 16061409

**Sample ID:** ATR-MW39(29.3)-G062116

**Lab ID:** 16061409-15

**Collection Date:** 6/21/2016 03:45 PM

**Matrix:** GROUNDWATER

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<b>Analyses</b>	<b>Result</b>	<b>Qual</b>	<b>Report Limit</b>	<b>Units</b>	<b>Dilution Factor</b>	<b>Date Analyzed</b>
<i>Surr: Toluene-d8</i>	97.8		85-110	%REC	1	6/29/2016 08:04 PM

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

**ALS Group USA, Corp**

Date: 07-Jul-16

**Client:** AMEC Foster Wheeler

**Project:** Textron/Torx Rochester, IN 3359151040

**Work Order:** 16061409

**Sample ID:** ATR-MW38(20.8)-G062116

**Lab ID:** 16061409-16

**Collection Date:** 6/21/2016 04:50 PM

**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>			Analyst: <b>BJB</b>
1,1,1-Trichloroethane	ND		1.0	µg/L	1	6/29/2016 08:30 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	6/29/2016 08:30 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	6/29/2016 08:30 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	6/29/2016 08:30 PM
1,1-Dichloroethene	ND		1.0	µg/L	1	6/29/2016 08:30 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	6/29/2016 08:30 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	6/29/2016 08:30 PM
2-Butanone	ND		5.0	µg/L	1	6/29/2016 08:30 PM
2-Hexanone	ND		5.0	µg/L	1	6/29/2016 08:30 PM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	6/29/2016 08:30 PM
Acetone	ND		10	µg/L	1	6/29/2016 08:30 PM
Benzene	ND		1.0	µg/L	1	6/29/2016 08:30 PM
Bromodichloromethane	ND		1.0	µg/L	1	6/29/2016 08:30 PM
Bromoform	ND		1.0	µg/L	1	6/29/2016 08:30 PM
Bromomethane	ND		1.0	µg/L	1	6/29/2016 08:30 PM
Carbon disulfide	ND		1.0	µg/L	1	6/29/2016 08:30 PM
Carbon tetrachloride	ND		1.0	µg/L	1	6/29/2016 08:30 PM
Chlorobenzene	ND		1.0	µg/L	1	6/29/2016 08:30 PM
Chloroethane	ND		1.0	µg/L	1	6/29/2016 08:30 PM
Chloroform	ND		1.0	µg/L	1	6/29/2016 08:30 PM
Chloromethane	ND		1.0	µg/L	1	6/29/2016 08:30 PM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	6/29/2016 08:30 PM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	6/29/2016 08:30 PM
Dibromochloromethane	ND		1.0	µg/L	1	6/29/2016 08:30 PM
Ethylbenzene	ND		1.0	µg/L	1	6/29/2016 08:30 PM
m,p-Xylene	ND		2.0	µg/L	1	6/29/2016 08:30 PM
Methylene chloride	ND		5.0	µg/L	1	6/29/2016 08:30 PM
o-Xylene	ND		1.0	µg/L	1	6/29/2016 08:30 PM
Styrene	ND		1.0	µg/L	1	6/29/2016 08:30 PM
Tetrachloroethene	ND		1.0	µg/L	1	6/29/2016 08:30 PM
Toluene	ND		1.0	µg/L	1	6/29/2016 08:30 PM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	6/29/2016 08:30 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	6/29/2016 08:30 PM
Trichloroethene	ND		1.0	µg/L	1	6/29/2016 08:30 PM
Vinyl chloride	ND		1.0	µg/L	1	6/29/2016 08:30 PM
Xylenes, Total	ND		3.0	µg/L	1	6/29/2016 08:30 PM
Surr: 1,2-Dichloroethane-d4	101		75-120	%REC	1	6/29/2016 08:30 PM
Surr: 4-Bromofluorobenzene	94.1		80-110	%REC	1	6/29/2016 08:30 PM
Surr: Dibromofluoromethane	102		85-115	%REC	1	6/29/2016 08:30 PM

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

**ALS Group USA, Corp**

**Date:** 07-Jul-16

**Client:** AMEC Foster Wheeler

**Project:** Textron/Torx Rochester, IN 3359151040

**Work Order:** 16061409

**Sample ID:** ATR-MW38(20.8)-G062116

**Lab ID:** 16061409-16

**Collection Date:** 6/21/2016 04:50 PM

**Matrix:** GROUNDWATER

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<b>Analyses</b>	<b>Result</b>	<b>Qual</b>	<b>Report Limit</b>	<b>Units</b>	<b>Dilution Factor</b>	<b>Date Analyzed</b>
<i>Surr: Toluene-d8</i>	98.6		85-110	%REC	1	6/29/2016 08:30 PM

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

**ALS Group USA, Corp**

Date: 07-Jul-16

**Client:** AMEC Foster Wheeler

**Project:** Textron/Torx Rochester, IN 3359151040

**Work Order:** 16061409

**Sample ID:** ATR-MW38(29.1)-G062116

**Lab ID:** 16061409-17

**Collection Date:** 6/21/2016 05:40 PM

**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>		Analyst: <b>BG</b>	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	6/29/2016 07:31 AM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	6/29/2016 07:31 AM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	6/29/2016 07:31 AM
1,1-Dichloroethane	ND		1.0	µg/L	1	6/29/2016 07:31 AM
1,1-Dichloroethene	ND		1.0	µg/L	1	6/29/2016 07:31 AM
1,2-Dichloroethane	ND		1.0	µg/L	1	6/29/2016 07:31 AM
1,2-Dichloropropane	ND		1.0	µg/L	1	6/29/2016 07:31 AM
2-Butanone	ND		5.0	µg/L	1	6/29/2016 07:31 AM
2-Hexanone	ND		5.0	µg/L	1	6/29/2016 07:31 AM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	6/29/2016 07:31 AM
Acetone	ND		10	µg/L	1	6/29/2016 07:31 AM
Benzene	ND		1.0	µg/L	1	6/29/2016 07:31 AM
Bromodichloromethane	ND		1.0	µg/L	1	6/29/2016 07:31 AM
Bromoform	ND		1.0	µg/L	1	6/29/2016 07:31 AM
Bromomethane	ND		1.0	µg/L	1	6/29/2016 07:31 AM
Carbon disulfide	ND		1.0	µg/L	1	6/29/2016 07:31 AM
Carbon tetrachloride	ND		1.0	µg/L	1	6/29/2016 07:31 AM
Chlorobenzene	ND		1.0	µg/L	1	6/29/2016 07:31 AM
Chloroethane	ND		1.0	µg/L	1	6/29/2016 07:31 AM
Chloroform	ND		1.0	µg/L	1	6/29/2016 07:31 AM
Chloromethane	ND		1.0	µg/L	1	6/29/2016 07:31 AM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	6/29/2016 07:31 AM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	6/29/2016 07:31 AM
Dibromochloromethane	ND		1.0	µg/L	1	6/29/2016 07:31 AM
Ethylbenzene	ND		1.0	µg/L	1	6/29/2016 07:31 AM
m,p-Xylene	ND		2.0	µg/L	1	6/29/2016 07:31 AM
Methylene chloride	ND		5.0	µg/L	1	6/29/2016 07:31 AM
o-Xylene	ND		1.0	µg/L	1	6/29/2016 07:31 AM
Styrene	ND		1.0	µg/L	1	6/29/2016 07:31 AM
Tetrachloroethene	ND		1.0	µg/L	1	6/29/2016 07:31 AM
Toluene	ND		1.0	µg/L	1	6/29/2016 07:31 AM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	6/29/2016 07:31 AM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	6/29/2016 07:31 AM
Trichloroethene	ND		1.0	µg/L	1	6/29/2016 07:31 AM
Vinyl chloride	ND		1.0	µg/L	1	6/29/2016 07:31 AM
Xylenes, Total	ND		3.0	µg/L	1	6/29/2016 07:31 AM
Surr: 1,2-Dichloroethane-d4	99.0		75-120	%REC	1	6/29/2016 07:31 AM
Surr: 4-Bromofluorobenzene	93.6		80-110	%REC	1	6/29/2016 07:31 AM
Surr: Dibromofluoromethane	98.0		85-115	%REC	1	6/29/2016 07:31 AM

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

**ALS Group USA, Corp**

**Date:** 07-Jul-16

**Client:** AMEC Foster Wheeler

**Project:** Textron/Torx Rochester, IN 3359151040

**Work Order:** 16061409

**Sample ID:** ATR-MW38(29.1)-G062116

**Lab ID:** 16061409-17

**Collection Date:** 6/21/2016 05:40 PM

**Matrix:** GROUNDWATER

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<b>Analyses</b>	<b>Result</b>	<b>Qual</b>	<b>Report Limit</b>	<b>Units</b>	<b>Dilution Factor</b>	<b>Date Analyzed</b>
<i>Surr: Toluene-d8</i>	98.1		85-110	%REC	1	6/29/2016 07:31 AM

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



# ALS Group USA, Corp

Date: 07-Jul-16

**Client:** AMEC Foster Wheeler

**Project:** Textron/Torx Rochester, IN 3359151040

**Work Order:** 16061409

**Sample ID:** ATR-MW38(69.9)-G062116

**Lab ID:** 16061409-18

**Collection Date:** 6/21/2016 06:20 PM

**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>		Analyst: <b>BG</b>	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	6/29/2016 07:58 AM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	6/29/2016 07:58 AM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	6/29/2016 07:58 AM
1,1-Dichloroethane	ND		1.0	µg/L	1	6/29/2016 07:58 AM
1,1-Dichloroethene	ND		1.0	µg/L	1	6/29/2016 07:58 AM
1,2-Dichloroethane	ND		1.0	µg/L	1	6/29/2016 07:58 AM
1,2-Dichloropropane	ND		1.0	µg/L	1	6/29/2016 07:58 AM
2-Butanone	ND		5.0	µg/L	1	6/29/2016 07:58 AM
2-Hexanone	ND		5.0	µg/L	1	6/29/2016 07:58 AM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	6/29/2016 07:58 AM
Acetone	ND		10	µg/L	1	6/29/2016 07:58 AM
Benzene	ND		1.0	µg/L	1	6/29/2016 07:58 AM
Bromodichloromethane	ND		1.0	µg/L	1	6/29/2016 07:58 AM
Bromoform	ND		1.0	µg/L	1	6/29/2016 07:58 AM
Bromomethane	ND		1.0	µg/L	1	6/29/2016 07:58 AM
Carbon disulfide	ND		1.0	µg/L	1	6/29/2016 07:58 AM
Carbon tetrachloride	ND		1.0	µg/L	1	6/29/2016 07:58 AM
Chlorobenzene	ND		1.0	µg/L	1	6/29/2016 07:58 AM
Chloroethane	ND		1.0	µg/L	1	6/29/2016 07:58 AM
<b>Chloroform</b>	<b>1.3</b>		<b>1.0</b>	<b>µg/L</b>	1	6/29/2016 07:58 AM
Chloromethane	ND		1.0	µg/L	1	6/29/2016 07:58 AM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	6/29/2016 07:58 AM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	6/29/2016 07:58 AM
Dibromochloromethane	ND		1.0	µg/L	1	6/29/2016 07:58 AM
Ethylbenzene	ND		1.0	µg/L	1	6/29/2016 07:58 AM
m,p-Xylene	ND		2.0	µg/L	1	6/29/2016 07:58 AM
Methylene chloride	ND		5.0	µg/L	1	6/29/2016 07:58 AM
o-Xylene	ND		1.0	µg/L	1	6/29/2016 07:58 AM
Styrene	ND		1.0	µg/L	1	6/29/2016 07:58 AM
Tetrachloroethene	ND		1.0	µg/L	1	6/29/2016 07:58 AM
Toluene	ND		1.0	µg/L	1	6/29/2016 07:58 AM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	6/29/2016 07:58 AM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	6/29/2016 07:58 AM
Trichloroethene	ND		1.0	µg/L	1	6/29/2016 07:58 AM
Vinyl chloride	ND		1.0	µg/L	1	6/29/2016 07:58 AM
Xylenes, Total	ND		3.0	µg/L	1	6/29/2016 07:58 AM
Surr: 1,2-Dichloroethane-d4	98.6		75-120	%REC	1	6/29/2016 07:58 AM
Surr: 4-Bromofluorobenzene	92.6		80-110	%REC	1	6/29/2016 07:58 AM
Surr: Dibromofluoromethane	96.4		85-115	%REC	1	6/29/2016 07:58 AM

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

**ALS Group USA, Corp**

Date: 07-Jul-16

**Client:** AMEC Foster Wheeler**Project:** Textron/Torx Rochester, IN 3359151040**Work Order:** 16061409**Sample ID:** ATR-MW38(69.9)-G062116**Lab ID:** 16061409-18**Collection Date:** 6/21/2016 06:20 PM**Matrix:** GROUNDWATER

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Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	98.0		85-110	%REC	1	6/29/2016 07:58 AM

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

**ALS Group USA, Corp**

Date: 07-Jul-16

**Client:** AMEC Foster Wheeler

**Project:** Textron/Torx Rochester, IN 3359151040

**Work Order:** 16061409

**Sample ID:** ATR-MW85(130)-G062116

**Lab ID:** 16061409-19

**Collection Date:** 6/21/2016 10:35 AM

**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>			Analyst: <b>BJB</b>
1,1,1-Trichloroethane	ND		1.0	µg/L	1	6/29/2016 06:45 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	6/29/2016 06:45 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	6/29/2016 06:45 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	6/29/2016 06:45 PM
1,1-Dichloroethene	ND		1.0	µg/L	1	6/29/2016 06:45 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	6/29/2016 06:45 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	6/29/2016 06:45 PM
2-Butanone	ND		5.0	µg/L	1	6/29/2016 06:45 PM
2-Hexanone	ND		5.0	µg/L	1	6/29/2016 06:45 PM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	6/29/2016 06:45 PM
Acetone	ND		10	µg/L	1	6/29/2016 06:45 PM
Benzene	ND		1.0	µg/L	1	6/29/2016 06:45 PM
Bromodichloromethane	ND		1.0	µg/L	1	6/29/2016 06:45 PM
Bromoform	ND		1.0	µg/L	1	6/29/2016 06:45 PM
Bromomethane	ND		1.0	µg/L	1	6/29/2016 06:45 PM
Carbon disulfide	ND		1.0	µg/L	1	6/29/2016 06:45 PM
Carbon tetrachloride	ND		1.0	µg/L	1	6/29/2016 06:45 PM
Chlorobenzene	ND		1.0	µg/L	1	6/29/2016 06:45 PM
Chloroethane	ND		1.0	µg/L	1	6/29/2016 06:45 PM
Chloroform	ND		1.0	µg/L	1	6/29/2016 06:45 PM
Chloromethane	ND		1.0	µg/L	1	6/29/2016 06:45 PM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	6/29/2016 06:45 PM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	6/29/2016 06:45 PM
Dibromochloromethane	ND		1.0	µg/L	1	6/29/2016 06:45 PM
Ethylbenzene	ND		1.0	µg/L	1	6/29/2016 06:45 PM
m,p-Xylene	ND		2.0	µg/L	1	6/29/2016 06:45 PM
Methylene chloride	ND		5.0	µg/L	1	6/29/2016 06:45 PM
o-Xylene	ND		1.0	µg/L	1	6/29/2016 06:45 PM
Styrene	ND		1.0	µg/L	1	6/29/2016 06:45 PM
Tetrachloroethene	ND		1.0	µg/L	1	6/29/2016 06:45 PM
Toluene	ND		1.0	µg/L	1	6/29/2016 06:45 PM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	6/29/2016 06:45 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	6/29/2016 06:45 PM
Trichloroethene	ND		1.0	µg/L	1	6/29/2016 06:45 PM
Vinyl chloride	ND		1.0	µg/L	1	6/29/2016 06:45 PM
Xylenes, Total	ND		3.0	µg/L	1	6/29/2016 06:45 PM
Surr: 1,2-Dichloroethane-d4	101		75-120	%REC	1	6/29/2016 06:45 PM
Surr: 4-Bromofluorobenzene	94.2		80-110	%REC	1	6/29/2016 06:45 PM
Surr: Dibromofluoromethane	99.1		85-115	%REC	1	6/29/2016 06:45 PM

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

**ALS Group USA, Corp**

**Date:** 07-Jul-16

**Client:** AMEC Foster Wheeler  
**Project:** Textron/Torx Rochester, IN 3359151040  
**Sample ID:** ATR-MW85(130)-G062116  
**Collection Date:** 6/21/2016 10:35 AM

**Work Order:** 16061409  
**Lab ID:** 16061409-19  
**Matrix:** GROUNDWATER

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<b>Analyses</b>	<b>Result</b>	<b>Qual</b>	<b>Report Limit</b>	<b>Units</b>	<b>Dilution Factor</b>	<b>Date Analyzed</b>
<i>Surr: Toluene-d8</i>	98.2		85-110	%REC	1	6/29/2016 06:45 PM

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

**ALS Group USA, Corp**

Date: 07-Jul-16

**Client:** AMEC Foster Wheeler

**Project:** Textron/Torx Rochester, IN 3359151040

**Work Order:** 16061409

**Sample ID:** ATR-MW1-G062116

**Lab ID:** 16061409-20

**Collection Date:** 6/21/2016 01:30 PM

**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>		Analyst: <b>BG</b>	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	6/29/2016 08:50 AM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	6/29/2016 08:50 AM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	6/29/2016 08:50 AM
1,1-Dichloroethane	ND		1.0	µg/L	1	6/29/2016 08:50 AM
1,1-Dichloroethene	ND		1.0	µg/L	1	6/29/2016 08:50 AM
1,2-Dichloroethane	ND		1.0	µg/L	1	6/29/2016 08:50 AM
1,2-Dichloropropane	ND		1.0	µg/L	1	6/29/2016 08:50 AM
2-Butanone	ND		5.0	µg/L	1	6/29/2016 08:50 AM
2-Hexanone	ND		5.0	µg/L	1	6/29/2016 08:50 AM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	6/29/2016 08:50 AM
Acetone	ND		10	µg/L	1	6/29/2016 08:50 AM
Benzene	ND		1.0	µg/L	1	6/29/2016 08:50 AM
Bromodichloromethane	ND		1.0	µg/L	1	6/29/2016 08:50 AM
Bromoform	ND		1.0	µg/L	1	6/29/2016 08:50 AM
Bromomethane	ND		1.0	µg/L	1	6/29/2016 08:50 AM
Carbon disulfide	ND		1.0	µg/L	1	6/29/2016 08:50 AM
Carbon tetrachloride	ND		1.0	µg/L	1	6/29/2016 08:50 AM
Chlorobenzene	ND		1.0	µg/L	1	6/29/2016 08:50 AM
Chloroethane	ND		1.0	µg/L	1	6/29/2016 08:50 AM
Chloroform	ND		1.0	µg/L	1	6/29/2016 08:50 AM
Chloromethane	ND		1.0	µg/L	1	6/29/2016 08:50 AM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	6/29/2016 08:50 AM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	6/29/2016 08:50 AM
Dibromochloromethane	ND		1.0	µg/L	1	6/29/2016 08:50 AM
Ethylbenzene	ND		1.0	µg/L	1	6/29/2016 08:50 AM
m,p-Xylene	ND		2.0	µg/L	1	6/29/2016 08:50 AM
Methylene chloride	ND		5.0	µg/L	1	6/29/2016 08:50 AM
o-Xylene	ND		1.0	µg/L	1	6/29/2016 08:50 AM
Styrene	ND		1.0	µg/L	1	6/29/2016 08:50 AM
Tetrachloroethene	ND		1.0	µg/L	1	6/29/2016 08:50 AM
Toluene	ND		1.0	µg/L	1	6/29/2016 08:50 AM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	6/29/2016 08:50 AM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	6/29/2016 08:50 AM
Trichloroethene	ND		1.0	µg/L	1	6/29/2016 08:50 AM
Vinyl chloride	ND		1.0	µg/L	1	6/29/2016 08:50 AM
Xylenes, Total	ND		3.0	µg/L	1	6/29/2016 08:50 AM
Surr: 1,2-Dichloroethane-d4	100		75-120	%REC	1	6/29/2016 08:50 AM
Surr: 4-Bromofluorobenzene	94.3		80-110	%REC	1	6/29/2016 08:50 AM
Surr: Dibromofluoromethane	98.3		85-115	%REC	1	6/29/2016 08:50 AM

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

# ALS Group USA, Corp

Date: 07-Jul-16

**Client:** AMEC Foster Wheeler

**Project:** Textron/Torx Rochester, IN 3359151040

**Sample ID:** ATR-MW1-G062116

**Collection Date:** 6/21/2016 01:30 PM

**Work Order:** 16061409

**Lab ID:** 16061409-20

**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	97.8		85-110	%REC	1	6/29/2016 08:50 AM

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

# ALS Group USA, Corp

Date: 07-Jul-16

**Client:** AMEC Foster Wheeler

**Project:** Textron/Torx Rochester, IN 3359151040

**Work Order:** 16061409

**Sample ID:** ATR-MW39(13)-G062116

**Lab ID:** 16061409-21

**Collection Date:** 6/21/2016 02:35 PM

**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>		Analyst: <b>BG</b>	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	6/29/2016 09:17 AM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	6/29/2016 09:17 AM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	6/29/2016 09:17 AM
1,1-Dichloroethane	ND		1.0	µg/L	1	6/29/2016 09:17 AM
1,1-Dichloroethene	ND		1.0	µg/L	1	6/29/2016 09:17 AM
1,2-Dichloroethane	ND		1.0	µg/L	1	6/29/2016 09:17 AM
1,2-Dichloropropane	ND		1.0	µg/L	1	6/29/2016 09:17 AM
2-Butanone	ND		5.0	µg/L	1	6/29/2016 09:17 AM
2-Hexanone	ND		5.0	µg/L	1	6/29/2016 09:17 AM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	6/29/2016 09:17 AM
Acetone	ND		10	µg/L	1	6/29/2016 09:17 AM
Benzene	ND		1.0	µg/L	1	6/29/2016 09:17 AM
Bromodichloromethane	ND		1.0	µg/L	1	6/29/2016 09:17 AM
Bromoform	ND		1.0	µg/L	1	6/29/2016 09:17 AM
Bromomethane	ND		1.0	µg/L	1	6/29/2016 09:17 AM
Carbon disulfide	ND		1.0	µg/L	1	6/29/2016 09:17 AM
Carbon tetrachloride	ND		1.0	µg/L	1	6/29/2016 09:17 AM
Chlorobenzene	ND		1.0	µg/L	1	6/29/2016 09:17 AM
Chloroethane	ND		1.0	µg/L	1	6/29/2016 09:17 AM
Chloroform	ND		1.0	µg/L	1	6/29/2016 09:17 AM
Chloromethane	ND		1.0	µg/L	1	6/29/2016 09:17 AM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	6/29/2016 09:17 AM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	6/29/2016 09:17 AM
Dibromochloromethane	ND		1.0	µg/L	1	6/29/2016 09:17 AM
Ethylbenzene	ND		1.0	µg/L	1	6/29/2016 09:17 AM
m,p-Xylene	ND		2.0	µg/L	1	6/29/2016 09:17 AM
Methylene chloride	ND		5.0	µg/L	1	6/29/2016 09:17 AM
o-Xylene	ND		1.0	µg/L	1	6/29/2016 09:17 AM
Styrene	ND		1.0	µg/L	1	6/29/2016 09:17 AM
Tetrachloroethene	ND		1.0	µg/L	1	6/29/2016 09:17 AM
Toluene	ND		1.0	µg/L	1	6/29/2016 09:17 AM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	6/29/2016 09:17 AM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	6/29/2016 09:17 AM
Trichloroethene	ND		1.0	µg/L	1	6/29/2016 09:17 AM
Vinyl chloride	ND		1.0	µg/L	1	6/29/2016 09:17 AM
Xylenes, Total	ND		3.0	µg/L	1	6/29/2016 09:17 AM
Surr: 1,2-Dichloroethane-d4	101		75-120	%REC	1	6/29/2016 09:17 AM
Surr: 4-Bromofluorobenzene	92.6		80-110	%REC	1	6/29/2016 09:17 AM
Surr: Dibromofluoromethane	99.4		85-115	%REC	1	6/29/2016 09:17 AM

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

**ALS Group USA, Corp**

**Date:** 07-Jul-16

**Client:** AMEC Foster Wheeler  
**Project:** Textron/Torx Rochester, IN 3359151040  
**Sample ID:** ATR-MW39(13)-G062116  
**Collection Date:** 6/21/2016 02:35 PM

**Work Order:** 16061409  
**Lab ID:** 16061409-21  
**Matrix:** GROUNDWATER

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<b>Analyses</b>	<b>Result</b>	<b>Qual</b>	<b>Report Limit</b>	<b>Units</b>	<b>Dilution Factor</b>	<b>Date Analyzed</b>
<i>Surr: Toluene-d8</i>	96.2		85-110	%REC	1	6/29/2016 09:17 AM

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



# ALS Group USA, Corp

Date: 07-Jul-16

**Client:** AMEC Foster Wheeler

**Project:** Textron/Torx Rochester, IN 3359151040

**Work Order:** 16061409

**Sample ID:** ATR-MW39(76.8)-G062116

**Lab ID:** 16061409-22

**Collection Date:** 6/21/2016 03:25 PM

**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>			Analyst: <b>BG</b>
1,1,1-Trichloroethane	ND		1.0	µg/L	1	6/29/2016 09:43 AM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	6/29/2016 09:43 AM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	6/29/2016 09:43 AM
1,1-Dichloroethane	ND		1.0	µg/L	1	6/29/2016 09:43 AM
1,1-Dichloroethene	ND		1.0	µg/L	1	6/29/2016 09:43 AM
1,2-Dichloroethane	ND		1.0	µg/L	1	6/29/2016 09:43 AM
1,2-Dichloropropane	ND		1.0	µg/L	1	6/29/2016 09:43 AM
2-Butanone	ND		5.0	µg/L	1	6/29/2016 09:43 AM
2-Hexanone	ND		5.0	µg/L	1	6/29/2016 09:43 AM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	6/29/2016 09:43 AM
Acetone	ND		10	µg/L	1	6/29/2016 09:43 AM
Benzene	ND		1.0	µg/L	1	6/29/2016 09:43 AM
Bromodichloromethane	ND		1.0	µg/L	1	6/29/2016 09:43 AM
Bromoform	ND		1.0	µg/L	1	6/29/2016 09:43 AM
Bromomethane	ND		1.0	µg/L	1	6/29/2016 09:43 AM
Carbon disulfide	ND		1.0	µg/L	1	6/29/2016 09:43 AM
Carbon tetrachloride	ND		1.0	µg/L	1	6/29/2016 09:43 AM
Chlorobenzene	ND		1.0	µg/L	1	6/29/2016 09:43 AM
Chloroethane	ND		1.0	µg/L	1	6/29/2016 09:43 AM
Chloroform	ND		1.0	µg/L	1	6/29/2016 09:43 AM
Chloromethane	ND		1.0	µg/L	1	6/29/2016 09:43 AM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	6/29/2016 09:43 AM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	6/29/2016 09:43 AM
Dibromochloromethane	ND		1.0	µg/L	1	6/29/2016 09:43 AM
Ethylbenzene	ND		1.0	µg/L	1	6/29/2016 09:43 AM
m,p-Xylene	ND		2.0	µg/L	1	6/29/2016 09:43 AM
Methylene chloride	ND		5.0	µg/L	1	6/29/2016 09:43 AM
o-Xylene	ND		1.0	µg/L	1	6/29/2016 09:43 AM
Styrene	ND		1.0	µg/L	1	6/29/2016 09:43 AM
Tetrachloroethene	ND		1.0	µg/L	1	6/29/2016 09:43 AM
Toluene	ND		1.0	µg/L	1	6/29/2016 09:43 AM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	6/29/2016 09:43 AM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	6/29/2016 09:43 AM
Trichloroethene	ND		1.0	µg/L	1	6/29/2016 09:43 AM
Vinyl chloride	ND		1.0	µg/L	1	6/29/2016 09:43 AM
Xylenes, Total	ND		3.0	µg/L	1	6/29/2016 09:43 AM
Surr: 1,2-Dichloroethane-d4	101		75-120	%REC	1	6/29/2016 09:43 AM
Surr: 4-Bromofluorobenzene	94.4		80-110	%REC	1	6/29/2016 09:43 AM
Surr: Dibromofluoromethane	101		85-115	%REC	1	6/29/2016 09:43 AM

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

**ALS Group USA, Corp**

**Date:** 07-Jul-16

**Client:** AMEC Foster Wheeler

**Project:** Textron/Torx Rochester, IN 3359151040

**Work Order:** 16061409

**Sample ID:** ATR-MW39(76.8)-G062116

**Lab ID:** 16061409-22

**Collection Date:** 6/21/2016 03:25 PM

**Matrix:** GROUNDWATER

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<b>Analyses</b>	<b>Result</b>	<b>Qual</b>	<b>Report Limit</b>	<b>Units</b>	<b>Dilution Factor</b>	<b>Date Analyzed</b>
<i>Surr: Toluene-d8</i>	98.6		85-110	%REC	1	6/29/2016 09:43 AM

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

**ALS Group USA, Corp**

Date: 07-Jul-16

**Client:** AMEC Foster Wheeler

**Project:** Textron/Torx Rochester, IN 3359151040

**Work Order:** 16061409

**Sample ID:** ATR-MW38(102.5)-G062116

**Lab ID:** 16061409-23

**Collection Date:** 6/21/2016 04:35 PM

**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>		Analyst: <b>BJB</b>	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	6/29/2016 08:56 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	6/29/2016 08:56 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	6/29/2016 08:56 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	6/29/2016 08:56 PM
1,1-Dichloroethene	ND		1.0	µg/L	1	6/29/2016 08:56 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	6/29/2016 08:56 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	6/29/2016 08:56 PM
2-Butanone	ND		5.0	µg/L	1	6/29/2016 08:56 PM
2-Hexanone	ND		5.0	µg/L	1	6/29/2016 08:56 PM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	6/29/2016 08:56 PM
Acetone	ND		10	µg/L	1	6/29/2016 08:56 PM
Benzene	ND		1.0	µg/L	1	6/29/2016 08:56 PM
Bromodichloromethane	ND		1.0	µg/L	1	6/29/2016 08:56 PM
Bromoform	ND		1.0	µg/L	1	6/29/2016 08:56 PM
Bromomethane	ND		1.0	µg/L	1	6/29/2016 08:56 PM
Carbon disulfide	ND		1.0	µg/L	1	6/29/2016 08:56 PM
Carbon tetrachloride	ND		1.0	µg/L	1	6/29/2016 08:56 PM
Chlorobenzene	ND		1.0	µg/L	1	6/29/2016 08:56 PM
Chloroethane	ND		1.0	µg/L	1	6/29/2016 08:56 PM
Chloroform	ND		1.0	µg/L	1	6/29/2016 08:56 PM
Chloromethane	ND		1.0	µg/L	1	6/29/2016 08:56 PM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	6/29/2016 08:56 PM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	6/29/2016 08:56 PM
Dibromochloromethane	ND		1.0	µg/L	1	6/29/2016 08:56 PM
Ethylbenzene	ND		1.0	µg/L	1	6/29/2016 08:56 PM
m,p-Xylene	ND		2.0	µg/L	1	6/29/2016 08:56 PM
Methylene chloride	ND		5.0	µg/L	1	6/29/2016 08:56 PM
o-Xylene	ND		1.0	µg/L	1	6/29/2016 08:56 PM
Styrene	ND		1.0	µg/L	1	6/29/2016 08:56 PM
Tetrachloroethene	ND		1.0	µg/L	1	6/29/2016 08:56 PM
Toluene	ND		1.0	µg/L	1	6/29/2016 08:56 PM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	6/29/2016 08:56 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	6/29/2016 08:56 PM
Trichloroethene	ND		1.0	µg/L	1	6/29/2016 08:56 PM
Vinyl chloride	ND		1.0	µg/L	1	6/29/2016 08:56 PM
Xylenes, Total	ND		3.0	µg/L	1	6/29/2016 08:56 PM
Surr: 1,2-Dichloroethane-d4	98.9		75-120	%REC	1	6/29/2016 08:56 PM
Surr: 4-Bromofluorobenzene	92.6		80-110	%REC	1	6/29/2016 08:56 PM
Surr: Dibromofluoromethane	97.4		85-115	%REC	1	6/29/2016 08:56 PM

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

**ALS Group USA, Corp**

**Date:** 07-Jul-16

**Client:** AMEC Foster Wheeler

**Project:** Textron/Torx Rochester, IN 3359151040

**Work Order:** 16061409

**Sample ID:** ATR-MW38(102.5)-G062116

**Lab ID:** 16061409-23

**Collection Date:** 6/21/2016 04:35 PM

**Matrix:** GROUNDWATER

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<b>Analyses</b>	<b>Result</b>	<b>Qual</b>	<b>Report Limit</b>	<b>Units</b>	<b>Dilution Factor</b>	<b>Date Analyzed</b>
<i>Surr: Toluene-d8</i>	95.8		85-110	%REC	1	6/29/2016 08:56 PM

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

**ALS Group USA, Corp**

Date: 07-Jul-16

**Client:** AMEC Foster Wheeler

**Project:** Textron/Torx Rochester, IN 3359151040

**Work Order:** 16061409

**Sample ID:** ATR-MW35(45)-G062216

**Lab ID:** 16061409-24

**Collection Date:** 6/22/2016 10:30 AM

**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>		Analyst: <b>BJB</b>	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	6/29/2016 09:22 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	6/29/2016 09:22 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	6/29/2016 09:22 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	6/29/2016 09:22 PM
1,1-Dichloroethene	ND		1.0	µg/L	1	6/29/2016 09:22 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	6/29/2016 09:22 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	6/29/2016 09:22 PM
2-Butanone	ND		5.0	µg/L	1	6/29/2016 09:22 PM
2-Hexanone	ND		5.0	µg/L	1	6/29/2016 09:22 PM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	6/29/2016 09:22 PM
Acetone	ND		10	µg/L	1	6/29/2016 09:22 PM
Benzene	ND		1.0	µg/L	1	6/29/2016 09:22 PM
Bromodichloromethane	ND		1.0	µg/L	1	6/29/2016 09:22 PM
Bromoform	ND		1.0	µg/L	1	6/29/2016 09:22 PM
Bromomethane	ND		1.0	µg/L	1	6/29/2016 09:22 PM
Carbon disulfide	ND		1.0	µg/L	1	6/29/2016 09:22 PM
Carbon tetrachloride	ND		1.0	µg/L	1	6/29/2016 09:22 PM
Chlorobenzene	ND		1.0	µg/L	1	6/29/2016 09:22 PM
Chloroethane	ND		1.0	µg/L	1	6/29/2016 09:22 PM
Chloroform	ND		1.0	µg/L	1	6/29/2016 09:22 PM
Chloromethane	ND		1.0	µg/L	1	6/29/2016 09:22 PM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	6/29/2016 09:22 PM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	6/29/2016 09:22 PM
Dibromochloromethane	ND		1.0	µg/L	1	6/29/2016 09:22 PM
Ethylbenzene	ND		1.0	µg/L	1	6/29/2016 09:22 PM
m,p-Xylene	ND		2.0	µg/L	1	6/29/2016 09:22 PM
Methylene chloride	ND		5.0	µg/L	1	6/29/2016 09:22 PM
o-Xylene	ND		1.0	µg/L	1	6/29/2016 09:22 PM
Styrene	ND		1.0	µg/L	1	6/29/2016 09:22 PM
Tetrachloroethene	ND		1.0	µg/L	1	6/29/2016 09:22 PM
Toluene	ND		1.0	µg/L	1	6/29/2016 09:22 PM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	6/29/2016 09:22 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	6/29/2016 09:22 PM
Trichloroethene	ND		1.0	µg/L	1	6/29/2016 09:22 PM
Vinyl chloride	ND		1.0	µg/L	1	6/29/2016 09:22 PM
Xylenes, Total	ND		3.0	µg/L	1	6/29/2016 09:22 PM
Surr: 1,2-Dichloroethane-d4	99.9		75-120	%REC	1	6/29/2016 09:22 PM
Surr: 4-Bromofluorobenzene	94.0		80-110	%REC	1	6/29/2016 09:22 PM
Surr: Dibromofluoromethane	94.4		85-115	%REC	1	6/29/2016 09:22 PM

