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16 March 2016

Mr. Ken McDaniel, LPG
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Indiana Department of Environmental Management
100 North Senate Ave.
Indianapolis, IN 46204-2251

**RE: Report of Remedial Injection Activities and Initial Performance Monitoring
TORX Facility
4366 North Old US Highway 31, Rochester, Indiana
Facility Cleanup ID 7100149
Amec Foster Wheeler Project Number 3359-15-1040**

Dear Mr. McDaniel:

Enclosed is the *Report of Remedial Injection Activities and Initial Performance Monitoring* performed at the Torx Facility located in Rochester, Indiana prepared by Amec Foster Wheeler Environment & Infrastructure, Inc. (Amec Foster Wheeler). The report documents the remedial injection activities and results of the first 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 total chlorinated volatile organic compound (CVOC) contaminant mass has been reduced by 24% from baseline conditions, and mass reduction has occurred in both the source area and downgradient treatment area. As detailed in Amec Foster Wheeler's January 8, 2016 Annual Groundwater Monitoring Report, the CVOC plume is not advancing and appears to be stable, and the subsequent post-injection mass reduction has further enhanced the stability of the plume.

If you have any questions or comments following your review of this correspondence, 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 REMEDIAL INJECTION ACTIVITIES AND INITIAL PERFORMANCE MONITORING

Former TORX Facility

4366 North Old US Highway 31
Rochester, Indiana

Prepared for:

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March 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

µg/L	micrograms per liter
µmole/L	micromole per liter
cells/mL	cells per milliliter
DCE	Dichloroethene
DHC	Dehalococcoides bacteria
ERD	Enhanced Reductive Dechlorination
ISCR	In-situ Chemical Reduction
mg/L	milligrams per liter
mV	millivolts
ORP	oxygen reduction potential
qPCR	quantitative polymerase chain reaction
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 both the implementation and initial performance monitoring results 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 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. This report documents the implementation of the ISCR and ERD remedial injection activities performed at the referenced site in 2015. The purpose of the injection 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 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 very long lived reductive dechlorination amendment. Figure 2 details the treatment zones, arrays, and well locations.

2.1 ISCR Injection Activities

As detailed in the RWP, ISCR injections were implemented using a combination of zero valent iron (ZVI) and a lactate based carbon source referred to as (Anaerobic Bio Chemical) ABC®. The combination of anaerobic biodegradation and direct reduction via ZVI is

designed to drive aquifer chemistry to a highly reductive environment. The ISCR treatment zone is shown on Figure 3.

Due to the steep bank of the Western Pond in the injection area, construction of a benched support wall was required to allow the drill rig to access injection points in injection rows one and two. The support wall benches consist of two parallel rows of pre-cast concrete blocks shown on Figure 3. Flat benches were then constructed in rows 1-4 using a compacted limestone gravel base and compacted sand top. Coarse limestone rip rap was used at the base of the slope in the pond to provide stability and prevent erosion.

Amec Foster Wheeler retained Redox Tech, LLC to perform injection services within the ISCR treatment area shown in Figure 3. A total of 11,960 pounds of ABC® and 35,850 pounds of ZVI were combined to produce 24,830 gallons of ABC+® slurry and injected into 29 injection points within the treatment zone. The injections occurred during a three week period from June 16 to July 7, 2015. Table 1 presents a summary of the quantities of slurry injected into each location.

The slurry was injected using a pneumatic powered ChemGrout piston pump through 1.5 inch inner diameter Geoprobe® rods. The rods were advanced to the target depths using a track-mounted 6610 DT direct push Geoprobe® rig. Upon completing injections at each location, the boreholes were abandoned using bentonite chips to the water table and the remaining portion of the borehole was filled with cement grout to grade.

The injection points were arranged in four parallel rows approximately perpendicular to groundwater flow. In rows one and two, tooling was advanced to 42 feet below ground surface (BGS) and the injections were completed in approximate three foot increments from 42 feet to 20 feet BGS. Each three foot interval received 125 gallons of slurry for a total of 875 gallons per injection location. In rows three and four, tooling was advanced to 44 feet BGS and injections were completed in three foot increments from 44 feet to 22 feet BGS. Each approximate three foot interval received 109 gallons slurry for a total of 872 gallons per location.

In an effort to reduce the potential of the injection material surfacing, the target injection interval for each location was divided into deep and shallow intervals and completed using two boreholes. The formation responded well to the injections with a few exceptions. Upon

completion of the shallow interval of injection point (IP)-13, daylighting and migration into the adjacent pond was observed. It was estimated that less than one gallon of ABC+ migrated into the Western Pond. To correct the over-pressurization problem, the injection material for the deep interval of IP-13 was combined with the deep interval of IP-11.

One other injection point exhibited daylighting of the slurry. During injection of the IP-4 shallow intervals daylighting was observed. The injection material for IP-4 deep intervals was combined with the IP-27 deep intervals. Because injection point IP-5 was located adjacent to IP-4 near the pond it was decided to not inject at IP-5 to prevent over-pressurization of the formation and potential daylighting. Therefore, the ABC+® from IP-5 was combined with injection point IP-7 location.

2.2 ERD Injection Activities

As detailed in the RWP, the ERD injections consisted of lactate based formulas manufactured by Redox Tech, LLC (Redox Tech), referred to as product Anaerobic Biochem (ABC®), referred to as “ABC” hereinafter. The ABC product was diluted approximately 10:1 with water to create the final injection amendment. Amec Foster Wheeler performed the injection services within the ERD treatment areas shown in Figure 2. 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.

ERD was accomplished by injection of various modified forms of product ABC into an array of permanently installed injection wells. Details for 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.

2.2.1 Source Area Outside Building

The area east of the Western Pond and access road behind the manufacturing plant within the source area is shown in Figure 4. A total of 19 injection wells were installed in two rows to address two separate vertical contaminant intervals. Due to the presence of silt lenses in the subsurface the ethyl lactate in ABC was increased by 50-100% above its fraction in the standard ABC mixture. The use of this high ethyl lactate blend was designed to increase

desorption and diffusion of the chlorinated VOCs from the silt lenses such that they would be more available for treatment.

The injections occurred during July 30 through August 2, 2015. Table 2 presents a summary of the quantities of modified ABC injected into each well. A total of approximately 14,837 gallons of amendment was injected into 17 of the 19 injection wells (well 3 was not injected in), with each injection well receiving generally between 897 and 965 gallons of amendment. The exceptions were injection wells 12, 13 and 19, which had reduced volumes of 518, 0 and 388 gallons, respectively, injected due to high pressures encountered.

2.2.2 Source Area Under Building

ERD injections were performed at the source area under the Site building in February 2016. Details of the injection and subsequent performance monitoring will be provided in a separate report.

2.2.3 Downgradient Treatment Zone A

The area east of the manufacturing plant is divided into four downgradient treatment zones (Zones A through D) as shown in Figure 2. A total of 68 injection wells were installed as two nested wells at 34 locations to address the vertical contaminant profile in Treatment Area A. Standard product ABC formulation was used to promote reductive dechlorination in this area.

The injections occurred between July 16 and August 2, 2015. Table 3 presents a summary of the quantities of ABC injected into each well. Each injection location or point received between 3,280 and 3,340 gallons of amendment with each injection interval receiving between 1,640 and 1,700 gallons of amendment.

2.2.4 Downgradient Treatment Zone B

Thirty-nine (39) injection wells were installed at 17 locations in Treatment Zone B. Each location has two injection wells, one for an upper and one for an intermediate interval. Locations 9 and 14 have a third injection well for a deep interval, while locations 15 through 17 also have a third injection well to address the deeper contamination observed in a silt layer at MW24. Standard product ABC formulation was used to promote reductive dechlorination in Treatment Zone B.

The injections occurred between August 28 and September 12, 2015. Table 4 presents a summary of the quantities of ABC injected into each well. Each of the upper and intermediate injection wells received approximately 1,430 gal of amendment. For the deep interval at locations 9, 14, and 15 through 17, each well received approximately 770 gal of amendment.

2.2.5 Downgradient Treatment Zone C

Twenty injection wells were installed at 10 locations in Treatment Zone C in order to address the vertical contaminant profile. Each location has two injection wells, one for an upper and one for a lower interval.

Different amendments were used in the upper and lower injection wells in Treatment Zone C. For the upper interval wells the higher end fatty acids in ABC were increased by 30-40% above its fraction in the standard ABC to increase retardation. Standard product ABC formulation was used to promote reductive dechlorination in deeper injection wells of Treatment Zone C.

The injections occurred between September 10 and 16, 2015. Table 5 presents a summary of the quantities of standard and modified ABC injected into each well. Each of the upper interval wells received approximately 3,155 gallons of amendment, while each of the deeper injection wells received approximately 3,070 gallons of amendment.

2.2.6 Downgradient Treatment Zone D

Injection wells were installed at 38 locations in Treatment Zone D, with all but one location having injection wells to treat three discrete vertical intervals. Injection well 1 did not have a deep injection interval due to high clay content at that location. In two arrays of points (locations 1-10) a higher fatty acid fraction of ABC, similar to that specified for Treatment Zone C, was injected.

Two arrays of injection wells were installed in the southern portion of Treatment Zone D with the first array approximately 30 feet upgradient from well MW26. The second array was located approximately 15 feet upgradient from MW26. Two additional arrays of injection wells are located along the eastern edge of Treatment Zone D to address VOC levels observed at MW17.

These wells were used to inject a modified form of ABC, referred to as ABC-ole. ABC-ole is a modification of standard ABC that contains a high mass fraction of oleic acid. Oleic acid is strongly adsorbed to soils and has limited mobility in the environment. This ABC formulation is designed to provide an initial relatively quick release of carbon to stimulate reductive dechlorination. Following the initial release of the more soluble fractions and initial stimulus for ERD, this substrate is designed to provide a much sustained release of electron donor as the oleic acid and its daughter products are slowly hydrolyzed.

The injections occurred between August 3 and 29, 2015. Table 6 presents a summary of the quantities of standard and modified ABC injected into each well. Each interval of the modified ABC wells (wells 1-10) received approximately 2,760 gallons of amendment with the exception of the deeper well at point 10, where the formation would not accept the amendment. For the ABC-ole locations (11 through 38), each interval received between 282 and 686 gallons of amendment.

2.3 Performance Monitoring Objectives

Following the injections of amendments detailed above, Amec Foster Wheeler conducted initial groundwater performance monitoring sampling events during August and October 2015. 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 will also be used to identify refinements to the biostimulant or ISCR amendment injections in the future to optimize remedy effectiveness.

2.4 Scope of Work

Amec Foster Wheeler conducted groundwater monitoring and sampling at 36 monitoring wells located within and downgradient of the treatment zones. Performance monitoring wells inside the plant were not sampled during these performance monitoring events because injection activities in this area did not commence in 2015. Injection of amendment in the Source Area Outside (Behind) the Plant and in Treatment Zone A was conducted in

July and early August 2015. The initial round of groundwater performance monitoring for these two zones was conducted in late August 2015. Injection of amendment in Treatment Zones B through D were conducted in August and September 2015. Groundwater performance monitoring of these zones was conducted in October 2015.

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 volatile organic compounds (VOCs), anions (nitrate, chloride, and sulfate), total organic carbon (TOC), alkalinity, Dehalococoides (DHC) Bacteria, dissolved gases (methane, ethane, and ethene), volatile fatty acids (VFAs), and select metals (iron and manganese).

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, and pH], VOCs, anions (nitrate, chloride, and sulfate), TOC, alkalinity, DHC, dissolved gases (methane, ethane, and ethene), VFAs, and select metals (arsenic, selenium, iron, and manganese). The analytical methods used are presented in Table 7. The results of this baseline sampling, supplemented with results of routine groundwater monitoring conducted from 2012 through 2014, are included on Tables 8 through 10. 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 7. The 1-inch monitoring wells, MW12 and MW13 located east of North Old US Highway 31 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 submersible sampling pump. Prior to sample collection, groundwater was purged from the wells using a modified low-flow procedure. Groundwater field parameters including pH, temperature, conductivity, oxidation-reduction potential, 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 for ORP, +/- 10 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, for analysis of anions, metals, TOC, and alkalinity. Samples for DHC analyses were shipped under chain-of-custody to Microbial Insights in Knoxville Tennessee. Samples for VFAs and 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 and MW13. 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 7.

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.

5.1.2 Volatile Fatty Acids

The groundwater samples were analyzed for VFAs by Method AM23G. The injected amendment contains VFAs, and therefore VFAs are an indicator of substrate distribution to the performance monitoring wells.

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.

5.2.2 Manganese, Iron, Nitrate, and Sulfate

The groundwater samples were analyzed for manganese and iron by Method 6020A, nitrate by Method 353.2, sulfate and chloride by Method 9056A. These constituents are competing electron acceptors for microbial respiration in the absence of oxygen. Once dissolved oxygen is depleted, anaerobic microbes typically use other electron acceptors in the following order: nitrate, manganese, ferric iron, and sulfate. Typically sufficient amendment

is needed to deplete these competing electron acceptors before significant dechlorination can occur. Elevated levels of dissolved iron and manganese indicate that the groundwater geochemistry is sufficiently reducing. The preferable concentration for nitrate is < 1 mg/L and for sulfate is < 20 mg/L.

5.2.3 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 Dechlorinating Bacteria and Functional Genes

The groundwater samples were analyzed for Dehalococcoides and reductase genes by Quantitative Polymerase Chain Reaction (qPCR). Dehalococcoides are a bacterial group capable of complete reductive dechlorination of chlorinated hydrocarbons to ethene/ethane. An abundance of reductase of functional genes is indicative of dechlorination processes at work. Vinyl chloride reductase genes facilitate complete reductive dechlorination to ethene.

5.4 Buffering

5.4.1 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 alternation 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.

5.4.2 Alkalinity

The groundwater samples were analyzed for alkalinity by Method A2320B. Alkalinity, evaluated in conjunction with pH, is an indicator of buffering capacity of the aquifer. An increase in alkalinity and stable pH indicates the buffering capacity of the aquifer is sufficient to neutralize metabolic acids produced during degradation of the amendment. If the pH is lower than 5 and alkalinity remains at or below background, a buffering agent may be needed to provide a suitable environment for the desired biological activity.

5.5 Degradation of Chlorinated VOCs

5.5.1 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 chlorinated VOCs 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.

5.5.2 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 chlorinated VOCs is occurring.

5.5.3 Chloride

The groundwater samples were analyzed for chloride by Method 9056. Chloride is produced by the anaerobic dechlorination. Elevated levels of chloride relative to background are indication that dechlorination has occurred.

6.0 Data Evaluation

Tables 8 through 10 present the analytical results. The measured field parameters referenced in Section 4.0 are included in Table 8. Figures 5 and 6 present a summary of the results of the VOC analyses performed on the monitoring wells in each treatment area. 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 increased significantly post-injection to well above 20 mg/L in all four wells (as high as 38,000 mg/L in

PM3 in the middle of the source area), indicating amendment was successfully distributed to the wells. VFAs also increased significantly and are substantially present in all four wells, particularly PM3, indicating substrate distribution to the monitoring wells.

The ORP ranged from -25.1 to -86.6 millivolts (mV) indicating reducing conditions. Dissolved oxygen readings were less than 1 mg/L, which is comparable to baseline conditions. Iron and manganese concentrations were comparable or slightly higher than baseline conditions. Nitrate and sulfate concentrations were within their target range. The pH ranged from 5.68 to 6.61, and alkalinity was comparable or higher than baseline conditions indicating sufficient buffering.

The DHC populations increased by several orders of magnitude and are now substantially present in all four wells at between 1.06E+04 and 8.92E+05 cells per milliliter (cells/mL), which is typically sufficient for reductive dechlorination. Reductase genes indicate potential for biological activity, particularly at PM2 in the middle of the source area. Of the reductase functional genes only *tceA* was identified at less than reporting limits.

A summary of the pertinent results for the performance monitoring wells in the source area is provided below:

- PM2: The Total Molar Mass was 23 micromoles per liter ($\mu\text{mole/L}$) in August 2015, down from 226 in November 2012, a 90% reduction in mass. Trichloroethene (TCE) in PM2 was below reporting limits in August 2015, down from 2,000 micrograms per liter ($\mu\text{g/L}$) in November 2012, indicating the source contaminant has been remediated at this location. TOC and VFA concentration indicate the amendment is still substantially present, while the DHC population was favorable for continued enhanced reductive dechlorination.
- PM3: The Total Molar Mass was 5 $\mu\text{mole/L}$ in August 2015, down from 571 $\mu\text{mole/L}$ in November 2012, a 99% reduction. TCE in PM3 was below reporting limits in August 2015; cis-1,2-DCE in PM3 was 200 $\mu\text{g/L}$ in August 2015, down from 43,000 $\mu\text{g/L}$ in November 2012; while vinyl chloride was 200 $\mu\text{g/L}$ in August 2015, down from 7,600 $\mu\text{g/L}$ in Nov 2012. The TOC concentration of 38,000 mg/l was very elevated at this well due to the significant decrease in groundwater velocity between the area directly at the pond and the area directly behind and

underneath the building. The injection was designed anticipating this hydraulic wall effect. The DHC population at PM3 was at a concentration supportive of complete dechlorination.

The total chlorinated VOC molar mass increased slightly in MW81(27) and MW59(29), indicating liberation of CVOCs is occurring. TCE was reduced substantially in MW81(27), which had the second highest TCE baseline concentration. Vinyl chloride concentrations doubled in these two wells relative to the 2012 data, indicating dechlorination was also occurring but had not yet fully reduced the chlorinated ethene. These wells are located closer to the boundaries of the treatment area and may not have received as sufficient amendment as PM2 and PM3, which are located towards the center of the treatment area, however, the presence of VFAs/TOC and DHC are supportive for complete dechlorination.

Methane and ethene concentrations were high in all four wells. Chloride concentrations varied relative to background but none had increased to more than 2 times the background concentration.

Conclusions

- The total molar mass for the primary chlorinated VOCs has thus far been reduced by 28% in the Source Zone Outside (Behind) Plant based upon data from the four performance monitoring wells relative to baseline.
- Contaminant mass has been substantially reduced in the two performance monitoring wells (PM2 and PM3) located in the middle of the source area. At both of these locations conditions appear favorable for continued contaminant dechlorination.
- Contaminant mass increased slightly in the remaining two wells [MW81(27) and MW59(29)], likely due to liberation of mass from silt layers near these wells as part of the injection. These wells are located closer to the boundaries of the treatment area and may not have received as sufficient amendment as PM2 and PM3. It is notable, however, that TCE was reduced significantly at MW81(27). Additionally, at both of these locations conditions appear favorable for subsequent mass dechlorination.

6.2 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). Only two of the wells (MW6C and MW13) have baseline TOC data. TOC concentrations increased notably in the August 2015 sample results from well MW13 relative to baseline, while the increase in TOC at MW6C relative to baseline was marginal. With the exception of MW6C (8.1 mg/L) and OW1(28) (4.9 mg/L), the TOC levels were greater than 20 mg/L indicating amendment distribution to the performance monitoring wells had occurred. The variability in TOC concentrations could indicate uneven distribution as of the time of the initial performance monitoring event. VFAs were substantially present in all wells except OW1(28) and MW6C, which were at low concentrations.

The ORP ranged from -10.2 to -154 mV indicating iron-reducing conditions in all wells. With the exception of MW12 (1.86 mg/L) and MW13 (4.92 mg/L) dissolved oxygen is at favorable levels. Baseline data for iron and manganese is only available for MW13. The iron and manganese concentrations for MW13 were similar to the baseline data. Nitrate and sulfate concentrations were within the target range. The pH ranged from 6.01 to 7.48, and alkalinity was comparable or higher than baseline conditions indicating sufficient buffering.

The DHC populations increased by several orders of magnitude post-injection in certain wells and were between 1.05E+02 and 1.32E+06 cells per milliliter (cells/mL) throughout the treatment zone. Certain wells which did not exhibit a substantial DHC increase (e.g., MW20) still exhibit adequate DHC population. Reductase genes indicate potential for biological activity.

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

- MW6C: The total CVOC molar mass was reduced from 56 $\mu\text{mole/L}$ in September 2012 to 5 $\mu\text{mole/L}$ in August 2015, a 91% reduction. Cis-1,2-DCE was 410 $\mu\text{g/L}$ in August 2015, down from 3,600 $\mu\text{g/L}$ in September 2012. Vinyl chloride was 1,200 $\mu\text{g/L}$ in September 2012 and 66 $\mu\text{g/L}$ in August 2015. ORP was at -20mV, which is not as low as desirable, and TOC was less than 20 mg/L, indicating the injected amendment may be somewhat depleted.

- MW12: The total CVOC molar mass was 39 μmole in August 2015, down from 125 μmole in May 2013, which was a 69% reduction in CVOCs. The Cis-1,2-DCE concentration declined from 11,000 $\mu\text{g/L}$ in May 2013 to 2,900 $\mu\text{g/L}$ in August 2015 (78% reduction). The TOC and DHC levels measured in August 2015 were sufficient for continued reductive dechlorination.
- OW1: Total molar mass in shallow well OW1(28) was 6.6 $\mu\text{mole/L}$ in August 2015, down from 21.6 $\mu\text{mole/L}$ in December 2014, a 69% reduction, while total molar mass in deeper well OW1(39) was 7.8 $\mu\text{mole/L}$ in August 2015, down from 16 $\mu\text{mole/L}$ in December 2014, a 51% reduction. Cis-1,2-DCE in OW1(28) was 270 $\mu\text{g/L}$ in August 2015, down from 1,300 $\mu\text{g/L}$ in December 2014, while cis-1,2-DCE in OW1(39) was 180 $\mu\text{g/L}$ in August 2015, down from 540 $\mu\text{g/L}$ in December 2014. Vinyl chloride was 240 $\mu\text{g/L}$ in August 2015, down from 500 $\mu\text{g/L}$ in December 2014, while vinyl chloride in OW1(39) was 370 $\mu\text{g/L}$ in August 2015, down from 650 $\mu\text{g/L}$ in December 2014. DHC population was very substantial at both intervals. In OW1(28) ORP and TOC were low as compared to OW1(39), indicating a higher rate of amendment depletion in the upper interval.
- MW13: The total molar mass declined by 16% relative to the September 2012 baseline. The concentration of cis-1,2 DCE had been reduced from 4,900 $\mu\text{g/L}$ in September 2012 to 3,400 $\mu\text{g/L}$ in August 2015. Although the cis-1,2 DCE concentration was reduced by 30% relative to the baseline, the August 2015 concentration was approximately 10% greater than observed in May 2013, suggesting that some desorption from the aquifer matrix may have occurred. As of August 2015, the TOC concentrations indicate that adequate donor remains to support dechlorination. Additionally, DHC levels had increased by four orders of magnitude and were very robust.
- MW62(36): MW-62 is on the extreme southern edge in the upgradient portion of Treatment Zone A. The total molar mass increased by 47% relative to the May 2013 baseline. TCE was not observed at this well in either May 2013 or August 2015. The concentration of cis-1,2 DCE at MW-62(36) more than doubled from the May 2013 level of 2,400 $\mu\text{g/L}$ after the initial injection, indicating that the

daughter product desorbed from the aquifer matrix. Conversely, vinyl chloride concentrations declined by 20% relative to the May 2013 data. TOC levels were somewhat depleted in August 2015 but DHC levels were supportive of complete dechlorination. In particular, vinyl chloride reductase levels were very elevated indicating excellent potential for complete dechlorination provided adequate donor levels are maintained.

- MW-20(35): MW-20 is on the extreme northern edge in the upgradient portion of Treatment Zone A. The total molar mass decreased by 50% relative to the May 2013 baseline. TCE was not observed at this well in May 2013 but was present at 3.5 µg/L in August 2015 indicating that matrix desorption occurred. The concentrations of cis-1,2 DCE and vinyl chloride at MW-20(35) declined by 50% from the May 2013 level. The redox potential reading, TOC concentration and DHC levels all indicate conditions supportive of dechlorination.
- MW20(51): The total molar mass decreased by 38% relative to the May 2013 baseline. TCE was not observed during either the baseline or post-injection monitoring event. The concentration of cis-1,2 DCE declined by 48% from the May 2013 level, while vinyl chloride declined by 22%. The TOC concentration is supportive of dechlorination, though the DHC population is somewhat marginal.

The total molar mass increased slightly for MW62(36), likely due to desorption on the outer edge of the treatment zone. The mass remained at minimal levels in MW82(58).

Methane concentrations were high in all the performance monitoring wells, which is favorable. Ethene was present in all wells, indicating complete dechlorination is occurring throughout the treatment area. Chloride concentrations varied relative to background but none had increased to more than two times the background concentration.

Conclusions

- The total molar mass for the primary chlorinated VOCs has thus far been reduced by 43% in Treatment Zone A based upon data from the nine performance monitoring wells relative to baseline. The greatest reductions were at MW6C on the upgradient portion of the treatment zone and in MW12 located

in the middle of the treatment zone. The only treatment zone well that did not have mass reduction was MW62, located on the outer edge of the treatment zone.

- Contaminant mass has been reduced in seven of the nine performance monitoring wells [MW6C, MW12, OW1, MW13, MW20(35), MW20(51), and OW1(39)], while the mass remained minimal in monitoring well MW82(58). At MW20 and OW1 mass reductions were observed in both the shallow and intermediate depth intervals. At most locations conditions appear favorable for subsequent mass dechlorination.
- Contaminant mass increased in one well [MW62(36)], located near the edge of the treatment area, likely due to liberation from the effects of the injection. Mass liberation is required as part of reductive dechlorination, and at this location conditions appear favorable for subsequent mass dechlorination.

6.3 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). With the exception of MW24(24.9) and MW24(55.9), located just outside the treatment area, the TOC levels were greater than 20 mg/L indicating amendment distribution to the performance monitoring wells had occurred. Likewise, VFA concentrations were indicative of amendment distribution to all performance monitoring wells except MW24(24.9) and MW24(55.9).

The ORP ranged from 7.9 to -155.2 mV. The ORP indicated reducing conditions in all the wells except that conditions were less reductive at MW24(24.9). With the exception of OW2(33), dissolved oxygen readings were less than 1 mg/L. The dissolved oxygen reading at OW2(33) was 2.47 mg/L. The pH, which ranged from 6.55 to 7.14, together with alkalinity results indicate optimal conditions with adequate buffering to maintain neutral pH conditions.

Sulfate concentrations were generally within the target range of < 20 mg/L. Nitrate concentrations were within target range. Background iron and manganese data is only available for MW14. Although slightly higher than background, the iron and manganese

concentrations for this well were less than 1 mg/L. These parameters indicate that the natural geochemistry will not strongly compete for electron donor capacity from amendment addition.

The DHC population in OW3(55) was low at 19 cells/mL. The DHC populations in the other wells were between 4.18E+02 cells/mL and 1.72E+06 cells/m, with the lower end populations seen at MW14, MW24, and OW3(35). The somewhat lower DHC could be because not enough time has passed for the amendments to have fully impacted certain performance wells due to the slower groundwater velocity in this treatment zone. It is notable that DHC increased by a factor of 40 in MW-14. Reductase genes indicate potential for biological activity at MW14, MW24(55.9), OW2(33), OW2(53), and OW3(35), though as detailed above the total DHC at certain wells is somewhat low. The potential for biological activity at OW3(55) and MW24(24.9) appears to be lower.

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

- OW2(53): A 98% reduction in chlorinated CVOC mass was observed in OW2(53) with the total CVOC molar mass reduced from 35 $\mu\text{mole/L}$ in December 2014 to 0.6 $\mu\text{mole/L}$ in October 2015. The vinyl chloride concentration in this well dropped to 19 $\mu\text{g/L}$ from 1,500 $\mu\text{g/L}$ (99%), and the cis-1,2-DCE concentration dropped to 30 $\mu\text{g/L}$ from 1,100 $\mu\text{g/L}$ (97%). The TOC concentration was 440 mg/L and the redox potential was measured at -112mV which indicates conditions favorable to continued reductive dechlorination.
- OW2(33): The CVOC molar mass increased by an order of magnitude from 4.1 $\mu\text{mole/L}$ in December 2014 to 46 $\mu\text{mole/L}$ in October 2015. TCE was not detected at this interval in this well and therefore the increase in CVOC mass was due to the concentrations of cis 1,2 DCE increasing from 180 $\mu\text{g/L}$ to 2,000 $\mu\text{g/L}$ with a similar increase in vinyl chloride concentration. Both the ORP level and DHC population at this interval were conducive to biological reduction, while the TOC level in October 2015 (42 mg/L) was somewhat marginal. High ethene concentrations (370 $\mu\text{g/L}$) indicate some complete dechlorination is already occurring. The limited TOC concentration may reflect amendment depletion from

CVOC desorption from the matrix, or limited transport from the upgradient injection point to the monitoring well due to the low groundwater velocity in Treatment Zone B, or a combination of these factors.

- OW3(35): The CVOC molar mass decreased by 40%, from 4.7 $\mu\text{mole/L}$ in December 2014 to 2.9 $\mu\text{mole/L}$ in October 2015. TCE was less than the reporting limit of 1 $\mu\text{g/L}$ in October 2015, down from 8 $\mu\text{g/L}$ in December 2014. The concentration of cis-1,2 DCE declined by 50% from 300 $\mu\text{g/L}$ in December 2014 to 150 $\mu\text{g/L}$ in October 2015. Vinyl chloride concentrations remained comparable to baseline. The ORP level (-136 mv) and TOC concentration (130 mg/L) were favorable for continued dechlorination but the DHC levels were low.
- OW3(55): The CVOC molar mass decreased from 6.8 $\mu\text{mole/L}$ in December 2014 to 4.5 $\mu\text{mole/L}$ in October 2015. TCE was 430 $\mu\text{g/L}$, down from 680 $\mu\text{g/L}$ in December 2014. Cis-1,2 DCE levels also decreased similarly. The ORP level (-156 mv) and TOC concentration (1,600 mg/L) were favorable for continued dechlorination but the DHC levels were low at 1.9E01 cells /mL. Based on the TOC concentrations, it is anticipated that the DHC population will increase in the coming months. DHC levels will be determined in subsequent monitoring to verify that the microbial population reaches desired levels.
- MW14: The CVOC molar mass increased by a factor of two from 4 $\mu\text{mol/L}$ in September 2012 to 5.6 $\mu\text{mol/L}$ in October 2015. The TCE concentration was at 570 $\mu\text{g/L}$ in October 2015, up from 390 $\mu\text{g/L}$ in September 2012. Cis-1,2-DCE was at 110 $\mu\text{g/L}$ in October 2015, up from 53 $\mu\text{g/L}$ in September 2012. The ORP level at this interval was conducive to biological reduction and DHC population increased by a factor of 40 from baseline. The TOC level in October 2015 (35 mg/L) was somewhat marginal. The limited TOC concentration may reflect amendment depletion from CVOC desorption from the matrix and/or limited transport to date from the upgradient injection.
- MW24(55.9): The CVOC molar mass decreased from 1.7 $\mu\text{mole/L}$ in March 2013 to 1.4 $\mu\text{mole/L}$ in October 2015. TCE was 110 $\mu\text{g/L}$, down from 130 $\mu\text{g/L}$ in March 2013. Cis-1,2 DCE levels also decreased similarly. TOC and DHC

were low, suggesting that the amendment has not fully impacted this well located just outside the treatment zone.

- MW24(24.9): All CVOC concentrations remained not detected in this well.

Ethene was detected in all wells and was particularly high in OW2(33). Methane was elevated in OW2(33), OW3(35), and MW15. Background chloride data is only available for MW14. The chloride concentration for this well was slightly lower than its background concentration.

Conclusions

- Relative to baseline the total molar mass for the primary chlorinated VOCs increased by 7% in Treatment Zone B , However, the overall increase is primarily due to a localized increase in one well [OW-2(33)].
- Contaminant mass was reduced in four of the seven performance monitoring wells [MW24(55.9), OW2(53), OW3(35), and OW3(55)], while the mass remained not detected in another monitoring well [MW24(24.9)]. The biggest decrease was at OW2(53), located on the upgradient portion of the treatment zone.
- Contaminant mass increased significantly in one well [OW2(33)], the intermediate depth well at this location, likely due to liberation from silt layers from the effects of the injection. In the deeper interval at this location [OW-2(53)] mass was reduced significantly. Regarding the increase at OW2(33), both the ORP level and DHC population at this interval were conducive to biological reduction, while the TOC level was somewhat marginal.
- Contaminant mass also increased slightly in one well (MW14). At this location conditions appear somewhat favorable for subsequent mass dechlorination.

6.4 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).

Performance monitoring wells MW15 and OW4(35) were the only wells with TOC greater than 20 mg/L. Likewise, MW15 and OW4(35) were the only wells with significant VFA concentrations. This data indicates the amendment may have not yet distributed to certain performance monitoring wells in Treatment Zone C due to the larger distances between injection rows in this zone.

The ORP ranged from -37.5 to -140.2 mV indicating reducing conditions. With the exception of MW25(16.4), dissolved oxygen readings were less than 1 mg/L. The pH ranged from 6.11 to 7.43 which is in the ideal range for biological-based treatment. The alkalinity results indicate sufficient buffering capacity is present in the groundwater to offset acidification that typically accompanies reductive dechlorination.

The sulfate and nitrate concentrations were within target range. Background iron and manganese data is only available for MW25(16.4), and the concentrations of these constituents were generally consistent with background.

Total CVOC molar mass generally increased in the performance monitoring wells in Treatment Zone C, indicating liberation of contaminants from the aquifer matrix. A summary of the pertinent results for the performance monitoring wells in Treatment Zone C is provided below:

- MW15: The total CVOC molar mass increased to 64 $\mu\text{mole/L}$ in October 2015, up from 25 $\mu\text{mole/L}$ in April 2012. The concentration of TCE increased by an order of magnitude and the cis-1,2 DCE concentration more than doubled, indicating these contaminants desorbed from the aquifer matrix. The ORP level (-92 mv) and TOC concentration (540 mg/L) were favorable for continued dechlorination but the DHC levels were somewhat low ($5.0\text{E}+2$ cells /mL). Based on the TOC concentrations, it is anticipated that the DHC population will increase. Elevated ethene levels indicate complete dechlorination is occurring.
- MW25(16.4): The total CVOC molar mass increased to 48 $\mu\text{mole/L}$ in October 2015, up from 29 $\mu\text{mole/L}$ in September 2012. Cis-1,2 DCE concentrations doubled from baseline indicating these contaminants desorbed from the aquifer matrix. The TOC concentration (3.4 mg/L) suggests that amendment had not been well distributed or that amendment had not reached the monitoring well due

to the slow groundwater velocity in the area. The DHC levels ($8.4E+03$ cells /mL) suggest potential for dechlorination.

- MW25(32.6): The total CVOC molar mass increased to $33 \mu\text{mole/L}$ in October 2015, up from $10 \mu\text{mole/L}$ in April 2012. The concentration of TCE increased from not detected to $78 \mu\text{g/L}$ and the vinyl chloride concentration more than tripled indicating these contaminants desorbed from the aquifer matrix. The ORP level (-89 mv) was in the iron reducing range. However the TOC concentration (5.4 mg/L) suggests that amendment had not been well distributed or that amendment had not reached the monitoring well due to the slow groundwater velocity in the area. The DHC levels were low ($3.0E+2$ cells /mL) and may not increase until TOC levels increase.
- MW25(45.2): The total CVOC molar mass increased to $24 \mu\text{mole/L}$ in October 2015, up from $10 \mu\text{mole/L}$ in July 2013. The concentration of TCE, cis 1,2 DCE and vinyl chloride generally doubled indicating these contaminants desorbed from the aquifer matrix. The ORP level (-37 mv) was in the iron reducing range. However the TOC concentration (2.1 mg/L) suggests that amendment had not been well distributed or that amendment had not reached the monitoring well due to the slow groundwater velocity in the area. The DHC levels were low ($1.7E+2$ cells /mL) and may not increase until TOC levels increase.
- OW4(35): The CVOC molar mass decreased by 50% from $11 \mu\text{mole/L}$ in December 2014 to $5.4 \mu\text{mole/L}$ in October 2015. The concentration of cis-1,2-DCE declined from $210 \mu\text{g/L}$ in December 2014 to $170 \mu\text{g/L}$ in October 2015. Vinyl chloride concentrations declined by 50%. The ORP level (-110 mv) and TOC concentration (1900 mg/L) were favorable for continued dechlorination. The elevated TOC level suggests that amendment had been advectively transported some distance from the injection point C-1, which is located approximately 10 feet upgradient of OW4(35). The DHC levels were low, though based on the TOC concentrations, it is anticipated that the DHC population will increase.

- OW4(55): The low CVOC concentrations at baseline were reduced such that all CVOCs were not detected during the post-injection sampling event.

Methane concentrations were high in MW15, MW25(16.4), and MW25(32.6). Ethene was detected in all treatment zone wells and was substantially elevated in MW25(32.6), indicating that some complete dechlorination of contaminant mass is occurring. Background chloride data is only available for MW25(16.4). The chloride concentration for this well was higher than its background, but still less than 2 times the background concentration.

Conclusions

- The total molar mass for the primary chlorinated VOCs has increased twofold in Treatment Zone C based upon data from the six performance monitoring wells relative to baseline. This overall increase is attributed to desorption of mass from the injection effects, as well as, the delayed impact to certain wells due to the slow groundwater velocity in portions of the treatment area.
- Contaminant mass has been reduced in one of the six performance monitoring wells, OW4(35), while the mass remained minimal to not detected in OW4(54). At both locations conditions appear slightly favorable for subsequent mass dechlorination.
- Contaminant mass increased in four of the six wells [MW15, MW25(16.4), MW25(32.6), and MW25(45.2)], again likely due to contaminant liberation from numerous silt layers located near these wells. The liberated mass may now be more available for subsequent dechlorination. The biggest mass increase was seen at MW15, where conditions appear somewhat favorable for subsequent mass dechlorination. At MW25 the mass increased at all three vertical screened intervals, all of which have silt layers nearby. The three intervals of MW25 appear to have a slight potential for subsequent mass dechlorination. The lack of dechlorination seen to date at these locations may also be attributable to the amendment not yet reaching the monitoring wells due to the slow groundwater velocity in portions of the treatment zone.

6.5 Treatment Zone D

Ten monitoring wells located 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). Samples from four of the ten wells had TOC levels greater than 20 mg/L: MW26(17.5), ZVI-2(17.5), OW5(16), and OW5(35). VFA concentrations for these same four wells, as well as, MW16(28.8) demonstrate distribution of the amendment to these wells. Based upon this data, the amendment may not have distributed well to the screened zones of the other five performance monitoring wells: MW16, MW17, MW26(58.8), and ZVI-2(32.5), and OW5(54). One reason that the amendment effects may not have made it to some of these monitoring wells could be due to the very large injection row spacing in this treatment zone, e.g., the nearest injection well upgradient of MW16 is 110 feet away. Another reason could be the location of certain wells (e.g., MW17) on the outer edge of the treatment zone.

With the exception of MW17, the ORP ranged from -45.6 to -125 mV indicating reducing conditions. The ORP at MW17 was 213.1 mV, much higher than historical, and may be an anomaly. The dissolved oxygen reading at OW5(16) was 3.02 mg/L, but otherwise dissolved oxygen readings were less than 1 mg/L. The pH, which ranged from 6.84 to 7.38, together with the alkalinity results indicate sufficient buffering.

The iron concentration at MW16 was an order of magnitude higher than its background concentration. Sulfate concentrations in all performance wells were near or below the target range of < 20 mg/L.

CVOC mass decreased on most treatment zone monitoring wells. A summary of the pertinent results for the performance monitoring wells in Treatment Zone D is provided below:

- MW16: The total CVOC molar mass increased to 7.8 $\mu\text{mole/L}$ in October 2015 from 6.2 $\mu\text{mole/L}$ in September 2012. However, the concentration of TCE decreased significantly to 2.2 $\mu\text{g/L}$ in October 2015 from 42 $\mu\text{g/L}$ in September 2012. The cis-1,2-DCE concentration increased from 360 $\mu\text{g/L}$ in September 2012 to 480 $\mu\text{g/L}$ in August 2015, and some of this increase is likely associated with the strong dechlorination of the parent compound TCE. Vinyl chloride

increased from 130 µg/L in September 2012 to 170 µg/L in August 2015. ORP (-98) and DHC (4.1E+04) are supportive of continued reductive dechlorination, while the ethene concentration (45 µg/L) demonstrates that part of the mass has undergone complete dechlorination. The low TOC concentration indicates the full effects of the nearest injection well 110 feet upgradient may not have yet had time to fully impact this location.

- MW17: The total CVOC molar mass decreased to 1.9 µmole/L in October 2015 from 2.8 µmole/L in September 2012, a 32% reduction. The concentration of TCE decreased to 190 µg/L in October 2015 from 270 µg/L in September 2012. The cis-1,2-DCE concentration increased from 41 µg/L in September 2012 to 67 µg/L in August 2015, likely due to the associated reduction in TCE. The high ORP and low TOC and DHC indicate that the amendment has not fully affected this well located on the outer edge of the treatment zone.
- MW26(17.5): The total CVOC molar mass decreased to 8.0 µmole/L in October 2015 from 14 µmole/L in September 2012, a 43% reduction. TCE decreased from 4 µg/L to not detected; cis-1,2-DCE decreased from 770 µg/L to 510 µg/L; and vinyl chloride decreased from 380 µg/L to 170 µg/L. ORP (-115 mv), TOC (47 mg/L), and DHC (1.2E+06 cells/ml) values are all supportive of continued reductive dechlorination.
- MW26(28.8): All chlorinated VOCs were non-detect with a total molar mass reduction down from 0.9 µmole/L in September 2012.
- MW26(58): All chlorinated VOCs remained at minimal concentrations post-injection.
- ZVI-2(17.5): The total CVOC molar mass decreased to 7.3 µmole/L in October 2015 from 20 µmole/L in December 2012, an 84% reduction. The TCE concentration decreased to not detected in October 2015 from 5.1 µg/L in December 2012. Cis-1,2-DCE decreased to 320 µg/L from 1,300 µg/L and vinyl chloride decreased to 250 µg/L from 400 µg/L. ORP (-137 mv) and DHC (8.6E+05 cells/ml) are supportive of continued reductive dechlorination, while the

ethene concentration (38 µg/L) demonstrates complete degradation of part of the contaminant mass.

- ZVI-2(32.5): The total CVOC molar mass decreased to 5.4 µmole/L in October 2015 from 10 µmole/L in December 2012, a 46% reduction. Concentrations of TCE decreased from 16 µg/L in December 2012 to less than 1 µg/L in October 2015. Cis-1,2-DCE decreased from 580 µg/L to 320 µg/L and vinyl chloride concentrations decreased from 210 µg/L to 130 µg/L. The DHC population of 2.6E+05 cells/ml is supportive of continued reductive dechlorination, while the low TOC concentration indicates the full effects of the amendment may not have yet reached this well.
- OW5(16): The total CVOC molar mass decreased slightly to 11 µmole/L in October 2015 from 12 µmole/L in December 2014, an 8% reduction. The concentration of TCE decreased from 9.4 µg/L to not detected. Cis-1,2-DCE decreased from 780 µg/L to 720 µg/L and vinyl chloride decreased from 230 µg/L to 190 µg/L. ORP (-80 mv), TOC (140 mg/L), and DHC (2.2E+03 cells/ml) are all supportive of continued reductive dechlorination.
- OW5(35): The total CVOC molar mass decreased slightly to 14 µmole/L in October 2015 from 16 µmole/L in December 2014, a 12% reduction. The concentration of TCE decreased from 330 µg/L to not detected. Cis-1,2-DCE decreased from 1,200 µg/L to 1,100 µg/L, while the concentration of vinyl chloride increased from 43 µg/L to 170 µg/L, likely due to the dechlorination of TCE and DCE. ORP (-125 mv), TOC (190 mg/L), and DHC (4.8E+03 cells/ml) are all supportive of continued reductive dechlorination.
- OW5(54): The total CVOC molar mass increased to 26 µmole/L in October 2015 from 12 µmole/L in December 2014. However, the concentration of TCE decreased from 5.5 µg/L to not detected. Cis-1,2-DCE increased from 220 µg/L to 2,000 µg/L, and while some of the increase may be due to dechlorination of TCE, the majority of the increase is likely due to desorption of mass from the effects of the injection. The concentration of vinyl chloride decreased from 580 µg/L to 300 µg/L. ORP (-117 mv) and DHC (1.9E+03 cells/ml) are supportive of

continued reductive dechlorination, though the low TOC concentration indicates that the full effects of the nearest injection wells 50 feet upgradient may not have yet had time to fully impact this well.

Methane concentrations were high in MW16, MW26(17.5), MW26(28.8), ZVI-2(17.5), ZVI-2(32.5), and OW5(35), which is favorable. Ethene was detected in all performance wells and was substantially elevated in MW26(17.5) and ZVI2(17.5), indicating some complete dechlorination is occurring. Chloride concentrations were similar to background.

Conclusions

- The total molar mass for the primary chlorinated VOCs has thus far been reduced by 13% in Treatment Zone D based upon data from the 10 performance monitoring wells relative to baseline,
- Contaminant mass has been reduced in seven of the 10 performance monitoring wells [MW17, MW26(17.5), MW26(28.8), ZVI-2(17.5), ZVI-2(32.5), OW5(16), and OW5(35)], including all three wells located at the downgradient edge of the treatment area (i.e., MW17, MW26, and ZVI-2), while the mass remained minimal in one other monitoring well [MW26(58)].
- Contaminant mass increased slightly in one well (MW16) and moderately in one other well [OW5(44)]. At both of these locations conditions appear somewhat favorable for subsequent mass dechlorination, though the full effects of the nearest injection wells upgradient may not have yet had time to fully impact these locations.
- At MW26 contaminant mass decreased in both the shallow and intermediate intervals and remained at minimal concentrations at the deeper interval; at ZVI-2 mass was reduced in both the shallow and intermediate intervals; and at OW5 mass was reduced in the shallow and intermediate intervals but increased in the deeper interval, likely due to liberation from the nearby silt layers as part of the injection process.

6.6 Quality Control Results

The VOC data was validated in general accordance with the Quality Assurance Project Plan. 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 validation included an evaluation of the data quality and a review of the field quality assurance sample results. The laboratory data conformed to the guidelines in the Quality Assurance Project Plan with a few exceptions. There were two samples, MW14 and MW17 that had their matrix spike and/or matrix spike duplicate below control limits, therefore the concentrations of TCE were flagged with a J (estimated) value in Table 9. Additionally, there was one sample, OW3(55), in which the relative percent difference (RPD) between the field duplicate results exceeded the control limits, therefore 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, and vinyl chloride results for this sample were flagged with a J value in Table 9.

In accordance with the Quality Assurance Project Plan (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. There was good agreement between the VOC concentrations reported in the replicate samples and primary samples for field replicate MW20(35). However, the field replicate for sample OW3(55) was above the 25% RPD goal for cis-1,2-DCE, trans-1,2-DCE and vinyl chloride. These analytes were qualified as estimated concentrations. None of the equipment blanks and trip blanks had any detections.

7.0 Conclusions

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

Source Zone Outside (Behind) Plant

- The total molar mass for the primary chlorinated VOCs has thus far been reduced by 28%. Contaminant mass has been substantially reduced in two of

the four performance monitoring wells (PM2 and PM3). Both of these locations are in the middle of the treatment area and conditions appear favorable for continued contaminant dechlorination

- Contaminant mass increased slightly in the remaining two wells [MW81(27) and MW59(29)], likely due to liberation of mass from silt layers near these wells as part of the injection. These wells are located closer to the boundaries of the treatment area and may not have received as sufficient amendment as PM2 and PM3, although at both of these locations conditions appear favorable for subsequent mass dechlorination.

Treatment Zone A

- The total molar mass for the primary chlorinated VOCs has thus far been reduced by 43%. Contaminant mass has been reduced in seven of the nine performance monitoring wells [MW6C, MW12, OW1, MW13, MW20(35), MW20(51), and OW1(39)], while the mass remained minimal in one monitoring well [MW82(58)]. At most locations conditions appear favorable for subsequent mass dechlorination.
- Contaminant mass increased in one well [MW62(36)], located near the edge of the treatment area, likely due to liberation from the effects of the injection. Mass liberation is required as part of reductive dechlorination, and at this location conditions appear favorable for subsequent mass dechlorination.

Treatment Zone B

- The total molar mass for the primary chlorinated VOCs has increased by 7%, however, the overall increase is primarily due to a localized increase in one well [OW2(33)], where mass appears to have been liberated as part of the injection. The mass at this location may now be more available for treatment, and at this location conditions appear favorable for subsequent mass dechlorination.

- Contaminant mass was reduced in four of the seven performance monitoring wells [MW24(55), OW2(53), OW3(35), and OW3(55)], while the mass remained not detected in another monitoring well [MW24(25)].
- Contaminant mass increased significantly in one well [OW2(33)], the intermediate depth well at this location, likely due to liberation from the effects of the injection. Both the ORP level and DHC population at this interval were conducive to biological reduction, while the TOC level was somewhat marginal.
- Contaminant mass increased slightly in one well (MW14). At this location conditions appear somewhat favorable for subsequent mass dechlorination.

Treatment Zone C

- The total molar mass for the primary chlorinated VOCs has increased twofold in Treatment Zone C. This overall increase is attributed to desorption of mass from the injection effects, as well as, the delayed impact to certain wells due to the slow groundwater velocity in portions of the treatment area.
- Contaminant mass has been reduced in one of the six performance monitoring wells, OW4(35), while the mass remained minimal to not detected in OW4(54). At both locations conditions appear slightly favorable for subsequent mass dechlorination.
- Contaminant mass increased in four of the six wells [MW15, MW25(16.4), MW25(32.6), and MW25(45.2)], including all three vertical intervals of MW25, again likely due to contaminant liberation from numerous silt layers located near these wells. The liberated mass may now be more available for subsequent dechlorination, and conditions appear somewhat favorable for subsequent mass dechlorination at these locations. The lack of dechlorination seen to date at these locations may also be attributable to the amendment not yet reaching the monitoring wells due the slow groundwater velocity in portions of the treatment zone.

Treatment Zone D

- The total molar mass for the primary chlorinated VOCs has thus far been reduced by 13%, Contaminant mass has been reduced in seven of the 10 performance monitoring wells [MW17, MW26(17.5), MW26(28.8), ZVI-2(17.5), ZVI-2(32.5), OW5(16), and OW5(35)], while the mass remained minimal in one other monitoring well [MW26(58)].
- Contaminant mass increased slightly in one well (MW16) and moderately in one other well [OW5(44)]. At both of these locations conditions appear somewhat favorable for subsequent mass dechlorination, though the full effects of the nearest injection wells upgradient may not have yet had time to fully impact these locations.
- At MW26 contaminant mass decreased in both the shallow and intermediate intervals and remained at minimal concentrations at the deeper interval; at ZVI-2 mass was reduced in both the shallow and intermediate intervals; and at OW5 mass was reduced in the shallow and intermediate intervals but increased in the deeper interval, likely due to liberation from the nearby silt layers as part of the injection process.

The total CVOC contaminant mass has been reduced by 24% from baseline, from 2,564 $\mu\text{mole/L}$ baseline to 1,938 $\mu\text{mole/L}$ post-injection. As detailed in Amec Foster Wheeler's January 8, 2016 Annual Groundwater Monitoring Report, the CVOC plume is not advancing and appears to be stable, and the subsequent post-injection mass reduction further enhances the stability of the plume. Related to plume stability, it is particularly notable that contaminant mass has been reduced both within the source area as well as at the downgradient edge of the treatment area (i.e., MW17, MW26, and ZVI-1).

Indicator Parameters

The TOC and VFA data indicated amendment distribution had occurred to the following:

- Source Area Outside (Behind) Plant: All four performance monitoring wells;

- Treatment Zone A: Seven of the nine performance monitoring wells, including MW12, MW13, MW62, MW20(35), MW20(51), MW82, and OW1(39);
- Treatment Zone B: Five of the seven performance monitoring wells, including MW14, OW2(33), OW2(53), OW3(35), and OW3(55.9).
- Treatment Zone C: Two of the six performance monitoring wells, including MW15 and OW4(35).
- Treatment Zone D: Five of the ten performance monitoring wells, including MW26(17.5), MW26(28.8), ZVI-2(17.5), OW5(16), and OW5(35).

TOC at MW6C and OW1(28) (Treatment Zone A), MW24(24.9) and MW24(55.9) (Treatment Zone B), MW25(16.4), MW25(32.6), MW25(45.2), and OW4(54) (Treatment Zone C), and MW16, MW17, MW26(28.8), MW26(58.8), ZVI-2(32.5), and OW5(54) (Treatment Zone D) was low, though the full effects of the nearest injection wells upgradient may not have yet had time to fully impact some of these locations.

The pH and alkalinity results indicate sufficient buffering. The ORP and dissolved oxygen readings generally indicated anaerobic, reducing conditions have been achieved. Dissolved oxygen was higher than target levels in MW12 and MW13 (Treatment Zone A), OW2(33) (Treatment Zone B), MW25(16.4) (Treatment Zone C), and OW5(16) (Treatment Zone D). Sulfate, nitrate, iron, and manganese are competing electron acceptors in the absence of oxygen and were generally within their target range.

The DHC populations were mostly adequate for biodegradation except at OW4(35) (5 cells/mL), OW3(55) (19 cells/mL), and MW17 (0.3 cells/mL). The reductase functional genes indicate biological activity is occurring at the majority of the performance monitoring wells.

8.0 Upcoming Activities

The source area bioaugmentation injections inside the Acument facility were completed in February. The next round of injections in the other treatment zones will be based on the results of the next performance groundwater monitoring event. The second performance



groundwater monitoring event, which will include all performance monitoring wells except of the one located inside of the Acument building, is scheduled for completion by March 4, 2016. The next performance monitoring report will be prepared following receipt and evaluation of the analytical results.

There are several performance groundwater monitoring wells that have decreased in VOC concentration to less than the detection limits. If this trend continues after the completion of the March performance monitoring event, it will be recommended that these wells be removed from the performance monitoring program.