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

**ALS Group USA, Corp**

**Date:** 07-Jul-16

**Client:** AMEC Foster Wheeler  
**Project:** Textron/Torx Rochester, IN 3359151040  
**Sample ID:** ATR-MW35(45)-G062216  
**Collection Date:** 6/22/2016 10:30 AM

**Work Order:** 16061409  
**Lab ID:** 16061409-24  
**Matrix:** GROUNDWATER

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<b>Analyses</b>	<b>Result</b>	<b>Qual</b>	<b>Report Limit</b>	<b>Units</b>	<b>Dilution Factor</b>	<b>Date Analyzed</b>
<i>Surr: Toluene-d8</i>	97.2		85-110	%REC	1	6/29/2016 09:22 PM

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

# ALS Group USA, Corp

Date: 07-Jul-16

**Client:** AMEC Foster Wheeler

**Project:** Textron/Torx Rochester, IN 3359151040

**Work Order:** 16061409

**Sample ID:** ATR-EB001-G062216

**Lab ID:** 16061409-25

**Collection Date:** 6/22/2016 10:55 AM

**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>		Analyst: <b>BG</b>	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	6/29/2016 04:27 AM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	6/29/2016 04:27 AM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	6/29/2016 04:27 AM
1,1-Dichloroethane	ND		1.0	µg/L	1	6/29/2016 04:27 AM
1,1-Dichloroethene	ND		1.0	µg/L	1	6/29/2016 04:27 AM
1,2-Dichloroethane	ND		1.0	µg/L	1	6/29/2016 04:27 AM
1,2-Dichloropropane	ND		1.0	µg/L	1	6/29/2016 04:27 AM
2-Butanone	ND		5.0	µg/L	1	6/29/2016 04:27 AM
2-Hexanone	ND		5.0	µg/L	1	6/29/2016 04:27 AM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	6/29/2016 04:27 AM
<b>Acetone</b>	<b>11</b>		<b>10</b>	<b>µg/L</b>	1	6/29/2016 04:27 AM
Benzene	ND		1.0	µg/L	1	6/29/2016 04:27 AM
<b>Bromodichloromethane</b>	<b>1.7</b>		<b>1.0</b>	<b>µg/L</b>	1	6/29/2016 04:27 AM
Bromoform	ND		1.0	µg/L	1	6/29/2016 04:27 AM
Bromomethane	ND		1.0	µg/L	1	6/29/2016 04:27 AM
Carbon disulfide	ND		1.0	µg/L	1	6/29/2016 04:27 AM
Carbon tetrachloride	ND		1.0	µg/L	1	6/29/2016 04:27 AM
Chlorobenzene	ND		1.0	µg/L	1	6/29/2016 04:27 AM
Chloroethane	ND		1.0	µg/L	1	6/29/2016 04:27 AM
<b>Chloroform</b>	<b>8.6</b>		<b>1.0</b>	<b>µg/L</b>	1	6/29/2016 04:27 AM
Chloromethane	ND		1.0	µg/L	1	6/29/2016 04:27 AM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	6/29/2016 04:27 AM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	6/29/2016 04:27 AM
Dibromochloromethane	ND		1.0	µg/L	1	6/29/2016 04:27 AM
Ethylbenzene	ND		1.0	µg/L	1	6/29/2016 04:27 AM
m,p-Xylene	ND		2.0	µg/L	1	6/29/2016 04:27 AM
Methylene chloride	ND		5.0	µg/L	1	6/29/2016 04:27 AM
o-Xylene	ND		1.0	µg/L	1	6/29/2016 04:27 AM
Styrene	ND		1.0	µg/L	1	6/29/2016 04:27 AM
Tetrachloroethene	ND		1.0	µg/L	1	6/29/2016 04:27 AM
Toluene	ND		1.0	µg/L	1	6/29/2016 04:27 AM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	6/29/2016 04:27 AM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	6/29/2016 04:27 AM
Trichloroethene	ND		1.0	µg/L	1	6/29/2016 04:27 AM
Vinyl chloride	ND		1.0	µg/L	1	6/29/2016 04:27 AM
Xylenes, Total	ND		3.0	µg/L	1	6/29/2016 04:27 AM
Surr: 1,2-Dichloroethane-d4	101		75-120	%REC	1	6/29/2016 04:27 AM
Surr: 4-Bromofluorobenzene	95.8		80-110	%REC	1	6/29/2016 04:27 AM
Surr: Dibromofluoromethane	101		85-115	%REC	1	6/29/2016 04:27 AM

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

# ALS Group USA, Corp

Date: 07-Jul-16

**Client:** AMEC Foster Wheeler

**Project:** Textron/Torx Rochester, IN 3359151040

**Sample ID:** ATR-EB001-G062216

**Collection Date:** 6/22/2016 10:55 AM

**Work Order:** 16061409

**Lab ID:** 16061409-25

**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	96.7		85-110	%REC	1	6/29/2016 04:27 AM

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



# ALS Group USA, Corp

Date: 07-Jul-16

**Client:** AMEC Foster Wheeler

**Project:** Textron/Torx Rochester, IN 3359151040

**Work Order:** 16061409

**Sample ID:** ATR-MW35(90)-G062216

**Lab ID:** 16061409-26

**Collection Date:** 6/22/2016 11:50 AM

**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>			Analyst: <b>BJB</b>
1,1,1-Trichloroethane	ND		1.0	µg/L	1	6/29/2016 09:49 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	6/29/2016 09:49 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	6/29/2016 09:49 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	6/29/2016 09:49 PM
1,1-Dichloroethene	ND		1.0	µg/L	1	6/29/2016 09:49 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	6/29/2016 09:49 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	6/29/2016 09:49 PM
2-Butanone	ND		5.0	µg/L	1	6/29/2016 09:49 PM
2-Hexanone	ND		5.0	µg/L	1	6/29/2016 09:49 PM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	6/29/2016 09:49 PM
Acetone	ND		10	µg/L	1	6/29/2016 09:49 PM
Benzene	ND		1.0	µg/L	1	6/29/2016 09:49 PM
Bromodichloromethane	ND		1.0	µg/L	1	6/29/2016 09:49 PM
Bromoform	ND		1.0	µg/L	1	6/29/2016 09:49 PM
Bromomethane	ND		1.0	µg/L	1	6/29/2016 09:49 PM
Carbon disulfide	ND		1.0	µg/L	1	6/29/2016 09:49 PM
Carbon tetrachloride	ND		1.0	µg/L	1	6/29/2016 09:49 PM
Chlorobenzene	ND		1.0	µg/L	1	6/29/2016 09:49 PM
Chloroethane	ND		1.0	µg/L	1	6/29/2016 09:49 PM
Chloroform	ND		1.0	µg/L	1	6/29/2016 09:49 PM
Chloromethane	ND		1.0	µg/L	1	6/29/2016 09:49 PM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	6/29/2016 09:49 PM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	6/29/2016 09:49 PM
Dibromochloromethane	ND		1.0	µg/L	1	6/29/2016 09:49 PM
Ethylbenzene	ND		1.0	µg/L	1	6/29/2016 09:49 PM
m,p-Xylene	ND		2.0	µg/L	1	6/29/2016 09:49 PM
Methylene chloride	ND		5.0	µg/L	1	6/29/2016 09:49 PM
o-Xylene	ND		1.0	µg/L	1	6/29/2016 09:49 PM
Styrene	ND		1.0	µg/L	1	6/29/2016 09:49 PM
Tetrachloroethene	ND		1.0	µg/L	1	6/29/2016 09:49 PM
Toluene	ND		1.0	µg/L	1	6/29/2016 09:49 PM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	6/29/2016 09:49 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	6/29/2016 09:49 PM
Trichloroethene	ND		1.0	µg/L	1	6/29/2016 09:49 PM
Vinyl chloride	ND		1.0	µg/L	1	6/29/2016 09:49 PM
Xylenes, Total	ND		3.0	µg/L	1	6/29/2016 09:49 PM
Surr: 1,2-Dichloroethane-d4	98.1		75-120	%REC	1	6/29/2016 09:49 PM
Surr: 4-Bromofluorobenzene	94.8		80-110	%REC	1	6/29/2016 09:49 PM
Surr: Dibromofluoromethane	97.9		85-115	%REC	1	6/29/2016 09:49 PM

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

# ALS Group USA, Corp

Date: 07-Jul-16

**Client:** AMEC Foster Wheeler

**Project:** Textron/Torx Rochester, IN 3359151040

**Sample ID:** ATR-MW35(90)-G062216

**Collection Date:** 6/22/2016 11:50 AM

**Work Order:** 16061409

**Lab ID:** 16061409-26

**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	97.4		85-110	%REC	1	6/29/2016 09:49 PM

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

**ALS Group USA, Corp**

Date: 07-Jul-16

**Client:** AMEC Foster Wheeler

**Project:** Textron/Torx Rochester, IN 3359151040

**Work Order:** 16061409

**Sample ID:** ATR-MW35(148)-G062216

**Lab ID:** 16061409-27

**Collection Date:** 6/22/2016 11:10 AM

**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>			Analyst: <b>BJB</b>
1,1,1-Trichloroethane	ND		1.0	µg/L	1	6/29/2016 10:15 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	6/29/2016 10:15 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	6/29/2016 10:15 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	6/29/2016 10:15 PM
1,1-Dichloroethene	ND		1.0	µg/L	1	6/29/2016 10:15 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	6/29/2016 10:15 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	6/29/2016 10:15 PM
2-Butanone	ND		5.0	µg/L	1	6/29/2016 10:15 PM
2-Hexanone	ND		5.0	µg/L	1	6/29/2016 10:15 PM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	6/29/2016 10:15 PM
Acetone	ND		10	µg/L	1	6/29/2016 10:15 PM
Benzene	ND		1.0	µg/L	1	6/29/2016 10:15 PM
Bromodichloromethane	ND		1.0	µg/L	1	6/29/2016 10:15 PM
Bromoform	ND		1.0	µg/L	1	6/29/2016 10:15 PM
Bromomethane	ND		1.0	µg/L	1	6/29/2016 10:15 PM
Carbon disulfide	ND		1.0	µg/L	1	6/29/2016 10:15 PM
Carbon tetrachloride	ND		1.0	µg/L	1	6/29/2016 10:15 PM
Chlorobenzene	ND		1.0	µg/L	1	6/29/2016 10:15 PM
Chloroethane	ND		1.0	µg/L	1	6/29/2016 10:15 PM
Chloroform	ND		1.0	µg/L	1	6/29/2016 10:15 PM
Chloromethane	ND		1.0	µg/L	1	6/29/2016 10:15 PM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	6/29/2016 10:15 PM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	6/29/2016 10:15 PM
Dibromochloromethane	ND		1.0	µg/L	1	6/29/2016 10:15 PM
Ethylbenzene	ND		1.0	µg/L	1	6/29/2016 10:15 PM
m,p-Xylene	ND		2.0	µg/L	1	6/29/2016 10:15 PM
Methylene chloride	ND		5.0	µg/L	1	6/29/2016 10:15 PM
o-Xylene	ND		1.0	µg/L	1	6/29/2016 10:15 PM
Styrene	ND		1.0	µg/L	1	6/29/2016 10:15 PM
Tetrachloroethene	ND		1.0	µg/L	1	6/29/2016 10:15 PM
Toluene	ND		1.0	µg/L	1	6/29/2016 10:15 PM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	6/29/2016 10:15 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	6/29/2016 10:15 PM
Trichloroethene	ND		1.0	µg/L	1	6/29/2016 10:15 PM
Vinyl chloride	ND		1.0	µg/L	1	6/29/2016 10:15 PM
Xylenes, Total	ND		3.0	µg/L	1	6/29/2016 10:15 PM
Surr: 1,2-Dichloroethane-d4	103		75-120	%REC	1	6/29/2016 10:15 PM
Surr: 4-Bromofluorobenzene	94.6		80-110	%REC	1	6/29/2016 10:15 PM
Surr: Dibromofluoromethane	98.3		85-115	%REC	1	6/29/2016 10:15 PM

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

# ALS Group USA, Corp

Date: 07-Jul-16

**Client:** AMEC Foster Wheeler

**Project:** Textron/Torx Rochester, IN 3359151040

**Sample ID:** ATR-MW35(148)-G062216

**Collection Date:** 6/22/2016 11:10 AM

**Work Order:** 16061409

**Lab ID:** 16061409-27

**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	97.2		85-110	%REC	1	6/29/2016 10:15 PM

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

**ALS Group USA, Corp**

Date: 07-Jul-16

**Client:** AMEC Foster Wheeler

**Project:** Textron/Torx Rochester, IN 3359151040

**Work Order:** 16061409

**Sample ID:** ATR-EB002-G062216

**Lab ID:** 16061409-28

**Collection Date:** 6/22/2016 11:35 AM

**Matrix:** GROUNDWATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<b>VOLATILE ORGANIC COMPOUNDS</b>			<b>SW8260B</b>		Analyst: <b>LSY</b>	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	6/30/2016 06:49 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	6/30/2016 06:49 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	6/30/2016 06:49 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	6/30/2016 06:49 PM
1,1-Dichloroethene	ND		1.0	µg/L	1	6/30/2016 06:49 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	6/30/2016 06:49 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	6/30/2016 06:49 PM
2-Butanone	ND		5.0	µg/L	1	6/30/2016 06:49 PM
2-Hexanone	ND		5.0	µg/L	1	6/30/2016 06:49 PM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	6/30/2016 06:49 PM
<b>Acetone</b>	<b>12</b>		<b>10</b>	<b>µg/L</b>	1	6/30/2016 06:49 PM
Benzene	ND		1.0	µg/L	1	6/30/2016 06:49 PM
<b>Bromodichloromethane</b>	<b>1.5</b>		<b>1.0</b>	<b>µg/L</b>	1	6/30/2016 06:49 PM
Bromoform	ND		1.0	µg/L	1	6/30/2016 06:49 PM
Bromomethane	ND		1.0	µg/L	1	6/30/2016 06:49 PM
Carbon disulfide	ND		1.0	µg/L	1	6/30/2016 06:49 PM
Carbon tetrachloride	ND		1.0	µg/L	1	6/30/2016 06:49 PM
Chlorobenzene	ND		1.0	µg/L	1	6/30/2016 06:49 PM
Chloroethane	ND		1.0	µg/L	1	6/30/2016 06:49 PM
<b>Chloroform</b>	<b>7.5</b>		<b>1.0</b>	<b>µg/L</b>	1	6/30/2016 06:49 PM
<b>Chloromethane</b>	<b>1.3</b>		<b>1.0</b>	<b>µg/L</b>	1	6/30/2016 06:49 PM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	6/30/2016 06:49 PM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	6/30/2016 06:49 PM
Dibromochloromethane	ND		1.0	µg/L	1	6/30/2016 06:49 PM
Ethylbenzene	ND		1.0	µg/L	1	6/30/2016 06:49 PM
m,p-Xylene	ND		2.0	µg/L	1	6/30/2016 06:49 PM
Methylene chloride	ND		5.0	µg/L	1	6/30/2016 06:49 PM
o-Xylene	ND		1.0	µg/L	1	6/30/2016 06:49 PM
Styrene	ND		1.0	µg/L	1	6/30/2016 06:49 PM
Tetrachloroethene	ND		1.0	µg/L	1	6/30/2016 06:49 PM
Toluene	ND		1.0	µg/L	1	6/30/2016 06:49 PM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	6/30/2016 06:49 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	6/30/2016 06:49 PM
Trichloroethene	ND		1.0	µg/L	1	6/30/2016 06:49 PM
Vinyl chloride	ND		1.0	µg/L	1	6/30/2016 06:49 PM
Xylenes, Total	ND		3.0	µg/L	1	6/30/2016 06:49 PM
Surr: 1,2-Dichloroethane-d4	101		75-120	%REC	1	6/30/2016 06:49 PM
Surr: 4-Bromofluorobenzene	94.4		80-110	%REC	1	6/30/2016 06:49 PM
Surr: Dibromofluoromethane	98.0		85-115	%REC	1	6/30/2016 06:49 PM

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

# ALS Group USA, Corp

Date: 07-Jul-16

**Client:** AMEC Foster Wheeler

**Project:** Textron/Torx Rochester, IN 3359151040

**Sample ID:** ATR-EB002-G062216

**Collection Date:** 6/22/2016 11:35 AM

**Work Order:** 16061409

**Lab ID:** 16061409-28

**Matrix:** GROUNDWATER

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Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	97.6		85-110	%REC	1	6/30/2016 06:49 PM

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

**Client:** AMEC Foster Wheeler  
**Project:** Textron/Torx Rochester, IN 3359151040  
**WorkOrder:** 16061409

**QUALIFIERS,  
ACRONYMS, UNITS**

<u>Qualifier</u>	<u>Description</u>
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte is present at an estimated concentration between the MDL and Report Limit
n	Not offered for accreditation
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
mg/L	Milligrams per Liter

Client: AMEC Foster Wheeler

**QC BATCH REPORT**

Work Order: 16061409

Project: Textron/Torx Rochester, IN 3359151040

Batch ID: **R190435**

Instrument ID **VMS6**

Method: **SW8260B**

MBLK		Sample ID: <b>VBK1-160628-R190435</b>				Units: <b>µg/L</b>		Analysis Date: <b>6/28/2016 02:55 PM</b>		
Client ID:		Run ID: <b>VMS6_160628A</b>				SeqNo: <b>3898168</b>		Prep Date:		DF: <b>1</b>
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloroethane	ND	1.0								
1,2-Dichloropropane	ND	1.0								
2-Butanone	ND	5.0								
2-Hexanone	ND	5.0								
4-Methyl-2-pentanone	ND	1.0								
Acetone	ND	10								
Benzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	1.0								
Carbon disulfide	ND	1.0								
Carbon tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	1.0								
Chloroform	ND	1.0								
Chloromethane	ND	1.0								
cis-1,2-Dichloroethene	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
Dibromochloromethane	ND	1.0								
Ethylbenzene	ND	1.0								
m,p-Xylene	ND	2.0								
Methylene chloride	ND	5.0								
o-Xylene	ND	1.0								
Styrene	ND	1.0								
Tetrachloroethene	ND	1.0								
Toluene	ND	1.0								
trans-1,2-Dichloroethene	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
Trichloroethene	ND	1.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	3.0								
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>19.79</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>99</i>	<i>75-120</i>	<i>0</i>			
<i>Surr: 4-Bromofluorobenzene</i>	<i>18.62</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>93.1</i>	<i>80-110</i>	<i>0</i>			
<i>Surr: Dibromofluoromethane</i>	<i>19.23</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>96.2</i>	<i>85-115</i>	<i>0</i>			
<i>Surr: Toluene-d8</i>	<i>19.71</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>98.6</i>	<i>85-110</i>	<i>0</i>			

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



Client: AMEC Foster Wheeler  
 Work Order: 16061409  
 Project: Textron/Torx Rochester, IN 3359151040

# QC BATCH REPORT

Batch ID: R190435 Instrument ID VMS6 Method: SW8260B

LCS		Sample ID: VLCSW1-160628-R190435				Units: µg/L		Analysis Date: 6/28/2016 02:03 PM		
Client ID:		Run ID: VMS6_160628A			SeqNo: 3898167		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	19.97	1.0	20	0	99.8	75-130	0			
1,1,2,2-Tetrachloroethane	19.85	1.0	20	0	99.2	75-130	0			
1,1,2-Trichloroethane	21.67	1.0	20	0	108	75-125	0			
1,1-Dichloroethane	21.11	1.0	20	0	106	75-133	0			
1,1-Dichloroethene	20.56	1.0	20	0	103	70-145	0			
1,2-Dichloroethane	20.87	1.0	20	0	104	78-125	0			
1,2-Dichloropropane	20.19	1.0	20	0	101	75-125	0			
2-Butanone	17.65	5.0	20	0	88.2	55-150	0			
2-Hexanone	19.43	5.0	20	0	97.2	60-135	0			
4-Methyl-2-pentanone	25.7	1.0	20	0	128	77-178	0			
Acetone	17.69	10	20	0	88.4	60-160	0			
Benzene	20.79	1.0	20	0	104	85-125	0			
Bromodichloromethane	19.49	1.0	20	0	97.4	75-125	0			
Bromoform	16.88	1.0	20	0	84.4	60-125	0			
Bromomethane	18.9	1.0	20	0	94.5	30-185	0			
Carbon disulfide	20.03	1.0	20	0	100	60-165	0			
Carbon tetrachloride	19.54	1.0	20	0	97.7	65-140	0			
Chlorobenzene	20.22	1.0	20	0	101	80-120	0			
Chloroethane	23.46	1.0	20	0	117	50-140	0			
Chloroform	19.25	1.0	20	0	96.2	80-130	0			
Chloromethane	16.42	1.0	20	0	82.1	50-130	0			
cis-1,2-Dichloroethene	20.49	1.0	20	0	102	75-134	0			
cis-1,3-Dichloropropene	18.72	1.0	20	0	93.6	70-130	0			
Dibromochloromethane	17.94	1.0	20	0	89.7	60-115	0			
Ethylbenzene	19.41	1.0	20	0	97	85-125	0			
m,p-Xylene	38.65	2.0	40	0	96.6	75-130	0			
Methylene chloride	20.25	5.0	20	0	101	75-140	0			
o-Xylene	18.87	1.0	20	0	94.4	80-125	0			
Styrene	19.44	1.0	20	0	97.2	85-125	0			
Tetrachloroethene	20.25	1.0	20	0	101	77-138	0			
Toluene	21.37	1.0	20	0	107	85-125	0			
trans-1,2-Dichloroethene	20.92	1.0	20	0	105	80-140	0			
trans-1,3-Dichloropropene	18.96	1.0	20	0	94.8	81-123	0			
Trichloroethene	20.09	1.0	20	0	100	84-130	0			
Vinyl chloride	17.5	1.0	20	0	87.5	50-136	0			
Xylenes, Total	57.52	3.0	60	0	95.9	80-126	0			
Surr: 1,2-Dichloroethane-d4	19.48	0	20	0	97.4	75-120	0			
Surr: 4-Bromofluorobenzene	19.52	0	20	0	97.6	80-110	0			
Surr: Dibromofluoromethane	19.99	0	20	0	100	85-115	0			
Surr: Toluene-d8	20.55	0	20	0	103	85-110	0			

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

Client: AMEC Foster Wheeler  
 Work Order: 16061409  
 Project: Textron/Torx Rochester, IN 3359151040

# QC BATCH REPORT

Batch ID: R190435 Instrument ID VMS6 Method: SW8260B

MS		Sample ID: 16061409-12A MS				Units: µg/L		Analysis Date: 6/28/2016 11:13 PM		
Client ID: ATR-MW37(23.3)-G062116		Run ID: VMS6_160628A		SeqNo: 3898181		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	20.26	1.0	20	0	101	75-130	0			
1,1,2,2-Tetrachloroethane	18.26	1.0	20	0	91.3	75-130	0			
1,1,2-Trichloroethane	19.4	1.0	20	0	97	75-125	0			
1,1-Dichloroethane	20.53	1.0	20	0	103	75-133	0			
1,1-Dichloroethene	21.23	1.0	20	0	106	70-145	0			
1,2-Dichloroethane	19.89	1.0	20	0	99.4	78-125	0			
1,2-Dichloropropane	19.34	1.0	20	0	96.7	75-125	0			
2-Butanone	17.57	5.0	20	0	87.8	55-150	0			
2-Hexanone	18.4	5.0	20	0	92	60-135	0			
4-Methyl-2-pentanone	23.55	1.0	20	0	118	77-178	0			
Acetone	17.73	10	20	0	88.6	60-160	0			
Benzene	20.67	1.0	20	0	103	85-125	0			
Bromodichloromethane	18.86	1.0	20	0	94.3	75-125	0			
Bromoform	15.35	1.0	20	0	76.8	60-125	0			
Bromomethane	13.15	1.0	20	0	65.8	30-185	0			
Carbon disulfide	19.42	1.0	20	0	97.1	60-165	0			
Carbon tetrachloride	20.5	1.0	20	0	102	65-140	0			
Chlorobenzene	19.85	1.0	20	0	99.2	80-120	0			
Chloroethane	22.75	1.0	20	0	114	50-140	0			
Chloroform	19.09	1.0	20	0	95.4	80-130	0			
Chloromethane	14.7	1.0	20	0	73.5	50-130	0			
cis-1,2-Dichloroethene	19.99	1.0	20	0	100	75-134	0			
cis-1,3-Dichloropropene	18.29	1.0	20	0	91.4	70-130	0			
Dibromochloromethane	16.57	1.0	20	0	82.8	60-115	0			
Ethylbenzene	19.98	1.0	20	0	99.9	85-125	0			
m,p-Xylene	39.96	2.0	40	0	99.9	75-130	0			
Methylene chloride	20.49	5.0	20	0	102	75-140	0			
o-Xylene	19.04	1.0	20	0	95.2	80-125	0			
Styrene	19.17	1.0	20	0	95.8	85-125	0			
Tetrachloroethene	20.71	1.0	20	0	104	77-138	0			
Toluene	20.4	1.0	20	0	102	85-125	0			
trans-1,2-Dichloroethene	20.49	1.0	20	0	102	80-140	0			
trans-1,3-Dichloropropene	16.44	1.0	20	0	82.2	81-123	0			
Trichloroethene	20.63	1.0	20	0	103	84-130	0			
Vinyl chloride	16.98	1.0	20	0	84.9	50-136	0			
Xylenes, Total	59	3.0	60	0	98.3	80-126	0			
Surr: 1,2-Dichloroethane-d4	19.67	0	20	0	98.4	75-120	0			
Surr: 4-Bromofluorobenzene	19.23	0	20	0	96.2	80-110	0			
Surr: Dibromofluoromethane	19.84	0	20	0	99.2	85-115	0			
Surr: Toluene-d8	19.63	0	20	0	98.2	85-110	0			

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

Client: AMEC Foster Wheeler  
 Work Order: 16061409  
 Project: Textron/Torx Rochester, IN 3359151040

# QC BATCH REPORT

Batch ID: R190435 Instrument ID VMS6 Method: SW8260B

MSD		Sample ID: 16061409-12A MSD				Units: µg/L		Analysis Date: 6/28/2016 11:39 PM		
Client ID: ATR-MW37(23.3)-G062116		Run ID: VMS6_160628A		SeqNo: 3898182		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	19.35	1.0	20	0	96.8	75-130	20.26	4.59	30	
1,1,2,2-Tetrachloroethane	18.17	1.0	20	0	90.8	75-130	18.26	0.494	30	
1,1,2-Trichloroethane	19.13	1.0	20	0	95.6	75-125	19.4	1.4	30	
1,1-Dichloroethane	19.11	1.0	20	0	95.6	75-133	20.53	7.16	30	
1,1-Dichloroethene	19.5	1.0	20	0	97.5	70-145	21.23	8.49	30	
1,2-Dichloroethane	18.97	1.0	20	0	94.8	78-125	19.89	4.73	30	
1,2-Dichloropropane	18.98	1.0	20	0	94.9	75-125	19.34	1.88	30	
2-Butanone	16.8	5.0	20	0	84	55-150	17.57	4.48	30	
2-Hexanone	18.51	5.0	20	0	92.6	60-135	18.4	0.596	30	
4-Methyl-2-pentanone	25.06	1.0	20	0	125	77-178	23.55	6.21	30	
Acetone	17.9	10	20	0	89.5	60-160	17.73	0.954	30	
Benzene	19.46	1.0	20	0	97.3	85-125	20.67	6.03	30	
Bromodichloromethane	18.1	1.0	20	0	90.5	75-125	18.86	4.11	30	
Bromoform	15.01	1.0	20	0	75	60-125	15.35	2.24	30	
Bromomethane	14.75	1.0	20	0	73.8	30-185	13.15	11.5	30	
Carbon disulfide	18.51	1.0	20	0	92.6	60-165	19.42	4.8	30	
Carbon tetrachloride	18.65	1.0	20	0	93.2	65-140	20.5	9.45	30	
Chlorobenzene	19.19	1.0	20	0	96	80-120	19.85	3.38	30	
Chloroethane	21.01	1.0	20	0	105	50-140	22.75	7.95	30	
Chloroform	17.75	1.0	20	0	88.8	80-130	19.09	7.27	30	
Chloromethane	15.82	1.0	20	0	79.1	50-130	14.7	7.34	30	
cis-1,2-Dichloroethene	18.7	1.0	20	0	93.5	75-134	19.99	6.67	30	
cis-1,3-Dichloropropene	17.35	1.0	20	0	86.8	70-130	18.29	5.27	30	
Dibromochloromethane	16.23	1.0	20	0	81.2	60-115	16.57	2.07	30	
Ethylbenzene	19.18	1.0	20	0	95.9	85-125	19.98	4.09	30	
m,p-Xylene	38.34	2.0	40	0	95.8	75-130	39.96	4.14	30	
Methylene chloride	19.09	5.0	20	0	95.4	75-140	20.49	7.07	30	
o-Xylene	18.64	1.0	20	0	93.2	80-125	19.04	2.12	30	
Styrene	18.64	1.0	20	0	93.2	85-125	19.17	2.8	30	
Tetrachloroethene	20.34	1.0	20	0	102	77-138	20.71	1.8	30	
Toluene	19.68	1.0	20	0	98.4	85-125	20.4	3.59	30	
trans-1,2-Dichloroethene	19.17	1.0	20	0	95.8	80-140	20.49	6.66	30	
trans-1,3-Dichloropropene	16.64	1.0	20	0	83.2	81-123	16.44	1.21	30	
Trichloroethene	20.11	1.0	20	0	101	84-130	20.63	2.55	30	
Vinyl chloride	16.54	1.0	20	0	82.7	50-136	16.98	2.63	30	
Xylenes, Total	56.98	3.0	60	0	95	80-126	59	3.48	30	
Surr: 1,2-Dichloroethane-d4	19.71	0	20	0	98.6	75-120	19.67	0.203	30	
Surr: 4-Bromofluorobenzene	19.96	0	20	0	99.8	80-110	19.23	3.73	30	
Surr: Dibromofluoromethane	20.08	0	20	0	100	85-115	19.84	1.2	30	
Surr: Toluene-d8	19.91	0	20	0	99.6	85-110	19.63	1.42	30	

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

**Client:** AMEC Foster Wheeler  
**Work Order:** 16061409  
**Project:** Textron/Torx Rochester, IN 3359151040

# QC BATCH REPORT

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Batch ID: **R190435**      Instrument ID **VMS6**      Method: **SW8260B**

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**The following samples were analyzed in this batch:**

16061409-01A	16061409-02A	16061409-03A
16061409-04A	16061409-05A	16061409-09A
16061409-12A		

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

Client: AMEC Foster Wheeler  
 Work Order: 16061409  
 Project: Textron/Torx Rochester, IN 3359151040

# QC BATCH REPORT

Batch ID: **R190470** Instrument ID **VMS6** Method: **SW8260B**

MBLK		Sample ID: <b>VBLKW2-160628-R190470</b>				Units: <b>µg/L</b>		Analysis Date: <b>6/29/2016 02:42 AM</b>		
Client ID:		Run ID: <b>VMS6_160628B</b>		SeqNo: <b>3898928</b>		Prep Date:		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloroethane	ND	1.0								
1,2-Dichloropropane	ND	1.0								
2-Butanone	ND	5.0								
2-Hexanone	ND	5.0								
4-Methyl-2-pentanone	ND	1.0								
Acetone	ND	10								
Benzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	1.0								
Carbon disulfide	ND	1.0								
Carbon tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	1.0								
Chloroform	ND	1.0								
Chloromethane	ND	1.0								
cis-1,2-Dichloroethene	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
Dibromochloromethane	ND	1.0								
Ethylbenzene	ND	1.0								
m,p-Xylene	ND	2.0								
Methylene chloride	ND	5.0								
o-Xylene	ND	1.0								
Styrene	ND	1.0								
Tetrachloroethene	ND	1.0								
Toluene	ND	1.0								
trans-1,2-Dichloroethene	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
Trichloroethene	ND	1.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	3.0								
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>19.77</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>98.8</i>	<i>75-120</i>	<i>0</i>			
<i>Surr: 4-Bromofluorobenzene</i>	<i>19.03</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>95.2</i>	<i>80-110</i>	<i>0</i>			
<i>Surr: Dibromofluoromethane</i>	<i>19.5</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>97.5</i>	<i>85-115</i>	<i>0</i>			
<i>Surr: Toluene-d8</i>	<i>19.72</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>98.6</i>	<i>85-110</i>	<i>0</i>			

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

Client: AMEC Foster Wheeler  
 Work Order: 16061409  
 Project: Textron/Torx Rochester, IN 3359151040