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TORX Facility Remediation
Report of Performance Monitoring

TABLES

Table 1
Volume of ABC+ Injected into the ISCR Treatment Zone
TORX Facility, 4366 North Old US Highway 31, Rochester, Indiana

Injection Point	Date	Interval (ft. BGS)	Elevation (feet)	ABC (gals)	ZVI (lbs)	ABC+ Slurry (gals)	Comments
1	6/21/2015	20-30	773.30 - 763.30	21	510	375	
		30-42	763.30 - 751.30	28	680	500	
2	6/29/2015	20-30	772.69 - 762.69	21	510	375	
		30-42	762.69 - 750.69	28	680	500	
3	6/17/2015	20-30	772.52 - 762.52	21	510	375	
		30-42	762.52 - 750.52	28	680	500	
4	7/6/2015	20-30	772.55 - 762.55	21	510	375	Observed daylighting
		30-42	762.55 - 750.55	0	0	0	Combined with IP-27 (32-44)
5	7/6/2015	20-30	772.46 - 762.46	0	0	0	Combined with IP-7 due to close proximity to pond
		30-42	762.46 - 750.46	0	0	0	
6	6/29/2015	20-30	772.38 - 762.38	21	510	375	
		30-42	762.38 - 750.38	28	680	500	
7	7/6/2015	20-32	772.42 - 762.42	42	1020	375	Additional ABC+ used from IP-5 (20-30)
		30-42	762.42 - 750.42	56	1360	500	Additional ABC+ used from IP-5 (30-42)
8	7/1/2015	20-30	777.14 - 767.14	21	510	375	
		30-42	767.14 - 755.14	28	680	500	
9	6/17/2015	20-30	776.42 - 766.42	21	510	375	
		30-42	766.42 - 754.42	28	680	500	
10	6/21/2015	20-30	776.01 - 766.01	21	510	375	
		30-42	766.01 - 754.01	28	680	500	
11	7/2/2015	20-30	775.91 - 765.91	21	510	375	
		30-42	765.91 - 753.91	56	1360	500	Additional ABC+ used from IP-13 (30-42)
12	6/20/2015	20-30	775.84 - 765.84	21	510	375	
		30-42	765.84 - 753.84	28	680	500	
13	7/1/2015	20-30	775.80 - 765.80	21	510	375	Observed daylighting
		30-42	765.80 - 753.80	0	0	0	Combined with IP-11 (30-42)
14	6/17/2015	20-30	775.70 - 765.70	21	510	375	
		30-42	765.70 - 753.70	28	680	500	
15	6/29/2015	20-30	775.56 - 765.56	21	510	375	
		30-42	765.56 - 753.56	28	680	500	
16	6/18/2015	22-32	776.93 - 766.93	24	600	436	
		32-44	766.93 - 754.93	24	600	436	
17	7/7/2015	22-32	776.68 - 766.68	24	600	436	
		32-44	766.68 - 754.68	24	600	436	
18	6/20/2015	22-32	776.46 - 766.46	24	600	436	
		32-44	766.46 - 754.46	24	600	436	
19	6/23/2015	22-32	776.23 - 766.23	24	600	436	
		32-44	766.23 - 754.23	24	600	436	
20	6/30/2015	22-32	776.26 - 766.26	24	600	436	
		32-44	766.23 - 754.26	24	600	436	

Table 1 (continued)
Volume of ABC+ Injected into the ISCR Treatment Zone
TORX Facility, 4366 North Old US Highway 31, Rochester, Indiana

Injection Point	Date	Interval (ft. BGS)	Elevation (feet)	ABC (gals)	ZVI (lbs)	ABC+ Slurry (gals)	Comments
21	6/18/2015	22-32	776.19 - 766.19	24	600	436	
		32-44	766.19 - 754.19	24	600	436	
22	7/7/2015	22-32	776.26 - 766.26	24	600	436	
		32-44	766.26 - 754.26	24	600	436	
23	6/19/2015	22-32	776.97 - 766.97	24	600	436	
		32-44	766.97 - 754.97	24	600	436	
24	6/22/2015	22-32	777.01 - 767.01	24	600	436	
		32-44	767.01 - 755.01	24	600	436	
25	6/19/2015	22-32	776.71 - 766.71	24	600	436	
		32-44	766.71 - 754.71	24	600	436	
26	6/30/2015	22-32	776.50 - 766.50	24	600	436	
		32-44	766.50 - 754.50	24	600	436	
27	7/7/2015	22-32	776.41 - 766.41	24	600	436	
		32-44	766.41 - 754.41	52	1280	936	Additional ABC+ used from IP-4 (30-42)
28	6/23/2015	22-32	776.52 - 766.52	24	600	436	
		32-44	766.52 - 754.52	24	600	436	
29	6/30/2015	22-32	776.32 - 766.32	24	600	436	
		32-44	766.32 - 754.32	24	600	436	
30	6/19/2015	22-32	776.03 - 766.03	24	600	436	
		32-44	766.03 - 754.03	24	600	436	

Prepared by: RED
Checked by: PJS

Table 2
Volume of Modified ABC Injected into Source Area Outside Building
TORX Facility, 4366 North Old US Highway 31, Rochester, Indiana

Injection Well	Date	Interval (ft. BGS)	Elevation (feet)	ABC (gals)	Comments
1	8/1-2/2015	24.5 - 29.5	775.93 - 770.93	897	
2	8/1-2/2015	22.0 - 27.0	777.74 - 772.74	897	
3	8/1-2/2015	25.0 - 30.0	774.09 - 769.09	0	Not injected
4	8/1-2/2015	15.0 - 20.0	783.62 - 778.62	897	
5	8/1-2/2015	25.5 - 30.5	783.11 - 778.11	897	
6	8/1-2/2015	30.5 - 35.5	777.38 - 772.38	897	
7	8/1-2/2015	29.5 - 34.5	778.63 - 773.63	897	
8	8/1-2/2015	27.5 - 32.5	780.83 - 775.83	897	
9	8/1-2/2015	25.0 - 30.0	783.17 - 778.17	897	
10	7/30-31/2015	34.5 - 39.5	765.93 - 760.93	965	
11	7/30-31/2015	37.5 - 42.5	762.24 - 757.24	965	
12	7/31/2015	40.0 - 45.0	759.09 - 754.09	965	
13	7/30/2015	32.5 - 37.5	765.94 - 760.94	0	Not injected in due to high injection pressures
14	7/30-31/2015	27.0 - 32.0	771.62 - 766.62	965	
15	7/30-31/2015	44.0 - 49.0	764.61 - 759.61	965	
16	7/30-31/2015	47.5 - 52.5	760.38 - 755.38	965	
17	7/30-31/2015	47.5 - 52.5	760.63 - 755.63	965	
18	7/30-31/2015	43.5 - 48.5	764.83 - 759.83	965	
19	7/30/2015	43.5 - 48.5	764.67 - 759.67	388	Reduced volume due to high injection pressures
Inj-2	N/A	18.9 - 23.6	779.78 - 775.08	0	Not injected

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Checked by: PJS

Table 3
Volume of ABC Injected into Treatment Zone A
TORX Facility, 4366 North Old US Highway 31, Rochester, Indiana

Injection Well	Date	Interval (ft. BGS)	Elevation (feet)	ABC (gals)	Comments
1	8/1-2/2025	29.0 - 34.0	782.97 - 777.97	1,700	
	7/30-8/2/2015	40.0 - 50.0	771.97 - 761.97	1,640	
2	8/1-2/2015	30.5 - 35.5	782.02 - 777.02	1,640	
	7/30-8/2/2015	40.5 - 50.5	772.02 - 762.02	1,640	
3	8/1-2/2025	27.0 - 37.0	785.53 - 775.53	1,700	
	7/30-8/2/2015	42.0 - 47.0	770.53 - 765.53	1,640	
4	8/1-2/2015	29.0 - 39.0	783.69 - 773.69	1,700	
	7/30-8/2/2015	45.0 - 50.0	767.69 - 762.69	1,640	
5	8/1-2/2025	29.0 - 39.0	783.52 - 773.52	1,700	
	7/30-8/2/2015	45.0 - 50.0	767.52 - 762.52	1,640	
6	8/1-2/2015	29.0 - 39.0	782.71 - 772.71	1,700	
	7/30-8/2/2015	45.0 - 50.0	766.71 - 761.71	1,640	
7	7/18-19/2015	26.0 - 31.0	783.38 - 778.38	1,640	
	7/16-18/2015	36.0 - 46.0	773.38 - 763.38	1,640	
8	7/18-19/2015	26.5 - 31.5	782.97 - 777.97	1,640	
	7/16-18/2015	36.5 - 46.5	772.97 - 762.97	1,640	
9	7/18-19/2015	26.0 - 31.0	783.05 - 778.05	1,640	
	7/16-18/2015	36.0 - 46.0	773.05 - 763.05	1,640	
10	7/18-19/2015	24.0 - 29.0	784.48 - 779.48	1,640	
	7/16-18/2015	33.0 - 43.0	775.48 - 765.48	1,640	
11	7/18-19/2015	25.0 - 30.0	783.07 - 778.07	1,640	
	7/16-18/2015	35.0 - 45.0	773.07 - 763.07	1,640	
12	7/18-19/2015	25.0 - 30.0	782.72 - 777.72	1,640	
	7/16-18/2015	35.0 - 45.0	772.72 - 762.72	1,640	
13	7/18-19/2015	26.0 - 31.0	782.82 - 777.82	1,640	
	7/16-18/2015	36.0 - 46.0	772.82 - 762.82	1,640	
14	7/18-19/2015	25.2 - 30.2	783.36 - 778.36	1,640	
	7/16-18/2015	35.5 - 45.5	773.06 - 763.06	1,640	
15	7/20, 7/28-29/2015	25.0 - 30.0	782.74 - 777.74	1,640	
	7/19-21/2015	35.0 - 45.0	772.74 - 762.74	1,640	
16	7/20, 7/28-28/2015	23.5 - 28.5	782.94 - 777.94	1,648	
	7/19-21/2015	33.5 - 43.5	772.94 - 762.94	1,640	
17	7/20, 7/28-29/2015	22.0 - 27.0	783.36 - 778.36	1,640	
	7/19-21/2015	33.0 - 43.0	772.36 - 762.36	1,640	
18	7/20, 7/28-28/2015	22.0 - 27.0	783.41 - 778.41	1,648	
	7/19-21/2015	32.0 - 42.0	773.41 - 763.41	1,640	
19	7/20, 7/28-29/2015	26.0 - 31.0	782.94 - 777.94	1,640	
	7/19-21/2015	36.0 - 46.0	772.94 - 762.94	1,640	
20	7/20, 7/28-28/2015	25.0 - 30.0	783.33 - 778.33	1,648	
	7/19-21/2015	35.0 - 45.0	773.33 - 763.33	1,640	

Table 3 (continued)
Volume of ABC Injected into Treatment Zone A
TORX Facility, 4366 North Old US Highway 31, Rochester, Indiana

Injection Well	Date	Interval (ft. BGS)	ABC (gals)	ABC (gals)	Comments
21	7/20, 7/28-29/2015	25.0 - 30.0	782.80 - 777.80	1,640	
	7/19-21/2015	35.0 - 45.0	772.80 - 762.80	1,640	
22	7/28-29/2015	24.0 - 29.0	782.73 - 777.73	1,640	
	7/20-21, 7/29-30/2015	34.0 - 44.0	772.73 - 762.73	1,640	
23	7/28-29/2015	22.0 - 27.0	783.08 - 778.08	1,640	
	7/20-21, 29-30/2015	32.0 - 42.0	773.08 - 763.08	1,640	
24	7/28-29/2015	21.5 - 26.5	783.14 - 778.14	1,640	
	7/20-21, 7/29-30/2015	31.5 - 41.5	773.14 - 763.14	1,640	
25	7/28-29/2015	24.0 - 29.0	783.60 - 778.60	1,640	
	7/20-21, 29-30/2015	34.0 - 44.0	773.60 - 763.60	1,640	
26	7/28-29/2015	24.0 - 29.0	783.08 - 778.08	1,640	
	7/20-21, 7/29-30/2015	34.0 - 44.0	773.08 - 763.08	1,640	
27	7/18-20/2015	23.0 - 28.0	783.21 - 778.21	1,640	
	7/16-18/2015	33.0 - 43.0	773.21 - 763.21	1,640	
28	7/18-20/2015	22.0 - 27.0	783.35 - 778.35	1,640	
	7/16-18/2015	32.0 - 42.0	773.35 - 763.35	1,640	
29	7/18-20/2015	22.0 - 27.0	782.95 - 777.95	1,640	
	7/16-18/2015	32.0 - 42.0	772.95 - 762.95	1,640	
30	7/18-20/2015	24.0 - 29.0	782.87 - 777.87	1,640	
	7/16-18/2015	33.0 - 43.0	773.87 - 763.87	1,640	
31	7/18-20/2015	23.0 - 28.0	783.39 - 778.39	1,640	
	7/16-18/2015	34.0 - 44.0	772.39 - 762.39	1,640	
32	7/18-20/2015	23.0 - 28.0	783.03 - 778.03	1,640	
	7/16-18/2015	33.0 - 43.0	773.03 - 763.03	1,640	
33	7/18-20/2015	24.0 - 29.0	782.08 - 777.08	1,640	
	7/16-18/2015	34.0 - 44.0	772.08 - 762.08	1,640	
34	7/18-20/2015	23.0 - 28.0	783.22 - 778.22	1,640	
	7/16-18/2015	33.0 - 43.0	773.22 - 763.22	1,640	

Prepared by: RED
Checked by: PJS

Table 4
Volume of ABC Injected into Treatment Zone B
TORX Facility, 4366 North Old US Highway 31, Rochester, Indiana

Injection Well	Date	Interval (ft. BGS)	Elevation (feet)	ABC (gals)	Comments
1	8/31 and 9/1/2015	26.5 - 36.5	780.10 - 770.10	1,430	
	8/28-31/2015	36.5 - 46.5	770.10 - 760.10	1,430	
2	8/31 and 9/1/2015	25.5 - 35.5	780.27 - 770.27	1,430	
	8/28-31/2015	38.0 - 48.0	770.27 - 760.27	1,430	
3	9/9, 11-12/2015	26.0 - 36.0	779.91 - 769.91	1,446	
	8/28-31/2015	35.5 - 45.5	770.41 - 760.41	1,430	
4	9/9, 11-12/2015	25.5 - 35.5	780.11 - 770.11	1,446	
	8/28-31/2015	37.5 - 47.5	768.11 - 758.11	1,430	
5	9/9, 11-12/2015	24.0 - 34.0	777.86 - 767.86	1,446	
	8/28-31/2015	38.0 - 48.0	768.23 - 758.23	1,430	
6	9/9, 11-12/2015	25.5 - 35.5	767.47 - 757.47	1,446	
	9/29-31/2015	39.0 - 49.0	766.47 - 756.47	1,430	
7	9/9-11/2015	25.0 - 35.0	780.02 - 770.02	1,430	
	8/29-31/2015	47.0 - 52.0	758.02 - 753.02	1,430	
8	9/9-11/2015	25.0 - 35.0	779.81 - 769.81	1,430	
	8/31 and 9/1/2015	38.0 - 48.0	766.81 - 756.81	1,430	
9	8/29-31/2015	24.5 - 34.5	779.86 - 769.86	1,430	
	9/9-11/2015	49.0 - 54.0	755.36 - 750.36	1,430	
	8/28-29/2015	36.5 - 46.5	767.86 - 757.86	770	
10	8/29-31/2015	37.0 - 47.0	768.05 - 758.05	1,430	
	9/9, 11-12/2015	25.0 - 35.0	780.05 - 770.05	1,446	
11	8/29-31/2015	36.5 - 46.5	768.07 - 758.07	1,430	
	9/9, 11-12/2015	26.0 - 36.0	778.57 - 768.57	1,446	
12	9/9-11/2015	27.0 - 37.0	776.66 - 766.66	1,430	
	8/31 and 9/1/2015	38.0 - 48.0	765.66 - 755.66	1,430	
13	9/9-11/2015	23.0 - 33.0	780.76 - 770.76	1,430	
	8/31 and 9/1/2015	35.5 - 45.5	768.26 - 758.26	1,430	
14	09/09-11/2015	23.0 - 33.0	780.04 - 770.04	1,430	
	8/29-31/2015	35.0 - 45.0	768.04 - 758.04	770	
	8/29-31/2015	50.0 - 55.0	753.04 - 748.04	1,430	
15	9/9-11/2015	22.0 - 32.0	780.24 - 770.24	1,430	
	8/28-29/2015	35.0 - 45.0	767.24 - 757.24	770	
	8/29-31/2015	46.0 - 51.0	756.24 - 751.24	1,430	
16	9/1 and 9/9-11/2015	26.0 - 36.0	776.57 - 766.57	1,430	
	8/29-31/2015	37.0 - 47.0	765.57 - 755.57	1,430	
	8/28-29/2015	50.0 - 55.0	752.57 - 747.57	770	
17	9/9-11/2015	22.5 - 32.5	779.95 - 769.95	1,430	
	8/29-31/2015	34.5 - 44.5	767.95 - 757.95	1430	
	8/28-29/2015	49.5 - 54.5	752.95 - 747.95	770	

Prepared by: RED
Checked by: PJS

Table 5
Volume of Standard and Modified ABC Injected into Treatment Zone C
TORX Facility, 4366 North Old US Highway 31, Rochester, Indiana

Injection Well	Date	Interval (ft. BGS)	Elevation (feet)	ABC (gals)	Comments
1	9/13-16/2015	22.5 - 32.5	779.93 - 769.93	3,155	Modified ABC
	9/10-13/2015	42.0 - 52.0	760.43 - 750.43	3,070	Standard ABC
2	9/13-16/2015	28.0 - 38.0	773.7 - 763.7	3,155	Modified ABC
	9/10-13/2015	43.0 - 53.0	758.7 - 748.7	3,070	Standard ABC
3	9/13-16/2015	20.0 - 30.0	778.76 - 768.76	3,155	Modified ABC
	9/10-13/2015	35.0 - 45.0	763.76 - 753.76	3,070	Standard ABC
4	9/13-16/2015	27.0 - 37.0	774.86 - 764.86	3,155	Modified ABC
	9/10-13/2015	47.0 - 57.0	754.86 - 744.86	3,070	Standard ABC
5	9/13-16/2015	29.0 - 39.0	774.32 - 764.32	3,155	Modified ABC
	9/10-13/2015	48.0 - 58.0	755.32 - 745.32	3,070	Standard ABC
6	9/13-16/2015	15.0 - 25.0	774.11 - 764.11	3,155	Modified ABC
	9/10-13/2015	35.0 - 45.0	754.11 - 744.11	3,070	Standard ABC
7	9/13-16/2015	24.0 - 34.0	775.41 - 765.41	3,155	Modified ABC
	9/10-13/2015	42.0 - 52.0	757.41 - 747.41	3,070	Standard ABC
8	9/13-16/2015	18.5 - 28.5	777.31 - 767.31	3,155	Modified ABC
	9/10-13/2015	35.5 - 45.5	760.31 - 750.31	3,070	Standard ABC
9	9/13-16/2015	23.0 - 33.0	770.74 - 760.74	3,155	Modified ABC
	9/10-13/2015	40.0 - 50.0	753.74 - 743.74	3,070	Standard ABC
10	9/13-16/2015	13.0 - 23.0	779.25 - 769.25	3,155	Modified ABC
	9/10-13/2015	42.5 - 52.5	749.75 - 739.75	3,070	Standard ABC

Prepared by: RED
Checked by: PJS

Table 6
Volume of Modified ABC and ABC-Ole Injected into Treatment Zone D
TORX Facility, 4366 North Old US Highway 31, Rochester, Indiana

Injection Well	Date	Interval (ft. BGS)	Elevation (feet)	ABC (gals)	Comments
1	8/11-15/2015	17.0 - 22.0	779.74 - 774.74	2,761	Modified ABC
	8/3-4 and 8/11-14/2015	27.0 - 32.0	769.74 - 764.74	2,760	Modified ABC
2	8/11-15/2015	11.0 - 16.0	782.98 - 777.98	2,761	Modified ABC
	8/3-4 and 8/15-17/2015	30.0 - 35.0	763.98 - 758.98	2,761	Modified ABC
	8/3-4 and 8/11-14/2015	44.0 - 49.0	749.98 - 744.98	2,760	Modified ABC
3	8/11-15/2015	11.0 - 16.0	781.24 - 776.24	2,761	Modified ABC
	8/3-4 and 8/15-17/2015	27.0 - 32.0	765.24 - 760.24	2,761	Modified ABC
	8/3-4 and 8/11-14/2015	42.0 - 47.0	750.24 - 745.24	2,760	Modified ABC
4	8/11-15/2015	11.0 - 16.0	780.89 - 775.89	2,761	Modified ABC
	8/3-4 and 8/15-17/2015	23.5 - 28.5	768.39 - 763.39	2,761	Modified ABC
	8/3-4 and 8/11-14/2015	40.0 - 45.0	751.89 - 746.89	2,760	Modified ABC
5	8/11-15/2015	8.0 - 13.0	782.62 - 777.62	2,761	Modified ABC
	8/3-4 and 8/15-17/2015	26.0 - 31.0	764.62 - 759.62	2,761	Modified ABC
	8/3-4 and 8/11-14/2015	41.0 - 46.0	749.62 - 744.62	2,760	Modified ABC
6	8/11-15/2015	13.0 - 18.0	781.42 - 776.42	2,760	Modified ABC
	8/3-4 and 8/15-17/2015	24.0 - 29.0	770.42 - 765.42	2,760	Modified ABC
	8/3-4 and 8/11-14/2015	42.0 - 47.0	752.42 - 747.42	2,760	Modified ABC
7	8/11-15/2015	11.0 - 16.0	780.77 - 775.77	2,760	Modified ABC
	8/3-4 and 8/15-17/2015	26.5 - 31.5	765.27 - 760.27	2,760	Modified ABC
	8/3-4 and 8/11-14/2015	41.5 - 46.5	750.27 - 745.27	2,765	Modified ABC
8	8/11-15/2015	9.0 - 14.0	782.21 - 777.21	2,760	Modified ABC
	8/3-4 and 8/15-17/2015	26.0 - 31.0	765.21 - 760.21	2,760	Modified ABC
	8/3-4 and 8/11-14/2015	41.0 - 46.0	750.21 - 745.21	2,765	Modified ABC
9	8/11-15/2015	10.0 - 15.0	780.83 - 775.83	2,760	Modified ABC
	8/3-4 and 8/15-17/2015	26.0 - 31.0	764.83 - 759.83	2,760	Modified ABC
	8/3-4 and 8/11-14/2015	41.0 - 46.0	749.83 - 744.83	2,765	Modified ABC
10	8/3-4 and 8/11-15/2015	8.0 - 13.0	782.05 - 777.05	2,760	Modified ABC
	8/3-4 and 8/15-17/2015	25.0 - 30.0	765.05 - 760.05	2,760	Modified ABC
	8/3/2015	40.0 - 45.0	750.05 - 745.05	0	Formation would not accept biostimulant
11	8/25/2015	13.0 - 16.0	780.92 - 777.92	282	ABC-ole
	8/28/2015	28.0 - 33.0	765.92 - 760.92	470	ABC-ole
	8/26/2015	45.0 - 50.0	748.92 - 743.92	470	ABC-ole
12	8/26/2015	12.0 - 15.0	780.75 - 777.75	282	ABC-ole
	8/28/2015	27.0 - 32.0	765.75 - 760.75	470	ABC-ole
	8/25/2015	43.0 - 48.0	749.75 - 744.75	470	ABC-ole
13	8/25/2015	10.5 - 13.5	781.00 - 778.00	282	ABC-ole
	8/28/2015	20.0 - 25.0	771.50 - 766.50	470	ABC-ole
	8/26/2015	38.5 - 43.5	753.00 - 748.00	470	ABC-ole
14	8/26/2015	10.5 - 13.5	780.69 - 777.69	282	ABC-ole
	8/28/2015	25.0 - 30.0	766.19 - 761.19	470	ABC-ole
	8/25/2015	42.0 - 47.0	749.19 - 744.19	470	ABC-ole

Table 6 (continued)
Volume of Modified ABC and ABC-Ole Injected into Treatment Zone D
TORX Facility, 4366 North Old US Highway 31, Rochester, Indiana

Injection Well	Date	Interval (ft. BGS)	Elevation (feet)	ABC (gals)	Comments
15	8/26/2015	10.0 - 13.0	780.74 - 777.74	282	ABC-ole
	8/28/2015	25.0 - 30.0	765.74 - 760.74	470	ABC-ole
	8/27/2015	41.0 - 46.0	749.74 - 744.74	470	ABC-ole
16	8/26/2015	10.0 - 13.0	780.09 - 777.09	282	ABC-ole
	8/28/2015	24.0 - 29.0	766.09 - 761.09	470	ABC-ole
	8/25/2015	40.0 - 45.0	750.09 - 745.09	470	ABC-ole
17	8/25/2015	8.0 - 11.0	781.09 - 778.09	282	ABC-ole
	8/27/2015	23.0 - 28.0	766.09 - 761.09	470	ABC-ole
	8/26/2015	39.0 - 44.0	750.09 - 745.09	470	ABC-ole
18	8/26/2015	8.0 - 11.0	780.26 - 777.26	282	ABC-ole
	8/27/2015	22.0 - 27.0	766.26 - 761.26	470	ABC-ole
	8/25/2015	38.0 - 43.0	750.26 - 745.26	470	ABC-ole
19	8/25/2015	7.5 - 10.5	779.72 - 776.72	282	ABC-ole
	8/26/2015	21.5 - 26.5	765.72 - 760.72	470	ABC-ole
	8/26/2015	37.0 - 42.0	750.22 - 745.22	470	ABC-ole
20	8/26/2015	6.0 - 9.0	779.96 - 776.96	282	ABC-ole
	8/27/2015	18.0 - 23.0	767.96 - 762.96	470	ABC-ole
	8/25/2015	31.5 - 36.5	754.46 - 749.46	470	ABC-ole
21	8/25/2015	10.0 - 13.0	774.90 - 771.90	282	ABC-ole
	8/26/2015	20.0 - 25.0	764.90 - 759.90	470	ABC-ole
	8/26/2015	35.0 - 40.0	749.90 - 744.90	470	ABC-ole
22	8/26/2015	13.5 - 16.5	781.04 - 778.04	282	ABC-ole
	8/26/2015	28.5 - 33.5	766.04 - 761.04	0	ABC-ole
	8/25/2015	42.5 - 47.5	752.04 - 747.04	470	ABC-ole
23	8/25/2015	12.0 - 15.0	780.96 - 777.96	282	ABC-ole
	8/26/2015	27.0 - 32.0	765.96 - 760.96	470	ABC-ole
	8/26/2015	43.0 - 48.0	749.96 - 744.96	470	ABC-ole
24	8/26/2015	10.0 - 13.0	781.28 - 778.28	282	ABC-ole
	8/27/2015	23.0 - 28.0	768.28 - 763.28	470	ABC-ole
	8/25/2015	41.0 - 46.0	750.28 - 745.28	470	ABC-ole
25	8/25/2015	10.0 - 13.0	781.00 - 778.00	282	ABC-ole
	8/26/2015	25.0 - 30.0	766.00 - 761.00	470	ABC-ole
	8/26/2015	41.0 - 46.0	750.00 - 745.00	470	ABC-ole
26	8/26/2015	9.0 - 12.0	781.17 - 778.17	282	ABC-ole
	8/27/2015	24.0 - 29.0	766.17 - 761.17	470	ABC-ole
	8/25/2015	40.0 - 45.0	750.17 - 745.17	470	ABC-ole
27	8/25/2015	8.5 - 11.5	780.96 - 777.96	282	ABC-ole
	8/26/2015	23.5 - 28.5	765.96 - 760.96	470	ABC-ole
	8/26/2015	39.5 - 44.5	749.96 - 744.96	470	ABC-ole

Table 6 (continued)
Volume of Modified ABC and ABC-Ole Injected into Treatment Zone D
TORX Facility, 4366 North Old US Highway 31, Rochester, Indiana

Injection Well	Date	Interval (ft. BGS)	Elevation (feet)	ABC (gals)	Comments
28	8/26/2015	7.5 - 10.5	781.10 - 778.10	282	ABC-ole
	8/27/2015	22.5 - 27.5	766.10 - 761.10	470	ABC-ole
	8/25/2015	38.5 - 43.5	750.10 - 745.10	470	ABC-ole
29	8/25/2015	6.5 - 9.5	780.88 - 777.88	282	ABC-ole
	8/26/2015	23.0 - 28.0	764.38 - 759.38	470	ABC-ole
	8/26/2015	37.5 - 42.5	749.88 - 744.88	470	ABC-ole
30	8/26/2015	12.0 - 15.0	774.19 - 771.19	282	ABC-ole
	8/27/2015	22.5 - 27.5	763.69 - 758.69	470	ABC-ole
	8/25/2015	36.0 - 41.0	750.19 - 745.19	470	ABC-ole
31	8/25/2015	12.0 - 15.0	772.84 - 769.84	282	ABC-ole
	8/26/2015	20.0 - 25.0	764.84 - 759.84	470	ABC-ole
	8/26/2015	35.0 - 40.0	749.84 - 744.84	470	ABC-ole
32	8/26/2015	6.0 - 11.0	780.01 - 775.01	282	ABC-ole
	8/27/2015	18.0 - 23.0	768.01 - 763.01	686	ABC-ole
	8/27/2015	39.0 - 44.0	747.01 - 742.01	457	ABC-ole
33	8/28-29/2015	6.0 - 11.0	778.77 - 773.77	686	ABC-ole
	8/27/2015	17.0 - 22.0	767.77 - 762.77	686	ABC-ole
	8/27/2015	38.0 - 43.0	746.77 - 741.77	457	ABC-ole
34	8/28-29/2015	6.0 - 11.0	777.28 - 772.28	686	ABC-ole
	8/27/2015	24.0 - 29.0	759.28 - 754.28	686	ABC-ole
	8/27/2015	37.0 - 42.0	746.28 - 741.28	457	ABC-ole
35	8/28-29/2015	7.0 - 12.0	775.11 - 770.11	686	ABC-ole
	8/27/2015	20.0 - 25.0	762.11 - 757.11	686	ABC-ole
	8/27/2015	35.0 - 40.0	747.11 - 742.11	457	ABC-ole
36	8/28-29/2015	5.0 - 10.0	779.84 - 774.84	686	ABC-ole
	8/27/2015	18.0 - 23.0	766.84 - 761.84	686	ABC-ole
	8/27/2015	33.0 - 38.0	751.84 - 746.84	457	ABC-ole
37	8/28-29/2015	7.0 - 12.0	776.41 - 771.41	686	ABC-ole
	8/27/2015	17.0 - 22.0	766.41 - 761.41	686	ABC-ole
	8/27/2015	36.0 - 41.0	747.41 - 742.41	457	ABC-ole
38	8/28-29/2015	8.0 - 13.0	774.13 - 769.13	686	ABC-ole
	8/27/2015	19.0 - 24.0	763.13 - 758.13	686	ABC-ole
	8/27/2015	35.0 - 40.0	747.13 - 742.13	457	ABC-ole

Prepared by: RED
Checked by: PJS

Table 7
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	Zone A	Zone B	Zone C	Zone D	Treatment Areas	Source Zone Behind Plant	Zone A	Zone B	Zone C	Zone D	
Objectives	Evaluate changes in aquifer chemistry and VOC concentrations in groundwater					Objectives	Evaluate Changes in VOC concentrations, Organic substrate, and ERD end products in groundwater					
Fixed Laboratory Analyses						Fixed Laboratory Analyses						
VOCs ⁽¹⁾ ; TOC ⁽²⁾ ; Dissolved Gases ⁽³⁾	4 Wells	9 Wells	7 Wells	6 Wells	10 Wells	VOCs; TOC; Dissolved Gases	4 Wells	9 Wells	7 Wells	6 Wells	10 Wells	
	MW-81(27); MW-59(29); PM-2; PM-3	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); 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-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)	
	Metals ⁽⁴⁾ ; Alkalinity ⁽⁵⁾											
	Anions ⁽⁶⁾											
	DHC ⁽⁷⁾											
VFAs ⁽⁸⁾												
Field Readings						Field Readings						
Water Level ⁽⁹⁾	x	x	x	x	x	Water Level	x	x	x	x	x	
ORP ⁽¹⁰⁾	x	x	x	x	x	ORP	x	x	x	x	x	
pH	x	x	x	x	x	pH	x	x	x	x	x	
Cond.	x	x	x	x	x	Cond.	x	x	x	x	x	
Temperature	x	x	x	x	x	Temperature	x	x	x	x	x	
DO ⁽¹¹⁾	x	x	x	x	x	DO	x	x	x	x	x	
Turbidity	x	x	x	x	x	Turbidity	x	x	x	x	x	

(1) - VOCs: volatile organic compounds (Method 8260)

(2) - TOC: total organic carbon (Method 9060)

(3) - Dissolved gases include methane, ethane, and ethene (Method AM20GAX)

(4) - Iron and Manganese (Method 6020A)

(5) - Alkalinity (Method A2320B)

(6) - Anions include sulfate, nitrate, and chloride (Method SW9056)

(7) - DHCs: dehalococoides [Quantitative Polymerase Chain Reaction (qPCR)]

(8) - VFAs: volatile fatty acids (Method AM23G)

(9) - Depth to water measurements using a water level indicator

(10) - ORP: Oxidation Reduction Potential

(11) - DO: Dissolved Oxygen

Table 8
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 - 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	6.68	0.804	15.26	4.9	0.24	-25.1	210	210	370	65	0.027	1.1	14	0.78
Source - Outside	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
Source - Outside	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
Source - Outside	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	05/02/2013	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	38000	53	2.7	13	6.8	0.67
Source - Inside	ATR-MW67(30)-G092612	09/26/2012	7.04	0.784	16.95	1341	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	1242	4.01	78.5	NA	NA	7.8	NA	NA	NA	NA	NA
Source - Inside	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
Zone A	ATR-MW6C-G092612	09/26/2012	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
Zone A	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
Zone A	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

Table 8 (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 A	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
Zone A	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
Zone A	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
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
Zone A	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
Zone A	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
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	10/8/15	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
Zone B	MTR-MW24(24.9)-G082213	7/22/13	7.29	0.628	13.40	NM	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-MW24 (24.9)-G100815	10/8/15	6.95	0.693	14.00	4.2	0.92	7.9	290	290	1.4	39	0.19	12	0.13	0.26
Zone B	ATR-MW24(55.4)-G030513	3/5/13	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	5/2/13	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	5/2/13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-MW24 (55.9)-G100815	10/8/15	6.81	0.876	13.21	0.0	0.36	-28.6	390	390	2	26	0.02 U	24	0.44	0.52
Zone B	ATR-OW2(33)-G121814	12/18/14	7.37	0.490	13.37	0.2	0.46	-91.0	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-OW2 (33)-G100815	10/8/15	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
Zone B	ATR-OW2(53)-G121814	12/18/14	7.60	0.510	13.36	2.7	0.48	-123.0	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-OW2 (53)-G100815	10/8/15	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
Zone B	ATR-OW3(35)-G121614	12/16/14	7.50	0.652	13.53	7.5	4.24	-62.8	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-OW3 (35)-G100715	10/7/15	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
Zone B	ATR-OW3(55)-G121614	12/16/14	7.04	0.756	13.04	1.0	0.40	-26.0	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-OW3 (55)-G100715	10/7/15	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	10/7/15	NA	NA	NA	NA	NA	NA	690	690	1600	28	0.02 U	12	11	2.2
Zone C	ATR-MW15-G041312	4/13/12	7.18	0.388	13.46	2.3	0.23	-59.1	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-MW15-G041312R	4/13/12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-MW15-G030613	3/6/13	7.26	0.483	12.85	0.0	0.24	-35.3	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-MW15-G050213	5/2/13	7.35	0.366	13.43	1.1	0.19	-44.6	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-MW15-G050213R	5/2/13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-MW15-6082213	7/22/13	7.36	0.466	14.10	NM	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-MW15-G101315	10/13/15	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

Table 8 (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 C	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	10/13/15	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
Zone C	ATR-MW25(32.6)-G041612	4/16/12	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	3/6/13	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	5/2/13	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	6/19/14	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	10/13/15	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
Zone C	MTR-MW25(45.2)-6082213	7/22/13	7.04	0.463	14.10	NM	NM	NM	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-MW25(45.2)-G101315	10/13/15	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
Zone C	ATR-OW4(35)-G121614	12/16/14	7.60	0.461	12.99	-0.1	0.42	-123.8	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-OW4(35)-G101315	10/13/15	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
Zone C	ATR-OW4(54)-G121614	12/16/14	7.57	0.558	12.87	0.5	0.43	-142.8	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-OW4(54)-G101315	10/13/15	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
Zone D	ATR-MW16-G092612	09/26/2012	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	10/7/15	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
Zone D	ATR-MW17-G092612	09/26/2012	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	10/7/15	7.11	0.846	13.20	51.2	0.31	213.1	360	360	1.7	24	1.2	23	1.8	0.62	
Zone D	ATR-MW26(17.5)-G092712	09/27/2012	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	10/7/15	6.98	0.694	14.18	3.1	0.32	-115.3	290	290	47	15	0.15	1.4	14	0.99	

Table 8 (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-MW26(28.8)-G092712	09/27/2012	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	09/27/2012	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	01/08/2013	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
Zone D	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	10/7/15	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(58.2)-G041612	4/16/12	7.25	0.418	12.28	0.0	0.26	-232.8	NA	NA	NA	NA	NA	NA	NA	NA
Zone D	ATR-MW26(58.2)-G060413	6/4/13	6.93	0.417	12.97	NM	0.55	105.4	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-MW26 (58.8)-G100715	10/7/15	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
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	01/08/2013	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
Zone D	ATR-ZVI2 (17.5)-G100715	10/7/15	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-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	01/08/2013	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
Zone D	ATR-ZVI2 (32.5)-G100715	10/7/15	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-OW5(16)-G121714	12/17/14	7.31	0.629	12.96	6.4	0.51	53.3	NA	NA	NA	NA	NA	NA	NA	NA
Zone D	ATR-OW5 (16)-G100715	10/7/15	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(35)-G121714	12/17/14	7.51	0.534	12.78	1.1	0.44	-76.0	NA	NA	NA	NA	NA	NA	NA	NA
Zone D	ATR-OW5 (35)-G100715	10/7/15	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(44)-G121714	12/17/14	7.67	0.495	12.53	1.0	0.43	-120.3	NA	NA	NA	NA	NA	NA	NA	NA
Zone D	ATR-OW5 (54)-G100715	10/7/15	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

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

Prepared by: LF
 Checked by: PJS

Table 9

**Summary of Target VOC Analytical and Molecular Concentrations
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	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*	µmole/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
Source - Outside	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
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
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

Table 9 (continued)

**Summary of Target VOC Analytical and Molecular Concentrations
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	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*	µmole/L
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
Zone A	ATR-MW12-G050613	5/6/13	25 U		11000	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
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
Zone A	ATR-MW62(36)-G050213	5/2/13	10 U		2400	25	10 U		20 U		10 U		2000	32	57
	ATR-MW62-G082715	8/27/15	20 U		5,600	58	21	0.22	20 U		20 U		1,600	26	84
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
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
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	0.4
	ATR-MW82(58)-G050613	5/7/13	1 U		12	0.12	1 U		2 U		7.6	0.06	17	0.27	0.5
	ATR-MW82-G082615	8/26/15	1 U		21	0.22	1.8	0.02	1 U		8.3	0.06	15	0.24	0.5
Zone A	ATR-OW1(28)-G121714	12/17/14	7.2	0.07	1300	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

Table 9 (continued)

Summary of Target VOC Analytical and Molecular Concentrations
 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	VOCs												Total Molar Mass μmole/L
			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 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
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	2.0 U		110	1.1	3.0	0.03	2.0 U		570 J	4.3	3.6	0.06	5.6
Zone B	MTR-MW24(24.9)-6082213	7/22/13	1 U		1 U		1 U		2 U		1 U		1 U		0
	ATR-MW24 (24.9)-G100815	10/8/15	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		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	1.0 U		49	0.51	2.5	0.03	1.0 U		110	0.84	1.0	0.02	1.4
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	2000	21	9.2	0.09	5.0 U		5.0 U		1600	26	46
Zone B	ATR-OW2(53)-G121814	12/18/14	1 U		1100	11	7.3	0.08	1 U		1 U		1500	24	35
	ATR-OW2 (53)-G100815	10/8/15	1.0 U		30	0.31	1.0 U		1.0 U		1.0 U		19	0.30	0.6
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	1.0 U		150	1.5	1.3	0.01	1.0 U		1.0 U		84	1.3	2.9
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	1.0 UJ		55 J	0.57	9.1 J	0.09	1.0 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	1.0 U		430	3.3	2.4 J	0.04	4.5

Table 9 (continued)

**Summary of Target VOC Analytical and Molecular Concentrations
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	VOCs												Total Molar Mass μmole/L
			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-MW15-G041312	4/13/12	5 U		1800	19	57	0.59	10 U		28	0.21	350	5.6	25
	ATR-MW15-G041312R	4/13/12	5 U		1300	13	40	0.41	10 U		27	0.21	220	3.5	18
	ATR-MW15-G030613	3/6/13	15	0.15	2800	29	71	0.73	10 U		200	1.5	380	6.1	37
	ATR-MW15-G050213	5/2/13	10 U		2900	30	62	0.64	20 U		240	1.8	300	4.8	37
	ATR-MW15-G050213R	5/2/13	14	0.14	2800	29	67	0.69	10 U		220	1.7	300	4.8	36
	ATR-MW15-6082213	7/22/13	11	0.11	2100	22	58	0.60	10 U		160	1.2	190	3.0	27
	ATR-MW15-G101315	10/13/15	55	0.57	4600	47	350	3.6	10 U		690	5.3	460	7.4	64
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	3600	37	38	0.39	10 U		10 U		670	11	48
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		1300	13	10.0 U		20 U		10 U		440	7.0	20
	ATR-MW25(32.6)-G050213	5/2/13	5 U		1500	15	5.0 U		10 U		5 U		360	5.8	21
	ATR-MW25(32.6)-G061914	6/19/14	5 U		1200	12	5.0 U		5 U		14 J	0.11	300 J	4.8	17
	ATR-MW25(32.6)-G101315	10/13/15	5.0 U		1600	17	7.4	0.08	5.0 U		78	0.59	980	16	33
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		1800	19	200	2.1	10 U		15	0.11	220	3.5	24
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	5.0 U		170	1.8	5.0 U		5.0 U		5.0 U		230	3.7	5.4
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	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		0

Table 9 (continued)

**Summary of Target VOC Analytical and Molecular Concentrations
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	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*	µmole/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	1.0 U		2.2	0.02	170	2.7	7.8
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	1.0 U		41	0.42	1.6	0.02	1.0 U		190 J	1.4	1.0 U		1.9
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	1.0 U		510	5.3	3.2	0.03	1.0 U		1.0 U		170	2.7	8.0

Table 9 (continued)

**Summary of Target VOC Analytical and Molecular Concentrations
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	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*	µmole/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	0.9
	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	0.9
	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	1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		1.0 U		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	1.0 U		8.3	0.09	1.0 U		1.0 U		1.0 U		3.1	0.05	0.14
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	1.0 U		320	3.3	2.9	0.03	1.0 U		1.0 U		250	4.0	7.3

Table 9 (continued)

Summary of Target VOC Analytical and Molecular Concentrations
 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	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*	µmole/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	1.0 U		1.0 U		130	2.1	5.4
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	2.0 U		720	7.4	6.1	0.06	2.0 U		2.0 U		190	3.0	11
Zone D	ATR-OW5(35)-G121714	12/17/14	1 U		1200	12.4	15	0.15	1 U		330	2.5	43	0.69	16
	ATR-OW5 (35)-G100715	10/7/15	5.0		1100	11.3	5.4	0.06	5.0 U		5.0 U		170	2.7	14
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	2000	20.6	14	0.14	5.0 U		5.0 U		300	4.8	26

Notes:

J - Estimated concentration, analyte detected below quantitation limit

U - Analyzed but not detected above the MDL

(96.94) - Compound molecular weight in grams per mole

m/L* - micromole per liter

µmole/L - micromole per liter

µg/L - micrograms per liter

Green text is baseline data

Blue text is performance monitoring data

Prepared by: LF

Checked by: PJS

Table 10

Summary of Dechlorinating Bacteria, Functional Genes, Dissolved Gases, and Volatile Fatty Acid Results
Performed on the Groundwater Samples Collected from the Revised Monitoring Well Network During the Baseline Groundwater Monitoring
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 - Outside	ATR-MW81(27)-G110512	11/5/12	2.10E+00 J	< 1.70E+00	6.00E-01 J	< 1.70E+00	11,000	170	550	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-MW81(27)-G020413	2/4/13	NA	NA	NA	NA	NA	NA	NA	0.10 U	2.4	6.9	0.44	4.9	0.16	0.071 J	0.24	0.050 U	0.10 U
	ATR-MW81(27)-G030613	3/6/13	7.17E+03*	< 4.30E+00*	5.14E+03*	8.98E+01*	11,000	220	640	0.20	0.80	1.2	0.12	0.89	0.066 J	0.027 J	0.12	0.050 U	0.10 U
	ATR-MW81(27)-G050313	5/3/13	NA	NA	NA	NA	11,000	230	760	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-MW81(27)-G082715	8/27/15	2.54E+05	<1.00E+00	9.78E+04	4.74E+03	8500	150	520	0.38 J	270	93	3.1 J	150	0.59 J	0.58 J	3.5	0.29	1.4
Source - Outside	MTR-MW59(29)-G092712	9/27/12	3.18E+04	< 5.00E-01	2.17E+02	3.07E+04	11,000	240	1,600	0.022 J	0.021 J	0.050 U	0.083 J	0.050 U	0.15 U	0.15 U	0.070 U	0.050 U	0.050 U
	MTR-MW59(29)-G092712R	9/27/12	1.52E+05*	2.30E+00 J*	1.66E+03*	1.48E+05*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	MTR-MW59(29)-G020413	2/4/13	NA	NA	NA	NA	NA	NA	NA	2.8	160	190	6.7 J	240	6.0	3.0	6.4	0.05 U	4.9
	MTR-MW59(29)-G030613	3/6/13	2.28E+05*	< 3.60E+00*	1.68E+05*	1.20E+03*	14,000	280	9,600	1.0 U	86	97	2.5 J	120	3.9	2.2	3.9	0.05 U	2.5
	MTR-MW59(29)-G050313	5/3/13	NA	NA	NA	NA	13,000	250	4,900	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-MW59(29)-G082715	8/27/15	2.46E+05	<5.00E-01	1.15E+05	7.08E+04	18000	400	4300	0.26 J	98	110	0.53 J	24	0.31 J	0.085 J	0.5	0.2 U	0.5 U
Source - Outside	ATR-PM2-G110512	11/5/12	4.66E+01	< 2.50E+00	5.50E+00	2.90E+00	10,000	180	1,700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-PM2-G020413	2/4/13	NA	NA	NA	NA	NA	NA	NA	0.10 U	0.58	0.56	0.032 J	0.21	0.15 U	0.15 U	0.070 U	0.050 U	0.10 U
	ATR-PM2-G030613	3/6/13	4.12E+03*	< 4.00E-01*	2.71E+03*	1.18E+02*	10,000	160	840	0.050 J	0.15	0.10	0.035 J	0.059	0.15 U	0.15 U	0.070 U	0.050 U	0.10 U
	ATR-PM2-G050313	5/3/13	NA	NA	NA	NA	7,800	120	620	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-PM2-G082715	8/27/15	8.92E+05	<5.00E-01	5.71E+05	2.84E+05	15000	300	2900	0.11	39	19	0.25	1.3	0.2	0.056 J	0.15	0.2 U	0.5 U
Source - Outside	ATR-PM3-G110512	11/5/12	3.60E+00	< 1.40E+00	1.00E+00 J	< 1.40E+00	11,000	260	700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-PM3-G020413	2/4/13	NA	NA	NA	NA	NA	NA	NA	0.056 J	0.12	0.13	0.070 J	0.042 J	0.15 U	0.15 U	0.070 U	U	0.10 U
	ATR-PM3-G030513	3/5/13	3.58E+03*	< 9.00E-01*	1.95E+03*	7.81E+02*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-PM3-G050313	5/3/13	NA	NA	NA	NA	10,000	260	680	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	ATR-PM3-G082715	8/27/15	1.06E+04	<1.85E+01	5.91E+03	7.24E+02	4000	23	800	360	260	53	31	180	23	1.5 U	0.72	0.2 U	0.75
Source - Inside	ATR-MW67(30)-G110712	11/7/12	< 1.43E+01	< 1.43E+01	< 1.43E+01	< 1.43E+01	1,700	75	6.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Source - Inside	ATR-MW72(32)-G030613	3/6/13	3.29E+01*	< 6.30E+00*	2.17E+01*	< 6.30E+00*	6,100	130	770	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	
	ATR-MW6C-G082615	8/26/15	5.67E+04	2.66E+01	2.47E+04	9.77E+03	1500	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
Zone A	ATR-MW12-G082615	8/26/15	5.42E+02	< 2.50E+00	1.62E+01	1.64E+01	1400	19	520	0.35 J	48	27	0.35	4	0.28	0.19	0.094	0.2 U	0.5 U
Zone A	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
Zone A	ATR-MW62-G082715	8/27/15	4.93E+04	2.86E+02	1.82E+04	9.99E+03	2000	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
Zone A	ATR-MW20(35)-G082715	8/27/15	7.82E+03	2.08E+02	5.36E+03	6.76E+01	1900	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	2000	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
Zone A	ATR-MW20(51)-G082715	8/27/15	1.05E+02	<1.90E+00	1.78E+01	2.80E+00	1500	44	270	4.3	600	470	3.2 J	64	2.6	1.5	0.39 J	0.2 U	0.48 J
Zone A	ATR-MW82-G082615	8/26/15	5.85E+03	<3.30E+00	1.63E+02	8.77E+01	1400	1.4	26	160	670	520	4.5 J	270	5.9	1.6	3.1	0.25	0.5 U
Zone A	ATR-OW1S-G082715	8/27/15	3.56E+05	<5.00E-01	6.74E+03	1.48E+05	2800	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
Zone A	ATR-OW1D-G082715	8/27/15	1.22E+06	<5.00E-01	6.04E+05	3.44E+05	1400	5.1	150	1 U	280	460	2.1	26	1.6	0.5 J	0.85	0.2 U	0.21 J
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
Zone B	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
Zone B	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
Zone B	ATR-OW2 (33)-G100815	10/8/15	1.72E+06	< 5.00E-01	1.76E+05	1.60E+05	1800	24	370	2 U	64	52	0.3	6	0.5	0.23	0.4	0.2 U	0.2 U
Zone B	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
Zone B	ATR-OW3 (35)-G100715	10/7/15	7.91E+02	< 5.00E-01	3.00E-01 J	4.00E-01 J	1500	1.8	6.2	2 U	110	170	0.5 J	1.2	1.2	0.56	0.55	0.2 U	0.43

Table 10 (continued)

Summary of Dechlorinating Bacteria, Functional Genes, Dissolved Gases, and Volatile Fatty Acid Results
 Performed on the Groundwater Samples Collected from the Revised Monitoring Well Network During the Baseline Groundwater Monitoring
 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	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)-100715R	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
Zone C	ATR-MW15-G101315	10/13/15	5.05E+02	2.00E-01 J	7.30E+00	1.50E+00	2400	5.2	260	26	180	55	56	0.62 J	1.5	0.1	0.18	0.2 U	0.2 U
Zone C	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	1200	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
Zone C	ATR-MW25(32.6)-G101315	10/13/15	3.26E+02	8.00E-01	1.34E+01	4.50E+00	3100	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
Zone C	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
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
Zone C	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
Zone D	ATR-MW16-G100715	10/7/15	4.06E+04	3.71E+01	9.62E+02	5.56E+03	8400	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
Zone D	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
Zone D	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
	ATR-MW26 (17.5)-G100715	10/7/15	1.20E+06	2.30E+02	1.64E+05	2.45E+05	4100	27	260	2 U	64	31	0.4	1.3	0.22	0.18	0.2	0.2 U	0.3
Zone D	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
	ATR-MW26 (28.8)-G100715	10/7/15	6.86E+04	1.05E+02	2.56E+03	7.06E+03	15000	62	8.6	2 U	25	48	0.21	0.79	0.24	0.098 J	0.2	0.2 U	0.2 U
Zone D	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
Zone D	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
	ATR-ZVI2 (17.5)-G100715	10/7/15	8.61E+05	6.91E+02	3.74E+04	9.92E+04	3200	38	320	2 U	34	15	0.22	0.36	0.086 J	0.11	0.09 J	0.2 U	0.2 U
Zone D	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
	ATR-ZVI2 (32.5)-G100715	10/7/15	2.56E+05	2.70E+02	1.43E+01	3.23E+04	1000	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
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
Zone D	ATR-OW5 (35)-G100715	10/7/15	4.80E+03	2.00E-01 J	1.30E+00	3.60E+00	1200	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
Zone D	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

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 - Dehalococoides Bacteria

*DHC Sample filtered by Microbial Insights at the laboratory

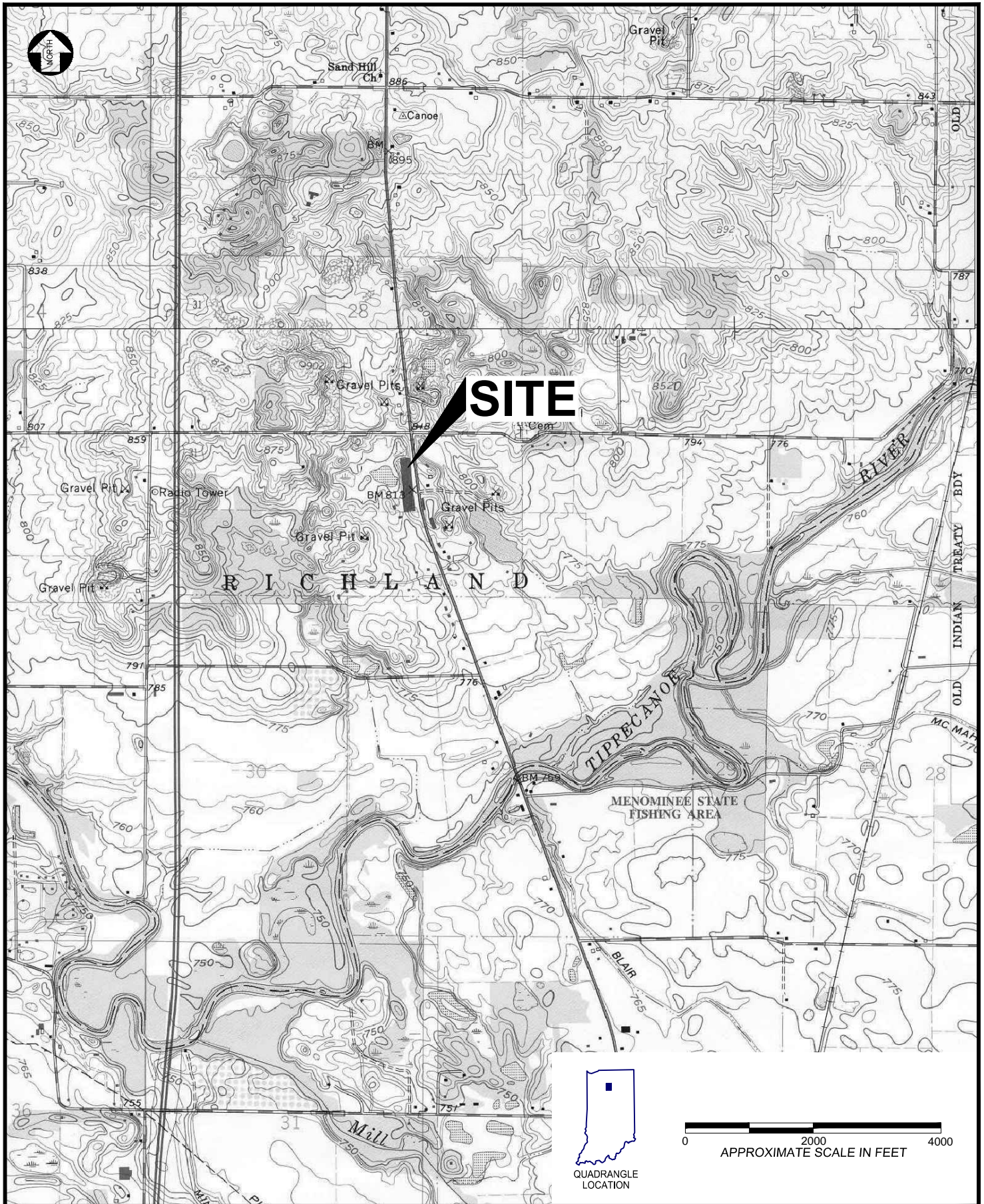
Prepared by: LF

Checked by: PJS



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FIGURES



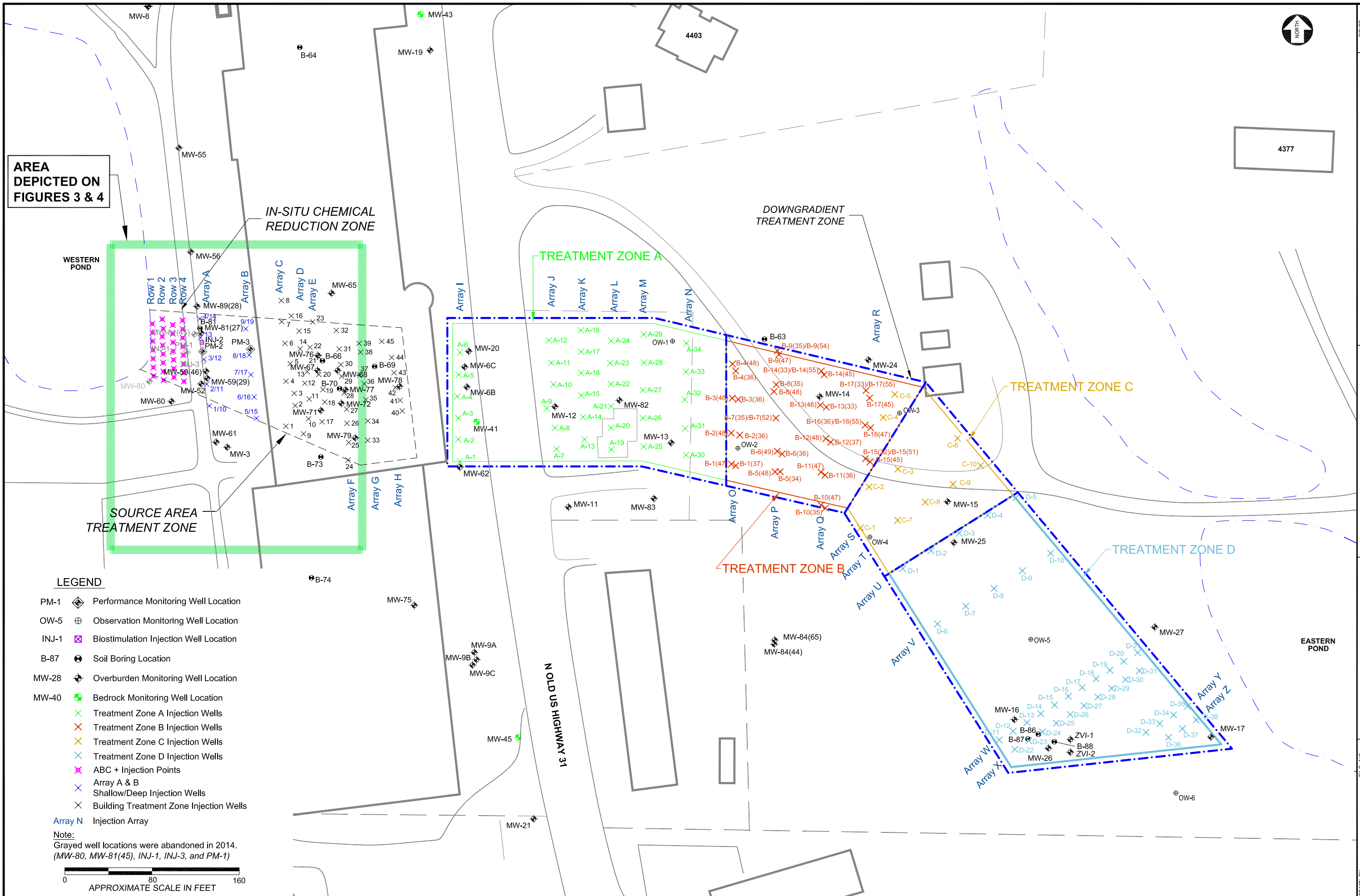
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PROJECT NO.		SCALE
3359 15 1040		SEE ABOVE

TORX FACILITY
4366 NORTH OLD US HIGHWAY 31
ROCHESTER, INDIANA

amec foster wheeler

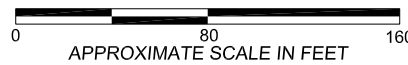

SITE
LOCATION
MAP

FIGURE
1
 SHEET 1 of 1



AREA
DEPICTED ON
FIGURES 3 & 4

- 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)





WESTERN
POND

MW-56

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

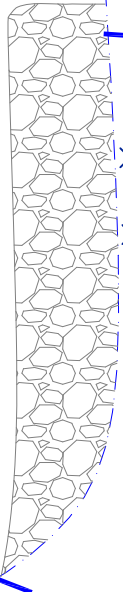
ROWS 1 & 2

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

Injection points 1 through 30, marked with green 'X' symbols and numbers. Points 1-15 are in the first row, 16-30 in the second row.

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

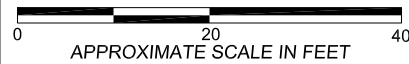
MW-60

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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 APPROVED BY PJS DATE 02/24/2016
 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
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ROCHESTER, INDIANA

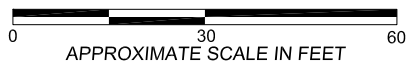
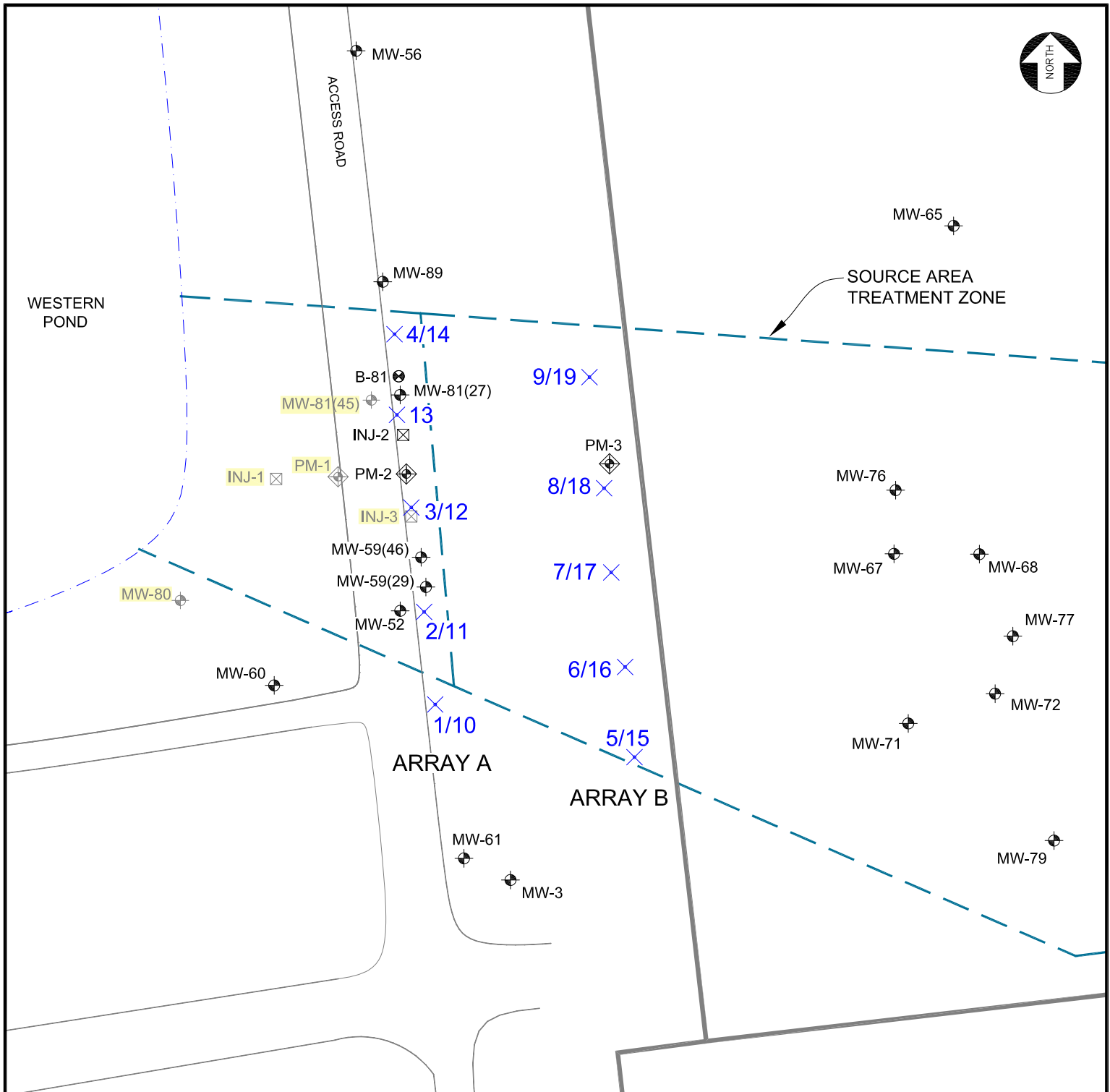


IN-SITU CHEMICAL
REDUCTION
INJECTION POINTS

FIGURE

3

SHEET 1 of 1



APPROXIMATE SCALE IN FEET

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

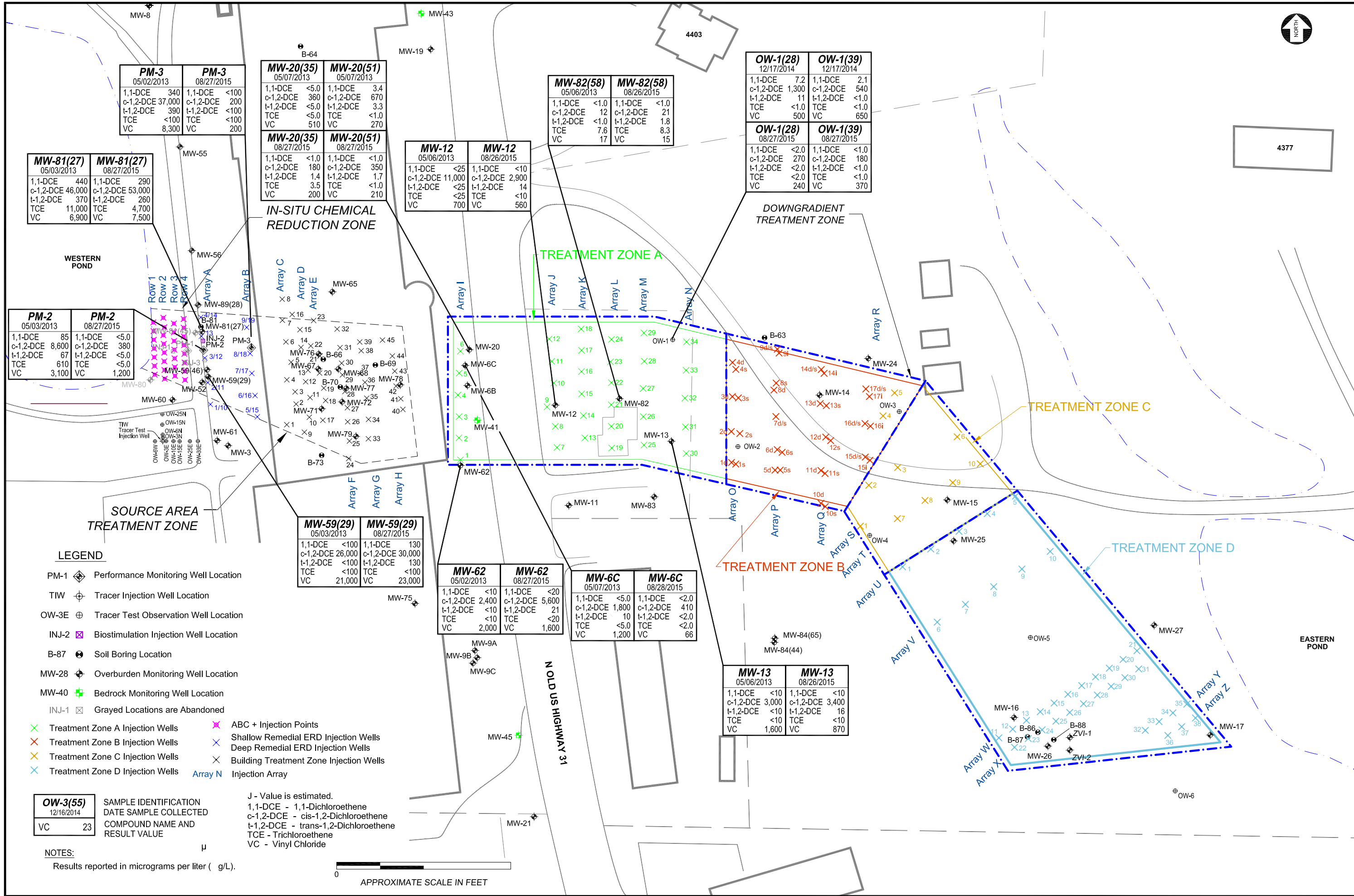
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SOURCE Wells surveyed by Territorial Engineering, 2009; Fulton County, IN GIS, 2005; historical maps from Textron	
PROJECT NO. 3359 15 1040	SCALE SEE ABOVE

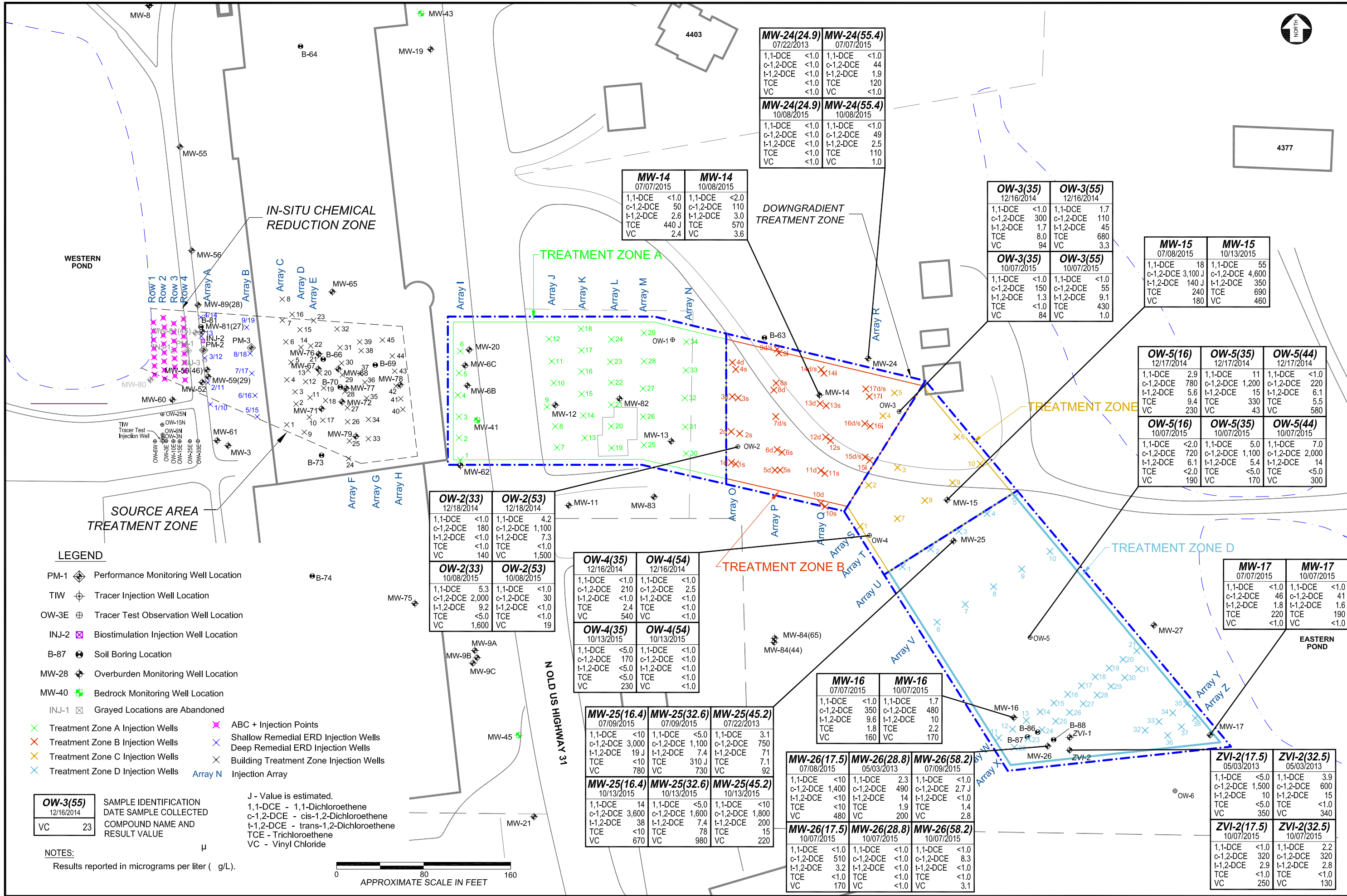
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SOURCE AREA
OUTSIDE BUILDING
INJECTION WELLS

FIGURE
4
 SHEET 1 of 1





MW-24(24.9)	MW-24(55.4)
07/22/2013	07/07/2015
1,1-DCE <1.0	1,1-DCE <1.0
c-1,2-DCE <1.0	c-1,2-DCE 44
t-1,2-DCE <1.0	t-1,2-DCE 1.9
TCE <1.0	TCE 120
VC <1.0	VC <1.0

MW-24(24.9)	MW-24(55.4)
10/08/2015	10/08/2015
1,1-DCE <1.0	1,1-DCE <1.0
c-1,2-DCE <1.0	c-1,2-DCE 49
t-1,2-DCE <1.0	t-1,2-DCE 2.5
TCE <1.0	TCE 110
VC <1.0	VC 1.0

MW-14	MW-14
07/07/2015	10/08/2015
1,1-DCE <1.0	1,1-DCE <2.0
c-1,2-DCE 50	c-1,2-DCE 110
t-1,2-DCE 2.6	t-1,2-DCE 3.0
TCE 440 J	TCE 570
VC 2.4	VC 3.6

OW-3(35)	OW-3(55)
12/16/2014	12/16/2014
1,1-DCE <1.0	1,1-DCE 1.7
c-1,2-DCE 300	c-1,2-DCE 110
t-1,2-DCE 1.7	t-1,2-DCE 45
TCE 8.0	TCE 680
VC 94	VC 3.3

OW-3(35)	OW-3(55)
10/07/2015	10/07/2015
1,1-DCE <1.0	1,1-DCE <1.0
c-1,2-DCE 150	c-1,2-DCE 55
t-1,2-DCE 1.3	t-1,2-DCE 9.1
TCE <1.0	TCE 430
VC 84	VC 1.0

MW-15	MW-15
07/08/2015	10/13/2015
1,1-DCE 18	1,1-DCE 55
c-1,2-DCE 3,100 J	c-1,2-DCE 4,600
t-1,2-DCE 140 J	t-1,2-DCE 350
TCE 240	TCE 690
VC 180	VC 460

OW-5(16)	OW-5(35)	OW-5(44)
12/17/2014	12/17/2014	12/17/2014
1,1-DCE 2.9	1,1-DCE 11	1,1-DCE <1.0
c-1,2-DCE 780	c-1,2-DCE 1,200	c-1,2-DCE 220
t-1,2-DCE 5.6	t-1,2-DCE 15	t-1,2-DCE 6.1
TCE 9.4	TCE 330	TCE 5.5
VC 230	VC 43	VC 580

OW-5(16)	OW-5(35)	OW-5(44)
10/07/2015	10/07/2015	10/07/2015
1,1-DCE <2.0	1,1-DCE 5.0	1,1-DCE 7.0
c-1,2-DCE 720	c-1,2-DCE 1,100	c-1,2-DCE 2,000
t-1,2-DCE 6.1	t-1,2-DCE 5.4	t-1,2-DCE 14
TCE <2.0	TCE <5.0	TCE <5.0
VC 190	VC 170	VC 300

OW-2(33)	OW-2(53)
12/18/2014	12/18/2014
1,1-DCE <1.0	1,1-DCE 4.2
c-1,2-DCE 180	c-1,2-DCE 1,100
t-1,2-DCE <1.0	t-1,2-DCE 7.3
TCE <1.0	TCE <1.0
VC 140	VC 1,500

OW-2(33)	OW-2(53)
10/08/2015	10/08/2015
1,1-DCE 5.3	1,1-DCE <1.0
c-1,2-DCE 2,000	c-1,2-DCE 30
t-1,2-DCE 9.2	t-1,2-DCE <1.0
TCE <5.0	TCE <1.0
VC 1,600	VC 19

OW-4(35)	OW-4(54)
12/16/2014	12/16/2014
1,1-DCE <1.0	1,1-DCE <1.0
c-1,2-DCE 210	c-1,2-DCE 2.5
t-1,2-DCE <1.0	t-1,2-DCE <1.0
TCE 2.4	TCE <1.0
VC 540	VC <1.0

OW-4(35)	OW-4(54)
10/13/2015	10/13/2015
1,1-DCE <5.0	1,1-DCE <1.0
c-1,2-DCE 170	c-1,2-DCE <1.0
t-1,2-DCE <5.0	t-1,2-DCE <1.0
TCE <5.0	TCE <1.0
VC 230	VC <1.0

MW-16	MW-16
07/07/2015	10/07/2015
1,1-DCE <1.0	1,1-DCE 1.7
c-1,2-DCE 350	c-1,2-DCE 480
t-1,2-DCE 9.6	t-1,2-DCE 10
TCE 1.8	TCE 2.2
VC 160	VC 170

MW-25(16.4)	MW-25(32.6)	MW-25(45.2)
07/09/2015	07/09/2015	07/22/2013
1,1-DCE <10	1,1-DCE <5.0	1,1-DCE 3.1
c-1,2-DCE 3,000	c-1,2-DCE 1,100	c-1,2-DCE 750
t-1,2-DCE 19 J	t-1,2-DCE 7.4	t-1,2-DCE 71
TCE <10	TCE 310 J	TCE 7.1
VC 780	VC 730	VC 92

MW-25(16.4)	MW-25(32.6)	MW-25(45.2)
10/13/2015	10/13/2015	10/13/2015
1,1-DCE 14	1,1-DCE <5.0	1,1-DCE <10
c-1,2-DCE 3,600	c-1,2-DCE 1,600	c-1,2-DCE 1,800
t-1,2-DCE 38	t-1,2-DCE 7.4	t-1,2-DCE 200
TCE <10	TCE 78	TCE 15
VC 670	VC 980	VC 220

MW-26(17.5)	MW-26(28.8)	MW-26(58.2)
07/08/2015	05/03/2013	07/09/2015
1,1-DCE <10	1,1-DCE 2.3	1,1-DCE <1.0
c-1,2-DCE 1,400	c-1,2-DCE 490	c-1,2-DCE 2.7 J
t-1,2-DCE <10	t-1,2-DCE 14	t-1,2-DCE <1.0
TCE <10	TCE 1.9	TCE 1.4
VC 480	VC 200	VC 2.8

MW-26(17.5)	MW-26(28.8)	MW-26(58.2)
10/07/2015	10/07/2015	10/07/2015
1,1-DCE <1.0	1,1-DCE <1.0	1,1-DCE <1.0
c-1,2-DCE 510	c-1,2-DCE <1.0	c-1,2-DCE 8.3
t-1,2-DCE 3.2	t-1,2-DCE <1.0	t-1,2-DCE <1.0
TCE <1.0	TCE <1.0	TCE <1.0
VC 170	VC <1.0	VC 3.1

ZVI-2(17.5)	ZVI-2(32.5)
05/03/2013	05/03/2013
1,1-DCE <5.0	1,1-DCE 3.9
c-1,2-DCE 1,500	c-1,2-DCE 600
t-1,2-DCE 10	t-1,2-DCE 15
TCE <5.0	TCE <1.0
VC 350	VC 340

ZVI-2(17.5)	ZVI-2(32.5)
10/07/2015	10/07/2015
1,1-DCE <1.0	1,1-DCE 2.2
c-1,2-DCE 320	c-1,2-DCE 320
t-1,2-DCE 2.9	t-1,2-DCE 2.8
TCE <1.0	TCE <1.0
VC 250	VC 130

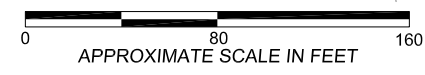
LEGEND

- PM-1 Performance Monitoring Well Location
- TIW Tracer Injection Well Location
- OW-3E Tracer Test Observation 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
- Treatment Zone B Injection Wells
- Treatment Zone C Injection Wells
- Treatment Zone D Injection Wells
- ABC + Injection Points
- Shallow Remedial ERD Injection Wells
- Deep Remedial ERD Injection Wells
- Building Treatment Zone Injection Wells
- Array N Injection Array

OW-3(55)	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 (g/L).





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Report of Performance Monitoring

APPENDIX A

GROUNDWATER SAMPLE COLLECTION FIELD LOGS

GROUND-WATER/SURFACE WATER SAMPLING FORM

Sample Location TFS Rech. Surface Water Groundwater Sample Identification ATR-MW20(35)-6082715
 Sampling Personnel GS/SP Date 8-27-15 Start Time 1150 Weather 70°F Sunny
(Use: Well name)

MEASUREMENT SUMMARY:

Measuring Point TOC Depth to Water 25.35' Depth to Product — Product Thickness —
 Total Casing Depth — Borehole Diameter 2" Approx. Pump Depth — Feet
 Screen Interval top bottom — Feet

SAMPLING SUMMARY:

Sampling Method: Grab Composite Grundfos Bladder Pump Peristaltic Pump Bailor

Pump Started 1210 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)
1215	6.84	0.598	17.93	95.8	200	25.35	-	1.55	-63.0
1220	4.99	0.630	14.98	27.6	200	25.35	-	0.46	-87.1
1225	7.00	0.633	16.57	13.5	200	25.35	-	0.38	-91.2
1230	7.00	0.637	16.46	10.0	200	25.35	-	0.35	-92.5
1235	7.00	0.638	16.45	5.0	200	25.35	-	0.34	-94.6
1240	7.00	0.639	16.43	2.1	200	25.35	-	0.33	-95.4

Final:
 Time 1240 pH 7.00 SC 0.639 Temp 16.43 Turb. 2.1 Flow Rate 200 DTW 25.35 Drawdown — DO 0.33 ORP -95.4

Comments: * Replicate ATR-MW20(35)-6082715R taken

Calibration: pH Calibration Buffers: 4 7 10 ORP Calibration — mV
 SC Reference Solution — mS/cm Turbidity Cal. Solution — NTUs
 Sample Name ATR-MW20(35)-6082715 Time 1240 VOCs SVOCs PAHs TOC
 Total Metals Dissolved Metals BTEX Total Cyanide Free Cyanide
 Other List:
 MS/MSD Blind Dup Blind Dup Name TB



GROUNDWATER/SURFACE WATER
SAMPLING FORM

GROUND-WATER/SURFACE WATER SAMPLING FORM

Sample Location TFS Road 11.59 (29) Surface Water Groundwater Sample Identification ATR-MW59(A)-6080715
 (Use: Well name)
 Sampling Personnel GS Date 8/27/15 Start Time 17:45 Weather SUNNY

MEASUREMENT SUMMARY:

Measuring Point TOC Depth to Water 14.21 Depth to Product - Product Thickness -
 Total Casing Depth _____ Borehole Diameter 2" Approx. Pump Depth _____ Feet
 Screen Interval top bottom Feet

SAMPLING SUMMARY:

Sampling Method: Grab Composite Grundfos Bladder Pump Peristaltic Pump Bailor

Pump Started 17:55 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>18:00</u>	<u>6.44</u>	<u>0.551</u>	<u>01.07</u>	<u>5.5</u>	<u>000</u>	<u>14.21</u>	<u>-</u>	<u>1.51</u>	<u>-54.8</u>
<u>18:05</u>	<u>6.58</u>	<u>0.449</u>	<u>18.76</u>	<u>2.7</u>	<u>200</u>	<u>14.21</u>	<u>-</u>	<u>0.82</u>	<u>-65.4</u>
<u>18:10</u>	<u>6.60</u>	<u>0.477</u>	<u>14.79</u>	<u>4.8</u>	<u>200</u>	<u>14.21</u>	<u>-</u>	<u>0.35</u>	<u>-70.2</u>
<u>18:15</u>	<u>6.61</u>	<u>0.478</u>	<u>14.79</u>	<u>4.2</u>	<u>200</u>	<u>14.21</u>	<u>-</u>	<u>0.32</u>	<u>-71.8</u>
<u>18:20</u>	<u>6.61</u>	<u>0.477</u>	<u>14.77</u>	<u>3.1</u>	<u>200</u>	<u>14.21</u>	<u>-</u>	<u>0.32</u>	<u>-73.6</u>

Final:
 Time 18:20 pH 6.61 SC 0.477 Temp 14.77 Turb. 3.1 Flow Rate 200 DTW 14.21 Drawdown - DO 0.32 ORP -73.6

Comments: _____

Calibration: pH Calibration Buffers: 4 7 10 ORP Calibration _____ mV
 SC Reference Solution _____ mS/cm Turbidity Cal. Solution _____ NTUs
 Sample Name ATR-MW59 (A)-6080715 Time 18:20 VOCs SVOCs PAHs TOC
 Total Metals Dissolved Metals BTEX Total Cyanide Free Cyanide
 Other List: _____
 MS/MSD _____ Blind Dup _____ Blind Dup Name _____ TB _____



GROUNDWATER/SURFACE WATER
SAMPLING FORM

GROUND-WATER/SURFACE WATER SAMPLING FORM

Sample Location TFS Rock. Surface Water Groundwater Sample Identification ATR-DWI(0)-6082715
 (Use: Well name)
 Sampling Personnel GS/SP Date 8-27-15 Start Time 1420 Weather 75° Sunny

MEASUREMENT SUMMARY:

Measuring Point TOC Depth to Water 20.21' Depth to Product - Product Thickness -
 Total Casing Depth 39 Borehole Diameter 2" Approx. Pump Depth - Feet
 Screen Interval top bottom Feet

SAMPLING SUMMARY:

Sampling Method: Grab Composite Grundfos Bladder Pump Peristaltic Pump Bailor
 Pump Started 1429 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)
1434	7.06	0.727	17.64	824.6	200	20.21	~	6.40	-66.9
1439	7.04	0.600	16.45	720.6	200	20.21	~	3.48	-67.8
1444	6.82	0.629	15.19	454.3	200	20.21	~	0.55	-70.6
1449	6.70	0.785	15.10	445.0	200	20.21	~	0.41	-71.2
1454	6.61	1.103	15.22	400.2	200	20.21	~	0.41	-74.7
1459	6.87	1.242	15.26	222.0	200	20.21	~	0.27	-78.3
1504	6.80	1.260	15.45	193.4	200	20.21	~	0.20	-78.6
1509	6.71	1.290	15.63	97.9	200	20.21	~	0.25	-83.4
1514	6.71	1.291	15.61	96.9	200	20.21	~	0.25	-83.7
1519	6.71	1.290	15.63	95.2	200	20.21	~	0.25	-84.5
1524	6.70	1.290	15.60	78.7	200	20.21	~	0.24	-84.2
1529	6.70	1.319	15.57	85.2	200	20.21	~	0.24	-83.7
1534	6.69	1.324	15.61	49.6	200	20.21	~	0.23	-83.7
1539	6.68	1.332	15.73	40.1	200	20.21	~	0.23	-84.2
1544	6.68	1.339	15.72	38.1	200	20.21	~	0.23	-84.0
1549	6.67	1.338	15.71	38.38	200	20.21	~	0.22	-84.0

Final:

Time 1549 pH 6.67 SC 1.338 Temp 15.71 Turb. 3.8 Flow Rate 200 DTW 20.21 Drawdown ~ DO 0.22 ORP -84.0

Comments: MS/MSD collected for method 8260

Calibration: pH Calibration Buffers: 4 7 10 ORP Calibration - mV
 SC Reference Solution - mS/cm Turbidity Cal. Solution - NTUs
 Sample Name ATR-DWI(0)-6082715 Time 1549 VOCs SVOCs PAHs TOC
 Total Metals Dissolved Metals BTEX Total Cyanide Free Cyanide
 Other List: -
 MS/MSD - Blind Dup - Blind Dup Name - TB -



GROUNDWATER/SURFACE WATER
SAMPLING FORM

GROUND-WATER/SURFACE WATER SAMPLING FORM

Sample Location TFS Room Surface Water Groundwater Sample Identification ATR-CW(5)-6082715
(Use: Well name)
 Sampling Personnel SP Date 6-27-15 Start Time 1500 Weather _____

MEASUREMENT SUMMARY:
 Measuring Point TOC Depth to Water 20.21 Depth to Product _____ Product Thickness _____
 Total Casing Depth _____ Borehole Diameter 2" Approx. Pump Depth _____ Feet
 Screen Interval top _____ bottom _____ Feet

SAMPLING SUMMARY:
 Sampling Method: Grab Composite Grundfos Bladder Pump Peristaltic Pump Bailor
 Pump Started 1510 Pump Stopped _____ Total Gallons 5.5

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>1525</u>	<u>7.47</u>	<u>1.396</u>	<u>13.96</u>	<u>55.5</u>	<u>200</u>	<u>20.21</u>	<u>0</u>	<u>.06</u>	<u>-105</u>
<u>1530</u>	<u>7.43</u>	<u>1.396</u>	<u>13.90</u>	<u>55.5</u>	<u>200</u>	<u>20.21</u>	<u>0</u>	<u>.05</u>	<u>-105</u>
<u>1537</u>	<u>7.44</u>	<u>1.410</u>	<u>13.85</u>	<u>53.67</u>	<u>200</u>	<u>"</u>	<u>"</u>	<u>.04</u>	<u>-136</u>
<u>1544</u>	<u>7.46</u>	<u>1.431</u>	<u>13.63</u>	<u>11.71</u>	<u>200</u>	<u>"</u>	<u>"</u>	<u>.02</u>	<u>-148</u>
<u>1551</u>	<u>7.47</u>	<u>1.435</u>	<u>13.61</u>	<u>7.34</u>	<u>200</u>	<u>"</u>	<u>"</u>	<u>.03</u>	<u>-151</u>
<u>1558</u>	<u>7.44</u>	<u>1.440</u>	<u>13.60</u>	<u>5.399</u>	<u>200</u>	<u>"</u>	<u>"</u>	<u>.04</u>	<u>-154</u>

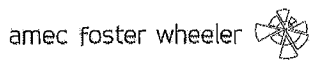
Final:

Time	pH	SC	Temp	Turb.	Flow Rate	DTW	Drawdown	DO	ORP
<u>1558</u>	<u>7.48</u>	<u>1.440</u>	<u>13.60</u>	<u>5.399</u>	<u>200</u>	<u>20.21</u>	<u>~</u>	<u>0.04</u>	<u>154</u>

Comments: First well using "In-situ Inc. Trimble" Device only takes readings every 7 mins.

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

Sample Name ATR-CW(5)-6082715 Time 1600 TDS Mercury Sulfide
 Alkalinity Metals Ammonia as N Chloride, Fluoride, & Sulfate
 Other List: _____
 MS/MSD _____ Blind Dup _____ Blind Dup Name _____ TB _____



GROUNDWATER/SURFACE WATER SAMPLING FORM

GROUND-WATER/SURFACE WATER SAMPLING FORM

Sample Location TPS-Rot Surface Water Groundwater Sample Identification MW 13
 (Use: Well name)
 Sampling Personnel GS-SP Date 8/24/15 Start Time 1300 Weather 68° Overcast

MEASUREMENT SUMMARY:
 Measuring Point TOC Depth to Water 21.78 Depth to Product - Product Thickness -
 Total Casing Depth _____ Borehole Diameter 1" 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 1.25

Grab
 0.25
 0.50
 0.75
 1.00
 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)
<u>1320</u>	<u>6.97</u>	<u>21.74</u>	<u>15.20</u>	<u>763.4</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>6.17</u>	<u>3.35</u>
<u>1326</u>	<u>6.94</u>	<u>20.78</u>	<u>14.45</u>	<u>946.6</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>3.74</u>	<u>3.65</u>
<u>1332</u>	<u>6.90</u>	<u>21.13</u>	<u>14.22</u>	<u>589.0</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>4.75</u>	<u>-64.0</u>
<u>1338</u>	<u>6.96</u>	<u>21.52</u>	<u>14.39</u>	<u>402.8</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>2.07</u>	<u>-64.1</u>
<u>1343</u>	<u>7.06</u>	<u>21.18</u>	<u>14.20</u>	<u>570.1</u>	<u>/</u>	<u>/</u>	<u>/</u>	<u>4.92</u>	<u>-53.7</u>

Final:
 Time 1343 pH 7.06 SC 21.18 Temp 14.20 Turb. 570.1 Flow Rate / DTW / Drawdown / DO 4.92 ORP -53.7

Comments: _____

Calibration: pH Calibration Buffers: 4 7 10 ORP Calibration _____ mV
 SC Reference Solution _____ mS/cm Turbidity Cal. Solution _____ NTUs
 Sample Name ATR-MW13082615 Time 1350 VOCs SVOCs PAHs TOC
 Total Metals Dissolved Metals BTEX Total Cyanide Free Cyanide
 Other List: _____
 MS/MSD _____ Blind Dup _____ Blind Dup Name _____ TB _____



GROUNDWATER/SURFACE WATER
SAMPLING FORM

GROUND-WATER/SURFACE WATER SAMPLING FORM

Sample Location TFS Leach Surface Water Groundwater Sample Identification MW-12
(Use: Well name)
 Sampling Personnel BS/SNP Date 8-26-15 Start Time 12:15 Weather 68°F Overcast

MEASUREMENT SUMMARY:

Measuring Point TBC Depth to Water 23.45' Depth to Product / Product Thickness /
 Total Casing Depth 31.20 Borehole Diameter 1" Approx. Pump Depth Feet
 Screen Interval top bottom Feet

SAMPLING SUMMARY:

Sampling Method: Grab Composite Grundfos Bladder Pump Peristaltic Pump Bailor

Pump Started 1220 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)
1230	6.64	20.71	16.13	184.1	/			3.11	-90.1
1235	6.71	17.47	14.96	66.5	/			4.30	-80.3
1435	6.96	17.23	15.25	160.7	1			1.88	-55.2
1440	6.91	17.28	15.45	188.6				1.86	-44.2

0411
Gal
0.25
0.50
0.75
1.75

Final:

Time	pH	SC	Temp	Turb.	Flow Rate	DTW	Drawdown	DO	ORP
1440	6.91	17.28	15.45	188.6	/	/	/	1.86	-44.2

Comments: *

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

Sample Name ATL-MW12-01082615 Time 1440 VOCs SVOCs PAHs TOC

Total Metals Dissolved Metals BTEX Total Cyanide Free Cyanide

Other List:

MS/MSD Blind Dup Blind Dup Name TB



GROUNDWATER/SURFACE WATER
SAMPLING FORM

GROUND-WATER/SURFACE WATER SAMPLING FORM

Sample Location TFS Roch Surface Water Groundwater Sample Identification ATR-MW6C-6092615
 (Use: Well name)
 Sampling Personnel GS/SP Date 8.26.15 Start Time 1500 Weather 65°F overcast

MEASUREMENT SUMMARY:
 Measuring Point TOC Depth to Water 25.32' Depth to Product Product Thickness
 Total Casing Depth Borehole Diameter 2" Approx. Pump Depth 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

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)
1527	7.55	14.25	17.28	43.8	500	25.33	25.33	0.97	32.0
1528	7.40	14.57	16.70	27.8	500	25.33	0.01	0.55	31.4
1537	7.35	14.46	16.57	23.7	500	25.33	~	0.45	23.7
1540	7.33	14.29	16.40	23.8	500	25.33	~	0.36	16.0
1547	7.31	14.22	16.47	22.8	500	25.33	~	0.33	5.6
1552	7.28	14.17	16.42	18.0	500	25.33	~	0.30	-4.8
1557	7.28	14.14	16.45	13.9	500	25.33	~	0.29	-13.4
1602	7.26	14.16	16.34	16.3	500	25.33	~	0.28	-18.6
1607	7.26	14.16	16.32	5.6	520	25.33	~	0.28	-15.9
1612	7.25	14.17	16.30	4.8	500	25.33	~	0.27	-20.2

Final:
 Time 1612 pH 7.25 SC 14.17 Temp 16.30 Turb. 4.8 Flow Rate 500 DTW 25.33 Drawdown 0.01 DO 0.27 ORP -20.2

Comments: _____

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

Sample Name ATR-MW6C-6092615 Time 1612 VOCs SVOCs PAHs TOC
 Total Metals Dissolved Metals BTEX Total Cyanide Free Cyanide
 Other List: _____
 MS/MSD Blind Dup Blind Dup Name TB



GROUNDWATER/SURFACE WATER SAMPLING FORM

GROUND-WATER/SURFACE WATER SAMPLING FORM

Sample Location TFS Rock Surface Water Groundwater Sample Identification ATR-MW82-6082615
 (Use: Well name)
 Sampling Personnel GG/SP Date 8-26-15 Start Time 1625 Weather 68°F overcast

MEASUREMENT SUMMARY:

Measuring Point TOC Depth to Water 22.35 Depth to Product Product Thickness
 Total Casing Depth _____ Borehole Diameter 2" Approx. Pump Depth _____ Feet
 Screen Interval top _____ bottom _____ Feet

SAMPLING SUMMARY:

Sampling Method: Grab Composite Grundfos Bladder Pump Peristaltic Pump Bailor

Pump Started 1630 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)
1635	7.00	57.45	16.83	45.7	500	22.35	-	0.12	7.9
1640	6.34	50.61	15.77	87.6	500	22.35	-	0.47	4.2
1645	6.01	50.52	15.57	94.8	500	22.35	-	0.35	5.0
1650	6.16	59.71	15.57	90.5	500	22.35	-	0.27	3.7
1655	6.15	60.65	15.57	79.4	500	22.35	-	0.23	1.3
1700	6.16	61.21	15.41	21.3	500	22.35	-	0.21	-1.8
1705	6.17	61.80	15.41	43.6	500	22.35	-	0.18	-5.2
1710	6.18	61.83	15.41	40.7	500	22.35	-	0.18	-5.3
1715	6.19	62.08	15.38	38.9	500	22.35	-	0.18	-6.6
1720	6.19	62.34	15.38	31.5	500	22.35	-	0.17	-7.2
1725	6.19	62.51	15.30	28.2	500	22.35	-	0.16	-8.0
1730	6.19	62.62	15.28	25.2	500	22.35	-	0.16	-8.8
1735	6.19	62.44	15.27	20.5	500	22.35	-	0.16	-9.5
1740	6.19	62.63	15.23	13.2	500	22.35	-	0.16	-9.8
1745	6.19	62.62	15.23	5.8	500	22.35	-	0.15	-10.5
1750	6.19	62.61	15.24	4.2	500	22.35	-	0.15	-10.2

Final:

Time 1750 pH 6.19 SC 62.61 Temp 15.24 Turb. 4.2 Flow Rate 500 DTW 22.35 Drawdown - DO 0.15 ORP -10.2

Comments: _____

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

Sample Name ATR-MW82-6082615 Time 1750 VOCs SVOCs PAHs TOC

Total Metals Dissolved Metals BTEX Total Cyanide Free Cyanide

Other List: _____

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



GROUNDWATER/SURFACE WATER
SAMPLING FORM

GROUND-WATER/SURFACE WATER SAMPLING FORM

Sample Location TFB Loch Surface Water Groundwater Sample Identification ATR-MUD0(S1) - 6082715
 Sampling Personnel GS Date 8/27/15 Start Time 10:18 (Use: Well name) 0740 Weather Sunny 75°

MEASUREMENT SUMMARY:
 Measuring Point TOC Depth to Water 25.35' Depth to Product _____ Product Thickness _____
 Total Casing Depth _____ Borehole Diameter 2" Approx. Pump Depth _____ Feet
 Screen Interval top _____ bottom _____ Feet

SAMPLING SUMMARY:

Sampling Method: Grab Composite Grundfos Bladder Pump Peristaltic Pump Bailor
 Pump Started 0605 Pump Stopped 0740 Total Gallons _____

Time (24-hr)	pH (S.U.)	SC (mg/l)	Temp (°C)	Turb. (NTU)	Flow Rate (ml/min)	DTW (ft)	Drawdown (ft)	DO (mg/L)	ORP (mV)
1023	6.20	1.899	17.17	698.1	100	25.35	-	9.04	-25.1
1028	6.13	1.808	17.07	435.5	100	25.35	-	9.09	-24.7
1033	5.94	1.787	17.17	237.3	100	25.35	-	8.43	-33.5
1038	5.89	1.790	17.27	218.6	100	25.35	-	8.41	-33.6
1043	5.92	1.510	17.40	244.5	100	25.35	-	8.27	-32.9
1048	5.99	1.591	18.76	447.8	100	25.35	-	1.89	-37.0
1053	5.99	1.804	17.27	467.4	100	25.35	-	0.47	-48.7
1058	5.98	1.851	17.31	159.6	100	25.35	-	0.46	-49.8
1103	6.00	1.869	17.31	149.0	100	25.35	-	0.37	-53.8
1108	6.01	1.871	17.34	137.0	100	25.35	-	0.33	-57.0
1113	6.03	1.854	17.30	126.3	100	25.35	-	0.32	-40.4
1118	5.98	1.868	17.30	112.4	100	25.35	-	0.33	-52.1
1123	6.03	1.867	17.30	77.0	100	25.35	-	0.30	-56.5
1128	6.02	1.863	17.31	110.2	100	25.35	-	0.28	-60.3
1133	6.00	1.862	17.30	20.10	100	25.32	-	0.27	-61.7
1138	6.01	1.861	17.30	23.2	100	25.32	-	0.27	-62.0

Final:
 Time 1138 pH 6.01 SC 1.861 Temp 17.30 Turb. 2.2 Flow Rate 100 DTW 25.32 Drawdown - DO 0.27 ORP -62.0

Comments: * Check DO meter Recalibrated

Calibration: pH Calibration Buffers: 4 7 10 ORP Calibration _____ mV
 SC Reference Solution _____ mS/cm Turbidity Cal. Solution _____ NTUs
 Sample Name ATR-MUD0(S1) - 6082715 Time 1138 VOCs SVOCs PAHs TOC
 Total Metals Dissolved Metals BTEX Total Cyanide Free Cyanide
 Other List: _____
 MS/MSD _____ Blind Dup _____ Blind Dup Name _____ TB _____



GROUNDWATER/SURFACE WATER SAMPLING FORM

GROUND-WATER/SURFACE WATER SAMPLING FORM

Sample Location TFS Roch. Surface Water Groundwater Sample Identification ATR-AM2-6082715
 Sampling Personnel SP/GIS Date 8-27-15 Start Time 1830 Weather 75 Sunny
(Use: Well name)

MEASUREMENT SUMMARY:
 Measuring Point TOC Depth to Water 12.80 Depth to Product 0 Product Thickness
 Total Casing Depth Borehole Diameter Approx. Pump Depth Feet
 Screen Interval top bottom Feet

SAMPLING SUMMARY:
 Sampling Method: Grab Composite Grundfos Bladder Pump Peristaltic Pump Bailor

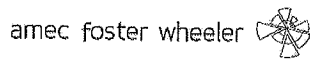
Pump Started 1845 Pump Stopped Total Gallons

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)
1850	6.68	0.693	16.34	39.6	250	12.80	1	0.53	-68.74
1855	6.65	0.696	15.98	76.4	250	12.80	1	0.57	-72.9
1900	6.59	0.701	15.63	157.3	250	12.80	2	0.55	-75.9
1905	6.57	0.704	15.25	22.5	250	12.80	2	0.54	-77.6
1910	6.46	0.705	15.06	40.2	250	12.80	2	0.52	-80.7
1915	6.47	0.708	15.05	89.8	250	12.80	2	0.52	-84.4
1920	6.47	0.708	15.03	25.2	250	12.80	1	0.52	-85.6
1925	6.49	0.706	15.01	2.9	250	12.80	1	0.51	-86.6

Final:
 Time 1925 pH 6.49 SC 0.706 Temp 15.01 Turb. 2.9 Flow Rate 250 DTW 12.80 Drawdown 1 DO 0.51 ORP -86.6

Comments: _____

Calibration: pH Calibration Buffers: 4 7 10 ORP Calibration mV
 SC Reference Solution mS/cm Turbidity Cal. Solution NTUs
 Sample Name ATR-AM2-6082715 Time TDS Mercury Sulfide
 Alkalinity Metals Ammonia as N Chloride, Fluoride, & Sulfate
 Other List: _____
 MS/MSD Blind Dup Blind Dup Name TB



GROUNDWATER/SURFACE WATER SAMPLING FORM

GROUND-WATER/SURFACE WATER SAMPLING FORM

Sample Location TKS Rock Surface Water Groundwater Sample Identification ATR-MW62-6082715
 (Use: Well name)
 Sampling Personnel GS/SP Date 8-27-15 Start Time 1320 Weather 75°F Sunny

MEASUREMENT SUMMARY:

Measuring Point TOC Depth to Water 25.65' Depth to Product - Product Thickness -
 Total Casing Depth _____ Borehole Diameter 2" Approx. Pump Depth _____ Feet
 Screen Interval top _____ bottom _____ Feet

SAMPLING SUMMARY:

Sampling Method: Grab Composite Grundfos Bladder Pump Peristaltic Pump Bailor
 Pump Started 1325 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>1320</u>	<u>6.96</u>	<u>0.712</u>	<u>17.55</u>	<u>43.8</u>	<u>200</u>	<u>25.65</u>	<u>-</u>	<u>0.59</u>	<u>-86.0</u>
<u>1335</u>	<u>6.80</u>	<u>0.709</u>	<u>16.54</u>	<u>39.0</u>	<u>200</u>	<u>25.65</u>	<u>-</u>	<u>0.59</u>	<u>-88.2</u>
<u>1340</u>	<u>6.70</u>	<u>0.708</u>	<u>16.41</u>	<u>20.1</u>	<u>200</u>	<u>25.65</u>	<u>-</u>	<u>0.34</u>	<u>-86.2</u>
<u>1345</u>	<u>6.63</u>	<u>0.704</u>	<u>16.27</u>	<u>20.1</u>	<u>200</u>	<u>25.65</u>	<u>-</u>	<u>0.31</u>	<u>-86.5</u>
<u>1350</u>	<u>6.63</u>	<u>0.701</u>	<u>16.27</u>	<u>6.0</u>	<u>200</u>	<u>25.65</u>	<u>-</u>	<u>0.39</u>	<u>-87.4</u>
<u>1355</u>	<u>6.62</u>	<u>0.700</u>	<u>16.27</u>	<u>4.8</u>	<u>200</u>	<u>25.65</u>	<u>-</u>	<u>0.30</u>	<u>-87.4</u>

Final:

Time 1355 pH 6.62 SC 0.700 Temp 16.27 Turb. 4.8 Flow Rate 200 DTW 25.65 Drawdown - DO 0.30 ORP -87.4

Comments: _____

Calibration: pH Calibration Buffers: 4 7 10 ORP Calibration _____ mV
 SC Reference Solution _____ mS/cm Turbidity Cal. Solution _____ NTUs
 Sample Name ATR-MW62-6082715 Time 1355 VOCs SVOCs PAHs TOC
 Total Metals Dissolved Metals BTEX Total Cyanide Free Cyanide
 Other List: _____
 MS/MSD _____ Blind Dup _____ Blind Dup Name _____ TB _____



GROUND-WATER/SURFACE WATER SAMPLING FORM

Sample Location TFS Room Surface Water Groundwater Sample Identification ATR-PM3-61082715
 (Use: Well name)
 Sampling Personnel SP Date 8-27-15 Start Time 1645 Weather 75 Sunny

MEASUREMENT SUMMARY:
 Measuring Point TOC Depth to Water 23.11 Depth to Product - Product Thickness -
 Total Casing Depth - Borehole Diameter 2" Approx. Pump Depth - Feet -
 Screen Interval top - bottom - Feet -

SAMPLING SUMMARY:
 Sampling Method: Grab Composite Grundfos Bladder Pump Peristaltic Pump Bailor
 Pump Started 1700 Pump Stopped - Total Gallons 22.2

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>1707</u>	<u>6.16</u>	<u>1.897</u>	<u>19.39</u>	<u>238.8</u>	<u>150</u>	<u>23.10</u>	<u>.01</u>	<u>7.02</u>	<u>-5</u>
<u>1714</u>	<u>5.86</u>	<u>2.164</u>	<u>16.77</u>	<u>648.1</u>	<u>150</u>	<u>23.10</u>	<u>.01</u>	<u>.76</u>	<u>-60</u>
<u>1721</u>	<u>5.82</u>	<u>2.096</u>	<u>17.42</u>	<u>486.3</u>	<u>150</u>	<u>"</u>	<u>"</u>	<u>.35</u>	<u>-72</u>
<u>1729</u>	<u>5.82</u>	<u>2.011</u>	<u>17.51</u>	<u>406.6</u>	<u>150</u>	<u>"</u>	<u>"</u>	<u>.30</u>	<u>-77</u>
<u>1735</u>	<u>5.82</u>	<u>2.007</u>	<u>17.49</u>	<u>410.5</u>	<u>150</u>	<u>"</u>	<u>"</u>	<u>.32</u>	<u>-78</u>
<u>1742</u>	<u>5.83</u>	<u>2.010</u>	<u>17.47</u>	<u>526.6</u>	<u>150</u>	<u>"</u>	<u>"</u>	<u>.83</u>	<u>-78</u>
<u>1749</u>	<u>5.82</u>	<u>2.011</u>	<u>17.48</u>	<u>517.6</u>	<u>150</u>	<u>"</u>	<u>"</u>	<u>0.91</u>	<u>-79</u>
<u>1756</u>									

Final:
 Time 1750 pH 5.82 SC 2.011 Temp 17.48 Turb. 517.6 Flow Rate 150 DTW " Drawdown " DO 0.81 ORP -79

Comments: Heavy amount of ABC (Biotin) being passed Turbidity negligible

Calibration: pH Calibration Buffers: 4 7 10 ORP Calibration - mV
 SC Reference Solution - mS/cm Turbidity Cal. Solution - NTUs
 Sample Name ATR-PM3-61082715 Time 1750 VOCs SVOCs PAHs TOC
 Total Metals Dissolved Metals BTEX Total Cyanide Free Cyanide
 Other List: _____
 MS/MSD _____ Blind Dup _____ Blind Dup Name _____ TB _____



GROUND-WATER/SURFACE WATER SAMPLING FORM

Sample Location ATR-MW81(22) Surface Water Groundwater Sample Identification ATR-MW81(22)-6082(22)
 (Use: Well name)
 Sampling Personnel GS Date 8/27/15 Start Time 1645 Weather JUNY 75

MEASUREMENT SUMMARY:

Measuring Point T00 Depth to Water 15.69 Depth to Product - Product Thickness -
 Total Casing Depth - Borehole Diameter 2" Approx. Pump Depth 26' Feet
 Screen Interval top - bottom - Feet

SAMPLING SUMMARY:

Sampling Method: Grab Composite Grundfos Bladder Pump Peristaltic Pump Bailor
 Pump Started 1650 Pump Stopped 1725 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>1655</u>	<u>7.03</u>	<u>0.412</u>	<u>16.23</u>	<u>12.9</u>	<u>200</u>	<u>15.69</u>	<u>-</u>	<u>0.54</u>	<u>-94.2</u>
<u>1700</u>	<u>6.89</u>	<u>0.469</u>	<u>15.54</u>	<u>26.8</u>	<u>200</u>	<u>15.69</u>	<u>-</u>	<u>0.39</u>	<u>-90.0</u>
<u>1705</u>	<u>6.04</u>	<u>0.757</u>	<u>15.39</u>	<u>45.0</u>	<u>200</u>	<u>15.69</u>	<u>-</u>	<u>0.30</u>	<u>-89.3</u>
<u>1710</u>	<u>5.86</u>	<u>0.782</u>	<u>15.30</u>	<u>21.2</u>	<u>200</u>	<u>15.69</u>	<u>-</u>	<u>0.07</u>	<u>-33.6</u>
<u>1715</u>	<u>5.70</u>	<u>0.802</u>	<u>15.28</u>	<u>17.9</u>	<u>200</u>	<u>15.69</u>	<u>-</u>	<u>0.25</u>	<u>-78.8</u>
<u>1720</u>	<u>5.69</u>	<u>0.805</u>	<u>15.26</u>	<u>8.6</u>	<u>200</u>	<u>15.69</u>	<u>-</u>	<u>0.24</u>	<u>-74.9</u>
<u>1725</u>	<u>5.68</u>	<u>0.804</u>	<u>15.20</u>	<u>4.9</u>	<u>200</u>	<u>15.69</u>	<u>-</u>	<u>0.24</u>	<u>-75.1</u>

Final:
 Time 1725 pH 5.68 SC 0.804 Temp 15.26 Turb. 4.9 Flow Rate 200 DTW 15.69 Drawdown - DO 0.24 ORP -75.1

Comments: _____

Calibration: pH Calibration Buffers: 4 7 10 ORP Calibration _____ mV
 SC Reference Solution _____ mS/cm Turbidity Cal. Solution _____ NTUs
 Sample Name ATR-MW81(22)-12050725 Time 1725 VOCs SVOCs PAHs TOC
 Total Metals Dissolved Metals BTEX Total Cyanide Free Cyanide
 Other List: _____
 MS/MSD _____ Blind Dup _____ Blind Dup Name _____ TB _____



GROUNDWATER/SURFACE WATER
SAMPLING FORM

GROUND-WATER/SURFACE WATER SAMPLING FORM

Project Location TFS Rochester Surface Water Groundwater Sample Identification ATR-MW05(16)-G100715
 Project Number 3359-14-1028 (Use: Well name)
 Sampling Personnel SUP Date 10-7-15 Start Time 1350 Weather 75°F Sunny

MEASUREMENT SUMMARY:

Measuring Point T.O.C. Depth to Water 8.59 Depth to Product / Product Thickness /
 Total Casing Depth 16.74 Borehole Diameter 2" Approx. Pump Depth 14 Feet
 Screen Interval top bottom Feet

SAMPLING SUMMARY:

Sampling Method: Grab Composite Grundfos Bladder Pump Peristaltic Pump Bailor
 Pump Started 1400 Pump Stopped / Total Gallons 25

Time (24-hr)	pH _s (S.U.)	SC 3% (mS/cm)	Temp 3% (°C)	Turb. 10 (NTU)	Flow Rate (ml/min)	DTW (ft)	Drawdown (ft)	DO 10% (mg/L)	ORP 10 (mV)
1405	6.73	1.470	17.37	13.4	300	8.63	.04	2.32	-64.9
1410	6.81	1.364	16.91	9.9	300	8.63	.04	2.73	-66.3
1415	6.86	1.315	16.56	7.5	300	8.60	.01	2.86	-68.4
1420	6.89	1.282	16.44	5.8	300	8.60	.01	2.92	-71.0
1425	6.92	1.262	16.47	3.0	300	8.60	.01	2.91	-71.2
1430	6.93	1.250	16.41	2.6	300	"	"	2.96	-76.3
1435	6.94	1.235	16.46	15.1	300	"	"	3.02	-76.6
1440	6.95	1.226	16.46	11.5	300	"	"	3.09	-78.7
1445	6.96	1.217	16.40	9.6	300	"	"	3.05	-79.8
1450	6.96	1.215	16.34	9.3	300	"	"	3.02	-80.3

Final:

Time	pH	SC	Temp	Turb.	Flow Rate	DTW	Drawdown	DO	ORP
1450	6.96	1.215	16.34	9.3	300	8.60	.01	3.02	-80.3

Comments: Flow rate reduced to ~200 ml/min for sample 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 Time 1500 VOCs SVOCs PAHs TOC
 Total Metals Dissolved Metals BTEX Total Cyanide Free Cyanide
 Other List: _____
 MS/MSD _____ Blind Dup _____ Blind Dup Name _____ TB _____



GROUNDWATER/SURFACE WATER SAMPLING FORM

GROUND-WATER/SURFACE WATER SAMPLING FORM

Project Location TFS Rochester Surface Water Groundwater Sample Identification ATR-MW17-6100715
 Project Number 3359-14-1028 (Use: Well name)
 Sampling Personnel SVP Date 10-7-15 Start Time 1800 Weather 65°F Sunny

MEASUREMENT SUMMARY:

Measuring Point JOC Depth to Water 2.83 Depth to Product _____ Product Thickness _____
 Total Casing Depth _____ 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 1015 Pump Stopped 1130 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>1020</u>	<u>7.01</u>	<u>832</u>	<u>13.43</u>	<u>209.2</u>	<u>200</u>	<u>2.84</u>	<u>.01</u>	<u>2.25</u>	<u>244.2</u>
<u>1025</u>	<u>7.03</u>	<u>840</u>	<u>13.43</u>	<u>176.7</u>	<u>200</u>	<u>2.83</u>	<u>0</u>	<u>1.93</u>	<u>244.4</u>
<u>1030</u>	<u>7.05</u>	<u>845</u>	<u>13.37</u>	<u>179.4</u>	<u>200</u>	<u>2.83</u>	<u>0</u>	<u>.85</u>	<u>243.1</u>
<u>1035</u>	<u>7.06</u>	<u>845</u>	<u>13.24</u>	<u>129.7</u>	<u>200</u>	<u>2.83</u>	<u>0</u>	<u>.66</u>	<u>235.7</u>
<u>1040</u>	<u>7.08</u>	<u>842</u>	<u>13.16</u>	<u>106.5</u>	<u>200</u>	<u>"</u>	<u>"</u>	<u>.64</u>	<u>231.0</u>
<u>1045</u>	<u>7.09</u>	<u>838</u>	<u>13.11</u>	<u>93.5</u>	<u>200</u>	<u>"</u>	<u>"</u>	<u>.51</u>	<u>224.1</u>
<u>1050</u>	<u>7.09</u>	<u>842</u>	<u>13.07</u>	<u>57.9</u>	<u>200</u>	<u>"</u>	<u>"</u>	<u>.66</u>	<u>221.5</u>
<u>1055</u>	<u>7.14</u>	<u>842</u>	<u>13.10</u>	<u>63.2</u>	<u>200</u>	<u>"</u>	<u>"</u>	<u>.48</u>	<u>220.7</u>
<u>1100</u>	<u>7.11</u>	<u>844</u>	<u>13.11</u>	<u>58.9</u>	<u>200</u>	<u>"</u>	<u>"</u>	<u>.45</u>	<u>201.1</u>
<u>1105</u>	<u>7.10</u>	<u>847</u>	<u>13.24</u>	<u>53.1</u>	<u>200</u>	<u>"</u>	<u>"</u>	<u>.33</u>	<u>200.8</u>
<u>1110</u>	<u>7.10</u>	<u>846</u>	<u>13.23</u>	<u>52.4</u>	<u>200</u>	<u>"</u>	<u>"</u>	<u>.32</u>	<u>218.6</u>
<u>1115</u>	<u>7.11</u>	<u>846</u>	<u>13.20</u>	<u>51.2</u>	<u>200</u>	<u>"</u>	<u>"</u>	<u>.31</u>	<u>213.1</u>
<u>1120</u>									

Drop + Clean Flow through

Final:

Time 1115 pH 7.11 SC 846 Temp 13.20 Turb. 51.2 Flow Rate 200 DTW 2.83 Drawdown 0 DO .31 ORP 213.1

Comments: _____

Calibration: pH Calibration Buffers: 4 7 10 ORP Calibration 240 mV
 SC Reference Solution 1.413 mS/cm Turbidity Cal. Solution 0.426 NTUs
 Sample Name ATR-MW17-6100715 Time 1120 VOCs SVOCs PAHs TOC
 Total Metals Dissolved Metals BTEX Total Cyanide Free Cyanide
 Other List: _____
 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-G100715
 Project Number 3359-14-1028 (Use: Well name)
 Sampling Personnel SAMP Date 10-7-15 Start Time 1158 Weather 75° F Sunny

MEASUREMENT SUMMARY:

Measuring Point TOL Depth to Water 9.28 Depth to Product / Product Thickness /
 Total Casing Depth / Borehole Diameter 2" Approx. Pump Depth / Feet
 Screen Interval top bottom Feet

SAMPLING SUMMARY:

Sampling Method: Grab Composite Grundfos Bladder Pump Peristaltic Pump Bailor
 Pump Started 1235 Pump Stopped 1335 Total Gallons ~5.5

Time (24-hr)	pH (S.U.)	SC 3% (mS/cm)	Temp 3% (°C)	Turb. 10 (NTU)	Flow Rate (ml/min)	DTW (ft)	Drawdown (ft)	DO 10% (mg/L)	ORP 10 (mV)
1240	7.00	0.815	14.70	0	500	9.30	0.02	0.98	-85.2
1245	7.00	0.804	14.49	0	500	9.30	0.02	0.97	-89.1
1250	7.01	0.755	14.24	0	500	9.30	0.02	0.97	-94.8
1255	7.03	0.764	14.03	0	500	9.28	0	0.97	-79.6
1300	7.09	0.693	13.83	0	500	9.28	0	0.98	-97.0
1305	7.10	0.701	13.79	0	500	9.28	0	0.97	-95.6
1310	7.09	0.704	13.82	0	500	9.28	0	0.97	-96.8
1315	7.09	0.710	13.81	0	500	9.28	0	0.99	-97.8
1320	7.10	0.716	13.29	0	500	9.28	0	0.98	-98.1
1325									

Final:

Time	pH	SC	Temp	Turb.	Flow Rate	DTW	Drawdown	DO	ORP
1320	7.10	0.716	13.29	0	500	9.28	0	0.98	-98.1

Comments: Flow rate reduced to 200 ml/min for sample collection

Calibration: pH Calibration Buffers: 4 7 10 ORP Calibration 240 mV
 SC Reference Solution 1.413 mS/cm Turbidity Cal. Solution 0.426 NTUs
 Sample Name ATR-MW16-G100715 Time 1325 VOCs SVOCs PAHs TOC
 Total Metals Dissolved Metals BTEX Total Cyanide Free Cyanide
 Other List: _____
 MS/MSD _____ Blind Dup _____ Blind Dup Name _____ TB _____

GROUND-WATER/SURFACE WATER SAMPLING FORM

Sample Location TP3 Rochester Surface Water Groundwater Sample Identification ATL-OW5(35)-6100715
 (Use: Well name)
 Sampling Personnel SUP Date 10-7-15 Start Time 1505 Weather 75°F Sunny

MEASUREMENT SUMMARY:

Measuring Point TOC Depth to Water 7.81 Depth to Product _____ Product Thickness _____
 Total Casing Depth 35 Borehole Diameter 2" Approx. Pump Depth _____ Feet
 Screen Interval top _____ bottom _____ Feet

SAMPLING SUMMARY:

Sampling Method: Grab Composite Grundfos Bladder Pump Peristaltic Pump Bailor
 Pump Started 1532 Pump Stopped 1635 Total Gallons ~5.5

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	7.53	0.537	15.45	0	350	8.61	0.60	2.18	-112.5
1540	7.39	0.530	14.95	0	350	8.61	0.60	2.08	-106.6
1545	7.39	0.532	14.52	0	350	8.61	0.60	2.09	-106.1
1550	7.27	0.768	14.26	0	250	7.81	0.05	2.53	-113.7
1555	7.29	0.724	14.07	0	350	7.81	0	2.09	-112.6
1600	7.20	1.060	13.83	0	350	7.81	0	1.89	-116.7
1605	7.28	1.041	13.78	0	350	7.81	0	0.31	-121.4
1610	7.19	1.051	13.70	0	350	7.81	0	0.21	-123.2
1615	7.18	1.059	13.74	0	350	7.81	0	0.17	-124.8
1620	7.18	1.060	13.72	0	350	7.81	0	0.17	-125.8

Final:

Time	pH	SC	Temp	Turb.	Flow Rate	DTW	Drawdown	DO	ORP
1620	7.18	1.060	13.72	0	350	7.81	0	0.17	-125.0

Comments: Flow rate reduced to ~200 ml/min prior to sample 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 ATL-OW5(35)-6100715 Time 1630 VOCs SVOCs PAHs TOC
 Total Metals Dissolved Metals BTEX Total Cyanide Free Cyanide
 Other List: _____
 MS/MSD _____ Blind Dup _____ Blind Dup Name _____ TB _____



GROUNDWATER/SURFACE WATER
SAMPLING FORM

GROUND-WATER/SURFACE WATER SAMPLING FORM

Project Location TFS Rochester Surface Water Groundwater Sample Identification ATR-MW OWS (54) - G-100715
 Project Number 3359-14-1028 (Use: Well name)
 Sampling Personnel SAP Date 10-7-15 Start Time 1630 Weather 75° Sunny

MEASUREMENT SUMMARY:

Measuring Point TOC Depth to Water 7.69 Depth to Product Product Thickness
 Total Casing Depth _____ Borehole Diameter 2" Approx. Pump Depth _____ Feet
 Screen Interval top _____ bottom _____ Feet

SAMPLING SUMMARY:

Sampling Method: Grab Composite Grundfos Bladder Pump Peristaltic Pump Bailor
 Pump Started 1645 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>1650</u>	<u>7.35</u>	<u>553</u>	<u>15.48</u>	<u>0</u>	<u>400</u>	<u>7.81</u>	<u>0.12</u>	<u>0.87</u>	<u>-91.8</u>
<u>1658</u>	<u>7.35</u>	<u>542</u>	<u>14.26</u>	<u>0</u>	<u>400</u>	<u>7.80</u>	<u>0.11</u>	<u>0.32</u>	<u>-106.6</u>
<u>1700</u>	<u>7.35</u>	<u>540</u>	<u>13.91</u>	<u>0</u>	<u>400</u>	<u>7.80</u>	<u>0.11</u>	<u>0.19</u>	<u>-111.9</u>
<u>1705</u>	<u>7.36</u>	<u>540</u>	<u>13.79</u>	<u>0</u>	<u>400</u>	<u>7.80</u>	<u>0.11</u>	<u>0.15</u>	<u>-114.5</u>
<u>1710</u>	<u>7.37</u>	<u>540</u>	<u>13.70</u>	<u>0</u>	<u>400</u>	<u>7.80</u>	<u>0.11</u>	<u>0.11</u>	<u>-116.6</u>
<u>1715</u>									
<u>1720</u>									

Final:

Time 1710 pH 7.37 SC 540 Temp 13.70 Turb. 0 Flow Rate 400 DTW 7.80 Drawdown 0.11 DO 0.11 ORP -116.6

Comments: Flow rate reduced to ~200 ml/min prior to sample collection

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-MW OWS (54) - G-100715 Time 1720 VOCs SVOCs PAHs TOC
 Total Metals Dissolved Metals BTEX Total Cyanide Free Cyanide
 Other List: _____
 MS/MSD _____ Blind Dup _____ Blind Dup Name _____ TB _____

GROUND-WATER/SURFACE WATER SAMPLING FORM

Project Location: TFS Rochester Surface Water Groundwater Sample Identification ATR-MW14 - G100815
 Project Number 3359-14-1028 (Use: Well name)
 Sampling Personnel SAIP Date 10-8-15 Start Time 0900 Weather 60°F Sunny

MEASUREMENT SUMMARY:

Measuring Point TOC Depth to Water 18.32 Depth to Product _____ Product Thickness _____
 Total Casing Depth _____ 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 0920 Pump Stopped 1010 Total Gallons ~4

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>0905</u>	<u>7.08</u>	<u>0.604</u>	<u>13.68</u>	<u>0.6</u>	<u>350</u>	<u>18.34</u>	<u>0.02</u>	<u>0.79</u>	<u>-83.0</u>
<u>0930</u>	<u>7.11</u>	<u>0.618</u>	<u>13.53</u>	<u>0</u>	<u>350</u>	<u>18.34</u>	<u>0.02</u>	<u>0.53</u>	<u>-81.2</u>
<u>0935</u>	<u>7.12</u>	<u>0.681</u>	<u>13.29</u>	<u>0</u>	<u>350</u>	<u>18.32</u>	<u>0</u>	<u>0.27</u>	<u>-97.3</u>
<u>0940</u>	<u>7.14</u>	<u>0.633</u>	<u>13.23</u>	<u>0</u>	<u>350</u>	<u>18.32</u>	<u>0</u>	<u>0.19</u>	<u>-101.2</u>
<u>0945</u>	<u>7.14</u>	<u>0.635</u>	<u>13.20</u>	<u>0.6</u>	<u>350</u>	<u>18.32</u>	<u>0</u>	<u>0.16</u>	<u>-104.8</u>
<u>0950</u>	<u>7.14</u>	<u>0.635</u>	<u>13.26</u>	<u>0.5</u>	<u>350</u>	<u>18.32</u>	<u>0</u>	<u>0.14</u>	<u>-108.5</u>

Final:

Time	pH	SC	Temp	Turb.	Flow Rate	DTW	Drawdown	DO	ORP
<u>0950</u>	<u>7.14</u>	<u>0.635</u>	<u>13.20</u>	<u>0.5</u>	<u>350</u>	<u>18.32</u>	<u>0</u>	<u>0.14</u>	<u>-108.5</u>

Comments: Reduce flow rate to ~200 ml/min prior to sample 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-MW14-G100815 Time 1000 VOCs SVOCs PAHs TOC
 Total Metals Dissolved Metals BTEX Total Cyanide Free Cyanide
 Other List: _____
 MS/MSD _____ Blind Dup _____ Blind Dup Name _____ TB _____



GROUNDWATER/SURFACE WATER SAMPLING FORM

GROUND-WATER/SURFACE WATER SAMPLING FORM

Project Location TFS Rochester Surface Water Groundwater Sample Identification ATR-MW26(17.5)
 Project Number 3359-14-1028 (Use: Well name)
 Sampling Personnel CS Date 10/7/15 Start Time 1105 Weather SUNNY 70

MEASUREMENT SUMMARY:
 Measuring Point 405 Depth to Water 10.38 Depth to Product — Product Thickness —
 Total Casing Depth 17.5 Borehole Diameter 2" Approx. Pump Depth 15' Feet
 Screen Interval top bottom Feet

SAMPLING SUMMARY:
 Sampling Method: Grab Composite Grundfos Bladder Pump Peristaltic Pump Bailor
 Pump Started 1105 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)
1110	7.26	0.623	14.33	43.0	200	10.38	—	0.58	-91.1
1115	7.13	0.629	14.23	91.0	200	10.38	—	0.42	-100.4
1120	7.00	0.669	14.05	9.8	200	10.38	—	0.37	-103.6
1125	6.95	0.672	14.16	3.2	200	10.38	—	0.33	-111.1
1130	6.98	0.694	14.18	3.1	200	10.38	—	0.32	-115.3

Final:
 Time 1130 pH 6.98 SC 0.694 Temp 14.18 Turb. 3.1 Flow Rate 200 DTW 10.38 Drawdown — DO 0.32 ORP -115.3

Comments: _____

Calibration: pH Calibration Buffers: 4 7 10 ORP Calibration 240 mV
 SC Reference Solution 4.49 mS/cm Turbidity Cal. Solution 1-120 NTUs
 Sample Name ATR-MW26(17.5) - 6007 Time 1130 VOCs SVOCs PAHs TOC
 Total Metals Dissolved Metals BTEX Total Cyanide Free Cyanide
 Other List: _____
 MS/MSD _____ Blind Dup _____ Blind Dup Name _____ TB _____



GROUNDWATER/SURFACE WATER SAMPLING FORM
 Amec Foster Wheeler Environment & Infrastructure, Inc.