# QC BATCH REPORT

Batch ID: **R190470** Instrument ID **VMS6** Method: **SW8260B**

LCS		Sample ID: <b>VLCSW2-160628-R190470</b>				Units: <b>µg/L</b>		Analysis Date: <b>6/29/2016 01:50 AM</b>		
Client ID:		Run ID: <b>VMS6_160628B</b>			SeqNo: <b>3898927</b>		Prep Date:		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	20.93	1.0	20	0	105	75-130	0			
1,1,2,2-Tetrachloroethane	20.68	1.0	20	0	103	75-130	0			
1,1,2-Trichloroethane	20.77	1.0	20	0	104	75-125	0			
1,1-Dichloroethane	20.58	1.0	20	0	103	75-133	0			
1,1-Dichloroethene	20.72	1.0	20	0	104	70-145	0			
1,2-Dichloroethane	20.56	1.0	20	0	103	78-125	0			
1,2-Dichloropropane	19.77	1.0	20	0	98.8	75-125	0			
2-Butanone	18.24	5.0	20	0	91.2	55-150	0			
2-Hexanone	20.28	5.0	20	0	101	60-135	0			
4-Methyl-2-pentanone	27.53	1.0	20	0	138	77-178	0			
Acetone	23.3	10	20	0	116	60-160	0			
Benzene	20.58	1.0	20	0	103	85-125	0			
Bromodichloromethane	20.15	1.0	20	0	101	75-125	0			
Bromoform	17.98	1.0	20	0	89.9	60-125	0			
Bromomethane	15.39	1.0	20	0	77	30-185	0			
Carbon disulfide	19.36	1.0	20	0	96.8	60-165	0			
Carbon tetrachloride	20.29	1.0	20	0	101	65-140	0			
Chlorobenzene	20.79	1.0	20	0	104	80-120	0			
Chloroethane	19.62	1.0	20	0	98.1	50-140	0			
Chloroform	19.65	1.0	20	0	98.2	80-130	0			
Chloromethane	16.43	1.0	20	0	82.2	50-130	0			
cis-1,2-Dichloroethene	19.68	1.0	20	0	98.4	75-134	0			
cis-1,3-Dichloropropene	19.03	1.0	20	0	95.2	70-130	0			
Dibromochloromethane	18.23	1.0	20	0	91.2	60-115	0			
Ethylbenzene	20.45	1.0	20	0	102	85-125	0			
m,p-Xylene	41.35	2.0	40	0	103	75-130	0			
Methylene chloride	19.74	5.0	20	0	98.7	75-140	0			
o-Xylene	19.87	1.0	20	0	99.4	80-125	0			
Styrene	20.02	1.0	20	0	100	85-125	0			
Tetrachloroethene	21.29	1.0	20	0	106	77-138	0			
Toluene	21.04	1.0	20	0	105	85-125	0			
trans-1,2-Dichloroethene	20.27	1.0	20	0	101	80-140	0			
trans-1,3-Dichloropropene	17.94	1.0	20	0	89.7	81-123	0			
Trichloroethene	21.24	1.0	20	0	106	84-130	0			
Vinyl chloride	16.81	1.0	20	0	84	50-136	0			
Xylenes, Total	61.22	3.0	60	0	102	80-126	0			
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>19.45</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>97.2</i>	<i>75-120</i>	<i>0</i>			
<i>Surr: 4-Bromofluorobenzene</i>	<i>19.65</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>98.2</i>	<i>80-110</i>	<i>0</i>			
<i>Surr: Dibromofluoromethane</i>	<i>19.14</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>95.7</i>	<i>85-115</i>	<i>0</i>			
<i>Surr: Toluene-d8</i>	<i>19.72</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>98.6</i>	<i>85-110</i>	<i>0</i>			

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

Client: AMEC Foster Wheeler  
 Work Order: 16061409  
 Project: Textron/Torx Rochester, IN 3359151040

# QC BATCH REPORT

Batch ID: R190470 Instrument ID VMS6 Method: SW8260B

MS		Sample ID: 16061409-19A MS				Units: µg/L		Analysis Date: 6/29/2016 11:55 AM		
Client ID: ATR-MW85(130)-G062116		Run ID: VMS6_160628B		SeqNo: 3898950		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	20.32	1.0	20	0	102	75-130	0			
1,1,2,2-Tetrachloroethane	18.25	1.0	20	0	91.2	75-130	0			
1,1,2-Trichloroethane	19.65	1.0	20	0	98.2	75-125	0			
1,1-Dichloroethane	19.92	1.0	20	0	99.6	75-133	0			
1,1-Dichloroethene	20.89	1.0	20	0	104	70-145	0			
1,2-Dichloroethane	19.75	1.0	20	0	98.8	78-125	0			
1,2-Dichloropropane	18.8	1.0	20	0	94	75-125	0			
2-Butanone	17.14	5.0	20	0	85.7	55-150	0			
2-Hexanone	17.6	5.0	20	0	88	60-135	0			
4-Methyl-2-pentanone	23.93	1.0	20	0	120	77-178	0			
Acetone	20.28	10	20	0	101	60-160	0			
Benzene	20.51	1.0	20	0	103	85-125	0			
Bromodichloromethane	18.67	1.0	20	0	93.4	75-125	0			
Bromoform	15.83	1.0	20	0	79.2	60-125	0			
Bromomethane	9.74	1.0	20	0	48.7	30-185	0			
Carbon disulfide	19.69	1.0	20	0	98.4	60-165	0			
Carbon tetrachloride	20.12	1.0	20	0	101	65-140	0			
Chlorobenzene	19.88	1.0	20	0	99.4	80-120	0			
Chloroethane	21.57	1.0	20	0	108	50-140	0			
Chloroform	18.9	1.0	20	0	94.5	80-130	0			
Chloromethane	15.09	1.0	20	0	75.4	50-130	0			
cis-1,2-Dichloroethene	18.95	1.0	20	0	94.8	75-134	0			
cis-1,3-Dichloropropene	17.5	1.0	20	0	87.5	70-130	0			
Dibromochloromethane	16.71	1.0	20	0	83.6	60-115	0			
Ethylbenzene	20.01	1.0	20	0	100	85-125	0			
m,p-Xylene	39.56	2.0	40	0	98.9	75-130	0			
Methylene chloride	19.87	5.0	20	0	99.4	75-140	0			
o-Xylene	19.03	1.0	20	0	95.2	80-125	0			
Styrene	19.17	1.0	20	0	95.8	85-125	0			
Tetrachloroethene	20.82	1.0	20	0	104	77-138	0			
Toluene	20.53	1.0	20	0	103	85-125	0			
trans-1,2-Dichloroethene	20.41	1.0	20	0	102	80-140	0			
trans-1,3-Dichloropropene	15.93	1.0	20	0	79.6	81-123	0			S
Trichloroethene	20.67	1.0	20	0	103	84-130	0			
Vinyl chloride	17.69	1.0	20	0	88.4	50-136	0			
Xylenes, Total	58.59	3.0	60	0	97.6	80-126	0			
Surr: 1,2-Dichloroethane-d4	19.84	0	20	0	99.2	75-120	0			
Surr: 4-Bromofluorobenzene	19.82	0	20	0	99.1	80-110	0			
Surr: Dibromofluoromethane	20.22	0	20	0	101	85-115	0			
Surr: Toluene-d8	19.72	0	20	0	98.6	85-110	0			

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

Client: AMEC Foster Wheeler  
 Work Order: 16061409  
 Project: Textron/Torx Rochester, IN 3359151040

# QC BATCH REPORT

Batch ID: R190470 Instrument ID VMS6 Method: SW8260B

MSD		Sample ID: 16061409-19A MSD				Units: µg/L		Analysis Date: 6/29/2016 12:21 PM		
Client ID: ATR-MW85(130)-G062116		Run ID: VMS6_160628B		SeqNo: 3898951		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	15.92	1.0	20	0	79.6	75-130	20.32	24.3	30	
1,1,2,2-Tetrachloroethane	14.58	1.0	20	0	72.9	75-130	18.25	22.4	30	S
1,1,2-Trichloroethane	15.24	1.0	20	0	76.2	75-125	19.65	25.3	30	
1,1-Dichloroethane	15.9	1.0	20	0	79.5	75-133	19.92	22.4	30	
1,1-Dichloroethene	16.54	1.0	20	0	82.7	70-145	20.89	23.2	30	
1,2-Dichloroethane	15.14	1.0	20	0	75.7	78-125	19.75	26.4	30	S
1,2-Dichloropropane	14.78	1.0	20	0	73.9	75-125	18.8	23.9	30	S
2-Butanone	13.65	5.0	20	0	68.2	55-150	17.14	22.7	30	
2-Hexanone	13.99	5.0	20	0	70	60-135	17.6	22.9	30	
4-Methyl-2-pentanone	19.14	1.0	20	0	95.7	77-178	23.93	22.2	30	
Acetone	15.72	10	20	0	78.6	60-160	20.28	25.3	30	
Benzene	15.68	1.0	20	0	78.4	85-125	20.51	26.7	30	S
Bromodichloromethane	14.54	1.0	20	0	72.7	75-125	18.67	24.9	30	S
Bromoform	12.61	1.0	20	0	63	60-125	15.83	22.6	30	
Bromomethane	10.54	1.0	20	0	52.7	30-185	9.74	7.89	30	
Carbon disulfide	15.63	1.0	20	0	78.2	60-165	19.69	23	30	
Carbon tetrachloride	16.07	1.0	20	0	80.4	65-140	20.12	22.4	30	
Chlorobenzene	15.69	1.0	20	0	78.4	80-120	19.88	23.6	30	S
Chloroethane	16.79	1.0	20	0	84	50-140	21.57	24.9	30	
Chloroform	14.53	1.0	20	0	72.6	80-130	18.9	26.1	30	S
Chloromethane	12.51	1.0	20	0	62.6	50-130	15.09	18.7	30	
cis-1,2-Dichloroethene	15.25	1.0	20	0	76.2	75-134	18.95	21.6	30	
cis-1,3-Dichloropropene	13.19	1.0	20	0	66	70-130	17.5	28.1	30	S
Dibromochloromethane	13.36	1.0	20	0	66.8	60-115	16.71	22.3	30	
Ethylbenzene	15.48	1.0	20	0	77.4	85-125	20.01	25.5	30	S
m,p-Xylene	30.8	2.0	40	0	77	75-130	39.56	24.9	30	
Methylene chloride	15.58	5.0	20	0	77.9	75-140	19.87	24.2	30	
o-Xylene	15	1.0	20	0	75	80-125	19.03	23.7	30	S
Styrene	15.12	1.0	20	0	75.6	85-125	19.17	23.6	30	S
Tetrachloroethene	16.39	1.0	20	0	82	77-138	20.82	23.8	30	
Toluene	16.07	1.0	20	0	80.4	85-125	20.53	24.4	30	S
trans-1,2-Dichloroethene	15.62	1.0	20	0	78.1	80-140	20.41	26.6	30	S
trans-1,3-Dichloropropene	12.68	1.0	20	0	63.4	81-123	15.93	22.7	30	S
Trichloroethene	16.35	1.0	20	0	81.8	84-130	20.67	23.3	30	S
Vinyl chloride	13.79	1.0	20	0	69	50-136	17.69	24.8	30	
Xylenes, Total	45.8	3.0	60	0	76.3	80-126	58.59	24.5	30	S
Surr: 1,2-Dichloroethane-d4	19.24	0	20	0	96.2	75-120	19.84	3.07	30	
Surr: 4-Bromofluorobenzene	19.65	0	20	0	98.2	80-110	19.82	0.861	30	
Surr: Dibromofluoromethane	19.55	0	20	0	97.8	85-115	20.22	3.37	30	
Surr: Toluene-d8	19.8	0	20	0	99	85-110	19.72	0.405	30	

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



**Client:** AMEC Foster Wheeler  
**Work Order:** 16061409  
**Project:** Textron/Torx Rochester, IN 3359151040

# QC BATCH REPORT

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Batch ID: **R190470**      Instrument ID **VMS6**      Method: **SW8260B**

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**The following samples were analyzed in this batch:**

16061409-06A	16061409-07A	16061409-08A
16061409-10A	16061409-11A	16061409-13A
16061409-14A	16061409-15A	16061409-16A
16061409-17A	16061409-18A	16061409-19A
16061409-20A	16061409-21A	16061409-22A
16061409-25A		

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

Client: AMEC Foster Wheeler  
 Work Order: 16061409  
 Project: Textron/Torx Rochester, IN 3359151040

# QC BATCH REPORT

Batch ID: R190541 Instrument ID VMS6 Method: SW8260B

MBLK		Sample ID: VBLKW1-160629-R190541				Units: µg/L		Analysis Date: 6/29/2016 04:34 PM		
Client ID:		Run ID: VMS6_160629A		SeqNo: 3900485		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	19.78	0	20	0	98.9	75-120	0			
Surr: 4-Bromofluorobenzene	19.03	0	20	0	95.2	80-110	0			
Surr: Dibromofluoromethane	19.49	0	20	0	97.4	85-115	0			
Surr: Toluene-d8	20.05	0	20	0	100	85-110	0			

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

Client: AMEC Foster Wheeler  
 Work Order: 16061409  
 Project: Textron/Torx Rochester, IN 3359151040

# QC BATCH REPORT

Batch ID: R190541 Instrument ID VMS6 Method: SW8260B

LCS		Sample ID: VLCSW1-160629-R190541				Units: µg/L		Analysis Date: 6/29/2016 03:16 PM		
Client ID:		Run ID: VMS6_160629A			SeqNo: 3900484		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	20.9	1.0	20	0	104	75-130	0			
1,1,2,2-Tetrachloroethane	21.09	1.0	20	0	105	75-130	0			
1,1,2-Trichloroethane	21.69	1.0	20	0	108	75-125	0			
1,1-Dichloroethane	21.39	1.0	20	0	107	75-133	0			
1,1-Dichloroethene	20.61	1.0	20	0	103	70-145	0			
1,2-Dichloroethane	21.51	1.0	20	0	108	78-125	0			
1,2-Dichloropropane	20.85	1.0	20	0	104	75-125	0			
2-Butanone	20.35	5.0	20	0	102	55-150	0			
2-Hexanone	19.38	5.0	20	0	96.9	60-135	0			
4-Methyl-2-pentanone	27.43	1.0	20	0	137	77-178	0			
Acetone	22.49	10	20	0	112	60-160	0			
Benzene	21.63	1.0	20	0	108	85-125	0			
Bromodichloromethane	20.28	1.0	20	0	101	75-125	0			
Bromoform	17.34	1.0	20	0	86.7	60-125	0			
Bromomethane	16.33	1.0	20	0	81.6	30-185	0			
Carbon disulfide	19.56	1.0	20	0	97.8	60-165	0			
Carbon tetrachloride	19.7	1.0	20	0	98.5	65-140	0			
Chlorobenzene	21.5	1.0	20	0	108	80-120	0			
Chloroethane	18.87	1.0	20	0	94.4	50-140	0			
Chloroform	20.24	1.0	20	0	101	80-130	0			
Chloromethane	16.18	1.0	20	0	80.9	50-130	0			
cis-1,2-Dichloroethene	21.37	1.0	20	0	107	75-134	0			
cis-1,3-Dichloropropene	19.29	1.0	20	0	96.4	70-130	0			
Dibromochloromethane	17.96	1.0	20	0	89.8	60-115	0			
Ethylbenzene	20.58	1.0	20	0	103	85-125	0			
m,p-Xylene	41.55	2.0	40	0	104	75-130	0			
Methylene chloride	20.77	5.0	20	0	104	75-140	0			
o-Xylene	20.34	1.0	20	0	102	80-125	0			
Styrene	20.56	1.0	20	0	103	85-125	0			
Tetrachloroethene	21.26	1.0	20	0	106	77-138	0			
Toluene	21.77	1.0	20	0	109	85-125	0			
trans-1,2-Dichloroethene	21.51	1.0	20	0	108	80-140	0			
trans-1,3-Dichloropropene	18.31	1.0	20	0	91.6	81-123	0			
Trichloroethene	21.6	1.0	20	0	108	84-130	0			
Vinyl chloride	16.82	1.0	20	0	84.1	50-136	0			
Xylenes, Total	61.89	3.0	60	0	103	80-126	0			
Surr: 1,2-Dichloroethane-d4	19.38	0	20	0	96.9	75-120	0			
Surr: 4-Bromofluorobenzene	19.36	0	20	0	96.8	80-110	0			
Surr: Dibromofluoromethane	20.09	0	20	0	100	85-115	0			
Surr: Toluene-d8	20.14	0	20	0	101	85-110	0			

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

Client: AMEC Foster Wheeler  
 Work Order: 16061409  
 Project: Textron/Torx Rochester, IN 3359151040

# QC BATCH REPORT

Batch ID: R190541 Instrument ID VMS6 Method: SW8260B

MS		Sample ID: 16061409-19A MS				Units: µg/L		Analysis Date: 6/30/2016 01:18 AM		
Client ID: ATR-MW85(130)-G062116		Run ID: VMS6_160629A				SeqNo: 3900501		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	21.75	1.0	20	0	109	75-130	0			
1,1,2,2-Tetrachloroethane	20.66	1.0	20	0	103	75-130	0			
1,1,2-Trichloroethane	21.36	1.0	20	0	107	75-125	0			
1,1-Dichloroethane	21.46	1.0	20	0	107	75-133	0			
1,1-Dichloroethene	22.15	1.0	20	0	111	70-145	0			
1,2-Dichloroethane	21.72	1.0	20	0	109	78-125	0			
1,2-Dichloropropane	20.91	1.0	20	0	105	75-125	0			
2-Butanone	15.68	5.0	20	0	78.4	55-150	0			
2-Hexanone	17.82	5.0	20	0	89.1	60-135	0			
4-Methyl-2-pentanone	24.33	1.0	20	0	122	77-178	0			
Acetone	16.25	10	20	0	81.2	60-160	0			
Benzene	22.26	1.0	20	0	111	85-125	0			
Bromodichloromethane	21.47	1.0	20	0	107	75-125	0			
Bromoform	18.06	1.0	20	0	90.3	60-125	0			
Bromomethane	7.55	1.0	20	0	37.8	30-185	0			
Carbon disulfide	19.95	1.0	20	0	99.8	60-165	0			
Carbon tetrachloride	22.27	1.0	20	0	111	65-140	0			
Chlorobenzene	21.67	1.0	20	0	108	80-120	0			
Chloroethane	27.97	1.0	20	0	140	50-140	0			
Chloroform	20.36	1.0	20	0	102	80-130	0			
Chloromethane	14.96	1.0	20	0	74.8	50-130	0			
cis-1,2-Dichloroethene	21.8	1.0	20	0	109	75-134	0			
cis-1,3-Dichloropropene	19.32	1.0	20	0	96.6	70-130	0			
Dibromochloromethane	18.42	1.0	20	0	92.1	60-115	0			
Ethylbenzene	21.3	1.0	20	0	106	85-125	0			
m,p-Xylene	42.66	2.0	40	0	107	75-130	0			
Methylene chloride	21.54	5.0	20	0	108	75-140	0			
o-Xylene	20.52	1.0	20	0	103	80-125	0			
Styrene	20.81	1.0	20	0	104	85-125	0			
Tetrachloroethene	22.58	1.0	20	0	113	77-138	0			
Toluene	21.72	1.0	20	0	109	85-125	0			
trans-1,2-Dichloroethene	21.71	1.0	20	0	109	80-140	0			
trans-1,3-Dichloropropene	18.32	1.0	20	0	91.6	81-123	0			
Trichloroethene	22.63	1.0	20	0	113	84-130	0			
Vinyl chloride	18.89	1.0	20	0	94.4	50-136	0			
Xylenes, Total	63.18	3.0	60	0	105	80-126	0			
Surr: 1,2-Dichloroethane-d4	19.68	0	20	0	98.4	75-120	0			
Surr: 4-Bromofluorobenzene	19.78	0	20	0	98.9	80-110	0			
Surr: Dibromofluoromethane	19.82	0	20	0	99.1	85-115	0			
Surr: Toluene-d8	19.12	0	20	0	95.6	85-110	0			

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

Client: AMEC Foster Wheeler  
 Work Order: 16061409  
 Project: Textron/Torx Rochester, IN 3359151040

# QC BATCH REPORT

Batch ID: R190541 Instrument ID VMS6 Method: SW8260B

MSD		Sample ID: 16061409-19A MSD				Units: µg/L		Analysis Date: 6/30/2016 01:45 AM		
Client ID: ATR-MW85(130)-G062116		Run ID: VMS6_160629A				SeqNo: 3900502		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	22.25	1.0	20	0	111	75-130	21.75	2.27	30	
1,1,2,2-Tetrachloroethane	21.18	1.0	20	0	106	75-130	20.66	2.49	30	
1,1,2-Trichloroethane	21.72	1.0	20	0	109	75-125	21.36	1.67	30	
1,1-Dichloroethane	21.87	1.0	20	0	109	75-133	21.46	1.89	30	
1,1-Dichloroethene	22.4	1.0	20	0	112	70-145	22.15	1.12	30	
1,2-Dichloroethane	21.62	1.0	20	0	108	78-125	21.72	0.461	30	
1,2-Dichloropropane	20.91	1.0	20	0	105	75-125	20.91	0	30	
2-Butanone	15.29	5.0	20	0	76.4	55-150	15.68	2.52	30	
2-Hexanone	18.88	5.0	20	0	94.4	60-135	17.82	5.78	30	
4-Methyl-2-pentanone	25.91	1.0	20	0	130	77-178	24.33	6.29	30	
Acetone	15.9	10	20	0	79.5	60-160	16.25	2.18	30	
Benzene	22.15	1.0	20	0	111	85-125	22.26	0.495	30	
Bromodichloromethane	21.38	1.0	20	0	107	75-125	21.47	0.42	30	
Bromoform	18.1	1.0	20	0	90.5	60-125	18.06	0.221	30	
Bromomethane	10.68	1.0	20	0	53.4	30-185	7.55	34.3	30	R
Carbon disulfide	21.01	1.0	20	0	105	60-165	19.95	5.18	30	
Carbon tetrachloride	21.94	1.0	20	0	110	65-140	22.27	1.49	30	
Chlorobenzene	22.25	1.0	20	0	111	80-120	21.67	2.64	30	
Chloroethane	25.15	1.0	20	0	126	50-140	27.97	10.6	30	
Chloroform	20.64	1.0	20	0	103	80-130	20.36	1.37	30	
Chloromethane	12.33	1.0	20	0	61.6	50-130	14.96	19.3	30	
cis-1,2-Dichloroethene	21.34	1.0	20	0	107	75-134	21.8	2.13	30	
cis-1,3-Dichloropropene	20.22	1.0	20	0	101	70-130	19.32	4.55	30	
Dibromochloromethane	18.74	1.0	20	0	93.7	60-115	18.42	1.72	30	
Ethylbenzene	22.1	1.0	20	0	110	85-125	21.3	3.69	30	
m,p-Xylene	44.05	2.0	40	0	110	75-130	42.66	3.21	30	
Methylene chloride	21.49	5.0	20	0	107	75-140	21.54	0.232	30	
o-Xylene	21.21	1.0	20	0	106	80-125	20.52	3.31	30	
Styrene	21.3	1.0	20	0	106	85-125	20.81	2.33	30	
Tetrachloroethene	23.23	1.0	20	0	116	77-138	22.58	2.84	30	
Toluene	22.21	1.0	20	0	111	85-125	21.72	2.23	30	
trans-1,2-Dichloroethene	21.89	1.0	20	0	109	80-140	21.71	0.826	30	
trans-1,3-Dichloropropene	18.77	1.0	20	0	93.8	81-123	18.32	2.43	30	
Trichloroethene	22.62	1.0	20	0	113	84-130	22.63	0.0442	30	
Vinyl chloride	17.86	1.0	20	0	89.3	50-136	18.89	5.61	30	
Xylenes, Total	65.26	3.0	60	0	109	80-126	63.18	3.24	30	
Surr: 1,2-Dichloroethane-d4	19.65	0	20	0	98.2	75-120	19.68	0.153	30	
Surr: 4-Bromofluorobenzene	19.65	0	20	0	98.2	80-110	19.78	0.659	30	
Surr: Dibromofluoromethane	19.69	0	20	0	98.4	85-115	19.82	0.658	30	
Surr: Toluene-d8	19.56	0	20	0	97.8	85-110	19.12	2.28	30	

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

**Client:** AMEC Foster Wheeler  
**Work Order:** 16061409  
**Project:** Textron/Torx Rochester, IN 3359151040

# QC BATCH REPORT

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Batch ID: **R190541**      Instrument ID **VMS6**      Method: **SW8260B**

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**The following samples were analyzed in this batch:**

16061409-01A	16061409-02A	16061409-06A
16061409-09A	16061409-11A	16061409-13A
16061409-14A	16061409-15A	16061409-16A
16061409-19A	16061409-23A	16061409-24A
16061409-26A	16061409-27A	

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

Client: AMEC Foster Wheeler  
 Work Order: 16061409  
 Project: Textron/Torx Rochester, IN 3359151040

# QC BATCH REPORT

Batch ID: **R190646A** Instrument ID **VMS6** Method: **SW8260B**

MBLK		Sample ID: <b>VBLKW1-160630-R190646A</b>				Units: <b>µg/L</b>		Analysis Date: <b>6/30/2016 05:30 PM</b>		
Client ID:		Run ID: <b>VMS6_160630A</b>		SeqNo: <b>3903010</b>		Prep Date:		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloroethane	ND	1.0								
1,2-Dichloropropane	ND	1.0								
2-Butanone	ND	5.0								
2-Hexanone	ND	5.0								
4-Methyl-2-pentanone	ND	1.0								
Acetone	ND	10								
Benzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	1.0								
Carbon disulfide	ND	1.0								
Carbon tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	1.0								
Chloroform	ND	1.0								
Chloromethane	ND	1.0								
cis-1,2-Dichloroethene	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
Dibromochloromethane	ND	1.0								
Ethylbenzene	ND	1.0								
m,p-Xylene	ND	2.0								
Methylene chloride	ND	5.0								
o-Xylene	ND	1.0								
Styrene	ND	1.0								
Tetrachloroethene	ND	1.0								
Toluene	ND	1.0								
trans-1,2-Dichloroethene	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
Trichloroethene	ND	1.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	3.0								
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>20.24</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>101</i>	<i>75-120</i>	<i>0</i>			
<i>Surr: 4-Bromofluorobenzene</i>	<i>19.02</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>95.1</i>	<i>80-110</i>	<i>0</i>			
<i>Surr: Dibromofluoromethane</i>	<i>19.6</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>98</i>	<i>85-115</i>	<i>0</i>			
<i>Surr: Toluene-d8</i>	<i>19.64</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>98.2</i>	<i>85-110</i>	<i>0</i>			

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

Client: AMEC Foster Wheeler  
 Work Order: 16061409  
 Project: Textron/Torx Rochester, IN 3359151040

# QC BATCH REPORT

Batch ID: **R190646A** Instrument ID **VMS6** Method: **SW8260B**

LCS		Sample ID: <b>VLCSW1-160630-R190646A</b>				Units: <b>µg/L</b>		Analysis Date: <b>6/30/2016 04:11 PM</b>		
Client ID:		Run ID: <b>VMS6_160630A</b>			SeqNo: <b>3903009</b>		Prep Date:		DF: <b>1</b>	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	21.26	1.0	20	0	106	75-130	0			
1,1,2,2-Tetrachloroethane	21.22	1.0	20	0	106	75-130	0			
1,1,2-Trichloroethane	21.3	1.0	20	0	106	75-125	0			
1,1-Dichloroethane	21.4	1.0	20	0	107	75-133	0			
1,1-Dichloroethene	21.02	1.0	20	0	105	70-145	0			
1,2-Dichloroethane	21.69	1.0	20	0	108	78-125	0			
1,2-Dichloropropane	20.91	1.0	20	0	105	75-125	0			
2-Butanone	17.84	5.0	20	0	89.2	55-150	0			
2-Hexanone	18.68	5.0	20	0	93.4	60-135	0			
4-Methyl-2-pentanone	24.78	1.0	20	0	124	77-178	0			
Acetone	19.45	10	20	0	97.2	60-160	0			
Benzene	21.87	1.0	20	0	109	85-125	0			
Bromodichloromethane	20.27	1.0	20	0	101	75-125	0			
Bromoform	16.63	1.0	20	0	83.2	60-125	0			
Bromomethane	18.62	1.0	20	0	93.1	30-185	0			
Carbon disulfide	18.06	1.0	20	0	90.3	60-165	0			
Carbon tetrachloride	20.14	1.0	20	0	101	65-140	0			
Chlorobenzene	21.96	1.0	20	0	110	80-120	0			
Chloroethane	21.38	1.0	20	0	107	50-140	0			
Chloroform	20.26	1.0	20	0	101	80-130	0			
Chloromethane	17.4	1.0	20	0	87	50-130	0			
cis-1,2-Dichloroethene	20.96	1.0	20	0	105	75-134	0			
cis-1,3-Dichloropropene	19.5	1.0	20	0	97.5	70-130	0			
Dibromochloromethane	17.89	1.0	20	0	89.4	60-115	0			
Ethylbenzene	21.54	1.0	20	0	108	85-125	0			
m,p-Xylene	43.29	2.0	40	0	108	75-130	0			
Methylene chloride	23.61	5.0	20	0	118	75-140	0			
o-Xylene	20.93	1.0	20	0	105	80-125	0			
Styrene	21.09	1.0	20	0	105	85-125	0			
Tetrachloroethene	21.89	1.0	20	0	109	77-138	0			
Toluene	21.83	1.0	20	0	109	85-125	0			
trans-1,2-Dichloroethene	21.33	1.0	20	0	107	80-140	0			
trans-1,3-Dichloropropene	18.4	1.0	20	0	92	81-123	0			
Trichloroethene	22.11	1.0	20	0	111	84-130	0			
Vinyl chloride	18.3	1.0	20	0	91.5	50-136	0			
Xylenes, Total	64.22	3.0	60	0	107	80-126	0			
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>20.01</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>100</i>	<i>75-120</i>	<i>0</i>			
<i>Surr: 4-Bromofluorobenzene</i>	<i>19.93</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>99.6</i>	<i>80-110</i>	<i>0</i>			
<i>Surr: Dibromofluoromethane</i>	<i>19.44</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>97.2</i>	<i>85-115</i>	<i>0</i>			
<i>Surr: Toluene-d8</i>	<i>19.68</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>98.4</i>	<i>85-110</i>	<i>0</i>			

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



Client: AMEC Foster Wheeler  
 Work Order: 16061409  
 Project: Textron/Torx Rochester, IN 3359151040

# QC BATCH REPORT

Batch ID: **R190646A** Instrument ID **VMS6** Method: **SW8260B**

MS		Sample ID: 16061543-17A MS				Units: µg/L		Analysis Date: 7/1/2016 02:13 AM		
Client ID:		Run ID: VMS6_160630A			SeqNo: 3903022		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	23.22	1.0	20	0	116	75-130	0			
1,1,2,2-Tetrachloroethane	22.29	1.0	20	0	111	75-130	0			
1,1,2-Trichloroethane	22.75	1.0	20	0	114	75-125	0			
1,1-Dichloroethane	23.72	1.0	20	0	119	75-133	0			
1,1-Dichloroethene	25.23	1.0	20	0	126	70-145	0			
1,2-Dichloroethane	23.15	1.0	20	0	116	78-125	0			
1,2-Dichloropropane	22.4	1.0	20	0	112	75-125	0			
2-Butanone	18.26	5.0	20	0	91.3	55-150	0			
2-Hexanone	18.9	5.0	20	0	94.5	60-135	0			
4-Methyl-2-pentanone	25.23	1.0	20	0	126	77-178	0			
Acetone	22.19	10	20	0	111	60-160	0			
Benzene	24.04	1.0	20	0	120	85-125	0			
Bromodichloromethane	21.06	1.0	20	0	105	75-125	0			
Bromoform	17.21	1.0	20	0	86	60-125	0			
Bromomethane	12.89	1.0	20	0	64.4	30-185	0			
Carbon disulfide	20.28	1.0	20	0	101	60-165	0			
Carbon tetrachloride	22.28	1.0	20	0	111	65-140	0			
Chlorobenzene	23.56	1.0	20	0	118	80-120	0			
Chloroethane	22.44	1.0	20	0	112	50-140	0			
Chloroform	22.33	1.0	20	0	112	80-130	0			
Chloromethane	16.64	1.0	20	0	83.2	50-130	0			
cis-1,2-Dichloroethene	23.26	1.0	20	0	116	75-134	0			
cis-1,3-Dichloropropene	20.05	1.0	20	0	100	70-130	0			
Dibromochloromethane	18.54	1.0	20	0	92.7	60-115	0			
Ethylbenzene	23.37	1.0	20	0	117	85-125	0			
m,p-Xylene	46.59	2.0	40	0	116	75-130	0			
Methylene chloride	23.82	5.0	20	0	119	75-140	0			
o-Xylene	22.54	1.0	20	0	113	80-125	0			
Styrene	22.53	1.0	20	0	113	85-125	0			
Tetrachloroethene	24.51	1.0	20	0	123	77-138	0			
Toluene	23.92	1.0	20	0	120	85-125	0			
trans-1,2-Dichloroethene	23.82	1.0	20	0	119	80-140	0			
trans-1,3-Dichloropropene	18.35	1.0	20	0	91.8	81-123	0			
Trichloroethene	24.21	1.0	20	0	121	84-130	0			
Vinyl chloride	21.94	1.0	20	0	110	50-136	0			
Xylenes, Total	69.13	3.0	60	0	115	80-126	0			
Surr: 1,2-Dichloroethane-d4	19.55	0	20	0	97.8	75-120	0			
Surr: 4-Bromofluorobenzene	19.64	0	20	0	98.2	80-110	0			
Surr: Dibromofluoromethane	19.35	0	20	0	96.8	85-115	0			
Surr: Toluene-d8	19.68	0	20	0	98.4	85-110	0			

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

Client: AMEC Foster Wheeler  
 Work Order: 16061409  
 Project: Textron/Torx Rochester, IN 3359151040

# QC BATCH REPORT

Batch ID: **R190646A** Instrument ID **VMS6** Method: **SW8260B**

MSD		Sample ID: 16061543-17A MSD				Units: µg/L		Analysis Date: 7/1/2016 02:39 AM		
Client ID:		Run ID: VMS6_160630A			SeqNo: 3903023		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	22.14	1.0	20	0	111	75-130	23.22	4.76	30	
1,1,2,2-Tetrachloroethane	20.7	1.0	20	0	104	75-130	22.29	7.4	30	
1,1,2-Trichloroethane	21.37	1.0	20	0	107	75-125	22.75	6.26	30	
1,1-Dichloroethane	21.75	1.0	20	0	109	75-133	23.72	8.67	30	
1,1-Dichloroethene	22.86	1.0	20	0	114	70-145	25.23	9.86	30	
1,2-Dichloroethane	21.64	1.0	20	0	108	78-125	23.15	6.74	30	
1,2-Dichloropropane	20.62	1.0	20	0	103	75-125	22.4	8.28	30	
2-Butanone	17.39	5.0	20	0	87	55-150	18.26	4.88	30	
2-Hexanone	17.62	5.0	20	0	88.1	60-135	18.9	7.01	30	
4-Methyl-2-pentanone	22.26	1.0	20	0	111	77-178	25.23	12.5	30	
Acetone	18.8	10	20	0	94	60-160	22.19	16.5	30	
Benzene	22.44	1.0	20	0	112	85-125	24.04	6.88	30	
Bromodichloromethane	20.5	1.0	20	0	102	75-125	21.06	2.69	30	
Bromoform	16.12	1.0	20	0	80.6	60-125	17.21	6.54	30	
Bromomethane	18.94	1.0	20	0	94.7	30-185	12.89	38	30	R
Carbon disulfide	19.08	1.0	20	0	95.4	60-165	20.28	6.1	30	
Carbon tetrachloride	21.69	1.0	20	0	108	65-140	22.28	2.68	30	
Chlorobenzene	21.75	1.0	20	0	109	80-120	23.56	7.99	30	
Chloroethane	22.62	1.0	20	0	113	50-140	22.44	0.799	30	
Chloroform	20.18	1.0	20	0	101	80-130	22.33	10.1	30	
Chloromethane	19.21	1.0	20	0	96	50-130	16.64	14.3	30	
cis-1,2-Dichloroethene	20.76	1.0	20	0	104	75-134	23.26	11.4	30	
cis-1,3-Dichloropropene	19.11	1.0	20	0	95.6	70-130	20.05	4.8	30	
Dibromochloromethane	17.43	1.0	20	0	87.2	60-115	18.54	6.17	30	
Ethylbenzene	21.49	1.0	20	0	107	85-125	23.37	8.38	30	
m,p-Xylene	43.1	2.0	40	0	108	75-130	46.59	7.78	30	
Methylene chloride	21.25	5.0	20	0	106	75-140	23.82	11.4	30	
o-Xylene	20.76	1.0	20	0	104	80-125	22.54	8.22	30	
Styrene	20.66	1.0	20	0	103	85-125	22.53	8.66	30	
Tetrachloroethene	22.81	1.0	20	0	114	77-138	24.51	7.19	30	
Toluene	21.94	1.0	20	0	110	85-125	23.92	8.63	30	
trans-1,2-Dichloroethene	21.52	1.0	20	0	108	80-140	23.82	10.1	30	
trans-1,3-Dichloropropene	17.03	1.0	20	0	85.2	81-123	18.35	7.46	30	
Trichloroethene	22.27	1.0	20	0	111	84-130	24.21	8.35	30	
Vinyl chloride	20.4	1.0	20	0	102	50-136	21.94	7.27	30	
Xylenes, Total	63.86	3.0	60	0	106	80-126	69.13	7.93	30	
Surr: 1,2-Dichloroethane-d4	19.29	0	20	0	96.4	75-120	19.55	1.34	30	
Surr: 4-Bromofluorobenzene	19.73	0	20	0	98.6	80-110	19.64	0.457	30	
Surr: Dibromofluoromethane	19.62	0	20	0	98.1	85-115	19.35	1.39	30	
Surr: Toluene-d8	19.52	0	20	0	97.6	85-110	19.68	0.816	30	

The following samples were analyzed in this batch:

16061409-01A	16061409-06A	16061409-28A
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Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: AMEC Foster Wheeler  
 Work Order: 16061409  
 Project: Textron/Torx Rochester, IN 3359151040

# QC BATCH REPORT

Batch ID: R190397A Instrument ID TOC2 Method: SW9060A

<b>MBLK</b>		Sample ID: <b>MBLK-R190397A</b>				Units: <b>mg/L</b>		Analysis Date: <b>6/27/2016 01:26 PM</b>		
Client ID:		Run ID: <b>TOC2_160627A</b>		SeqNo: <b>3895876</b>		Prep Date:		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Organic Carbon, Total ND 0.50

<b>LCS</b>		Sample ID: <b>LCS-R190397A</b>				Units: <b>mg/L</b>		Analysis Date: <b>6/27/2016 01:26 PM</b>		
Client ID:		Run ID: <b>TOC2_160627A</b>		SeqNo: <b>3895877</b>		Prep Date:		DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Organic Carbon, Total 5.132 0.50 5 0 103 91-110 0

<b>MS</b>		Sample ID: <b>16061293-06F MS</b>				Units: <b>mg/L</b>		Analysis Date: <b>6/27/2016 01:26 PM</b>		
Client ID:		Run ID: <b>TOC2_160627A</b>		SeqNo: <b>3895881</b>		Prep Date:		DF: <b>4</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Organic Carbon, Total 21.05 2.0 20 1.714 96.7 87-120 0

<b>MSD</b>		Sample ID: <b>16061293-06F MSD</b>				Units: <b>mg/L</b>		Analysis Date: <b>6/27/2016 01:26 PM</b>		
Client ID:		Run ID: <b>TOC2_160627A</b>		SeqNo: <b>3895882</b>		Prep Date:		DF: <b>4</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Organic Carbon, Total 22.56 2.0 20 1.714 104 87-120 21.05 6.92 10

The following samples were analyzed in this batch:

16061409-01B	16061409-02B	16061409-03B
16061409-04B	16061409-05B	16061409-06B

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

Client: AMEC Foster Wheeler  
 Work Order: 16061409  
 Project: Textron/Torx Rochester, IN 3359151040

# QC BATCH REPORT

Batch ID: **R190502** Instrument ID **TOC2** Method: **SW9060A**

<b>MBLK</b>	Sample ID: <b>MBLK-R190502</b>		Units: <b>mg/L</b>		Analysis Date: <b>6/28/2016 01:44 PM</b>					
Client ID:	Run ID: <b>TOC2_160628A</b>		SeqNo: <b>3898710</b>		Prep Date:			DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Organic Carbon, Total                      ND      0.50

<b>LCS</b>	Sample ID: <b>LCS-R190502</b>		Units: <b>mg/L</b>		Analysis Date: <b>6/28/2016 01:44 PM</b>					
Client ID:	Run ID: <b>TOC2_160628A</b>		SeqNo: <b>3898711</b>		Prep Date:			DF: <b>1</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Organic Carbon, Total                      5.125      0.50      5      0      102      91-110      0

<b>MS</b>	Sample ID: <b>16061384-03C MS</b>		Units: <b>mg/L</b>		Analysis Date: <b>6/28/2016 01:44 PM</b>					
Client ID:	Run ID: <b>TOC2_160628A</b>		SeqNo: <b>3898713</b>		Prep Date:			DF: <b>4</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Organic Carbon, Total                      23.62      2.0      20      2.534      105      87-120      0

<b>MSD</b>	Sample ID: <b>16061384-03C MSD</b>		Units: <b>mg/L</b>		Analysis Date: <b>6/28/2016 01:44 PM</b>					
Client ID:	Run ID: <b>TOC2_160628A</b>		SeqNo: <b>3898714</b>		Prep Date:			DF: <b>4</b>		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Organic Carbon, Total                      24.01      2.0      20      2.534      107      87-120      23.62      1.65      10

The following samples were analyzed in this batch:

16061409-01B
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Note: See Qualifiers Page for a list of Qualifiers and their explanation.



# Environmental

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## Chain of Custody Form

Page 1 of 4

COC ID: 33581

Houston, TX  
+1 281 530 5656

Middletown, PA  
+1 717 944 5541

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+1 610 948 4903

Salt Lake City, UT  
+1 801 266 7700

South Charleston, WV  
+1 304 356 3168

York, PA  
+1 717 505 5280

ALS Project Manager:

ALS Work Order #: 16061409

Customer Information		Project Information		Parameter/Method Request for Analysis											
Purchase Order	* *	Project Name	Former TORX/Textron	A	VOCs (8260B) * <u>CO12606117</u>										
Work Order		Project Number	<u>3359157040</u>	B	TOC, <del>Nitrate-Nitrite</del> * <u>CO12605142</u>										
Company Name	AMEC Foster Wheeler	Bill To Company	AMEC Foster Wheeler	C	<del>Iron and Manganese</del>										
Send Report To	Paul Stork	Invoice Attn	Paul Stork	D	<del>Chloride, Sulfate, Alkalinity + Bicarb</del>										
Address	521 Byers Road, Suite 204	Address	521 Byers Road, Suite 204	E											
City/State/Zip	Miamisburg, OH 45342	City/State/Zip	Miamisburg, OH 45342	F											
Phone	(937) 859-3600	Phone	(937) 859-3600	G											
Fax	(937) 859-7951	Fax	(937) 859-7951	H											
e-Mail Address		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	ATR - MW71 - G062016	6-20-16	1240	GW	1/3	4	X	X										
2	ATR - MW67 - G062016	6-20-16	1350		1/3	4	X	X										
3	ATR - MW72 - G062016	6-20-16	1515		1/3	4	X	X										
4	ATR - MW76 - G062016	6-20-16	1635		1/3	4	X	X										
✓ 5	ATR - MW77 - G062016	6-20-16	1410		1/3	4	X	X										
✓ 6	ATR - MW76 - G062016	6-20-16	1600		1/3	4	X	X										
7	ATR - E6001 - G062116	6-21-16	0815		1	3	X											
✓ 8	ATR - E6002 - G062116	6-21-16	0815		1	3	X											
9	ATR - MW57(38) - G062116	6-21-16	0925		1	3	X											
10	TRIP BLANK	6/21/16			1	1	X											

Sampler(s) Please Print & Sign <i>Sam Partzner</i>	Shipment Method <i>Carrier</i>	Turnaround Time in Business Days (BD) <input type="checkbox"/> 10 BD <input type="checkbox"/> 5 BD <input type="checkbox"/> 3 BD <input type="checkbox"/> 2 BD <input type="checkbox"/> 1 BD	Other _____	Results Due Date:
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Relinquished by: <i>[Signature]</i>	Date: <u>6-22-16</u>	Time: <u>1300</u>	Received by: <i>[Signature]</i>	Notes:
Relinquished by: <i>[Signature]</i>	Date: <u>6/22/16</u>	Time: <u>1430</u>	Received by (Laboratory): <i>[Signature]</i>	Cooler ID: _____ Cooler Temp: <u>3.4°C</u> QC Package: (Check One Box Below) <input type="checkbox"/> Level II Std QC <input type="checkbox"/> TRRP Checklist <input type="checkbox"/> Level III Std QC/Raw Date <input type="checkbox"/> TRRP Level IV <input type="checkbox"/> Level IV SW846/CLP <input type="checkbox"/> Other _____
Logged by (Laboratory): <i>DFS</i>	Date: <u>6/23/16</u>	Time: <u>1445</u>	Checked by (Laboratory): <i>[Signature]</i>	



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# Chain of Custody Form

Page 2 of 4

COC ID: 29689

Houston, TX  
+1 281 530 5656

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+1 610 948 4903

South Charleston, WV  
+1 304 356 3168

Middletown, PA  
+1 717 944 5541

Salt Lake City, UT  
+1 801 266 7700

York, PA  
+1 717 505 5280

## Environmental

Customer Information		Project Information		ALS Project Manager:												ALS Work Order #: <u>1606409</u>											
Purchase Order	*	Project Name	TFS	A	VOCs * <u>C012606117</u>																						
Work Order		Project Number	<u>3859151040</u>	B	<u>JOC</u>																						
Company Name	AMEC Foster Wheeler	Bill To Company	AMEC Foster Wheeler	C																							
Send Report To	Paul Stork	Invoice Attn	Paul Stork	D																							
Address	521 Byers Road, Suite 204	Address	521 Byers Road, Suite 204	E																							
City/State/Zip	Miamisburg, OH 45342	City/State/Zip	Miamisburg, OH 45342	F																							
Phone	(937) 859-3600	Phone	(937) 859-3600	G																							
Fax	(937) 859-7951	Fax	(937) 859-7951	H																							
e-Mail Address		e-Mail Address		I																							
				J																							

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
11	ATR - MW85 (39) - 6062116	6-21-16	1045	GW	1	3	X										
12	ATR - MW37 (23.3) - 6062116	6-21-16	1230				X										
13	ATR - MW37 (70) - 6062116	6-21-16	1325				X										
14	ATR - MW37 (49) - 6062116	6-21-16	1415				X										
15	ATR - MW39 (29.3) - 6062116	6-21-16	1545				X										
16	ATR - MW38 (20.8) - 6062116	6-21-16	1650				X										
17	ATR - MW38 (29.1) - 6062116	6-21-16	1740				X										
18	ATR - MW38 (69.9) - 6062116	6-21-16	1820				X										
19	ATR - MW37 (23.3) - 6062116 MS	6-21-16	1230				X										
20	ATR - MW37 (23.3) - 6062116 MS	6-21-16	1230				X										

Sampler(s) Please Print & Sign <u>Sam Parfitt</u>		Shipment Method <u>Courier</u>		Turnaround Time in Business Days (BD) <input type="checkbox"/> 10 BD <input type="checkbox"/> 5 BD <input type="checkbox"/> 3 BD <input type="checkbox"/> 2 BD <input type="checkbox"/> 1 BD				Results Due Date:				
Relinquished by: <u>[Signature]</u>	Date: <u>6/22/16</u>	Time: <u>1300</u>	Received by: <u>[Signature]</u>		Notes:							
Relinquished by: <u>[Signature]</u>	Date: <u>6/22/16</u>	Time: <u>1430</u>	Received by (Laboratory): <u>[Signature]</u>		Cooler ID		Cooler Temp <u>3.4 C</u>		QC Package: (Check One Box Below)			
Logged by (Laboratory): <u>DFS</u>	Date: <u>6/23/16</u>	Time: <u>1445</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 <sub>3</sub> 3-H <sub>2</sub> SO <sub>4</sub> 4-NaOH 5-Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> 6-NaHSO <sub>4</sub> 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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# Chain of Custody Form

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York, PA  
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Page 3 of 4

COC ID: 33584

## Environmental

Customer Information		Project Information		ALS Project Manager: _____												ALS Work Order #: <u>16061409</u>											
Purchase Order	<u>C012606117</u>	Project Name	<u>Former TORX/Textron</u>	A VOCs (8260B)																							
Work Order		Project Number	<u>3359151040</u>	B <del>706, Nitrate-Nitrite</del>																							
Company Name	<u>AMEC Foster Wheeler</u>	Bill To Company	<u>AMEC Foster Wheeler</u>	C <u>Iron and Manganese</u>																							
Send Report To	<u>Paul Stork</u>	Invoice Attn	<u>Paul Stork</u>	D <u>Chloride, Sulfate, Alkalinity + Barab</u>																							
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		e-Mail Address		I																							
				J																							

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
21	<u>ATL - MW85 (130) - G062116</u>	<u>6-21-16</u>	<u>1035</u>	<u>GW</u>	<u>1</u>	<u>3</u>	X										
22	<u>ATL - MW85 (130) - G062116MS</u>	<u>6-21-16</u>	<u>1035</u>	<u>I</u>	<u>I</u>	<u>I</u>	X										
23	<u>ATL - MW85 (130) - G062116MSD</u>	<u>6-21-16</u>	<u>1035</u>	<u>I</u>	<u>I</u>	<u>I</u>	X										
24	<u>ATL - MW1 - G062116</u>	<u>6-21-16</u>	<u>1330</u>	<u>I</u>	<u>I</u>	<u>I</u>	X										
25	<u>ATL - MW39 (13) - G062116</u>	<u>6-21-16</u>	<u>1435</u>	<u>I</u>	<u>I</u>	<u>I</u>	X										
26	<u>ATL - MW39 (76.8) - G062116</u>	<u>6-21-16</u>	<u>1525</u>	<u>I</u>	<u>I</u>	<u>I</u>	X										
27	<u>ATL - MW39 (102.5) - G062116</u>	<u>6-21-16</u>	<u>1635</u>	<u>I</u>	<u>I</u>	<u>I</u>	X										
8																	
9																	
10																	

Sampler(s) Please Print & Sign <u>Sam Portillo</u>		Shipment Method <u>Carrier</u>		Turnaround Time in Business Days (BD) <input type="checkbox"/> 10 BD <input type="checkbox"/> 5 BD <input type="checkbox"/> 3 BD <input type="checkbox"/> 2 BD <input type="checkbox"/> 1 BD				Other _____				Results Due Date: _____				
Relinquished by: <u>[Signature]</u>	Date: <u>6-22-16</u>	Time: <u>1300</u>	Received by: <u>[Signature]</u>		Date: <u>6/23/16</u>		Time: <u>0930</u>		Notes:							
Relinquished by: <u>[Signature]</u>	Date: <u>6/22/16</u>	Time: <u>1430</u>	Received by (Laboratory): <u>[Signature]</u>		Date: <u>6/23/16</u>		Time: <u>0930</u>		Cooler ID	Cooler Temp <u>34°C</u>	QC Package: (Check One Box Below)					
Logged by (Laboratory): <u>DFS</u>	Date: <u>6/23/16</u>	Time: <u>1445</u>	Checked by (Laboratory): <u>[Signature]</u>		Date: <u>6/23/16</u>		Time: <u>1445</u>		<input type="checkbox"/> Level II Std QC <input type="checkbox"/> TRRP Checklist <input type="checkbox"/> Level III Std QC/Raw Date <input type="checkbox"/> TRRP Level IV <input type="checkbox"/> Level IV SW846/CLP <input type="checkbox"/> Other _____							
Preservative Key: 1-HCl 2-HNO <sub>3</sub> 3-H <sub>2</sub> SO <sub>4</sub> 4-NaOH 5-Na <sub>2</sub> S <sub>2</sub> O <sub>8</sub> 6-NaHCO <sub>3</sub> 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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# Chain of Custody Form

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COC ID: 27659

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South Charleston, WV  
+1 304 356 3168

York, PA  
+1 717 505 5280

ALS Project Manager: \_\_\_\_\_ ALS Work Order #: 16061409

Customer Information		Project Information		Parameter/Method Request for Analysis												
Purchase Order	* _____	Project Name	TFS	A	VOCs (8260B) * <u>C012606117</u>											
Work Order	_____	Project Number	<u>3355 15040</u>	B	<del>TOC, Nitrate-Nitrite</del>											
Company Name	AMEC Foster Wheeler	Bill To Company	AMEC Foster Wheeler	C	<del>Iron and Manganese</del>											
Send Report To	Paul Stork	Invoice Attn	Paul Stork	D	<del>Chloride, Sulfate, Alkalinity - Basic</del>											
Address	521 Byers Road, Suite 204	Address	521 Byers Road, Suite 204	E												
City/State/Zip	Miamisburg, OH 45342	City/State/Zip	Miamisburg, OH 45342	F												
Phone	(937) 859-3600	Phone	(937) 859-3600	G												
Fax	(937) 859-7951	Fax	(937) 859-7951	H												
e-Mail Address	_____	e-Mail Address	_____	I												
				J												

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
129	ATR-MW35(45)-6062216	6-22-16	1030	GW		3	X										
135	ATR-EB001-6062216	6-22-16	1055				X										
136	ATR-MW35(90)-6062216	6-22-16	1150				X										
140	ATR-MW35(14%) - 6062216	6-22-16	1110				X										
138	ATR-EB002-6062216	6-22-16	1135				X										

Sampler(s) Please Print & Sign <i>Sam Taylor</i>		Shipment Method <i>Courier</i>		Turnaround Time in Business Days (BD) <input type="checkbox"/> 10 BD <input type="checkbox"/> 5 BD <input type="checkbox"/> 3 BD <input type="checkbox"/> 2 BD <input type="checkbox"/> 1 BD				Results Due Date:				
Relinquished by: <i>[Signature]</i>	Date: 6/22/16	Time: 1300	Received by: <i>[Signature]</i>		Notes:							
Relinquished by: <i>[Signature]</i>	Date: 6/22/16	Time: 1430	Received by (Laboratory): <i>[Signature]</i>		Cooler ID		Cooler Temp <i>3.4°C</i>		QC Package: (Check One Box Below)			
Logged by (Laboratory): <i>[Signature]</i>	Date: 6/23/16	Time: 1445	Checked by (Laboratory): <i>[Signature]</i>		<input type="checkbox"/> Level II Std QC				<input type="checkbox"/> TRRP Checklist			
Preservative Key: 1-HCl 2-HNO <sub>3</sub> 3-H <sub>2</sub> SO <sub>4</sub> 4-NaOH 5-Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> 6-NaHSO <sub>3</sub> 7-Other 8-4°C 9-5035					<input type="checkbox"/> Level III Std QC/Raw Date				<input type="checkbox"/> TRRP Level IV			
					<input type="checkbox"/> Level IV SW846/CLP				<input type="checkbox"/> Other _____			



Sample Receipt Checklist

Client Name: **AMEC - DAYTON**

Date/Time Received: **23-Jun-16 09:30**

Work Order: **16061409**

Received by: **DS**

Checklist completed by Diane Shaw 23-Jun-16  
eSignature Date

Reviewed by: Joseph Ribar 25-Jun-16  
eSignature Date

Matrices: Groundwater

Carrier name: FedEx

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

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

Custody seals intact on sample bottles? Yes  No  Not Present

Chain of custody present? Yes  No

Chain of custody signed when relinquished and received? Yes  No

Chain of custody agrees with sample labels? Yes  No

Samples in proper container/bottle? Yes  No

Sample containers intact? Yes  No

Sufficient sample volume for indicated test? Yes  No

All samples received within holding time? Yes  No

Container/Temp Blank temperature in compliance? Yes  No

Sample(s) received on ice? Yes  No

Temperature(s)/Thermometer(s): 3.4/3.4 c SR2

Cooler(s)/Kit(s):

Date/Time sample(s) sent to storage: 6/23/2016 3:11:29 PM

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

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

pH adjusted? Yes  No  N/A

pH adjusted by:

Login Notes:

-----

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction:



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

June 30, 2016

Paul Stork  
AMEC Foster Wheeler  
521 Byers Road  
Suite 204  
Miamisburg, OH 45342

RE: **TFS / 3359151040**

*Pace Workorder: 19447*

Dear Paul Stork:

Enclosed are the analytical results for sample(s) received by the laboratory on Wednesday, June 22, 2016. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

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

Sincerely,

Ruth Welsh 06/30/2016  
Ruth.Welsh@pacelabs.com

Customer Service Representative

Enclosures

As a valued client we would appreciate your comments on our service.  
Please email [info@microseeps.com](mailto:info@microseeps.com).

Total Number of Pages \_\_\_\_\_

Report ID: 19447 - 810649

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### LABORATORY ACCREDITATIONS & CERTIFICATIONS

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



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### SAMPLE SUMMARY

Workorder: 19447 TFS / 3359151040

Lab ID	Sample ID	Matrix	Date Collected	Date Received
194470001	ATR-OU2(53)-G061616	Water	6/16/2016 09:05	6/22/2016 11:30
194470002	ATR-EB001-G061616	Water	6/16/2016 09:30	6/22/2016 11:30
194470003	ATR-OU1(39)-G061616	Water	6/16/2016 11:05	6/22/2016 11:30
194470004	ATR-OU1(28)-G061616	Water	6/16/2016 12:25	6/22/2016 11:30
194470005	ATR-MW20(51)-G061616	Water	6/16/2016 14:00	6/22/2016 11:30
194470006	ATR-MW20(35)-G061616	Water	6/16/2016 14:55	6/22/2016 11:30
194470007	ATR-MW81(27)-G061616	Water	6/16/2016 16:10	6/22/2016 11:30
194470008	ATR-MW20(35)-G061616R	Water	6/16/2016 14:55	6/22/2016 11:30
194470009	ATR-MW17-G061416	Water	6/14/2016 11:05	6/22/2016 11:30
194470010	ATR-OW5(16)-G061416	Water	6/14/2016 13:00	6/22/2016 11:30
194470011	ATR-OW5(35)-G061416	Water	6/14/2016 13:45	6/22/2016 11:30
194470012	ATR-OW5(45)-G061416	Water	6/14/2016 14:40	6/22/2016 11:30
194470013	ATR-MW16-G061416	Water	6/14/2016 15:55	6/22/2016 11:30
194470014	ATR-MW26(17.5)-G061416	Water	6/14/2016 11:00	6/22/2016 11:30
194470015	ATR-MW26(28.8)-G061416	Water	6/14/2016 11:50	6/22/2016 11:30
194470016	ATR-MW26(58.2)-G061416	Water	6/14/2016 13:00	6/22/2016 11:30
194470017	ATR-ZVI2(17.5)-G061416	Water	6/14/2016 15:05	6/22/2016 11:30
194470018	ATR-ZVI2(32.5)-G061416	Water	6/14/2016 15:50	6/22/2016 11:30
194470019	ATR-MW15-G061516	Water	6/15/2016 09:55	6/22/2016 11:30
194470020	ATR-OW4(54)-G061516	Water	6/15/2016 11:00	6/22/2016 11:30
194470021	ATR-OW4(35)-G061516	Water	6/15/2016 11:45	6/22/2016 11:30
194470022	ATR-OW3(55)-G061516	Water	6/15/2016 13:00	6/22/2016 11:30
194470023	ATR-OW3(35)-G061516	Water	6/15/2016 14:15	6/22/2016 11:30
194470024	ATR-OW2(33)-G061516	Water	6/15/2016 15:35	6/22/2016 11:30
194470025	ATR-MW25(16.4)-G061516	Water	6/15/2016 09:25	6/22/2016 11:30
194470026	ATR-MW25(32.6)-G061516	Water	6/15/2016 10:30	6/22/2016 11:30
194470027	ATR-MW25(45.2)-G061516	Water	6/15/2016 11:30	6/22/2016 11:30
194470028	ATR-MW24(24.9)-G061516	Water	6/15/2016 12:50	6/22/2016 11:30
194470029	ATR-MW24(55.4)-G061516	Water	6/15/2016 13:55	6/22/2016 11:30
194470030	ATR-MW14-G061516	Water	6/15/2016 15:30	6/22/2016 11:30
194470031	ATR-MW59(29)-G061716	Water	6/17/2016 09:25	6/22/2016 11:30
194470032	ATR-MW59(29)-G061716R	Water	6/17/2016 09:25	6/22/2016 11:30
194470033	ATR-MW82-G061616	Water	6/16/2016 09:00	6/22/2016 11:30
194470034	ATR-EB002-G061616	Water	6/16/2016 09:30	6/22/2016 11:30
194470035	ATR-MW12-G061616	Water	6/16/2016 10:50	6/22/2016 11:30

Report ID: 19447 - 810649

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**SAMPLE SUMMARY**

Workorder: 19447 TFS / 3359151040

Lab ID	Sample ID	Matrix	Date Collected	Date Received
194470036	ATR-MW13-G061616	Water	6/16/2016 11:50	6/22/2016 11:30
194470037	ATR-MW6C-G061616	Water	6/16/2016 13:20	6/22/2016 11:30
194470038	ATR-MW62(36)-G061616	Water	6/16/2016 15:00	6/22/2016 11:30
194470039	ATR-PM2-G061616	Water	6/16/2016 16:30	6/22/2016 11:30
194470040	ATR-PM3-G061716	Water	6/17/2016 09:50	6/22/2016 11:30
194470041	ATR-MW68-G061716	Water	6/17/2016 11:30	6/22/2016 11:30
194470042	ATR-EB003-G061716	Water	6/17/2016 10:30	6/22/2016 11:30
194470043	ATR-MW71-G062016	Water	6/20/2016 12:40	6/22/2016 11:30
194470044	ATR-MW67-G062016	Water	6/20/2016 13:50	6/22/2016 11:30
194470045	ATR-MW72-G062016	Water	6/20/2016 15:15	6/22/2016 11:30
194470046	ATR-MW78-G062016	Water	6/20/2016 16:35	6/22/2016 11:30
194470047	ATR-MW77-G062016	Water	6/20/2016 14:40	6/22/2016 11:30
194470048	ATR-MW76-G062016	Water	6/20/2016 16:00	6/22/2016 11:30



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## PROJECT SUMMARY

Workorder: 19447 TFS / 3359151040

---

### Workorder Comments

---

The container pH for samples 19447 (0005, 0011-0012, 0019, 0021, 0027, 0031-0032, 0039-0041, 0043-0045, 0048) were measured as below the expected pH (< 10) for those samples preserved with trisodium phosphate, as assigned to PAES method AM20Gax.



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**ANALYTICAL RESULTS**

Workorder: 19447 TFS / 3359151040

Lab ID: 194470001 Date Received: 6/22/2016 11:30 Matrix: Water  
 Sample ID: ATR-OU2(53)-G061616 Date Collected: 6/16/2016 09:05

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
<b>RISK - PAES</b>								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	24000	ug/l	0.50	0.027	1	6/24/2016 07:34	BW	n
Ethane	110	ug/l	0.10	0.0030	1	6/24/2016 07:34	BW	n
Ethene	310	ug/l	0.10	0.0010	1	6/24/2016 07:34	BW	n



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### ANALYTICAL RESULTS

Workorder: 19447 TFS / 3359151040

Lab ID: 194470002 Date Received: 6/22/2016 11:30 Matrix: Water  
 Sample ID: ATR-EB001-G061616 Date Collected: 6/16/2016 09:30

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
<b>RISK - PAES</b>								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	0.26J	ug/l	0.50	0.027	1	6/24/2016 07:44	BW	n
Ethane	0.011J	ug/l	0.10	0.0030	1	6/24/2016 07:44	BW	n
Ethene	0.031J	ug/l	0.10	0.0010	1	6/24/2016 07:44	BW	n



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### ANALYTICAL RESULTS

Workorder: 19447 TFS / 3359151040

Lab ID: 194470003 Date Received: 6/22/2016 11:30 Matrix: Water  
 Sample ID: ATR-OU1(39)-G061616 Date Collected: 6/16/2016 11:05

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
<b>RISK - PAES</b>								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	20000	ug/l	0.50	0.027	1	6/24/2016 07:55	BW	n
Ethane	160	ug/l	0.10	0.0030	1	6/24/2016 07:55	BW	n
Ethene	0.012J	ug/l	0.10	0.0010	1	6/24/2016 07:55	BW	n



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### ANALYTICAL RESULTS

Workorder: 19447 TFS / 3359151040

Lab ID: 194470004 Date Received: 6/22/2016 11:30 Matrix: Water  
 Sample ID: ATR-OU1(28)-G061616 Date Collected: 6/16/2016 12:25

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
<b>RISK - PAES</b>								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	14000	ug/l	0.50	0.027	1	6/24/2016 08:08	BW	n
Ethane	58	ug/l	0.10	0.0030	1	6/24/2016 08:08	BW	n
Ethene	320	ug/l	0.10	0.0010	1	6/24/2016 08:08	BW	n



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**ANALYTICAL RESULTS**

Workorder: 19447 TFS / 3359151040

Lab ID: 194470005 Date Received: 6/22/2016 11:30 Matrix: Water  
 Sample ID: ATR-MW20(51)-G061616 Date Collected: 6/16/2016 14:00

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
<b>RISK - PAES</b>								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	23000	ug/l	0.50	0.027	1	6/24/2016 08:18	BW	n
Ethane	7.5	ug/l	0.10	0.0030	1	6/24/2016 08:18	BW	n
Ethene	0.078J	ug/l	0.10	0.0010	1	6/24/2016 08:18	BW	n



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### ANALYTICAL RESULTS

Workorder: 19447 TFS / 3359151040

Lab ID: 194470006 Date Received: 6/22/2016 11:30 Matrix: Water  
 Sample ID: ATR-MW20(35)-G061616 Date Collected: 6/16/2016 14:55

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
<b>RISK - PAES</b>								
Analysis Desc: AM20GAX Analytical Method: AM20GAX								
Methane	18000	ug/l	0.50	0.027	1	6/24/2016 08:30	BW	n
Ethane	130	ug/l	0.10	0.0030	1	6/24/2016 08:30	BW	n
Ethene	320	ug/l	0.10	0.0010	1	6/24/2016 08:30	BW	n



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**ANALYTICAL RESULTS**

Workorder: 19447 TFS / 3359151040

Lab ID: 194470007 Date Received: 6/22/2016 11:30 Matrix: Water  
 Sample ID: ATR-MW81(27)-G061616 Date Collected: 6/16/2016 16:10

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
<b>RISK - PAES</b>								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	20000	ug/l	0.50	0.027	1	6/24/2016 08:40	BW	n
Ethane	310	ug/l	0.10	0.0030	1	6/24/2016 08:40	BW	n
Ethene	1700	ug/l	0.10	0.0010	1	6/24/2016 08:40	BW	n



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### ANALYTICAL RESULTS

Workorder: 19447 TFS / 3359151040

Lab ID: 194470008 Date Received: 6/22/2016 11:30 Matrix: Water  
 Sample ID: ATR-MW20(35)-G061616R Date Collected: 6/16/2016 14:55

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
<b>RISK - PAES</b>								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	18000	ug/l	0.50	0.027	1	6/24/2016 08:51	BW	n
Ethane	130	ug/l	0.10	0.0030	1	6/24/2016 08:51	BW	n
Ethene	300	ug/l	0.10	0.0010	1	6/24/2016 08:51	BW	n



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**ANALYTICAL RESULTS**

Workorder: 19447 TFS / 3359151040

Lab ID: 194470009 Date Received: 6/22/2016 11:30 Matrix: Water  
 Sample ID: ATR-MW17-G061416 Date Collected: 6/14/2016 11:05

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
<b>RISK - PAES</b>								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	3.1	ug/l	0.50	0.027	1	6/24/2016 09:01	BW	n
Ethane	0.046J	ug/l	0.10	0.0030	1	6/24/2016 09:01	BW	n
Ethene	0.012J	ug/l	0.10	0.0010	1	6/24/2016 09:01	BW	n



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**ANALYTICAL RESULTS**

Workorder: 19447 TFS / 3359151040

Lab ID: 194470010 Date Received: 6/22/2016 11:30 Matrix: Water  
 Sample ID: ATR-OW5(16)-G061416 Date Collected: 6/14/2016 13:00

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
<b>RISK - PAES</b>								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	5200	ug/l	0.50	0.027	1	6/24/2016 09:11	BW	n
Ethane	2.9	ug/l	0.10	0.0030	1	6/24/2016 09:11	BW	n
Ethene	160	ug/l	0.10	0.0010	1	6/24/2016 09:11	BW	n



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### ANALYTICAL RESULTS

Workorder: 19447 TFS / 3359151040

Lab ID: 194470011 Date Received: 6/22/2016 11:30 Matrix: Water  
 Sample ID: ATR-OW5(35)-G061416 Date Collected: 6/14/2016 13:45

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
<b>RISK - PAES</b>								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	22000	ug/l	0.50	0.027	1	6/24/2016 09:22	BW	n
Ethane	71	ug/l	0.10	0.0030	1	6/24/2016 09:22	BW	n
Ethene	170	ug/l	0.10	0.0010	1	6/24/2016 09:22	BW	n



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### ANALYTICAL RESULTS

Workorder: 19447 TFS / 3359151040

Lab ID: 194470012 Date Received: 6/22/2016 11:30 Matrix: Water  
 Sample ID: ATR-OW5(45)-G061416 Date Collected: 6/14/2016 14:40

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
<b>RISK - PAES</b>								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	2900	ug/l	0.50	0.027	1	6/24/2016 09:31	BW	n
Ethane	14	ug/l	0.10	0.0030	1	6/24/2016 09:31	BW	n
Ethene	310	ug/l	0.10	0.0010	1	6/24/2016 09:31	BW	n



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### ANALYTICAL RESULTS

Workorder: 19447 TFS / 3359151040

Lab ID: 194470013 Date Received: 6/22/2016 11:30 Matrix: Water  
 Sample ID: ATR-MW16-G061416 Date Collected: 6/14/2016 15:55

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
<b>RISK - PAES</b>								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	12000	ug/l	0.50	0.027	1	6/24/2016 10:21	BW	n
Ethane	100	ug/l	0.10	0.0030	1	6/24/2016 10:21	BW	n
Ethene	88	ug/l	0.10	0.0010	1	6/24/2016 10:21	BW	n



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### ANALYTICAL RESULTS

Workorder: 19447 TFS / 3359151040

Lab ID: 194470014 Date Received: 6/22/2016 11:30 Matrix: Water  
 Sample ID: ATR-MW26(17.5)-G061416 Date Collected: 6/14/2016 11:00

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
<b>RISK - PAES</b>								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	20000	ug/l	0.50	0.027	1	6/24/2016 10:32	BW	n
Ethane	340	ug/l	0.10	0.0030	1	6/24/2016 10:32	BW	n
Ethene	200	ug/l	0.10	0.0010	1	6/24/2016 10:32	BW	n