GROUND-WATER/SURFACE WATER SAMPLING FORM

Project Location TFS Rochester Surface Water Groundwater Sample Identification ATR-MW 26(23.8)
 Project Number 3359-14-1028 (Use: Well name)
 Sampling Personnel LS Date 10/7/15 Start Time 1200 Weather SUNNY 70

MEASUREMENT SUMMARY:

Measuring Point top Depth to Water 10.26 Depth to Product - Product Thickness -
 Total Casing Depth 29' Borehole Diameter 2" Approx. Pump Depth 26' Feet
 Screen Interval top bottom Feet

SAMPLING SUMMARY:

Sampling Method: Grab Composite Grundfos Bladder Pump Peristaltic Pump Bailor
 Pump Started 1200 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>1205</u>	<u>7.32</u>	<u>0.648</u>	<u>14.00</u>	<u>2.7</u>	<u>800</u>	<u>10.26</u>	<u>-</u>	<u>0.45</u>	<u>-92.1</u>
<u>1210</u>	<u>7.24</u>	<u>0.652</u>	<u>13.83</u>	<u>22.8</u>	<u>800</u>	<u>10.26</u>	<u>-</u>	<u>0.30</u>	<u>-101.9</u>
<u>1215</u>	<u>7.16</u>	<u>0.653</u>	<u>13.86</u>	<u>51.2</u>	<u>800</u>	<u>10.26</u>	<u>-</u>	<u>0.27</u>	<u>-104.6</u>
<u>1220</u>	<u>7.19</u>	<u>0.652</u>	<u>13.92</u>	<u>37.2</u>	<u>800</u>	<u>10.26</u>	<u>-</u>	<u>0.26</u>	<u>-109.1</u>
<u>1225</u>	<u>7.20</u>	<u>0.653</u>	<u>13.73</u>	<u>0.0</u>	<u>800</u>	<u>10.26</u>	<u>-</u>	<u>0.27</u>	<u>-114.3</u>

Final:
 Time 1225 pH 7.20 SC 0.653 Temp 13.73 Turb. 0.0 Flow Rate 800 DTW 10.26 Drawdown - DO 0.27 ORP -114.3

Comments: * cleaned optics and NTU's drop to zero

Calibration: pH Calibration Buffers: 4 7 10 ORP Calibration 240 mV
 SC Reference Solution 4.49 mS/cm Turbidity Cal. Solution 1-120 NTUs
 Sample Name ATR-MW 26(23.8)-610075 Time _____ VOCs SVOCs PAHs TOC
 Total Metals Dissolved Metals BTEX Total Cyanide Free Cyanide
 Other List: _____
 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-300 ²⁰¹⁻²⁽³⁰⁰⁵⁾
 Project Number 3359-14-1028 (Use: Well name)
 Sampling Personnel _____ Date 10/7/15 Start Time 1253 Weather SUNNY 70

MEASUREMENT SUMMARY:

Measuring Point TOC Depth to Water 9.89 Depth to Product — Product Thickness —
 Total Casing Depth 33' Borehole Diameter 2" Approx. Pump Depth 31' Feet
 Screen Interval top bottom Feet

SAMPLING SUMMARY:

Sampling Method: Grab Composite Grundfos Bladder Pump Peristaltic Pump Bailor
 Pump Started 1253 Pump Stopped 1328 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>1258</u>	<u>7.47</u>	<u>0.557</u>	<u>14.62</u>	<u>50.1</u>	<u>200</u>	<u>9.89</u>	<u>—</u>	<u>0.41</u>	<u>-96.3</u>
<u>1303</u>	<u>7.48</u>	<u>0.558</u>	<u>14.39</u>	<u>14.1</u>	<u>200</u>	<u>9.89</u>	<u>—</u>	<u>0.32</u>	<u>-91.3</u>
<u>1308</u>	<u>7.22</u>	<u>0.557</u>	<u>14.19</u>	<u>23.4</u>	<u>200</u>	<u>9.89</u>	<u>—</u>	<u>0.29</u>	<u>-88.9</u>
<u>1313</u>	<u>7.27</u>	<u>0.557</u>	<u>13.90</u>	<u>10.1</u>	<u>200</u>	<u>9.89</u>	<u>—</u>	<u>0.26</u>	<u>-84.5</u>
<u>1318</u>	<u>7.25</u>	<u>0.549</u>	<u>13.90</u>	<u>14.2</u>	<u>200</u>	<u>9.89</u>	<u>—</u>	<u>0.24</u>	<u>-82.3</u>
<u>1323</u>	<u>7.26</u>	<u>0.548</u>	<u>13.89</u>	<u>6.6</u>	<u>200</u>	<u>9.89</u>	<u>—</u>	<u>0.24</u>	<u>-82.7</u>
<u>1328</u>	<u>7.26</u>	<u>0.549</u>	<u>13.80</u>	<u>4.2</u>	<u>200</u>	<u>9.89</u>	<u>—</u>	<u>0.24</u>	<u>-83.8</u>

Final:
 Time 1328 pH 7.26 SC 0.547 Temp 13.90 Turb. 4.2 Flow Rate 200 DTW 9.89 Drawdown — DO 0.24 ORP -83.8

Comments: _____

Calibration: pH Calibration Buffers: 4 7 10 ORP Calibration 246 mV
 SC Reference Solution 4.49 mS/cm Turbidity Cal. Solution 0-126 NTUs
 Sample Name ATR-MW-300 ²⁰¹⁻²⁽³⁰⁰⁵⁾⁻⁶¹⁰⁰⁷¹⁰ Time 13.28 VOCs SVOCs PAHs TOC
 Total Metals Dissolved Metals BTEX Total Cyanide Free Cyanide
 Other List: _____
 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(58.8)
 Project Number 3359-14-1028 (Use: Well name)
 Sampling Personnel GS Date 10/31/15 Start Time 1010 Weather Sunny 70°

MEASUREMENT SUMMARY:

Measuring Point Toc Depth to Water 9.71 Depth to Product - Product Thickness -
 Total Casing Depth 58' Borehole Diameter 2" Approx. Pump Depth 56' Feet
 Screen Interval top bottom Feet

SAMPLING SUMMARY:

Sampling Method: Grab Composite Grundfos Bladder Pump Peristaltic Pump Bailor
 Pump Started 1010 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>1015</u>	<u>6.00</u>	<u>0.504</u>	<u>15.31</u>	<u>0.0</u>	<u>200</u>	<u>9.71</u>	<u>-</u>	<u>1.59</u>	<u>28.4</u>
<u>1020</u>	<u>6.55</u>	<u>0.497</u>	<u>15.48</u>	<u>0.0</u>	<u>200</u>	<u>9.71</u>	<u>-</u>	<u>0.55</u>	<u>-19.9</u>
<u>1025</u>	<u>6.71</u>	<u>0.492</u>	<u>15.17</u>	<u>0.2</u>	<u>200</u>	<u>9.71</u>	<u>-</u>	<u>0.48</u>	<u>-29.8</u>
<u>1030</u>	<u>6.82</u>	<u>0.496</u>	<u>15.27</u>	<u>0.0</u>	<u>200</u>	<u>9.71</u>	<u>-</u>	<u>0.44</u>	<u>-37.0</u>
<u>1035</u>	<u>6.83</u>	<u>0.496</u>	<u>15.38</u>	<u>0.0</u>	<u>200</u>	<u>9.71</u>	<u>-</u>	<u>0.41</u>	<u>-42.5</u>
<u>1040</u>	<u>6.84</u>	<u>0.496</u>	<u>15.39</u>	<u>0.0</u>	<u>200</u>	<u>9.71</u>	<u>-</u>	<u>0.40</u>	<u>-45.6</u>

Final:
 Time 1040 pH 6.84 SC 0.496 Temp 15.39 Turb. 0.0 Flow Rate 200 DTW 9.71 Drawdown - DO 0.40 ORP -45.6

Comments: _____

Calibration: pH Calibration Buffers: 4 7 10 ORP Calibration 240 mV
 SC Reference Solution 7.49 mS/cm Turbidity Cal. Solution 1-126 NTUs
 Sample Name ATR-MW26(58.8)-6100715 Time 1040 VOCs SVOCs PAHs TOC
 Total Metals Dissolved Metals BTEX Total Cyanide Free Cyanide
 Other List: _____
 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 202-2(12.5)
 Project Number 3359-14-1028 (Use: Well name)
 Sampling Personnel GS Date 10/7/15 Start Time 1345 Weather Sunny 76°

MEASUREMENT SUMMARY:
 Measuring Point TOC Depth to Water 9.39 Depth to Product - Product Thickness -
 Total Casing Depth 17.5 Borehole Diameter 2" Approx. Pump Depth 16' Feet
 Screen Interval top bottom Feet

SAMPLING SUMMARY:
 Sampling Method: Grab Composite Grundfos Bladder Pump Peristaltic Pump Bailor
 Pump Started 1345 Pump Stopped 1420 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>1350</u>	<u>7.42</u>	<u>0.671</u>	<u>15.19</u>	<u>532.9</u>	<u>150</u>	<u>9.39</u>	<u>-</u>	<u>0.77</u>	<u>-115.2</u>
<u>1355</u>	<u>7.37</u>	<u>0.702</u>	<u>14.40</u>	<u>101.7</u>	<u>150</u>	<u>9.29</u>	<u>-</u>	<u>0.36</u>	<u>-149.0</u>
<u>1400</u>	<u>7.41</u>	<u>0.676</u>	<u>14.36</u>	<u>121.3</u>	<u>150</u>	<u>9.29</u>	<u>-</u>	<u>0.45</u>	<u>-153.0</u>
<u>1405</u>	<u>7.40</u>	<u>0.684</u>	<u>14.34</u>	<u>26.7</u>	<u>150</u>	<u>9.29</u>	<u>-</u>	<u>0.46</u>	<u>-151.1</u>
<u>1410</u>	<u>7.28</u>	<u>0.662</u>	<u>14.37</u>	<u>63.8</u>	<u>150</u>	<u>9.39</u>	<u>-</u>	<u>0.62</u>	<u>-147.8</u>
<u>1415</u>	<u>7.37</u>	<u>0.661</u>	<u>14.38</u>	<u>7.6</u>	<u>150</u>	<u>9.29</u>	<u>-</u>	<u>0.62</u>	<u>-139.7</u>
<u>1420</u>	<u>7.38</u>	<u>0.661</u>	<u>14.28</u>	<u>3.6</u>	<u>150</u>	<u>9.39</u>	<u>-</u>	<u>0.62</u>	<u>-136.6</u>

Final:
 Time 1420 pH 7.38 SC 0.661 Temp 14.28 Turb. 3.6 Flow Rate 150 DTW 9.39 Drawdown - DO 0.62 ORP 136.6

Comments: _____

Calibration: pH Calibration Buffers: 4 7 10 ORP Calibration 240 mV
 SC Reference Solution _____ mS/cm Turbidity Cal. Solution 0-120 NTUs
 Sample Name ATR-MW Time 1420 VOCs SVOCs PAHs TOC
 Total Metals Dissolved Metals BTEX Total Cyanide Free Cyanide
 Other List: _____
 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 (33)
 Project Number 3359-14-1028 Date 10/8/15 Start Time 1115 Weather Sunny 70°
 Sampling Personnel GS (Use: Well name)

MEASUREMENT SUMMARY:

Measuring Point TOC Depth to Water _____ Depth to Product - Product Thickness -
 Total Casing Depth 33' Borehole Diameter 2" 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 1210 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)
1120	7.23	0.528	16.91	173.7	150		-	0.32	-105.7
1125	7.22	0.512	16.63	176.7	150		-	0.35	-109.9
1130	7.23	0.512	16.79	165.6	150		-	0.42	-116.1
1135	7.22	0.514	16.76	191.5	150		-	0.62	-108.1
1140	7.21	0.522	16.81	228.6	150		-	0.77	-74.9
1145	7.17	0.527	17.13	118.5	150		-	1.16	-108.9
1150	7.15	0.537	17.56	110.6	150		-	1.63	-86.2
1155	7.14	0.545	17.31	65.6	150		-	2.51	-92.2
1200	7.11	0.550	17.22	65.2	150		-	2.49	-100.6
1205	7.11	0.551	17.21	66.4	150		-	2.48	-101.5
1210	7.10	0.551	17.22	67.1	150		-	2.47	-101.8

Final:

Time 1210 pH 7.10 SC 0.551 Temp 17.22 Turb. 67.1 Flow Rate 150 DTW _____ Drawdown - DO 2.47 ORP -101.8

Comments: MS/MSD collected for VOCs
*Black substance in well * Black particles in well, turbidity will not drop

Calibration: pH Calibration Buffers: 4 7 10 ORP Calibration 240 mV
 SC Reference Solution 4.49 mS/cm Turbidity Cal. Solution 0-126 NTUs
 Sample Name ATR-MW (33)-G100815 Time 1210 VOCs SVOCs PAHs TOC
 Total Metals Dissolved Metals BTEX Total Cyanide Free Cyanide
 Other List: _____
 MS/MSD MS/MSD collected Blind Dup _____ Blind Dup Name _____ TB _____



GROUND-WATER/SURFACE WATER SAMPLING FORM

Project Location TFS Rochester Surface Water Groundwater Sample Identification ATR-MW (53)
 Project Number 3359-14-1028 (Use: Well name)
 Sampling Personnel CS Date 10/31/15 Start Time 1255 Weather Sun, 70

MEASUREMENT SUMMARY:
 Measuring Point TBC Depth to Water _____ Depth to Product - Product Thickness -
 Total Casing Depth _____ Borehole Diameter 2" Approx. Pump Depth 50' Feet
 Screen Interval top _____ bottom _____ Feet

SAMPLING SUMMARY:
 Sampling Method: Grab Composite Grundfos Bladder Pump Peristaltic Pump Bailer
 Pump Started 1255 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>1300</u>	<u>6.80</u>	<u>1.308</u>	<u>15.76</u>	<u>8.4</u>	<u>200</u>	<u>-</u>	<u>-</u>	<u>0.58</u>	<u>-97.6</u>
<u>1305</u>	<u>6.77</u>	<u>1.511</u>	<u>15.23</u>	<u>2.4</u>	<u>200</u>	<u>-</u>	<u>-</u>	<u>0.37</u>	<u>-108.1</u>
<u>1310</u>	<u>6.75</u>	<u>1.514</u>	<u>15.31</u>	<u>1.7</u>	<u>200</u>	<u>-</u>	<u>-</u>	<u>0.35</u>	<u>-110.1</u>
<u>1315</u>	<u>6.74</u>	<u>1.516</u>	<u>15.27</u>	<u>1.5</u>	<u>200</u>	<u>-</u>	<u>-</u>	<u>0.34</u>	<u>-111.2</u>
<u>1320</u>	<u>6.75</u>	<u>1.517</u>	<u>15.33</u>	<u>1.0</u>	<u>200</u>	<u>-</u>	<u>-</u>	<u>0.33</u>	<u>-112.4</u>

Final:
 Time pH SC Temp Turb. Flow Rate DTW Drawdown DO ORP

Comments: _____

Calibration: pH Calibration Buffers: 4 7 10 ORP Calibration 240 mV
 SC Reference Solution 4.49 mS/cm Turbidity Cal. Solution 0-100 NTUs
 Sample Name ATR-MW (53)-Glossis Time 1320 VOCs SVOCs PAHs TOC
 Total Metals Dissolved Metals BTEX Total Cyanide Free Cyanide
 Other List: _____
 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 24(55.9)
 Project Number 3359-14-1028 (Use: Well name)
 Sampling Personnel GS Date 10/8/15 Start Time 0908 Weather SUNY 60°

MEASUREMENT SUMMARY:

Measuring Point TOC Depth to Water 20.57 Depth to Product - Product Thickness -
 Total Casing Depth 56' Borehole Diameter 5" Approx. Pump Depth 53.1' Feet
 Screen Interval top bottom Feet

SAMPLING SUMMARY:

Sampling Method: Grab Composite Grundfos Bladder Pump Peristaltic Pump Bailor
 Pump Started 0908 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)
0906	6.90	0.849	13.45	0.0	150	20.57	-	0.97	214.1
0918	6.74	0.847	13.26	0.0	150	20.57	-	0.44	189.0
0923	6.66	0.865	13.22	0.0	150	20.57	-	0.50	113.5
0929	6.60	0.883	13.89	0.0	150	20.57	-	0.43	59.0
0933	6.68	0.880	13.23	0.0	150	20.57	-	0.39	18.2
0938	6.75	0.874	12.22	0.0	150	20.57	-	0.136	-9.3
0943	6.80	0.875	13.21	0.0	150	20.57	-	0.136	-25.3
0948	6.81	0.874	13.21	0.0	150	20.57	-	0.136	-28.6
		0.876							

Final:

Time 0948 pH 6.81 SC 0.876 Temp 13.21 Turb. 0.0 Flow Rate 150 DTW 20.57 Drawdown 20 DO 0.136 ORP -28.6

Comments: _____

Calibration: pH Calibration Buffers: 4 7 10 ORP Calibration 240 mV
 SC Reference Solution 4.49 mS/cm Turbidity Cal. Solution 0-126 NTUs
 Sample Name ATR-MW 24(55.9)-6100815 Time 0948 VOCs SVOCs PAHs TOC
 Total Metals Dissolved Metals BTEX Total Cyanide Free Cyanide
 Other List: _____
 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 24(24.9)
 Project Number 3359-14-1028 (Use: Well name)
 Sampling Personnel [Signature] Date 10/2/15 Start Time 1025 Weather Sunny 65

MEASUREMENT SUMMARY:

Measuring Point TOC Depth to Water 20.65 Depth to Product - Product Thickness -
 Total Casing Depth 25' Borehole Diameter 2.11 Approx. Pump Depth - Feet
 Screen Interval top - bottom - Feet

SAMPLING SUMMARY:

Sampling Method: Grab Composite Grundfos Bladder Pump Peristaltic Pump Bailor

Pump Started 1025 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)
1030	6.95	0.696	13.93	17.66	200	20.60	-	1.18	17.6
1035	6.94	0.694	13.92	14.4	200	20.60	-	0.97	14.1
1040	6.94	0.693	14.00	13.7	200	20.60	-	1.00	11.3
1045	6.95	0.693	14.00	2.2	200	20.60	-	0.93	7.8
1050	6.95	0.693	14.00	4.2	200	20.60	-	0.92	7.8

Final:
 Time 1050 pH 6.95 SC 0.693 Temp 14.00 Turb. 4.2 Flow Rate 200 DTW 20.60 Drawdown - DO 0.92 ORP 7.8

Comments: _____

Calibration: pH Calibration Buffers: 4 7 10 ORP Calibration 240 mV
 SC Reference Solution 4.49 mS/cm Turbidity Cal. Solution 0.126 NTUs
 Sample Name ATR-MW 24(24.9)-6090815 Time 1050 VOCs SVOCs PAHs TOC
 Total Metals Dissolved Metals BTEX Total Cyanide Free Cyanide
 Other List: _____
 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-0W3 (33)-
 Project Number 3359-14-1028 (Use: Well name)
 Sampling Personnel CS Date 10/7/15 Start Time 1458 Weather Sunny

MEASUREMENT SUMMARY:
 Measuring Point 700 Depth to Water _____ Depth to Product ~ Product Thickness _____
 Total Casing Depth 35' Borehole Diameter 2" Approx. Pump Depth 33' Feet
 Screen Interval top bottom Feet

SAMPLING SUMMARY:

Sampling Method: Grab Composite Grundfos Bladder Pump Peristaltic Pump Bailor
 Pump Started 1458 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)
1503	7.15	0.812	14.79	37.4	200		-	0.48	-118.7
1508	7.10	0.816	14.71	11.8	200		-	0.38	-123.2
1513	7.09	0.930	14.67	0.8	200		-	0.31	-128.6
1518	7.10	0.944	14.66	0.1	200		-	0.28	-131.6
1523	7.12	0.952	14.75	0.0	200		-	0.27	-132.0
1528	7.12	0.951	14.73	0.0	200		-	0.26	-135.3
1533	7.12	0.953	14.73	0.0	200		-	0.25	-136.7

Final:
 Time 1533 pH 7.12 SC 0.953 Temp 14.73 Turb. 0.0 Flow Rate 200 DTW _____ Drawdown _____ DO 0.25 ORP -136.7

Comments: _____

Calibration: pH Calibration Buffers: 4 7 10 ORP Calibration 240 mV
 SC Reference Solution 4.49 mS/cm Turbidity Cal. Solution 0-120 NTUs
 Sample Name ATR-MW-0W3 (33)-6180715 Time 1533 VOCs SVOCs PAHs TOC
 Total Metals Dissolved Metals BTEX Total Cyanide Free Cyanide
 Other List: _____
 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-0w3(55)
 Project Number 3359-14-1028 (Use: Well name)
 Sampling Personnel ES Date 10/7/15 Start Time 1550 Weather SUNNY 70

MEASUREMENT SUMMARY:

Measuring Point TOC Depth to Water _____ Depth to Product _____ Product Thickness _____
 Total Casing Depth 53' Borehole Diameter 2" Approx. Pump Depth 53' Feet
 Screen Interval top _____ bottom _____ Feet

SAMPLING SUMMARY:

Sampling Method: Grab Composite Grundfos Bladder Pump Peristaltic Pump Bailor
 Pump Started 1550 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)
1555	7.45	0.365	16.11	50.2	200		-	0.86	-175.6
1600	7.57	0.310	15.21	48.7	200		-	0.30	-227.7
1605	7.58	0.322	15.22	62.6	200		-	0.26	-223.5
1610	7.00	0.497	15.32	30.4	200		-	0.24	-190.4
1615	6.58	1.589	15.11	12.7	200		-	0.23	-159.1
1620	6.57	1.591	15.14	10.8	200		-	0.21	-152.1
1625	6.56	1.592	15.13	6.5	200		-	0.20	-154.2
1630	6.55	1.594	15.15	3.8	200		-	0.20	-155.2

Final:

Time	pH	SC	Temp	Turb.	Flow Rate	DTW	Drawdown	DO	ORP
1630	6.55	1.594	15.15	3.8	200		-	0.20	-155.2

Comments: Replicate ~~023~~ ATR-0w3(55)-6100715R

Calibration: pH Calibration Buffers: 4 7 10 ORP Calibration 240 mV
 SC Reference Solution 4.149 mS/cm Turbidity Cal. Solution 0-120 NTUs
 Sample Name ATR-MW-0w3(55)-6100715 Time 1630 VOCs SVOCs PAHs TOC
 Total Metals Dissolved Metals BTEX Total Cyanide Free Cyanide
 Other List: _____
 MS/MSD Replicate Blind Dup ATR-0w3(55)-6100715 Blind Dup Name _____ TB _____

GROUND-WATER/SURFACE WATER SAMPLING FORM

Project Location TFS Rochester Surface Water Groundwater Sample Identification ATR-MW (54)
 Project Number 3359-15-1040 (Use: Well name)
 Sampling Personnel SNP Date 10-13-15 Start Time 1320 Weather _____

MEASUREMENT SUMMARY:

Measuring Point TOC Depth to Water 17.49 Depth to Product Product Thickness
 Total Casing Depth 54 Borehole Diameter 2 1/2 Approx. Pump Depth 49 Feet
 Screen Interval top bottom Feet

SAMPLING SUMMARY:

Sampling Method: Grab Composite Grundfos Bladder Pump Peristaltic Pump Bailor
 Pump Started 1325 Pump Stopped _____ Total Gallons _____

Time (24-hr)	pH ¹ (S.U.)	SC ^{3%} (mS/cm)	Temp ^{3%} (°C)	Turb. ¹⁰ (NTU)	Flow Rate (ml/min)	DTW (ft)	Drawdown (ft)	DO ^{10%} (mg/L)	ORP ¹⁰ (mV)
1330	7.11	0.614	14.21	4.5	400	17.56	0.07	0.40	-103.6
1335	7.44	0.590	13.64	2.0	400	17.56	0.07	0.70	-113.6
1340	7.45	0.590	13.45	0	400	17.60	0.11	0.32	-121.8
1345	7.46	0.595	13.39	0	400	17.60	0.11	0.25	-132.6
1350	7.45	0.595	13.32	0	400	17.60	0.11	0.22	-136.3
1355	7.46	0.596	13.30	0	400	17.60	0.11	0.19	-139.9
1400	7.45	0.596	13.29	0	400	17.60	0.11	0.17	-140.2

Final:
 Time pH SC Temp Turb. Flow Rate DTW Drawdown DO ORP

Comments: Flow rate reduced to 200 ml/min prior to sample collection

Calibration: pH Calibration Buffers: 4 7 10 ORP Calibration 240 mV
 SC Reference Solution 1.415 mS/cm Turbidity Cal. Solution 0.126 NTUs
 Sample Name ATR-MW (54)-G.101315 Time 1405 VOCs TOC VFA DHC
 Anions Dissolved Gasses Iron & Manganese Alkalinity
 Other List: _____
 MS/MSD _____ Blind Dup _____ Blind Dup Name _____ TB _____

GROUND-WATER/SURFACE WATER SAMPLING FORM

Project Location TFS Rochester Surface Water Groundwater Sample Identification ATR-OW4(35)
 Project Number 3359-15-1040 (Use: Well name)
 Sampling Personnel SVP Date 10-13-15 Start Time 1215 Weather 55° Overcast

MEASUREMENT SUMMARY:

Measuring Point TOC Depth to Water 17.58 Depth to Product _____ Product Thickness _____
 Total Casing Depth .35 Borehole Diameter 2" Approx. Pump Depth 30 Feet
 Screen Interval top bottom _____ Feet

SAMPLING SUMMARY:

Sampling Method: Grab Composite Grundfos Bladder Pump Peristaltic Pump Bailor
 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)
1230	6.25	1.789	13.64	56.5	350	17.65	.07	0.20	-62.0
1235	6.21	1.807	13.60	57.9	350	17.60	.02	0.68	-67.3
1240	6.13	2.018	13.52	56.6	350	17.60	.02	0.28	-83.8
1245	6.12	2.103	13.49	55.9	350	17.60	.02	0.13	-95.9
1250	6.11	2.167	13.45	51.4	350	17.60	.02	0.11	-102.3
1255	6.11	2.201	13.45	52.3	350	17.60	.02	0.10	-107.8
1300	6.11	2.210	13.46	54.6	350	17.60	.02	0.09	-109.9

Final:

Time	pH	SC	Temp	Turb.	Flow Rate	DTW	Drawdown	DO	ORP

Comments: Flow rate reduced to 200ml/min prior to sample collection. Purge water cloudy + white (ABC)

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 OW4(35) - G101315 Time 1305 VOCs TOC VFA DHC
 Anions Dissolved Gases Iron & Manganese Alkalinity
 Other List: _____
 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(45.2)
 Project Number 3359-15-1040 (Use: Well name)
 Sampling Personnel SVP Date 10-13-15 Start Time 1110 Weather 55 overcast

MEASUREMENT SUMMARY:

Measuring Point TOC Depth to Water 8.37 Depth to Product / Product Thickness /
 Total Casing Depth 45.2 Borehole Diameter 2" Approx. Pump Depth 40 Feet
 Screen Interval top bottom Feet

SAMPLING SUMMARY:

Sampling Method: Grab Composite Grundfos Bladder Pump Peristaltic Pump Bailor
 Pump Started 1115 Pump Stopped 1200 Total Gallons 23

Time (24-hr)	pH (S.U.)	SC 3% (mS/cm)	Temp 32 (°C)	Turb. 10 (NTU)	Flow Rate (ml/min)	DTW (ft)	Drawdown (ft)	DO 10% (mg/L)	ORP 10 (mV)
<u>1120</u>	<u>7.40</u>	<u>0.543</u>	<u>13.35</u>	<u>0.8</u>	<u>350</u>	<u>8.37</u>	<u>0</u>	<u>1.20</u>	<u>-39.1</u>
<u>1125</u>	<u>7.39</u>	<u>0.546</u>	<u>13.30</u>	<u>2.1</u>	<u>350</u>	<u>8.37</u>	<u>0</u>	<u>0.95</u>	<u>-40.7</u>
<u>1130</u>	<u>7.36</u>	<u>0.556</u>	<u>13.12</u>	<u>1.0</u>	<u>350</u>	<u>8.37</u>	<u>0</u>	<u>0.42</u>	<u>-39.0</u>
<u>1135</u>	<u>7.37</u>	<u>0.558</u>	<u>13.10</u>	<u>0.4</u>	<u>350</u>	<u>8.37</u>	<u>0</u>	<u>0.34</u>	<u>-39.2</u>
<u>1140</u>	<u>7.37</u>	<u>0.560</u>	<u>13.09</u>	<u>0</u>	<u>350</u>	<u>8.37</u>	<u>0</u>	<u>0.27</u>	<u>-39.5</u>
<u>1145</u>	<u>7.36</u>	<u>0.562</u>	<u>13.09</u>	<u>0</u>	<u>350</u>	<u>8.37</u>	<u>0</u>	<u>0.26</u>	<u>-39.5</u>

Final:

Time	pH	SC	Temp	Turb.	Flow Rate	DTW	Drawdown	DO	ORP

Comments: Flow rate reduced to 200 ml/min prior to sample 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(45.2)-6101315 Time 1150 VOCs TOC VFA DHC
 Anions Dissolved Gases Iron & Manganese Alkalinity
 Other List: _____
 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(326)-6101315
 Project Number 3359-15-1040 (Use: Well name)
 Sampling Personnel SAP Date 10-13-15 Start Time 1015 Weather 55° Overcast

MEASUREMENT SUMMARY:

Measuring Point TOC Depth to Water 8.11 Depth to Product _____ Product Thickness _____
 Total Casing Depth 32.6 Borehole Diameter 2" Approx. Pump Depth 29' Feet
 Screen Interval top _____ bottom _____ Feet

SAMPLING SUMMARY:

Sampling Method: Grab Composite Grundfos Bladder Pump Peristaltic Pump Bailor
 Pump Started 1020 Pump Stopped 1100 Total Gallons ~3.5

Time (24-hr)	pH _{s,t} (S.U.)	SC 3% (mS/cm)	Temp 32 (°C)	Turb. 70 (NTU)	Flow Rate (ml/min)	DTW (ft)	Drawdown (ft)	DO 10% (mg/L)	ORP 10 (mV)
<u>1025</u>	<u>7.63</u>	<u>0.556</u>	<u>13.10</u>	<u>0</u>	<u>450</u>	<u>8.12</u>	<u>0.01</u>	<u>1.26</u>	<u>-84.1</u>
<u>1030</u>	<u>7.56</u>	<u>0.557</u>	<u>13.09</u>	<u>0</u>	<u>450</u>	<u>8.11</u>	<u>0</u>	<u>0.81</u>	<u>-86.6</u>
<u>1035</u>	<u>7.41</u>	<u>0.559</u>	<u>13.06</u>	<u>0</u>	<u>450</u>	<u>8.11</u>	<u>0</u>	<u>0.79</u>	<u>-85.8</u>
<u>1040</u>	<u>7.42</u>	<u>0.560</u>	<u>13.15</u>	<u>0</u>	<u>450</u>	<u>8.11</u>	<u>0</u>	<u>0.20</u>	<u>-87.7</u>
<u>1045</u>	<u>7.42</u>	<u>0.560</u>	<u>13.16</u>	<u>0</u>	<u>450</u>	<u>8.11</u>	<u>0</u>	<u>0.18</u>	<u>-88.9</u>
<u>1050</u>	<u>7.43</u>	<u>0.561</u>	<u>13.20</u>	<u>0</u>	<u>450</u>	<u>8.11</u>	<u>0</u>	<u>0.16</u>	<u>-88.9</u>

Final:

Time	pH	SC	Temp	Turb.	Flow Rate	DTW	Drawdown	DO	ORP

Comments: Flow rate reduced to 200 ml/min prior to sample 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(326)-6101315 Time 1055 VOCs TOC VFA DHC
 Anions Dissolved Gasses Iron & Manganese Alkalinity
 Other List: _____
 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(16.4)-G101315
 Project Number 3359-15-1040 (Use: Well name)
 Sampling Personnel SAP Date 10-13-15 Start Time 0930 Weather 62°F Overcast

MEASUREMENT SUMMARY:

Measuring Point TOL Depth to Water 8.08 Depth to Product Product Thickness
 Total Casing Depth 16.4 Borehole Diameter 2" Approx. Pump Depth 14.5 Feet
 Screen Interval top bottom Feet

SAMPLING SUMMARY:

Sampling Method: Grab Composite Grundfos Bladder Pump Peristaltic Pump Bailor
 Pump Started 0925 Pump Stopped 1000 Total Gallons 3.6

Time (24-hr)	pH ^a (S.U.)	SC 3% (mS/cm)	Temp 3% (°C)	Turb. 10 (NTU)	Flow Rate (ml/min)	DTW (ft)	Drawdown (ft)	DO 10% (mg/L)	ORP 10 (mV)
<u>0930</u>	<u>7.47</u>	<u>0.685</u>	<u>13.95</u>	<u>4.0</u>	<u>400</u>	<u>8.10</u>	<u>.02</u>	<u>2.21</u>	<u>-66.2</u>
<u>0935</u>	<u>7.33</u>	<u>0.686</u>	<u>14.00</u>	<u>4.4</u>	<u>400</u>	<u>8.15</u>	<u>.07</u>	<u>2.15</u>	<u>-69.9</u>
<u>0940</u>	<u>7.31</u>	<u>0.688</u>	<u>14.03</u>	<u>1.8</u>	<u>400</u>	<u>8.15</u>	<u>.07</u>	<u>2.29</u>	<u>-69.7</u>
<u>0945</u>	<u>7.29</u>	<u>0.689</u>	<u>14.04</u>	<u>2.6</u>	<u>400</u>	<u>8.15</u>	<u>.07</u>	<u>2.61</u>	<u>-67.2</u>
<u>0950</u>	<u>7.28</u>	<u>0.691</u>	<u>14.04</u>	<u>0</u>	<u>400</u>	<u>8.15</u>	<u>.07</u>	<u>2.56</u>	<u>-65.0</u>
<u>0955</u>									

Final:
 Time 0950 pH 7.26 SC 0.691 Temp 14.04 Turb. 0 Flow Rate 400 DTW 8.15 Drawdown .07 DO 2.56 ORP 65.0

Comments: Flow rate reduced to 200 ml/min prior to sample collection

Calibration: pH Calibration Buffers: 4 7 10 ORP Calibration 240 mV
 SC Reference Solution 1.413 mS/cm Turbidity Cal. Solution 0/100 NTUs
 Sample Name ATR-MW25(16.4)-G101315 Time 0955 VOCs TOC VFA DHC
 Anions Dissolved Gasses Iron & Manganese Alkalinity
 Other List: _____
 MS/MSD _____ Blind Dup _____ Blind Dup Name _____ TB _____

GROUND-WATER/SURFACE WATER SAMPLING FORM

Project Location TFS Rochester Surface Water Groundwater Sample Identification ATR-MW15-6101315
 Project Number 3359-15-1040 (Use: Well name)
 Sampling Personnel SUP Date 10-13-15 Start Time 0810 Weather _____

MEASUREMENT SUMMARY:

Measuring Point 70C Depth to Water 9.34 Depth to Product _____ Product Thickness _____
 Total Casing Depth _____ 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 0815 Pump Stopped 0900 Total Gallons ~3

Time (24-hr)	pH _i (S.U.)	SC 3% (mS/cm)	Temp 3% (°C)	Turb. 10 (NTU)	Flow Rate (ml/min)	DTW (ft)	Drawdown (ft)	DO 10% (mg/L)	ORP 10 (mV)
<u>0820</u>	<u>7.00</u>	<u>0.563</u>	<u>13.09</u>	<u>3.2</u>	<u>300</u>	<u>9.36</u>	<u>0.2</u>	<u>0.55</u>	<u>-50.6</u>
<u>0825</u>	<u>6.97</u>	<u>0.722</u>	<u>12.99</u>	<u>5.5</u>	<u>300</u>	<u>9.34</u>	<u>0</u>	<u>0.37</u>	<u>-52.2</u>
<u>0830</u>	<u>6.74</u>	<u>0.970</u>	<u>13.07</u>	<u>9.2</u>	<u>300</u>	<u>9.34</u>	<u>0</u>	<u>0.23</u>	<u>-62.3</u>
<u>0835</u>	<u>6.66</u>	<u>1.113</u>	<u>12.98</u>	<u>9.4</u>	<u>300</u>	<u>9.34</u>	<u>0</u>	<u>0.18</u>	<u>-82.8</u>
<u>0840</u>	<u>6.65</u>	<u>1.145</u>	<u>13.03</u>	<u>8.4</u>	<u>300</u>	<u>9.34</u>	<u>0</u>	<u>0.16</u>	<u>-88.4</u>
<u>0845</u>	<u>6.65</u>	<u>1.188</u>	<u>12.99</u>	<u>9.1</u>	<u>300</u>	<u>9.34</u>	<u>0</u>	<u>0.16</u>	<u>-92.1</u>
<u>0850</u>									

Final:

Time	pH	SC	Temp	Turb.	Flow Rate	DTW	Drawdown	DO	ORP
<u>0845</u>	<u>6.65</u>	<u>1.168</u>	<u>12.98</u>	<u>9.1</u>	<u>300</u>	<u>9.30</u>	<u>0</u>	<u>0.16</u>	<u>-92.1</u>

Comments: Flow rate reduced to 200 ml/min prior to sample 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-MW15-6101315 Time 0850 VOCs TOC VFA DHC
 Anions Dissolved Gasses Iron & Manganese Alkalinity
 Other List: _____
 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



16-Sep-2015

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

Re: **Textron/Torx Rochester, IN 3359-14-1022**

Work Order: **15081601**

Dear Paul,

ALS Environmental received 18 samples on 28-Aug-2015 01:05 PM 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 72.

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

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RIGHT SOLUTIONS RIGHT PARTNER

Client: AMEC Foster Wheeler
Project: Textron/Torx Rochester, IN 3359-14-1022
Work Order: 15081601

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>
15081601-01	ATR-MW13-G082615	Water		8/26/2015 13:50	8/28/2015 13:05	<input type="checkbox"/>
15081601-02	ATR-MW12-G082615	Water		8/26/2015 14:40	8/28/2015 13:05	<input type="checkbox"/>
15081601-03	ATR-MW6C-G082815	Water		8/26/2015 16:12	8/28/2015 13:05	<input type="checkbox"/>
15081601-04	ATR-MW82-G082615	Water		8/26/2015 17:50	8/28/2015 13:05	<input type="checkbox"/>
15081601-05	ATR-EB001-G082615	Water		8/26/2015 18:10	8/28/2015 13:05	<input type="checkbox"/>
15081601-06	ATR-MW20(51)-G082715	Water		8/27/2015 11:38	8/28/2015 13:05	<input type="checkbox"/>
15081601-07	ATR-MW20(35)-G082715	Water		8/27/2015 12:40	8/28/2015 13:05	<input type="checkbox"/>
15081601-08	ATR-MW20(35)-G082715R	Water		8/27/2015 12:40	8/28/2015 13:05	<input type="checkbox"/>
15081601-09	ATR-MW62-G082715	Water		8/27/2015 13:55	8/28/2015 13:05	<input type="checkbox"/>
15081601-10	ATR-OW1(D)-G082715	Water		8/27/2015 15:49	8/28/2015 13:05	<input type="checkbox"/>
15081601-11	ATR-OW1(S)-G082715	Water		8/27/2015 16:00	8/28/2015 13:05	<input type="checkbox"/>
15081601-12	ATR-MW81(27)-G082715	Water		8/27/2015 17:25	8/28/2015 13:05	<input type="checkbox"/>
15081601-13	ATR-PM3-G082715	Water		8/27/2015 17:50	8/28/2015 13:05	<input type="checkbox"/>
15081601-14	ATR-MW59(29)-G082715	Water		8/27/2015 17:20	8/28/2015 13:05	<input type="checkbox"/>
15081601-15	ATR-PM2-G082715	Water		8/27/2015 19:25	8/28/2015 13:05	<input type="checkbox"/>
15081601-16	ATR-EB001-G082715	Water		8/27/2015 18:45	8/28/2015 13:05	<input type="checkbox"/>
15081601-17	ATR-FB001-G082715	Water		8/27/2015 19:00	8/28/2015 13:05	<input type="checkbox"/>
15081601-18	Trip Blank	Water		8/27/2015	8/28/2015 13:05	<input type="checkbox"/>

Client: AMEC Foster Wheeler
Project: Textron/Torx Rochester, IN 3359-14-1022
Work Order: 15081601

Case Narrative

Samples for the above noted Work Order were received on 08/28/2015. 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:

Several samples were run at diluton due to high concentration of target and non-target analytes.

Batch R170816, Method 8260, Sample 15081601-14A MS: The MS and MSD samples were rerun in another batch.

Batch R170816, Method 8260, Sample 15081601-14A MS: Sample ran 5 minutes out side of 12 hour tune window.

Batch R170826, Method 8260, Sample VLCSW1-150901: The LCS recovery was above the upper control limit. All sample results in the batch were non-detect. No qualification is necessary for these analytes: 1,1,2,2-Tetrachloroethane and Styrene

Batch R170826, Method 8260, Sample 15081601-14A MS: The MS/MSD recoveries were above the upper control limit. The corresponding result in the parent sample may be biased high for these analytes: cis-1,2-Dichloroethene and Vinyl Chloride

Metals:

No other deviations or anomalies were noted.

Wet Chemistry:

No other deviations or anomalies were noted.

ALS Group USA, Corp

Date: 16-Sep-15

Client: AMEC Foster Wheeler

Project: Textron/Torx Rochester, IN 3359-14-1022

Work Order: 15081601

Sample ID: ATR-MW13-G082615

Lab ID: 15081601-01

Collection Date: 8/26/2015 01:50 PM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A		Prep: SW3005A / 8/31/15	Analyst: ML
Iron	15		0.080	mg/L	1	9/2/2015 07:59 PM
Manganese	0.73		0.0050	mg/L	1	9/2/2015 07:59 PM
VOLATILE ORGANIC COMPOUNDS			SW8260			Analyst: JNJ
1,1,1-Trichloroethane	ND		10	µg/L	10	9/2/2015 01:23 AM
1,1,2,2-Tetrachloroethane	ND		10	µg/L	10	9/2/2015 01:23 AM
1,1,2-Trichloroethane	ND		10	µg/L	10	9/2/2015 01:23 AM
1,1-Dichloroethane	ND		10	µg/L	10	9/2/2015 01:23 AM
1,1-Dichloroethene	ND		10	µg/L	10	9/2/2015 01:23 AM
1,2-Dichloroethane	ND		10	µg/L	10	9/2/2015 01:23 AM
1,2-Dichloropropane	ND		10	µg/L	10	9/2/2015 01:23 AM
2-Butanone	ND		50	µg/L	10	9/2/2015 01:23 AM
2-Hexanone	ND		50	µg/L	10	9/2/2015 01:23 AM
4-Methyl-2-pentanone	ND		10	µg/L	10	9/2/2015 01:23 AM
Acetone	ND		100	µg/L	10	9/2/2015 01:23 AM
Benzene	ND		10	µg/L	10	9/2/2015 01:23 AM
Bromodichloromethane	ND		10	µg/L	10	9/2/2015 01:23 AM
Bromoform	ND		10	µg/L	10	9/2/2015 01:23 AM
Bromomethane	ND		10	µg/L	10	9/2/2015 01:23 AM
Carbon disulfide	ND		10	µg/L	10	9/2/2015 01:23 AM
Carbon tetrachloride	ND		10	µg/L	10	9/2/2015 01:23 AM
Chlorobenzene	ND		10	µg/L	10	9/2/2015 01:23 AM
Chloroethane	ND		10	µg/L	10	9/2/2015 01:23 AM
Chloroform	ND		10	µg/L	10	9/2/2015 01:23 AM
Chloromethane	ND		10	µg/L	10	9/2/2015 01:23 AM
cis-1,2-Dichloroethene	3,400		100	µg/L	100	9/2/2015 02:39 PM
cis-1,3-Dichloropropene	ND		10	µg/L	10	9/2/2015 01:23 AM
Dibromochloromethane	ND		10	µg/L	10	9/2/2015 01:23 AM
Ethylbenzene	ND		10	µg/L	10	9/2/2015 01:23 AM
m,p-Xylene	ND		20	µg/L	10	9/2/2015 01:23 AM
Methylene chloride	ND		50	µg/L	10	9/2/2015 01:23 AM
o-Xylene	ND		10	µg/L	10	9/2/2015 01:23 AM
Styrene	ND		10	µg/L	10	9/2/2015 01:23 AM
Tetrachloroethene	ND		10	µg/L	10	9/2/2015 01:23 AM
Toluene	ND		10	µg/L	10	9/2/2015 01:23 AM
trans-1,2-Dichloroethene	16		10	µg/L	10	9/2/2015 01:23 AM
trans-1,3-Dichloropropene	ND		10	µg/L	10	9/2/2015 01:23 AM
Trichloroethene	ND		10	µg/L	10	9/2/2015 01:23 AM
Vinyl chloride	870		100	µg/L	100	9/2/2015 02:39 PM

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

ALS Group USA, Corp

Date: 16-Sep-15

Client: AMEC Foster Wheeler

Project: Textron/Torx Rochester, IN 3359-14-1022

Work Order: 15081601

Sample ID: ATR-MW13-G082615

Lab ID: 15081601-01

Collection Date: 8/26/2015 01:50 PM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Xylenes, Total	ND		30	µg/L	10	9/2/2015 01:23 AM
Surr: 1,2-Dichloroethane-d4	107		75-120	%REC	10	9/2/2015 01:23 AM
Surr: 1,2-Dichloroethane-d4	108		75-120	%REC	100	9/2/2015 02:39 PM
Surr: 4-Bromofluorobenzene	93.2		80-110	%REC	10	9/2/2015 01:23 AM
Surr: 4-Bromofluorobenzene	91.0		80-110	%REC	100	9/2/2015 02:39 PM
Surr: Dibromofluoromethane	102		85-115	%REC	10	9/2/2015 01:23 AM
Surr: Dibromofluoromethane	101		85-115	%REC	100	9/2/2015 02:39 PM
Surr: Toluene-d8	103		85-110	%REC	100	9/2/2015 02:39 PM
Surr: Toluene-d8	104		85-110	%REC	10	9/2/2015 01:23 AM
ALKALINITY			A2320 B-97			Analyst: JB
Alkalinity, Bicarbonate (as CaCO3)	310		10	mg/L	1	9/4/2015 01:35 PM
Alkalinity, Total (as CaCO3)	310		10	mg/L	1	9/4/2015 01:35 PM
ANIONS BY ION CHROMATOGRAPHY			SW9056A			Analyst: EE
Chloride	36		2.0	mg/L	2	9/1/2015 04:32 PM
Sulfate	18		2.0	mg/L	2	9/1/2015 04:32 PM
NITROGEN, NITRATE-NITRITE			E353.2 R2.0			Analyst: JJG
Nitrogen, Nitrate-Nitrite	ND		0.020	mg/L	1	9/1/2015 11:43 AM
ORGANIC CARBON, TOTAL			SW9060A			Analyst: JJG
Organic Carbon, Total	120		10	mg/L	20	9/1/2015 12:30 PM

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

ALS Group USA, Corp

Date: 16-Sep-15

Client: AMEC Foster Wheeler

Project: Textron/Torx Rochester, IN 3359-14-1022

Work Order: 15081601

Sample ID: ATR-MW12-G082615

Lab ID: 15081601-02

Collection Date: 8/26/2015 02:40 PM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A		Prep: SW3005A / 8/31/15	Analyst: ML
Iron	5.4		0.080	mg/L	1	9/2/2015 08:04 PM
Manganese	0.44		0.0050	mg/L	1	9/2/2015 08:04 PM
VOLATILE ORGANIC COMPOUNDS			SW8260			Analyst: JNJ
1,1,1-Trichloroethane	ND		10	µg/L	10	9/1/2015 11:36 PM
1,1,2,2-Tetrachloroethane	ND		10	µg/L	10	9/1/2015 11:36 PM
1,1,2-Trichloroethane	ND		10	µg/L	10	9/1/2015 11:36 PM
1,1-Dichloroethane	ND		10	µg/L	10	9/1/2015 11:36 PM
1,1-Dichloroethene	ND		10	µg/L	10	9/1/2015 11:36 PM
1,2-Dichloroethane	ND		10	µg/L	10	9/1/2015 11:36 PM
1,2-Dichloropropane	ND		10	µg/L	10	9/1/2015 11:36 PM
2-Butanone	ND		50	µg/L	10	9/1/2015 11:36 PM
2-Hexanone	ND		50	µg/L	10	9/1/2015 11:36 PM
4-Methyl-2-pentanone	ND		10	µg/L	10	9/1/2015 11:36 PM
Acetone	ND		100	µg/L	10	9/1/2015 11:36 PM
Benzene	ND		10	µg/L	10	9/1/2015 11:36 PM
Bromodichloromethane	ND		10	µg/L	10	9/1/2015 11:36 PM
Bromoform	ND		10	µg/L	10	9/1/2015 11:36 PM
Bromomethane	ND		10	µg/L	10	9/1/2015 11:36 PM
Carbon disulfide	ND		10	µg/L	10	9/1/2015 11:36 PM
Carbon tetrachloride	ND		10	µg/L	10	9/1/2015 11:36 PM
Chlorobenzene	ND		10	µg/L	10	9/1/2015 11:36 PM
Chloroethane	ND		10	µg/L	10	9/1/2015 11:36 PM
Chloroform	ND		10	µg/L	10	9/1/2015 11:36 PM
Chloromethane	ND		10	µg/L	10	9/1/2015 11:36 PM
cis-1,2-Dichloroethene	2,900		500	µg/L	500	8/31/2015 06:21 PM
cis-1,3-Dichloropropene	ND		10	µg/L	10	9/1/2015 11:36 PM
Dibromochloromethane	ND		10	µg/L	10	9/1/2015 11:36 PM
Ethylbenzene	ND		10	µg/L	10	9/1/2015 11:36 PM
m,p-Xylene	ND		20	µg/L	10	9/1/2015 11:36 PM
Methylene chloride	ND		50	µg/L	10	9/1/2015 11:36 PM
o-Xylene	ND		10	µg/L	10	9/1/2015 11:36 PM
Styrene	ND		10	µg/L	10	9/1/2015 11:36 PM
Tetrachloroethene	ND		10	µg/L	10	9/1/2015 11:36 PM
Toluene	ND		10	µg/L	10	9/1/2015 11:36 PM
trans-1,2-Dichloroethene	14		10	µg/L	10	9/1/2015 11:36 PM
trans-1,3-Dichloropropene	ND		10	µg/L	10	9/1/2015 11:36 PM
Trichloroethene	ND		10	µg/L	10	9/1/2015 11:36 PM
Vinyl chloride	560		10	µg/L	10	9/1/2015 11:36 PM

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

ALS Group USA, Corp

Date: 16-Sep-15

Client: AMEC Foster Wheeler
Project: Textron/Torx Rochester, IN 3359-14-1022
Sample ID: ATR-MW12-G082615
Collection Date: 8/26/2015 02:40 PM

Work Order: 15081601
Lab ID: 15081601-02
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Xylenes, Total	ND		30	µg/L	10	9/1/2015 11:36 PM
Surr: 1,2-Dichloroethane-d4	103		75-120	%REC	500	8/31/2015 06:21 PM
Surr: 1,2-Dichloroethane-d4	108		75-120	%REC	10	9/1/2015 11:36 PM
Surr: 4-Bromofluorobenzene	98.1		80-110	%REC	500	8/31/2015 06:21 PM
Surr: 4-Bromofluorobenzene	92.0		80-110	%REC	10	9/1/2015 11:36 PM
Surr: Dibromofluoromethane	105		85-115	%REC	500	8/31/2015 06:21 PM
Surr: Dibromofluoromethane	104		85-115	%REC	10	9/1/2015 11:36 PM
Surr: Toluene-d8	104		85-110	%REC	10	9/1/2015 11:36 PM
Surr: Toluene-d8	96.3		85-110	%REC	500	8/31/2015 06:21 PM
ALKALINITY			A2320 B-97			Analyst: JB
Alkalinity, Bicarbonate (as CaCO3)	250		10	mg/L	1	9/4/2015 01:35 PM
Alkalinity, Total (as CaCO3)	250		10	mg/L	1	9/4/2015 01:35 PM
ANIONS BY ION CHROMATOGRAPHY			SW9056A			Analyst: EE
Chloride	23		2.0	mg/L	2	9/1/2015 04:52 PM
Sulfate	1.7		1.0	mg/L	1	9/3/2015 09:53 AM
NITROGEN, NITRATE-NITRITE			E353.2 R2.0			Analyst: JJG
Nitrogen, Nitrate-Nitrite	0.022		0.020	mg/L	1	9/1/2015 11:43 AM
ORGANIC CARBON, TOTAL			SW9060A			Analyst: JJG
Organic Carbon, Total	69		10	mg/L	20	9/4/2015 02:13 PM

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

ALS Group USA, Corp

Date: 16-Sep-15

Client: AMEC Foster Wheeler
Project: Textron/Torx Rochester, IN 3359-14-1022
Sample ID: ATR-MW6C-G082815
Collection Date: 8/26/2015 04:12 PM

Work Order: 15081601
Lab ID: 15081601-03
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A		Prep: SW3005A / 8/31/15	Analyst: ML
Iron	0.32		0.080	mg/L	1	9/2/2015 08:09 PM
Manganese	0.22		0.0050	mg/L	1	9/2/2015 08:09 PM
VOLATILE ORGANIC COMPOUNDS			SW8260			Analyst: JNJ
1,1,1-Trichloroethane	ND		2.0	µg/L	2	9/2/2015 12:03 PM
1,1,2,2-Tetrachloroethane	ND		2.0	µg/L	2	9/2/2015 12:03 PM
1,1,2-Trichloroethane	ND		2.0	µg/L	2	9/2/2015 12:03 PM
1,1-Dichloroethane	ND		2.0	µg/L	2	9/2/2015 12:03 PM
1,1-Dichloroethene	ND		2.0	µg/L	2	9/2/2015 12:03 PM
1,2-Dichloroethane	ND		2.0	µg/L	2	9/2/2015 12:03 PM
1,2-Dichloropropane	ND		2.0	µg/L	2	9/2/2015 12:03 PM
2-Butanone	ND		10	µg/L	2	9/2/2015 12:03 PM
2-Hexanone	ND		10	µg/L	2	9/2/2015 12:03 PM
4-Methyl-2-pentanone	ND		2.0	µg/L	2	9/2/2015 12:03 PM
Acetone	ND		20	µg/L	2	9/2/2015 12:03 PM
Benzene	ND		2.0	µg/L	2	9/2/2015 12:03 PM
Bromodichloromethane	ND		2.0	µg/L	2	9/2/2015 12:03 PM
Bromoform	ND		2.0	µg/L	2	9/2/2015 12:03 PM
Bromomethane	ND		2.0	µg/L	2	9/2/2015 12:03 PM
Carbon disulfide	ND		2.0	µg/L	2	9/2/2015 12:03 PM
Carbon tetrachloride	ND		2.0	µg/L	2	9/2/2015 12:03 PM
Chlorobenzene	ND		2.0	µg/L	2	9/2/2015 12:03 PM
Chloroethane	ND		2.0	µg/L	2	9/2/2015 12:03 PM
Chloroform	ND		2.0	µg/L	2	9/2/2015 12:03 PM
Chloromethane	ND		2.0	µg/L	2	9/2/2015 12:03 PM
cis-1,2-Dichloroethene	410		20	µg/L	20	8/31/2015 04:35 PM
cis-1,3-Dichloropropene	ND		2.0	µg/L	2	9/2/2015 12:03 PM
Dibromochloromethane	ND		2.0	µg/L	2	9/2/2015 12:03 PM
Ethylbenzene	ND		2.0	µg/L	2	9/2/2015 12:03 PM
m,p-Xylene	ND		4.0	µg/L	2	9/2/2015 12:03 PM
Methylene chloride	ND		10	µg/L	2	9/2/2015 12:03 PM
o-Xylene	ND		2.0	µg/L	2	9/2/2015 12:03 PM
Styrene	ND		2.0	µg/L	2	9/2/2015 12:03 PM
Tetrachloroethene	ND		2.0	µg/L	2	9/2/2015 12:03 PM
Toluene	ND		2.0	µg/L	2	9/2/2015 12:03 PM
trans-1,2-Dichloroethene	ND		2.0	µg/L	2	9/2/2015 12:03 PM
trans-1,3-Dichloropropene	ND		2.0	µg/L	2	9/2/2015 12:03 PM
Trichloroethene	ND		2.0	µg/L	2	9/2/2015 12:03 PM
Vinyl chloride	66		2.0	µg/L	2	9/2/2015 12:03 PM

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

ALS Group USA, Corp

Date: 16-Sep-15

Client: AMEC Foster Wheeler
Project: Textron/Torx Rochester, IN 3359-14-1022
Sample ID: ATR-MW6C-G082815
Collection Date: 8/26/2015 04:12 PM

Work Order: 15081601
Lab ID: 15081601-03
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Xylenes, Total	ND		6.0	µg/L	2	9/2/2015 12:03 PM
Surr: 1,2-Dichloroethane-d4	99.9		75-120	%REC	20	8/31/2015 04:35 PM
Surr: 1,2-Dichloroethane-d4	106		75-120	%REC	2	9/2/2015 12:03 PM
Surr: 4-Bromofluorobenzene	98.2		80-110	%REC	20	8/31/2015 04:35 PM
Surr: 4-Bromofluorobenzene	92.8		80-110	%REC	2	9/2/2015 12:03 PM
Surr: Dibromofluoromethane	104		85-115	%REC	20	8/31/2015 04:35 PM
Surr: Dibromofluoromethane	103		85-115	%REC	2	9/2/2015 12:03 PM
Surr: Toluene-d8	104		85-110	%REC	2	9/2/2015 12:03 PM
Surr: Toluene-d8	93.2		85-110	%REC	20	8/31/2015 04:35 PM
ALKALINITY			A2320 B-97			Analyst: JB
Alkalinity, Bicarbonate (as CaCO3)	230		10	mg/L	1	9/4/2015 01:35 PM
Alkalinity, Total (as CaCO3)	230		10	mg/L	1	9/4/2015 01:35 PM
ANIONS BY ION CHROMATOGRAPHY			SW9056A			Analyst: EE
Chloride	21		2.0	mg/L	2	9/1/2015 05:13 PM
Sulfate	7.6		2.0	mg/L	2	9/1/2015 05:13 PM
NITROGEN, NITRATE-NITRITE			E353.2 R2.0			Analyst: JJG
Nitrogen, Nitrate-Nitrite	0.22		0.020	mg/L	1	9/1/2015 11:43 AM
ORGANIC CARBON, TOTAL			SW9060A			Analyst: JJG
Organic Carbon, Total	8.2		0.50	mg/L	1	8/29/2015 02:00 PM

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

ALS Group USA, Corp

Date: 16-Sep-15

Client: AMEC Foster Wheeler
Project: Textron/Torx Rochester, IN 3359-14-1022
Sample ID: ATR-MW82-G082615
Collection Date: 8/26/2015 05:50 PM

Work Order: 15081601
Lab ID: 15081601-04
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A		Prep: SW3005A / 8/31/15	Analyst: ML
Iron	5.8		0.080	mg/L	1	9/2/2015 09:44 PM
Manganese	7.4		0.050	mg/L	10	9/3/2015 03:27 PM
VOLATILE ORGANIC COMPOUNDS			SW8260			Analyst: JNJ
1,1,1-Trichloroethane	ND		1.0	µg/L	1	9/1/2015 07:09 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	9/1/2015 07:09 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	9/1/2015 07:09 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	9/1/2015 07:09 PM
1,1-Dichloroethene	ND		1.0	µg/L	1	9/1/2015 07:09 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	9/1/2015 07:09 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	9/1/2015 07:09 PM
2-Butanone	18		5.0	µg/L	1	9/1/2015 07:09 PM
2-Hexanone	ND		5.0	µg/L	1	9/1/2015 07:09 PM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	9/1/2015 07:09 PM
Acetone	ND		10	µg/L	1	9/1/2015 07:09 PM
Benzene	ND		1.0	µg/L	1	9/1/2015 07:09 PM
Bromodichloromethane	ND		1.0	µg/L	1	9/1/2015 07:09 PM
Bromoform	ND		1.0	µg/L	1	9/1/2015 07:09 PM
Bromomethane	ND		1.0	µg/L	1	9/1/2015 07:09 PM
Carbon disulfide	1.1		1.0	µg/L	1	9/1/2015 07:09 PM
Carbon tetrachloride	ND		1.0	µg/L	1	9/1/2015 07:09 PM
Chlorobenzene	ND		1.0	µg/L	1	9/1/2015 07:09 PM
Chloroethane	ND		1.0	µg/L	1	9/1/2015 07:09 PM
Chloroform	ND		1.0	µg/L	1	9/1/2015 07:09 PM
Chloromethane	ND		1.0	µg/L	1	9/1/2015 07:09 PM
cis-1,2-Dichloroethene	21		1.0	µg/L	1	9/1/2015 07:09 PM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	9/1/2015 07:09 PM
Dibromochloromethane	ND		1.0	µg/L	1	9/1/2015 07:09 PM
Ethylbenzene	ND		1.0	µg/L	1	9/1/2015 07:09 PM
m,p-Xylene	ND		2.0	µg/L	1	9/1/2015 07:09 PM
Methylene chloride	ND		5.0	µg/L	1	9/1/2015 07:09 PM
o-Xylene	ND		1.0	µg/L	1	9/1/2015 07:09 PM
Styrene	ND		1.0	µg/L	1	9/1/2015 07:09 PM
Tetrachloroethene	ND		1.0	µg/L	1	9/1/2015 07:09 PM
Toluene	ND		1.0	µg/L	1	9/1/2015 07:09 PM
trans-1,2-Dichloroethene	1.8		1.0	µg/L	1	9/1/2015 07:09 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	9/1/2015 07:09 PM
Trichloroethene	8.3		1.0	µg/L	1	9/1/2015 07:09 PM
Vinyl chloride	15		1.0	µg/L	1	9/1/2015 07:09 PM

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

ALS Group USA, Corp

Date: 16-Sep-15

Client: AMEC Foster Wheeler
Project: Textron/Torx Rochester, IN 3359-14-1022
Sample ID: ATR-MW82-G082615
Collection Date: 8/26/2015 05:50 PM

Work Order: 15081601
Lab ID: 15081601-04
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Xylenes, Total	ND		3.0	µg/L	1	9/1/2015 07:09 PM
Surr: 1,2-Dichloroethane-d4	105		75-120	%REC	1	9/1/2015 07:09 PM
Surr: 4-Bromofluorobenzene	94.4		80-110	%REC	1	9/1/2015 07:09 PM
Surr: Dibromofluoromethane	103		85-115	%REC	1	9/1/2015 07:09 PM
Surr: Toluene-d8	106		85-110	%REC	1	9/1/2015 07:09 PM
ALKALINITY			A2320 B-97			Analyst: JB
Alkalinity, Bicarbonate (as CaCO3)	990		10	mg/L	1	9/4/2015 01:35 PM
Alkalinity, Total (as CaCO3)	990		10	mg/L	1	9/4/2015 01:35 PM
ANIONS BY ION CHROMATOGRAPHY			SW9056A			Analyst: EE
Chloride	5.4		2.0	mg/L	2	9/1/2015 05:33 PM
Sulfate	3.0		2.0	mg/L	2	9/1/2015 05:33 PM
NITROGEN, NITRATE-NITRITE			E353.2 R2.0			Analyst: JJG
Nitrogen, Nitrate-Nitrite	0.021		0.020	mg/L	1	9/1/2015 11:43 AM
ORGANIC CARBON, TOTAL			SW9060A			Analyst: JJG
Organic Carbon, Total	1,600		250	mg/L	500	9/4/2015 02:13 PM