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### ANALYTICAL RESULTS

Workorder: 19447 TFS / 3359151040

Lab ID: 194470015 Date Received: 6/22/2016 11:30 Matrix: Water  
 Sample ID: ATR-MW26(28.8)-G061416 Date Collected: 6/14/2016 11:50

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
<b>RISK - PAES</b>								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	28000	ug/l	0.50	0.027	1	6/24/2016 10:41	BW	n
Ethane	57	ug/l	0.10	0.0030	1	6/24/2016 10:41	BW	n
Ethene	0.10	U ug/l	0.10	0.0010	1	6/24/2016 10:41	BW	n



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### ANALYTICAL RESULTS

Workorder: 19447 TFS / 3359151040

Lab ID: 194470016 Date Received: 6/22/2016 11:30 Matrix: Water  
 Sample ID: ATR-MW26(58.2)-G061416 Date Collected: 6/14/2016 13:00

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
<b>RISK - PAES</b>								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	810	ug/l	0.50	0.027	1	6/24/2016 10:50	BW	n
Ethane	2.2	ug/l	0.10	0.0030	1	6/24/2016 10:50	BW	n
Ethene	1.7	ug/l	0.10	0.0010	1	6/24/2016 10:50	BW	n



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**ANALYTICAL RESULTS**

Workorder: 19447 TFS / 3359151040

Lab ID: 194470017 Date Received: 6/22/2016 11:30 Matrix: Water  
 Sample ID: ATR-ZVI2(17.5)-G061416 Date Collected: 6/14/2016 15:05

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
<b>RISK - PAES</b>								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	18000	ug/l	0.50	0.027	1	6/24/2016 11:03	BW	n
Ethane	350	ug/l	0.10	0.0030	1	6/24/2016 11:03	BW	n
Ethene	110	ug/l	0.10	0.0010	1	6/24/2016 11:03	BW	n



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### ANALYTICAL RESULTS

Workorder: 19447 TFS / 3359151040

Lab ID: 194470018 Date Received: 6/22/2016 11:30 Matrix: Water  
 Sample ID: ATR-ZVI2(32.5)-G061416 Date Collected: 6/14/2016 15:50

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
<b>RISK - PAES</b>								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	8300	ug/l	0.50	0.027	1	6/24/2016 11:12	BW	n
Ethane	44	ug/l	0.10	0.0030	1	6/24/2016 11:12	BW	n
Ethene	54	ug/l	0.10	0.0010	1	6/24/2016 11:12	BW	n



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**ANALYTICAL RESULTS**

Workorder: 19447 TFS / 3359151040

Lab ID: 194470019 Date Received: 6/22/2016 11:30 Matrix: Water  
 Sample ID: ATR-MW15-G061516 Date Collected: 6/15/2016 09:55

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
<b>RISK - PAES</b>								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	4200	ug/l	0.50	0.027	1	6/24/2016 11:22	BW	n
Ethane	9.2	ug/l	0.10	0.0030	1	6/24/2016 11:22	BW	n
Ethene	170	ug/l	0.10	0.0010	1	6/24/2016 11:22	BW	n



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**ANALYTICAL RESULTS**

Workorder: 19447 TFS / 3359151040

Lab ID: 194470020 Date Received: 6/22/2016 11:30 Matrix: Water  
 Sample ID: ATR-OW4(54)-G061516 Date Collected: 6/15/2016 11:00

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
<b>RISK - PAES</b>								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	730	ug/l	0.50	0.027	1	6/24/2016 11:33	BW	n
Ethane	0.24	ug/l	0.10	0.0030	1	6/24/2016 11:33	BW	n
Ethene	0.13	ug/l	0.10	0.0010	1	6/24/2016 11:33	BW	n



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**ANALYTICAL RESULTS**

Workorder: 19447 TFS / 3359151040

Lab ID: 194470021 Date Received: 6/22/2016 11:30 Matrix: Water  
 Sample ID: ATR-OW4(35)-G061516 Date Collected: 6/15/2016 11:45

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
<b>RISK - PAES</b>								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	30000	ug/l	0.50	0.027	1	6/27/2016 07:42	BW	n
Ethane	7.5	ug/l	0.10	0.0030	1	6/27/2016 07:42	BW	n
Ethene	730	ug/l	0.10	0.0010	1	6/27/2016 07:42	BW	n



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**ANALYTICAL RESULTS**

Workorder: 19447 TFS / 3359151040

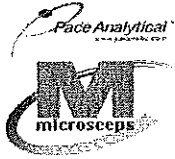
Lab ID: 194470022 Date Received: 6/22/2016 11:30 Matrix: Water  
 Sample ID: ATR-OW3(55)-G061516 Date Collected: 6/15/2016 13:00

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
<b>RISK - PAES</b>								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	24000	ug/l	0.50	0.027	1	6/27/2016 07:54	BW	n
Ethane	33	ug/l	0.10	0.0030	1	6/27/2016 07:54	BW	n
Ethene	30	ug/l	0.10	0.0010	1	6/27/2016 07:54	BW	n



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### ANALYTICAL RESULTS

Workorder: 19447 TFS / 3359151040

Lab ID: 194470023 Date Received: 6/22/2016 11:30 Matrix: Water  
 Sample ID: ATR-OW3(35)-G061516 Date Collected: 6/15/2016 14:15

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
<b>RISK - PAES</b>								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	13000	ug/l	0.50	0.027	1	6/27/2016 08:04	BW	n
Ethane	24	ug/l	0.10	0.0030	1	6/27/2016 08:04	BW	n
Ethene	23	ug/l	0.10	0.0010	1	6/27/2016 08:04	BW	n



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### ANALYTICAL RESULTS

Workorder: 19447 TFS / 3359151040

Lab ID: 194470024 Date Received: 6/22/2016 11:30 Matrix: Water  
 Sample ID: ATR-OW2(33)-G061516 Date Collected: 6/15/2016 15:35

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
<b>RISK - PAES</b>								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	11000	ug/l	0.50	0.027	1	6/27/2016 08:16	BW	n
Ethane	51	ug/l	0.10	0.0030	1	6/27/2016 08:16	BW	n
Ethene	1200	ug/l	0.10	0.0010	1	6/27/2016 08:16	BW	n



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**ANALYTICAL RESULTS**

Workorder: 19447 TFS / 3359151040

Lab ID: 194470025 Date Received: 6/22/2016 11:30 Matrix: Water  
 Sample ID: ATR-MW25(16.4)-G061516 Date Collected: 6/15/2016 09:25

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
<b>RISK - PAES</b>								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	12000	ug/l	0.50	0.027	1	6/27/2016 08:28	BW	n
Ethane	140	ug/l	0.10	0.0030	1	6/27/2016 08:28	BW	n
Ethene	920	ug/l	0.10	0.0010	1	6/27/2016 08:28	BW	n



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### ANALYTICAL RESULTS

Workorder: 19447 TFS / 3359151040

Lab ID: 194470026 Date Received: 6/22/2016 11:30 Matrix: Water  
 Sample ID: ATR-MW25(32.6)-G061516 Date Collected: 6/15/2016 10:30

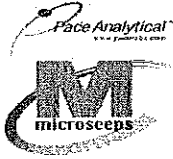
Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
<b>RISK - PAES</b>								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	18000	ug/l	0.50	0.027	1	6/27/2016 08:39	BW	n
Ethane	70	ug/l	0.10	0.0030	1	6/27/2016 08:39	BW	n
Ethene	1200	ug/l	0.10	0.0010	1	6/27/2016 08:39	BW	n



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### ANALYTICAL RESULTS

Workorder: 19447 TFS / 3359151040

Lab ID: 194470027 Date Received: 6/22/2016 11:30 Matrix: Water  
 Sample ID: ATR-MW25(45.2)-G061516 Date Collected: 6/15/2016 11:30

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
<b>RISK - PAES</b>								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	3000	ug/l	0.50	0.027	1	6/27/2016 08:50	BW	n
Ethane	8.6	ug/l	0.10	0.0030	1	6/27/2016 08:50	BW	n
Ethene	96	ug/l	0.10	0.0010	1	6/27/2016 08:50	BW	n



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### ANALYTICAL RESULTS

Workorder: 19447 TFS / 3359151040

Lab ID: 194470028 Date Received: 6/22/2016 11:30 Matrix: Water  
 Sample ID: ATR-MW24(24.9)-G061516 Date Collected: 6/15/2016 12:50

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
<b>RISK - PAES</b>								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	13	ug/l	0.50	0.027	1	6/27/2016 09:04	BW	n
Ethane	0.0069J	ug/l	0.10	0.0030	1	6/27/2016 09:04	BW	n
Ethene	0.0083J	ug/l	0.10	0.0010	1	6/27/2016 09:04	BW	n



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### ANALYTICAL RESULTS

Workorder: 19447 TFS / 3359151040

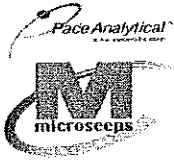
Lab ID: 194470029 Date Received: 6/22/2016 11:30 Matrix: Water  
 Sample ID: ATR-MW24(55.4)-G061516 Date Collected: 6/15/2016 13:55

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
<b>RISK - PAES</b>								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	19	ug/l	0.50	0.027	1	6/27/2016 09:14	BW	n
Ethane	0.15	ug/l	0.10	0.0030	1	6/27/2016 09:14	BW	n
Ethene	0.089J	ug/l	0.10	0.0010	1	6/27/2016 09:14	BW	n



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**ANALYTICAL RESULTS**

Workorder: 19447 TFS / 3359151040

Lab ID: 194470030 Date Received: 6/22/2016 11:30 Matrix: Water  
 Sample ID: ATR-MW14-G061516 Date Collected: 6/15/2016 15:30

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
<b>RISK - PAES</b>								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	3800	ug/l	0.50	0.027	1	6/27/2016 09:24	BW	n
Ethane	1.1	ug/l	0.10	0.0030	1	6/27/2016 09:24	BW	n
Ethene	1200	ug/l	0.10	0.0010	1	6/27/2016 09:24	BW	n



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### ANALYTICAL RESULTS

Workorder: 19447 TFS / 3359151040

Lab ID: 194470031 Date Received: 6/22/2016 11:30 Matrix: Water  
 Sample ID: ATR-MW59(29)-G061716 Date Collected: 6/17/2016 09:25

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
<b>RISK - PAES</b>								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	24000	ug/l	0.50	0.027	1	6/27/2016 09:36	BW	n
Ethane	170	ug/l	0.10	0.0030	1	6/27/2016 09:36	BW	n
Ethene	13000	ug/l	0.10	0.0010	1	6/27/2016 09:36	BW	n



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**ANALYTICAL RESULTS**

Workorder: 19447 TFS / 3359151040

Lab ID: 194470032 Date Received: 6/22/2016 11:30 Matrix: Water  
 Sample ID: ATR-MW59(29)-G061716R Date Collected: 6/17/2016 09:25

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
<b>RISK - PAES</b>								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	19000	ug/l	0.50	0.027	1	6/27/2016 09:45	BW	n
Ethane	140	ug/l	0.10	0.0030	1	6/27/2016 09:45	BW	n
Ethene	10000	ug/l	0.10	0.0010	1	6/27/2016 09:45	BW	n



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### ANALYTICAL RESULTS

Workorder: 19447 TFS / 3359151040

Lab ID: 194470033 Date Received: 6/22/2016 11:30 Matrix: Water  
 Sample ID: ATR-MW82-G061616 Date Collected: 6/16/2016 09:00

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
<b>RISK - PAES</b>								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	25000	ug/l	0.50	0.027	1	6/27/2016 10:48	BW	n
Ethane	81	ug/l	0.10	0.0030	1	6/27/2016 10:48	BW	n
Ethene	0.31	ug/l	0.10	0.0010	1	6/27/2016 10:48	BW	n



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### ANALYTICAL RESULTS

Workorder: 19447 TFS / 3359151040

Lab ID: 194470034  
 Sample ID: ATR-EB002-G061616

Date Received: 6/22/2016 11:30 Matrix: Water  
 Date Collected: 6/16/2016 09:30

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
<b>RISK - PAES</b>								
Analysis Desc: AM20GAX Analytical Method: AM20GAX								
Methane	0.29J	ug/l	0.50	0.027	1	6/27/2016 10:58	BW	n
Ethane	0.0089J	ug/l	0.10	0.0030	1	6/27/2016 10:58	BW	n
Ethene	0.023J	ug/l	0.10	0.0010	1	6/27/2016 10:58	BW	n



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### ANALYTICAL RESULTS

Workorder: 19447 TFS / 3359151040

Lab ID: 194470035 Date Received: 6/22/2016 11:30 Matrix: Water  
 Sample ID: ATR-MW12-G061616 Date Collected: 6/16/2016 10:50

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
<b>RISK - PAES</b>								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	18000	ug/l	0.50	0.027	1	6/27/2016 11:13	BW	n
Ethane	37	ug/l	0.10	0.0030	1	6/27/2016 11:13	BW	n
Ethene	1600	ug/l	0.10	0.0010	1	6/27/2016 11:13	BW	n



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**ANALYTICAL RESULTS**

Workorder: 19447 TFS / 3359151040

Lab ID: 194470036  
 Sample ID: ATR-MW13-G061616

Date Received: 6/22/2016 11:30 Matrix: Water  
 Date Collected: 6/16/2016 11:50

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
<b>RISK - PAES</b>								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	18000	ug/l	0.50	0.027	1	6/27/2016 11:25	BW	n
Ethane	130	ug/l	0.10	0.0030	1	6/27/2016 11:25	BW	n
Ethene	1000	ug/l	0.10	0.0010	1	6/27/2016 11:25	BW	n



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### ANALYTICAL RESULTS

Workorder: 19447 TFS / 3359151040

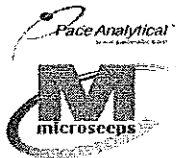
Lab ID: 194470037 Date Received: 6/22/2016 11:30 Matrix: Water  
 Sample ID: ATR-MW6C-G061616 Date Collected: 6/16/2016 13:20

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
<b>RISK - PAES</b>								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	11000	ug/l	0.50	0.027	1	6/27/2016 11:37	BW	n
Ethane	81	ug/l	0.10	0.0030	1	6/27/2016 11:37	BW	n
Ethene	68	ug/l	0.10	0.0010	1	6/27/2016 11:37	BW	n



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### ANALYTICAL RESULTS

Workorder: 19447 TFS / 3359151040

Lab ID: 194470038 Date Received: 6/22/2016 11:30 Matrix: Water  
 Sample ID: ATR-MW62(36)-G061616 Date Collected: 6/16/2016 15:00

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
<b>RISK - PAES</b>								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	17000	ug/l	0.50	0.027	1	6/27/2016 11:47	BW	n
Ethane	140	ug/l	0.10	0.0030	1	6/27/2016 11:47	BW	n
Ethene	3400	ug/l	0.10	0.0010	1	6/27/2016 11:47	BW	n



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### ANALYTICAL RESULTS

Workorder: 19447 TFS / 3359151040

Lab ID: 194470039 Date Received: 6/22/2016 11:30 Matrix: Water  
 Sample ID: ATR-PM2-G061616 Date Collected: 6/16/2016 16:30

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
<b>RISK - PAES</b>								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	22000	ug/l	0.50	0.027	1	6/27/2016 11:56	BW	n
Ethane	280	ug/l	0.10	0.0030	1	6/27/2016 11:56	BW	n
Ethene	10000	ug/l	0.10	0.0010	1	6/27/2016 11:56	BW	n



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**ANALYTICAL RESULTS**

Workorder: 19447 TFS / 3359151040

Lab ID: 194470040 Date Received: 6/22/2016 11:30 Matrix: Water  
 Sample ID: ATR-PM3-G061716 Date Collected: 6/17/2016 09:50

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
<b>RISK - PAES</b>								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	17000	ug/l	0.50	0.027	1	6/27/2016 12:07	BW	n
Ethane	170	ug/l	0.10	0.0030	1	6/27/2016 12:07	BW	n
Ethene	4600	ug/l	0.10	0.0010	1	6/27/2016 12:07	BW	n



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**ANALYTICAL RESULTS**

Workorder: 19447 TFS / 3359151040

Lab ID: 194470041 Date Received: 6/22/2016 11:30 Matrix: Water  
 Sample ID: ATR-MW68-G061716 Date Collected: 6/17/2016 11:30

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
<b>RISK - PAES</b>								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	5000	ug/l	0.50	0.027	1	6/27/2016 10:12	GT	n
Ethane	96	ug/l	0.10	0.0070	1	6/27/2016 10:12	GT	n
Ethene	6700	ug/l	1.0	0.090	10	6/29/2016 11:15	TD	d,n



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**ANALYTICAL RESULTS**

Workorder: 19447 TFS / 3359151040

Lab ID: 194470042  
 Sample ID: ATR-EB003-G061716

Date Received: 6/22/2016 11:30 Matrix: Water  
 Date Collected: 6/17/2016 10:30

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
<b>RISK - PAES</b>								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	0.12J	ug/l	0.50	0.027	1	6/27/2016 10:25	GT	n
Ethane	0.0093J	ug/l	0.10	0.0070	1	6/27/2016 10:25	GT	n
Ethene	0.028J	ug/l	0.10	0.0090	1	6/27/2016 10:25	GT	n



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### ANALYTICAL RESULTS

Workorder: 19447 TFS / 3359151040

Lab ID: 194470043  
 Sample ID: ATR-MW71-G062016

Date Received: 6/22/2016 11:30 Matrix: Water  
 Date Collected: 6/20/2016 12:40

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
<b>RISK - PAES</b>								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	9100	ug/l	0.50	0.027	1	6/27/2016 10:39	GT	n
Ethane	66	ug/l	0.10	0.0070	1	6/27/2016 10:39	GT	n
Ethene	6700	ug/l	1.0	0.090	10	6/29/2016 11:27	TD	d,n



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### ANALYTICAL RESULTS

Workorder: 19447 TFS / 3359151040

Lab ID: 194470044 Date Received: 6/22/2016 11:30 Matrix: Water  
 Sample ID: ATR-MW67-G062016 Date Collected: 6/20/2016 13:50

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
<b>RISK - PAES</b>								
Analysis Desc: AM20GAX Analytical Method: AM20GAX								
Methane	3000	ug/l	0.50	0.027	1	6/27/2016 10:51	GT	n
Ethane	130	ug/l	0.10	0.0070	1	6/27/2016 10:51	GT	n
Ethene	3100	ug/l	1.0	0.090	10	6/29/2016 11:44	TD	d,n



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### ANALYTICAL RESULTS

Workorder: 19447 TFS / 3359151040

Lab ID: 194470045 Date Received: 6/22/2016 11:30 Matrix: Water  
 Sample ID: ATR-MW72-G062016 Date Collected: 6/20/2016 15:15

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
<b>RISK - PAES</b>								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	6600	ug/l	0.50	0.027	1	6/27/2016 11:03	GT	n
Ethane	81	ug/l	0.10	0.0070	1	6/27/2016 11:03	GT	n
Ethene	790	ug/l	1.0	0.090	10	6/29/2016 12:00	TD	d,n



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### ANALYTICAL RESULTS

Workorder: 19447 TFS / 3359151040

Lab ID: 194470046  
 Sample ID: ATR-MW78-G062016

Date Received: 6/22/2016 11:30 Matrix: Water  
 Date Collected: 6/20/2016 16:35

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
<b>RISK - PAES</b>								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	18000	ug/l	0.50	0.027	1	6/27/2016 11:16	GT	n
Ethane	170	ug/l	0.10	0.0070	1	6/27/2016 11:16	GT	n
Ethene	28	ug/l	0.10	0.0090	1	6/27/2016 11:16	GT	n



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### ANALYTICAL RESULTS

Workorder: 19447 TFS / 3359151040

Lab ID: 194470047 Date Received: 6/22/2016 11:30 Matrix: Water  
 Sample ID: ATR-MW77-G062016 Date Collected: 6/20/2016 14:40

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
<b>RISK - PAES</b>								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	6900	ug/l	0.50	0.027	1	6/27/2016 11:28	GT	n
Ethane	18	ug/l	0.10	0.0070	1	6/27/2016 11:28	GT	n
Ethene	14	ug/l	0.10	0.0090	1	6/27/2016 11:28	GT	n



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**ANALYTICAL RESULTS**

Workorder: 19447 TFS / 3359151040

Lab ID: 194470048 Date Received: 6/22/2016 11:30 Matrix: Water  
 Sample ID: ATR-MW76-G062016 Date Collected: 6/20/2016 16:00

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
<b>RISK - PAES</b>								
Analysis Desc: AM20GAX Analytical Method: AM20GAX								
Methane	2700	ug/l	0.50	0.027	1	6/27/2016 12:32	GT	n
Ethane	87	ug/l	0.10	0.0070	1	6/27/2016 12:32	GT	n
Ethene	1300	ug/l	1.0	0.090	10	6/29/2016 12:15	TD	d,n



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## ANALYTICAL RESULTS QUALIFIERS

Workorder: 19447 TFS / 3359151040

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### DEFINITIONS/QUALIFIERS

Disclaimer : The Pennsylvania Department of Environmental Protection (PADEP) has decided to no longer recognize analyses that do not produce data for primary compliance, for NELAP accreditation. The methods affected by this decision are AM20Gax, AM21G, SW846 7199 and AM4.02. The laboratory shall continue to administer the NELAP/TNI standard requirements in the performance of these methods.

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



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**QUALITY CONTROL DATA**

Workorder: 19447 TFS / 3359151040

QC Batch: DISG/5450 Analysis Method: AM20GAX  
 QC Batch Method: AM20GAX  
 Associated Lab Samples: 194470001, 194470002, 194470003, 194470004, 194470005, 194470006, 194470007, 194470008, 194470009,  
 194470010, 194470011, 194470012, 194470013, 194470014, 194470015, 194470016, 194470017, 194470018,  
 194470019, 194470020

METHOD BLANK: 42621

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

LABORATORY CONTROL SAMPLE & LCSD: 42622 42623

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
RISK										
Methane	ug/l	750	750	750	100	101	80-120	1	20	n
Ethane	ug/l	38	35	36	93	95	80-120	2.1	20	n
Ethene	ug/l	35	32	33	92	93	80-120	1.1	20	n



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**QUALITY CONTROL DATA**

Workorder: 19447 TFS / 3359151040

QC Batch: DISG/5452 Analysis Method: AM20GAX  
 QC Batch Method: AM20GAX

Associated Lab Samples: 194470021, 194470022, 194470023, 194470024, 194470025, 194470026, 194470027, 194470028, 194470029,  
 194470030, 194470031, 194470032, 194470033, 194470034, 194470035, 194470036, 194470037, 194470038,  
 194470039, 194470040

METHOD BLANK: 42635

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

LABORATORY CONTROL SAMPLE & LCSD: 42636 42637

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
RISK										
Methane	ug/l	750	770	780	103	104	80-120	0.97	20	n
Ethane	ug/l	38	36	36	96	96	80-120	0	20	n
Ethene	ug/l	35	34	34	95	96	80-120	1	20	n



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**QUALITY CONTROL DATA**

Workorder: 19447 TFS / 3359151040

QC Batch: DISG/5457 Analysis Method: AM20GAX  
 QC Batch Method: AM20GAX  
 Associated Lab Samples: 194470041, 194470042, 194470043, 194470044, 194470045, 194470046, 194470047, 194470048

METHOD BLANK: 42677

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

LABORATORY CONTROL SAMPLE & LCSD: 42679 42681

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
RISK										
Methane	ug/l	750	830	830	111	111	80-120	0	20	n
Ethane	ug/l	38	44	44	116	116	80-120	0	20	n
Ethene	ug/l	35	41	41	116	117	80-120	0.86	20	n



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

**QUALITY CONTROL DATA**

Workorder: 19447 TFS / 3359151040

QC Batch: DISG/5466 Analysis Method: AM20GAX  
 QC Batch Method: AM20GAX  
 Associated Lab Samples: 194470041, 194470043, 194470044, 194470045, 194470048

METHOD BLANK: 42747

Parameter	Units	Blank Result	Reporting Limit Qualifiers
RISK Ethene	ug/l	0.10 U	0.10 n

LABORATORY CONTROL SAMPLE & LCSD: 42749 42751

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
RISK Ethene	ug/l	35	39	40	112	114	80-120	1.8	20	n



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Fax: (412) 826-3433

## QUALITY CONTROL DATA QUALIFIERS

Workorder: 19447 TFS / 3359151040

---

### QUALITY CONTROL PARAMETER QUALIFIERS

- n The laboratory does not hold NELAP/TNI accreditation for this method or analyte.



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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: 19447 TFS / 3359151040

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
194470001	ATR-OU2(53)-G061616			AM20GAX	DISG/5450
194470002	ATR-EB001-G061616			AM20GAX	DISG/5450
194470003	ATR-OU1(39)-G061616			AM20GAX	DISG/5450
194470004	ATR-OU1(28)-G061616			AM20GAX	DISG/5450
194470005	ATR-MW20(51)-G061616			AM20GAX	DISG/5450
194470006	ATR-MW20(35)-G061616			AM20GAX	DISG/5450
194470007	ATR-MW81(27)-G061616			AM20GAX	DISG/5450
194470008	ATR-MW20(35)-G061616R			AM20GAX	DISG/5450
194470009	ATR-MW17-G061416			AM20GAX	DISG/5450
194470010	ATR-OW5(16)-G061416			AM20GAX	DISG/5450
194470011	ATR-OW5(35)-G061416			AM20GAX	DISG/5450
194470012	ATR-OW5(45)-G061416			AM20GAX	DISG/5450
194470013	ATR-MW16-G061416			AM20GAX	DISG/5450
194470014	ATR-MW26(17.5)-G061416			AM20GAX	DISG/5450
194470015	ATR-MW26(28.8)-G061416			AM20GAX	DISG/5450
194470016	ATR-MW26(58.2)-G061416			AM20GAX	DISG/5450
194470017	ATR-ZVI2(17.5)-G061416			AM20GAX	DISG/5450
194470018	ATR-ZVI2(32.5)-G061416			AM20GAX	DISG/5450
194470019	ATR-MW15-G061516			AM20GAX	DISG/5450
194470020	ATR-OW4(54)-G061516			AM20GAX	DISG/5450
194470021	ATR-OW4(35)-G061516			AM20GAX	DISG/5452
194470022	ATR-OW3(55)-G061516			AM20GAX	DISG/5452
194470023	ATR-OW3(35)-G061516			AM20GAX	DISG/5452
194470024	ATR-OW2(33)-G061516			AM20GAX	DISG/5452
194470025	ATR-MW25(16.4)-G061516			AM20GAX	DISG/5452
194470026	ATR-MW25(32.6)-G061516			AM20GAX	DISG/5452
194470027	ATR-MW25(45.2)-G061516			AM20GAX	DISG/5452
194470028	ATR-MW24(24.9)-G061516			AM20GAX	DISG/5452
194470029	ATR-MW24(55.4)-G061516			AM20GAX	DISG/5452
194470030	ATR-MW14-G061516			AM20GAX	DISG/5452
194470031	ATR-MW59(29)-G061716			AM20GAX	DISG/5452
194470032	ATR-MW59(29)-G061716R			AM20GAX	DISG/5452
194470033	ATR-MW82-G061616			AM20GAX	DISG/5452

Report ID: 19447 - 810649

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### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: 19447 TFS / 3359151040

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
194470034	ATR-EB002-G061616			AM20GAX	DISG/5452
194470035	ATR-MW12-G061616			AM20GAX	DISG/5452
194470036	ATR-MW13-G061616			AM20GAX	DISG/5452
194470037	ATR-MW6C-G061616			AM20GAX	DISG/5452
194470038	ATR-MW62(36)-G061616			AM20GAX	DISG/5452
194470039	ATR-PM2-G061616			AM20GAX	DISG/5452
194470040	ATR-PM3-G061716			AM20GAX	DISG/5452
194470041	ATR-MW68-G061716			AM20GAX	DISG/5457
194470042	ATR-EB003-G061716			AM20GAX	DISG/5457
194470043	ATR-MW71-G062016			AM20GAX	DISG/5457
194470044	ATR-MW67-G062016			AM20GAX	DISG/5457
194470045	ATR-MW72-G062016			AM20GAX	DISG/5457
194470046	ATR-MW78-G062016			AM20GAX	DISG/5457
194470047	ATR-MW77-G062016			AM20GAX	DISG/5457
194470048	ATR-MW76-G062016			AM20GAX	DISG/5457
194470041	ATR-MW68-G061716			AM20GAX	DISG/5466
194470043	ATR-MW71-G062016			AM20GAX	DISG/5466
194470044	ATR-MW67-G062016			AM20GAX	DISG/5466
194470045	ATR-MW72-G062016			AM20GAX	DISG/5466
194470048	ATR-MW76-G062016			AM20GAX	DISG/5466



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**CHAIN-OF-CUSTODY / Analytical Request Document**  
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19447

<b>Section A</b> Required Client Information: Company: <u>Avec</u> Address: <u>521 Reynolds</u> Email To: <u>Paul.Stork@avec.com</u> Phone: <u>157-695-7000</u> Fax: Requested Due Date/AT:		<b>Section B</b> Required Project Information: Report To: <u>Paul Stork</u> Copy To: Purchase Order No.: <u>COB6005143</u> Project Name: <u>TOPS</u> Project Number: <u>2349151410</u>		<b>Section C</b> Invoice Information: Attention: Company Name: Address: Page Quote Reference: Page Project Manager: Page Profile #:	
<b>REGULATORY AGENCY</b> <input type="checkbox"/> NPDES <input type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER <input type="checkbox"/> UST <input type="checkbox"/> RCRA <input type="checkbox"/> OTHER			Page: <u>1</u> of <u>285</u> <b>1757184</b>		
<b>Site Location</b> STATE: <u>IN</u>			Requested Analysis Filtered (Y/N)		

ITEM #	Section D Required Client Information	Matrix Codes MATRIX / CODE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives	Analysis Test ↓	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	Page Project No./ Lab ID#
					COMPOSITE START	COMPOSITE END/DATE							
1	ATL-NWA(53)-6061616												
2	ATL-E4001-6061616												
3	ATL-001(3)-6061616												
4	ATL-003(33)-6061616												
5	ATL-MWA0(51)-6061616												
6	ATL-MWA0(25)-6061616												
7	ATL-MWA0(27)-6061616												
8	ATL-MWA0(33)-6061616												
9													
10													
11													
12													

<b>ADDITIONAL COMMENTS</b> ANDOGAX Methane, Ethane, Ethene		<b>RELINQUISHED BY / AFFILIATION</b> Sam Kikka		<b>DATE</b> 6-21-16		<b>TIME</b> 7:15		<b>ACCEPTED BY / AFFILIATION</b> N. O'Shea		<b>DATE</b> 6-22-16		<b>TIME</b> 11:30		<b>SAMPLE CONDITIONS</b> 5.6 g IN	
<b>SAMPLER NAME AND SIGNATURE</b> PRINT Name of SAMPLER: _____ SIGNATURE of SAMPLER: _____ DATE Signed (MM/DD/YY): <u>6-21-16</u>															
Temp in °C		Received on Ice (Y/N)		Custody Sealed Cooler (Y/N)		Samples Intact (Y/N)									



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# CHAIN-OF-CUSTODY / Analytical Request Document

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19447

Page: 2 of 5  
1757183

<b>Section A</b> Required Client Information: Company: <u>Mace Foster Wheeler</u> Address: <u>21 Riverside Rd</u> Email To: <u>Ball Stock</u> Phone: <u>513-559-7200</u> Requested Due Date/TAT:		<b>Section B</b> Required Project Information: Report To: <u>Ball Stock</u> Copy To:		<b>Section C</b> Invoice Information: Attention: Company Name: Address: Pace Quote Reference: Pace Project Manager: Pace Profile #:	
Matrix Codes MATRIX / CODE Drinking Water: DW Waste Water: WW Product: P Soil/Solid: SL Oil: OL Wipe: WP Air: AR Tissue: TS Other: OT		Matrix Code (see valid codes to left) SAMPLE TYPE (G=GRAB C=COMP)		Collected Composite Start: DATE TIME Composite End/Grab: DATE TIME	
Sample IDs MUST BE UNIQUE (A-Z, 0-9 / -)		Sample Temp at Collection # of Containers		Preservatives Unpreserved H <sub>2</sub> SO <sub>4</sub> HNO <sub>3</sub> HCl NaOH Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> Methanol Other: <u>Tris, Phosphate</u>	
Requested Analysis Filtered (Y/N)		Analysis Test <u>Dissolved Gases *</u>		Regulatory Agency <input type="checkbox"/> NPDES <input type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER <input type="checkbox"/> UST <input type="checkbox"/> RCRA <input type="checkbox"/> OTHER Site Location STATE: <u>IN</u>	

ITEM #	Section D Required Client Information	Matrix Codes MATRIX / CODE	MATRIX CODE	SAMPLE TYPE	DATE	TIME	DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives	Analysis Test	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	Pace Project No./ Lab ID
1	ATL-MW17-6061416		AT		6-14-16	1105				3					
2	ATL-OUS116-6061416				6-14-16	1320									
3	ATL-OUS135-6061416				6-14-16	1345									
4	ATL-OUS145-6061416				6-14-16	1440									
5	ATL-MW16-6061416				6-14-16	1555									
6	ATL-MW2617.5-6061416				6-14-16	1150									
7	ATL-MW26108.8-6061416				6-14-16	1300									
8	ATL-MW26154.2-6061416				6-14-16	1505									
9	ATL-ZVI217.5-6061416				6-14-16	1505									
10	ATL-ZVI2122.5-6061416				6-14-16	1550									
11															
12															

ADDITIONAL COMMENTS <u>* AMDOGAX</u> <u>We have Ethene Ethene</u>		RELINQUISHED BY / AFFILIATION <u>Ball Stock</u>		DATE <u>6-14-16</u>		TIME <u>1715</u>		ACCEPTED BY / AFFILIATION <u>KAS</u>		DATE <u>6-22-16</u>		TIME <u>1130</u>		SAMPLE CONDITIONS Temp in °C Received on Ice (Y/N) Custody Sealed Cooler (Y/N) Samples Intact (Y/N)	
SAMPLER NAME AND SIGNATURE PRINT Name of SAMPLER: SIGNATURE of SAMPLER:		DATE Signed (MM/DD/YY):		DATE <u>6-21-16</u>		TIME <u>1130</u>		ACCEPTED BY / AFFILIATION <u>PHS</u>		DATE <u>6-22-16</u>		TIME <u>1130</u>		SAMPLE CONDITIONS Temp in °C Received on Ice (Y/N) Custody Sealed Cooler (Y/N) Samples Intact (Y/N)	



19947

**CHAIN-OF-CUSTODY / Analytical Request Document**  
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<b>Section A</b> Required Client Information:		<b>Section B</b> Required Project Information:		<b>Section C</b> Invoice Information:	
Company: <u>Avec Taster Unleaded</u>	Report To: <u>Paul Stark</u>	Attention:	Company Name:	REGULATORY AGENCY	<input type="checkbox"/> NPDES <input type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER <input type="checkbox"/> UST <input type="checkbox"/> RCRA <input type="checkbox"/> OTHER
Address: <u>5316 Bar Co.</u>	Copy To:		Address:		
Email To: <u>Paul.Stark@avec.com</u>	Purchase Order No: <u>2012605413</u>	Page Quote Reference:	Page Project Manager:	Site Location STATE: <u>IN</u>	
Project: <u>2785-2000</u>	Project Name: <u>TP</u>	Page Profile #:			
Requested Due Date/TAT:	Project Number: <u>3255151040</u>			Requested Analysis Filtered (Y/N)	