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

ALS Group USA, Corp

Date: 16-Sep-15

Client: AMEC Foster Wheeler

Project: Textron/Torx Rochester, IN 3359-14-1022

Work Order: 15081601

Sample ID: ATR-EB001-G082615

Lab ID: 15081601-05

Collection Date: 8/26/2015 06:10 PM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A		Prep: SW3005A / 8/31/15	Analyst: ML
Iron	ND		0.080	mg/L	1	9/2/2015 09:49 PM
Manganese	ND		0.0050	mg/L	1	9/2/2015 09:49 PM
VOLATILE ORGANIC COMPOUNDS			SW8260			Analyst: JNJ
1,1,1-Trichloroethane	ND		1.0	µg/L	1	8/31/2015 12:39 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	8/31/2015 12:39 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	8/31/2015 12:39 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	8/31/2015 12:39 PM
1,1-Dichloroethene	ND		1.0	µg/L	1	8/31/2015 12:39 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	8/31/2015 12:39 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	8/31/2015 12:39 PM
2-Butanone	ND		5.0	µg/L	1	8/31/2015 12:39 PM
2-Hexanone	ND		5.0	µg/L	1	8/31/2015 12:39 PM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	8/31/2015 12:39 PM
Acetone	ND		10	µg/L	1	8/31/2015 12:39 PM
Benzene	ND		1.0	µg/L	1	8/31/2015 12:39 PM
Bromodichloromethane	ND		1.0	µg/L	1	8/31/2015 12:39 PM
Bromoform	ND		1.0	µg/L	1	8/31/2015 12:39 PM
Bromomethane	ND		1.0	µg/L	1	8/31/2015 12:39 PM
Carbon disulfide	ND		1.0	µg/L	1	8/31/2015 12:39 PM
Carbon tetrachloride	ND		1.0	µg/L	1	8/31/2015 12:39 PM
Chlorobenzene	ND		1.0	µg/L	1	8/31/2015 12:39 PM
Chloroethane	ND		1.0	µg/L	1	8/31/2015 12:39 PM
Chloroform	ND		1.0	µg/L	1	8/31/2015 12:39 PM
Chloromethane	ND		1.0	µg/L	1	8/31/2015 12:39 PM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	8/31/2015 12:39 PM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	8/31/2015 12:39 PM
Dibromochloromethane	ND		1.0	µg/L	1	8/31/2015 12:39 PM
Ethylbenzene	ND		1.0	µg/L	1	8/31/2015 12:39 PM
m,p-Xylene	ND		2.0	µg/L	1	8/31/2015 12:39 PM
Methylene chloride	ND		5.0	µg/L	1	8/31/2015 12:39 PM
o-Xylene	ND		1.0	µg/L	1	8/31/2015 12:39 PM
Styrene	ND		1.0	µg/L	1	8/31/2015 12:39 PM
Tetrachloroethene	ND		1.0	µg/L	1	8/31/2015 12:39 PM
Toluene	ND		1.0	µg/L	1	8/31/2015 12:39 PM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	8/31/2015 12:39 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	8/31/2015 12:39 PM
Trichloroethene	ND		1.0	µg/L	1	8/31/2015 12:39 PM
Vinyl chloride	ND		1.0	µg/L	1	8/31/2015 12:39 PM

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

ALS Group USA, Corp

Date: 16-Sep-15

Client: AMEC Foster Wheeler
Project: Textron/Torx Rochester, IN 3359-14-1022
Sample ID: ATR-EB001-G082615
Collection Date: 8/26/2015 06:10 PM

Work Order: 15081601
Lab ID: 15081601-05
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Xylenes, Total	ND		3.0	µg/L	1	8/31/2015 12:39 PM
Surr: 1,2-Dichloroethane-d4	102		75-120	%REC	1	8/31/2015 12:39 PM
Surr: 4-Bromofluorobenzene	97.1		80-110	%REC	1	8/31/2015 12:39 PM
Surr: Dibromofluoromethane	103		85-115	%REC	1	8/31/2015 12:39 PM
Surr: Toluene-d8	96.2		85-110	%REC	1	8/31/2015 12:39 PM
ALKALINITY			A2320 B-97			Analyst: JB
Alkalinity, Bicarbonate (as CaCO3)	ND		10	mg/L	1	9/4/2015 01:35 PM
Alkalinity, Total (as CaCO3)	ND		10	mg/L	1	9/4/2015 01:35 PM
ANIONS BY ION CHROMATOGRAPHY			SW9056A			Analyst: EE
Chloride	ND		1.0	mg/L	1	9/1/2015 05:53 PM
Sulfate	ND		1.0	mg/L	1	9/1/2015 05:53 PM
NITROGEN, NITRATE-NITRITE			E353.2 R2.0			Analyst: JJG
Nitrogen, Nitrate-Nitrite	ND		0.020	mg/L	1	9/1/2015 11:43 AM
ORGANIC CARBON, TOTAL			SW9060A			Analyst: JJG
Organic Carbon, Total	1.2		0.50	mg/L	1	8/29/2015 02:00 PM

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

ALS Group USA, Corp

Date: 16-Sep-15

Client: AMEC Foster Wheeler
Project: Textron/Torx Rochester, IN 3359-14-1022
Sample ID: ATR-MW20(51)-G082715
Collection Date: 8/27/2015 11:38 AM

Work Order: 15081601
Lab ID: 15081601-06
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A		Prep: SW3005A / 8/31/15	Analyst: ML
Iron	46		0.080	mg/L	1	9/2/2015 09:54 PM
Manganese	3.5		0.050	mg/L	10	9/3/2015 03:32 PM
VOLATILE ORGANIC COMPOUNDS			SW8260			Analyst: JNJ
1,1,1-Trichloroethane	ND		1.0	µg/L	1	9/1/2015 07:36 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	9/1/2015 07:36 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	9/1/2015 07:36 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	9/1/2015 07:36 PM
1,1-Dichloroethene	ND		1.0	µg/L	1	9/1/2015 07:36 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	9/1/2015 07:36 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	9/1/2015 07:36 PM
2-Butanone	3,600		500	µg/L	100	8/31/2015 08:05 PM
2-Hexanone	ND		5.0	µg/L	1	9/1/2015 07:36 PM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	9/1/2015 07:36 PM
Acetone	11		10	µg/L	1	9/1/2015 07:36 PM
Benzene	ND		1.0	µg/L	1	9/1/2015 07:36 PM
Bromodichloromethane	ND		1.0	µg/L	1	9/1/2015 07:36 PM
Bromoform	ND		1.0	µg/L	1	9/1/2015 07:36 PM
Bromomethane	ND		1.0	µg/L	1	9/1/2015 07:36 PM
Carbon disulfide	ND		1.0	µg/L	1	9/1/2015 07:36 PM
Carbon tetrachloride	ND		1.0	µg/L	1	9/1/2015 07:36 PM
Chlorobenzene	ND		1.0	µg/L	1	9/1/2015 07:36 PM
Chloroethane	ND		1.0	µg/L	1	9/1/2015 07:36 PM
Chloroform	ND		1.0	µg/L	1	9/1/2015 07:36 PM
Chloromethane	ND		1.0	µg/L	1	9/1/2015 07:36 PM
cis-1,2-Dichloroethene	350		10	µg/L	10	8/31/2015 08:31 PM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	9/1/2015 07:36 PM
Dibromochloromethane	ND		1.0	µg/L	1	9/1/2015 07:36 PM
Ethylbenzene	ND		1.0	µg/L	1	9/1/2015 07:36 PM
m,p-Xylene	ND		2.0	µg/L	1	9/1/2015 07:36 PM
Methylene chloride	ND		5.0	µg/L	1	9/1/2015 07:36 PM
o-Xylene	ND		1.0	µg/L	1	9/1/2015 07:36 PM
Styrene	ND		1.0	µg/L	1	9/1/2015 07:36 PM
Tetrachloroethene	ND		1.0	µg/L	1	9/1/2015 07:36 PM
Toluene	ND		1.0	µg/L	1	9/1/2015 07:36 PM
trans-1,2-Dichloroethene	1.7		1.0	µg/L	1	9/1/2015 07:36 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	9/1/2015 07:36 PM
Trichloroethene	ND		1.0	µg/L	1	9/1/2015 07:36 PM
Vinyl chloride	210		10	µg/L	10	8/31/2015 08:31 PM

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

ALS Group USA, Corp

Date: 16-Sep-15

Client: AMEC Foster Wheeler
Project: Textron/Torx Rochester, IN 3359-14-1022
Sample ID: ATR-MW20(51)-G082715
Collection Date: 8/27/2015 11:38 AM

Work Order: 15081601
Lab ID: 15081601-06
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Xylenes, Total	ND		3.0	µg/L	1	9/1/2015 07:36 PM
Surr: 1,2-Dichloroethane-d4	106		75-120	%REC	1	9/1/2015 07:36 PM
Surr: 1,2-Dichloroethane-d4	101		75-120	%REC	10	8/31/2015 08:31 PM
Surr: 1,2-Dichloroethane-d4	103		75-120	%REC	100	8/31/2015 08:05 PM
Surr: 4-Bromofluorobenzene	99.3		80-110	%REC	100	8/31/2015 08:05 PM
Surr: 4-Bromofluorobenzene	95.7		80-110	%REC	10	8/31/2015 08:31 PM
Surr: 4-Bromofluorobenzene	94.5		80-110	%REC	1	9/1/2015 07:36 PM
Surr: Dibromofluoromethane	104		85-115	%REC	10	8/31/2015 08:31 PM
Surr: Dibromofluoromethane	104		85-115	%REC	1	9/1/2015 07:36 PM
Surr: Dibromofluoromethane	104		85-115	%REC	100	8/31/2015 08:05 PM
Surr: Toluene-d8	103		85-110	%REC	1	9/1/2015 07:36 PM
Surr: Toluene-d8	96.0		85-110	%REC	100	8/31/2015 08:05 PM
Surr: Toluene-d8	94.9		85-110	%REC	10	8/31/2015 08:31 PM
ALKALINITY			A2320 B-97			Analyst: JB
Alkalinity, Bicarbonate (as CaCO3)	740		10	mg/L	1	9/4/2015 01:35 PM
Alkalinity, Total (as CaCO3)	740		10	mg/L	1	9/4/2015 01:35 PM
ANIONS BY ION CHROMATOGRAPHY			SW9056A			Analyst: EE
Chloride	6.5		1.0	mg/L	1	9/1/2015 06:13 PM
Sulfate	ND		1.0	mg/L	1	9/1/2015 06:13 PM
NITROGEN, NITRATE-NITRITE			E353.2 R2.0			Analyst: JJG
Nitrogen, Nitrate-Nitrite	0.080		0.020	mg/L	1	9/1/2015 11:43 AM
ORGANIC CARBON, TOTAL			SW9060A			Analyst: JJG
Organic Carbon, Total	740		50	mg/L	100	9/4/2015 02:13 PM

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

ALS Group USA, Corp

Date: 16-Sep-15

Client: AMEC Foster Wheeler
Project: Textron/Torx Rochester, IN 3359-14-1022
Sample ID: ATR-MW20(35)-G082715
Collection Date: 8/27/2015 12:40 PM

Work Order: 15081601
Lab ID: 15081601-07
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A		Prep: SW3005A / 8/31/15	Analyst: ML
Iron	2.6		0.080	mg/L	1	9/2/2015 09:59 PM
Manganese	0.37		0.0050	mg/L	1	9/2/2015 09:59 PM
VOLATILE ORGANIC COMPOUNDS			SW8260			Analyst: JNJ
1,1,1-Trichloroethane	ND		1.0	µg/L	1	8/31/2015 01:31 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	8/31/2015 01:31 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	8/31/2015 01:31 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	8/31/2015 01:31 PM
1,1-Dichloroethene	ND		1.0	µg/L	1	8/31/2015 01:31 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	8/31/2015 01:31 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	8/31/2015 01:31 PM
2-Butanone	ND		5.0	µg/L	1	9/4/2015 07:44 PM
2-Hexanone	ND		5.0	µg/L	1	8/31/2015 01:31 PM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	8/31/2015 01:31 PM
Acetone	ND		10	µg/L	1	8/31/2015 01:31 PM
Benzene	ND		1.0	µg/L	1	8/31/2015 01:31 PM
Bromodichloromethane	ND		1.0	µg/L	1	8/31/2015 01:31 PM
Bromoform	ND		1.0	µg/L	1	8/31/2015 01:31 PM
Bromomethane	ND		1.0	µg/L	1	8/31/2015 01:31 PM
Carbon disulfide	ND		1.0	µg/L	1	8/31/2015 01:31 PM
Carbon tetrachloride	ND		1.0	µg/L	1	8/31/2015 01:31 PM
Chlorobenzene	ND		1.0	µg/L	1	8/31/2015 01:31 PM
Chloroethane	ND		1.0	µg/L	1	8/31/2015 01:31 PM
Chloroform	ND		1.0	µg/L	1	8/31/2015 01:31 PM
Chloromethane	ND		1.0	µg/L	1	8/31/2015 01:31 PM
cis-1,2-Dichloroethene	180		10	µg/L	10	9/2/2015 01:49 AM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	8/31/2015 01:31 PM
Dibromochloromethane	ND		1.0	µg/L	1	8/31/2015 01:31 PM
Ethylbenzene	ND		1.0	µg/L	1	8/31/2015 01:31 PM
m,p-Xylene	ND		2.0	µg/L	1	8/31/2015 01:31 PM
Methylene chloride	ND		5.0	µg/L	1	8/31/2015 01:31 PM
o-Xylene	ND		1.0	µg/L	1	8/31/2015 01:31 PM
Styrene	ND		1.0	µg/L	1	8/31/2015 01:31 PM
Tetrachloroethene	1.8		1.0	µg/L	1	8/31/2015 01:31 PM
Toluene	ND		1.0	µg/L	1	8/31/2015 01:31 PM
trans-1,2-Dichloroethene	1.4		1.0	µg/L	1	8/31/2015 01:31 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	8/31/2015 01:31 PM
Trichloroethene	3.5		1.0	µg/L	1	8/31/2015 01:31 PM
Vinyl chloride	200		10	µg/L	10	9/2/2015 01:49 AM

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

ALS Group USA, Corp

Date: 16-Sep-15

Client: AMEC Foster Wheeler
Project: Textron/Torx Rochester, IN 3359-14-1022
Sample ID: ATR-MW20(35)-G082715
Collection Date: 8/27/2015 12:40 PM

Work Order: 15081601
Lab ID: 15081601-07
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Xylenes, Total	ND		3.0	µg/L	1	8/31/2015 01:31 PM
Surr: 1,2-Dichloroethane-d4	101		75-120	%REC	1	9/4/2015 07:44 PM
Surr: 1,2-Dichloroethane-d4	109		75-120	%REC	10	9/2/2015 01:49 AM
Surr: 1,2-Dichloroethane-d4	101		75-120	%REC	1	8/31/2015 01:31 PM
Surr: 4-Bromofluorobenzene	101		80-110	%REC	1	8/31/2015 01:31 PM
Surr: 4-Bromofluorobenzene	93.0		80-110	%REC	10	9/2/2015 01:49 AM
Surr: 4-Bromofluorobenzene	98.6		80-110	%REC	1	9/4/2015 07:44 PM
Surr: Dibromofluoromethane	103		85-115	%REC	10	9/2/2015 01:49 AM
Surr: Dibromofluoromethane	101		85-115	%REC	1	9/4/2015 07:44 PM
Surr: Dibromofluoromethane	101		85-115	%REC	1	8/31/2015 01:31 PM
Surr: Toluene-d8	98.5		85-110	%REC	1	9/4/2015 07:44 PM
Surr: Toluene-d8	97.8		85-110	%REC	1	8/31/2015 01:31 PM
Surr: Toluene-d8	102		85-110	%REC	10	9/2/2015 01:49 AM
ALKALINITY			A2320 B-97			Analyst: JB
Alkalinity, Bicarbonate (as CaCO3)	320		10	mg/L	1	9/4/2015 01:35 PM
Alkalinity, Total (as CaCO3)	320		10	mg/L	1	9/4/2015 01:35 PM
ANIONS BY ION CHROMATOGRAPHY			SW9056A			Analyst: EE
Chloride	18		1.0	mg/L	1	9/1/2015 07:14 PM
Sulfate	3.1		1.0	mg/L	1	9/1/2015 07:14 PM
NITROGEN, NITRATE-NITRITE			E353.2 R2.0			Analyst: JJG
Nitrogen, Nitrate-Nitrite	ND		0.020	mg/L	1	9/1/2015 11:43 AM
ORGANIC CARBON, TOTAL			SW9060A			Analyst: JJG
Organic Carbon, Total	84		10	mg/L	20	9/4/2015 02:13 PM

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

ALS Group USA, Corp

Date: 16-Sep-15

Client: AMEC Foster Wheeler
Project: Textron/Torx Rochester, IN 3359-14-1022
Sample ID: ATR-MW20(35)-G082715R
Collection Date: 8/27/2015 12:40 PM

Work Order: 15081601
Lab ID: 15081601-08
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A		Prep: SW3005A / 8/31/15	Analyst: ML
Iron	2.6		0.080	mg/L	1	9/2/2015 10:04 PM
Manganese	0.37		0.0050	mg/L	1	9/2/2015 10:04 PM
VOLATILE ORGANIC COMPOUNDS			SW8260			Analyst: JNJ
1,1,1-Trichloroethane	ND		1.0	µg/L	1	8/31/2015 01:57 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	8/31/2015 01:57 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	8/31/2015 01:57 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	8/31/2015 01:57 PM
1,1-Dichloroethene	ND		1.0	µg/L	1	8/31/2015 01:57 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	8/31/2015 01:57 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	8/31/2015 01:57 PM
2-Butanone	ND		5.0	µg/L	1	9/4/2015 08:08 PM
2-Hexanone	ND		5.0	µg/L	1	8/31/2015 01:57 PM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	8/31/2015 01:57 PM
Acetone	ND		10	µg/L	1	8/31/2015 01:57 PM
Benzene	ND		1.0	µg/L	1	8/31/2015 01:57 PM
Bromodichloromethane	ND		1.0	µg/L	1	8/31/2015 01:57 PM
Bromoform	ND		1.0	µg/L	1	8/31/2015 01:57 PM
Bromomethane	ND		1.0	µg/L	1	8/31/2015 01:57 PM
Carbon disulfide	ND		1.0	µg/L	1	8/31/2015 01:57 PM
Carbon tetrachloride	ND		1.0	µg/L	1	8/31/2015 01:57 PM
Chlorobenzene	ND		1.0	µg/L	1	8/31/2015 01:57 PM
Chloroethane	ND		1.0	µg/L	1	8/31/2015 01:57 PM
Chloroform	ND		1.0	µg/L	1	8/31/2015 01:57 PM
Chloromethane	ND		1.0	µg/L	1	8/31/2015 01:57 PM
cis-1,2-Dichloroethene	180		10	µg/L	10	9/2/2015 02:16 AM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	8/31/2015 01:57 PM
Dibromochloromethane	ND		1.0	µg/L	1	8/31/2015 01:57 PM
Ethylbenzene	ND		1.0	µg/L	1	8/31/2015 01:57 PM
m,p-Xylene	ND		2.0	µg/L	1	8/31/2015 01:57 PM
Methylene chloride	ND		5.0	µg/L	1	8/31/2015 01:57 PM
o-Xylene	ND		1.0	µg/L	1	8/31/2015 01:57 PM
Styrene	ND		1.0	µg/L	1	8/31/2015 01:57 PM
Tetrachloroethene	1.8		1.0	µg/L	1	8/31/2015 01:57 PM
Toluene	ND		1.0	µg/L	1	8/31/2015 01:57 PM
trans-1,2-Dichloroethene	1.2		1.0	µg/L	1	8/31/2015 01:57 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	8/31/2015 01:57 PM
Trichloroethene	3.5		1.0	µg/L	1	8/31/2015 01:57 PM
Vinyl chloride	250		10	µg/L	10	9/2/2015 02:16 AM

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

ALS Group USA, Corp

Date: 16-Sep-15

Client: AMEC Foster Wheeler
Project: Textron/Torx Rochester, IN 3359-14-1022
Sample ID: ATR-MW20(35)-G082715R
Collection Date: 8/27/2015 12:40 PM

Work Order: 15081601
Lab ID: 15081601-08
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Xylenes, Total	ND		3.0	µg/L	1	8/31/2015 01:57 PM
Surr: 1,2-Dichloroethane-d4	102		75-120	%REC	1	9/4/2015 08:08 PM
Surr: 1,2-Dichloroethane-d4	108		75-120	%REC	10	9/2/2015 02:16 AM
Surr: 1,2-Dichloroethane-d4	101		75-120	%REC	1	8/31/2015 01:57 PM
Surr: 4-Bromofluorobenzene	97.8		80-110	%REC	1	8/31/2015 01:57 PM
Surr: 4-Bromofluorobenzene	92.0		80-110	%REC	10	9/2/2015 02:16 AM
Surr: 4-Bromofluorobenzene	104		80-110	%REC	1	9/4/2015 08:08 PM
Surr: Dibromofluoromethane	104		85-115	%REC	10	9/2/2015 02:16 AM
Surr: Dibromofluoromethane	100		85-115	%REC	1	9/4/2015 08:08 PM
Surr: Dibromofluoromethane	102		85-115	%REC	1	8/31/2015 01:57 PM
Surr: Toluene-d8	99.5		85-110	%REC	1	9/4/2015 08:08 PM
Surr: Toluene-d8	96.2		85-110	%REC	1	8/31/2015 01:57 PM
Surr: Toluene-d8	103		85-110	%REC	10	9/2/2015 02:16 AM
ALKALINITY			A2320 B-97			Analyst: JB
Alkalinity, Bicarbonate (as CaCO3)	320		10	mg/L	1	9/4/2015 01:35 PM
Alkalinity, Total (as CaCO3)	320		10	mg/L	1	9/4/2015 01:35 PM
ANIONS BY ION CHROMATOGRAPHY			SW9056A			Analyst: EE
Chloride	18		1.0	mg/L	1	9/1/2015 07:34 PM
Sulfate	3.3		1.0	mg/L	1	9/1/2015 07:34 PM
NITROGEN, NITRATE-NITRITE			E353.2 R2.0			Analyst: JJG
Nitrogen, Nitrate-Nitrite	ND		0.020	mg/L	1	9/1/2015 11:43 AM
ORGANIC CARBON, TOTAL			SW9060A			Analyst: JJG
Organic Carbon, Total	88		10	mg/L	20	9/4/2015 02:13 PM

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

ALS Group USA, Corp

Date: 16-Sep-15

Client: AMEC Foster Wheeler
Project: Textron/Torx Rochester, IN 3359-14-1022
Sample ID: ATR-MW62-G082715
Collection Date: 8/27/2015 01:55 PM

Work Order: 15081601
Lab ID: 15081601-09
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A		Prep: SW3005A / 8/31/15	Analyst: ML
Iron	3.9		0.080	mg/L	1	9/2/2015 10:09 PM
Manganese	2.9		0.050	mg/L	10	9/3/2015 03:37 PM
VOLATILE ORGANIC COMPOUNDS			SW8260			Analyst: JNJ
1,1,1-Trichloroethane	ND		20	µg/L	20	9/2/2015 02:42 AM
1,1,2,2-Tetrachloroethane	ND		20	µg/L	20	9/2/2015 02:42 AM
1,1,2-Trichloroethane	ND		20	µg/L	20	9/2/2015 02:42 AM
1,1-Dichloroethane	ND		20	µg/L	20	9/2/2015 02:42 AM
1,1-Dichloroethene	ND		20	µg/L	20	9/2/2015 02:42 AM
1,2-Dichloroethane	ND		20	µg/L	20	9/2/2015 02:42 AM
1,2-Dichloropropane	ND		20	µg/L	20	9/2/2015 02:42 AM
2-Butanone	ND		100	µg/L	20	9/2/2015 02:42 AM
2-Hexanone	ND		100	µg/L	20	9/2/2015 02:42 AM
4-Methyl-2-pentanone	ND		20	µg/L	20	9/2/2015 02:42 AM
Acetone	ND		200	µg/L	20	9/2/2015 02:42 AM
Benzene	ND		20	µg/L	20	9/2/2015 02:42 AM
Bromodichloromethane	ND		20	µg/L	20	9/2/2015 02:42 AM
Bromoform	ND		20	µg/L	20	9/2/2015 02:42 AM
Bromomethane	ND		20	µg/L	20	9/2/2015 02:42 AM
Carbon disulfide	ND		20	µg/L	20	9/2/2015 02:42 AM
Carbon tetrachloride	ND		20	µg/L	20	9/2/2015 02:42 AM
Chlorobenzene	ND		20	µg/L	20	9/2/2015 02:42 AM
Chloroethane	ND		20	µg/L	20	9/2/2015 02:42 AM
Chloroform	ND		20	µg/L	20	9/2/2015 02:42 AM
Chloromethane	ND		20	µg/L	20	9/2/2015 02:42 AM
cis-1,2-Dichloroethene	5,600		200	µg/L	200	8/31/2015 05:28 PM
cis-1,3-Dichloropropene	ND		20	µg/L	20	9/2/2015 02:42 AM
Dibromochloromethane	ND		20	µg/L	20	9/2/2015 02:42 AM
Ethylbenzene	ND		20	µg/L	20	9/2/2015 02:42 AM
m,p-Xylene	ND		40	µg/L	20	9/2/2015 02:42 AM
Methylene chloride	ND		100	µg/L	20	9/2/2015 02:42 AM
o-Xylene	ND		20	µg/L	20	9/2/2015 02:42 AM
Styrene	ND		20	µg/L	20	9/2/2015 02:42 AM
Tetrachloroethene	ND		20	µg/L	20	9/2/2015 02:42 AM
Toluene	ND		20	µg/L	20	9/2/2015 02:42 AM
trans-1,2-Dichloroethene	21		20	µg/L	20	9/2/2015 02:42 AM
trans-1,3-Dichloropropene	ND		20	µg/L	20	9/2/2015 02:42 AM
Trichloroethene	ND		20	µg/L	20	9/2/2015 02:42 AM
Vinyl chloride	1,600		200	µg/L	200	8/31/2015 05:28 PM

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

ALS Group USA, Corp

Date: 16-Sep-15

Client: AMEC Foster Wheeler
Project: Textron/Torx Rochester, IN 3359-14-1022
Sample ID: ATR-MW62-G082715
Collection Date: 8/27/2015 01:55 PM

Work Order: 15081601
Lab ID: 15081601-09
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Xylenes, Total	ND		60	µg/L	20	9/2/2015 02:42 AM
Surr: 1,2-Dichloroethane-d4	104		75-120	%REC	200	8/31/2015 05:28 PM
Surr: 1,2-Dichloroethane-d4	106		75-120	%REC	20	9/2/2015 02:42 AM
Surr: 4-Bromofluorobenzene	98.7		80-110	%REC	200	8/31/2015 05:28 PM
Surr: 4-Bromofluorobenzene	91.8		80-110	%REC	20	9/2/2015 02:42 AM
Surr: Dibromofluoromethane	103		85-115	%REC	200	8/31/2015 05:28 PM
Surr: Dibromofluoromethane	101		85-115	%REC	20	9/2/2015 02:42 AM
Surr: Toluene-d8	103		85-110	%REC	20	9/2/2015 02:42 AM
Surr: Toluene-d8	95.4		85-110	%REC	200	8/31/2015 05:28 PM
ALKALINITY			A2320 B-97			Analyst: JB
Alkalinity, Bicarbonate (as CaCO3)	300		10	mg/L	1	9/4/2015 01:35 PM
Alkalinity, Total (as CaCO3)	300		10	mg/L	1	9/4/2015 01:35 PM
ANIONS BY ION CHROMATOGRAPHY			SW9056A			Analyst: EE
Chloride	40		5.0	mg/L	5	9/3/2015 10:33 AM
Sulfate	1.1		1.0	mg/L	1	9/3/2015 10:13 AM
NITROGEN, NITRATE-NITRITE			E353.2 R2.0			Analyst: JJG
Nitrogen, Nitrate-Nitrite	0.10		0.020	mg/L	1	9/1/2015 11:43 AM
ORGANIC CARBON, TOTAL			SW9060A			Analyst: JJG
Organic Carbon, Total	39		5.0	mg/L	10	9/4/2015 02:13 PM

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

ALS Group USA, Corp

Date: 16-Sep-15

Client: AMEC Foster Wheeler
Project: Textron/Torx Rochester, IN 3359-14-1022
Sample ID: ATR-OW1(D)-G082715
Collection Date: 8/27/2015 03:49 PM

Work Order: 15081601
Lab ID: 15081601-10
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A		Prep: SW3005A / 8/31/15	Analyst: ML
Iron	13		0.080	mg/L	1	9/2/2015 10:14 PM
Manganese	0.86		0.0050	mg/L	1	9/2/2015 10:14 PM
VOLATILE ORGANIC COMPOUNDS			SW8260			Analyst: JNJ
1,1,1-Trichloroethane	ND		1.0	µg/L	1	9/2/2015 03:09 AM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	9/2/2015 03:09 AM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	9/2/2015 03:09 AM
1,1-Dichloroethane	ND		1.0	µg/L	1	9/2/2015 03:09 AM
1,1-Dichloroethene	ND		1.0	µg/L	1	9/2/2015 03:09 AM
1,2-Dichloroethane	ND		1.0	µg/L	1	9/2/2015 03:09 AM
1,2-Dichloropropane	ND		1.0	µg/L	1	9/2/2015 03:09 AM
2-Butanone	34		5.0	µg/L	1	9/2/2015 03:09 AM
2-Hexanone	ND		5.0	µg/L	1	9/2/2015 03:09 AM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	9/2/2015 03:09 AM
Acetone	ND		10	µg/L	1	9/2/2015 03:09 AM
Benzene	ND		1.0	µg/L	1	9/2/2015 03:09 AM
Bromodichloromethane	ND		1.0	µg/L	1	9/2/2015 03:09 AM
Bromoform	ND		1.0	µg/L	1	9/2/2015 03:09 AM
Bromomethane	ND		1.0	µg/L	1	9/2/2015 03:09 AM
Carbon disulfide	1.6		1.0	µg/L	1	9/2/2015 03:09 AM
Carbon tetrachloride	ND		1.0	µg/L	1	9/2/2015 03:09 AM
Chlorobenzene	ND		1.0	µg/L	1	9/2/2015 03:09 AM
Chloroethane	ND		1.0	µg/L	1	9/2/2015 03:09 AM
Chloroform	ND		1.0	µg/L	1	9/2/2015 03:09 AM
Chloromethane	ND		1.0	µg/L	1	9/2/2015 03:09 AM
cis-1,2-Dichloroethene	180		100	µg/L	100	8/31/2015 03:42 PM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	9/2/2015 03:09 AM
Dibromochloromethane	ND		1.0	µg/L	1	9/2/2015 03:09 AM
Ethylbenzene	ND		1.0	µg/L	1	9/2/2015 03:09 AM
m,p-Xylene	ND		2.0	µg/L	1	9/2/2015 03:09 AM
Methylene chloride	ND		5.0	µg/L	1	9/2/2015 03:09 AM
o-Xylene	ND		1.0	µg/L	1	9/2/2015 03:09 AM
Styrene	ND		1.0	µg/L	1	9/2/2015 03:09 AM
Tetrachloroethene	ND		1.0	µg/L	1	9/2/2015 03:09 AM
Toluene	ND		1.0	µg/L	1	9/2/2015 03:09 AM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	9/2/2015 03:09 AM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	9/2/2015 03:09 AM
Trichloroethene	ND		1.0	µg/L	1	9/2/2015 03:09 AM
Vinyl chloride	370		100	µg/L	100	8/31/2015 03:42 PM

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

ALS Group USA, Corp

Date: 16-Sep-15

Client: AMEC Foster Wheeler
Project: Textron/Torx Rochester, IN 3359-14-1022
Sample ID: ATR-OW1(D)-G082715
Collection Date: 8/27/2015 03:49 PM

Work Order: 15081601
Lab ID: 15081601-10
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Xylenes, Total	ND		3.0	µg/L	1	9/2/2015 03:09 AM
Surr: 1,2-Dichloroethane-d4	103		75-120	%REC	100	8/31/2015 03:42 PM
Surr: 1,2-Dichloroethane-d4	105		75-120	%REC	1	9/2/2015 03:09 AM
Surr: 4-Bromofluorobenzene	101		80-110	%REC	100	8/31/2015 03:42 PM
Surr: 4-Bromofluorobenzene	92.4		80-110	%REC	1	9/2/2015 03:09 AM
Surr: Dibromofluoromethane	103		85-115	%REC	100	8/31/2015 03:42 PM
Surr: Dibromofluoromethane	102		85-115	%REC	1	9/2/2015 03:09 AM
Surr: Toluene-d8	104		85-110	%REC	1	9/2/2015 03:09 AM
Surr: Toluene-d8	96.5		85-110	%REC	100	8/31/2015 03:42 PM
ALKALINITY			A2320 B-97			Analyst: JB
Alkalinity, Bicarbonate (as CaCO3)	600		10	mg/L	1	9/4/2015 01:35 PM
Alkalinity, Total (as CaCO3)	600		10	mg/L	1	9/4/2015 01:35 PM
ANIONS BY ION CHROMATOGRAPHY			SW9056A			Analyst: EE
Chloride	12		1.0	mg/L	1	9/1/2015 08:15 PM
Sulfate	ND		1.0	mg/L	1	9/1/2015 08:15 PM
NITROGEN, NITRATE-NITRITE			E353.2 R2.0			Analyst: JJG
Nitrogen, Nitrate-Nitrite	ND		0.020	mg/L	1	9/1/2015 11:43 AM
ORGANIC CARBON, TOTAL			SW9060A			Analyst: JJG
Organic Carbon, Total	410		50	mg/L	100	9/4/2015 02:13 PM

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

ALS Group USA, Corp

Date: 16-Sep-15

Client: AMEC Foster Wheeler
Project: Textron/Torx Rochester, IN 3359-14-1022
Sample ID: ATR-OW1(S)-G082715
Collection Date: 8/27/2015 04:00 PM

Work Order: 15081601
Lab ID: 15081601-11
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A		Prep: SW3005A / 8/31/15	Analyst: ML
Iron	3.7		0.080	mg/L	1	9/2/2015 10:19 PM
Manganese	0.86		0.0050	mg/L	1	9/2/2015 10:19 PM
VOLATILE ORGANIC COMPOUNDS			SW8260			Analyst: JNJ
1,1,1-Trichloroethane	ND		2.0	µg/L	2	9/1/2015 11:10 PM
1,1,2,2-Tetrachloroethane	ND		2.0	µg/L	2	9/1/2015 11:10 PM
1,1,2-Trichloroethane	ND		2.0	µg/L	2	9/1/2015 11:10 PM
1,1-Dichloroethane	ND		2.0	µg/L	2	9/1/2015 11:10 PM
1,1-Dichloroethene	ND		2.0	µg/L	2	9/1/2015 11:10 PM
1,2-Dichloroethane	ND		2.0	µg/L	2	9/1/2015 11:10 PM
1,2-Dichloropropane	ND		2.0	µg/L	2	9/1/2015 11:10 PM
2-Butanone	ND		10	µg/L	2	9/1/2015 11:10 PM
2-Hexanone	ND		10	µg/L	2	9/1/2015 11:10 PM
4-Methyl-2-pentanone	ND		2.0	µg/L	2	9/1/2015 11:10 PM
Acetone	ND		20	µg/L	2	9/1/2015 11:10 PM
Benzene	ND		2.0	µg/L	2	9/1/2015 11:10 PM
Bromodichloromethane	ND		2.0	µg/L	2	9/1/2015 11:10 PM
Bromoform	ND		2.0	µg/L	2	9/1/2015 11:10 PM
Bromomethane	ND		2.0	µg/L	2	9/1/2015 11:10 PM
Carbon disulfide	ND		2.0	µg/L	2	9/1/2015 11:10 PM
Carbon tetrachloride	ND		2.0	µg/L	2	9/1/2015 11:10 PM
Chlorobenzene	ND		2.0	µg/L	2	9/1/2015 11:10 PM
Chloroethane	ND		2.0	µg/L	2	9/1/2015 11:10 PM
Chloroform	ND		2.0	µg/L	2	9/1/2015 11:10 PM
Chloromethane	ND		2.0	µg/L	2	9/1/2015 11:10 PM
cis-1,2-Dichloroethene	270		50	µg/L	50	9/2/2015 03:06 PM
cis-1,3-Dichloropropene	ND		2.0	µg/L	2	9/1/2015 11:10 PM
Dibromochloromethane	ND		2.0	µg/L	2	9/1/2015 11:10 PM
Ethylbenzene	ND		2.0	µg/L	2	9/1/2015 11:10 PM
m,p-Xylene	ND		4.0	µg/L	2	9/1/2015 11:10 PM
Methylene chloride	ND		10	µg/L	2	9/1/2015 11:10 PM
o-Xylene	ND		2.0	µg/L	2	9/1/2015 11:10 PM
Styrene	ND		2.0	µg/L	2	9/1/2015 11:10 PM
Tetrachloroethene	ND		2.0	µg/L	2	9/1/2015 11:10 PM
Toluene	ND		2.0	µg/L	2	9/1/2015 11:10 PM
trans-1,2-Dichloroethene	ND		2.0	µg/L	2	9/1/2015 11:10 PM
trans-1,3-Dichloropropene	ND		2.0	µg/L	2	9/1/2015 11:10 PM
Trichloroethene	ND		2.0	µg/L	2	9/1/2015 11:10 PM
Vinyl chloride	240		50	µg/L	50	9/2/2015 03:06 PM

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

ALS Group USA, Corp

Date: 16-Sep-15

Client: AMEC Foster Wheeler
Project: Textron/Torx Rochester, IN 3359-14-1022
Sample ID: ATR-OW1(S)-G082715
Collection Date: 8/27/2015 04:00 PM

Work Order: 15081601
Lab ID: 15081601-11
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Xylenes, Total	ND		6.0	µg/L	2	9/1/2015 11:10 PM
Surr: 1,2-Dichloroethane-d4	106		75-120	%REC	2	9/1/2015 11:10 PM
Surr: 1,2-Dichloroethane-d4	110		75-120	%REC	50	9/2/2015 03:06 PM
Surr: 4-Bromofluorobenzene	93.2		80-110	%REC	2	9/1/2015 11:10 PM
Surr: 4-Bromofluorobenzene	92.2		80-110	%REC	50	9/2/2015 03:06 PM
Surr: Dibromofluoromethane	100		85-115	%REC	2	9/1/2015 11:10 PM
Surr: Dibromofluoromethane	104		85-115	%REC	50	9/2/2015 03:06 PM
Surr: Toluene-d8	104		85-110	%REC	50	9/2/2015 03:06 PM
Surr: Toluene-d8	104		85-110	%REC	2	9/1/2015 11:10 PM
ALKALINITY			A2320 B-97			Analyst: JB
Alkalinity, Bicarbonate (as CaCO3)	220		10	mg/L	1	9/4/2015 01:35 PM
Alkalinity, Total (as CaCO3)	220		10	mg/L	1	9/4/2015 01:35 PM
ANIONS BY ION CHROMATOGRAPHY			SW9056A			Analyst: EE
Chloride	65		10	mg/L	10	9/1/2015 08:35 PM
Sulfate	7.4		2.0	mg/L	2	9/3/2015 10:54 AM
NITROGEN, NITRATE-NITRITE			E353.2 R2.0			Analyst: JJG
Nitrogen, Nitrate-Nitrite	ND		0.020	mg/L	1	9/1/2015 11:43 AM
ORGANIC CARBON, TOTAL			SW9060A			Analyst: JJG
Organic Carbon, Total	4.9		0.50	mg/L	1	9/4/2015 02:13 PM

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

ALS Group USA, Corp

Date: 16-Sep-15

Client: AMEC Foster Wheeler
Project: Textron/Torx Rochester, IN 3359-14-1022
Sample ID: ATR-MW81(27)-G082715
Collection Date: 8/27/2015 05:25 PM

Work Order: 15081601
Lab ID: 15081601-12
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A		Prep: SW3005A / 8/31/15	Analyst: ML
Iron	14		0.080	mg/L	1	9/2/2015 10:24 PM
Manganese	0.78		0.0050	mg/L	1	9/2/2015 10:24 PM
VOLATILE ORGANIC COMPOUNDS			SW8260			Analyst: JNJ
1,1,1-Trichloroethane	ND		200	µg/L	200	9/4/2015 09:59 AM
1,1,2,2-Tetrachloroethane	ND		200	µg/L	200	9/4/2015 09:59 AM
1,1,2-Trichloroethane	ND		200	µg/L	200	9/4/2015 09:59 AM
1,1-Dichloroethane	ND		200	µg/L	200	9/4/2015 09:59 AM
1,1-Dichloroethene	290		200	µg/L	200	9/4/2015 09:59 AM
1,2-Dichloroethane	ND		200	µg/L	200	9/4/2015 09:59 AM
1,2-Dichloropropane	ND		200	µg/L	200	9/4/2015 09:59 AM
2-Butanone	ND		1,000	µg/L	200	9/4/2015 09:59 AM
2-Hexanone	ND		1,000	µg/L	200	9/4/2015 09:59 AM
4-Methyl-2-pentanone	ND		200	µg/L	200	9/4/2015 09:59 AM
Acetone	ND		2,000	µg/L	200	9/4/2015 09:59 AM
Benzene	ND		200	µg/L	200	9/4/2015 09:59 AM
Bromodichloromethane	ND		200	µg/L	200	9/4/2015 09:59 AM
Bromoform	ND		200	µg/L	200	9/4/2015 09:59 AM
Bromomethane	ND		200	µg/L	200	9/4/2015 09:59 AM
Carbon disulfide	ND		200	µg/L	200	9/4/2015 09:59 AM
Carbon tetrachloride	ND		200	µg/L	200	9/4/2015 09:59 AM
Chlorobenzene	ND		200	µg/L	200	9/4/2015 09:59 AM
Chloroethane	ND		200	µg/L	200	9/4/2015 09:59 AM
Chloroform	ND		200	µg/L	200	9/4/2015 09:59 AM
Chloromethane	ND		200	µg/L	200	9/4/2015 09:59 AM
cis-1,2-Dichloroethene	53,000		1,000	µg/L	1000	8/31/2015 07:13 PM
cis-1,3-Dichloropropene	ND		200	µg/L	200	9/4/2015 09:59 AM
Dibromochloromethane	ND		200	µg/L	200	9/4/2015 09:59 AM
Ethylbenzene	ND		200	µg/L	200	9/4/2015 09:59 AM
m,p-Xylene	ND		400	µg/L	200	9/4/2015 09:59 AM
Methylene chloride	ND		1,000	µg/L	200	9/4/2015 09:59 AM
o-Xylene	ND		200	µg/L	200	9/4/2015 09:59 AM
Styrene	ND		200	µg/L	200	9/4/2015 09:59 AM
Tetrachloroethene	ND		200	µg/L	200	9/4/2015 09:59 AM
Toluene	ND		200	µg/L	200	9/4/2015 09:59 AM
trans-1,2-Dichloroethene	260		200	µg/L	200	9/4/2015 09:59 AM
trans-1,3-Dichloropropene	ND		200	µg/L	200	9/4/2015 09:59 AM
Trichloroethene	4,700		200	µg/L	200	9/4/2015 09:59 AM
Vinyl chloride	7,500		1,000	µg/L	1000	8/31/2015 07:13 PM

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

ALS Group USA, Corp

Date: 16-Sep-15

Client: AMEC Foster Wheeler
Project: Textron/Torx Rochester, IN 3359-14-1022
Sample ID: ATR-MW81(27)-G082715
Collection Date: 8/27/2015 05:25 PM

Work Order: 15081601
Lab ID: 15081601-12
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Xylenes, Total	ND		600	µg/L	200	9/4/2015 09:59 AM
Surr: 1,2-Dichloroethane-d4	102		75-120	%REC	1000	8/31/2015 07:13 PM
Surr: 1,2-Dichloroethane-d4	99.0		75-120	%REC	200	9/4/2015 09:59 AM
Surr: 4-Bromofluorobenzene	97.8		80-110	%REC	1000	8/31/2015 07:13 PM
Surr: 4-Bromofluorobenzene	97.5		80-110	%REC	200	9/4/2015 09:59 AM
Surr: Dibromofluoromethane	103		85-115	%REC	1000	8/31/2015 07:13 PM
Surr: Dibromofluoromethane	98.2		85-115	%REC	200	9/4/2015 09:59 AM
Surr: Toluene-d8	103		85-110	%REC	200	9/4/2015 09:59 AM
Surr: Toluene-d8	96.5		85-110	%REC	1000	8/31/2015 07:13 PM
ALKALINITY			A2320 B-97			Analyst: JB
Alkalinity, Bicarbonate (as CaCO3)	210		10	mg/L	1	9/4/2015 01:35 PM
Alkalinity, Total (as CaCO3)	210		10	mg/L	1	9/4/2015 01:35 PM
ANIONS BY ION CHROMATOGRAPHY			SW9056A			Analyst: EE
Chloride	65		10	mg/L	10	9/1/2015 08:55 PM
Sulfate	1.1		1.0	mg/L	1	9/3/2015 11:14 AM
NITROGEN, NITRATE-NITRITE			E353.2 R2.0			Analyst: JJG
Nitrogen, Nitrate-Nitrite	0.027		0.020	mg/L	1	9/1/2015 11:43 AM
ORGANIC CARBON, TOTAL			SW9060A			Analyst: JJG
Organic Carbon, Total	370		50	mg/L	100	9/4/2015 02:13 PM

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

ALS Group USA, Corp

Date: 16-Sep-15

Client: AMEC Foster Wheeler

Project: Textron/Torx Rochester, IN 3359-14-1022

Work Order: 15081601

Sample ID: ATR-PM3-G082715

Lab ID: 15081601-13

Collection Date: 8/27/2015 05:50 PM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A		Prep: SW3005A / 8/31/15	Analyst: ML
Iron	6.8		0.080	mg/L	1	9/2/2015 10:29 PM
Manganese	0.67		0.0050	mg/L	1	9/2/2015 10:29 PM
VOLATILE ORGANIC COMPOUNDS			SW8260			Analyst: JNJ
1,1,1-Trichloroethane	ND		100	µg/L	100	8/31/2015 07:39 PM
1,1,2,2-Tetrachloroethane	ND		100	µg/L	100	8/31/2015 07:39 PM
1,1,2-Trichloroethane	ND		100	µg/L	100	8/31/2015 07:39 PM
1,1-Dichloroethane	ND		100	µg/L	100	8/31/2015 07:39 PM
1,1-Dichloroethene	ND		100	µg/L	100	8/31/2015 07:39 PM
1,2-Dichloroethane	ND		100	µg/L	100	8/31/2015 07:39 PM
1,2-Dichloropropane	ND		100	µg/L	100	8/31/2015 07:39 PM
2-Butanone	ND		500	µg/L	100	8/31/2015 07:39 PM
2-Hexanone	ND		500	µg/L	100	8/31/2015 07:39 PM
4-Methyl-2-pentanone	ND		100	µg/L	100	8/31/2015 07:39 PM
Acetone	ND		1,000	µg/L	100	8/31/2015 07:39 PM
Benzene	ND		100	µg/L	100	8/31/2015 07:39 PM
Bromodichloromethane	ND		100	µg/L	100	8/31/2015 07:39 PM
Bromoform	ND		100	µg/L	100	8/31/2015 07:39 PM
Bromomethane	ND		100	µg/L	100	8/31/2015 07:39 PM
Carbon disulfide	ND		100	µg/L	100	8/31/2015 07:39 PM
Carbon tetrachloride	ND		100	µg/L	100	8/31/2015 07:39 PM
Chlorobenzene	ND		100	µg/L	100	8/31/2015 07:39 PM
Chloroethane	ND		100	µg/L	100	8/31/2015 07:39 PM
Chloroform	ND		100	µg/L	100	8/31/2015 07:39 PM
Chloromethane	ND		100	µg/L	100	8/31/2015 07:39 PM
cis-1,2-Dichloroethene	200		100	µg/L	100	8/31/2015 07:39 PM
cis-1,3-Dichloropropene	ND		100	µg/L	100	8/31/2015 07:39 PM
Dibromochloromethane	ND		100	µg/L	100	8/31/2015 07:39 PM
Ethylbenzene	ND		100	µg/L	100	8/31/2015 07:39 PM
m,p-Xylene	ND		200	µg/L	100	8/31/2015 07:39 PM
Methylene chloride	ND		500	µg/L	100	8/31/2015 07:39 PM
o-Xylene	ND		100	µg/L	100	8/31/2015 07:39 PM
Styrene	ND		100	µg/L	100	8/31/2015 07:39 PM
Tetrachloroethene	ND		100	µg/L	100	8/31/2015 07:39 PM
Toluene	ND		100	µg/L	100	8/31/2015 07:39 PM
trans-1,2-Dichloroethene	ND		100	µg/L	100	8/31/2015 07:39 PM
trans-1,3-Dichloropropene	ND		100	µg/L	100	8/31/2015 07:39 PM
Trichloroethene	ND		100	µg/L	100	8/31/2015 07:39 PM
Vinyl chloride	200		100	µg/L	100	8/31/2015 07:39 PM

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

ALS Group USA, Corp

Date: 16-Sep-15

Client: AMEC Foster Wheeler
Project: Textron/Torx Rochester, IN 3359-14-1022
Sample ID: ATR-PM3-G082715
Collection Date: 8/27/2015 05:50 PM

Work Order: 15081601
Lab ID: 15081601-13
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Xylenes, Total	ND		300	µg/L	100	8/31/2015 07:39 PM
Surr: 1,2-Dichloroethane-d4	102		75-120	%REC	100	8/31/2015 07:39 PM
Surr: 4-Bromofluorobenzene	98.8		80-110	%REC	100	8/31/2015 07:39 PM
Surr: Dibromofluoromethane	104		85-115	%REC	100	8/31/2015 07:39 PM
Surr: Toluene-d8	94.9		85-110	%REC	100	8/31/2015 07:39 PM
ALKALINITY			A2320 B-97			Analyst: JB
Alkalinity, Bicarbonate (as CaCO3)	310		10	mg/L	1	9/4/2015 01:35 PM
Alkalinity, Total (as CaCO3)	310		10	mg/L	1	9/4/2015 01:35 PM
ANIONS BY ION CHROMATOGRAPHY			SW9056A			Analyst: EE
Chloride	53		10	mg/L	10	9/1/2015 09:15 PM
Sulfate	13		10	mg/L	10	9/1/2015 09:15 PM
NITROGEN, NITRATE-NITRITE			E353.2 R2.0			Analyst: JJG
Nitrogen, Nitrate-Nitrite	2.7		0.10	mg/L	5	9/1/2015 11:43 AM
ORGANIC CARBON, TOTAL			SW9060A			Analyst: JJG
Organic Carbon, Total	38,000		2,500	mg/L	5000	9/4/2015 02:13 PM

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

ALS Group USA, Corp

Date: 16-Sep-15

Client: AMEC Foster Wheeler
Project: Textron/Torx Rochester, IN 3359-14-1022
Sample ID: ATR-MW59(29)-G082715
Collection Date: 8/27/2015 05:20 PM

Work Order: 15081601
Lab ID: 15081601-14
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A		Prep: SW3005A / 8/31/15	Analyst: ML
Iron	3.6		0.080	mg/L	1	9/2/2015 10:49 PM
Manganese	0.32		0.0050	mg/L	1	9/2/2015 10:49 PM
VOLATILE ORGANIC COMPOUNDS			SW8260			Analyst: JNJ
1,1,1-Trichloroethane	ND		100	µg/L	100	9/2/2015 02:13 PM
1,1,2,2-Tetrachloroethane	ND		100	µg/L	100	9/2/2015 02:13 PM
1,1,2-Trichloroethane	ND		100	µg/L	100	9/2/2015 02:13 PM
1,1-Dichloroethane	ND		100	µg/L	100	9/2/2015 02:13 PM
1,1-Dichloroethene	130		100	µg/L	100	9/2/2015 02:13 PM
1,2-Dichloroethane	ND		100	µg/L	100	9/2/2015 02:13 PM
1,2-Dichloropropane	ND		100	µg/L	100	9/2/2015 02:13 PM
2-Butanone	ND		500	µg/L	100	9/2/2015 02:13 PM
2-Hexanone	ND		500	µg/L	100	9/2/2015 02:13 PM
4-Methyl-2-pentanone	ND		100	µg/L	100	9/2/2015 02:13 PM
Acetone	ND		1,000	µg/L	100	9/2/2015 02:13 PM
Benzene	ND		100	µg/L	100	9/2/2015 02:13 PM
Bromodichloromethane	ND		100	µg/L	100	9/2/2015 02:13 PM
Bromoform	ND		100	µg/L	100	9/2/2015 02:13 PM
Bromomethane	ND		100	µg/L	100	9/2/2015 02:13 PM
Carbon disulfide	ND		100	µg/L	100	9/2/2015 02:13 PM
Carbon tetrachloride	ND		100	µg/L	100	9/2/2015 02:13 PM
Chlorobenzene	ND		100	µg/L	100	9/2/2015 02:13 PM
Chloroethane	ND		100	µg/L	100	9/2/2015 02:13 PM
Chloroform	ND		100	µg/L	100	9/2/2015 02:13 PM
Chloromethane	ND		100	µg/L	100	9/2/2015 02:13 PM
cis-1,2-Dichloroethene	30,000		1,000	µg/L	1000	8/31/2015 06:47 PM
cis-1,3-Dichloropropene	ND		100	µg/L	100	9/2/2015 02:13 PM
Dibromochloromethane	ND		100	µg/L	100	9/2/2015 02:13 PM
Ethylbenzene	ND		100	µg/L	100	9/2/2015 02:13 PM
m,p-Xylene	ND		200	µg/L	100	9/2/2015 02:13 PM
Methylene chloride	ND		500	µg/L	100	9/2/2015 02:13 PM
o-Xylene	ND		100	µg/L	100	9/2/2015 02:13 PM
Styrene	ND		100	µg/L	100	9/2/2015 02:13 PM
Tetrachloroethene	ND		100	µg/L	100	9/2/2015 02:13 PM
Toluene	ND		100	µg/L	100	9/2/2015 02:13 PM
trans-1,2-Dichloroethene	130		100	µg/L	100	9/2/2015 02:13 PM
trans-1,3-Dichloropropene	ND		100	µg/L	100	9/2/2015 02:13 PM
Trichloroethene	ND		100	µg/L	100	9/2/2015 02:13 PM
Vinyl chloride	23,000		1,000	µg/L	1000	8/31/2015 06:47 PM

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

ALS Group USA, Corp

Date: 16-Sep-15

Client: AMEC Foster Wheeler
Project: Textron/Torx Rochester, IN 3359-14-1022
Sample ID: ATR-MW59(29)-G082715
Collection Date: 8/27/2015 05:20 PM

Work Order: 15081601
Lab ID: 15081601-14
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Xylenes, Total	ND		300	µg/L	100	9/2/2015 02:13 PM
Surr: 1,2-Dichloroethane-d4	103		75-120	%REC	1000	8/31/2015 06:47 PM
Surr: 1,2-Dichloroethane-d4	104		75-120	%REC	100	9/2/2015 02:13 PM
Surr: 4-Bromofluorobenzene	99.8		80-110	%REC	1000	8/31/2015 06:47 PM
Surr: 4-Bromofluorobenzene	92.6		80-110	%REC	100	9/2/2015 02:13 PM
Surr: Dibromofluoromethane	105		85-115	%REC	1000	8/31/2015 06:47 PM
Surr: Dibromofluoromethane	103		85-115	%REC	100	9/2/2015 02:13 PM
Surr: Toluene-d8	104		85-110	%REC	100	9/2/2015 02:13 PM
Surr: Toluene-d8	96.4		85-110	%REC	1000	8/31/2015 06:47 PM
ALKALINITY			A2320 B-97			Analyst: JB
Alkalinity, Bicarbonate (as CaCO3)	230		10	mg/L	1	9/4/2015 01:35 PM
Alkalinity, Total (as CaCO3)	230		10	mg/L	1	9/4/2015 01:35 PM
ANIONS BY ION CHROMATOGRAPHY			SW9056A			Analyst: EE
Chloride	48		5.0	mg/L	5	9/3/2015 11:54 AM
Sulfate	ND		1.0	mg/L	1	9/3/2015 11:34 AM
NITROGEN, NITRATE-NITRITE			E353.2 R2.0			Analyst: JJG
Nitrogen, Nitrate-Nitrite	0.022		0.020	mg/L	1	9/1/2015 11:43 AM
ORGANIC CARBON, TOTAL			SW9060A			Analyst: JJG
Organic Carbon, Total	89		10	mg/L	20	9/4/2015 02:13 PM

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

ALS Group USA, Corp

Date: 16-Sep-15

Client: AMEC Foster Wheeler
Project: Textron/Torx Rochester, IN 3359-14-1022
Sample ID: ATR-PM2-G082715
Collection Date: 8/27/2015 07:25 PM

Work Order: 15081601
Lab ID: 15081601-15
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A		Prep: SW3005A / 8/31/15	Analyst: ML
Iron	5.1		0.080	mg/L	1	9/2/2015 10:54 PM
Manganese	0.95		0.0050	mg/L	1	9/2/2015 10:54 PM
VOLATILE ORGANIC COMPOUNDS			SW8260			Analyst: JNJ
1,1,1-Trichloroethane	ND		5.0	µg/L	5	9/2/2015 12:56 PM
1,1,2,2-Tetrachloroethane	ND		5.0	µg/L	5	9/2/2015 12:56 PM
1,1,2-Trichloroethane	ND		5.0	µg/L	5	9/2/2015 12:56 PM
1,1-Dichloroethane	ND		5.0	µg/L	5	9/2/2015 12:56 PM
1,1-Dichloroethene	ND		5.0	µg/L	5	9/2/2015 12:56 PM
1,2-Dichloroethane	ND		5.0	µg/L	5	9/2/2015 12:56 PM
1,2-Dichloropropane	ND		5.0	µg/L	5	9/2/2015 12:56 PM
2-Butanone	ND		25	µg/L	5	9/2/2015 12:56 PM
2-Hexanone	ND		25	µg/L	5	9/2/2015 12:56 PM
4-Methyl-2-pentanone	ND		5.0	µg/L	5	9/2/2015 12:56 PM
Acetone	ND		50	µg/L	5	9/2/2015 12:56 PM
Benzene	ND		5.0	µg/L	5	9/2/2015 12:56 PM
Bromodichloromethane	ND		5.0	µg/L	5	9/2/2015 12:56 PM
Bromoform	ND		5.0	µg/L	5	9/2/2015 12:56 PM
Bromomethane	ND		5.0	µg/L	5	9/2/2015 12:56 PM
Carbon disulfide	ND		5.0	µg/L	5	9/2/2015 12:56 PM
Carbon tetrachloride	ND		5.0	µg/L	5	9/2/2015 12:56 PM
Chlorobenzene	ND		5.0	µg/L	5	9/2/2015 12:56 PM
Chloroethane	ND		5.0	µg/L	5	9/2/2015 12:56 PM
Chloroform	ND		5.0	µg/L	5	9/2/2015 12:56 PM
Chloromethane	ND		5.0	µg/L	5	9/2/2015 12:56 PM
cis-1,2-Dichloroethene	380		5.0	µg/L	5	9/2/2015 12:56 PM
cis-1,3-Dichloropropene	ND		5.0	µg/L	5	9/2/2015 12:56 PM
Dibromochloromethane	ND		5.0	µg/L	5	9/2/2015 12:56 PM
Ethylbenzene	6.0		5.0	µg/L	5	9/2/2015 12:56 PM
m,p-Xylene	ND		10	µg/L	5	9/2/2015 12:56 PM
Methylene chloride	ND		25	µg/L	5	9/2/2015 12:56 PM
o-Xylene	ND		5.0	µg/L	5	9/2/2015 12:56 PM
Styrene	ND		5.0	µg/L	5	9/2/2015 12:56 PM
Tetrachloroethene	ND		5.0	µg/L	5	9/2/2015 12:56 PM
Toluene	ND		5.0	µg/L	5	9/2/2015 12:56 PM
trans-1,2-Dichloroethene	ND		5.0	µg/L	5	9/2/2015 12:56 PM
trans-1,3-Dichloropropene	ND		5.0	µg/L	5	9/2/2015 12:56 PM
Trichloroethene	ND		5.0	µg/L	5	9/2/2015 12:56 PM
Vinyl chloride	1,200		200	µg/L	200	8/31/2015 05:55 PM

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

ALS Group USA, Corp

Date: 16-Sep-15

Client: AMEC Foster Wheeler
Project: Textron/Torx Rochester, IN 3359-14-1022
Sample ID: ATR-PM2-G082715
Collection Date: 8/27/2015 07:25 PM

Work Order: 15081601
Lab ID: 15081601-15
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Xylenes, Total	ND		15	µg/L	5	9/2/2015 12:56 PM
Surr: 1,2-Dichloroethane-d4	103		75-120	%REC	200	8/31/2015 05:55 PM
Surr: 1,2-Dichloroethane-d4	110		75-120	%REC	5	9/2/2015 12:56 PM
Surr: 4-Bromofluorobenzene	98.8		80-110	%REC	200	8/31/2015 05:55 PM
Surr: 4-Bromofluorobenzene	92.8		80-110	%REC	5	9/2/2015 12:56 PM
Surr: Dibromofluoromethane	103		85-115	%REC	200	8/31/2015 05:55 PM
Surr: Dibromofluoromethane	104		85-115	%REC	5	9/2/2015 12:56 PM
Surr: Toluene-d8	105		85-110	%REC	5	9/2/2015 12:56 PM
Surr: Toluene-d8	94.7		85-110	%REC	200	8/31/2015 05:55 PM
ALKALINITY			A2320 B-97			Analyst: JB
Alkalinity, Bicarbonate (as CaCO3)	330		10	mg/L	1	9/4/2015 01:35 PM
Alkalinity, Total (as CaCO3)	330		10	mg/L	1	9/4/2015 01:35 PM
ANIONS BY ION CHROMATOGRAPHY			SW9056A			Analyst: EE
Chloride	26		2.0	mg/L	2	9/3/2015 08:00 PM
Sulfate	ND		1.0	mg/L	1	9/3/2015 12:15 PM
NITROGEN, NITRATE-NITRITE			E353.2 R2.0			Analyst: JJG
Nitrogen, Nitrate-Nitrite	0.11		0.020	mg/L	1	9/1/2015 11:43 AM
ORGANIC CARBON, TOTAL			SW9060A			Analyst: JJG
Organic Carbon, Total	41		10	mg/L	20	9/4/2015 02:13 PM