ITEM #	Section D Required Client Information	Matrix Codes MATRIX / CODE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives						Analysis Test ↓	Residual Chlorine (Y/N)	
					DATE	TIME			DATE	TIME	Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl			NaOH
1	ATR-MWUS-6061516	DW WT WW	WT	GRAB	6-5-16	0955		3									
2	ATR-OUU(54)-6061516	Drinking Water Water Waste Water Product Soil/Solid			6-5-16	1100											
3	ATR-OUU(55)-6061516				6-5-16	1445											
4	ATR-OUU(55)-6061516				6-5-16	1300											
5	ATR-OUU(55)-6061516				6-5-16	1415											
6	ATR-OUU(55)-6061516				6-5-16	1535											
7	ATR-MWUS(64)-6061516				6-5-16	0925											
8	ATR-MWUS(64)-6061516				6-5-16	1038											
9	ATR-MWUS(65)-6061516				6-5-16	1126											
10	ATR-MWUS(64)-6061516				6-5-16	1350											
11	ATR-MWUS(64)-6061516				6-5-16	1355											
12	ATR-MWUS(64)-6061516				6-5-16	1530											

ADDITIONAL COMMENTS		RELINQUISHED BY / AFFILIATION		DATE		TIME		ACCEPTED BY / AFFILIATION		DATE		TIME		SAMPLE CONDITIONS	
* AMDO6AX		[Signature]		6-21-16		1715		KOSZ		6-22-16		1130		S.G. Y.N.	
Methane Ethane Ethane															

2

SAMPLER NAME AND SIGNATURE		PRINT Name of SAMPLER:	DATE Signed (MM/DD/YY):
[Signature]		[Signature]	6-21-16
SIGNATURE OF SAMPLER:		Temp in °C	Received on Ice (Y/N)
[Signature]			
		Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

19447

**CHAIN-OF-CUSTODY / Analytical Request Document**  
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Page: 4 of 5

1757185

<b>Section A</b> Required Client Information:		<b>Section B</b> Required Project Information:		<b>Section C</b> Invoice Information:	
Company: <u>Avec Foster Umwelt</u>	Report To: <u>Paul Storm</u>	Attention:	Company Name:	Address:	REGULATORY AGENCY
Address: <u>521 Bays Rd</u>	Copy To:				<input type="checkbox"/> NPDES <input type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER
Email To: <u>Manuska OH 45242</u>	Purchase Order No.: <u>CO12665143</u>	Pace Quote Reference:	Pace Project Manager:	Pace Profile #:	<input type="checkbox"/> UST <input type="checkbox"/> RCRA <input type="checkbox"/> OTHER
Phone: <u>937-859-2888</u>	Project Name: <u>TPS</u>				Site Location STATE: <u>OH</u>
Requested Due Date/AT:	Project Number: <u>3355151040</u>				Requested Analysis Filtered (Y/N)

ITEM #	Section D Required Client Information	Matrix Codes MATRIX / CODE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives						Analysis Test	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	Pace Project No./ Lab ID
					DATE	TIME			DATE	TIME	Unpreserved	H <sub>2</sub> SO <sub>4</sub>	HNO <sub>3</sub>	HCl				
1	ATR-MW55(69)-6061716	DW WT WW	WT		6-17-16	0905		3										
2	ATR-MW59(65)-6061716	DW WT WW			6-17-16	0905												
3	ATR-MW53-6061616	P SL WP			6-16-16	0900												
4	ATL-E0002-6061616	OL WP			6-17-16	0930												
5	ATR-MW13-6061616	OL WP			6-16-16	1050												
6	ATL-MW15-6061616	Oil Wipe			6-16-16	1150												
7	ATR-MW14-6061616	Air Tissue			6-16-16	1300												
8	ATR-AVU6152-6061616				6-16-16	1500												
9	ATR-PM2-6061616				6-16-16	1630												
10	ATR-PM3-6061716				6-16-16	0755												
11	ATR-MW65-6061716				6-17-16	1150												
12	ATL-E8003-6061716				6-17-16	1030												

ADDITIONAL COMMENTS		RELINQUISHED BY / AFFILIATION		DATE		TIME		ACCEPTED BY / AFFILIATION		DATE		TIME		SAMPLE CONDITIONS	
*AWD06AX		Sam Goble		6-21-16		715		KOR		PASS		6-21-16 1130A		Y N	
Mettave Ethene Twent															

SAMPLER NAME AND SIGNATURE		Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER:	SIGNATURE of SAMPLER:				



Ship To: ALS Environmental  
4388 Glendale Milford Rd.  
Cincinnati, Ohio 45242  
Phone: (513) 733-5336  
Fax: (513) 733-5347

# Field Chain-of-Custody Record

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19447

Date: 6-21-16 Purchase Order No.: 081260543

Company Name: Avec Foster Wheeler Project No.: 3359151040

Address: 521 Bess Rd. Sampling Site: TPS Rochester

City: Mansfield OH State: OH ZIP: 44872

Person to Contact: Paul Stark Billing Address (if different):

Email Address: Paul.Stark@amwfw.com

Telephone (437): 553-3600

Alternate Contact:

Report Requested by EOB of Selected TAT (Check Box):  
 10 Wk Days  5 Wk Days  3 Wk Days  2 Wk Days  1 Wk Day  
 Other  
 OH VAP:  YES  NO BUSTR:  YES  NO

## ANALYSIS REQUESTED

ALS Lab ID	Sample ID / Description	Date	Time	Preservation Key #	Sample Type / Matrix Key Abbr.	# of Sample Containers	ANALYSIS REQUESTED
43	ATR-MW71-6062016	6-20-16	1240	Torsodium Phosphate	MX 3	3	Dissolved Gases AMMOGAX
44	ATR-MW67-6062016	6-20-16	1350		X	X	
45	ATR-MW72-6062016	6-20-16	1515		X	X	
46	ATR-MW78-6062016	6-20-16	1635		X	X	
47	ATR-MW77-6062016	6-20-16	1710		X	X	
48	ATR-MW76-6062016	6-20-16	1600		X	X	

Notes: Methane Ethane Ethene

Matrix Key: A - Air B - Bulk S - Soil W - Water

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY.

Relinquished By: \_\_\_\_\_ Time / Date: 7/5/2016 Received By: WOO (Signature) PARS (Signature) Time / Date: 6-22-16 1130

Relinquished By: \_\_\_\_\_ Time / Date: \_\_\_\_\_ Received By: \_\_\_\_\_ (Signature) \_\_\_\_\_ (Signature) Time / Date: \_\_\_\_\_

Relinquished By: \_\_\_\_\_ Time / Date: \_\_\_\_\_ Received By: \_\_\_\_\_ (Signature) \_\_\_\_\_ (Signature) Time / Date: 5.60C

COOLER TEMP: \_\_\_\_\_ °C PH ADJUSTMENTS: \_\_\_\_\_

COOLING METHOD: NONE COOLER WET ICE DRY ICE ICE PACK

DELIVERY METHOD: CLIENT DROP BOX FEDEX UPS

STD MAIL PRY MAIL ALS COURIER OTHER: \_\_\_\_\_

CUSTODY SEALS: NONE COOLER PACKAGE SAMPLES

EQUIP. RETURNED: \_\_\_\_\_

NON-CONFORMANCE FORM

PAES Work Order #: 19447

Date: 6.22.16 Time of Receipt: 11:30 Receiver: LY

Client: AmeC

REASON FOR NON-CONFORMANCE:

ATR-MW71-6062016: Vials ID was  
ATR-MW71(33)-6062016

ACTION TAKEN:

Client name: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Logged in according to COC

Customer Service Initials: RW

Date: 6-22-16

# Cooler Receipt Form

Client Name: Ameo OH Project: TFS/ Lab Work Order: 19447  
3359151040

**A. Shipping/Container Information (circle appropriate response)**

Courier: FedEx UPS USPS Client Other: \_\_\_\_\_ Air bill Present: Yes No  
 Tracking Number: 7834 1452 2034  
 Custody Seal on Cooler/Box Present: Yes No Seals Intact: Yes No  
 Cooler/Box Packing Material: Bubble Wrap Absorbent Foam Other: \_\_\_\_\_  
 Type of Ice: Wet Blue None Ice Intact: Yes Melted  
 Cooler Temperature: 5-6°C Radiation Screened: Yes No Chain of Custody Present: Yes No  
 Comments: \_\_\_\_\_

**B. Laboratory Assignment/Log-in (check appropriate response)**

	YES	NO	N/A	Comment Reference non-Conformance
Chain of Custody properly filled out	✓			
Chain of Custody relinquished	✓			
Sampler Name & Signature on COC	✓			
Containers intact	✓			
Were samples in separate bags	✓			
Sample container labels match COC Sample name/date and time collected		✓		
Sufficient volume provided	✓			
PAES containers used	✓			
Are containers properly preserved for the requested testing? (as labeled)	✓			
If an unknown preservation state, were containers checked? Exception: VOA's coliform			✓	If yes, see pH form.
Was volume for dissolved testing field filtered, as noted on the COC? Was volume received in a preserved container?			✓	

Comments: \_\_\_\_\_

Cooler contents examined/received by: LG Date: 6-22-16

Project Manager Review: BW Date: 6-22-16

**DATA VALIDATION REPORT  
JUNE 2016 PERFORMANCE GROUNDWATER SAMPLING  
TEXTRON FORMER TORX FACILITY  
ROCHESTER, INDIANA**

**1.0 INTRODUCTION**

Groundwater samples were collected during monitoring well sampling completed in June 2016 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 8260B

Sample results were validated using general procedures in the USEPA National Data Validation Guidelines (USEPA, 1999), Indiana Department of Environmental Management (IDEM) data validation 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 the samples and includes a 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 replicate sample results
- sample results summary
- verification of electronic database results

A summary of qualification actions is presented on Table 3. Table 3 includes listings of validation reason codes that are applied to the results in the project database to document the reason for the validation qualification. Final sample results are presented on 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 IV 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 replicate sample results
- sample results summary
- verification of electronic database results\*
- instrument tuning
- initial calibration
- continuing calibration\*
- calculation checks specified in USEPA guidelines
- analyte identification and quantitation

#### Sample Preservation and Holding Times

The lab report narrative indicates at the time of analysis the following sample was found to have a pH measurement greater than 2:

ATR-MW15-G061516

Based on professional judgment a 7 day holding time was used for evaluation of the sample. Sample ATR-MW15-G061516 was analyzed 3 days outside the 7 day HT and all results were qualified estimated (J/UJ). Qualified results are summarized in Table 3 and were assigned reason code HT.

#### LCS Results

Reporting limits for bromomethane in a subset of samples were qualified as estimated values (UJ) due to LCS percent recoveries less than the QAPP specified control limits. LCS percent recoveries associated with qualified sample results ranged from 58 to 61, indicating potential low biases for bromomethane. All affected sample results were non-detect. Qualified results are included in Table 3 with reason code LCS-L.

### MS/MSD Results

A subset of results for the following compounds was qualified as estimated values (J/UJ) due to MS/MSD percent recoveries outside the QAPP specified control limits. Qualified results are summarized in Table 3 and were assigned reason code MS-L and/or MS-RPD.

- bromomethane
- vinyl chloride

In the MS/MSD associated with sample ATR-OW1(39)-G061616 the MS percent recovery for bromomethane (65) was below 70-130 control limits indicating potential low bias. Bromomethane was not detected in sample ATR-OW1(39)-G061616 and the reporting limit was qualified estimated (UJ).

In the MS/MSD associated with sample ATR-MW15-G061516 percent recoveries for bromomethane (43, 51) were below 70-130 control limits indicating potential low bias. Bromomethane was not detected in sample ATR-MW15-G061516 and the reporting limit was qualified estimated (UJ).

In the MS/MSD associated with sample ATR-MW81(27)-G061616 percent recoveries for bromomethane (56, 63) and vinyl chloride (62) were below 70-130 control limits indicating potential low biases. Bromomethane was not detected in sample ATR-MW81(27)-G061616 and the reporting limit was qualified estimated (UJ). The positive detection of vinyl chloride in sample ATR-MW81(27)-G061616 was qualified estimated (J) and may represent a potential low bias.

In the MS/MSD associated with sample ATR-OW5(35)-G061416 percent recoveries for bromomethane (50, 69) and vinyl chloride (68, 58) were below 70-130 control limits indicating potential low biases, and the relative percent difference between recoveries for bromomethane (31) was above the control limit of 20. Bromomethane was not detected in sample ATR-OW5(35)-G061416 and the reporting limit was qualified estimated (UJ). The positive detection of vinyl chloride in sample ATR-OW5(35)-G061416 was qualified estimated (J) and may represent a potential low bias.

### Sample Result Reporting/Verification of Electronic Database Results

The target analyte list in Table 2 of the QAPP includes total 1,2-dichloroethene and total 1,3-dichloropropene, in addition to the individual cis- and trans- isomers. The laboratory reported only the isomers for these compounds and not total concentrations.

### Continuing Calibration

Reporting limits for the following non-detect compounds in a subset of samples were qualified as estimated values (UJ) due to continuing calibration percent difference results outside the method goal of 20. Qualified results are summarized in Table 3 and were assigned reason code CCV%D.

- 1,1,1-trichloroethane
- acetone
- bromomethane
- carbon disulfide
- m,p-xylenes



In the continuing calibration analyzed June 25, 2016 (12:27), the percent difference (%D) for acetone (-20.1) was outside the control limit of 20. Acetone was not detected in associated samples and reporting limits were qualified estimated (UJ).

In the continuing calibration analyzed June 27, 2016 (08:48), the %D for carbon disulfide (-21.4) was outside the control limit of 20. Carbon disulfide was not detected in associated samples and reporting limits were qualified estimated (UJ).

In the continuing calibration analyzed June 27, 2016 (21:20), %Ds for bromomethane (28), carbon disulfide (-20.1), 1,1,1-trichloroethane (-26), and m,p-xylene (-22) were outside the control limit of 20. These analytes were not detected in associated samples and reporting limits were qualified estimated (UJ). Reporting limits for total xylenes were also qualified estimated (UJ) based on professional judgment.

In the continuing calibration analyzed June 28, 2016 (09:34), the %D for bromomethane (26) was outside the control limit of 20. Bromomethane was not detected in associated samples and reporting limits were qualified estimated (UJ).

### Reporting Limits

Some samples were analyzed at dilutions due to concentrations of target compounds. Reporting limits are elevated for compounds that were not detected in these samples. A summary of reporting limits for these samples is presented on Table 4.

Data Validator: Julie Ricardi



Date: August 17, 2016

Report Reviewed by: Christian Ricardi, NRCC-EAC



Date: August 29, 2016

### **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.

TABLE 1 - SUMMARY OF SAMPLES AND ANALYTICAL METHODS  
DATA VALIDATION REPORT  
JUNE 2016 PERFORMANCE GROUNDWATER SAMPLING  
TEXTRON FORMER TORX FACILITY  
ROCHESTER, INDIANA

SDG	Location	Field Sample ID	Sample Date	Matrix	Lab Sample ID	Parameter	VOCs
						Method	SW8260B
						QC Code	Param_Count
16061162	4377 N 31	ATR-4377NOUHWY31-061416	06/14/16	GW	16061162-44A	FS	36
16061162	MW-12	ATR-MW12-G061616	06/16/16	GW	16061162-39A	FS	36
16061162	MW-13	ATR-MW13-G061616	06/16/16	GW	16061162-40A	FS	36
16061162	MW-14	ATR-MW14-G061516	06/15/16	GW	16061162-30A	FS	36
16061162	MW-15	ATR-MW15-G061516	06/15/16	GW	16061162-19A	FS	36
16061162	MW-16	ATR-MW16-G061416	06/14/16	GW	16061162-05A	FS	36
16061162	MW-17	ATR-MW17-G061416	06/14/16	GW	16061162-01A	FS	36
16061162	MW-20(35)	ATR-MW20(35)-G061616	06/16/16	GW	16061162-16A	FS	36
16061162	MW-20(35)	ATR-MW20(35)-G061616R	06/16/16	GW	16061162-18A	FD	36
16061162	MW-20(51)	ATR-MW20(51)-G061616	06/16/16	GW	16061162-15A	FS	36
16061162	MW-24(24.9)	ATR-MW24(24.8)-G061516	06/15/16	GW	16061162-28A	FS	36
16061162	MW-24(55.9)	ATR-MW24(55.4)-G061516	06/15/16	GW	16061162-29A	FS	36
16061162	MW-25(16.4)	ATR-MW25(16.4)-G061516	06/15/16	GW	16061162-25A	FS	36
16061162	MW-25(32.6)	ATR-MW25(32.6)-G061516	06/15/16	GW	16061162-26A	FS	36
16061162	MW-25(45.2)	ATR-MW25(45.2)-G061516	06/15/16	GW	16061162-27A	FS	36
16061162	MW-26(17.5)	ATR-MW26(17.5)-G061416	06/14/16	GW	16061162-06A	FS	36
16061162	MW-26(28.8)	ATR-MW26(28.8)-G061416	06/14/16	GW	16061162-07A	FS	36
16061162	MW-26(58.8)	ATR-MW26(58.2)-G061416	06/14/16	GW	16061162-08A	FS	36
16061162	MW-59(29)	ATR-MW59(29)-G061716	06/17/16	GW	16061162-35A	FS	36
16061162	MW-59(29)	ATR-MW59(29)-G061716R	06/17/16	GW	16061162-36A	FD	36
16061162	MW-62(36)	ATR-MW62-G061616	06/16/16	GW	16061162-42A	FS	36
16061162	MW-68(32)	ATR-MW68-G061716	06/17/16	GW	16061162-33A	FS	36
16061162	MW-6C	ATR-MW6C-G061616	06/16/16	GW	16061162-41A	FS	36
16061162	MW-81(27)	ATR-MW81(27)-G061616	06/16/16	GW	16061162-17A	FS	36
16061162	MW-82(58)	ATR-MW82-G061616	06/16/16	GW	16061162-37A	FS	36
16061162	OW-01(28)	ATR-OW1(28)-G061616	06/16/16	GW	16061162-14A	FS	36
16061162	OW-01(39)	ATR-OW1(39)-G061616	06/16/16	GW	16061162-13A	FS	36
16061162	OW-02(33)	ATR-OW2(33)-G061516	06/15/16	GW	16061162-24A	FS	36
16061162	OW-02(53)	ATR-OW2(53)-G061616	06/16/16	GW	16061162-11A	FS	36
16061162	OW-03(35)	ATR-OW3(35)-G061516	06/15/16	GW	16061162-23A	FS	36
16061162	OW-03(55)	ATR-OW3(55)-G061516	06/15/16	GW	16061162-22A	FS	36
16061162	OW-04(35)	ATR-OW4(35)-G061516	06/15/16	GW	16061162-21A	FS	36
16061162	OW-04(54)	ATR-OW4(54)-G061516	06/15/16	GW	16061162-20A	FS	36
16061162	OW-04(54)	ATR-OW5(45)-G061416	06/14/16	GW	16061162-04A	FS	36
16061162	OW-05(16)	ATR-OW5(16)-G061416	06/14/16	GW	16061162-02A	FS	36
16061162	OW-05(35)	ATR-OW5(35)-G061416	06/14/16	GW	16061162-03A	FS	36
16061162	PM-2	ATR-PM2-G061616	06/16/16	GW	16061162-43A	FS	36
16061162	PM-3	ATR-PM3-G061716	06/17/16	GW	16061162-32A	FS	36
16061162	QC	ATR-EB001-G061616	06/16/16	BW	16061162-12A	EB	36
16061162	QC	ATR-EB002-G061616	06/16/16	BW	16061162-38A	EB	36
16061162	QC	ATR-EB003-G061716	06/17/16	BW	16061162-31A	EB	36
16061162	QC	Trip Blank - 061716	06/17/16	BW	16061162-34A	TB	36
16061162	ZVI-2(17.5)	ATR-ZVI2(17.5)-G061416	06/14/16	GW	16061162-09A	FS	36
16061162	ZVI-2(32.5)	ATR-ZVI2(32.5)-G061416	06/14/16	GW	16061162-10A	FS	36

GW = groundwater, BW = blank water  
FS = field sample, FD = field duplicate, TB = trip blank, EB = equipment blank  
Param\_Count = number of target analytes reported

**TABLE 2 - QC LIMITS  
DATA VALIDATION REPORT  
JUNE 2016 PERFORMANCE GROUNDWATER SAMPLING  
TEXTRON FORMER TORX FACILITY  
ROCHESTER, INDIANA**

<b>PARAMETER</b>	<b>QC TEST</b>	<b>ANALYTE</b>	<b>WATER (%)</b>	<b>WATER RPD</b>
<b>Volatiles</b>	<b>Surrogate</b>	All Surrogates(1) All Target	85 - 115	
	<b>LCS</b>	Compounds All Target	70 - 130	
	<b>MS/MSD</b>	Compounds All Target	70 - 130	20(2)
	<b>Field Duplicates</b>	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 - SUMMARY OF QUALIFICATION ACTIONS  
DATA VALIDATION REPORT  
JUNE 2016 PERFORMANCE GROUNDWATER SAMPLING  
TEXTRON FORMER TORX FACILITY  
ROCHESTER, INDIANA

SDG	Analysis Method	Lab Sample ID	Field Sample ID	Parameter Name	Lab Result	Lab Qualifier	Validated Result	Validation Qualifier	Val Reason Code	Result Units	Lab ID
16061162	SW8260B	16061162-01A	ATR-MW17-G061416	Carbon disulfide	1	U	1	UJ	CCV%D	UG/L	ALSHN
16061162	SW8260B	16061162-02A	ATR-OW5(16)-G061416	Bromomethane	1	U	1	UJ	CCV%D, LCS-L	UG/L	ALSHN
16061162	SW8260B	16061162-03A	ATR-OW5(35)-G061416	Bromomethane	1	U	1	UJ	CCV%D, LCS-L, MS-L, MS-RPD	UG/L	ALSHN
16061162	SW8260B	16061162-03A	ATR-OW5(35)-G061416	Vinyl chloride	170		170	J	MS-L	UG/L	ALSHN
16061162	SW8260B	16061162-04A	ATR-OW5(45)-G061416	Carbon disulfide	5	U	5	UJ	CCV%D	UG/L	ALSHN
16061162	SW8260B	16061162-05A	ATR-MW16-G061416	Carbon disulfide	1	U	1	UJ	CCV%D	UG/L	ALSHN
16061162	SW8260B	16061162-06A	ATR-MW26(17.5)-G061416	Carbon disulfide	1	U	1	UJ	CCV%D	UG/L	ALSHN
16061162	SW8260B	16061162-10A	ATR-ZVI2(32.5)-G061416	Carbon disulfide	1	U	1	UJ	CCV%D	UG/L	ALSHN
16061162	SW8260B	16061162-11A	ATR-OW2(53)-G061616	Carbon disulfide	5	U	5	UJ	CCV%D	UG/L	ALSHN
16061162	SW8260B	16061162-13A	ATR-OW1(39)-G061616	Bromomethane	1	U	1	UJ	MS-L	UG/L	ALSHN
16061162	SW8260B	16061162-14A	ATR-OW1(28)-G061616	Carbon disulfide	1	U	1	UJ	CCV%D	UG/L	ALSHN
16061162	SW8260B	16061162-17A	ATR-MW81(27)-G061616	1,1,1-Trichloroethane	100	U	100	UJ	CCV%D	UG/L	ALSHN
16061162	SW8260B	16061162-17A	ATR-MW81(27)-G061616	Bromomethane	100	U	100	UJ	CCV%D, LCS-L, MS-L	UG/L	ALSHN
16061162	SW8260B	16061162-17A	ATR-MW81(27)-G061616	Carbon disulfide	100	U	100	UJ	CCV%D	UG/L	ALSHN
16061162	SW8260B	16061162-17A	ATR-MW81(27)-G061616	Vinyl chloride	43000		43,000	J	MS-L	UG/L	ALSHN
16061162	SW8260B	16061162-17A	ATR-MW81(27)-G061616	Xylenes (m&p)	200	U	200	UJ	CCV%D	UG/L	ALSHN
16061162	SW8260B	16061162-17A	ATR-MW81(27)-G061616	Xylenes, Total	300	U	300	UJ	CCV%D	UG/L	ALSHN
16061162	SW8260B	16061162-19A	ATR-MW15-G061516	1,1,1-Trichloroethane	10	U	10	UJ	HT	UG/L	ALSHN
16061162	SW8260B	16061162-19A	ATR-MW15-G061516	1,1,2,2-Tetrachloroethane	10	U	10	UJ	HT	UG/L	ALSHN
16061162	SW8260B	16061162-19A	ATR-MW15-G061516	1,1,2-Trichloroethane	10	U	10	UJ	HT	UG/L	ALSHN
16061162	SW8260B	16061162-19A	ATR-MW15-G061516	1,1-Dichloroethane	10	U	10	UJ	HT	UG/L	ALSHN
16061162	SW8260B	16061162-19A	ATR-MW15-G061516	1,1-Dichloroethene	22		22	J	HT	UG/L	ALSHN
16061162	SW8260B	16061162-19A	ATR-MW15-G061516	1,2-Dichloroethane	10	U	10	UJ	HT	UG/L	ALSHN
16061162	SW8260B	16061162-19A	ATR-MW15-G061516	1,2-Dichloropropane	10	U	10	UJ	HT	UG/L	ALSHN
16061162	SW8260B	16061162-19A	ATR-MW15-G061516	2-Butanone	840		840	J	HT	UG/L	ALSHN
16061162	SW8260B	16061162-19A	ATR-MW15-G061516	2-Hexanone	50	U	50	UJ	HT	UG/L	ALSHN
16061162	SW8260B	16061162-19A	ATR-MW15-G061516	4-Methyl-2-pentanone	10	U	10	UJ	HT	UG/L	ALSHN
16061162	SW8260B	16061162-19A	ATR-MW15-G061516	Acetone	100	U	100	UJ	HT	UG/L	ALSHN
16061162	SW8260B	16061162-19A	ATR-MW15-G061516	Benzene	10	U	10	UJ	HT	UG/L	ALSHN
16061162	SW8260B	16061162-19A	ATR-MW15-G061516	Bromodichloromethane	10	U	10	UJ	HT	UG/L	ALSHN
16061162	SW8260B	16061162-19A	ATR-MW15-G061516	Bromoform	10	U	10	UJ	HT	UG/L	ALSHN
16061162	SW8260B	16061162-19A	ATR-MW15-G061516	Bromomethane	10	U	10	UJ	HT, MS-L	UG/L	ALSHN
16061162	SW8260B	16061162-19A	ATR-MW15-G061516	Carbon disulfide	10	U	10	UJ	HT	UG/L	ALSHN
16061162	SW8260B	16061162-19A	ATR-MW15-G061516	Carbon tetrachloride	10	U	10	UJ	HT	UG/L	ALSHN
16061162	SW8260B	16061162-19A	ATR-MW15-G061516	Chlorobenzene	10	U	10	UJ	HT	UG/L	ALSHN
16061162	SW8260B	16061162-19A	ATR-MW15-G061516	Chloroethane	10	U	10	UJ	HT	UG/L	ALSHN

TABLE 3 - SUMMARY OF QUALIFICATION ACTIONS  
DATA VALIDATION REPORT  
JUNE 2016 PERFORMANCE GROUNDWATER SAMPLING  
TEXTRON FORMER TORX FACILITY  
ROCHESTER, INDIANA

SDG	Analysis Method	Lab Sample ID	Field Sample ID	Parameter Name	Lab Result	Lab Qualifier	Validated Result	Validation Qualifier	Val Reason Code	Result Units	Lab ID
16061162	SW8260B	16061162-19A	ATR-MW15-G061516	Chloroform	10	U	10	UJ	HT	UG/L	ALSHN
16061162	SW8260B	16061162-19A	ATR-MW15-G061516	Chloromethane	10	U	10	UJ	HT	UG/L	ALSHN
16061162	SW8260B	16061162-19A	ATR-MW15-G061516	Cis-1,2-Dichloroethene	4300		4,300	J	HT	UG/L	ALSHN
16061162	SW8260B	16061162-19A	ATR-MW15-G061516	Cis-1,3-Dichloropropene	10	U	10	UJ	HT	UG/L	ALSHN
16061162	SW8260B	16061162-19A	ATR-MW15-G061516	Dibromochloromethane	10	U	10	UJ	HT	UG/L	ALSHN
16061162	SW8260B	16061162-19A	ATR-MW15-G061516	Ethylbenzene	10	U	10	UJ	HT	UG/L	ALSHN
16061162	SW8260B	16061162-19A	ATR-MW15-G061516	Methylene chloride	50	U	50	UJ	HT	UG/L	ALSHN
16061162	SW8260B	16061162-19A	ATR-MW15-G061516	Styrene	10	U	10	UJ	HT	UG/L	ALSHN
16061162	SW8260B	16061162-19A	ATR-MW15-G061516	Tetrachloroethene	10	U	10	UJ	HT	UG/L	ALSHN
16061162	SW8260B	16061162-19A	ATR-MW15-G061516	Toluene	10	U	10	UJ	HT	UG/L	ALSHN
16061162	SW8260B	16061162-19A	ATR-MW15-G061516	trans-1,2-Dichloroethene	140		140	J	HT	UG/L	ALSHN
16061162	SW8260B	16061162-19A	ATR-MW15-G061516	trans-1,3-Dichloropropene	10	U	10	UJ	HT	UG/L	ALSHN
16061162	SW8260B	16061162-19A	ATR-MW15-G061516	Trichloroethene	10	U	10	UJ	HT	UG/L	ALSHN
16061162	SW8260B	16061162-19A	ATR-MW15-G061516	Vinyl chloride	340		340	J	HT	UG/L	ALSHN
16061162	SW8260B	16061162-19A	ATR-MW15-G061516	Xylene, o	10	U	10	UJ	HT	UG/L	ALSHN
16061162	SW8260B	16061162-19A	ATR-MW15-G061516	Xylenes (m&p)	20	U	20	UJ	HT	UG/L	ALSHN
16061162	SW8260B	16061162-19A	ATR-MW15-G061516	Xylenes, Total	30	U	30	UJ	HT	UG/L	ALSHN
16061162	SW8260B	16061162-21A	ATR-OW4(35)-G061516	1,1,1-Trichloroethane	5	U	5	UJ	CCV%D	UG/L	ALSHN
16061162	SW8260B	16061162-21A	ATR-OW4(35)-G061516	Bromomethane	5	U	5	UJ	CCV%D, LCS-L	UG/L	ALSHN
16061162	SW8260B	16061162-21A	ATR-OW4(35)-G061516	Carbon disulfide	5	U	5	UJ	CCV%D	UG/L	ALSHN
16061162	SW8260B	16061162-21A	ATR-OW4(35)-G061516	Xylenes (m&p)	10	U	10	UJ	CCV%D	UG/L	ALSHN
16061162	SW8260B	16061162-21A	ATR-OW4(35)-G061516	Xylenes, Total	15	U	15	UJ	CCV%D	UG/L	ALSHN
16061162	SW8260B	16061162-22A	ATR-OW3(55)-G061516	1,1,1-Trichloroethane	2	U	2	UJ	CCV%D	UG/L	ALSHN
16061162	SW8260B	16061162-22A	ATR-OW3(55)-G061516	Bromomethane	2	U	2	UJ	CCV%D, LCS-L	UG/L	ALSHN
16061162	SW8260B	16061162-22A	ATR-OW3(55)-G061516	Carbon disulfide	2	U	2	UJ	CCV%D	UG/L	ALSHN
16061162	SW8260B	16061162-22A	ATR-OW3(55)-G061516	Xylenes (m&p)	4	U	4	UJ	CCV%D	UG/L	ALSHN
16061162	SW8260B	16061162-22A	ATR-OW3(55)-G061516	Xylenes, Total	6	U	6	UJ	CCV%D	UG/L	ALSHN
16061162	SW8260B	16061162-23A	ATR-OW3(35)-G061516	Acetone	10	U	10	UJ	CCV%D	UG/L	ALSHN
16061162	SW8260B	16061162-24A	ATR-OW2(33)-G061516	1,1,1-Trichloroethane	5	U	5	UJ	CCV%D	UG/L	ALSHN
16061162	SW8260B	16061162-24A	ATR-OW2(33)-G061516	Bromomethane	5	U	5	UJ	CCV%D, LCS-L	UG/L	ALSHN
16061162	SW8260B	16061162-24A	ATR-OW2(33)-G061516	Carbon disulfide	5	U	5	UJ	CCV%D	UG/L	ALSHN
16061162	SW8260B	16061162-24A	ATR-OW2(33)-G061516	Xylenes (m&p)	10	U	10	UJ	CCV%D	UG/L	ALSHN
16061162	SW8260B	16061162-24A	ATR-OW2(33)-G061516	Xylenes, Total	15	U	15	UJ	CCV%D	UG/L	ALSHN
16061162	SW8260B	16061162-25A	ATR-MW25(16.4)-G061516	Carbon disulfide	1	U	1	UJ	CCV%D	UG/L	ALSHN
16061162	SW8260B	16061162-26A	ATR-MW25(32.6)-G061516	Carbon disulfide	1	U	1	UJ	CCV%D	UG/L	ALSHN
16061162	SW8260B	16061162-27A	ATR-MW25(45.2)-G061516	1,1,1-Trichloroethane	5	U	5	UJ	CCV%D	UG/L	ALSHN

TABLE 3 - SUMMARY OF QUALIFICATION ACTIONS  
DATA VALIDATION REPORT  
JUNE 2016 PERFORMANCE GROUNDWATER SAMPLING  
TEXTRON FORMER TORX FACILITY  
ROCHESTER, INDIANA