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

ALS Group USA, Corp

Date: 16-Sep-15

Client: AMEC Foster Wheeler

Project: Textron/Torx Rochester, IN 3359-14-1022

Work Order: 15081601

Sample ID: ATR-EB001-G082715

Lab ID: 15081601-16

Collection Date: 8/27/2015 06:45 PM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A		Prep: SW3005A / 8/31/15	Analyst: ML
Iron	ND		0.080	mg/L	1	9/2/2015 10:59 PM
Manganese	ND		0.0050	mg/L	1	9/2/2015 10:59 PM
VOLATILE ORGANIC COMPOUNDS			SW8260			Analyst: JNJ
1,1,1-Trichloroethane	ND		1.0	µg/L	1	8/31/2015 02:24 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	8/31/2015 02:24 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	8/31/2015 02:24 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	8/31/2015 02:24 PM
1,1-Dichloroethene	ND		1.0	µg/L	1	8/31/2015 02:24 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	8/31/2015 02:24 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	8/31/2015 02:24 PM
2-Butanone	ND		5.0	µg/L	1	8/31/2015 02:24 PM
2-Hexanone	ND		5.0	µg/L	1	8/31/2015 02:24 PM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	8/31/2015 02:24 PM
Acetone	ND		10	µg/L	1	8/31/2015 02:24 PM
Benzene	ND		1.0	µg/L	1	8/31/2015 02:24 PM
Bromodichloromethane	ND		1.0	µg/L	1	8/31/2015 02:24 PM
Bromoform	ND		1.0	µg/L	1	8/31/2015 02:24 PM
Bromomethane	ND		1.0	µg/L	1	8/31/2015 02:24 PM
Carbon disulfide	ND		1.0	µg/L	1	8/31/2015 02:24 PM
Carbon tetrachloride	ND		1.0	µg/L	1	8/31/2015 02:24 PM
Chlorobenzene	ND		1.0	µg/L	1	8/31/2015 02:24 PM
Chloroethane	ND		1.0	µg/L	1	8/31/2015 02:24 PM
Chloroform	ND		1.0	µg/L	1	8/31/2015 02:24 PM
Chloromethane	ND		1.0	µg/L	1	8/31/2015 02:24 PM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	8/31/2015 02:24 PM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	8/31/2015 02:24 PM
Dibromochloromethane	ND		1.0	µg/L	1	8/31/2015 02:24 PM
Ethylbenzene	ND		1.0	µg/L	1	8/31/2015 02:24 PM
m,p-Xylene	ND		2.0	µg/L	1	8/31/2015 02:24 PM
Methylene chloride	ND		5.0	µg/L	1	8/31/2015 02:24 PM
o-Xylene	ND		1.0	µg/L	1	8/31/2015 02:24 PM
Styrene	ND		1.0	µg/L	1	8/31/2015 02:24 PM
Tetrachloroethene	ND		1.0	µg/L	1	8/31/2015 02:24 PM
Toluene	ND		1.0	µg/L	1	8/31/2015 02:24 PM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	8/31/2015 02:24 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	8/31/2015 02:24 PM
Trichloroethene	ND		1.0	µg/L	1	8/31/2015 02:24 PM
Vinyl chloride	ND		1.0	µg/L	1	8/31/2015 02:24 PM

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

ALS Group USA, Corp

Date: 16-Sep-15

Client: AMEC Foster Wheeler

Project: Textron/Torx Rochester, IN 3359-14-1022

Sample ID: ATR-EB001-G082715

Collection Date: 8/27/2015 06:45 PM

Work Order: 15081601

Lab ID: 15081601-16

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Xylenes, Total	ND		3.0	µg/L	1	8/31/2015 02:24 PM
Surr: 1,2-Dichloroethane-d4	100		75-120	%REC	1	8/31/2015 02:24 PM
Surr: 4-Bromofluorobenzene	101		80-110	%REC	1	8/31/2015 02:24 PM
Surr: Dibromofluoromethane	103		85-115	%REC	1	8/31/2015 02:24 PM
Surr: Toluene-d8	97.2		85-110	%REC	1	8/31/2015 02:24 PM
ALKALINITY			A2320 B-97			Analyst: JB
Alkalinity, Bicarbonate (as CaCO3)	ND		10	mg/L	1	9/4/2015 01:35 PM
Alkalinity, Total (as CaCO3)	ND		10	mg/L	1	9/4/2015 01:35 PM
ANIONS BY ION CHROMATOGRAPHY			SW9056A			Analyst: EE
Chloride	ND		1.0	mg/L	1	9/3/2015 12:35 PM
Sulfate	ND		1.0	mg/L	1	9/3/2015 12:35 PM
NITROGEN, NITRATE-NITRITE			E353.2 R2.0			Analyst: JJG
Nitrogen, Nitrate-Nitrite	ND		0.020	mg/L	1	9/1/2015 11:43 AM
ORGANIC CARBON, TOTAL			SW9060A			Analyst: JJG
Organic Carbon, Total	0.54		0.50	mg/L	1	9/4/2015 02:13 PM

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

ALS Group USA, Corp

Date: 16-Sep-15

Client: AMEC Foster Wheeler

Project: Textron/Torx Rochester, IN 3359-14-1022

Work Order: 15081601

Sample ID: ATR-FB001-G082715

Lab ID: 15081601-17

Collection Date: 8/27/2015 07:00 PM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A		Prep: SW3005A / 8/31/15	Analyst: ML
Iron	ND		0.080	mg/L	1	9/2/2015 11:05 PM
Manganese	ND		0.0050	mg/L	1	9/2/2015 11:05 PM
VOLATILE ORGANIC COMPOUNDS			SW8260			Analyst: JNJ
1,1,1-Trichloroethane	ND		1.0	µg/L	1	9/1/2015 08:02 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	9/1/2015 08:02 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	9/1/2015 08:02 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	9/1/2015 08:02 PM
1,1-Dichloroethene	ND		1.0	µg/L	1	9/1/2015 08:02 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	9/1/2015 08:02 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	9/1/2015 08:02 PM
2-Butanone	ND		5.0	µg/L	1	9/1/2015 08:02 PM
2-Hexanone	ND		5.0	µg/L	1	9/1/2015 08:02 PM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	9/1/2015 08:02 PM
Acetone	34		10	µg/L	1	9/1/2015 08:02 PM
Benzene	ND		1.0	µg/L	1	9/1/2015 08:02 PM
Bromodichloromethane	ND		1.0	µg/L	1	9/1/2015 08:02 PM
Bromoform	ND		1.0	µg/L	1	9/1/2015 08:02 PM
Bromomethane	ND		1.0	µg/L	1	9/1/2015 08:02 PM
Carbon disulfide	ND		1.0	µg/L	1	9/1/2015 08:02 PM
Carbon tetrachloride	ND		1.0	µg/L	1	9/1/2015 08:02 PM
Chlorobenzene	ND		1.0	µg/L	1	9/1/2015 08:02 PM
Chloroethane	ND		1.0	µg/L	1	9/1/2015 08:02 PM
Chloroform	ND		1.0	µg/L	1	9/1/2015 08:02 PM
Chloromethane	ND		1.0	µg/L	1	9/1/2015 08:02 PM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	9/1/2015 08:02 PM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	9/1/2015 08:02 PM
Dibromochloromethane	ND		1.0	µg/L	1	9/1/2015 08:02 PM
Ethylbenzene	ND		1.0	µg/L	1	9/1/2015 08:02 PM
m,p-Xylene	ND		2.0	µg/L	1	9/1/2015 08:02 PM
Methylene chloride	ND		5.0	µg/L	1	9/1/2015 08:02 PM
o-Xylene	ND		1.0	µg/L	1	9/1/2015 08:02 PM
Styrene	ND		1.0	µg/L	1	9/1/2015 08:02 PM
Tetrachloroethene	ND		1.0	µg/L	1	9/1/2015 08:02 PM
Toluene	ND		1.0	µg/L	1	9/1/2015 08:02 PM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	9/1/2015 08:02 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	9/1/2015 08:02 PM
Trichloroethene	ND		1.0	µg/L	1	9/1/2015 08:02 PM
Vinyl chloride	ND		1.0	µg/L	1	9/1/2015 08:02 PM

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

ALS Group USA, Corp

Date: 16-Sep-15

Client: AMEC Foster Wheeler
Project: Textron/Torx Rochester, IN 3359-14-1022
Sample ID: ATR-FB001-G082715
Collection Date: 8/27/2015 07:00 PM

Work Order: 15081601
Lab ID: 15081601-17
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Xylenes, Total	ND		3.0	µg/L	1	9/1/2015 08:02 PM
Surr: 1,2-Dichloroethane-d4	110		75-120	%REC	1	9/1/2015 08:02 PM
Surr: 4-Bromofluorobenzene	92.2		80-110	%REC	1	9/1/2015 08:02 PM
Surr: Dibromofluoromethane	103		85-115	%REC	1	9/1/2015 08:02 PM
Surr: Toluene-d8	102		85-110	%REC	1	9/1/2015 08:02 PM
ALKALINITY			A2320 B-97			Analyst: JB
Alkalinity, Bicarbonate (as CaCO3)	ND		10	mg/L	1	9/4/2015 01:35 PM
Alkalinity, Total (as CaCO3)	ND		10	mg/L	1	9/4/2015 01:35 PM
ANIONS BY ION CHROMATOGRAPHY			SW9056A			Analyst: EE
Chloride	ND		1.0	mg/L	1	9/3/2015 12:55 PM
Sulfate	ND		1.0	mg/L	1	9/3/2015 12:55 PM
NITROGEN, NITRATE-NITRITE			E353.2 R2.0			Analyst: JJG
Nitrogen, Nitrate-Nitrite	0.073		0.020	mg/L	1	9/1/2015 11:43 AM
ORGANIC CARBON, TOTAL			SW9060A			Analyst: JJG
Organic Carbon, Total	0.74		0.50	mg/L	1	9/4/2015 02:13 PM

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

ALS Group USA, Corp

Date: 16-Sep-15

Client: AMEC Foster Wheeler

Project: Textron/Torx Rochester, IN 3359-14-1022

Work Order: 15081601

Sample ID: Trip Blank

Lab ID: 15081601-18

Collection Date: 8/27/2015

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260		Analyst: JNJ	
1,1,1-Trichloroethane	ND		1.0	µg/L	1	8/31/2015 12:13 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	8/31/2015 12:13 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	8/31/2015 12:13 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	8/31/2015 12:13 PM
1,1-Dichloroethene	ND		1.0	µg/L	1	8/31/2015 12:13 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	8/31/2015 12:13 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	8/31/2015 12:13 PM
2-Butanone	ND		5.0	µg/L	1	8/31/2015 12:13 PM
2-Hexanone	ND		5.0	µg/L	1	8/31/2015 12:13 PM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	8/31/2015 12:13 PM
Acetone	ND		10	µg/L	1	8/31/2015 12:13 PM
Benzene	ND		1.0	µg/L	1	8/31/2015 12:13 PM
Bromodichloromethane	ND		1.0	µg/L	1	8/31/2015 12:13 PM
Bromoform	ND		1.0	µg/L	1	8/31/2015 12:13 PM
Bromomethane	ND		1.0	µg/L	1	8/31/2015 12:13 PM
Carbon disulfide	ND		1.0	µg/L	1	8/31/2015 12:13 PM
Carbon tetrachloride	ND		1.0	µg/L	1	8/31/2015 12:13 PM
Chlorobenzene	ND		1.0	µg/L	1	8/31/2015 12:13 PM
Chloroethane	ND		1.0	µg/L	1	8/31/2015 12:13 PM
Chloroform	ND		1.0	µg/L	1	8/31/2015 12:13 PM
Chloromethane	ND		1.0	µg/L	1	8/31/2015 12:13 PM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	8/31/2015 12:13 PM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	8/31/2015 12:13 PM
Dibromochloromethane	ND		1.0	µg/L	1	8/31/2015 12:13 PM
Ethylbenzene	ND		1.0	µg/L	1	8/31/2015 12:13 PM
m,p-Xylene	ND		2.0	µg/L	1	8/31/2015 12:13 PM
Methylene chloride	ND		5.0	µg/L	1	8/31/2015 12:13 PM
o-Xylene	ND		1.0	µg/L	1	8/31/2015 12:13 PM
Styrene	ND		1.0	µg/L	1	8/31/2015 12:13 PM
Tetrachloroethene	ND		1.0	µg/L	1	8/31/2015 12:13 PM
Toluene	ND		1.0	µg/L	1	8/31/2015 12:13 PM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	8/31/2015 12:13 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	8/31/2015 12:13 PM
Trichloroethene	ND		1.0	µg/L	1	8/31/2015 12:13 PM
Vinyl chloride	ND		1.0	µg/L	1	8/31/2015 12:13 PM
Xylenes, Total	ND		3.0	µg/L	1	8/31/2015 12:13 PM
Surr: 1,2-Dichloroethane-d4	103		75-120	%REC	1	8/31/2015 12:13 PM
Surr: 4-Bromofluorobenzene	98.8		80-110	%REC	1	8/31/2015 12:13 PM
Surr: Dibromofluoromethane	101		85-115	%REC	1	8/31/2015 12:13 PM

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

ALS Group USA, Corp

Date: 16-Sep-15

Client: AMEC Foster Wheeler**Project:** Textron/Torx Rochester, IN 3359-14-1022**Work Order:** 15081601**Sample ID:** Trip Blank**Lab ID:** 15081601-18**Collection Date:** 8/27/2015**Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	98.8		85-110	%REC	1	8/31/2015 12:13 PM

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

Client: AMEC Foster Wheeler
Project: Textron/Torx Rochester, IN 3359-14-1022
WorkOrder: 15081601

**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 PQL, 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: 15081601

Project: Textron/Torx Rochester, IN 3359-14-1022

Batch ID: 75438

Instrument ID ICPMS2

Method: SW6020A

MBLK		Sample ID: MBLK-75438-75438				Units: mg/L		Analysis Date: 9/2/2015 07:34 PM		
Client ID:		Run ID: ICPMS2_150902B			SeqNo: 3443692		Prep Date: 8/31/2015		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Iron	ND	0.080								
Manganese	ND	0.0050								

LCS		Sample ID: LCS-75438-75438				Units: mg/L		Analysis Date: 9/2/2015 07:39 PM		
Client ID:		Run ID: ICPMS2_150902B			SeqNo: 3443693		Prep Date: 8/31/2015		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Iron	9.394	0.080	10	0	93.9	80-120	0			
Manganese	0.09632	0.0050	0.1	0	96.3	80-120	0			

MS		Sample ID: 15081601-03CMS				Units: mg/L		Analysis Date: 9/2/2015 08:14 PM		
Client ID: ATR-MW6C-G082815		Run ID: ICPMS2_150902B			SeqNo: 3443700		Prep Date: 8/31/2015		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Iron	9.566	0.080	10	0.3233	92.4	75-125	0			
Manganese	0.2987	0.0050	0.1	0.2178	80.9	75-125	0			

MSD		Sample ID: 15081601-03CMSD				Units: mg/L		Analysis Date: 9/2/2015 08:19 PM		
Client ID: ATR-MW6C-G082815		Run ID: ICPMS2_150902B			SeqNo: 3443701		Prep Date: 8/31/2015		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Iron	9.244	0.080	10	0.3233	89.2	75-125	9.566	3.42	20	
Manganese	0.3023	0.0050	0.1	0.2178	84.5	75-125	0.2987	1.2	20	

The following samples were analyzed in this batch:

15081601-01C	15081601-02C	15081601-03C
15081601-04C	15081601-05C	15081601-06C
15081601-07C	15081601-08C	15081601-09C
15081601-10C	15081601-11C	15081601-12C
15081601-13C	15081601-14C	15081601-15C
15081601-16C	15081601-17C	

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

Client: AMEC Foster Wheeler
 Work Order: 15081601
 Project: Textron/Torx Rochester, IN 3359-14-1022

QC BATCH REPORT

Batch ID: **R170660** Instrument ID **VMS5** Method: **SW8260**

MBLK		Sample ID: VBLKW1-150831-R170660				Units: µg/L		Analysis Date: 8/31/2015 11:48 AM		
Client ID:		Run ID: VMS5_150831A			SeqNo: 3440420		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloroethane	ND	1.0								
1,2-Dichloropropane	ND	1.0								
2-Butanone	ND	5.0								
2-Hexanone	ND	5.0								
4-Methyl-2-pentanone	ND	1.0								
Acetone	ND	10								
Benzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	1.0								
Carbon disulfide	ND	1.0								
Carbon tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	1.0								
Chloroform	ND	1.0								
Chloromethane	ND	1.0								
cis-1,2-Dichloroethene	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
Dibromochloromethane	ND	1.0								
Ethylbenzene	ND	1.0								
m,p-Xylene	ND	2.0								
Methylene chloride	ND	5.0								
o-Xylene	ND	1.0								
Styrene	ND	1.0								
Tetrachloroethene	ND	1.0								
Toluene	ND	1.0								
trans-1,2-Dichloroethene	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
Trichloroethene	ND	1.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	3.0								
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>20.5</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>19.6</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>98</i>	<i>80-110</i>	<i>0</i>			
<i>Surr: Dibromofluoromethane</i>	<i>20.2</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>101</i>	<i>85-115</i>	<i>0</i>			
<i>Surr: Toluene-d8</i>	<i>19.24</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>96.2</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: 15081601
 Project: Textron/Torx Rochester, IN 3359-14-1022

QC BATCH REPORT

Batch ID: **R170660** Instrument ID **VMS5** Method: **SW8260**

LCS		Sample ID: VLCSW1-150831-R170660				Units: µg/L		Analysis Date: 8/31/2015 10:57 AM		
Client ID:		Run ID: VMS5_150831A			SeqNo: 3440419		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	24.21	1.0	20	0	121	75-130	0			
1,1,2,2-Tetrachloroethane	22.32	1.0	20	0	112	75-130	0			
1,1,2-Trichloroethane	22.66	1.0	20	0	113	75-125	0			
1,1-Dichloroethane	23.72	1.0	20	0	119	75-133	0			
1,1-Dichloroethene	26.11	1.0	20	0	131	70-145	0			
1,2-Dichloroethane	23.25	1.0	20	0	116	78-125	0			
1,2-Dichloropropane	22.79	1.0	20	0	114	75-125	0			
2-Butanone	22.86	5.0	20	0	114	55-150	0			
2-Hexanone	21.6	5.0	20	0	108	60-135	0			
4-Methyl-2-pentanone	24.65	1.0	20	0	123	77-178	0			
Acetone	31.34	10	20	0	157	60-160	0			
Benzene	23.19	1.0	20	0	116	85-125	0			
Bromodichloromethane	22.12	1.0	20	0	111	75-125	0			
Bromoform	20	1.0	20	0	100	60-125	0			
Bromomethane	21.62	1.0	20	0	108	30-185	0			
Carbon disulfide	22.47	1.0	20	0	112	60-165	0			
Carbon tetrachloride	24.34	1.0	20	0	122	65-140	0			
Chlorobenzene	22.54	1.0	20	0	113	80-120	0			
Chloroethane	21.79	1.0	20	0	109	50-140	0			
Chloroform	22.69	1.0	20	0	113	80-130	0			
Chloromethane	19.99	1.0	20	0	100	50-130	0			
cis-1,2-Dichloroethene	23.94	1.0	20	0	120	75-134	0			
cis-1,3-Dichloropropene	21.47	1.0	20	0	107	70-130	0			
Dibromochloromethane	20.36	1.0	20	0	102	60-115	0			
Ethylbenzene	22.54	1.0	20	0	113	85-125	0			
m,p-Xylene	45.77	2.0	40	0	114	75-130	0			
Methylene chloride	23.07	5.0	20	0	115	75-140	0			
o-Xylene	21.89	1.0	20	0	109	80-125	0			
Styrene	22.31	1.0	20	0	112	85-125	0			
Tetrachloroethene	23.32	1.0	20	0	117	77-138	0			
Toluene	22.65	1.0	20	0	113	85-125	0			
trans-1,2-Dichloroethene	24.47	1.0	20	0	122	80-140	0			
trans-1,3-Dichloropropene	19.86	1.0	20	0	99.3	81-123	0			
Trichloroethene	23.3	1.0	20	0	116	84-130	0			
Vinyl chloride	20.5	1.0	20	0	102	50-136	0			
Xylenes, Total	67.66	3.0	60	0	113	80-126	0			
Surr: 1,2-Dichloroethane-d4	19.85	0	20	0	99.2	75-120	0			
Surr: 4-Bromofluorobenzene	20.8	0	20	0	104	80-110	0			
Surr: Dibromofluoromethane	20.28	0	20	0	101	85-115	0			
Surr: Toluene-d8	19.9	0	20	0	99.5	85-110	0			

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

Client: AMEC Foster Wheeler
 Work Order: 15081601
 Project: Textron/Torx Rochester, IN 3359-14-1022

QC BATCH REPORT

Batch ID: **R170660** Instrument ID **VMS5** Method: **SW8260**

MS		Sample ID: 15081601-10A MS				Units: µg/L		Analysis Date: 8/31/2015 08:57 PM		
Client ID: ATR-OW1(D)-G082715		Run ID: VMS5_150831A			SeqNo: 3440445		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	2230	100	2000	0	112	75-130	0			
1,1,2,2-Tetrachloroethane	1994	100	2000	0	99.7	75-130	0			
1,1,2-Trichloroethane	2060	100	2000	0	103	75-125	0			
1,1-Dichloroethane	2198	100	2000	0	110	75-133	0			
1,1-Dichloroethene	2500	100	2000	0	125	70-145	0			
1,2-Dichloroethane	2158	100	2000	0	108	78-125	0			
1,2-Dichloropropane	2016	100	2000	0	101	75-125	0			
2-Butanone	2601	500	2000	0	130	55-150	0			
2-Hexanone	1994	500	2000	0	99.7	60-135	0			
4-Methyl-2-pentanone	2404	100	2000	0	120	77-178	0			
Acetone	2934	1,000	2000	0	147	60-160	0			
Benzene	2104	100	2000	0	105	85-125	0			
Bromodichloromethane	2021	100	2000	0	101	75-125	0			
Bromoform	1831	100	2000	0	91.6	60-125	0			
Bromomethane	1284	100	2000	0	64.2	30-185	0			
Carbon disulfide	2089	100	2000	0	104	60-165	0			
Carbon tetrachloride	2279	100	2000	0	114	65-140	0			
Chlorobenzene	2050	100	2000	0	102	80-120	0			
Chloroethane	1950	100	2000	0	97.5	50-140	0			
Chloroform	2078	100	2000	0	104	80-130	0			
Chloromethane	1816	100	2000	0	90.8	50-130	0			
cis-1,2-Dichloroethene	2393	100	2000	177	111	75-134	0			
cis-1,3-Dichloropropene	1839	100	2000	0	92	70-130	0			
Dibromochloromethane	1887	100	2000	0	94.4	60-115	0			
Ethylbenzene	2062	100	2000	0	103	85-125	0			
m,p-Xylene	4176	200	4000	0	104	75-130	0			
Methylene chloride	2133	500	2000	0	107	75-140	0			
o-Xylene	2005	100	2000	0	100	80-125	0			
Styrene	2052	100	2000	0	103	85-125	0			
Tetrachloroethene	2162	100	2000	0	108	77-138	0			
Toluene	2045	100	2000	0	102	85-125	0			
trans-1,2-Dichloroethene	2279	100	2000	0	114	80-140	0			
trans-1,3-Dichloropropene	1757	100	2000	0	87.8	81-123	0			
Trichloroethene	2147	100	2000	0	107	84-130	0			
Vinyl chloride	2213	100	2000	367	92.3	50-136	0			
Xylenes, Total	6181	300	6000	0	103	80-126	0			
Surr: 1,2-Dichloroethane-d4	2019	0	2000	0	101	75-120	0			
Surr: 4-Bromofluorobenzene	2046	0	2000	0	102	80-110	0			
Surr: Dibromofluoromethane	2036	0	2000	0	102	85-115	0			
Surr: Toluene-d8	1965	0	2000	0	98.2	85-110	0			

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

Client: AMEC Foster Wheeler
 Work Order: 15081601
 Project: Textron/Torx Rochester, IN 3359-14-1022

QC BATCH REPORT

Batch ID: **R170660** Instrument ID **VMS5** Method: **SW8260**

MSD		Sample ID: 15081601-10A MSD				Units: µg/L		Analysis Date: 8/31/2015 09:23 PM		
Client ID: ATR-OW1(D)-G082715		Run ID: VMS5_150831A		SeqNo: 3440446		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	2349	100	2000	0	117	75-130	2230	5.2	30	
1,1,2,2-Tetrachloroethane	2095	100	2000	0	105	75-130	1994	4.94	30	
1,1,2-Trichloroethane	2153	100	2000	0	108	75-125	2060	4.41	30	
1,1-Dichloroethane	2326	100	2000	0	116	75-133	2198	5.66	30	
1,1-Dichloroethene	2665	100	2000	0	133	70-145	2500	6.39	30	
1,2-Dichloroethane	2235	100	2000	0	112	78-125	2158	3.51	30	
1,2-Dichloropropane	2170	100	2000	0	108	75-125	2016	7.36	30	
2-Butanone	2114	500	2000	0	106	55-150	2601	20.7	30	
2-Hexanone	1981	500	2000	0	99	60-135	1994	0.654	30	
4-Methyl-2-pentanone	2361	100	2000	0	118	77-178	2404	1.8	30	
Acetone	2998	1,000	2000	0	150	60-160	2934	2.16	30	
Benzene	2261	100	2000	0	113	85-125	2104	7.19	30	
Bromodichloromethane	2167	100	2000	0	108	75-125	2021	6.97	30	
Bromoform	1885	100	2000	0	94.2	60-125	1831	2.91	30	
Bromomethane	1644	100	2000	0	82.2	30-185	1284	24.6	30	
Carbon disulfide	2216	100	2000	0	111	60-165	2089	5.9	30	
Carbon tetrachloride	2455	100	2000	0	123	65-140	2279	7.44	30	
Chlorobenzene	2148	100	2000	0	107	80-120	2050	4.67	30	
Chloroethane	2059	100	2000	0	103	50-140	1950	5.44	30	
Chloroform	2219	100	2000	0	111	80-130	2078	6.56	30	
Chloromethane	1981	100	2000	0	99	50-130	1816	8.69	30	
cis-1,2-Dichloroethene	2480	100	2000	177	115	75-134	2393	3.57	30	
cis-1,3-Dichloropropene	1981	100	2000	0	99	70-130	1839	7.43	30	
Dibromochloromethane	1982	100	2000	0	99.1	60-115	1887	4.91	30	
Ethylbenzene	2175	100	2000	0	109	85-125	2062	5.33	30	
m,p-Xylene	4389	200	4000	0	110	75-130	4176	4.97	30	
Methylene chloride	2266	500	2000	0	113	75-140	2133	6.05	30	
o-Xylene	2117	100	2000	0	106	80-125	2005	5.43	30	
Styrene	2150	100	2000	0	108	85-125	2052	4.66	30	
Tetrachloroethene	2246	100	2000	0	112	77-138	2162	3.81	30	
Toluene	2147	100	2000	0	107	85-125	2045	4.87	30	
trans-1,2-Dichloroethene	2486	100	2000	0	124	80-140	2279	8.69	30	
trans-1,3-Dichloropropene	1856	100	2000	0	92.8	81-123	1757	5.48	30	
Trichloroethene	2267	100	2000	0	113	84-130	2147	5.44	30	
Vinyl chloride	2308	100	2000	367	97	50-136	2213	4.2	30	
Xylenes, Total	6506	300	6000	0	108	80-126	6181	5.12	30	
Surr: 1,2-Dichloroethane-d4	2058	0	2000	0	103	75-120	2019	1.91	30	
Surr: 4-Bromofluorobenzene	2038	0	2000	0	102	80-110	2046	0.392	30	
Surr: Dibromofluoromethane	2084	0	2000	0	104	85-115	2036	2.33	30	
Surr: Toluene-d8	1959	0	2000	0	98	85-110	1965	0.306	30	

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

Client: AMEC Foster Wheeler
Work Order: 15081601
Project: Textron/Torx Rochester, IN 3359-14-1022

QC BATCH REPORT

Batch ID: **R170660** Instrument ID **VMS5** Method: **SW8260**

The following samples were analyzed in this batch:

15081601-01A	15081601-02A	15081601-03A
15081601-04A	15081601-05A	15081601-06A
15081601-07A	15081601-08A	15081601-09A
15081601-10A	15081601-11A	15081601-12A
15081601-13A	15081601-14A	15081601-15A
15081601-16A	15081601-17A	15081601-18A

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

Client: AMEC Foster Wheeler
 Work Order: 15081601
 Project: Textron/Torx Rochester, IN 3359-14-1022

QC BATCH REPORT

Batch ID: R170816 Instrument ID VMS6 Method: SW8260

MBLK		Sample ID: VBLKW1-150902-R170816				Units: µg/L		Analysis Date: 9/2/2015 11:58 AM		
Client ID:		Run ID: VMS6_150902A		SeqNo: 3443724		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	21.29	0	20	0	106	75-120	0			
Surr: 4-Bromofluorobenzene	18.43	0	20	0	92.2	80-110	0			
Surr: Dibromofluoromethane	20.63	0	20	0	103	85-115	0			
Surr: Toluene-d8	20.74	0	20	0	104	85-110	0			

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

Client: AMEC Foster Wheeler
 Work Order: 15081601
 Project: Textron/Torx Rochester, IN 3359-14-1022

QC BATCH REPORT

Batch ID: R170816 Instrument ID VMS6 Method: SW8260

LCS		Sample ID: VLCSW1-150902-R170816				Units: µg/L		Analysis Date: 9/2/2015 10:38 AM		
Client ID:		Run ID: VMS6_150902A			SeqNo: 3443722		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	22.41	1.0	20	0	112	75-130	0			
1,1,2,2-Tetrachloroethane	21.41	1.0	20	0	107	75-130	0			
1,1,2-Trichloroethane	22.44	1.0	20	0	112	75-125	0			
1,1-Dichloroethane	21.3	1.0	20	0	106	75-133	0			
1,1-Dichloroethene	23.4	1.0	20	0	117	70-145	0			
1,2-Dichloroethane	20.08	1.0	20	0	100	78-125	0			
1,2-Dichloropropane	20.35	1.0	20	0	102	75-125	0			
2-Butanone	15.56	5.0	20	0	77.8	55-150	0			
2-Hexanone	17.91	5.0	20	0	89.6	60-135	0			
4-Methyl-2-pentanone	22.79	1.0	20	0	114	77-178	0			
Acetone	13.64	10	20	0	68.2	60-160	0			
Benzene	21.53	1.0	20	0	108	85-125	0			
Bromodichloromethane	21.17	1.0	20	0	106	75-125	0			
Bromoform	19.69	1.0	20	0	98.4	60-125	0			
Bromomethane	29.06	1.0	20	0	145	30-185	0			
Carbon disulfide	20.37	1.0	20	0	102	60-165	0			
Carbon tetrachloride	20.9	1.0	20	0	104	65-140	0			
Chlorobenzene	21.55	1.0	20	0	108	80-120	0			
Chloroethane	22.09	1.0	20	0	110	50-140	0			
Chloroform	19.52	1.0	20	0	97.6	80-130	0			
Chloromethane	17.75	1.0	20	0	88.8	50-130	0			
cis-1,2-Dichloroethene	22.22	1.0	20	0	111	75-134	0			
cis-1,3-Dichloropropene	20.99	1.0	20	0	105	70-130	0			
Dibromochloromethane	21.01	1.0	20	0	105	60-115	0			
Ethylbenzene	22.33	1.0	20	0	112	85-125	0			
m,p-Xylene	45.5	2.0	40	0	114	75-130	0			
Methylene chloride	21.67	5.0	20	0	108	75-140	0			
o-Xylene	22.15	1.0	20	0	111	80-125	0			
Styrene	23.18	1.0	20	0	116	85-125	0			
Tetrachloroethene	21.8	1.0	20	0	109	77-138	0			
Toluene	22.15	1.0	20	0	111	85-125	0			
trans-1,2-Dichloroethene	21.28	1.0	20	0	106	80-140	0			
trans-1,3-Dichloropropene	21.14	1.0	20	0	106	81-123	0			
Trichloroethene	21.3	1.0	20	0	106	84-130	0			
Vinyl chloride	21.06	1.0	20	0	105	50-136	0			
Xylenes, Total	67.65	3.0	60	0	113	80-126	0			
Surr: 1,2-Dichloroethane-d4	20.66	0	20	0	103	75-120	0			
Surr: 4-Bromofluorobenzene	19.81	0	20	0	99	80-110	0			
Surr: Dibromofluoromethane	20.43	0	20	0	102	85-115	0			
Surr: Toluene-d8	21.26	0	20	0	106	85-110	0			

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

Client: AMEC Foster Wheeler
 Work Order: 15081601
 Project: Textron/Torx Rochester, IN 3359-14-1022

QC BATCH REPORT

Batch ID: R170816 Instrument ID VMS6 Method: SW8260

MS		Sample ID: 15081601-14A MS				Units: µg/L		Analysis Date: 9/2/2015 08:55 PM		
Client ID: ATR-MW59(29)-G082715		Run ID: VMS6_150902A		SeqNo: 3443757		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	2126	100	2000	0	106	75-130	0			
1,1,2,2-Tetrachloroethane	2205	100	2000	0	110	75-130	0			
1,1,2-Trichloroethane	2213	100	2000	0	111	75-125	0			
1,1-Dichloroethane	2079	100	2000	0	104	75-133	0			
1,1-Dichloroethene	2446	100	2000	130	116	70-145	0			
1,2-Dichloroethane	1976	100	2000	0	98.8	78-125	0			
1,2-Dichloropropane	2048	100	2000	0	102	75-125	0			
2-Butanone	1710	500	2000	0	85.5	55-150	0			
2-Hexanone	1974	500	2000	0	98.7	60-135	0			
4-Methyl-2-pentanone	2435	100	2000	0	122	77-178	0			
Acetone	1727	1,000	2000	0	86.4	60-160	0			
Benzene	2072	100	2000	0	104	85-125	0			
Bromodichloromethane	2027	100	2000	0	101	75-125	0			
Bromoform	1999	100	2000	0	100	60-125	0			
Bromomethane	1575	100	2000	0	78.8	30-185	0			
Carbon disulfide	1899	100	2000	0	95	60-165	0			
Carbon tetrachloride	1991	100	2000	0	99.6	65-140	0			
Chlorobenzene	2071	100	2000	0	104	80-120	0			
Chloroethane	2330	100	2000	0	116	50-140	0			
Chloroform	1948	100	2000	0	97.4	80-130	0			
Chloromethane	1465	100	2000	0	73.2	50-130	0			
cis-1,2-Dichloroethene	30570	100	2000	27280	165	75-134	0			SEO
cis-1,3-Dichloropropene	1953	100	2000	0	97.6	70-130	0			
Dibromochloromethane	2065	100	2000	0	103	60-115	0			
Ethylbenzene	2167	100	2000	0	108	85-125	0			
m,p-Xylene	4440	200	4000	0	111	75-130	0			
Methylene chloride	2080	500	2000	0	104	75-140	0			
o-Xylene	2130	100	2000	0	106	80-125	0			
Styrene	2233	100	2000	0	112	85-125	0			
Tetrachloroethene	2153	100	2000	0	108	77-138	0			
Toluene	2168	100	2000	39	106	85-125	0			
trans-1,2-Dichloroethene	2210	100	2000	133	104	80-140	0			
trans-1,3-Dichloropropene	1964	100	2000	0	98.2	81-123	0			
Trichloroethene	2048	100	2000	0	102	84-130	0			
Vinyl chloride	25310	100	2000	22110	160	50-136	0			SEO
Xylenes, Total	6570	300	6000	0	110	80-126	0			
Surr: 1,2-Dichloroethane-d4	2072	0	2000	0	104	75-120	0			
Surr: 4-Bromofluorobenzene	1952	0	2000	0	97.6	80-110	0			
Surr: Dibromofluoromethane	2020	0	2000	0	101	85-115	0			
Surr: Toluene-d8	2092	0	2000	0	105	85-110	0			

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

Client: AMEC Foster Wheeler
 Work Order: 15081601
 Project: Textron/Torx Rochester, IN 3359-14-1022

QC BATCH REPORT

Batch ID: R170816 Instrument ID VMS6 Method: SW8260

MSD		Sample ID: 15081601-14A MSD				Units: µg/L		Analysis Date: 9/2/2015 09:21 PM		
Client ID: ATR-MW59(29)-G082715		Run ID: VMS6_150902A				SeqNo: 3443759		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	1819	100	2000	0	91	75-130	2126	15.6	30	
1,1,2,2-Tetrachloroethane	2130	100	2000	0	106	75-130	2205	3.46	30	
1,1,2-Trichloroethane	2115	100	2000	0	106	75-125	2213	4.53	30	
1,1-Dichloroethane	1822	100	2000	0	91.1	75-133	2079	13.2	30	
1,1-Dichloroethene	2040	100	2000	130	95.5	70-145	2446	18.1	30	
1,2-Dichloroethane	1827	100	2000	0	91.4	78-125	1976	7.84	30	
1,2-Dichloropropane	1874	100	2000	0	93.7	75-125	2048	8.87	30	
2-Butanone	1691	500	2000	0	84.6	55-150	1710	1.12	30	
2-Hexanone	1821	500	2000	0	91	60-135	1974	8.06	30	
4-Methyl-2-pentanone	2371	100	2000	0	119	77-178	2435	2.66	30	
Acetone	1720	1,000	2000	0	86	60-160	1727	0.406	30	
Benzene	1837	100	2000	0	91.8	85-125	2072	12	30	
Bromodichloromethane	1889	100	2000	0	94.4	75-125	2027	7.05	30	
Bromoform	1875	100	2000	0	93.8	60-125	1999	6.4	30	
Bromomethane	1611	100	2000	0	80.6	30-185	1575	2.26	30	
Carbon disulfide	1613	100	2000	0	80.6	60-165	1899	16.3	30	
Carbon tetrachloride	1611	100	2000	0	80.6	65-140	1991	21.1	30	
Chlorobenzene	1872	100	2000	0	93.6	80-120	2071	10.1	30	
Chloroethane	1896	100	2000	0	94.8	50-140	2330	20.5	30	
Chloroform	1719	100	2000	0	86	80-130	1948	12.5	30	
Chloromethane	1325	100	2000	0	66.2	50-130	1465	10	30	
cis-1,2-Dichloroethene	28580	100	2000	27280	64.9	75-134	30570	6.74	30	SEO
cis-1,3-Dichloropropene	1855	100	2000	0	92.8	70-130	1953	5.15	30	
Dibromochloromethane	1983	100	2000	0	99.2	60-115	2065	4.05	30	
Ethylbenzene	1918	100	2000	0	95.9	85-125	2167	12.2	30	
m,p-Xylene	3894	200	4000	0	97.4	75-130	4440	13.1	30	
Methylene chloride	1868	500	2000	0	93.4	75-140	2080	10.7	30	
o-Xylene	1951	100	2000	0	97.6	80-125	2130	8.77	30	
Styrene	2084	100	2000	0	104	85-125	2233	6.9	30	
Tetrachloroethene	1905	100	2000	0	95.2	77-138	2153	12.2	30	
Toluene	1914	100	2000	39	93.8	85-125	2168	12.4	30	
trans-1,2-Dichloroethene	1882	100	2000	133	87.4	80-140	2210	16	30	
trans-1,3-Dichloropropene	1905	100	2000	0	95.2	81-123	1964	3.05	30	
Trichloroethene	1737	100	2000	0	86.8	84-130	2048	16.4	30	
Vinyl chloride	23360	100	2000	22110	62.3	50-136	25310	8	30	EO
Xylenes, Total	5845	300	6000	0	97.4	80-126	6570	11.7	30	
Surr: 1,2-Dichloroethane-d4	2075	0	2000	0	104	75-120	2072	0.145	30	
Surr: 4-Bromofluorobenzene	1979	0	2000	0	99	80-110	1952	1.37	30	
Surr: Dibromofluoromethane	2026	0	2000	0	101	85-115	2020	0.297	30	
Surr: Toluene-d8	2102	0	2000	0	105	85-110	2092	0.477	30	

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

Client: AMEC Foster Wheeler
Work Order: 15081601
Project: Textron/Torx Rochester, IN 3359-14-1022

QC BATCH REPORT

Batch ID: **R170816** Instrument ID **VMS6** Method: **SW8260**

The following samples were analyzed in this batch:

15081601-01A	15081601-06A	15081601-11A
15081601-12A	15081601-14A	

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

Client: AMEC Foster Wheeler
 Work Order: 15081601
 Project: Textron/Torx Rochester, IN 3359-14-1022

QC BATCH REPORT

Batch ID: **R170826** Instrument ID **VMS6** Method: **SW8260**

MBLK		Sample ID: VBLKW1-150901-R170826				Units: µg/L		Analysis Date: 9/1/2015 06:42 PM		
Client ID:		Run ID: VMS6_150901A			SeqNo: 3441820		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	21.06	0	20	0	105	75-120	0			
Surr: 4-Bromofluorobenzene	18.96	0	20	0	94.8	80-110	0			
Surr: Dibromofluoromethane	20.49	0	20	0	102	85-115	0			
Surr: Toluene-d8	20.77	0	20	0	104	85-110	0			

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

Client: AMEC Foster Wheeler
 Work Order: 15081601
 Project: Textron/Torx Rochester, IN 3359-14-1022

QC BATCH REPORT

Batch ID: R170826 Instrument ID VMS6 Method: SW8260

LCS		Sample ID: VLCSW1-150901-R170826				Units: µg/L		Analysis Date: 9/1/2015 05:48 PM		
Client ID:		Run ID: VMS6_150901A			SeqNo: 3441819		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	23.34	1.0	20	0	117	75-130	0			
1,1,2,2-Tetrachloroethane	26.97	1.0	20	0	135	75-130	0			S
1,1,2-Trichloroethane	24.51	1.0	20	0	123	75-125	0			
1,1-Dichloroethane	22.26	1.0	20	0	111	75-133	0			
1,1-Dichloroethene	24.81	1.0	20	0	124	70-145	0			
1,2-Dichloroethane	21.22	1.0	20	0	106	78-125	0			
1,2-Dichloropropane	23	1.0	20	0	115	75-125	0			
2-Butanone	21.9	5.0	20	0	110	55-150	0			
2-Hexanone	26.19	5.0	20	0	131	60-135	0			
4-Methyl-2-pentanone	33.23	1.0	20	0	166	77-178	0			
Acetone	22.21	10	20	0	111	60-160	0			
Benzene	22.67	1.0	20	0	113	85-125	0			
Bromodichloromethane	22.24	1.0	20	0	111	75-125	0			
Bromoform	21.83	1.0	20	0	109	60-125	0			
Bromomethane	29.4	1.0	20	0	147	30-185	0			
Carbon disulfide	20.66	1.0	20	0	103	60-165	0			
Carbon tetrachloride	21.53	1.0	20	0	108	65-140	0			
Chlorobenzene	23.06	1.0	20	0	115	80-120	0			
Chloroethane	22.75	1.0	20	0	114	50-140	0			
Chloroform	21.08	1.0	20	0	105	80-130	0			
Chloromethane	19.21	1.0	20	0	96	50-130	0			
cis-1,2-Dichloroethene	23.32	1.0	20	0	117	75-134	0			
cis-1,3-Dichloropropene	22.91	1.0	20	0	115	70-130	0			
Dibromochloromethane	22.75	1.0	20	0	114	60-115	0			
Ethylbenzene	24.19	1.0	20	0	121	85-125	0			
m,p-Xylene	49.64	2.0	40	0	124	75-130	0			
Methylene chloride	22.06	5.0	20	0	110	75-140	0			
o-Xylene	24.28	1.0	20	0	121	80-125	0			
Styrene	25.5	1.0	20	0	128	85-125	0			S
Tetrachloroethene	23.65	1.0	20	0	118	77-138	0			
Toluene	23.37	1.0	20	0	117	85-125	0			
trans-1,2-Dichloroethene	21.78	1.0	20	0	109	80-140	0			
trans-1,3-Dichloropropene	23.43	1.0	20	0	117	81-123	0			
Trichloroethene	21.72	1.0	20	0	109	84-130	0			
Vinyl chloride	21.69	1.0	20	0	108	50-136	0			
Xylenes, Total	73.92	3.0	60	0	123	80-126	0			
Surr: 1,2-Dichloroethane-d4	20.69	0	20	0	103	75-120	0			
Surr: 4-Bromofluorobenzene	19.9	0	20	0	99.5	80-110	0			
Surr: Dibromofluoromethane	20.54	0	20	0	103	85-115	0			
Surr: Toluene-d8	21.01	0	20	0	105	85-110	0			

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

Client: AMEC Foster Wheeler
 Work Order: 15081601
 Project: Textron/Torx Rochester, IN 3359-14-1022

QC BATCH REPORT

Batch ID: R170826 Instrument ID VMS6 Method: SW8260

MS		Sample ID: 15081601-14A MS				Units: µg/L		Analysis Date: 9/2/2015 04:02 AM		
Client ID: ATR-MW59(29)-G082715		Run ID: VMS6_150901A		SeqNo: 3441862		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	2111	100	2000	0	106	75-130	0			
1,1,2,2-Tetrachloroethane	2022	100	2000	0	101	75-130	0			
1,1,2-Trichloroethane	2084	100	2000	0	104	75-125	0			
1,1-Dichloroethane	2000	100	2000	0	100	75-133	0			
1,1-Dichloroethene	2377	100	2000	0	119	70-145	0			
1,2-Dichloroethane	1908	100	2000	0	95.4	78-125	0			
1,2-Dichloropropane	1939	100	2000	0	97	75-125	0			
2-Butanone	1611	500	2000	0	80.6	55-150	0			
2-Hexanone	1872	500	2000	0	93.6	60-135	0			
4-Methyl-2-pentanone	2332	100	2000	0	117	77-178	0			
Acetone	1501	1,000	2000	0	75	60-160	0			
Benzene	2056	100	2000	0	103	85-125	0			
Bromodichloromethane	1976	100	2000	0	98.8	75-125	0			
Bromoform	1917	100	2000	0	95.8	60-125	0			
Bromomethane	1783	100	2000	0	89.2	30-185	0			
Carbon disulfide	1933	100	2000	0	96.6	60-165	0			
Carbon tetrachloride	2025	100	2000	0	101	65-140	0			
Chlorobenzene	2008	100	2000	0	100	80-120	0			
Chloroethane	2250	100	2000	0	112	50-140	0			
Chloroform	1855	100	2000	0	92.8	80-130	0			
Chloromethane	1421	100	2000	0	71	50-130	0			
cis-1,2-Dichloroethene	27300	100	2000	20630	333	75-134	0			SEO
cis-1,3-Dichloropropene	1892	100	2000	0	94.6	70-130	0			
Dibromochloromethane	2024	100	2000	0	101	60-115	0			
Ethylbenzene	2105	100	2000	0	105	85-125	0			
m,p-Xylene	4313	200	4000	0	108	75-130	0			
Methylene chloride	1983	500	2000	0	99.2	75-140	0			
o-Xylene	2122	100	2000	0	106	80-125	0			
Styrene	2186	100	2000	0	109	85-125	0			
Tetrachloroethene	2108	100	2000	0	105	77-138	0			
Toluene	2145	100	2000	33	106	85-125	0			
trans-1,2-Dichloroethene	2130	100	2000	97	102	80-140	0			
trans-1,3-Dichloropropene	1869	100	2000	0	93.4	81-123	0			
Trichloroethene	1996	100	2000	0	99.8	84-130	0			
Vinyl chloride	22740	100	2000	14720	401	50-136	0			SEO
Xylenes, Total	6435	300	6000	0	107	80-126	0			
Surr: 1,2-Dichloroethane-d4	2123	0	2000	0	106	75-120	0			
Surr: 4-Bromofluorobenzene	2010	0	2000	0	100	80-110	0			
Surr: Dibromofluoromethane	2075	0	2000	0	104	85-115	0			
Surr: Toluene-d8	2148	0	2000	0	107	85-110	0			

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

Client: AMEC Foster Wheeler
 Work Order: 15081601
 Project: Textron/Torx Rochester, IN 3359-14-1022

QC BATCH REPORT

Batch ID: **R170826** Instrument ID **VMS6** Method: **SW8260**

MSD		Sample ID: 15081601-14A MSD				Units: µg/L		Analysis Date: 9/2/2015 04:29 AM		
Client ID: ATR-MW59(29)-G082715		Run ID: VMS6_150901A				SeqNo: 3441919		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	2272	100	2000	0	114	75-130	2111	7.35	30	
1,1,2,2-Tetrachloroethane	2128	100	2000	0	106	75-130	2022	5.11	30	
1,1,2-Trichloroethane	2169	100	2000	0	108	75-125	2084	4	30	
1,1-Dichloroethane	2110	100	2000	0	106	75-133	2000	5.35	30	
1,1-Dichloroethene	2531	100	2000	0	127	70-145	2377	6.28	30	
1,2-Dichloroethane	1956	100	2000	0	97.8	78-125	1908	2.48	30	
1,2-Dichloropropane	2125	100	2000	0	106	75-125	1939	9.15	30	
2-Butanone	1519	500	2000	0	76	55-150	1611	5.88	30	
2-Hexanone	1892	500	2000	0	94.6	60-135	1872	1.06	30	
4-Methyl-2-pentanone	2306	100	2000	0	115	77-178	2332	1.12	30	
Acetone	1627	1,000	2000	0	81.4	60-160	1501	8.06	30	
Benzene	2194	100	2000	0	110	85-125	2056	6.49	30	
Bromodichloromethane	2105	100	2000	0	105	75-125	1976	6.32	30	
Bromoform	2015	100	2000	0	101	60-125	1917	4.98	30	
Bromomethane	2219	100	2000	0	111	30-185	1783	21.8	30	
Carbon disulfide	2051	100	2000	0	103	60-165	1933	5.92	30	
Carbon tetrachloride	2118	100	2000	0	106	65-140	2025	4.49	30	
Chlorobenzene	2156	100	2000	0	108	80-120	2008	7.11	30	
Chloroethane	2340	100	2000	0	117	50-140	2250	3.92	30	
Chloroform	1986	100	2000	0	99.3	80-130	1855	6.82	30	
Chloromethane	1728	100	2000	0	86.4	50-130	1421	19.5	30	
cis-1,2-Dichloroethene	28520	100	2000	20630	395	75-134	27300	4.39	30	SEO
cis-1,3-Dichloropropene	2006	100	2000	0	100	70-130	1892	5.85	30	
Dibromochloromethane	2124	100	2000	0	106	60-115	2024	4.82	30	
Ethylbenzene	2260	100	2000	0	113	85-125	2105	7.1	30	
m,p-Xylene	4601	200	4000	0	115	75-130	4313	6.46	30	
Methylene chloride	2086	500	2000	0	104	75-140	1983	5.06	30	
o-Xylene	2224	100	2000	0	111	80-125	2122	4.69	30	
Styrene	2287	100	2000	0	114	85-125	2186	4.52	30	
Tetrachloroethene	2176	100	2000	0	109	77-138	2108	3.17	30	
Toluene	2254	100	2000	33	111	85-125	2145	4.96	30	
trans-1,2-Dichloroethene	2275	100	2000	97	109	80-140	2130	6.58	30	
trans-1,3-Dichloropropene	1977	100	2000	0	98.8	81-123	1869	5.62	30	
Trichloroethene	2153	100	2000	0	108	84-130	1996	7.57	30	
Vinyl chloride	23620	100	2000	14720	445	50-136	22740	3.83	30	SEO
Xylenes, Total	6825	300	6000	0	114	80-126	6435	5.88	30	
Surr: 1,2-Dichloroethane-d4	2072	0	2000	0	104	75-120	2123	2.43	30	
Surr: 4-Bromofluorobenzene	1957	0	2000	0	97.8	80-110	2010	2.67	30	
Surr: Dibromofluoromethane	2037	0	2000	0	102	85-115	2075	1.85	30	
Surr: Toluene-d8	2120	0	2000	0	106	85-110	2148	1.31	30	

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

Client: AMEC Foster Wheeler
Work Order: 15081601
Project: Textron/Torx Rochester, IN 3359-14-1022

QC BATCH REPORT

Batch ID: **R170826** Instrument ID **VMS6** Method: **SW8260**

The following samples were analyzed in this batch:

15081601-01A	15081601-02A	15081601-03A
15081601-04A	15081601-06A	15081601-07A
15081601-08A	15081601-09A	15081601-10A
15081601-11A	15081601-12A	15081601-14A
15081601-15A	15081601-17A	

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

Client: AMEC Foster Wheeler
 Work Order: 15081601
 Project: Textron/Torx Rochester, IN 3359-14-1022

QC BATCH REPORT

Batch ID: **R171002A** Instrument ID **VMS6** Method: **SW8260**

MBLK		Sample ID: VBLKW2-150903-R171002A				Units: µg/L		Analysis Date: 9/4/2015 02:06 AM		
Client ID:		Run ID: VMS6_150903B		SeqNo: 3445825		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-1,3-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								
Xylenes, Total	ND	3.0								
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>19.67</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>98.4</i>	<i>75-120</i>	<i>0</i>			
<i>Surr: 4-Bromofluorobenzene</i>	<i>18.69</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>93.4</i>	<i>80-110</i>	<i>0</i>			
<i>Surr: Dibromofluoromethane</i>	<i>19.58</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>97.9</i>	<i>85-115</i>	<i>0</i>			
<i>Surr: Toluene-d8</i>	<i>20.69</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>103</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: 15081601
 Project: Textron/Torx Rochester, IN 3359-14-1022

QC BATCH REPORT

Batch ID: **R171002A** Instrument ID **VMS6** Method: **SW8260**

LCS		Sample ID: VLCSW2-150903-R171002A				Units: µg/L		Analysis Date: 9/4/2015 01:14 AM		
Client ID:		Run ID: VMS6_150903B			SeqNo: 3445824		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	1.0	20	0	105	75-130	0			
1,1,2,2-Tetrachloroethane	19.25	1.0	20	0	96.2	75-130	0			
1,1,2-Trichloroethane	21.23	1.0	20	0	106	75-125	0			
1,1-Dichloroethane	20.87	1.0	20	0	104	75-133	0			
1,1-Dichloroethene	22.14	1.0	20	0	111	70-145	0			
1,2-Dichloroethane	18.31	1.0	20	0	91.6	78-125	0			
1,2-Dichloropropane	20.73	1.0	20	0	104	75-125	0			
2-Butanone	13.9	5.0	20	0	69.5	55-150	0			
2-Hexanone	15.83	5.0	20	0	79.2	60-135	0			
4-Methyl-2-pentanone	19.66	1.0	20	0	98.3	77-178	0			
Acetone	13.35	10	20	0	66.8	60-160	0			
Benzene	20.7	1.0	20	0	104	85-125	0			
Bromodichloromethane	20.33	1.0	20	0	102	75-125	0			
Bromoform	19.12	1.0	20	0	95.6	60-125	0			
Bromomethane	31.32	1.0	20	0	157	30-185	0			
Carbon disulfide	17.62	1.0	20	0	88.1	60-165	0			
Carbon tetrachloride	18.82	1.0	20	0	94.1	65-140	0			
Chlorobenzene	21.2	1.0	20	0	106	80-120	0			
Chloroethane	21.97	1.0	20	0	110	50-140	0			
Chloroform	19.62	1.0	20	0	98.1	80-130	0			
Chloromethane	18.23	1.0	20	0	91.2	50-130	0			
cis-1,3-Dichloropropene	19.59	1.0	20	0	98	70-130	0			
Dibromochloromethane	20.79	1.0	20	0	104	60-115	0			
Ethylbenzene	22.31	1.0	20	0	112	85-125	0			
m,p-Xylene	44.94	2.0	40	0	112	75-130	0			
Methylene chloride	20.52	5.0	20	0	103	75-140	0			
o-Xylene	22.06	1.0	20	0	110	80-125	0			
Styrene	22.93	1.0	20	0	115	85-125	0			
Tetrachloroethene	21.32	1.0	20	0	107	77-138	0			
Toluene	21.89	1.0	20	0	109	85-125	0			
trans-1,2-Dichloroethene	20.52	1.0	20	0	103	80-140	0			
trans-1,3-Dichloropropene	19.58	1.0	20	0	97.9	81-123	0			
Trichloroethene	20.38	1.0	20	0	102	84-130	0			
Xylenes, Total	67	3.0	60	0	112	80-126	0			
<i>Surr: 1,2-Dichloroethane-d4</i>	19.62	0	20	0	98.1	75-120	0			
<i>Surr: 4-Bromofluorobenzene</i>	20.02	0	20	0	100	80-110	0			
<i>Surr: Dibromofluoromethane</i>	19.56	0	20	0	97.8	85-115	0			
<i>Surr: Toluene-d8</i>	21.06	0	20	0	105	85-110	0			

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

Client: AMEC Foster Wheeler
 Work Order: 15081601
 Project: Textron/Torx Rochester, IN 3359-14-1022

QC BATCH REPORT

Batch ID: R171002A Instrument ID VMS6 Method: SW8260

MS		Sample ID: 15081601-12A MS				Units: µg/L		Analysis Date: 9/4/2015 11:18 AM		
Client ID: ATR-MW81(27)-G082715		Run ID: VMS6_150903B		SeqNo: 3445872		Prep Date:		DF: 200		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	4152	200	4000	0	104	75-130	0			
1,1,2,2-Tetrachloroethane	4088	200	4000	0	102	75-130	0			
1,1,2-Trichloroethane	4260	200	4000	0	106	75-125	0			
1,1-Dichloroethane	4152	200	4000	0	104	75-133	0			
1,1-Dichloroethene	4844	200	4000	290	114	70-145	0			
1,2-Dichloroethane	3650	200	4000	0	91.2	78-125	0			
1,2-Dichloropropane	3896	200	4000	0	97.4	75-125	0			
2-Butanone	2956	1,000	4000	0	73.9	55-150	0			
2-Hexanone	4854	1,000	4000	0	121	60-135	0			
4-Methyl-2-pentanone	4406	200	4000	0	110	77-178	0			
Acetone	2714	2,000	4000	0	67.8	60-160	0			
Benzene	4094	200	4000	0	102	85-125	0			
Bromodichloromethane	3806	200	4000	0	95.2	75-125	0			
Bromoform	3566	200	4000	0	89.2	60-125	0			
Bromomethane	3814	200	4000	0	95.4	30-185	0			
Carbon disulfide	3324	200	4000	0	83.1	60-165	0			
Carbon tetrachloride	3758	200	4000	0	94	65-140	0			
Chlorobenzene	4134	200	4000	0	103	80-120	0			
Chloroethane	4446	200	4000	0	111	50-140	0			
Chloroform	3896	200	4000	0	97.4	80-130	0			
Chloromethane	3172	200	4000	0	79.3	50-130	0			
cis-1,3-Dichloropropene	3904	200	4000	0	97.6	70-130	0			
Dibromochloromethane	3816	200	4000	0	95.4	60-115	0			
Ethylbenzene	4436	200	4000	0	111	85-125	0			
m,p-Xylene	9012	400	8000	0	113	75-130	0			
Methylene chloride	4122	1,000	4000	0	103	75-140	0			
o-Xylene	4434	200	4000	0	111	80-125	0			
Styrene	4580	200	4000	0	114	85-125	0			
Tetrachloroethene	4424	200	4000	0	111	77-138	0			
Toluene	4380	200	4000	0	110	85-125	0			
trans-1,2-Dichloroethene	4332	200	4000	262	102	80-140	0			
trans-1,3-Dichloropropene	3964	200	4000	0	99.1	81-123	0			
Trichloroethene	8624	200	4000	4660	99.1	84-130	0			
Xylenes, Total	13450	600	12000	0	112	80-126	0			
Surr: 1,2-Dichloroethane-d4	3912	0	4000	0	97.8	75-120	0			
Surr: 4-Bromofluorobenzene	4034	0	4000	0	101	80-110	0			
Surr: Dibromofluoromethane	3842	0	4000	0	96	85-115	0			
Surr: Toluene-d8	4254	0	4000	0	106	85-110	0			

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

Client: AMEC Foster Wheeler
 Work Order: 15081601
 Project: Textron/Torx Rochester, IN 3359-14-1022

QC BATCH REPORT

Batch ID: R171002A Instrument ID VMS6 Method: SW8260

MSD		Sample ID: 15081601-12A MSD				Units: µg/L		Analysis Date: 9/4/2015 11:44 AM		
Client ID: ATR-MW81(27)-G082715		Run ID: VMS6_150903B		SeqNo: 3445873		Prep Date:		DF: 200		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	4348	200	4000	0	109	75-130	4152	4.61	30	
1,1,2,2-Tetrachloroethane	4068	200	4000	0	102	75-130	4088	0.49	30	
1,1,2-Trichloroethane	4368	200	4000	0	109	75-125	4260	2.5	30	
1,1-Dichloroethane	4302	200	4000	0	108	75-133	4152	3.55	30	
1,1-Dichloroethene	4926	200	4000	290	116	70-145	4844	1.68	30	
1,2-Dichloroethane	3764	200	4000	0	94.1	78-125	3650	3.08	30	
1,2-Dichloropropane	4100	200	4000	0	102	75-125	3896	5.1	30	
2-Butanone	2926	1,000	4000	0	73.2	55-150	2956	1.02	30	
2-Hexanone	3776	1,000	4000	0	94.4	60-135	4854	25	30	
4-Methyl-2-pentanone	4250	200	4000	0	106	77-178	4406	3.6	30	
Acetone	2756	2,000	4000	0	68.9	60-160	2714	1.54	30	
Benzene	4182	200	4000	0	105	85-125	4094	2.13	30	
Bromodichloromethane	3980	200	4000	0	99.5	75-125	3806	4.47	30	
Bromoform	3784	200	4000	0	94.6	60-125	3566	5.93	30	
Bromomethane	4960	200	4000	0	124	30-185	3814	26.1	30	
Carbon disulfide	3556	200	4000	0	88.9	60-165	3324	6.74	30	
Carbon tetrachloride	3964	200	4000	0	99.1	65-140	3758	5.34	30	
Chlorobenzene	4244	200	4000	0	106	80-120	4134	2.63	30	
Chloroethane	4662	200	4000	0	117	50-140	4446	4.74	30	
Chloroform	3998	200	4000	0	100	80-130	3896	2.58	30	
Chloromethane	3638	200	4000	0	91	50-130	3172	13.7	30	
cis-1,3-Dichloropropene	4026	200	4000	0	101	70-130	3904	3.08	30	
Dibromochloromethane	3956	200	4000	0	98.9	60-115	3816	3.6	30	
Ethylbenzene	4560	200	4000	0	114	85-125	4436	2.76	30	
m,p-Xylene	9174	400	8000	0	115	75-130	9012	1.78	30	
Methylene chloride	4118	1,000	4000	0	103	75-140	4122	0.0971	30	
o-Xylene	4538	200	4000	0	113	80-125	4434	2.32	30	
Styrene	4668	200	4000	0	117	85-125	4580	1.9	30	
Tetrachloroethene	4460	200	4000	0	112	77-138	4424	0.81	30	
Toluene	4494	200	4000	0	112	85-125	4380	2.57	30	
trans-1,2-Dichloroethene	4394	200	4000	262	103	80-140	4332	1.42	30	
trans-1,3-Dichloropropene	4048	200	4000	0	101	81-123	3964	2.1	30	
Trichloroethene	8788	200	4000	4660	103	84-130	8624	1.88	30	
Xylenes, Total	13710	600	12000	0	114	80-126	13450	1.96	30	
Surr: 1,2-Dichloroethane-d4	3858	0	4000	0	96.4	75-120	3912	1.39	30	
Surr: 4-Bromofluorobenzene	3932	0	4000	0	98.3	80-110	4034	2.56	30	
Surr: Dibromofluoromethane	3886	0	4000	0	97.2	85-115	3842	1.14	30	
Surr: Toluene-d8	4136	0	4000	0	103	85-110	4254	2.81	30	

The following samples were analyzed in this batch:

15081601-12A

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

Client: AMEC Foster Wheeler
 Work Order: 15081601
 Project: Textron/Torx Rochester, IN 3359-14-1022

QC BATCH REPORT

Batch ID: **R171090** Instrument ID **VMS7** Method: **SW8260**

MBLK		Sample ID: VBLKW2-150904-R171090				Units: µg/L		Analysis Date: 9/4/2015 07:19 PM		
Client ID:		Run ID: VMS7_150904B		SeqNo: 3447515		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2-Butanone	ND	5.0								
Surr: 1,2-Dichloroethane-d4	20.28	0	20	0	101	75-120	0			
Surr: 4-Bromofluorobenzene	19.65	0	20	0	98.2	80-110	0			
Surr: Dibromofluoromethane	20	0	20	0	100	85-115	0			
Surr: Toluene-d8	19.61	0	20	0	98	85-110	0			

LCS		Sample ID: VLCSW3-150904-R171090				Units: µg/L		Analysis Date: 9/4/2015 06:28 PM		
Client ID:		Run ID: VMS7_150904B		SeqNo: 3447514		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2-Butanone	20.15	5.0	20	0	101	55-150	0			
Surr: 1,2-Dichloroethane-d4	19.95	0	20	0	99.8	75-120	0			
Surr: 4-Bromofluorobenzene	20.01	0	20	0	100	80-110	0			
Surr: Dibromofluoromethane	19.92	0	20	0	99.6	85-115	0			
Surr: Toluene-d8	19.69	0	20	0	98.4	85-110	0			

MS		Sample ID: 1509202-21A MS				Units: µg/L		Analysis Date: 9/5/2015 03:38 AM		
Client ID:		Run ID: VMS7_150904B		SeqNo: 3447544		Prep Date:		DF: 10		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2-Butanone	187.6	50	200	0	93.8	55-150	0			
Surr: 1,2-Dichloroethane-d4	201.4	0	200	0	101	75-120	0			
Surr: 4-Bromofluorobenzene	205.1	0	200	0	103	80-110	0			
Surr: Dibromofluoromethane	205.4	0	200	0	103	85-115	0			
Surr: Toluene-d8	201.2	0	200	0	101	85-110	0			

MSD		Sample ID: 1509202-21A MSD				Units: µg/L		Analysis Date: 9/5/2015 04:03 AM		
Client ID:		Run ID: VMS7_150904B		SeqNo: 3447545		Prep Date:		DF: 10		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
2-Butanone	196.7	50	200	0	98.4	55-150	187.6	4.74	30	
Surr: 1,2-Dichloroethane-d4	195.1	0	200	0	97.6	75-120	201.4	3.18	30	
Surr: 4-Bromofluorobenzene	201.8	0	200	0	101	80-110	205.1	1.62	30	
Surr: Dibromofluoromethane	202.6	0	200	0	101	85-115	205.4	1.37	30	
Surr: Toluene-d8	195.8	0	200	0	97.9	85-110	201.2	2.72	30	

The following samples were analyzed in this batch:

15081601-07A	15081601-08A
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Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: AMEC Foster Wheeler
 Work Order: 15081601
 Project: Textron/Torx Rochester, IN 3359-14-1022

QC BATCH REPORT

Batch ID: **R170667B** Instrument ID **TOC3** Method: **SW9060A**

MBLK		Sample ID: MBLK-R170667B				Units: mg/L		Analysis Date: 8/29/2015 02:00 PM		
Client ID:		Run ID: TOC3_150829A		SeqNo: 3438653		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Organic Carbon, Total	0.196	0.50								J

LCS		Sample ID: LCS-R170667B				Units: mg/L		Analysis Date: 8/29/2015 02:00 PM		
Client ID:		Run ID: TOC3_150829A		SeqNo: 3438654		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Organic Carbon, Total	4.7	0.50	5	0	94	91-110		0		

The following samples were analyzed in this batch:

15081601-01B	15081601-02B	15081601-03B
15081601-04B	15081601-05B	15081601-06B

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

Client: AMEC Foster Wheeler
Work Order: 15081601
Project: Textron/Torx Rochester, IN 3359-14-1022

QC BATCH REPORT

Batch ID: **R170815** Instrument ID: **LACHAT2** Method: **E353.2 R2.0**

MBLK	Sample ID: MBLK-R170815		Units: mg/L		Analysis Date: 9/1/2015 11:43 AM					
Client ID:	Run ID: LACHAT2_150901B		SeqNo: 3441539		Prep Date:		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Nitrogen, Nitrate-Nitrite ND 0.020

LCS	Sample ID: LCS-R170815		Units: mg/L		Analysis Date: 9/1/2015 11:43 AM					
Client ID:	Run ID: LACHAT2_150901B		SeqNo: 3441540		Prep Date:		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Nitrogen, Nitrate-Nitrite 5.252 0.020 5 0 105 80-120 0

MS	Sample ID: 15081601-02B MS		Units: mg/L		Analysis Date: 9/1/2015 11:43 AM					
Client ID: ATR-MW12-G082615	Run ID: LACHAT2_150901B		SeqNo: 3441543		Prep Date:		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Nitrogen, Nitrate-Nitrite 4.846 0.020 5 0.02236 96.5 75-125 0

MS	Sample ID: 15081601-14B MS		Units: mg/L		Analysis Date: 9/1/2015 11:43 AM					
Client ID: ATR-MW59(29)-G082715	Run ID: LACHAT2_150901B		SeqNo: 3441559		Prep Date:		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Nitrogen, Nitrate-Nitrite 4.964 0.020 5 0.02178 98.8 75-125 0

MSD	Sample ID: 15081601-02B MSD		Units: mg/L		Analysis Date: 9/1/2015 11:43 AM					
Client ID: ATR-MW12-G082615	Run ID: LACHAT2_150901B		SeqNo: 3441544		Prep Date:		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Nitrogen, Nitrate-Nitrite 4.819 0.020 5 0.02236 95.9 75-125 4.846 0.559 20

MSD	Sample ID: 15081601-14B MSD		Units: mg/L		Analysis Date: 9/1/2015 11:43 AM					
Client ID: ATR-MW59(29)-G082715	Run ID: LACHAT2_150901B		SeqNo: 3441560		Prep Date:		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Nitrogen, Nitrate-Nitrite 4.962 0.020 5 0.02178 98.8 75-125 4.964 0.0403 20

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

Client: AMEC Foster Wheeler
Work Order: 15081601
Project: Textron/Torx Rochester, IN 3359-14-1022

QC BATCH REPORT

Batch ID: **R170815** Instrument ID **LCHAT2** Method: **E353.2 R2.0**

The following samples were analyzed in this batch:

15081601-01B	15081601-02B	15081601-03B
15081601-04B	15081601-05B	15081601-06B
15081601-07B	15081601-08B	15081601-09B
15081601-10B	15081601-11B	15081601-12B
15081601-13B	15081601-14B	15081601-15B
15081601-16B	15081601-17B	

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

Client: AMEC Foster Wheeler
 Work Order: 15081601
 Project: Textron/Torx Rochester, IN 3359-14-1022

QC BATCH REPORT

Batch ID: **R170831** Instrument ID **IC4** Method: **SW9056A**

MBLK		Sample ID: CCB/MBLK-R170831				Units: mg/L		Analysis Date: 9/1/2015 10:28 AM		
Client ID:		Run ID: IC4_150901A				SeqNo: 3441787		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	ND	1.0								
Sulfate	ND	1.0								

LCS		Sample ID: LCS-R170831				Units: mg/L		Analysis Date: 9/1/2015 10:48 AM		
Client ID:		Run ID: IC4_150901A				SeqNo: 3441791		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	9.471	1.0	10	0	94.7	88-110	0			
Sulfate	9.791	1.0	10	0	97.9	85-110	0			

MS		Sample ID: 15081527-03C MS				Units: mg/L		Analysis Date: 9/1/2015 01:50 PM		
Client ID:		Run ID: IC4_150901A				SeqNo: 3441814		Prep Date:		DF: 400
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	4683	400	4000	455.1	106	75-125	0			
Sulfate	6443	400	4000	1939	113	75-125	0			

MSD		Sample ID: 15081527-03C MSD				Units: mg/L		Analysis Date: 9/1/2015 02:10 PM		
Client ID:		Run ID: IC4_150901A				SeqNo: 3441818		Prep Date:		DF: 400
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	4690	400	4000	455.1	106	75-125	4683	0.151	20	
Sulfate	6483	400	4000	1939	114	75-125	6443	0.621	20	

The following samples were analyzed in this batch:

15081601-01F	15081601-02F	15081601-03F
15081601-04F	15081601-05F	15081601-06F
15081601-07F	15081601-08F	15081601-09F
15081601-10F	15081601-11F	15081601-12F
15081601-13F		

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

Client: AMEC Foster Wheeler
 Work Order: 15081601
 Project: Textron/Torx Rochester, IN 3359-14-1022

QC BATCH REPORT

Batch ID: **R170854C** Instrument ID **TOC3** Method: **SW9060A**

MBLK		Sample ID: MBLK-R170854C				Units: mg/L		Analysis Date: 9/1/2015 12:30 PM		
Client ID:		Run ID: TOC3_150901A		SeqNo: 3442531		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Organic Carbon, Total	0.208	0.50								J

LCS		Sample ID: LCS-R170854C				Units: mg/L		Analysis Date: 9/1/2015 12:30 PM		
Client ID:		Run ID: TOC3_150901A		SeqNo: 3442532		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Organic Carbon, Total	5.038	0.50	5	0	101	91-110		0		

The following samples were analyzed in this batch:

15081601-01B	15081601-02B	15081601-04B
15081601-06B	15081601-07B	15081601-08B
15081601-09B	15081601-10B	15081601-11B
15081601-12B	15081601-13B	15081601-14B
15081601-15B	15081601-16B	15081601-17B

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

Client: AMEC Foster Wheeler
 Work Order: 15081601
 Project: Textron/Torx Rochester, IN 3359-14-1022

QC BATCH REPORT

Batch ID: R171014 Instrument ID IC4 Method: SW9056A

MBLK		Sample ID: CCB/MBLANK-R171014				Units: mg/L		Analysis Date: 9/3/2015 07:45 AM		
Client ID:		Run ID: IC4_150903A		SeqNo: 3445201		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	ND	1.0								
Sulfate	ND	1.0								

LCS		Sample ID: LCS-R171014				Units: mg/L		Analysis Date: 9/3/2015 08:06 AM		
Client ID:		Run ID: IC4_150903A		SeqNo: 3445202		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	9.768	1.0	10	0	97.7	88-110	0			
Sulfate	9.484	1.0	10	0	94.8	85-110	0			

MS		Sample ID: 15081601-09F MS				Units: mg/L		Analysis Date: 9/3/2015 01:56 PM		
Client ID: ATR-MW62-G082715		Run ID: IC4_150903A		SeqNo: 3445215		Prep Date:		DF: 5		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	95.06	5.0	50	39.67	111	75-125	0			
Sulfate	52.84	5.0	50	0	106	75-125	0			

MSD		Sample ID: 15081601-09F MSD				Units: mg/L		Analysis Date: 9/3/2015 02:16 PM		
Client ID: ATR-MW62-G082715		Run ID: IC4_150903A		SeqNo: 3445216		Prep Date:		DF: 5		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	94.78	5.0	50	39.67	110	75-125	95.06	0.29	20	
Sulfate	52.77	5.0	50	0	106	75-125	52.84	0.14	20	

The following samples were analyzed in this batch:

15081601-02F	15081601-09F	15081601-11F
15081601-12F	15081601-14F	15081601-15F
15081601-16F	15081601-17F	

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

Client: AMEC Foster Wheeler
 Work Order: 15081601
 Project: Textron/Torx Rochester, IN 3359-14-1022

QC BATCH REPORT

Batch ID: **R171062** Instrument ID **Titrator 1** Method: **A2320 B-97**

MBLK		Sample ID: WBLKW1-150904-R171062				Units: mg/L		Analysis Date: 9/4/2015 01:35 PM		
Client ID:		Run ID: TITRATOR 1_150904A				SeqNo: 3446355		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Alkalinity, Bicarbonate (as CaCO3)	4.85	10								J
Alkalinity, Total (as CaCO3)	4.85	10								J

LCS		Sample ID: WLCSW-150904-R171062				Units: mg/L		Analysis Date: 9/4/2015 01:35 PM		
Client ID:		Run ID: TITRATOR 1_150904A				SeqNo: 3446356		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Alkalinity, Total (as CaCO3)	920.2	10	1000	0	92	90-106	0			

DUP		Sample ID: 15081601-03D DUP				Units: mg/L		Analysis Date: 9/4/2015 01:35 PM		
Client ID: ATR-MW6C-G082815		Run ID: TITRATOR 1_150904A				SeqNo: 3446360		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Alkalinity, Bicarbonate (as CaCO3)	223.4	10	0	0	0		226.3	1.29	20	
Alkalinity, Total (as CaCO3)	223.4	10	0	0	0		226.3	1.29	20	

DUP		Sample ID: 15081601-15D DUP				Units: mg/L		Analysis Date: 9/4/2015 01:35 PM		
Client ID: ATR-PM2-G082715		Run ID: TITRATOR 1_150904A				SeqNo: 3446373		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Alkalinity, Bicarbonate (as CaCO3)	331.3	10	0	0	0		332	0.205	20	
Alkalinity, Total (as CaCO3)	331.3	10	0	0	0		332	0.205	20	

The following samples were analyzed in this batch:

15081601-01D	15081601-02D	15081601-03D
15081601-04D	15081601-05D	15081601-06D
15081601-07D	15081601-08D	15081601-09D
15081601-10D	15081601-11D	15081601-12D
15081601-13D	15081601-14D	15081601-15D
15081601-16D	15081601-17D	

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

Client: AMEC Foster Wheeler
 Work Order: 15081601
 Project: Textron/Torx Rochester, IN 3359-14-1022

QC BATCH REPORT

Batch ID: R171111C Instrument ID TOC2 Method: SW9060A

MBLK		Sample ID: MBLK-R171111C				Units: mg/L		Analysis Date: 9/4/2015 02:13 PM		
Client ID:		Run ID: TOC2_150904A		SeqNo: 3447067		Prep Date:		DF: 1		
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: LCS-R171111C				Units: mg/L		Analysis Date: 9/4/2015 02:13 PM		
Client ID:		Run ID: TOC2_150904A		SeqNo: 3447070		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Organic Carbon, Total	4.994	0.50	5	0	99.9	91-110	0			

The following samples were analyzed in this batch:

15081601-02B	15081601-04B	15081601-06B
15081601-07B	15081601-08B	15081601-09B
15081601-10B	15081601-11B	15081601-12B
15081601-13B	15081601-14B	15081601-15B
15081601-16B	15081601-17B	

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



Ship To: ALS | Environmental
4388 Glendale Milford Rd.
Cincinnati, Ohio 45242
Phone: (513) 733-5336
Fax: (513) 733-5347

Field Chain-of-Custody Record

Report Requested by EOB of Selected TAT (Check Box): Other
 10 Wk Days 5 Wk Days 3 Wk Days 2 Wk Days 1 Wk Day
 OH VAP: YES NO BUSTR: YES NO

Date: 8/27/15 Purchase Order No.: _____
 Company Name: AMEC Foster Wheeler Project No.: Torx Rochester
 Address: 521 Byers Rd Sampling Site: ↓
Miamisburg OH 45342
 City State Zip
 Person to Contact: Paul Stork Billing Address (if different): _____
 Email Address: Paul.Stork@amecfw.com
 Telephone (PST): 859-3600
 Alternate Contact: _____

Preservation Key #	Sample Type / Matrix Key Abbr.	# of Sample Containers	ANALYSIS REQUESTED																	
			VOCs 8060	TOC 9060	Iron + Manganese 6080A	Alkalinity 8030B	Sulfide 9030													
✓ W	W	7	X	X	X	X	X													
✓ W	W	7	X	X	X	X	X													
✓ W	W	7	X	X	X	X	X													
W	W	7	X	X	X	X	X													
W	W	7	X	X	X	X	X													
W	W	7	X	X	X	X	X													
W	W	7	X	X	X	X	X													
W	W	7	X	X	X	X	X													
W	W	7	X	X	X	X	X													

ALS Lab ID	Sample ID / Description	Date	Time
1	ATR - MW13 - G082615	8-26-15	1350
2	ATR - MW12 - G082615	8-26-15	1440
3	ATR - MW6C - G082615	8-26-15	1612
4	ATR - MW82 - G082615	8-26-15	1750
5	ATR - EBC01 - 082615	8-26-15	1810
6	ATR - MW20(51) - G082715	8-27-15	1138
7	ATR - MW20(35) - G082715	8-27-15	1240
8	ATR - MW20(35) - G082715 R	8-27-15	1240
9	ATR - MW62 - G082715	8-27-15	1355
10	ATR - OW1(D) - G082715	8-27-15	1547

Notes: _____
 Preservation Key: 1-HCl 2-HNO₃ 3-H₂SO₄ 4-NaOH 5-Na₂S₂O₈ 6-NaHSO₃ 7-NaOH/ZnAcetate 8-Other 9-4°C
 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: (Signature) <u>[Signature]</u>	Time / Date <u>8/29/15 0950</u>	Received By: (Signature) <u>[Signature]</u>	Time / Date <u>8/29/15 0950</u>
Relinquished By: (Signature) <u>[Signature]</u>	Time / Date <u>8/28/15</u>	Received By: (Signature) <u>[Signature]</u>	Time / Date <u>8/28/15 1305</u>
Relinquished By: (Signature)	Time / Date	Received By: (Signature)	Time / Date

ALS LAB USE ONLY

COOLER TEMP: 4.6°C pH ADJUSTMENTS: _____

COOLING METHOD: NONE COOLER WET ICE DRY ICE ICE PACK

DELIVERY METHOD: CLIENT DROP BOX FEDEX UPS
STD MAIL PRTY MAIL ALS COURIER OTHER: _____

CUSTODY SEALS: NONE COOLER PACKAGE SAMPLES

EQUIP. RETURNED: _____



Ship To: ALS | Environmental
4388 Glendale Milford Rd.
Cincinnati, Ohio 45242
Phone: (513) 733-5336
Fax: (513) 733-5347

Field Chain-of-Custody Record

Page 15091601 of 27713

Report Requested by EOB of Selected TAT (Check Box): Other
 10 Wk Days 5 Wk Days 3 Wk Days 2 Wk Days 1 Wk Day
 OH VAP: YES NO BUSTR: YES NO

Date: 8/27/15 Purchase Order No.: _____
 Company Name: AMPC FW Project No.: _____
 Address: 501 Byers Rd Sampling Site: Toronto Theater
Marietta OH 45752
 City State Zip
 Person to Contact: Paul Stark Billing Address (if different): _____
 Email Address: Paul.Stark@ampcfw.com
 Telephone (937): 859-3600
 Alternate Contact: _____

ANALYSIS REQUESTED

ALS Lab ID	Sample ID / Description	Date	Time	Preservation Key #	Sample Type / Matrix Key Abbr.	# of Sample Containers												
11	ATR-OWI(S)-G082715	8-27-15	1600	W	7	X	X	X	X	X	X							
12	ATR-MW81(G)-G082715	8-27-15	1725	W	7	X	X	X	X	X								
13	ATR-PM3-G082715	8-27-15	1750	W	7	X	X	X	X	X								
14	ATR-MW59(G)-G082715	8-27-15	1720	W	7	X	X	X	X	X								
15	ATR-PM2-G082715	8-27-15	1925	W	7	X	X	X	X	X								
16	ATR-EB001-082715	8-27-15	1845	W	7	X	X	X	X	X								
17	ATR-FB001-082715	8-27-15	1900	W	7	X	X	X	X	X								
18	ATR-OWI(G)-G082715ms/msd	8-27-15	1549	W	7	X												

Notes: _____
 Preservation Key: 1-HCl 2-HNO₃ 3-H₂SO₄ 4-NaOH 5-Na₂S₂O₈ 6-NaHSO₃ 7-NaOH/ZnAcetate 8-Other 9-4°C
 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: (Signature) <u>[Signature]</u>	Time / Date <u>8/29/15 0950</u>	Received By: (Signature) <u>[Signature]</u>	Time / Date <u>8/29/15 1305</u>
Relinquished By: (Signature) <u>[Signature]</u>	Time / Date <u>8/28/15 1305</u>	Received By: (Signature) <u>[Signature]</u>	Time / Date <u>8/28/15 1305</u>
Relinquished By: (Signature)	Time / Date	Received By: (Signature)	Time / Date

ALS LAB USE ONLY	
COOLER TEMP: _____ °C	pH ADJUSTMENTS: _____
COOLING METHOD: NONE COOLER WET ICE DRY ICE ICE PACK	
DELIVERY METHOD: CLIENT DROP BOX FEDEX UPS STD MAIL PRTY MAIL ALS COURIER OTHER: _____	
CUSTODY SEALS: NONE COOLER PACKAGE SAMPLES	
EQUIP. RETURNED: _____	

Sample Receipt Checklist

Client Name: **AMEC - DAYTON**

Date/Time Received: **28-Aug-15 13:05**

Work Order: **15081601**

Received by: **KRW**

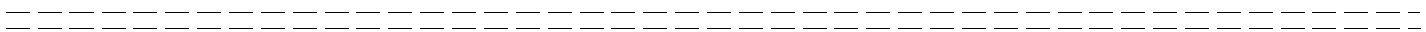
Checklist completed by Keith Wierenga 28-Aug-15 Reviewed by: _____
eSignature Date eSignature Date

Matrices: Water

Carrier name: ALSHN

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample(s) received on ice?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Temperature(s)/Thermometer(s):	<u>4.6/4.6 C</u>		<u>SR2</u>
Cooler(s)/Kit(s):	_____		
Date/Time sample(s) sent to storage:	<u>8/28/2015 2:33:12 PM</u>		
Water - VOA vials have zero headspace?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
pH adjusted?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>
pH adjusted by:	_____		

Login Notes:



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

Contacted By: _____ Regarding: _____

Comments:

CorrectiveAction:



27-Oct-2015

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

Re: **Textron/Torx Rochester, IN 3359-15-1040.09.01**

Work Order: **1510613**

Dear Paul,

ALS Environmental received 21 samples on 09-Oct-2015 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 71.

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: Tom Beamish

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

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

Environmental

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

Client: AMEC Foster Wheeler
Project: Textron/Torx Rochester, IN 3359-15-1040.09.01
Work Order: 1510613

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>
1510613-01	ATR-MW14-G100815	Water		10/08/15 10:00	10/09/15 13:00	<input type="checkbox"/>
1510613-02	ATR-MW24 (24.9)-G100815	Water		10/08/15 10:50	10/09/15 13:00	<input type="checkbox"/>
1510613-03	ATR-MW24 (55.9)-G100815	Water		10/08/15 09:48	10/09/15 13:00	<input type="checkbox"/>
1510613-04	ATR-OW2 (33)-G100815	Water		10/08/15 12:10	10/09/15 13:00	<input type="checkbox"/>
1510613-05	ATR-OW2 (53)-G100815	Water		10/08/15 13:20	10/09/15 13:00	<input type="checkbox"/>
1510613-06	ATR-OW3 (35)-G100715	Water		10/07/15 15:33	10/09/15 13:00	<input type="checkbox"/>
1510613-07	ATR-OW3 (55)-G100715	Water		10/07/15 16:30	10/09/15 13:00	<input type="checkbox"/>
1510613-08	ATR-OW3 (55)-G100715 R	Water		10/07/15 16:30	10/09/15 13:00	<input type="checkbox"/>
1510613-09	ATR-MW16-G100715	Water		10/07/15 13:25	10/09/15 13:00	<input type="checkbox"/>
1510613-10	ATR-MW17-G100715	Water		10/07/15 11:20	10/09/15 13:00	<input type="checkbox"/>
1510613-11	ATR-MW26 (17.5)-G100715	Water		10/07/15 11:30	10/09/15 13:00	<input type="checkbox"/>
1510613-12	ATR-MW26 (28.8)-G100715	Water		10/07/15 12:25	10/09/15 13:00	<input type="checkbox"/>
1510613-13	ATR-MW26 (58.8)-G100715	Water		10/07/15 10:40	10/09/15 13:00	<input type="checkbox"/>
1510613-14	ATR-ZVI2 (17.5)-G100715	Water		10/07/15 14:20	10/09/15 13:00	<input type="checkbox"/>
1510613-15	ATR-ZVI2 (32.5)-G100715	Water		10/07/15 13:28	10/09/15 13:00	<input type="checkbox"/>
1510613-16	ATR-OW5 (16)-G100715	Water		10/07/15 15:00	10/09/15 13:00	<input type="checkbox"/>
1510613-17	ATR-OW5 (35)-G100715	Water		10/07/15 16:30	10/09/15 13:00	<input type="checkbox"/>
1510613-18	ATR-OW5 (54)-G100715	Water		10/07/15 17:20	10/09/15 13:00	<input type="checkbox"/>
1510613-19	ATR-EB001-G100815	Water		10/08/15 10:15	10/09/15 13:00	<input type="checkbox"/>
1510613-20	Trip Blank #1	Water		10/07/15	10/09/15 13:00	<input type="checkbox"/>
1510613-21	Trip Blank #2	Water		10/08/15	10/09/15 13:00	<input type="checkbox"/>

Client: AMEC Foster Wheeler
Project: Textron/Torx Rochester, IN 3359-15-1040.09.01
WorkOrder: 1510613

**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 PQL, 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
Project: Textron/Torx Rochester, IN 3359-15-1040.09.01
Work Order: 1510613

Case Narrative

QC Comments:

Batch R174044, Method VOC_8260_W, Sample 1510613-04A MS: The MS and/or MSD recovery was below the lower control limit. The corresponding results in the parent sample may be biased low for 1,2-Dichloroethane, Chloroform, and Trichloroethene.

Batch R174050, Method VOC_8260_W, Sample 1510613-10A MS: The MS and/or MSD recovery was below the lower control limit. The corresponding result in the parent sample may be biased low for Trichloroethene.

Batch R174107A, Method VOC_8260_W, Sample 1510613-01A MS: The MS and/or MSD recovery was below the lower control limit. The corresponding result in the parent sample may be biased low for Trichloroethene.

Batch R174107A, Method VOC_8260_W, Sample 1510613-01A 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 Bromomethane.

ALS Group USA, Corp

Date: 27-Oct-15

Client: AMEC Foster Wheeler

Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

Work Order: 1510613

Sample ID: ATR-MW14-G100815

Lab ID: 1510613-01

Collection Date: 10/08/15 10:00 AM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A		Prep: SW3005A / 10/12/15	Analyst: RH
Iron	0.91		0.080	mg/L	1	10/13/15 03:25 AM
Manganese	0.97		0.0050	mg/L	1	10/13/15 03:25 AM
VOLATILE ORGANIC COMPOUNDS			SW8260B			Analyst: BG
1,1,1-Trichloroethane	ND		2.0	µg/L	2	10/19/15 08:03 AM
1,1,2,2-Tetrachloroethane	ND		2.0	µg/L	2	10/19/15 08:03 AM
1,1,2-Trichloroethane	ND		2.0	µg/L	2	10/19/15 08:03 AM
1,1-Dichloroethane	ND		2.0	µg/L	2	10/19/15 08:03 AM
1,1-Dichloroethene	ND		2.0	µg/L	2	10/19/15 08:03 AM
1,2-Dichloroethane	ND		2.0	µg/L	2	10/19/15 08:03 AM
1,2-Dichloropropane	ND		2.0	µg/L	2	10/19/15 08:03 AM
2-Butanone	ND		10	µg/L	2	10/19/15 08:03 AM
2-Hexanone	ND		10	µg/L	2	10/19/15 08:03 AM
4-Methyl-2-pentanone	ND		2.0	µg/L	2	10/19/15 08:03 AM
Acetone	ND		20	µg/L	2	10/19/15 08:03 AM
Benzene	ND		2.0	µg/L	2	10/19/15 08:03 AM
Bromodichloromethane	ND		2.0	µg/L	2	10/19/15 08:03 AM
Bromoform	ND		2.0	µg/L	2	10/19/15 08:03 AM
Bromomethane	ND		2.0	µg/L	2	10/19/15 08:03 AM
Carbon disulfide	ND		2.0	µg/L	2	10/19/15 08:03 AM
Carbon tetrachloride	ND		2.0	µg/L	2	10/19/15 08:03 AM
Chlorobenzene	ND		2.0	µg/L	2	10/19/15 08:03 AM
Chloroethane	ND		2.0	µg/L	2	10/19/15 08:03 AM
Chloroform	ND		2.0	µg/L	2	10/19/15 08:03 AM
Chloromethane	ND		2.0	µg/L	2	10/19/15 08:03 AM
cis-1,2-Dichloroethene	110		2.0	µg/L	2	10/19/15 08:03 AM
cis-1,3-Dichloropropene	ND		2.0	µg/L	2	10/19/15 08:03 AM
Dibromochloromethane	ND		2.0	µg/L	2	10/19/15 08:03 AM
Ethylbenzene	ND		2.0	µg/L	2	10/19/15 08:03 AM
m,p-Xylene	ND		4.0	µg/L	2	10/19/15 08:03 AM
Methylene chloride	ND		10	µg/L	2	10/19/15 08:03 AM
o-Xylene	ND		2.0	µg/L	2	10/19/15 08:03 AM
Styrene	ND		2.0	µg/L	2	10/19/15 08:03 AM
Tetrachloroethene	ND		2.0	µg/L	2	10/19/15 08:03 AM
Toluene	ND		2.0	µg/L	2	10/19/15 08:03 AM
trans-1,2-Dichloroethene	3.0		2.0	µg/L	2	10/19/15 08:03 AM
trans-1,3-Dichloropropene	ND		2.0	µg/L	2	10/19/15 08:03 AM
Trichloroethene	570		10	µg/L	10	10/19/15 04:36 PM
Vinyl chloride	3.6		2.0	µg/L	2	10/19/15 08:03 AM

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

ALS Group USA, Corp

Date: 27-Oct-15

Client: AMEC Foster Wheeler

Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

Work Order: 1510613

Sample ID: ATR-MW14-G100815

Lab ID: 1510613-01

Collection Date: 10/08/15 10:00 AM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Xylenes, Total	ND		6.0	µg/L	2	10/19/15 08:03 AM
Surr: 1,2-Dichloroethane-d4	98.9		75-120	%REC	2	10/19/15 08:03 AM
Surr: 1,2-Dichloroethane-d4	100		75-120	%REC	10	10/19/15 04:36 PM
Surr: 4-Bromofluorobenzene	93.6		80-110	%REC	2	10/19/15 08:03 AM
Surr: 4-Bromofluorobenzene	93.5		80-110	%REC	10	10/19/15 04:36 PM
Surr: Dibromofluoromethane	96.9		85-115	%REC	2	10/19/15 08:03 AM
Surr: Dibromofluoromethane	95.0		85-115	%REC	10	10/19/15 04:36 PM
Surr: Toluene-d8	105		85-110	%REC	10	10/19/15 04:36 PM
Surr: Toluene-d8	105		85-110	%REC	2	10/19/15 08:03 AM
ALKALINITY			A2320 B-97			Analyst: ED
Alkalinity, Bicarbonate (as CaCO3)	270		10	mg/L	1	10/15/15 12:20 PM
Alkalinity, Total (as CaCO3)	270		10	mg/L	1	10/15/15 12:20 PM
ANIONS BY ION CHROMATOGRAPHY			SW9056A			Analyst: EE
Chloride	5.5		1.0	mg/L	1	10/17/15 12:44 AM
Sulfate	15		1.0	mg/L	1	10/17/15 12:44 AM
NITROGEN, NITRATE-NITRITE			E353.2 R2.0			Analyst: JJG
Nitrogen, Nitrate-Nitrite	ND		0.020	mg/L	1	10/15/15 10:16 AM
ORGANIC CARBON, TOTAL			SW9060A			Analyst: JJG
Organic Carbon, Total	35		10	mg/L	20	10/14/15 05:31 PM

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

ALS Group USA, Corp

Date: 27-Oct-15

Client: AMEC Foster Wheeler

Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

Work Order: 1510613

Sample ID: ATR-MW24 (24.9)-G100815

Lab ID: 1510613-02

Collection Date: 10/08/15 10:50 AM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A		Prep: SW3005A / 10/12/15	Analyst: RH
Iron	0.13		0.080	mg/L	1	10/13/15 03:31 AM
Manganese	0.26		0.0050	mg/L	1	10/13/15 03:31 AM
VOLATILE ORGANIC COMPOUNDS			SW8260B			Analyst: BG
1,1,1-Trichloroethane	ND		1.0	µg/L	1	10/19/15 02:10 AM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	10/19/15 02:10 AM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	10/19/15 02:10 AM
1,1-Dichloroethane	ND		1.0	µg/L	1	10/19/15 02:10 AM
1,1-Dichloroethene	ND		1.0	µg/L	1	10/19/15 02:10 AM
1,2-Dichloroethane	ND		1.0	µg/L	1	10/19/15 02:10 AM
1,2-Dichloropropane	ND		1.0	µg/L	1	10/19/15 02:10 AM
2-Butanone	ND		5.0	µg/L	1	10/19/15 02:10 AM
2-Hexanone	ND		5.0	µg/L	1	10/19/15 02:10 AM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	10/19/15 02:10 AM
Acetone	ND		10	µg/L	1	10/19/15 02:10 AM
Benzene	ND		1.0	µg/L	1	10/19/15 02:10 AM
Bromodichloromethane	ND		1.0	µg/L	1	10/19/15 02:10 AM
Bromoform	ND		1.0	µg/L	1	10/19/15 02:10 AM
Bromomethane	ND		1.0	µg/L	1	10/19/15 02:10 AM
Carbon disulfide	ND		1.0	µg/L	1	10/19/15 02:10 AM
Carbon tetrachloride	ND		1.0	µg/L	1	10/19/15 02:10 AM
Chlorobenzene	ND		1.0	µg/L	1	10/19/15 02:10 AM
Chloroethane	ND		1.0	µg/L	1	10/19/15 02:10 AM
Chloroform	ND		1.0	µg/L	1	10/19/15 02:10 AM
Chloromethane	ND		1.0	µg/L	1	10/19/15 02:10 AM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	10/19/15 02:10 AM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	10/19/15 02:10 AM
Dibromochloromethane	ND		1.0	µg/L	1	10/19/15 02:10 AM
Ethylbenzene	ND		1.0	µg/L	1	10/19/15 02:10 AM
m,p-Xylene	ND		2.0	µg/L	1	10/19/15 02:10 AM
Methylene chloride	ND		5.0	µg/L	1	10/19/15 02:10 AM
o-Xylene	ND		1.0	µg/L	1	10/19/15 02:10 AM
Styrene	ND		1.0	µg/L	1	10/19/15 02:10 AM
Tetrachloroethene	ND		1.0	µg/L	1	10/19/15 02:10 AM
Toluene	ND		1.0	µg/L	1	10/19/15 02:10 AM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	10/19/15 02:10 AM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	10/19/15 02:10 AM
Trichloroethene	ND		1.0	µg/L	1	10/19/15 02:10 AM
Vinyl chloride	ND		1.0	µg/L	1	10/19/15 02:10 AM

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

ALS Group USA, Corp

Date: 27-Oct-15

Client: AMEC Foster Wheeler

Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

Work Order: 1510613

Sample ID: ATR-MW24 (24.9)-G100815

Lab ID: 1510613-02

Collection Date: 10/08/15 10:50 AM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Xylenes, Total	ND		3.0	µg/L	1	10/19/15 02:10 AM
Surr: 1,2-Dichloroethane-d4	101		75-120	%REC	1	10/19/15 02:10 AM
Surr: 4-Bromofluorobenzene	93.6		80-110	%REC	1	10/19/15 02:10 AM
Surr: Dibromofluoromethane	98.2		85-115	%REC	1	10/19/15 02:10 AM
Surr: Toluene-d8	106		85-110	%REC	1	10/19/15 02:10 AM
ALKALINITY			A2320 B-97			Analyst: ED
Alkalinity, Bicarbonate (as CaCO3)	290		10	mg/L	1	10/15/15 12:20 PM
Alkalinity, Total (as CaCO3)	290		10	mg/L	1	10/15/15 12:20 PM
ANIONS BY ION CHROMATOGRAPHY			SW9056A			Analyst: EE
Chloride	39		5.0	mg/L	5	10/17/15 10:27 AM
Sulfate	12		1.0	mg/L	1	10/17/15 01:04 AM
NITROGEN, NITRATE-NITRITE			E353.2 R2.0			Analyst: JJG
Nitrogen, Nitrate-Nitrite	0.19		0.020	mg/L	1	10/15/15 10:16 AM
ORGANIC CARBON, TOTAL			SW9060A			Analyst: JJG
Organic Carbon, Total	1.4		0.50	mg/L	1	10/19/15 11:30 AM

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

ALS Group USA, Corp

Date: 27-Oct-15

Client: AMEC Foster Wheeler

Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

Work Order: 1510613

Sample ID: ATR-MW24 (55.9)-G100815

Lab ID: 1510613-03

Collection Date: 10/08/15 09:48 AM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A		Prep: SW3005A / 10/12/15	Analyst: RH
Iron	0.44		0.080	mg/L	1	10/13/15 04:01 AM
Manganese	0.52		0.0050	mg/L	1	10/13/15 04:01 AM
VOLATILE ORGANIC COMPOUNDS			SW8260B			Analyst: BG
1,1,1-Trichloroethane	ND		1.0	µg/L	1	10/19/15 02:35 AM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	10/19/15 02:35 AM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	10/19/15 02:35 AM
1,1-Dichloroethane	ND		1.0	µg/L	1	10/19/15 02:35 AM
1,1-Dichloroethene	ND		1.0	µg/L	1	10/19/15 02:35 AM
1,2-Dichloroethane	ND		1.0	µg/L	1	10/19/15 02:35 AM
1,2-Dichloropropane	ND		1.0	µg/L	1	10/19/15 02:35 AM
2-Butanone	ND		5.0	µg/L	1	10/19/15 02:35 AM
2-Hexanone	ND		5.0	µg/L	1	10/19/15 02:35 AM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	10/19/15 02:35 AM
Acetone	ND		10	µg/L	1	10/19/15 02:35 AM
Benzene	ND		1.0	µg/L	1	10/19/15 02:35 AM
Bromodichloromethane	ND		1.0	µg/L	1	10/19/15 02:35 AM
Bromoform	ND		1.0	µg/L	1	10/19/15 02:35 AM
Bromomethane	ND		1.0	µg/L	1	10/19/15 02:35 AM
Carbon disulfide	ND		1.0	µg/L	1	10/19/15 02:35 AM
Carbon tetrachloride	ND		1.0	µg/L	1	10/19/15 02:35 AM
Chlorobenzene	ND		1.0	µg/L	1	10/19/15 02:35 AM
Chloroethane	ND		1.0	µg/L	1	10/19/15 02:35 AM
Chloroform	ND		1.0	µg/L	1	10/19/15 02:35 AM
Chloromethane	ND		1.0	µg/L	1	10/19/15 02:35 AM
cis-1,2-Dichloroethene	49		1.0	µg/L	1	10/19/15 02:35 AM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	10/19/15 02:35 AM
Dibromochloromethane	ND		1.0	µg/L	1	10/19/15 02:35 AM
Ethylbenzene	ND		1.0	µg/L	1	10/19/15 02:35 AM
m,p-Xylene	ND		2.0	µg/L	1	10/19/15 02:35 AM
Methylene chloride	ND		5.0	µg/L	1	10/19/15 02:35 AM
o-Xylene	ND		1.0	µg/L	1	10/19/15 02:35 AM
Styrene	ND		1.0	µg/L	1	10/19/15 02:35 AM
Tetrachloroethene	ND		1.0	µg/L	1	10/19/15 02:35 AM
Toluene	ND		1.0	µg/L	1	10/19/15 02:35 AM
trans-1,2-Dichloroethene	2.5		1.0	µg/L	1	10/19/15 02:35 AM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	10/19/15 02:35 AM
Trichloroethene	110		5.0	µg/L	5	10/19/15 06:48 AM
Vinyl chloride	1.0		1.0	µg/L	1	10/19/15 02:35 AM

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

ALS Group USA, Corp

Date: 27-Oct-15

Client: AMEC Foster Wheeler

Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

Work Order: 1510613

Sample ID: ATR-MW24 (55.9)-G100815

Lab ID: 1510613-03

Collection Date: 10/08/15 09:48 AM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Xylenes, Total	ND		3.0	µg/L	1	10/19/15 02:35 AM
Surr: 1,2-Dichloroethane-d4	97.0		75-120	%REC	1	10/19/15 02:35 AM
Surr: 1,2-Dichloroethane-d4	99.9		75-120	%REC	5	10/19/15 06:48 AM
Surr: 4-Bromofluorobenzene	94.6		80-110	%REC	1	10/19/15 02:35 AM
Surr: 4-Bromofluorobenzene	92.8		80-110	%REC	5	10/19/15 06:48 AM
Surr: Dibromofluoromethane	96.7		85-115	%REC	1	10/19/15 02:35 AM
Surr: Dibromofluoromethane	96.8		85-115	%REC	5	10/19/15 06:48 AM
Surr: Toluene-d8	105		85-110	%REC	5	10/19/15 06:48 AM
Surr: Toluene-d8	105		85-110	%REC	1	10/19/15 02:35 AM
ALKALINITY			A2320 B-97			Analyst: ED
Alkalinity, Bicarbonate (as CaCO3)	390		10	mg/L	1	10/15/15 12:20 PM
Alkalinity, Total (as CaCO3)	390		10	mg/L	1	10/15/15 12:20 PM
ANIONS BY ION CHROMATOGRAPHY			SW9056A			Analyst: EE
Chloride	26		2.0	mg/L	2	10/17/15 10:48 AM
Sulfate	24		2.0	mg/L	2	10/17/15 10:48 AM
NITROGEN, NITRATE-NITRITE			E353.2 R2.0			Analyst: JJG
Nitrogen, Nitrate-Nitrite	ND		0.020	mg/L	1	10/15/15 10:16 AM
ORGANIC CARBON, TOTAL			SW9060A			Analyst: JJG
Organic Carbon, Total	2.0		0.50	mg/L	1	10/19/15 11:30 AM

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

ALS Group USA, Corp

Date: 27-Oct-15

Client: AMEC Foster Wheeler

Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

Work Order: 1510613

Sample ID: ATR-OW2 (33)-G100815

Lab ID: 1510613-04

Collection Date: 10/08/15 12:10 PM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A		Prep: SW3005A / 10/12/15	Analyst: RH
Iron	3.6		0.080	mg/L	1	10/13/15 04:06 AM
Manganese	0.48		0.0050	mg/L	1	10/13/15 04:06 AM
VOLATILE ORGANIC COMPOUNDS			SW8260B			Analyst: BG
1,1,1-Trichloroethane	ND		5.0	µg/L	5	10/18/15 09:33 PM
1,1,2,2-Tetrachloroethane	ND		5.0	µg/L	5	10/18/15 09:33 PM
1,1,2-Trichloroethane	ND		5.0	µg/L	5	10/18/15 09:33 PM
1,1-Dichloroethane	ND		5.0	µg/L	5	10/18/15 09:33 PM
1,1-Dichloroethene	5.3		5.0	µg/L	5	10/18/15 09:33 PM
1,2-Dichloroethane	ND		5.0	µg/L	5	10/18/15 09:33 PM
1,2-Dichloropropane	ND		5.0	µg/L	5	10/18/15 09:33 PM
2-Butanone	ND		25	µg/L	5	10/18/15 09:33 PM
2-Hexanone	ND		25	µg/L	5	10/18/15 09:33 PM
4-Methyl-2-pentanone	ND		5.0	µg/L	5	10/18/15 09:33 PM
Acetone	ND		50	µg/L	5	10/18/15 09:33 PM
Benzene	ND		5.0	µg/L	5	10/18/15 09:33 PM
Bromodichloromethane	ND		5.0	µg/L	5	10/18/15 09:33 PM
Bromoform	ND		5.0	µg/L	5	10/18/15 09:33 PM
Bromomethane	ND		5.0	µg/L	5	10/18/15 09:33 PM
Carbon disulfide	ND		5.0	µg/L	5	10/18/15 09:33 PM
Carbon tetrachloride	ND		5.0	µg/L	5	10/18/15 09:33 PM
Chlorobenzene	ND		5.0	µg/L	5	10/18/15 09:33 PM
Chloroethane	ND		5.0	µg/L	5	10/18/15 09:33 PM
Chloroform	ND		5.0	µg/L	5	10/18/15 09:33 PM
Chloromethane	ND		5.0	µg/L	5	10/18/15 09:33 PM
cis-1,2-Dichloroethene	2,000		20	µg/L	20	10/18/15 06:36 PM
cis-1,3-Dichloropropene	ND		5.0	µg/L	5	10/18/15 09:33 PM
Dibromochloromethane	ND		5.0	µg/L	5	10/18/15 09:33 PM
Ethylbenzene	ND		5.0	µg/L	5	10/18/15 09:33 PM
m,p-Xylene	ND		10	µg/L	5	10/18/15 09:33 PM
Methylene chloride	ND		25	µg/L	5	10/18/15 09:33 PM
o-Xylene	ND		5.0	µg/L	5	10/18/15 09:33 PM
Styrene	ND		5.0	µg/L	5	10/18/15 09:33 PM
Tetrachloroethene	ND		5.0	µg/L	5	10/18/15 09:33 PM
Toluene	ND		5.0	µg/L	5	10/18/15 09:33 PM
trans-1,2-Dichloroethene	9.2		5.0	µg/L	5	10/18/15 09:33 PM
trans-1,3-Dichloropropene	ND		5.0	µg/L	5	10/18/15 09:33 PM
Trichloroethene	ND		5.0	µg/L	5	10/18/15 09:33 PM
Vinyl chloride	1,600		20	µg/L	20	10/18/15 06:36 PM

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

ALS Group USA, Corp

Date: 27-Oct-15

Client: AMEC Foster Wheeler

Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

Work Order: 1510613

Sample ID: ATR-OW2 (33)-G100815

Lab ID: 1510613-04

Collection Date: 10/08/15 12:10 PM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Xylenes, Total	ND		15	µg/L	5	10/18/15 09:33 PM
Surr: 1,2-Dichloroethane-d4	100		75-120	%REC	20	10/18/15 06:36 PM
Surr: 1,2-Dichloroethane-d4	99.2		75-120	%REC	5	10/18/15 09:33 PM
Surr: 4-Bromofluorobenzene	95.0		80-110	%REC	20	10/18/15 06:36 PM
Surr: 4-Bromofluorobenzene	92.8		80-110	%REC	5	10/18/15 09:33 PM
Surr: Dibromofluoromethane	97.8		85-115	%REC	20	10/18/15 06:36 PM
Surr: Dibromofluoromethane	96.8		85-115	%REC	5	10/18/15 09:33 PM
Surr: Toluene-d8	105		85-110	%REC	5	10/18/15 09:33 PM
Surr: Toluene-d8	107		85-110	%REC	20	10/18/15 06:36 PM
ALKALINITY			A2320 B-97			Analyst: ED
Alkalinity, Bicarbonate (as CaCO3)	270		10	mg/L	1	10/15/15 12:20 PM
Alkalinity, Total (as CaCO3)	270		10	mg/L	1	10/15/15 12:20 PM
ANIONS BY ION CHROMATOGRAPHY			SW9056A			Analyst: EE
Chloride	16		1.0	mg/L	1	10/17/15 01:45 AM
Sulfate	3.5		1.0	mg/L	1	10/17/15 01:45 AM
NITROGEN, NITRATE-NITRITE			E353.2 R2.0			Analyst: JJG
Nitrogen, Nitrate-Nitrite	ND		0.020	mg/L	1	10/15/15 10:16 AM
ORGANIC CARBON, TOTAL			SW9060A			Analyst: JJG
Organic Carbon, Total	42		10	mg/L	20	10/14/15 05:31 PM

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

ALS Group USA, Corp

Date: 27-Oct-15

Client: AMEC Foster Wheeler

Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

Work Order: 1510613

Sample ID: ATR-OW2 (53)-G100815

Lab ID: 1510613-05

Collection Date: 10/08/15 01:20 PM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A		Prep: SW3005A / 10/12/15	Analyst: RH
Iron	8.6		0.080	mg/L	1	10/13/15 04:11 AM
Manganese	1.6		0.050	mg/L	10	10/13/15 09:27 AM
VOLATILE ORGANIC COMPOUNDS			SW8260B			Analyst: BG
1,1,1-Trichloroethane	ND		1.0	µg/L	1	10/19/15 03:01 AM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	10/19/15 03:01 AM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	10/19/15 03:01 AM
1,1-Dichloroethane	ND		1.0	µg/L	1	10/19/15 03:01 AM
1,1-Dichloroethene	ND		1.0	µg/L	1	10/19/15 03:01 AM
1,2-Dichloroethane	ND		1.0	µg/L	1	10/19/15 03:01 AM
1,2-Dichloropropane	ND		1.0	µg/L	1	10/19/15 03:01 AM
2-Butanone	74		5.0	µg/L	1	10/19/15 03:01 AM
2-Hexanone	ND		5.0	µg/L	1	10/19/15 03:01 AM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	10/19/15 03:01 AM
Acetone	ND		10	µg/L	1	10/19/15 03:01 AM
Benzene	ND		1.0	µg/L	1	10/19/15 03:01 AM
Bromodichloromethane	ND		1.0	µg/L	1	10/19/15 03:01 AM
Bromoform	ND		1.0	µg/L	1	10/19/15 03:01 AM
Bromomethane	ND		1.0	µg/L	1	10/19/15 03:01 AM
Carbon disulfide	ND		1.0	µg/L	1	10/19/15 03:01 AM
Carbon tetrachloride	ND		1.0	µg/L	1	10/19/15 03:01 AM
Chlorobenzene	ND		1.0	µg/L	1	10/19/15 03:01 AM
Chloroethane	ND		1.0	µg/L	1	10/19/15 03:01 AM
Chloroform	ND		1.0	µg/L	1	10/19/15 03:01 AM
Chloromethane	ND		1.0	µg/L	1	10/19/15 03:01 AM
cis-1,2-Dichloroethene	30		1.0	µg/L	1	10/19/15 03:01 AM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	10/19/15 03:01 AM
Dibromochloromethane	ND		1.0	µg/L	1	10/19/15 03:01 AM
Ethylbenzene	ND		1.0	µg/L	1	10/19/15 03:01 AM
m,p-Xylene	ND		2.0	µg/L	1	10/19/15 03:01 AM
Methylene chloride	ND		5.0	µg/L	1	10/19/15 03:01 AM
o-Xylene	ND		1.0	µg/L	1	10/19/15 03:01 AM
Styrene	ND		1.0	µg/L	1	10/19/15 03:01 AM
Tetrachloroethene	ND		1.0	µg/L	1	10/19/15 03:01 AM
Toluene	ND		1.0	µg/L	1	10/19/15 03:01 AM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	10/19/15 03:01 AM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	10/19/15 03:01 AM
Trichloroethene	ND		1.0	µg/L	1	10/19/15 03:01 AM
Vinyl chloride	19		1.0	µg/L	1	10/19/15 03:01 AM

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

ALS Group USA, Corp

Date: 27-Oct-15

Client: AMEC Foster Wheeler

Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

Work Order: 1510613

Sample ID: ATR-OW2 (53)-G100815

Lab ID: 1510613-05

Collection Date: 10/08/15 01:20 PM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Xylenes, Total	ND		3.0	µg/L	1	10/19/15 03:01 AM
Surr: 1,2-Dichloroethane-d4	99.6		75-120	%REC	1	10/19/15 03:01 AM
Surr: 4-Bromofluorobenzene	96.5		80-110	%REC	1	10/19/15 03:01 AM
Surr: Dibromofluoromethane	97.2		85-115	%REC	1	10/19/15 03:01 AM
Surr: Toluene-d8	107		85-110	%REC	1	10/19/15 03:01 AM
ALKALINITY			A2320 B-97			Analyst: ED
Alkalinity, Bicarbonate (as CaCO3)	650		10	mg/L	1	10/15/15 12:20 PM
Alkalinity, Total (as CaCO3)	650		10	mg/L	1	10/15/15 12:20 PM
ANIONS BY ION CHROMATOGRAPHY			SW9056A			Analyst: EE
Chloride	2.6		1.0	mg/L	1	10/17/15 02:05 AM
Sulfate	ND		1.0	mg/L	1	10/17/15 02:05 AM
NITROGEN, NITRATE-NITRITE			E353.2 R2.0			Analyst: JJG
Nitrogen, Nitrate-Nitrite	ND		0.020	mg/L	1	10/15/15 10:16 AM
ORGANIC CARBON, TOTAL			SW9060A			Analyst: JJG
Organic Carbon, Total	440		50	mg/L	100	10/19/15 11:30 AM

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

ALS Group USA, Corp

Date: 27-Oct-15

Client: AMEC Foster Wheeler

Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

Work Order: 1510613

Sample ID: ATR-OW3 (35)-G100715

Lab ID: 1510613-06

Collection Date: 10/07/15 03:33 PM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A		Prep: SW3005A / 10/12/15	Analyst: RH
Iron	23		0.080	mg/L	1	10/13/15 04:17 AM
Manganese	1.6		0.0050	mg/L	1	10/13/15 04:17 AM
VOLATILE ORGANIC COMPOUNDS			SW8260B			Analyst: BG
1,1,1-Trichloroethane	ND		1.0	µg/L	1	10/19/15 03:26 AM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	10/19/15 03:26 AM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	10/19/15 03:26 AM
1,1-Dichloroethane	ND		1.0	µg/L	1	10/19/15 03:26 AM
1,1-Dichloroethene	ND		1.0	µg/L	1	10/19/15 03:26 AM
1,2-Dichloroethane	ND		1.0	µg/L	1	10/19/15 03:26 AM
1,2-Dichloropropane	ND		1.0	µg/L	1	10/19/15 03:26 AM
2-Butanone	94		25	µg/L	5	10/19/15 05:57 AM
2-Hexanone	ND		5.0	µg/L	1	10/19/15 03:26 AM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	10/19/15 03:26 AM
Acetone	ND		10	µg/L	1	10/19/15 03:26 AM
Benzene	ND		1.0	µg/L	1	10/19/15 03:26 AM
Bromodichloromethane	ND		1.0	µg/L	1	10/19/15 03:26 AM
Bromoform	ND		1.0	µg/L	1	10/19/15 03:26 AM
Bromomethane	ND		1.0	µg/L	1	10/19/15 03:26 AM
Carbon disulfide	ND		1.0	µg/L	1	10/19/15 03:26 AM
Carbon tetrachloride	ND		1.0	µg/L	1	10/19/15 03:26 AM
Chlorobenzene	ND		1.0	µg/L	1	10/19/15 03:26 AM
Chloroethane	ND		1.0	µg/L	1	10/19/15 03:26 AM
Chloroform	ND		1.0	µg/L	1	10/19/15 03:26 AM
Chloromethane	ND		1.0	µg/L	1	10/19/15 03:26 AM
cis-1,2-Dichloroethene	150		5.0	µg/L	5	10/19/15 05:57 AM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	10/19/15 03:26 AM
Dibromochloromethane	ND		1.0	µg/L	1	10/19/15 03:26 AM
Ethylbenzene	ND		1.0	µg/L	1	10/19/15 03:26 AM
m,p-Xylene	ND		2.0	µg/L	1	10/19/15 03:26 AM
Methylene chloride	ND		5.0	µg/L	1	10/19/15 03:26 AM
o-Xylene	ND		1.0	µg/L	1	10/19/15 03:26 AM
Styrene	ND		1.0	µg/L	1	10/19/15 03:26 AM
Tetrachloroethene	ND		1.0	µg/L	1	10/19/15 03:26 AM
Toluene	ND		1.0	µg/L	1	10/19/15 03:26 AM
trans-1,2-Dichloroethene	1.3		1.0	µg/L	1	10/19/15 03:26 AM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	10/19/15 03:26 AM
Trichloroethene	ND		1.0	µg/L	1	10/19/15 03:26 AM
Vinyl chloride	84		1.0	µg/L	1	10/19/15 03:26 AM

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

ALS Group USA, Corp

Date: 27-Oct-15

Client: AMEC Foster Wheeler

Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

Work Order: 1510613

Sample ID: ATR-OW3 (35)-G100715

Lab ID: 1510613-06

Collection Date: 10/07/15 03:33 PM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Xylenes, Total	ND		3.0	µg/L	1	10/19/15 03:26 AM
Surr: 1,2-Dichloroethane-d4	99.2		75-120	%REC	1	10/19/15 03:26 AM
Surr: 1,2-Dichloroethane-d4	100		75-120	%REC	5	10/19/15 05:57 AM
Surr: 4-Bromofluorobenzene	94.6		80-110	%REC	1	10/19/15 03:26 AM
Surr: 4-Bromofluorobenzene	93.8		80-110	%REC	5	10/19/15 05:57 AM
Surr: Dibromofluoromethane	99.1		85-115	%REC	1	10/19/15 03:26 AM
Surr: Dibromofluoromethane	97.1		85-115	%REC	5	10/19/15 05:57 AM
Surr: Toluene-d8	105		85-110	%REC	5	10/19/15 05:57 AM
Surr: Toluene-d8	106		85-110	%REC	1	10/19/15 03:26 AM
ALKALINITY			A2320 B-97			Analyst: ED
Alkalinity, Bicarbonate (as CaCO3)	390		10	mg/L	1	10/15/15 12:20 PM
Alkalinity, Total (as CaCO3)	390		10	mg/L	1	10/15/15 12:20 PM
ANIONS BY ION CHROMATOGRAPHY			SW9056A			Analyst: EE
Chloride	16		1.0	mg/L	1	10/17/15 02:25 AM
Sulfate	ND		1.0	mg/L	1	10/17/15 02:25 AM
NITROGEN, NITRATE-NITRITE			E353.2 R2.0			Analyst: JJG
Nitrogen, Nitrate-Nitrite	ND		0.020	mg/L	1	10/15/15 10:16 AM
ORGANIC CARBON, TOTAL			SW9060A			Analyst: JJG
Organic Carbon, Total	130		10	mg/L	20	10/14/15 05:31 PM

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

ALS Group USA, Corp

Date: 27-Oct-15

Client: AMEC Foster Wheeler

Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

Work Order: 1510613

Sample ID: ATR-OW3 (55)-G100715

Lab ID: 1510613-07

Collection Date: 10/07/15 04:30 PM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A		Prep: SW3005A / 10/12/15	Analyst: RH
Iron	11		0.080	mg/L	1	10/13/15 04:22 AM
Manganese	2.0		0.050	mg/L	10	10/13/15 09:32 AM
VOLATILE ORGANIC COMPOUNDS			SW8260B			Analyst: BG
1,1,1-Trichloroethane	ND		1.0	µg/L	1	10/19/15 05:27 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	10/19/15 05:27 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	10/19/15 05:27 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	10/19/15 05:27 PM
1,1-Dichloroethene	ND		1.0	µg/L	1	10/19/15 05:27 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	10/19/15 05:27 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	10/19/15 05:27 PM
2-Butanone	50		5.0	µg/L	1	10/19/15 05:27 PM
2-Hexanone	ND		5.0	µg/L	1	10/19/15 05:27 PM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	10/19/15 05:27 PM
Acetone	ND		10	µg/L	1	10/19/15 05:27 PM
Benzene	ND		1.0	µg/L	1	10/19/15 05:27 PM
Bromodichloromethane	ND		1.0	µg/L	1	10/19/15 05:27 PM
Bromoform	ND		1.0	µg/L	1	10/19/15 05:27 PM
Bromomethane	ND		1.0	µg/L	1	10/19/15 05:27 PM
Carbon disulfide	ND		1.0	µg/L	1	10/19/15 05:27 PM
Carbon tetrachloride	ND		1.0	µg/L	1	10/19/15 05:27 PM
Chlorobenzene	ND		1.0	µg/L	1	10/19/15 05:27 PM
Chloroethane	ND		1.0	µg/L	1	10/19/15 05:27 PM
Chloroform	ND		1.0	µg/L	1	10/19/15 05:27 PM
Chloromethane	ND		1.0	µg/L	1	10/19/15 05:27 PM
cis-1,2-Dichloroethene	55		1.0	µg/L	1	10/19/15 05:27 PM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	10/19/15 05:27 PM
Dibromochloromethane	ND		1.0	µg/L	1	10/19/15 05:27 PM
Ethylbenzene	ND		1.0	µg/L	1	10/19/15 05:27 PM
m,p-Xylene	ND		2.0	µg/L	1	10/19/15 05:27 PM
Methylene chloride	ND		5.0	µg/L	1	10/19/15 05:27 PM
o-Xylene	ND		1.0	µg/L	1	10/19/15 05:27 PM
Styrene	ND		1.0	µg/L	1	10/19/15 05:27 PM
Tetrachloroethene	ND		1.0	µg/L	1	10/19/15 05:27 PM
Toluene	ND		1.0	µg/L	1	10/19/15 05:27 PM
trans-1,2-Dichloroethene	9.1		1.0	µg/L	1	10/19/15 05:27 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	10/19/15 05:27 PM
Trichloroethene	430		10	µg/L	10	10/18/15 07:52 PM
Vinyl chloride	1.0		1.0	µg/L	1	10/19/15 05:27 PM