SDG	Analysis Method	Lab Sample ID	Field Sample ID	Parameter Name	Lab Result	Lab Qualifier	Validated Result	Validation Qualifier	Val Reason Code	Result Units	Lab ID
16061162	SW8260B	16061162-27A	ATR-MW25(45.2)-G061516	Bromomethane	5	U	5	UJ	CCV%D, LCS-L	UG/L	ALSHN
16061162	SW8260B	16061162-27A	ATR-MW25(45.2)-G061516	Carbon disulfide	5	U	5	UJ	CCV%D	UG/L	ALSHN
16061162	SW8260B	16061162-27A	ATR-MW25(45.2)-G061516	Xylenes (m&p)	10	U	10	UJ	CCV%D	UG/L	ALSHN
16061162	SW8260B	16061162-27A	ATR-MW25(45.2)-G061516	Xylenes, Total	15	U	15	UJ	CCV%D	UG/L	ALSHN
16061162	SW8260B	16061162-28A	ATR-MW24(24.8)-G061516	Acetone	10	U	10	UJ	CCV%D	UG/L	ALSHN
16061162	SW8260B	16061162-29A	ATR-MW24(55.4)-G061516	Carbon disulfide	1	U	1	UJ	CCV%D	UG/L	ALSHN
16061162	SW8260B	16061162-30A	ATR-MW14-G061516	1,1,1-Trichloroethane	1	U	1	UJ	CCV%D	UG/L	ALSHN
16061162	SW8260B	16061162-30A	ATR-MW14-G061516	Bromomethane	1	U	1	UJ	CCV%D, LCS-L	UG/L	ALSHN
16061162	SW8260B	16061162-30A	ATR-MW14-G061516	Carbon disulfide	1	U	1	UJ	CCV%D	UG/L	ALSHN
16061162	SW8260B	16061162-30A	ATR-MW14-G061516	Xylenes (m&p)	2	U	2	UJ	CCV%D	UG/L	ALSHN
16061162	SW8260B	16061162-30A	ATR-MW14-G061516	Xylenes, Total	3	U	3	UJ	CCV%D	UG/L	ALSHN
16061162	SW8260B	16061162-32A	ATR-PM3-G061716	1,1,1-Trichloroethane	50	U	50	UJ	CCV%D	UG/L	ALSHN
16061162	SW8260B	16061162-32A	ATR-PM3-G061716	Bromomethane	50	U	50	UJ	CCV%D, LCS-L	UG/L	ALSHN
16061162	SW8260B	16061162-32A	ATR-PM3-G061716	Carbon disulfide	50	U	50	UJ	CCV%D	UG/L	ALSHN
16061162	SW8260B	16061162-32A	ATR-PM3-G061716	Xylenes (m&p)	100	U	100	UJ	CCV%D	UG/L	ALSHN
16061162	SW8260B	16061162-32A	ATR-PM3-G061716	Xylenes, Total	150	U	150	UJ	CCV%D	UG/L	ALSHN
16061162	SW8260B	16061162-33A	ATR-MW68-G061716	Carbon disulfide	1	U	1	UJ	CCV%D	UG/L	ALSHN
16061162	SW8260B	16061162-35A	ATR-MW59(29)-G061716	1,1,1-Trichloroethane	25	U	25	UJ	CCV%D	UG/L	ALSHN
16061162	SW8260B	16061162-35A	ATR-MW59(29)-G061716	Bromomethane	25	U	25	UJ	CCV%D, LCS-L	UG/L	ALSHN
16061162	SW8260B	16061162-35A	ATR-MW59(29)-G061716	Carbon disulfide	25	U	25	UJ	CCV%D	UG/L	ALSHN
16061162	SW8260B	16061162-35A	ATR-MW59(29)-G061716	Xylenes (m&p)	50	U	50	UJ	CCV%D	UG/L	ALSHN
16061162	SW8260B	16061162-35A	ATR-MW59(29)-G061716	Xylenes, Total	75	U	75	UJ	CCV%D	UG/L	ALSHN
16061162	SW8260B	16061162-36A	ATR-MW59(29)-G061716R	1,1,1-Trichloroethane	25	U	25	UJ	CCV%D	UG/L	ALSHN
16061162	SW8260B	16061162-36A	ATR-MW59(29)-G061716R	Bromomethane	25	U	25	UJ	CCV%D, LCS-L	UG/L	ALSHN
16061162	SW8260B	16061162-36A	ATR-MW59(29)-G061716R	Carbon disulfide	25	U	25	UJ	CCV%D	UG/L	ALSHN
16061162	SW8260B	16061162-36A	ATR-MW59(29)-G061716R	Xylenes (m&p)	50	U	50	UJ	CCV%D	UG/L	ALSHN
16061162	SW8260B	16061162-36A	ATR-MW59(29)-G061716R	Xylenes, Total	75	U	75	UJ	CCV%D	UG/L	ALSHN
16061162	SW8260B	16061162-37A	ATR-MW82-G061616	Acetone	10	U	10	UJ	CCV%D	UG/L	ALSHN
16061162	SW8260B	16061162-39A	ATR-MW12-G061616	1,1,1-Trichloroethane	5	U	5	UJ	CCV%D	UG/L	ALSHN
16061162	SW8260B	16061162-39A	ATR-MW12-G061616	Bromomethane	5	U	5	UJ	CCV%D, LCS-L	UG/L	ALSHN
16061162	SW8260B	16061162-39A	ATR-MW12-G061616	Carbon disulfide	5	U	5	UJ	CCV%D	UG/L	ALSHN
16061162	SW8260B	16061162-39A	ATR-MW12-G061616	Xylenes (m&p)	10	U	10	UJ	CCV%D	UG/L	ALSHN
16061162	SW8260B	16061162-39A	ATR-MW12-G061616	Xylenes, Total	15	U	15	UJ	CCV%D	UG/L	ALSHN
16061162	SW8260B	16061162-40A	ATR-MW13-G061616	Carbon disulfide	1	U	1	UJ	CCV%D	UG/L	ALSHN
16061162	SW8260B	16061162-41A	ATR-MW6C-G061616	1,1,1-Trichloroethane	1	U	1	UJ	CCV%D	UG/L	ALSHN
16061162	SW8260B	16061162-41A	ATR-MW6C-G061616	Bromomethane	1	U	1	UJ	CCV%D, LCS-L	UG/L	ALSHN

TABLE 3 - SUMMARY OF QUALIFICATION ACTIONS  
DATA VALIDATION REPORT  
JUNE 2016 PERFORMANCE GROUNDWATER SAMPLING  
TEXTRON FORMER TORX FACILITY  
ROCHESTER, INDIANA

SDG	Analysis Method	Lab Sample ID	Field Sample ID	Parameter Name	Lab Result	Lab Qualifier	Validated Result	Validation Qualifier	Val Reason Code	Result Units	Lab ID
16061162	SW8260B	16061162-41A	ATR-MW6C-G061616	Carbon disulfide	1	U	1	UJ	CCV%D	UG/L	ALSHN
16061162	SW8260B	16061162-41A	ATR-MW6C-G061616	Xylenes (m&p)	2	U	2	UJ	CCV%D	UG/L	ALSHN
16061162	SW8260B	16061162-41A	ATR-MW6C-G061616	Xylenes, Total	3	U	3	UJ	CCV%D	UG/L	ALSHN
16061162	SW8260B	16061162-42A	ATR-MW62-G061616	1,1,1-Trichloroethane	1	U	1	UJ	CCV%D	UG/L	ALSHN
16061162	SW8260B	16061162-42A	ATR-MW62-G061616	Bromomethane	1	U	1	UJ	CCV%D, LCS-L	UG/L	ALSHN
16061162	SW8260B	16061162-42A	ATR-MW62-G061616	Carbon disulfide	1	U	1	UJ	CCV%D	UG/L	ALSHN
16061162	SW8260B	16061162-42A	ATR-MW62-G061616	Xylenes (m&p)	2	U	2	UJ	CCV%D	UG/L	ALSHN
16061162	SW8260B	16061162-42A	ATR-MW62-G061616	Xylenes, Total	3	U	3	UJ	CCV%D	UG/L	ALSHN
16061162	SW8260B	16061162-43A	ATR-PM2-G061616	1,1,1-Trichloroethane	10	U	10	UJ	CCV%D	UG/L	ALSHN
16061162	SW8260B	16061162-43A	ATR-PM2-G061616	Bromomethane	10	U	10	UJ	CCV%D, LCS-L	UG/L	ALSHN
16061162	SW8260B	16061162-43A	ATR-PM2-G061616	Carbon disulfide	10	U	10	UJ	CCV%D	UG/L	ALSHN
16061162	SW8260B	16061162-43A	ATR-PM2-G061616	Xylenes (m&p)	20	U	20	UJ	CCV%D	UG/L	ALSHN
16061162	SW8260B	16061162-43A	ATR-PM2-G061616	Xylenes, Total	30	U	30	UJ	CCV%D	UG/L	ALSHN

**Units --**

UG/L = microgram per liter

**Qualifiers --**

U = not detected, value is the reporting limit  
J = value is estimated

**Validation Reason Codes --**

HT = analytical holding time exceeded  
CCV%D = continuing calibration percent difference exceeds control limit  
LCS-L = laboratory control sample percent recovery less than control limits  
MS-L = matrix spike percent recovery less than control limits  
MS-RPD = MS/MSD relative percent difference greater than control limit



TABLE 4 - SUMMARY OF ANALYTICAL RESULTS  
DATA VALIDATION REPORT  
JUNE 2016 PERFORMANCE GROUNDWATER SAMPLING  
TEXTRON FORMER TORX FACILITY  
ROCHESTER, INDIANA

		SDG	16061162		16061162		16061162	
		Location	4377 N 31		MW-12		MW-13	
		Sample Date	6/14/2016		6/16/2016		6/16/2016	
		Sample ID	ATR-4377NOUHWY31-061416		ATR-MW12-G061616		ATR-MW13-G061616	
		Qc Code	FS		FS		FS	
Class	Parameter	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier
VOCs	1,1,1-Trichloroethane	UG/L	1	U	5	UJ	1	U
VOCs	1,1,2,2-Tetrachloroethane	UG/L	1	U	5	U	1	U
VOCs	1,1,2-Trichloroethane	UG/L	1	U	5	U	1	U
VOCs	1,1-Dichloroethane	UG/L	1	U	5	U	1	U
VOCs	1,1-Dichloroethene	UG/L	1	U	5	U	1	U
VOCs	1,2-Dichloroethane	UG/L	1	U	5	U	1	U
VOCs	1,2-Dichloropropane	UG/L	1	U	5	U	1	U
VOCs	2-Butanone	UG/L	5	U	25	U	76	
VOCs	2-Hexanone	UG/L	5	U	25	U	5	U
VOCs	4-Methyl-2-pentanone	UG/L	1	U	5	U	1	U
VOCs	Acetone	UG/L	10	U	50	U	24	
VOCs	Benzene	UG/L	1	U	5	U	1	U
VOCs	Bromodichloromethane	UG/L	1	U	5	U	1	U
VOCs	Bromoform	UG/L	1	U	5	U	1	U
VOCs	Bromomethane	UG/L	1	U	5	UJ	1	U
VOCs	Carbon disulfide	UG/L	1	U	5	UJ	1	UJ
VOCs	Carbon tetrachloride	UG/L	1	U	5	U	1	U
VOCs	Chlorobenzene	UG/L	1	U	5	U	1	U
VOCs	Chloroethane	UG/L	1	U	5	U	1	U
VOCs	Chloroform	UG/L	1	U	5	U	1	U
VOCs	Chloromethane	UG/L	1	U	5	U	1	U
VOCs	Cis-1,2-Dichloroethene	UG/L	1	U	630		190	
VOCs	Cis-1,3-Dichloropropene	UG/L	1	U	5	U	1	U
VOCs	Dibromochloromethane	UG/L	1	U	5	U	1	U
VOCs	Ethylbenzene	UG/L	1	U	5	U	1	U
VOCs	Methylene chloride	UG/L	5	U	25	U	5	U
VOCs	Styrene	UG/L	1	U	5	U	1	U

TABLE 4 - SUMMARY OF ANALYTICAL RESULTS  
 DATA VALIDATION REPORT  
 JUNE 2016 PERFORMANCE GROUNDWATER SAMPLING  
 TEXTRON FORMER TORX FACILITY  
 ROCHESTER, INDIANA

		SDG	16061162		16061162		16061162	
		Location	4377 N 31		MW-12		MW-13	
		Sample Date	6/14/2016		6/16/2016		6/16/2016	
		Sample ID	ATR-4377NOUHWY31-061416		ATR-MW12-G061616		ATR-MW13-G061616	
		Qc Code	FS		FS		FS	
Class	Parameter	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier
VOCs	Tetrachloroethene	UG/L	1 U		5 U		1 U	
VOCs	Toluene	UG/L	1 U		5 U		1 U	
VOCs	trans-1,2-Dichloroethene	UG/L	1 U		5 U		1	
VOCs	trans-1,3-Dichloropropene	UG/L	1 U		5 U		1 U	
VOCs	Trichloroethene	UG/L	1 U		5 U		1 U	
VOCs	Vinyl chloride	UG/L	1 U		1300		96	
VOCs	Xylene, o	UG/L	1 U		5 U		1 U	
VOCs	Xylenes (m&p)	UG/L	2 U		10 UJ		2 U	
VOCs	Xylenes, Total	UG/L	3 U		15 UJ		3 U	

U = not detected, value is the detection limit

J = value is estimated

UG/L = microgram per liter

FS = Field Sample, FD = Field Duplicate

TB = Trip Blank, EB = Equipment Blank

TABLE 4 - SUMMARY OF ANALYTICAL RESULTS  
DATA VALIDATION REPORT  
JUNE 2016 PERFORMANCE GROUNDWATER SAMPLING  
TEXTRON FORMER TORX FACILITY  
ROCHESTER, INDIANA

		SDG	16061162		16061162		16061162	
		Location	MW-14		MW-15		MW-16	
		Sample Date	6/15/2016		6/15/2016		6/14/2016	
		Sample ID	ATR-MW14-G061516		ATR-MW15-G061516		ATR-MW16-G061416	
		Qc Code	FS		FS		FS	
Class	Parameter	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier
VOCs	1,1,1-Trichloroethane	UG/L	1	UJ	10	UJ	1	U
VOCs	1,1,2,2-Tetrachloroethane	UG/L	1	U	10	UJ	1	U
VOCs	1,1,2-Trichloroethane	UG/L	1	U	10	UJ	1	U
VOCs	1,1-Dichloroethane	UG/L	1	U	10	UJ	1	U
VOCs	1,1-Dichloroethene	UG/L	1	U	22	J	1	U
VOCs	1,2-Dichloroethane	UG/L	1	U	10	UJ	1	U
VOCs	1,2-Dichloropropane	UG/L	1	U	10	UJ	1	U
VOCs	2-Butanone	UG/L	41		840	J	63	
VOCs	2-Hexanone	UG/L	5	U	50	UJ	5	U
VOCs	4-Methyl-2-pentanone	UG/L	1	U	10	UJ	1	U
VOCs	Acetone	UG/L	10	U	100	UJ	10	U
VOCs	Benzene	UG/L	1	U	10	UJ	1	U
VOCs	Bromodichloromethane	UG/L	1	U	10	UJ	1	U
VOCs	Bromoform	UG/L	1	U	10	UJ	1	U
VOCs	Bromomethane	UG/L	1	UJ	10	UJ	1	U
VOCs	Carbon disulfide	UG/L	1	UJ	10	UJ	1	UJ
VOCs	Carbon tetrachloride	UG/L	1	U	10	UJ	1	U
VOCs	Chlorobenzene	UG/L	1	U	10	UJ	1	U
VOCs	Chloroethane	UG/L	1	U	10	UJ	1	U
VOCs	Chloroform	UG/L	1	U	10	UJ	1	U
VOCs	Chloromethane	UG/L	1	U	10	UJ	1	U
VOCs	Cis-1,2-Dichloroethene	UG/L	20		4300	J	320	
VOCs	Cis-1,3-Dichloropropene	UG/L	1	U	10	UJ	1	U
VOCs	Dibromochloromethane	UG/L	1	U	10	UJ	1	U
VOCs	Ethylbenzene	UG/L	1	U	10	UJ	1	U
VOCs	Methylene chloride	UG/L	5	U	50	UJ	5	U
VOCs	Styrene	UG/L	1	U	10	UJ	1	U

TABLE 4 - SUMMARY OF ANALYTICAL RESULTS  
 DATA VALIDATION REPORT  
 JUNE 2016 PERFORMANCE GROUNDWATER SAMPLING  
 TEXTRON FORMER TORX FACILITY  
 ROCHESTER, INDIANA

		SDG	16061162		16061162		16061162	
		Location	MW-14		MW-15		MW-16	
		Sample Date	6/15/2016		6/15/2016		6/14/2016	
		Sample ID	ATR-MW14-G061516		ATR-MW15-G061516		ATR-MW16-G061416	
		Qc Code	FS		FS		FS	
Class	Parameter	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier
VOCs	Tetrachloroethene	UG/L	1	U	10	UJ	1	U
VOCs	Toluene	UG/L	1	U	10	UJ	1	U
VOCs	trans-1,2-Dichloroethene	UG/L	1.5		140	J	2.4	
VOCs	trans-1,3-Dichloropropene	UG/L	1	U	10	UJ	1	U
VOCs	Trichloroethene	UG/L	2.2		10	UJ	1	U
VOCs	Vinyl chloride	UG/L	23		340	J	270	
VOCs	Xylene, o	UG/L	1	U	10	UJ	1	U
VOCs	Xylenes (m&p)	UG/L	2	UJ	20	UJ	2	U
VOCs	Xylenes, Total	UG/L	3	UJ	30	UJ	3	U

U = not detected, value is the detection limit

J = value is estimated

UG/L = microgram per liter

FS = Field Sample, FD = Field Duplicate

TB = Trip Blank, EB = Equipment Blank

TABLE 4 - SUMMARY OF ANALYTICAL RESULTS  
DATA VALIDATION REPORT  
JUNE 2016 PERFORMANCE GROUNDWATER SAMPLING  
TEXTRON FORMER TORX FACILITY  
ROCHESTER, INDIANA

		SDG	16061162		16061162		16061162	
		Location	MW-17		MW-20(35)		MW-20(35)	
		Sample Date	6/14/2016		6/16/2016		6/16/2016	
		Sample ID	ATR-MW17-G061416		ATR-MW20(35)-G061616		ATR-MW20(35)-G061616R	
		Qc Code	FS		FS		FD	
Class	Parameter	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier
VOCs	1,1,1-Trichloroethane	UG/L	1	U	1	U	1	U
VOCs	1,1,2,2-Tetrachloroethane	UG/L	1	U	1	U	1	U
VOCs	1,1,2-Trichloroethane	UG/L	1	U	1	U	1	U
VOCs	1,1-Dichloroethane	UG/L	1	U	1	U	1	U
VOCs	1,1-Dichloroethene	UG/L	1	U	1	U	1	U
VOCs	1,2-Dichloroethane	UG/L	1	U	1	U	1	U
VOCs	1,2-Dichloropropane	UG/L	1	U	1	U	1	U
VOCs	2-Butanone	UG/L	5	U	5	U	5	U
VOCs	2-Hexanone	UG/L	5	U	5	U	5	U
VOCs	4-Methyl-2-pentanone	UG/L	1	U	1	U	1	U
VOCs	Acetone	UG/L	10	U	10	U	10	U
VOCs	Benzene	UG/L	1	U	1	U	1	U
VOCs	Bromodichloromethane	UG/L	1	U	1	U	1	U
VOCs	Bromoform	UG/L	1	U	1	U	1	U
VOCs	Bromomethane	UG/L	1	U	1	U	1	U
VOCs	Carbon disulfide	UG/L	1	UJ	1	U	1	U
VOCs	Carbon tetrachloride	UG/L	1	U	1	U	1	U
VOCs	Chlorobenzene	UG/L	1	U	1	U	1	U
VOCs	Chloroethane	UG/L	1	U	1	U	1	U
VOCs	Chloroform	UG/L	1	U	1	U	1	U
VOCs	Chloromethane	UG/L	1	U	1	U	1	U
VOCs	Cis-1,2-Dichloroethene	UG/L	41		1.7		2.1	
VOCs	Cis-1,3-Dichloropropene	UG/L	1	U	1	U	1	U
VOCs	Dibromochloromethane	UG/L	1	U	1	U	1	U
VOCs	Ethylbenzene	UG/L	1	U	1	U	1	U
VOCs	Methylene chloride	UG/L	5	U	5	U	5	U
VOCs	Styrene	UG/L	1	U	1	U	1	U

TABLE 4 - SUMMARY OF ANALYTICAL RESULTS  
 DATA VALIDATION REPORT  
 JUNE 2016 PERFORMANCE GROUNDWATER SAMPLING  
 TEXTRON FORMER TORX FACILITY  
 ROCHESTER, INDIANA

		SDG	16061162		16061162		16061162	
		Location	MW-17		MW-20(35)		MW-20(35)	
		Sample Date	6/14/2016		6/16/2016		6/16/2016	
		Sample ID	ATR-MW17-G061416		ATR-MW20(35)-G061616		ATR-MW20(35)-G061616R	
		Qc Code	FS		FS		FD	
Class	Parameter	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier
VOCs	Tetrachloroethene	UG/L	1	U	1	U	1	U
VOCs	Toluene	UG/L	1	U	1	U	1	U
VOCs	trans-1,2-Dichloroethene	UG/L	1.8		1	U	1	U
VOCs	trans-1,3-Dichloropropene	UG/L	1	U	1	U	1	U
VOCs	Trichloroethene	UG/L	220		1	U	1	U
VOCs	Vinyl chloride	UG/L	1	U	12		12	
VOCs	Xylene, o	UG/L	1	U	1	U	1	U
VOCs	Xylenes (m&p)	UG/L	2	U	2	U	2	U
VOCs	Xylenes, Total	UG/L	3	U	3	U	3	U

U = not detected, value is the detection limit

J = value is estimated

UG/L = microgram per liter

FS = Field Sample, FD = Field Duplicate

TB = Trip Blank, EB = Equipment Blank

TABLE 4 - SUMMARY OF ANALYTICAL RESULTS  
 DATA VALIDATION REPORT  
 JUNE 2016 PERFORMANCE GROUNDWATER SAMPLING  
 TEXTRON FORMER TORX FACILITY  
 ROCHESTER, INDIANA

		SDG	16061162		16061162		16061162	
		Location	MW-20(51)		MW-24(24.9)		MW-24(55.9)	
		Sample Date	6/16/2016		6/15/2016		6/15/2016	
		Sample ID	ATR-MW20(51)-G061616		ATR-MW24(24.8)-G061516		ATR-MW24(55.4)-G061516	
		Qc Code	FS		FS		FS	
Class	Parameter	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier
VOCs	1,1,1-Trichloroethane	UG/L	1	U	1	U	1	U
VOCs	1,1,2,2-Tetrachloroethane	UG/L	1	U	1	U	1	U
VOCs	1,1,2-Trichloroethane	UG/L	1	U	1	U	1	U
VOCs	1,1-Dichloroethane	UG/L	1	U	1	U	1	U
VOCs	1,1-Dichloroethene	UG/L	1	U	1	U	1	U
VOCs	1,2-Dichloroethane	UG/L	1	U	1	U	1	U
VOCs	1,2-Dichloropropane	UG/L	1	U	1	U	1	U
VOCs	2-Butanone	UG/L	24		5	U	5	U
VOCs	2-Hexanone	UG/L	5	U	5	U	5	U
VOCs	4-Methyl-2-pentanone	UG/L	1	U	1	U	1	U
VOCs	Acetone	UG/L	10	U	10	UJ	10	U
VOCs	Benzene	UG/L	1	U	1	U	1	U
VOCs	Bromodichloromethane	UG/L	1	U	1	U	1	U
VOCs	Bromoform	UG/L	1	U	1	U	1	U
VOCs	Bromomethane	UG/L	1	U	1	U	1	U
VOCs	Carbon disulfide	UG/L	1	U	1	U	1	UJ
VOCs	Carbon tetrachloride	UG/L	1	U	1	U	1	U
VOCs	Chlorobenzene	UG/L	1	U	1	U	1	U
VOCs	Chloroethane	UG/L	1	U	1	U	1	U
VOCs	Chloroform	UG/L	1	U	1	U	1	U
VOCs	Chloromethane	UG/L	1	U	1	U	1	U
VOCs	Cis-1,2-Dichloroethene	UG/L	1	U	1	U	47	
VOCs	Cis-1,3-Dichloropropene	UG/L	1	U	1	U	1	U
VOCs	Dibromochloromethane	UG/L	1	U	1	U	1	U
VOCs	Ethylbenzene	UG/L	1	U	1	U	1	U
VOCs	Methylene chloride	UG/L	5	U	5	U	5	U
VOCs	Styrene	UG/L	1	U	1	U	1	U

TABLE 4 - SUMMARY OF ANALYTICAL RESULTS  
 DATA VALIDATION REPORT  
 JUNE 2016 PERFORMANCE GROUNDWATER SAMPLING  
 TEXTRON FORMER TORX FACILITY  
 ROCHESTER, INDIANA

		SDG	16061162		16061162		16061162	
		Location	MW-20(51)		MW-24(24.9)		MW-24(55.9)	
		Sample Date	6/16/2016		6/15/2016		6/15/2016	
		Sample ID	ATR-MW20(51)-G061616		ATR-MW24(24.8)-G061516		ATR-MW24(55.4)-G061516	
		Qc Code	FS		FS		FS	
Class	Parameter	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier
VOCs	Tetrachloroethene	UG/L	1	U	1	U	1	U
VOCs	Toluene	UG/L	1	U	1	U	1	U
VOCs	trans-1,2-Dichloroethene	UG/L	1	U	1	U	2.2	
VOCs	trans-1,3-Dichloropropene	UG/L	1	U	1	U	1	U
VOCs	Trichloroethene	UG/L	1	U	1	U	110	
VOCs	Vinyl chloride	UG/L	1	U	1	U	1	U
VOCs	Xylene, o	UG/L	1	U	1	U	1	U
VOCs	Xylenes (m&p)	UG/L	2	U	2	U	2	U
VOCs	Xylenes, Total	UG/L	3	U	3	U	3	U

U = not detected, value is the detection limit

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TABLE 4 - SUMMARY OF ANALYTICAL RESULTS  
DATA VALIDATION REPORT  
JUNE 2016 PERFORMANCE GROUNDWATER SAMPLING  
TEXTRON FORMER TORX FACILITY  
ROCHESTER, INDIANA

		SDG	16061162		16061162		16061162	
		Location	MW-25(16.4)		MW-25(32.6)		MW-25(45.2)	
		Sample Date	6/15/2016		6/15/2016		6/15/2016	
		Sample ID	ATR-MW25(16.4)-G061516		ATR-MW25(32.6)-G061516		ATR-MW25(45.2)-G061516	
		Qc Code	FS		FS		FS	
Class	Parameter	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier
VOCs	1,1,1-Trichloroethane	UG/L	1	U	1	U	5	UJ
VOCs	1,1,2,2-Tetrachloroethane	UG/L	1	U	1	U	5	U
VOCs	1,1,2-Trichloroethane	UG/L	1	U	1	U	5	U
VOCs	1,1-Dichloroethane	UG/L	1	U	1	U	5	U
VOCs	1,1-Dichloroethene	UG/L	1	U	1	U	6.6	
VOCs	1,2-Dichloroethane	UG/L	1	U	1	U	5	U
VOCs	1,2-Dichloropropane	UG/L	1	U	1	U	5	U
VOCs	2-Butanone	UG/L	75		52		880	
VOCs	2-Hexanone	UG/L	5	U	5	U	25	U
VOCs	4-Methyl-2-pentanone	UG/L	1	U	1	U	5	U
VOCs	Acetone	UG/L	10	U	10	U	50	U
VOCs	Benzene	UG/L	1	U	1	U	5	U
VOCs	Bromodichloromethane	UG/L	1	U	1	U	5	U
VOCs	Bromoform	UG/L	1	U	1	U	5	U
VOCs	Bromomethane	UG/L	1	U	1	U	5	UJ
VOCs	Carbon disulfide	UG/L	1	UJ	1	UJ	5	UJ
VOCs	Carbon tetrachloride	UG/L	1	U	1	U	5	U
VOCs	Chlorobenzene	UG/L	1	U	1	U	5	U
VOCs	Chloroethane	UG/L	1	U	1	U	5	U
VOCs	Chloroform	UG/L	1	U	1	U	5	U
VOCs	Chloromethane	UG/L	1	U	1	U	5	U
VOCs	Cis-1,2-Dichloroethene	UG/L	49		1	U	1700	
VOCs	Cis-1,3-Dichloropropene	UG/L	1	U	1	U	5	U
VOCs	Dibromochloromethane	UG/L	1	U	1	U	5	U
VOCs	Ethylbenzene	UG/L	1	U	1	U	5	U
VOCs	Methylene chloride	UG/L	5	U	5	U	25	U
VOCs	Styrene	UG/L	1	U	1	U	5	U

TABLE 4 - SUMMARY OF ANALYTICAL RESULTS  
 DATA VALIDATION REPORT  
 JUNE 2016 PERFORMANCE GROUNDWATER SAMPLING  
 TEXTRON FORMER TORX FACILITY  
 ROCHESTER, INDIANA

		SDG	16061162		16061162		16061162	
		Location	MW-25(16.4)		MW-25(32.6)		MW-25(45.2)	
		Sample Date	6/15/2016		6/15/2016		6/15/2016	
		Sample ID	ATR-MW25(16.4)-G061516		ATR-MW25(32.6)-G061516		ATR-MW25(45.2)-G061516	
		Qc Code	FS		FS		FS	
Class	Parameter	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier
VOCs	Tetrachloroethene	UG/L	1	U	1	U	5	U
VOCs	Toluene	UG/L	1	U	1	U	5	U
VOCs	trans-1,2-Dichloroethene	UG/L	1	U	1	U	65	
VOCs	trans-1,3-Dichloropropene	UG/L	1	U	1	U	5	U
VOCs	Trichloroethene	UG/L	1	U	1	U	5	U
VOCs	Vinyl chloride	UG/L	16		1	U	870	
VOCs	Xylene, o	UG/L	1	U	1	U	5	U
VOCs	Xylenes (m&p)	UG/L	2	U	2	U	10	UJ
VOCs	Xylenes, Total	UG/L	3	U	3	U	15	UJ

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TABLE 4 - SUMMARY OF ANALYTICAL RESULTS  
DATA VALIDATION REPORT  
JUNE 2016 PERFORMANCE GROUNDWATER SAMPLING  
TEXTRON FORMER TORX FACILITY  
ROCHESTER, INDIANA

		SDG	16061162		16061162		16061162	
		Location	MW-26(17.5)		MW-26(28.8)		MW-26(58.8)	
		Sample Date	6/14/2016		6/14/2016		6/14/2016	
		Sample ID	ATR-MW26(17.5)-G061416		ATR-MW26(28.8)-G061416		ATR-MW26(58.2)-G061416	
		Qc Code	FS		FS		FS	
Class	Parameter	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier
VOCs	1,1,1-Trichloroethane	UG/L	1 U		1 U		1 U	
VOCs	1,1,2,2-Tetrachloroethane	UG/L	1 U		1 U		1 U	
VOCs	1,1,2-Trichloroethane	UG/L	1 U		1 U		1 U	
VOCs	1,1-Dichloroethane	UG/L	1 U		1 U		1 U	
VOCs	1,1-Dichloroethene	UG/L	1 U		1 U		1 U	
VOCs	1,2-Dichloroethane	UG/L	1 U		1 U		1 U	
VOCs	1,2-Dichloropropane	UG/L	1 U		1 U		1 U	
VOCs	2-Butanone	UG/L	16		5 U		66	
VOCs	2-Hexanone	UG/L	5 U		5 U		5 U	
VOCs	4-Methyl-2-pentanone	UG/L	1 U		1 U		1 U	
VOCs	Acetone	UG/L	10 U		10 U		10 U	
VOCs	Benzene	UG/L	1 U		1 U		1 U	
VOCs	Bromodichloromethane	UG/L	1 U		1 U		1 U	
VOCs	Bromoform	UG/L	1 U		1 U		1 U	
VOCs	Bromomethane	UG/L	1 U		1 U		1 U	
VOCs	Carbon disulfide	UG/L	1 UJ		1 U		1 U	
VOCs	Carbon tetrachloride	UG/L	1 U		1 U		1 U	
VOCs	Chlorobenzene	UG/L	1 U		1 U		1 U	
VOCs	Chloroethane	UG/L	1 U		1 U		1 U	
VOCs	Chloroform	UG/L	1 U		1 U		1 U	
VOCs	Chloromethane	UG/L	1 U		1 U		1 U	
VOCs	Cis-1,2-Dichloroethene	UG/L	13		1 U		10	
VOCs	Cis-1,3-Dichloropropene	UG/L	1 U		1 U		1 U	
VOCs	Dibromochloromethane	UG/L	1 U		1 U		1 U	
VOCs	Ethylbenzene	UG/L	1 U		1 U		1 U	
VOCs	Methylene chloride	UG/L	5 U		5 U		5 U	
VOCs	Styrene	UG/L	1 U		1 U		1 U	

TABLE 4 - SUMMARY OF ANALYTICAL RESULTS  
 DATA VALIDATION REPORT  
 JUNE 2016 PERFORMANCE GROUNDWATER SAMPLING  
 TEXTRON FORMER TORX FACILITY  
 ROCHESTER, INDIANA

		SDG	16061162		16061162		16061162	
		Location	MW-26(17.5)		MW-26(28.8)		MW-26(58.8)	
		Sample Date	6/14/2016		6/14/2016		6/14/2016	
		Sample ID	ATR-MW26(17.5)-G061416		ATR-MW26(28.8)-G061416		ATR-MW26(58.2)-G061416	
		Qc Code	FS		FS		FS	
Class	Parameter	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier
VOCs	Tetrachloroethene	UG/L	1	U	1	U	1	U
VOCs	Toluene	UG/L	1	U	1	U	1	U
VOCs	trans-1,2-Dichloroethene	UG/L	1	U	1	U	1.1	
VOCs	trans-1,3-Dichloropropene	UG/L	1	U	1	U	1	U
VOCs	Trichloroethene	UG/L	1	U	1	U	1	U
VOCs	Vinyl chloride	UG/L	11		1	U	26	
VOCs	Xylene, o	UG/L	1	U	1	U	1	U
VOCs	Xylenes (m&p)	UG/L	2	U	2	U	2	U
VOCs	Xylenes, Total	UG/L	3	U	3	U	3	U

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TABLE 4 - SUMMARY OF ANALYTICAL RESULTS  
DATA VALIDATION REPORT  
JUNE 2016 PERFORMANCE GROUNDWATER SAMPLING  
TEXTRON FORMER TORX FACILITY  
ROCHESTER, INDIANA

		SDG	16061162		16061162		16061162	
		Location	MW-59(29)		MW-59(29)		MW-62(36)	
		Sample Date	6/17/2016		6/17/2016		6/16/2016	
		Sample ID	ATR-MW59(29)-G061716		ATR-MW59(29)-G061716R		ATR-MW62-G061616	
		Qc Code	FS		FD		FS	
Class	Parameter	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier
VOCs	1,1,1-Trichloroethane	UG/L	25	UJ	25	UJ	1	UJ
VOCs	1,1,2,2-Tetrachloroethane	UG/L	25	U	25	U	1	U
VOCs	1,1,2-Trichloroethane	UG/L	25	U	25	U	1	U
VOCs	1,1-Dichloroethane	UG/L	25	U	25	U	1	U
VOCs	1,1-Dichloroethene	UG/L	25	U	25	U	1	U
VOCs	1,2-Dichloroethane	UG/L	25	U	25	U	1	U
VOCs	1,2-Dichloropropane	UG/L	25	U	25	U	1	U
VOCs	2-Butanone	UG/L	120	U	120	U	5	U
VOCs	2-Hexanone	UG/L	120	U	120	U	5	U
VOCs	4-Methyl-2-pentanone	UG/L	25	U	25	U	1	U
VOCs	Acetone	UG/L	250	U	250	U	10	U
VOCs	Benzene	UG/L	25	U	25	U	1	U
VOCs	Bromodichloromethane	UG/L	25	U	25	U	1	U
VOCs	Bromoform	UG/L	25	U	25	U	1	U
VOCs	Bromomethane	UG/L	25	UJ	25	UJ	1	UJ
VOCs	Carbon disulfide	UG/L	25	UJ	25	UJ	1	UJ
VOCs	Carbon tetrachloride	UG/L	25	U	25	U	1	U
VOCs	Chlorobenzene	UG/L	25	U	25	U	1	U
VOCs	Chloroethane	UG/L	25	U	25	U	1	U
VOCs	Chloroform	UG/L	25	U	25	U	1	U
VOCs	Chloromethane	UG/L	25	U	25	U	1	U
VOCs	Cis-1,2-Dichloroethene	UG/L	25	U	25	U	4.8	
VOCs	Cis-1,3-Dichloropropene	UG/L	25	U	25	U	1	U
VOCs	Dibromochloromethane	UG/L	25	U	25	U	1	U
VOCs	Ethylbenzene	UG/L	25	U	25	U	1	U
VOCs	Methylene chloride	UG/L	120	U	120	U	5	U
VOCs	Styrene	UG/L	25	U	25	U	1	U

TABLE 4 - SUMMARY OF ANALYTICAL RESULTS  
 DATA VALIDATION REPORT  
 JUNE 2016 PERFORMANCE GROUNDWATER SAMPLING  
 TEXTRON FORMER TORX FACILITY  
 ROCHESTER, INDIANA

		SDG	16061162		16061162		16061162	
		Location	MW-59(29)		MW-59(29)		MW-62(36)	
		Sample Date	6/17/2016		6/17/2016		6/16/2016	
		Sample ID	ATR-MW59(29)-G061716		ATR-MW59(29)-G061716R		ATR-MW62-G061616	
		Qc Code	FS		FD		FS	
Class	Parameter	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier
VOCs	Tetrachloroethene	UG/L	25	U	25	U	1	U
VOCs	Toluene	UG/L	25	U	25	U	1	U
VOCs	trans-1,2-Dichloroethene	UG/L	25	U	25	U	1	U
VOCs	trans-1,3-Dichloropropene	UG/L	25	U	25	U	1	U
VOCs	Trichloroethene	UG/L	25	U	25	U	1	U
VOCs	Vinyl chloride	UG/L	11000		11000		39	
VOCs	Xylene, o	UG/L	25	U	25	U	1	U
VOCs	Xylenes (m&p)	UG/L	50	UJ	50	UJ	2	UJ
VOCs	Xylenes, Total	UG/L	75	UJ	75	UJ	3	UJ

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TABLE 4 - SUMMARY OF ANALYTICAL RESULTS  
DATA VALIDATION REPORT  
JUNE 2016 PERFORMANCE GROUNDWATER SAMPLING  
TEXTRON FORMER TORX FACILITY  
ROCHESTER, INDIANA

		SDG	16061162		16061162		16061162	
		Location	MW-68(32)		MW-6C		MW-81(27)	
		Sample Date	6/17/2016		6/16/2016		6/16/2016	
		Sample ID	ATR-MW68-G061716		ATR-MW6C-G061616		ATR-MW81(27)-G061616	
		Qc Code	FS		FS		FS	
Class	Parameter	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier
VOCs	1,1,1-Trichloroethane	UG/L	1	U	1	UJ	100	UJ
VOCs	1,1,2,2-Tetrachloroethane	UG/L	1	U	1	U	100	U
VOCs	1,1,2-Trichloroethane	UG/L	1	U	1	U	100	U
VOCs	1,1-Dichloroethane	UG/L	1	U	1	U	100	U
VOCs	1,1-Dichloroethene	UG/L	2.1		1	U	100	U
VOCs	1,2-Dichloroethane	UG/L	1	U	1	U	100	U
VOCs	1,2-Dichloropropane	UG/L	1	U	1	U	100	U
VOCs	2-Butanone	UG/L	5	U	5	U	500	U
VOCs	2-Hexanone	UG/L	5	U	5	U	500	U
VOCs	4-Methyl-2-pentanone	UG/L	1	U	1	U	100	U
VOCs	Acetone	UG/L	24		10	U	1000	U
VOCs	Benzene	UG/L	1	U	1	U	100	U
VOCs	Bromodichloromethane	UG/L	1	U	1	U	100	U
VOCs	Bromoform	UG/L	1	U	1	U	100	U
VOCs	Bromomethane	UG/L	1	U	1	UJ	100	UJ
VOCs	Carbon disulfide	UG/L	1	UJ	1	UJ	100	UJ
VOCs	Carbon tetrachloride	UG/L	1	U	1	U	100	U
VOCs	Chlorobenzene	UG/L	1	U	1	U	100	U
VOCs	Chloroethane	UG/L	1	U	1	U	100	U
VOCs	Chloroform	UG/L	1	U	1	U	100	U
VOCs	Chloromethane	UG/L	1	U	1	U	100	U
VOCs	Cis-1,2-Dichloroethene	UG/L	190		50		57000	
VOCs	Cis-1,3-Dichloropropene	UG/L	1	U	1	U	100	U
VOCs	Dibromochloromethane	UG/L	1	U	1	U	100	U
VOCs	Ethylbenzene	UG/L	1	U	1	U	100	U
VOCs	Methylene chloride	UG/L	5	U	5	U	500	U
VOCs	Styrene	UG/L	1	U	1	U	100	U

TABLE 4 - SUMMARY OF ANALYTICAL RESULTS  
 DATA VALIDATION REPORT  
 JUNE 2016 PERFORMANCE GROUNDWATER SAMPLING  
 TEXTRON FORMER TORX FACILITY  
 ROCHESTER, INDIANA

		SDG	16061162		16061162		16061162	
		Location	MW-68(32)		MW-6C		MW-81(27)	
		Sample Date	6/17/2016		6/16/2016		6/16/2016	
		Sample ID	ATR-MW68-G061716		ATR-MW6C-G061616		ATR-MW81(27)-G061616	
		Qc Code	FS		FS		FS	
Class	Parameter	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier
VOCs	Tetrachloroethene	UG/L	1	U	1	U	100	U
VOCs	Toluene	UG/L	1	U	1	U	100	U
VOCs	trans-1,2-Dichloroethene	UG/L	5		1	U	320	
VOCs	trans-1,3-Dichloropropene	UG/L	1	U	1	U	100	U
VOCs	Trichloroethene	UG/L	1	U	1	U	100	U
VOCs	Vinyl chloride	UG/L	89		170		43000	J
VOCs	Xylene, o	UG/L	1	U	1	U	100	U
VOCs	Xylenes (m&p)	UG/L	2	U	2	UJ	200	UJ
VOCs	Xylenes, Total	UG/L	3	U	3	UJ	300	UJ

U = not detected, value is the detection limit

J = value is estimated

UG/L = microgram per liter

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TB = Trip Blank, EB = Equipment Blank



TABLE 4 - SUMMARY OF ANALYTICAL RESULTS  
DATA VALIDATION REPORT  
JUNE 2016 PERFORMANCE GROUNDWATER SAMPLING  
TEXTRON FORMER TORX FACILITY  
ROCHESTER, INDIANA

		SDG	16061162		16061162		16061162	
		Location	MW-82(58)		OW-01(28)		OW-01(39)	
		Sample Date	6/16/2016		6/16/2016		6/16/2016	
		Sample ID	ATR-MW82-G061616		ATR-OW1(28)-G061616		ATR-OW1(39)-G061616	
		Qc Code	FS		FS		FS	
Class	Parameter	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier
VOCs	1,1,1-Trichloroethane	UG/L	1	U	1	U	1	U
VOCs	1,1,2,2-Tetrachloroethane	UG/L	1	U	1	U	1	U
VOCs	1,1,2-Trichloroethane	UG/L	1	U	1	U	1	U
VOCs	1,1-Dichloroethane	UG/L	1	U	1	U	1	U
VOCs	1,1-Dichloroethene	UG/L	1	U	1	U	1	U
VOCs	1,2-Dichloroethane	UG/L	1	U	1	U	1	U
VOCs	1,2-Dichloropropane	UG/L	1	U	1	U	1	U
VOCs	2-Butanone	UG/L	5	U	13		5	U
VOCs	2-Hexanone	UG/L	5	U	5	U	5	U
VOCs	4-Methyl-2-pentanone	UG/L	1	U	1	U	1	U
VOCs	Acetone	UG/L	10	UJ	10	U	10	U
VOCs	Benzene	UG/L	1	U	1	U	1	U
VOCs	Bromodichloromethane	UG/L	1	U	1	U	1	U
VOCs	Bromoform	UG/L	1	U	1	U	1	U
VOCs	Bromomethane	UG/L	1	U	1	U	1	UJ
VOCs	Carbon disulfide	UG/L	1	U	1	UJ	1	U
VOCs	Carbon tetrachloride	UG/L	1	U	1	U	1	U
VOCs	Chlorobenzene	UG/L	1	U	1	U	1	U
VOCs	Chloroethane	UG/L	1	U	1	U	1	U
VOCs	Chloroform	UG/L	1	U	1	U	1	U
VOCs	Chloromethane	UG/L	1	U	1	U	1	U
VOCs	Cis-1,2-Dichloroethene	UG/L	1	U	18		1	U
VOCs	Cis-1,3-Dichloropropene	UG/L	1	U	1	U	1	U
VOCs	Dibromochloromethane	UG/L	1	U	1	U	1	U
VOCs	Ethylbenzene	UG/L	1	U	1	U	1	U
VOCs	Methylene chloride	UG/L	5	U	5	U	5	U
VOCs	Styrene	UG/L	1	U	1	U	1	U

TABLE 4 - SUMMARY OF ANALYTICAL RESULTS  
 DATA VALIDATION REPORT  
 JUNE 2016 PERFORMANCE GROUNDWATER SAMPLING  
 TEXTRON FORMER TORX FACILITY  
 ROCHESTER, INDIANA

		SDG	16061162		16061162		16061162	
		Location	MW-82(58)		OW-01(28)		OW-01(39)	
		Sample Date	6/16/2016		6/16/2016		6/16/2016	
		Sample ID	ATR-MW82-G061616		ATR-OW1(28)-G061616		ATR-OW1(39)-G061616	
		Qc Code	FS		FS		FS	
Class	Parameter	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier
VOCs	Tetrachloroethene	UG/L	1	U	1	U	1	U
VOCs	Toluene	UG/L	1	U	1	U	1	U
VOCs	trans-1,2-Dichloroethene	UG/L	1.1		1	U	1	U
VOCs	trans-1,3-Dichloropropene	UG/L	1	U	1	U	1	U
VOCs	Trichloroethene	UG/L	1	U	1	U	1	U
VOCs	Vinyl chloride	UG/L	1	U	26		1	U
VOCs	Xylene, o	UG/L	1	U	1	U	1	U
VOCs	Xylenes (m&p)	UG/L	2	U	2	U	2	U
VOCs	Xylenes, Total	UG/L	3	U	3	U	3	U

U = not detected, value is the detection limit

J = value is estimated

UG/L = microgram per liter

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TB = Trip Blank, EB = Equipment Blank

TABLE 4 - SUMMARY OF ANALYTICAL RESULTS  
DATA VALIDATION REPORT  
JUNE 2016 PERFORMANCE GROUNDWATER SAMPLING  
TEXTRON FORMER TORX FACILITY  
ROCHESTER, INDIANA

		SDG	16061162		16061162		16061162	
		Location	OW-02(33)		OW-02(53)		OW-03(35)	
		Sample Date	6/15/2016		6/16/2016		6/15/2016	
		Sample ID	ATR-OW2(33)-G061516		ATR-OW2(53)-G061616		ATR-OW3(35)-G061516	
		Qc Code	FS		FS		FS	
Class	Parameter	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier
VOCs	1,1,1-Trichloroethane	UG/L		5 UJ		5 U		1 U
VOCs	1,1,2,2-Tetrachloroethane	UG/L		5 U		5 U		1 U
VOCs	1,1,2-Trichloroethane	UG/L		5 U		5 U		1 U
VOCs	1,1-Dichloroethane	UG/L		5 U		5 U		1 U
VOCs	1,1-Dichloroethene	UG/L		7.1		5 U		1 U
VOCs	1,2-Dichloroethane	UG/L		5 U		5 U		1 U
VOCs	1,2-Dichloropropane	UG/L		5 U		5 U		1 U
VOCs	2-Butanone	UG/L		25 U		25 U		5 U
VOCs	2-Hexanone	UG/L		25 U		25 U		5 U
VOCs	4-Methyl-2-pentanone	UG/L		5 U		5 U		1 U
VOCs	Acetone	UG/L		50 U		50 U		10 UJ
VOCs	Benzene	UG/L		5 U		5 U		1 U
VOCs	Bromodichloromethane	UG/L		5 U		5 U		1 U
VOCs	Bromoform	UG/L		5 U		5 U		1 U
VOCs	Bromomethane	UG/L		5 UJ		5 U		1 U
VOCs	Carbon disulfide	UG/L		5 UJ		5 UJ		1 U
VOCs	Carbon tetrachloride	UG/L		5 U		5 U		1 U
VOCs	Chlorobenzene	UG/L		5 U		5 U		1 U
VOCs	Chloroethane	UG/L		5 U		5 U		1 U
VOCs	Chloroform	UG/L		5 U		5 U		1 U
VOCs	Chloromethane	UG/L		5 U		5 U		1 U
VOCs	Cis-1,2-Dichloroethene	UG/L		2300		5 U		1 U
VOCs	Cis-1,3-Dichloropropene	UG/L		5 U		5 U		1 U
VOCs	Dibromochloromethane	UG/L		5 U		5 U		1 U
VOCs	Ethylbenzene	UG/L		5 U		5 U		1 U
VOCs	Methylene chloride	UG/L		25 U		25 U		5 U
VOCs	Styrene	UG/L		5 U		5 U		1 U

TABLE 4 - SUMMARY OF ANALYTICAL RESULTS  
 DATA VALIDATION REPORT  
 JUNE 2016 PERFORMANCE GROUNDWATER SAMPLING  
 TEXTRON FORMER TORX FACILITY  
 ROCHESTER, INDIANA

		SDG	16061162		16061162		16061162	
		Location	OW-02(33)		OW-02(53)		OW-03(35)	
		Sample Date	6/15/2016		6/16/2016		6/15/2016	
		Sample ID	ATR-OW2(33)-G061516		ATR-OW2(53)-G061616		ATR-OW3(35)-G061516	
		Qc Code	FS		FS		FS	
Class	Parameter	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier
VOCs	Tetrachloroethene	UG/L	5	U	5	U	1	U
VOCs	Toluene	UG/L	5	U	5	U	1	U
VOCs	trans-1,2-Dichloroethene	UG/L	11		5	U	1	U
VOCs	trans-1,3-Dichloropropene	UG/L	5	U	5	U	1	U
VOCs	Trichloroethene	UG/L	5	U	5	U	1	U
VOCs	Vinyl chloride	UG/L	1600		5	U	3	
VOCs	Xylene, o	UG/L	5	U	5	U	1	U
VOCs	Xylenes (m&p)	UG/L	10	UJ	10	U	2	U
VOCs	Xylenes, Total	UG/L	15	UJ	15	U	3	U

U = not detected, value is the detection limit

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DATA VALIDATION REPORT  
JUNE 2016 PERFORMANCE GROUNDWATER SAMPLING  
TEXTRON FORMER TORX FACILITY  
ROCHESTER, INDIANA

		SDG	16061162		16061162		16061162	
		Location	OW-03(55)		OW-04(35)		OW-04(54)	
		Sample Date	6/15/2016		6/15/2016		6/14/2016	
		Sample ID	ATR-OW3(55)-G061516		ATR-OW4(35)-G061516		ATR-OW5(45)-G061416	
		Qc Code	FS		FS		FS	
Class	Parameter	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier
VOCs	1,1,1-Trichloroethane	UG/L	2	UJ	5	UJ	5	U
VOCs	1,1,2,2-Tetrachloroethane	UG/L	2	U	5	U	5	U
VOCs	1,1,2-Trichloroethane	UG/L	2	U	5	U	5	U
VOCs	1,1-Dichloroethane	UG/L	2	U	5	U	5	U
VOCs	1,1-Dichloroethene	UG/L	2	U	5	U	5	U
VOCs	1,2-Dichloroethane	UG/L	2	U	5	U	5	U
VOCs	1,2-Dichloropropane	UG/L	2	U	5	U	5	U
VOCs	2-Butanone	UG/L	230		260		180	
VOCs	2-Hexanone	UG/L	10	U	25	U	25	U
VOCs	4-Methyl-2-pentanone	UG/L	2	U	5	U	5	U
VOCs	Acetone	UG/L	20	U	50	U	50	U
VOCs	Benzene	UG/L	2	U	5	U	5	U
VOCs	Bromodichloromethane	UG/L	2	U	5	U	5	U
VOCs	Bromoform	UG/L	2	U	5	U	5	U
VOCs	Bromomethane	UG/L	2	UJ	5	UJ	5	U
VOCs	Carbon disulfide	UG/L	2	UJ	5	UJ	5	UJ
VOCs	Carbon tetrachloride	UG/L	2	U	5	U	5	U
VOCs	Chlorobenzene	UG/L	2	U	5	U	5	U
VOCs	Chloroethane	UG/L	2	U	5	U	5	U
VOCs	Chloroform	UG/L	2	U	5	U	5	U
VOCs	Chloromethane	UG/L	2	U	5	U	5	U
VOCs	Cis-1,2-Dichloroethene	UG/L	700		290		1000	
VOCs	Cis-1,3-Dichloropropene	UG/L	2	U	5	U	5	U
VOCs	Dibromochloromethane	UG/L	2	U	5	U	5	U
VOCs	Ethylbenzene	UG/L	2	U	5	U	5	U
VOCs	Methylene chloride	UG/L	10	U	25	U	25	U
VOCs	Styrene	UG/L	2	U	5	U	5	U

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 DATA VALIDATION REPORT  
 JUNE 2016 PERFORMANCE GROUNDWATER SAMPLING  
 TEXTRON FORMER TORX FACILITY  
 ROCHESTER, INDIANA

		SDG	16061162		16061162		16061162	
		Location	OW-03(55)		OW-04(35)		OW-04(54)	
		Sample Date	6/15/2016		6/15/2016		6/14/2016	
		Sample ID	ATR-OW3(55)-G061516		ATR-OW4(35)-G061516		ATR-OW5(45)-G061416	
		Qc Code	FS		FS		FS	
Class	Parameter	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier
VOCs	Tetrachloroethene	UG/L	2	U	5	U	5	U
VOCs	Toluene	UG/L	2	U	5	U	5	U
VOCs	trans-1,2-Dichloroethene	UG/L	22		5	U	5	U
VOCs	trans-1,3-Dichloropropene	UG/L	2	U	5	U	5	U
VOCs	Trichloroethene	UG/L	2	U	5	U	5	U
VOCs	Vinyl chloride	UG/L	80		930		670	
VOCs	Xylene, o	UG/L	2	U	5	U	5	U
VOCs	Xylenes (m&p)	UG/L	4	UJ	10	UJ	10	U
VOCs	Xylenes, Total	UG/L	6	UJ	15	UJ	15	U

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JUNE 2016 PERFORMANCE GROUNDWATER SAMPLING  
TEXTRON FORMER TORX FACILITY  
ROCHESTER, INDIANA

		SDG	16061162		16061162		16061162	
		Location	OW-04(54)		OW-05(16)		OW-05(35)	
		Sample Date	6/15/2016		6/14/2016		6/14/2016	
		Sample ID	ATR-OW4(54)-G061516		ATR-OW5(16)-G061416		ATR-OW5(35)-G061416	
		Qc Code	FS		FS		FS	
Class	Parameter	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier
VOCs	1,1,1-Trichloroethane	UG/L	1 U		1 U		1 U	
VOCs	1,1,2,2-Tetrachloroethane	UG/L	1 U		1 U		1 U	
VOCs	1,1,2-Trichloroethane	UG/L	1 U		1 U		1 U	
VOCs	1,1-Dichloroethane	UG/L	1 U		1 U		1 U	
VOCs	1,1-Dichloroethene	UG/L	1 U		1 U		1 U	
VOCs	1,2-Dichloroethane	UG/L	1 U		1 U		1 U	
VOCs	1,2-Dichloropropane	UG/L	1 U		1 U		1 U	
VOCs	2-Butanone	UG/L	5 U		5 U		17	
VOCs	2-Hexanone	UG/L	5 U		5 U		5 U	
VOCs	4-Methyl-2-pentanone	UG/L	1 U		1 U		1 U	
VOCs	Acetone	UG/L	10 U		10 U		10 U	
VOCs	Benzene	UG/L	1 U		1 U		1 U	
VOCs	Bromodichloromethane	UG/L	1 U		1 U		1 U	
VOCs	Bromoform	UG/L	1 U		1 U		1 U	
VOCs	Bromomethane	UG/L	1 U		1 UJ		1 UJ	
VOCs	Carbon disulfide	UG/L	1 U		1 U		1 U	
VOCs	Carbon tetrachloride	UG/L	1 U		1 U		1 U	
VOCs	Chlorobenzene	UG/L	1 U		1 U		1 U	
VOCs	Chloroethane	UG/L	1 U		1 U		1 U	
VOCs	Chloroform	UG/L	1 U		1 U		1 U	
VOCs	Chloromethane	UG/L	1 U		1 U		1 U	
VOCs	Cis-1,2-Dichloroethene	UG/L	1 U		230		32	
VOCs	Cis-1,3-Dichloropropene	UG/L	1 U		1 U		1 U	
VOCs	Dibromochloromethane	UG/L	1 U		1 U		1 U	
VOCs	Ethylbenzene	UG/L	1 U		1 U		1 U	
VOCs	Methylene chloride	UG/L	5 U		5 U		5 U	
VOCs	Styrene	UG/L	1 U		1 U		1 U	

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DATA VALIDATION REPORT  
JUNE 2016 PERFORMANCE GROUNDWATER SAMPLING  
TEXTRON FORMER TORX FACILITY  
ROCHESTER, INDIANA

		SDG	16061162		16061162		16061162	
		Location	OW-04(54)		OW-05(16)		OW-05(35)	
		Sample Date	6/15/2016		6/14/2016		6/14/2016	
		Sample ID	ATR-OW4(54)-G061516		ATR-OW5(16)-G061416		ATR-OW5(35)-G061416	
		Qc Code	FS		FS		FS	
Class	Parameter	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier
VOCs	Tetrachloroethene	UG/L	1	U	1	U	1	U
VOCs	Toluene	UG/L	1	U	1	U	1	U
VOCs	trans-1,2-Dichloroethene	UG/L	1	U	1.2		2.1	
VOCs	trans-1,3-Dichloropropene	UG/L	1	U	1	U	1	U
VOCs	Trichloroethene	UG/L	1	U	1	U	1	U
VOCs	Vinyl chloride	UG/L	1	U	47		170	J
VOCs	Xylene, o	UG/L	1	U	1	U	1	U
VOCs	Xylenes (m&p)	UG/L	2	U	2	U	2	U
VOCs	Xylenes, Total	UG/L	3	U	3	U	3	U

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JUNE 2016 PERFORMANCE GROUNDWATER SAMPLING  
TEXTRON FORMER TORX FACILITY  
ROCHESTER, INDIANA

		SDG	16061162		16061162		16061162	
		Location	PM-2		PM-3		QC	
		Sample Date	6/16/2016		6/17/2016		6/16/2016	
		Sample ID	ATR-PM2-G061616		ATR-PM3-G061716		ATR-EB001-G061616	
		Qc Code	FS		FS		EB	
Class	Parameter	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier
VOCs	1,1,1-Trichloroethane	UG/L	10	UJ	50	UJ	1	U
VOCs	1,1,2,2-Tetrachloroethane	UG/L	10	U	50	U	1	U
VOCs	1,1,2-Trichloroethane	UG/L	10	U	50	U	1	U
VOCs	1,1-Dichloroethane	UG/L	10	U	50	U	1	U
VOCs	1,1-Dichloroethene	UG/L	10	U	88		1	U
VOCs	1,2-Dichloroethane	UG/L	10	U	50	U	1	U
VOCs	1,2-Dichloropropane	UG/L	10	U	50	U	1	U
VOCs	2-Butanone	UG/L	50	U	250	U	5	U
VOCs	2-Hexanone	UG/L	50	U	250	U	5	U
VOCs	4-Methyl-2-pentanone	UG/L	10	U	50	U	1	U
VOCs	Acetone	UG/L	100	U	500	U	10	U
VOCs	Benzene	UG/L	10	U	50	U	1	U
VOCs	Bromodichloromethane	UG/L	10	U	50	U	2.5	
VOCs	Bromoform	UG/L	10	U	50	U	1	U
VOCs	Bromomethane	UG/L	10	UJ	50	UJ	1	U
VOCs	Carbon disulfide	UG/L	10	UJ	50	UJ	1	U
VOCs	Carbon tetrachloride	UG/L	10	U	50	U	1	U
VOCs	Chlorobenzene	UG/L	10	U	50	U	1	U
VOCs	Chloroethane	UG/L	10	U	50	U	1	U
VOCs	Chloroform	UG/L	10	U	50	U	9.9	
VOCs	Chloromethane	UG/L	10	U	50	U	1	U
VOCs	Cis-1,2-Dichloroethene	UG/L	20		13000		1	U
VOCs	Cis-1,3-Dichloropropene	UG/L	10	U	50	U	1	U
VOCs	Dibromochloromethane	UG/L	10	U	50	U	1	U
VOCs	Ethylbenzene	UG/L	10	U	50	U	1	U
VOCs	Methylene chloride	UG/L	50	U	250	U	5	U
VOCs	Styrene	UG/L	10	U	50	U	1	U

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 DATA VALIDATION REPORT  
 JUNE 2016 PERFORMANCE GROUNDWATER SAMPLING  
 TEXTRON FORMER TORX FACILITY  
 ROCHESTER, INDIANA

		SDG	16061162		16061162		16061162	
		Location	PM-2		PM-3		QC	
		Sample Date	6/16/2016		6/17/2016		6/16/2016	
		Sample ID	ATR-PM2-G061616		ATR-PM3-G061716		ATR-EB001-G061616	
		Qc Code	FS		FS		EB	
Class	Parameter	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier
VOCs	Tetrachloroethene	UG/L	10	U	50	U	1	U
VOCs	Toluene	UG/L	10	U	50	U	1	U
VOCs	trans-1,2-Dichloroethene	UG/L	10	U	180		1	U
VOCs	trans-1,3-Dichloropropene	UG/L	10	U	50	U	1	U
VOCs	Trichloroethene	UG/L	10	U	50	U	1	U
VOCs	Vinyl chloride	UG/L	5300		25000		1	U
VOCs	Xylene, o	UG/L	10	U	50	U	1	U
VOCs	Xylenes (m&p)	UG/L	20	UJ	100	UJ	2	U
VOCs	Xylenes, Total	UG/L	30	UJ	150	UJ	3	U

U = not detected, value is the detection limit

J = value is estimated

UG/L = microgram per liter

FS = Field Sample, FD = Field Duplicate

TB = Trip Blank, EB = Equipment Blank

TABLE 4 - SUMMARY OF ANALYTICAL RESULTS  
DATA VALIDATION REPORT  
JUNE 2016 PERFORMANCE GROUNDWATER SAMPLING  
TEXTRON FORMER TORX FACILITY  
ROCHESTER, INDIANA

		SDG	16061162		16061162		16061162	
		Location	QC		QC		QC	
		Sample Date	6/16/2016		6/17/2016		6/17/2016	
		Sample ID	ATR-EB002-G061616		Trip Blank - 061716		ATR-EB003-G061716	
		Qc Code	EB		TB		EB	
Class	Parameter	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier
VOCs	1,1,1-Trichloroethane	UG/L	1	U	1	U	1	U
VOCs	1,1,2,2-Tetrachloroethane	UG/L	1	U	1	U	1	U
VOCs	1,1,2-Trichloroethane	UG/L	1	U	1	U	1	U
VOCs	1,1-Dichloroethane	UG/L	1	U	1	U	1	U
VOCs	1,1-Dichloroethene	UG/L	1	U	1	U	1	U
VOCs	1,2-Dichloroethane	UG/L	1	U	1	U	1	U
VOCs	1,2-Dichloropropane	UG/L	1	U	1	U	1	U
VOCs	2-Butanone	UG/L	5	U	5	U	5	U
VOCs	2-Hexanone	UG/L	5	U	5	U	5	U
VOCs	4-Methyl-2-pentanone	UG/L	1	U	1	U	1	U
VOCs	Acetone	UG/L	10	U	10	U	10	U
VOCs	Benzene	UG/L	1	U	1	U	1	U
VOCs	Bromodichloromethane	UG/L	2.3		1	U	2.5	
VOCs	Bromoform	UG/L	1	U	1	U	1	U
VOCs	Bromomethane	UG/L	1	U	1	U	1	U
VOCs	Carbon disulfide	UG/L	1	U	1	U	1	U
VOCs	Carbon tetrachloride	UG/L	1	U	1	U	1	U
VOCs	Chlorobenzene	UG/L	1	U	1	U	1	U
VOCs	Chloroethane	UG/L	1	U	1	U	1	U
VOCs	Chloroform	UG/L	7.9		1	U	9.5	
VOCs	Chloromethane	UG/L	1	U	1	U	1	U
VOCs	Cis-1,2-Dichloroethene	UG/L	1	U	1	U	1	U
VOCs	Cis-1,3-Dichloropropene	UG/L	1	U	1	U	1	U
VOCs	Dibromochloromethane	UG/L	1	U	1	U	1	U
VOCs	Ethylbenzene	UG/L	1	U	1	U	1	U
VOCs	Methylene chloride	UG/L	5	U	5	U	5	U
VOCs	Styrene	UG/L	1	U	1	U	1	U

TABLE 4 - SUMMARY OF ANALYTICAL RESULTS  
 DATA VALIDATION REPORT  
 JUNE 2016 PERFORMANCE GROUNDWATER SAMPLING  
 TEXTRON FORMER TORX FACILITY  
 ROCHESTER, INDIANA

		SDG	16061162		16061162		16061162	
		Location	QC		QC		QC	
		Sample Date	6/16/2016		6/17/2016		6/17/2016	
		Sample ID	ATR-EB002-G061616		Trip Blank - 061716		ATR-EB003-G061716	
		Qc Code	EB		TB		EB	
Class	Parameter	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier
VOCs	Tetrachloroethene	UG/L	1	U	1	U	1	U
VOCs	Toluene	UG/L	1	U	1	U	1	U
VOCs	trans-1,2-Dichloroethene	UG/L	1	U	1	U	1	U
VOCs	trans-1,3-Dichloropropene	UG/L	1	U	1	U	1	U
VOCs	Trichloroethene	UG/L	1	U	1	U	1	U
VOCs	Vinyl chloride	UG/L	1	U	1	U	1	U
VOCs	Xylene, o	UG/L	1	U	1	U	1	U
VOCs	Xylenes (m&p)	UG/L	2	U	2	U	2	U
VOCs	Xylenes, Total	UG/L	3	U	3	U	3	U

U = not detected, value is the detection limit

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FS = Field Sample, FD = Field Duplicate

TB = Trip Blank, EB = Equipment Blank

TABLE 4 - SUMMARY OF ANALYTICAL RESULTS  
 DATA VALIDATION REPORT  
 JUNE 2016 PERFORMANCE GROUNDWATER SAMPLING  
 TEXTRON FORMER TORX FACILITY  
 ROCHESTER, INDIANA

		SDG	16061162		16061162	
		Location	ZVI-2(17.5)		ZVI-2(32.5)	
		Sample Date	6/14/2016		6/14/2016	
		Sample ID	ATR-ZVI2(17.5)-G061416		ATR-ZVI2(32.5)-G061416	
		Qc Code	FS		FS	
Class	Parameter	Units	Result	Qualifier	Result	Qualifier
VOCs	1,1,1-Trichloroethane	UG/L	1	U	1	U
VOCs	1,1,2,2-Tetrachloroethane	UG/L	1	U	1	U
VOCs	1,1,2-Trichloroethane	UG/L	1	U	1	U
VOCs	1,1-Dichloroethane	UG/L	1	U	1	U
VOCs	1,1-Dichloroethene	UG/L	1	U	1	U
VOCs	1,2-Dichloroethane	UG/L	1	U	1	U
VOCs	1,2-Dichloropropane	UG/L	1	U	1	U
VOCs	2-Butanone	UG/L	8.7		5	U
VOCs	2-Hexanone	UG/L	5	U	5	U
VOCs	4-Methyl-2-pentanone	UG/L	1	U	1	U
VOCs	Acetone	UG/L	10	U	10	U
VOCs	Benzene	UG/L	1	U	1	U
VOCs	Bromodichloromethane	UG/L	1	U	1	U
VOCs	Bromoform	UG/L	1	U	1	U
VOCs	Bromomethane	UG/L	1	U	1	U
VOCs	Carbon disulfide	UG/L	1	U	1	UJ
VOCs	Carbon tetrachloride	UG/L	1	U	1	U
VOCs	Chlorobenzene	UG/L	1	U	1	U
VOCs	Chloroethane	UG/L	1	U	1	U
VOCs	Chloroform	UG/L	1	U	1	U
VOCs	Chloromethane	UG/L	1	U	1	U
VOCs	Cis-1,2-Dichloroethene	UG/L	1	U	30	
VOCs	Cis-1,3-Dichloropropene	UG/L	1	U	1	U
VOCs	Dibromochloromethane	UG/L	1	U	1	U
VOCs	Ethylbenzene	UG/L	1	U	1	U
VOCs	Methylene chloride	UG/L	5	U	5	U
VOCs	Styrene	UG/L	1	U	1	U

TABLE 4 - SUMMARY OF ANALYTICAL RESULTS  
 DATA VALIDATION REPORT  
 JUNE 2016 PERFORMANCE GROUNDWATER SAMPLING  
 TEXTRON FORMER TORX FACILITY  
 ROCHESTER, INDIANA

		SDG	16061162		16061162	
		Location	ZVI-2(17.5)		ZVI-2(32.5)	
		Sample Date	6/14/2016		6/14/2016	
		Sample ID	ATR-ZVI2(17.5)-G061416		ATR-ZVI2(32.5)-G061416	
		Qc Code	FS		FS	
Class	Parameter	Units	Result	Qualifier	Result	Qualifier
VOCs	Tetrachloroethene	UG/L		1 U		1 U
VOCs	Toluene	UG/L		1 U		1 U
VOCs	trans-1,2-Dichloroethene	UG/L		1 U		1 U
VOCs	trans-1,3-Dichloropropene	UG/L		1 U		1 U
VOCs	Trichloroethene	UG/L		1 U		1 U
VOCs	Vinyl chloride	UG/L		1 U		65
VOCs	Xylene, o	UG/L		1 U		1 U
VOCs	Xylenes (m&p)	UG/L		2 U		2 U
VOCs	Xylenes, Total	UG/L		3 U		3 U

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FS = Field Sample, FD = Field Duplicate

TB = Trip Blank, EB = Equipment Blank