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

ALS Group USA, Corp

Date: 27-Oct-15

Client: AMEC Foster Wheeler

Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

Work Order: 1510613

Sample ID: ATR-OW3 (55)-G100715

Lab ID: 1510613-07

Collection Date: 10/07/15 04:30 PM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Xylenes, Total	ND		3.0	µg/L	1	10/19/15 05:27 PM
Surr: 1,2-Dichloroethane-d4	98.6		75-120	%REC	10	10/18/15 07:52 PM
Surr: 1,2-Dichloroethane-d4	99.0		75-120	%REC	1	10/19/15 05:27 PM
Surr: 4-Bromofluorobenzene	93.9		80-110	%REC	10	10/18/15 07:52 PM
Surr: 4-Bromofluorobenzene	95.4		80-110	%REC	1	10/19/15 05:27 PM
Surr: Dibromofluoromethane	96.7		85-115	%REC	10	10/18/15 07:52 PM
Surr: Dibromofluoromethane	95.0		85-115	%REC	1	10/19/15 05:27 PM
Surr: Toluene-d8	105		85-110	%REC	1	10/19/15 05:27 PM
Surr: Toluene-d8	104		85-110	%REC	10	10/18/15 07:52 PM
ALKALINITY			A2320 B-97			Analyst: ED
Alkalinity, Bicarbonate (as CaCO3)	660		10	mg/L	1	10/15/15 12:20 PM
Alkalinity, Total (as CaCO3)	660		10	mg/L	1	10/15/15 12:20 PM
ANIONS BY ION CHROMATOGRAPHY			SW9056A			Analyst: EE
Chloride	24		5.0	mg/L	5	10/17/15 11:48 AM
Sulfate	12		1.0	mg/L	1	10/17/15 02:45 AM
NITROGEN, NITRATE-NITRITE			E353.2 R2.0			Analyst: JJG
Nitrogen, Nitrate-Nitrite	ND		0.020	mg/L	1	10/15/15 10:16 AM
ORGANIC CARBON, TOTAL			SW9060A			Analyst: JJG
Organic Carbon, Total	1,600		250	mg/L	500	10/19/15 11:30 AM

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

ALS Group USA, Corp

Date: 27-Oct-15

Client: AMEC Foster Wheeler

Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

Work Order: 1510613

Sample ID: ATR-OW3 (55)-G100715 R

Lab ID: 1510613-08

Collection Date: 10/07/15 04:30 PM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A		Prep: SW3005A / 10/12/15	Analyst: RH
Iron	11		0.080	mg/L	1	10/13/15 04:27 AM
Manganese	2.2		0.050	mg/L	10	10/13/15 09:37 AM
VOLATILE ORGANIC COMPOUNDS			SW8260B			Analyst: BG
1,1,1-Trichloroethane	ND		1.0	µg/L	1	10/18/15 04:30 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	10/18/15 04:30 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	10/18/15 04:30 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	10/18/15 04:30 PM
1,1-Dichloroethene	1.1		1.0	µg/L	1	10/18/15 04:30 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	10/18/15 04:30 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	10/18/15 04:30 PM
2-Butanone	43		5.0	µg/L	1	10/18/15 04:30 PM
2-Hexanone	ND		5.0	µg/L	1	10/18/15 04:30 PM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	10/18/15 04:30 PM
Acetone	ND		10	µg/L	1	10/18/15 04:30 PM
Benzene	ND		1.0	µg/L	1	10/18/15 04:30 PM
Bromodichloromethane	ND		1.0	µg/L	1	10/18/15 04:30 PM
Bromoform	ND		1.0	µg/L	1	10/18/15 04:30 PM
Bromomethane	ND		1.0	µg/L	1	10/18/15 04:30 PM
Carbon disulfide	ND		1.0	µg/L	1	10/18/15 04:30 PM
Carbon tetrachloride	ND		1.0	µg/L	1	10/18/15 04:30 PM
Chlorobenzene	ND		1.0	µg/L	1	10/18/15 04:30 PM
Chloroethane	ND		1.0	µg/L	1	10/18/15 04:30 PM
Chloroform	ND		1.0	µg/L	1	10/18/15 04:30 PM
Chloromethane	ND		1.0	µg/L	1	10/18/15 04:30 PM
cis-1,2-Dichloroethene	89		1.0	µg/L	1	10/18/15 04:30 PM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	10/18/15 04:30 PM
Dibromochloromethane	ND		1.0	µg/L	1	10/18/15 04:30 PM
Ethylbenzene	ND		1.0	µg/L	1	10/18/15 04:30 PM
m,p-Xylene	ND		2.0	µg/L	1	10/18/15 04:30 PM
Methylene chloride	ND		5.0	µg/L	1	10/18/15 04:30 PM
o-Xylene	ND		1.0	µg/L	1	10/18/15 04:30 PM
Styrene	ND		1.0	µg/L	1	10/18/15 04:30 PM
Tetrachloroethene	ND		1.0	µg/L	1	10/18/15 04:30 PM
Toluene	ND		1.0	µg/L	1	10/18/15 04:30 PM
trans-1,2-Dichloroethene	21		1.0	µg/L	1	10/18/15 04:30 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	10/18/15 04:30 PM
Trichloroethene	430		10	µg/L	10	10/18/15 07:27 PM
Vinyl chloride	2.4		1.0	µg/L	1	10/18/15 04:30 PM

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

ALS Group USA, Corp

Date: 27-Oct-15

Client: AMEC Foster Wheeler

Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

Work Order: 1510613

Sample ID: ATR-OW3 (55)-G100715 R

Lab ID: 1510613-08

Collection Date: 10/07/15 04:30 PM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Xylenes, Total	ND		3.0	µg/L	1	10/18/15 04:30 PM
Surr: 1,2-Dichloroethane-d4	100		75-120	%REC	1	10/18/15 04:30 PM
Surr: 1,2-Dichloroethane-d4	99.2		75-120	%REC	10	10/18/15 07:27 PM
Surr: 4-Bromofluorobenzene	94.2		80-110	%REC	1	10/18/15 04:30 PM
Surr: 4-Bromofluorobenzene	94.6		80-110	%REC	10	10/18/15 07:27 PM
Surr: Dibromofluoromethane	97.2		85-115	%REC	1	10/18/15 04:30 PM
Surr: Dibromofluoromethane	98.4		85-115	%REC	10	10/18/15 07:27 PM
Surr: Toluene-d8	104		85-110	%REC	10	10/18/15 07:27 PM
Surr: Toluene-d8	105		85-110	%REC	1	10/18/15 04:30 PM
ALKALINITY			A2320 B-97			Analyst: ED
Alkalinity, Bicarbonate (as CaCO3)	690		10	mg/L	1	10/15/15 12:20 PM
Alkalinity, Total (as CaCO3)	690		10	mg/L	1	10/15/15 12:20 PM
ANIONS BY ION CHROMATOGRAPHY			SW9056A			Analyst: EE
Chloride	28		5.0	mg/L	5	10/17/15 12:09 PM
Sulfate	12		1.0	mg/L	1	10/17/15 03:05 AM
NITROGEN, NITRATE-NITRITE			E353.2 R2.0			Analyst: JJG
Nitrogen, Nitrate-Nitrite	ND		0.020	mg/L	1	10/15/15 10:16 AM
ORGANIC CARBON, TOTAL			SW9060A			Analyst: JJG
Organic Carbon, Total	1,600		250	mg/L	500	10/19/15 11:30 AM

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

ALS Group USA, Corp

Date: 27-Oct-15

Client: AMEC Foster Wheeler

Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

Work Order: 1510613

Sample ID: ATR-MW16-G100715

Lab ID: 1510613-09

Collection Date: 10/07/15 01:25 PM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A		Prep: SW3005A / 10/12/15	Analyst: RH
Iron	3.5		0.080	mg/L	1	10/13/15 04:32 AM
Manganese	0.13		0.0050	mg/L	1	10/13/15 04:32 AM
VOLATILE ORGANIC COMPOUNDS			SW8260B			Analyst: BG
1,1,1-Trichloroethane	ND		1.0	µg/L	1	10/19/15 05:02 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	10/19/15 05:02 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	10/19/15 05:02 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	10/19/15 05:02 PM
1,1-Dichloroethene	1.7		1.0	µg/L	1	10/19/15 05:02 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	10/19/15 05:02 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	10/19/15 05:02 PM
2-Butanone	ND		5.0	µg/L	1	10/19/15 05:02 PM
2-Hexanone	ND		5.0	µg/L	1	10/19/15 05:02 PM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	10/19/15 05:02 PM
Acetone	ND		10	µg/L	1	10/19/15 05:02 PM
Benzene	ND		1.0	µg/L	1	10/19/15 05:02 PM
Bromodichloromethane	ND		1.0	µg/L	1	10/19/15 05:02 PM
Bromoform	ND		1.0	µg/L	1	10/19/15 05:02 PM
Bromomethane	ND		1.0	µg/L	1	10/19/15 05:02 PM
Carbon disulfide	ND		1.0	µg/L	1	10/19/15 05:02 PM
Carbon tetrachloride	ND		1.0	µg/L	1	10/19/15 05:02 PM
Chlorobenzene	ND		1.0	µg/L	1	10/19/15 05:02 PM
Chloroethane	ND		1.0	µg/L	1	10/19/15 05:02 PM
Chloroform	ND		1.0	µg/L	1	10/19/15 05:02 PM
Chloromethane	ND		1.0	µg/L	1	10/19/15 05:02 PM
cis-1,2-Dichloroethene	480		10	µg/L	10	10/18/15 07:01 PM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	10/19/15 05:02 PM
Dibromochloromethane	ND		1.0	µg/L	1	10/19/15 05:02 PM
Ethylbenzene	ND		1.0	µg/L	1	10/19/15 05:02 PM
m,p-Xylene	ND		2.0	µg/L	1	10/19/15 05:02 PM
Methylene chloride	ND		5.0	µg/L	1	10/19/15 05:02 PM
o-Xylene	ND		1.0	µg/L	1	10/19/15 05:02 PM
Styrene	ND		1.0	µg/L	1	10/19/15 05:02 PM
Tetrachloroethene	ND		1.0	µg/L	1	10/19/15 05:02 PM
Toluene	ND		1.0	µg/L	1	10/19/15 05:02 PM
trans-1,2-Dichloroethene	10		1.0	µg/L	1	10/19/15 05:02 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	10/19/15 05:02 PM
Trichloroethene	2.2		1.0	µg/L	1	10/19/15 05:02 PM
Vinyl chloride	170		10	µg/L	10	10/18/15 07:01 PM

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

ALS Group USA, Corp

Date: 27-Oct-15

Client: AMEC Foster Wheeler

Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

Work Order: 1510613

Sample ID: ATR-MW16-G100715

Lab ID: 1510613-09

Collection Date: 10/07/15 01:25 PM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Xylenes, Total	ND		3.0	µg/L	1	10/19/15 05:02 PM
Surr: 1,2-Dichloroethane-d4	100		75-120	%REC	10	10/18/15 07:01 PM
Surr: 1,2-Dichloroethane-d4	100		75-120	%REC	1	10/19/15 05:02 PM
Surr: 4-Bromofluorobenzene	95.2		80-110	%REC	10	10/18/15 07:01 PM
Surr: 4-Bromofluorobenzene	93.8		80-110	%REC	1	10/19/15 05:02 PM
Surr: Dibromofluoromethane	97.8		85-115	%REC	10	10/18/15 07:01 PM
Surr: Dibromofluoromethane	99.2		85-115	%REC	1	10/19/15 05:02 PM
Surr: Toluene-d8	105		85-110	%REC	1	10/19/15 05:02 PM
Surr: Toluene-d8	106		85-110	%REC	10	10/18/15 07:01 PM
ALKALINITY			A2320 B-97			Analyst: ED
Alkalinity, Bicarbonate (as CaCO3)	320		10	mg/L	1	10/15/15 12:20 PM
Alkalinity, Total (as CaCO3)	320		10	mg/L	1	10/15/15 12:20 PM
ANIONS BY ION CHROMATOGRAPHY			SW9056A			Analyst: EE
Chloride	12		1.0	mg/L	1	10/17/15 03:26 AM
Sulfate	8.8		1.0	mg/L	1	10/17/15 03:26 AM
NITROGEN, NITRATE-NITRITE			E353.2 R2.0			Analyst: JJG
Nitrogen, Nitrate-Nitrite	ND		0.020	mg/L	1	10/15/15 10:16 AM
ORGANIC CARBON, TOTAL			SW9060A			Analyst: JJG
Organic Carbon, Total	2.8		0.50	mg/L	1	10/19/15 11:30 AM

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

ALS Group USA, Corp

Date: 27-Oct-15

Client: AMEC Foster Wheeler

Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

Work Order: 1510613

Sample ID: ATR-MW17-G100715

Lab ID: 1510613-10

Collection Date: 10/07/15 11:20 AM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A		Prep: SW3005A / 10/12/15	Analyst: RH
Iron	1.8		0.080	mg/L	1	10/13/15 04:37 AM
Manganese	0.62		0.0050	mg/L	1	10/13/15 04:37 AM
VOLATILE ORGANIC COMPOUNDS			SW8260B			Analyst: BG
1,1,1-Trichloroethane	ND		1.0	µg/L	1	10/19/15 03:51 AM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	10/19/15 03:51 AM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	10/19/15 03:51 AM
1,1-Dichloroethane	ND		1.0	µg/L	1	10/19/15 03:51 AM
1,1-Dichloroethene	ND		1.0	µg/L	1	10/19/15 03:51 AM
1,2-Dichloroethane	ND		1.0	µg/L	1	10/19/15 03:51 AM
1,2-Dichloropropane	ND		1.0	µg/L	1	10/19/15 03:51 AM
2-Butanone	ND		5.0	µg/L	1	10/19/15 03:51 AM
2-Hexanone	ND		5.0	µg/L	1	10/19/15 03:51 AM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	10/19/15 03:51 AM
Acetone	ND		10	µg/L	1	10/19/15 03:51 AM
Benzene	ND		1.0	µg/L	1	10/19/15 03:51 AM
Bromodichloromethane	ND		1.0	µg/L	1	10/19/15 03:51 AM
Bromoform	ND		1.0	µg/L	1	10/19/15 03:51 AM
Bromomethane	ND		1.0	µg/L	1	10/19/15 03:51 AM
Carbon disulfide	ND		1.0	µg/L	1	10/19/15 03:51 AM
Carbon tetrachloride	ND		1.0	µg/L	1	10/19/15 03:51 AM
Chlorobenzene	ND		1.0	µg/L	1	10/19/15 03:51 AM
Chloroethane	ND		1.0	µg/L	1	10/19/15 03:51 AM
Chloroform	ND		1.0	µg/L	1	10/19/15 03:51 AM
Chloromethane	ND		1.0	µg/L	1	10/19/15 03:51 AM
cis-1,2-Dichloroethene	41		1.0	µg/L	1	10/19/15 03:51 AM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	10/19/15 03:51 AM
Dibromochloromethane	ND		1.0	µg/L	1	10/19/15 03:51 AM
Ethylbenzene	ND		1.0	µg/L	1	10/19/15 03:51 AM
m,p-Xylene	ND		2.0	µg/L	1	10/19/15 03:51 AM
Methylene chloride	ND		5.0	µg/L	1	10/19/15 03:51 AM
o-Xylene	ND		1.0	µg/L	1	10/19/15 03:51 AM
Styrene	ND		1.0	µg/L	1	10/19/15 03:51 AM
Tetrachloroethene	ND		1.0	µg/L	1	10/19/15 03:51 AM
Toluene	ND		1.0	µg/L	1	10/19/15 03:51 AM
trans-1,2-Dichloroethene	1.6		1.0	µg/L	1	10/19/15 03:51 AM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	10/19/15 03:51 AM
Trichloroethene	190		5.0	µg/L	5	10/19/15 05:32 AM
Vinyl chloride	ND		1.0	µg/L	1	10/19/15 03:51 AM

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

ALS Group USA, Corp

Date: 27-Oct-15

Client: AMEC Foster Wheeler

Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

Work Order: 1510613

Sample ID: ATR-MW17-G100715

Lab ID: 1510613-10

Collection Date: 10/07/15 11:20 AM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Xylenes, Total	ND		3.0	µg/L	1	10/19/15 03:51 AM
Surr: 1,2-Dichloroethane-d4	97.6		75-120	%REC	1	10/19/15 03:51 AM
Surr: 1,2-Dichloroethane-d4	100		75-120	%REC	5	10/19/15 05:32 AM
Surr: 4-Bromofluorobenzene	94.3		80-110	%REC	1	10/19/15 03:51 AM
Surr: 4-Bromofluorobenzene	93.9		80-110	%REC	5	10/19/15 05:32 AM
Surr: Dibromofluoromethane	96.0		85-115	%REC	1	10/19/15 03:51 AM
Surr: Dibromofluoromethane	97.6		85-115	%REC	5	10/19/15 05:32 AM
Surr: Toluene-d8	105		85-110	%REC	5	10/19/15 05:32 AM
Surr: Toluene-d8	105		85-110	%REC	1	10/19/15 03:51 AM
ALKALINITY			A2320 B-97			Analyst: ED
Alkalinity, Bicarbonate (as CaCO3)	360		10	mg/L	1	10/15/15 12:20 PM
Alkalinity, Total (as CaCO3)	360		10	mg/L	1	10/15/15 12:20 PM
ANIONS BY ION CHROMATOGRAPHY			SW9056A			Analyst: EE
Chloride	24		2.0	mg/L	2	10/17/15 12:29 PM
Sulfate	23		2.0	mg/L	2	10/17/15 12:29 PM
NITROGEN, NITRATE-NITRITE			E353.2 R2.0			Analyst: JJG
Nitrogen, Nitrate-Nitrite	1.2		0.020	mg/L	1	10/15/15 10:16 AM
ORGANIC CARBON, TOTAL			SW9060A			Analyst: JJG
Organic Carbon, Total	1.7		0.50	mg/L	1	10/19/15 11:30 AM

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

ALS Group USA, Corp

Date: 27-Oct-15

Client: AMEC Foster Wheeler

Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

Work Order: 1510613

Sample ID: ATR-MW26 (17.5)-G100715

Lab ID: 1510613-11

Collection Date: 10/07/15 11:30 AM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A		Prep: SW3005A / 10/12/15	Analyst: RH
Iron	14		0.080	mg/L	1	10/13/15 06:04 AM
Manganese	0.99		0.0050	mg/L	1	10/13/15 06:04 AM
VOLATILE ORGANIC COMPOUNDS			SW8260B			Analyst: BG
1,1,1-Trichloroethane	ND		1.0	µg/L	1	10/18/15 03:39 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	10/18/15 03:39 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	10/18/15 03:39 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	10/18/15 03:39 PM
1,1-Dichloroethene	ND		1.0	µg/L	1	10/18/15 03:39 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	10/18/15 03:39 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	10/18/15 03:39 PM
2-Butanone	26		5.0	µg/L	1	10/18/15 03:39 PM
2-Hexanone	ND		5.0	µg/L	1	10/18/15 03:39 PM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	10/18/15 03:39 PM
Acetone	ND		10	µg/L	1	10/18/15 03:39 PM
Benzene	ND		1.0	µg/L	1	10/18/15 03:39 PM
Bromodichloromethane	ND		1.0	µg/L	1	10/18/15 03:39 PM
Bromoform	ND		1.0	µg/L	1	10/18/15 03:39 PM
Bromomethane	ND		1.0	µg/L	1	10/18/15 03:39 PM
Carbon disulfide	ND		1.0	µg/L	1	10/18/15 03:39 PM
Carbon tetrachloride	ND		1.0	µg/L	1	10/18/15 03:39 PM
Chlorobenzene	ND		1.0	µg/L	1	10/18/15 03:39 PM
Chloroethane	ND		1.0	µg/L	1	10/18/15 03:39 PM
Chloroform	ND		1.0	µg/L	1	10/18/15 03:39 PM
Chloromethane	ND		1.0	µg/L	1	10/18/15 03:39 PM
cis-1,2-Dichloroethene	510		10	µg/L	10	10/18/15 08:17 PM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	10/18/15 03:39 PM
Dibromochloromethane	ND		1.0	µg/L	1	10/18/15 03:39 PM
Ethylbenzene	ND		1.0	µg/L	1	10/18/15 03:39 PM
m,p-Xylene	ND		2.0	µg/L	1	10/18/15 03:39 PM
Methylene chloride	ND		5.0	µg/L	1	10/18/15 03:39 PM
o-Xylene	ND		1.0	µg/L	1	10/18/15 03:39 PM
Styrene	ND		1.0	µg/L	1	10/18/15 03:39 PM
Tetrachloroethene	ND		1.0	µg/L	1	10/18/15 03:39 PM
Toluene	ND		1.0	µg/L	1	10/18/15 03:39 PM
trans-1,2-Dichloroethene	3.2		1.0	µg/L	1	10/18/15 03:39 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	10/18/15 03:39 PM
Trichloroethene	ND		1.0	µg/L	1	10/18/15 03:39 PM
Vinyl chloride	170		10	µg/L	10	10/18/15 08:17 PM

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

ALS Group USA, Corp

Date: 27-Oct-15

Client: AMEC Foster Wheeler

Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

Work Order: 1510613

Sample ID: ATR-MW26 (17.5)-G100715

Lab ID: 1510613-11

Collection Date: 10/07/15 11:30 AM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Xylenes, Total	ND		3.0	µg/L	1	10/18/15 03:39 PM
Surr: 1,2-Dichloroethane-d4	98.8		75-120	%REC	1	10/18/15 03:39 PM
Surr: 1,2-Dichloroethane-d4	98.3		75-120	%REC	10	10/18/15 08:17 PM
Surr: 4-Bromofluorobenzene	94.1		80-110	%REC	1	10/18/15 03:39 PM
Surr: 4-Bromofluorobenzene	94.9		80-110	%REC	10	10/18/15 08:17 PM
Surr: Dibromofluoromethane	97.1		85-115	%REC	1	10/18/15 03:39 PM
Surr: Dibromofluoromethane	96.5		85-115	%REC	10	10/18/15 08:17 PM
Surr: Toluene-d8	104		85-110	%REC	10	10/18/15 08:17 PM
Surr: Toluene-d8	106		85-110	%REC	1	10/18/15 03:39 PM
ALKALINITY			A2320 B-97			Analyst: ED
Alkalinity, Bicarbonate (as CaCO3)	290		10	mg/L	1	10/15/15 12:20 PM
Alkalinity, Total (as CaCO3)	290		10	mg/L	1	10/15/15 12:20 PM
ANIONS BY ION CHROMATOGRAPHY			SW9056A			Analyst: EE
Chloride	15		1.0	mg/L	1	10/17/15 04:47 AM
Sulfate	1.4		1.0	mg/L	1	10/17/15 04:47 AM
NITROGEN, NITRATE-NITRITE			E353.2 R2.0			Analyst: JJG
Nitrogen, Nitrate-Nitrite	0.15		0.020	mg/L	1	10/15/15 10:16 AM
ORGANIC CARBON, TOTAL			SW9060A			Analyst: JJG
Organic Carbon, Total	47		10	mg/L	20	10/19/15 11:30 AM

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

ALS Group USA, Corp

Date: 27-Oct-15

Client: AMEC Foster Wheeler

Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

Work Order: 1510613

Sample ID: ATR-MW26 (28.8)-G100715

Lab ID: 1510613-12

Collection Date: 10/07/15 12:25 PM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A		Prep: SW3005A / 10/12/15	Analyst: RH
Iron	4.2		0.080	mg/L	1	10/13/15 06:09 AM
Manganese	0.17		0.0050	mg/L	1	10/13/15 06:09 AM
VOLATILE ORGANIC COMPOUNDS			SW8260B			Analyst: BG
1,1,1-Trichloroethane	ND		1.0	µg/L	1	10/19/15 04:16 AM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	10/19/15 04:16 AM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	10/19/15 04:16 AM
1,1-Dichloroethane	ND		1.0	µg/L	1	10/19/15 04:16 AM
1,1-Dichloroethene	ND		1.0	µg/L	1	10/19/15 04:16 AM
1,2-Dichloroethane	ND		1.0	µg/L	1	10/19/15 04:16 AM
1,2-Dichloropropane	ND		1.0	µg/L	1	10/19/15 04:16 AM
2-Butanone	58		5.0	µg/L	1	10/19/15 04:16 AM
2-Hexanone	ND		5.0	µg/L	1	10/19/15 04:16 AM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	10/19/15 04:16 AM
Acetone	ND		10	µg/L	1	10/19/15 04:16 AM
Benzene	ND		1.0	µg/L	1	10/19/15 04:16 AM
Bromodichloromethane	ND		1.0	µg/L	1	10/19/15 04:16 AM
Bromoform	ND		1.0	µg/L	1	10/19/15 04:16 AM
Bromomethane	ND		1.0	µg/L	1	10/19/15 04:16 AM
Carbon disulfide	ND		1.0	µg/L	1	10/19/15 04:16 AM
Carbon tetrachloride	ND		1.0	µg/L	1	10/19/15 04:16 AM
Chlorobenzene	ND		1.0	µg/L	1	10/19/15 04:16 AM
Chloroethane	ND		1.0	µg/L	1	10/19/15 04:16 AM
Chloroform	ND		1.0	µg/L	1	10/19/15 04:16 AM
Chloromethane	ND		1.0	µg/L	1	10/19/15 04:16 AM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	10/19/15 04:16 AM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	10/19/15 04:16 AM
Dibromochloromethane	ND		1.0	µg/L	1	10/19/15 04:16 AM
Ethylbenzene	ND		1.0	µg/L	1	10/19/15 04:16 AM
m,p-Xylene	ND		2.0	µg/L	1	10/19/15 04:16 AM
Methylene chloride	ND		5.0	µg/L	1	10/19/15 04:16 AM
o-Xylene	ND		1.0	µg/L	1	10/19/15 04:16 AM
Styrene	ND		1.0	µg/L	1	10/19/15 04:16 AM
Tetrachloroethene	ND		1.0	µg/L	1	10/19/15 04:16 AM
Toluene	ND		1.0	µg/L	1	10/19/15 04:16 AM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	10/19/15 04:16 AM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	10/19/15 04:16 AM
Trichloroethene	ND		1.0	µg/L	1	10/19/15 04:16 AM
Vinyl chloride	ND		1.0	µg/L	1	10/19/15 04:16 AM

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

ALS Group USA, Corp

Date: 27-Oct-15

Client: AMEC Foster Wheeler

Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

Work Order: 1510613

Sample ID: ATR-MW26 (28.8)-G100715

Lab ID: 1510613-12

Collection Date: 10/07/15 12:25 PM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Xylenes, Total	ND		3.0	µg/L	1	10/19/15 04:16 AM
<i>Surr: 1,2-Dichloroethane-d4</i>	98.4		75-120	%REC	1	10/19/15 04:16 AM
<i>Surr: 4-Bromofluorobenzene</i>	95.2		80-110	%REC	1	10/19/15 04:16 AM
<i>Surr: Dibromofluoromethane</i>	95.2		85-115	%REC	1	10/19/15 04:16 AM
<i>Surr: Toluene-d8</i>	106		85-110	%REC	1	10/19/15 04:16 AM
ALKALINITY			A2320 B-97			Analyst: ED
Alkalinity, Bicarbonate (as CaCO3)	300		10	mg/L	1	10/15/15 12:20 PM
Alkalinity, Total (as CaCO3)	300		10	mg/L	1	10/15/15 12:20 PM
ANIONS BY ION CHROMATOGRAPHY			SW9056A			Analyst: EE
Chloride	9.3		1.0	mg/L	1	10/17/15 05:07 AM
Sulfate	2.2		1.0	mg/L	1	10/17/15 05:07 AM
NITROGEN, NITRATE-NITRITE			E353.2 R2.0			Analyst: JJG
Nitrogen, Nitrate-Nitrite	ND		0.020	mg/L	1	10/15/15 10:16 AM
ORGANIC CARBON, TOTAL			SW9060A			Analyst: JJG
Organic Carbon, Total	3.6		0.50	mg/L	1	10/19/15 11:30 AM

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

ALS Group USA, Corp

Date: 27-Oct-15

Client: AMEC Foster Wheeler

Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

Work Order: 1510613

Sample ID: ATR-MW26 (58.8)-G100715

Lab ID: 1510613-13

Collection Date: 10/07/15 10:40 AM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A		Prep: SW3005A / 10/12/15	Analyst: RH
Iron	0.083		0.080	mg/L	1	10/13/15 06:14 AM
Manganese	0.059		0.0050	mg/L	1	10/13/15 06:14 AM
VOLATILE ORGANIC COMPOUNDS			SW8260B			Analyst: BG
1,1,1-Trichloroethane	ND		1.0	µg/L	1	10/19/15 04:42 AM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	10/19/15 04:42 AM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	10/19/15 04:42 AM
1,1-Dichloroethane	ND		1.0	µg/L	1	10/19/15 04:42 AM
1,1-Dichloroethene	ND		1.0	µg/L	1	10/19/15 04:42 AM
1,2-Dichloroethane	ND		1.0	µg/L	1	10/19/15 04:42 AM
1,2-Dichloropropane	ND		1.0	µg/L	1	10/19/15 04:42 AM
2-Butanone	ND		5.0	µg/L	1	10/19/15 04:42 AM
2-Hexanone	ND		5.0	µg/L	1	10/19/15 04:42 AM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	10/19/15 04:42 AM
Acetone	ND		10	µg/L	1	10/19/15 04:42 AM
Benzene	ND		1.0	µg/L	1	10/19/15 04:42 AM
Bromodichloromethane	ND		1.0	µg/L	1	10/19/15 04:42 AM
Bromoform	ND		1.0	µg/L	1	10/19/15 04:42 AM
Bromomethane	ND		1.0	µg/L	1	10/19/15 04:42 AM
Carbon disulfide	ND		1.0	µg/L	1	10/19/15 04:42 AM
Carbon tetrachloride	ND		1.0	µg/L	1	10/19/15 04:42 AM
Chlorobenzene	ND		1.0	µg/L	1	10/19/15 04:42 AM
Chloroethane	ND		1.0	µg/L	1	10/19/15 04:42 AM
Chloroform	ND		1.0	µg/L	1	10/19/15 04:42 AM
Chloromethane	ND		1.0	µg/L	1	10/19/15 04:42 AM
cis-1,2-Dichloroethene	8.3		1.0	µg/L	1	10/19/15 04:42 AM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	10/19/15 04:42 AM
Dibromochloromethane	ND		1.0	µg/L	1	10/19/15 04:42 AM
Ethylbenzene	ND		1.0	µg/L	1	10/19/15 04:42 AM
m,p-Xylene	ND		2.0	µg/L	1	10/19/15 04:42 AM
Methylene chloride	ND		5.0	µg/L	1	10/19/15 04:42 AM
o-Xylene	ND		1.0	µg/L	1	10/19/15 04:42 AM
Styrene	ND		1.0	µg/L	1	10/19/15 04:42 AM
Tetrachloroethene	ND		1.0	µg/L	1	10/19/15 04:42 AM
Toluene	ND		1.0	µg/L	1	10/19/15 04:42 AM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	10/19/15 04:42 AM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	10/19/15 04:42 AM
Trichloroethene	ND		1.0	µg/L	1	10/19/15 04:42 AM
Vinyl chloride	3.1		1.0	µg/L	1	10/19/15 04:42 AM

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

ALS Group USA, Corp

Date: 27-Oct-15

Client: AMEC Foster Wheeler

Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

Work Order: 1510613

Sample ID: ATR-MW26 (58.8)-G100715

Lab ID: 1510613-13

Collection Date: 10/07/15 10:40 AM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Xylenes, Total	ND		3.0	µg/L	1	10/19/15 04:42 AM
Surr: 1,2-Dichloroethane-d4	101		75-120	%REC	1	10/19/15 04:42 AM
Surr: 4-Bromofluorobenzene	94.8		80-110	%REC	1	10/19/15 04:42 AM
Surr: Dibromofluoromethane	98.4		85-115	%REC	1	10/19/15 04:42 AM
Surr: Toluene-d8	105		85-110	%REC	1	10/19/15 04:42 AM
ALKALINITY			A2320 B-97			Analyst: ED
Alkalinity, Bicarbonate (as CaCO3)	220		10	mg/L	1	10/15/15 12:20 PM
Alkalinity, Total (as CaCO3)	220		10	mg/L	1	10/15/15 12:20 PM
ANIONS BY ION CHROMATOGRAPHY			SW9056A			Analyst: EE
Chloride	6.9		1.0	mg/L	1	10/17/15 05:27 AM
Sulfate	15		1.0	mg/L	1	10/17/15 05:27 AM
NITROGEN, NITRATE-NITRITE			E353.2 R2.0			Analyst: JJG
Nitrogen, Nitrate-Nitrite	ND		0.020	mg/L	1	10/15/15 10:16 AM
ORGANIC CARBON, TOTAL			SW9060A			Analyst: JJG
Organic Carbon, Total	1.4		0.50	mg/L	1	10/19/15 11:30 AM

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

ALS Group USA, Corp

Date: 27-Oct-15

Client: AMEC Foster Wheeler

Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

Work Order: 1510613

Sample ID: ATR-ZVI2 (17.5)-G100715

Lab ID: 1510613-14

Collection Date: 10/07/15 02:20 PM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A		Prep: SW3005A / 10/12/15	Analyst: RH
Iron	12		0.080	mg/L	1	10/13/15 06:19 AM
Manganese	0.79		0.0050	mg/L	1	10/13/15 06:19 AM
VOLATILE ORGANIC COMPOUNDS			SW8260B			Analyst: BG
1,1,1-Trichloroethane	ND		1.0	µg/L	1	10/18/15 03:14 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	10/18/15 03:14 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	10/18/15 03:14 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	10/18/15 03:14 PM
1,1-Dichloroethene	ND		1.0	µg/L	1	10/18/15 03:14 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	10/18/15 03:14 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	10/18/15 03:14 PM
2-Butanone	28		5.0	µg/L	1	10/18/15 03:14 PM
2-Hexanone	ND		5.0	µg/L	1	10/18/15 03:14 PM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	10/18/15 03:14 PM
Acetone	ND		10	µg/L	1	10/18/15 03:14 PM
Benzene	ND		1.0	µg/L	1	10/18/15 03:14 PM
Bromodichloromethane	ND		1.0	µg/L	1	10/18/15 03:14 PM
Bromoform	ND		1.0	µg/L	1	10/18/15 03:14 PM
Bromomethane	ND		1.0	µg/L	1	10/18/15 03:14 PM
Carbon disulfide	ND		1.0	µg/L	1	10/18/15 03:14 PM
Carbon tetrachloride	ND		1.0	µg/L	1	10/18/15 03:14 PM
Chlorobenzene	ND		1.0	µg/L	1	10/18/15 03:14 PM
Chloroethane	ND		1.0	µg/L	1	10/18/15 03:14 PM
Chloroform	ND		1.0	µg/L	1	10/18/15 03:14 PM
Chloromethane	ND		1.0	µg/L	1	10/18/15 03:14 PM
cis-1,2-Dichloroethene	320		10	µg/L	10	10/18/15 08:42 PM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	10/18/15 03:14 PM
Dibromochloromethane	ND		1.0	µg/L	1	10/18/15 03:14 PM
Ethylbenzene	ND		1.0	µg/L	1	10/18/15 03:14 PM
m,p-Xylene	ND		2.0	µg/L	1	10/18/15 03:14 PM
Methylene chloride	ND		5.0	µg/L	1	10/18/15 03:14 PM
o-Xylene	ND		1.0	µg/L	1	10/18/15 03:14 PM
Styrene	ND		1.0	µg/L	1	10/18/15 03:14 PM
Tetrachloroethene	ND		1.0	µg/L	1	10/18/15 03:14 PM
Toluene	ND		1.0	µg/L	1	10/18/15 03:14 PM
trans-1,2-Dichloroethene	2.9		1.0	µg/L	1	10/18/15 03:14 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	10/18/15 03:14 PM
Trichloroethene	ND		1.0	µg/L	1	10/18/15 03:14 PM
Vinyl chloride	250		10	µg/L	10	10/18/15 08:42 PM

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

ALS Group USA, Corp

Date: 27-Oct-15

Client: AMEC Foster Wheeler

Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

Work Order: 1510613

Sample ID: ATR-ZVI2 (17.5)-G100715

Lab ID: 1510613-14

Collection Date: 10/07/15 02:20 PM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Xylenes, Total	ND		3.0	µg/L	1	10/18/15 03:14 PM
Surr: 1,2-Dichloroethane-d4	98.3		75-120	%REC	1	10/18/15 03:14 PM
Surr: 1,2-Dichloroethane-d4	99.7		75-120	%REC	10	10/18/15 08:42 PM
Surr: 4-Bromofluorobenzene	94.6		80-110	%REC	1	10/18/15 03:14 PM
Surr: 4-Bromofluorobenzene	93.1		80-110	%REC	10	10/18/15 08:42 PM
Surr: Dibromofluoromethane	96.0		85-115	%REC	1	10/18/15 03:14 PM
Surr: Dibromofluoromethane	97.0		85-115	%REC	10	10/18/15 08:42 PM
Surr: Toluene-d8	104		85-110	%REC	10	10/18/15 08:42 PM
Surr: Toluene-d8	106		85-110	%REC	1	10/18/15 03:14 PM
ALKALINITY			A2320 B-97			Analyst: ED
Alkalinity, Bicarbonate (as CaCO3)	280		10	mg/L	1	10/15/15 12:20 PM
Alkalinity, Total (as CaCO3)	280		10	mg/L	1	10/15/15 12:20 PM
ANIONS BY ION CHROMATOGRAPHY			SW9056A			Analyst: EE
Chloride	16		1.0	mg/L	1	10/17/15 05:47 AM
Sulfate	ND		1.0	mg/L	1	10/17/15 05:47 AM
NITROGEN, NITRATE-NITRITE			E353.2 R2.0			Analyst: JJG
Nitrogen, Nitrate-Nitrite	ND		0.020	mg/L	1	10/15/15 10:16 AM
ORGANIC CARBON, TOTAL			SW9060A			Analyst: JJG
Organic Carbon, Total	25		5.0	mg/L	10	10/19/15 11:30 AM

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

ALS Group USA, Corp

Date: 27-Oct-15

Client: AMEC Foster Wheeler

Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

Work Order: 1510613

Sample ID: ATR-ZVI2 (32.5)-G100715

Lab ID: 1510613-15

Collection Date: 10/07/15 01:28 PM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A		Prep: SW3005A / 10/12/15	Analyst: RH
Iron	1.7		0.080	mg/L	1	10/13/15 06:25 AM
Manganese	0.15		0.0050	mg/L	1	10/13/15 06:25 AM
VOLATILE ORGANIC COMPOUNDS			SW8260B			Analyst: BG
1,1,1-Trichloroethane	ND		1.0	µg/L	1	10/18/15 02:48 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	10/18/15 02:48 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	10/18/15 02:48 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	10/18/15 02:48 PM
1,1-Dichloroethene	2.2		1.0	µg/L	1	10/18/15 02:48 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	10/18/15 02:48 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	10/18/15 02:48 PM
2-Butanone	ND		5.0	µg/L	1	10/18/15 02:48 PM
2-Hexanone	ND		5.0	µg/L	1	10/18/15 02:48 PM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	10/18/15 02:48 PM
Acetone	ND		10	µg/L	1	10/18/15 02:48 PM
Benzene	ND		1.0	µg/L	1	10/18/15 02:48 PM
Bromodichloromethane	ND		1.0	µg/L	1	10/18/15 02:48 PM
Bromoform	ND		1.0	µg/L	1	10/18/15 02:48 PM
Bromomethane	ND		1.0	µg/L	1	10/18/15 02:48 PM
Carbon disulfide	ND		1.0	µg/L	1	10/18/15 02:48 PM
Carbon tetrachloride	ND		1.0	µg/L	1	10/18/15 02:48 PM
Chlorobenzene	ND		1.0	µg/L	1	10/18/15 02:48 PM
Chloroethane	ND		1.0	µg/L	1	10/18/15 02:48 PM
Chloroform	ND		1.0	µg/L	1	10/18/15 02:48 PM
Chloromethane	ND		1.0	µg/L	1	10/18/15 02:48 PM
cis-1,2-Dichloroethene	320		10	µg/L	10	10/18/15 09:08 PM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	10/18/15 02:48 PM
Dibromochloromethane	ND		1.0	µg/L	1	10/18/15 02:48 PM
Ethylbenzene	ND		1.0	µg/L	1	10/18/15 02:48 PM
m,p-Xylene	ND		2.0	µg/L	1	10/18/15 02:48 PM
Methylene chloride	ND		5.0	µg/L	1	10/18/15 02:48 PM
o-Xylene	ND		1.0	µg/L	1	10/18/15 02:48 PM
Styrene	ND		1.0	µg/L	1	10/18/15 02:48 PM
Tetrachloroethene	ND		1.0	µg/L	1	10/18/15 02:48 PM
Toluene	ND		1.0	µg/L	1	10/18/15 02:48 PM
trans-1,2-Dichloroethene	2.8		1.0	µg/L	1	10/18/15 02:48 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	10/18/15 02:48 PM
Trichloroethene	ND		1.0	µg/L	1	10/18/15 02:48 PM
Vinyl chloride	130		10	µg/L	10	10/18/15 09:08 PM

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

ALS Group USA, Corp

Date: 27-Oct-15

Client: AMEC Foster Wheeler

Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

Work Order: 1510613

Sample ID: ATR-ZVI2 (32.5)-G100715

Lab ID: 1510613-15

Collection Date: 10/07/15 01:28 PM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Xylenes, Total	ND		3.0	µg/L	1	10/18/15 02:48 PM
Surr: 1,2-Dichloroethane-d4	98.0		75-120	%REC	1	10/18/15 02:48 PM
Surr: 1,2-Dichloroethane-d4	99.9		75-120	%REC	10	10/18/15 09:08 PM
Surr: 4-Bromofluorobenzene	95.2		80-110	%REC	1	10/18/15 02:48 PM
Surr: 4-Bromofluorobenzene	94.2		80-110	%REC	10	10/18/15 09:08 PM
Surr: Dibromofluoromethane	96.9		85-115	%REC	1	10/18/15 02:48 PM
Surr: Dibromofluoromethane	94.8		85-115	%REC	10	10/18/15 09:08 PM
Surr: Toluene-d8	105		85-110	%REC	10	10/18/15 09:08 PM
Surr: Toluene-d8	105		85-110	%REC	1	10/18/15 02:48 PM
ALKALINITY			A2320 B-97			Analyst: ED
Alkalinity, Bicarbonate (as CaCO3)	250		10	mg/L	1	10/15/15 12:20 PM
Alkalinity, Total (as CaCO3)	250		10	mg/L	1	10/15/15 12:20 PM
ANIONS BY ION CHROMATOGRAPHY			SW9056A			Analyst: EE
Chloride	10		1.0	mg/L	1	10/17/15 06:08 AM
Sulfate	9.9		1.0	mg/L	1	10/17/15 06:08 AM
NITROGEN, NITRATE-NITRITE			E353.2 R2.0			Analyst: JJG
Nitrogen, Nitrate-Nitrite	ND		0.020	mg/L	1	10/15/15 10:16 AM
ORGANIC CARBON, TOTAL			SW9060A			Analyst: JJG
Organic Carbon, Total	5.2		0.50	mg/L	1	10/19/15 11:30 AM

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

ALS Group USA, Corp

Date: 27-Oct-15

Client: AMEC Foster Wheeler

Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

Work Order: 1510613

Sample ID: ATR-OW5 (16)-G100715

Lab ID: 1510613-16

Collection Date: 10/07/15 03:00 PM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A		Prep: SW3005A / 10/12/15	Analyst: RH
Iron	9.9		0.080	mg/L	1	10/13/15 06:30 AM
Manganese	1.1		0.0050	mg/L	1	10/13/15 06:30 AM
VOLATILE ORGANIC COMPOUNDS			SW8260B			Analyst: BG
1,1,1-Trichloroethane	ND		2.0	µg/L	2	10/19/15 07:38 AM
1,1,2,2-Tetrachloroethane	ND		2.0	µg/L	2	10/19/15 07:38 AM
1,1,2-Trichloroethane	ND		2.0	µg/L	2	10/19/15 07:38 AM
1,1-Dichloroethane	ND		2.0	µg/L	2	10/19/15 07:38 AM
1,1-Dichloroethene	ND		2.0	µg/L	2	10/19/15 07:38 AM
1,2-Dichloroethane	ND		2.0	µg/L	2	10/19/15 07:38 AM
1,2-Dichloropropane	ND		2.0	µg/L	2	10/19/15 07:38 AM
2-Butanone	74		10	µg/L	2	10/19/15 07:38 AM
2-Hexanone	ND		10	µg/L	2	10/19/15 07:38 AM
4-Methyl-2-pentanone	ND		2.0	µg/L	2	10/19/15 07:38 AM
Acetone	ND		20	µg/L	2	10/19/15 07:38 AM
Benzene	ND		2.0	µg/L	2	10/19/15 07:38 AM
Bromodichloromethane	ND		2.0	µg/L	2	10/19/15 07:38 AM
Bromoform	ND		2.0	µg/L	2	10/19/15 07:38 AM
Bromomethane	ND		2.0	µg/L	2	10/19/15 07:38 AM
Carbon disulfide	ND		2.0	µg/L	2	10/19/15 07:38 AM
Carbon tetrachloride	ND		2.0	µg/L	2	10/19/15 07:38 AM
Chlorobenzene	ND		2.0	µg/L	2	10/19/15 07:38 AM
Chloroethane	ND		2.0	µg/L	2	10/19/15 07:38 AM
Chloroform	ND		2.0	µg/L	2	10/19/15 07:38 AM
Chloromethane	ND		2.0	µg/L	2	10/19/15 07:38 AM
cis-1,2-Dichloroethene	720		20	µg/L	20	10/18/15 06:11 PM
cis-1,3-Dichloropropene	ND		2.0	µg/L	2	10/19/15 07:38 AM
Dibromochloromethane	ND		2.0	µg/L	2	10/19/15 07:38 AM
Ethylbenzene	ND		2.0	µg/L	2	10/19/15 07:38 AM
m,p-Xylene	ND		4.0	µg/L	2	10/19/15 07:38 AM
Methylene chloride	ND		10	µg/L	2	10/19/15 07:38 AM
o-Xylene	ND		2.0	µg/L	2	10/19/15 07:38 AM
Styrene	ND		2.0	µg/L	2	10/19/15 07:38 AM
Tetrachloroethene	ND		2.0	µg/L	2	10/19/15 07:38 AM
Toluene	ND		2.0	µg/L	2	10/19/15 07:38 AM
trans-1,2-Dichloroethene	6.1		2.0	µg/L	2	10/19/15 07:38 AM
trans-1,3-Dichloropropene	ND		2.0	µg/L	2	10/19/15 07:38 AM
Trichloroethene	ND		2.0	µg/L	2	10/19/15 07:38 AM
Vinyl chloride	190		2.0	µg/L	2	10/19/15 07:38 AM

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

ALS Group USA, Corp

Date: 27-Oct-15

Client: AMEC Foster Wheeler

Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

Work Order: 1510613

Sample ID: ATR-OW5 (16)-G100715

Lab ID: 1510613-16

Collection Date: 10/07/15 03:00 PM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Xylenes, Total	ND		6.0	µg/L	2	10/19/15 07:38 AM
Surr: 1,2-Dichloroethane-d4	99.3		75-120	%REC	20	10/18/15 06:11 PM
Surr: 1,2-Dichloroethane-d4	101		75-120	%REC	2	10/19/15 07:38 AM
Surr: 4-Bromofluorobenzene	95.0		80-110	%REC	20	10/18/15 06:11 PM
Surr: 4-Bromofluorobenzene	93.2		80-110	%REC	2	10/19/15 07:38 AM
Surr: Dibromofluoromethane	96.8		85-115	%REC	20	10/18/15 06:11 PM
Surr: Dibromofluoromethane	99.0		85-115	%REC	2	10/19/15 07:38 AM
Surr: Toluene-d8	105		85-110	%REC	2	10/19/15 07:38 AM
Surr: Toluene-d8	105		85-110	%REC	20	10/18/15 06:11 PM
ALKALINITY			A2320 B-97			Analyst: ED
Alkalinity, Bicarbonate (as CaCO3)	510		10	mg/L	1	10/15/15 12:20 PM
Alkalinity, Total (as CaCO3)	510		10	mg/L	1	10/15/15 12:20 PM
ANIONS BY ION CHROMATOGRAPHY			SW9056A			Analyst: EE
Chloride	20		5.0	mg/L	5	10/17/15 12:49 PM
Sulfate	ND		1.0	mg/L	1	10/17/15 06:28 AM
NITROGEN, NITRATE-NITRITE			E353.2 R2.0			Analyst: JJG
Nitrogen, Nitrate-Nitrite	ND		0.020	mg/L	1	10/15/15 10:16 AM
ORGANIC CARBON, TOTAL			SW9060A			Analyst: JJG
Organic Carbon, Total	140		10	mg/L	20	10/19/15 11:30 AM

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

ALS Group USA, Corp

Date: 27-Oct-15

Client: AMEC Foster Wheeler

Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

Work Order: 1510613

Sample ID: ATR-OW5 (35)-G100715

Lab ID: 1510613-17

Collection Date: 10/07/15 04:30 PM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A		Prep: SW3005A / 10/12/15	Analyst: RH
Iron	7.0		0.080	mg/L	1	10/13/15 06:35 AM
Manganese	0.45		0.0050	mg/L	1	10/13/15 06:35 AM
VOLATILE ORGANIC COMPOUNDS			SW8260B			Analyst: BG
1,1,1-Trichloroethane	ND		5.0	µg/L	5	10/18/15 09:58 PM
1,1,2,2-Tetrachloroethane	ND		5.0	µg/L	5	10/18/15 09:58 PM
1,1,2-Trichloroethane	ND		5.0	µg/L	5	10/18/15 09:58 PM
1,1-Dichloroethane	ND		5.0	µg/L	5	10/18/15 09:58 PM
1,1-Dichloroethene	5.0		5.0	µg/L	5	10/18/15 09:58 PM
1,2-Dichloroethane	ND		5.0	µg/L	5	10/18/15 09:58 PM
1,2-Dichloropropane	ND		5.0	µg/L	5	10/18/15 09:58 PM
2-Butanone	29		25	µg/L	5	10/18/15 09:58 PM
2-Hexanone	ND		25	µg/L	5	10/18/15 09:58 PM
4-Methyl-2-pentanone	ND		5.0	µg/L	5	10/18/15 09:58 PM
Acetone	ND		50	µg/L	5	10/18/15 09:58 PM
Benzene	ND		5.0	µg/L	5	10/18/15 09:58 PM
Bromodichloromethane	ND		5.0	µg/L	5	10/18/15 09:58 PM
Bromoform	ND		5.0	µg/L	5	10/18/15 09:58 PM
Bromomethane	ND		5.0	µg/L	5	10/18/15 09:58 PM
Carbon disulfide	ND		5.0	µg/L	5	10/18/15 09:58 PM
Carbon tetrachloride	ND		5.0	µg/L	5	10/18/15 09:58 PM
Chlorobenzene	ND		5.0	µg/L	5	10/18/15 09:58 PM
Chloroethane	ND		5.0	µg/L	5	10/18/15 09:58 PM
Chloroform	ND		5.0	µg/L	5	10/18/15 09:58 PM
Chloromethane	ND		5.0	µg/L	5	10/18/15 09:58 PM
cis-1,2-Dichloroethene	1,100		50	µg/L	50	10/18/15 05:20 PM
cis-1,3-Dichloropropene	ND		5.0	µg/L	5	10/18/15 09:58 PM
Dibromochloromethane	ND		5.0	µg/L	5	10/18/15 09:58 PM
Ethylbenzene	ND		5.0	µg/L	5	10/18/15 09:58 PM
m,p-Xylene	ND		10	µg/L	5	10/18/15 09:58 PM
Methylene chloride	ND		25	µg/L	5	10/18/15 09:58 PM
o-Xylene	ND		5.0	µg/L	5	10/18/15 09:58 PM
Styrene	ND		5.0	µg/L	5	10/18/15 09:58 PM
Tetrachloroethene	ND		5.0	µg/L	5	10/18/15 09:58 PM
Toluene	ND		5.0	µg/L	5	10/18/15 09:58 PM
trans-1,2-Dichloroethene	5.4		5.0	µg/L	5	10/18/15 09:58 PM
trans-1,3-Dichloropropene	ND		5.0	µg/L	5	10/18/15 09:58 PM
Trichloroethene	ND		5.0	µg/L	5	10/18/15 09:58 PM
Vinyl chloride	170		5.0	µg/L	5	10/18/15 09:58 PM

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

ALS Group USA, Corp

Date: 27-Oct-15

Client: AMEC Foster Wheeler

Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

Work Order: 1510613

Sample ID: ATR-OW5 (35)-G100715

Lab ID: 1510613-17

Collection Date: 10/07/15 04:30 PM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Xylenes, Total	ND		15	µg/L	5	10/18/15 09:58 PM
Surr: 1,2-Dichloroethane-d4	98.6		75-120	%REC	50	10/18/15 05:20 PM
Surr: 1,2-Dichloroethane-d4	102		75-120	%REC	5	10/18/15 09:58 PM
Surr: 4-Bromofluorobenzene	94.4		80-110	%REC	50	10/18/15 05:20 PM
Surr: 4-Bromofluorobenzene	96.0		80-110	%REC	5	10/18/15 09:58 PM
Surr: Dibromofluoromethane	98.0		85-115	%REC	50	10/18/15 05:20 PM
Surr: Dibromofluoromethane	97.2		85-115	%REC	5	10/18/15 09:58 PM
Surr: Toluene-d8	104		85-110	%REC	5	10/18/15 09:58 PM
Surr: Toluene-d8	105		85-110	%REC	50	10/18/15 05:20 PM
ALKALINITY			A2320 B-97			Analyst: ED
Alkalinity, Bicarbonate (as CaCO3)	520		10	mg/L	1	10/15/15 12:20 PM
Alkalinity, Total (as CaCO3)	520		10	mg/L	1	10/15/15 12:20 PM
ANIONS BY ION CHROMATOGRAPHY			SW9056A			Analyst: EE
Chloride	9.5		1.0	mg/L	1	10/17/15 06:48 AM
Sulfate	ND		1.0	mg/L	1	10/17/15 06:48 AM
NITROGEN, NITRATE-NITRITE			E353.2 R2.0			Analyst: JJG
Nitrogen, Nitrate-Nitrite	ND		0.020	mg/L	1	10/15/15 10:16 AM
ORGANIC CARBON, TOTAL			SW9060A			Analyst: JJG
Organic Carbon, Total	190		20	mg/L	40	10/19/15 11:30 AM

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

ALS Group USA, Corp

Date: 27-Oct-15

Client: AMEC Foster Wheeler

Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

Work Order: 1510613

Sample ID: ATR-OW5 (54)-G100715

Lab ID: 1510613-18

Collection Date: 10/07/15 05:20 PM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A		Prep: SW3005A / 10/12/15	Analyst: RH
Iron	1.4		0.080	mg/L	1	10/13/15 06:40 AM
Manganese	0.16		0.0050	mg/L	1	10/13/15 06:40 AM
VOLATILE ORGANIC COMPOUNDS			SW8260B			Analyst: BG
1,1,1-Trichloroethane	ND		5.0	µg/L	5	10/19/15 07:13 AM
1,1,2,2-Tetrachloroethane	ND		5.0	µg/L	5	10/19/15 07:13 AM
1,1,2-Trichloroethane	ND		5.0	µg/L	5	10/19/15 07:13 AM
1,1-Dichloroethane	ND		5.0	µg/L	5	10/19/15 07:13 AM
1,1-Dichloroethene	7.0		5.0	µg/L	5	10/19/15 07:13 AM
1,2-Dichloroethane	ND		5.0	µg/L	5	10/19/15 07:13 AM
1,2-Dichloropropane	ND		5.0	µg/L	5	10/19/15 07:13 AM
2-Butanone	ND		25	µg/L	5	10/19/15 07:13 AM
2-Hexanone	ND		25	µg/L	5	10/19/15 07:13 AM
4-Methyl-2-pentanone	ND		5.0	µg/L	5	10/19/15 07:13 AM
Acetone	ND		50	µg/L	5	10/19/15 07:13 AM
Benzene	ND		5.0	µg/L	5	10/19/15 07:13 AM
Bromodichloromethane	ND		5.0	µg/L	5	10/19/15 07:13 AM
Bromoform	ND		5.0	µg/L	5	10/19/15 07:13 AM
Bromomethane	ND		5.0	µg/L	5	10/19/15 07:13 AM
Carbon disulfide	ND		5.0	µg/L	5	10/19/15 07:13 AM
Carbon tetrachloride	ND		5.0	µg/L	5	10/19/15 07:13 AM
Chlorobenzene	ND		5.0	µg/L	5	10/19/15 07:13 AM
Chloroethane	ND		5.0	µg/L	5	10/19/15 07:13 AM
Chloroform	ND		5.0	µg/L	5	10/19/15 07:13 AM
Chloromethane	ND		5.0	µg/L	5	10/19/15 07:13 AM
cis-1,2-Dichloroethene	2,000		50	µg/L	50	10/18/15 05:46 PM
cis-1,3-Dichloropropene	ND		5.0	µg/L	5	10/19/15 07:13 AM
Dibromochloromethane	ND		5.0	µg/L	5	10/19/15 07:13 AM
Ethylbenzene	ND		5.0	µg/L	5	10/19/15 07:13 AM
m,p-Xylene	ND		10	µg/L	5	10/19/15 07:13 AM
Methylene chloride	ND		25	µg/L	5	10/19/15 07:13 AM
o-Xylene	ND		5.0	µg/L	5	10/19/15 07:13 AM
Styrene	ND		5.0	µg/L	5	10/19/15 07:13 AM
Tetrachloroethene	ND		5.0	µg/L	5	10/19/15 07:13 AM
Toluene	ND		5.0	µg/L	5	10/19/15 07:13 AM
trans-1,2-Dichloroethene	14		5.0	µg/L	5	10/19/15 07:13 AM
trans-1,3-Dichloropropene	ND		5.0	µg/L	5	10/19/15 07:13 AM
Trichloroethene	ND		5.0	µg/L	5	10/19/15 07:13 AM
Vinyl chloride	300		5.0	µg/L	5	10/19/15 07:13 AM

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

ALS Group USA, Corp

Date: 27-Oct-15

Client: AMEC Foster Wheeler

Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

Work Order: 1510613

Sample ID: ATR-OW5 (54)-G100715

Lab ID: 1510613-18

Collection Date: 10/07/15 05:20 PM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Xylenes, Total	ND		15	µg/L	5	10/19/15 07:13 AM
Surr: 1,2-Dichloroethane-d4	99.1		75-120	%REC	50	10/18/15 05:46 PM
Surr: 1,2-Dichloroethane-d4	100		75-120	%REC	5	10/19/15 07:13 AM
Surr: 4-Bromofluorobenzene	94.2		80-110	%REC	50	10/18/15 05:46 PM
Surr: 4-Bromofluorobenzene	94.0		80-110	%REC	5	10/19/15 07:13 AM
Surr: Dibromofluoromethane	96.8		85-115	%REC	50	10/18/15 05:46 PM
Surr: Dibromofluoromethane	97.8		85-115	%REC	5	10/19/15 07:13 AM
Surr: Toluene-d8	104		85-110	%REC	5	10/19/15 07:13 AM
Surr: Toluene-d8	106		85-110	%REC	50	10/18/15 05:46 PM
ALKALINITY			A2320 B-97			Analyst: ED
Alkalinity, Bicarbonate (as CaCO3)	230		10	mg/L	1	10/15/15 12:20 PM
Alkalinity, Total (as CaCO3)	230		10	mg/L	1	10/15/15 12:20 PM
ANIONS BY ION CHROMATOGRAPHY			SW9056A			Analyst: EE
Chloride	11		1.0	mg/L	1	10/17/15 07:08 AM
Sulfate	10		1.0	mg/L	1	10/17/15 07:08 AM
NITROGEN, NITRATE-NITRITE			E353.2 R2.0			Analyst: JJG
Nitrogen, Nitrate-Nitrite	ND		0.020	mg/L	1	10/15/15 10:16 AM
ORGANIC CARBON, TOTAL			SW9060A			Analyst: JJG
Organic Carbon, Total	2.3		0.50	mg/L	1	10/19/15 11:30 AM

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

ALS Group USA, Corp

Date: 27-Oct-15

Client: AMEC Foster Wheeler

Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

Work Order: 1510613

Sample ID: ATR-EB001-G100815

Lab ID: 1510613-19

Collection Date: 10/08/15 10:15 AM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A		Prep: SW3005A / 10/12/15	Analyst: RH
Iron	ND		0.080	mg/L	1	10/13/15 06:45 AM
Manganese	ND		0.0050	mg/L	1	10/13/15 06:45 AM
VOLATILE ORGANIC COMPOUNDS			SW8260B			Analyst: BG
1,1,1-Trichloroethane	ND		1.0	µg/L	1	10/19/15 05:07 AM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	10/19/15 05:07 AM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	10/19/15 05:07 AM
1,1-Dichloroethane	ND		1.0	µg/L	1	10/19/15 05:07 AM
1,1-Dichloroethene	ND		1.0	µg/L	1	10/19/15 05:07 AM
1,2-Dichloroethane	ND		1.0	µg/L	1	10/19/15 05:07 AM
1,2-Dichloropropane	ND		1.0	µg/L	1	10/19/15 05:07 AM
2-Butanone	ND		5.0	µg/L	1	10/19/15 05:07 AM
2-Hexanone	ND		5.0	µg/L	1	10/19/15 05:07 AM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	10/19/15 05:07 AM
Acetone	ND		10	µg/L	1	10/19/15 05:07 AM
Benzene	ND		1.0	µg/L	1	10/19/15 05:07 AM
Bromodichloromethane	ND		1.0	µg/L	1	10/19/15 05:07 AM
Bromoform	ND		1.0	µg/L	1	10/19/15 05:07 AM
Bromomethane	ND		1.0	µg/L	1	10/19/15 05:07 AM
Carbon disulfide	ND		1.0	µg/L	1	10/19/15 05:07 AM
Carbon tetrachloride	ND		1.0	µg/L	1	10/19/15 05:07 AM
Chlorobenzene	ND		1.0	µg/L	1	10/19/15 05:07 AM
Chloroethane	ND		1.0	µg/L	1	10/19/15 05:07 AM
Chloroform	ND		1.0	µg/L	1	10/19/15 05:07 AM
Chloromethane	ND		1.0	µg/L	1	10/19/15 05:07 AM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	10/19/15 05:07 AM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	10/19/15 05:07 AM
Dibromochloromethane	ND		1.0	µg/L	1	10/19/15 05:07 AM
Ethylbenzene	ND		1.0	µg/L	1	10/19/15 05:07 AM
m,p-Xylene	ND		2.0	µg/L	1	10/19/15 05:07 AM
Methylene chloride	ND		5.0	µg/L	1	10/19/15 05:07 AM
o-Xylene	ND		1.0	µg/L	1	10/19/15 05:07 AM
Styrene	ND		1.0	µg/L	1	10/19/15 05:07 AM
Tetrachloroethene	ND		1.0	µg/L	1	10/19/15 05:07 AM
Toluene	ND		1.0	µg/L	1	10/19/15 05:07 AM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	10/19/15 05:07 AM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	10/19/15 05:07 AM
Trichloroethene	ND		1.0	µg/L	1	10/19/15 05:07 AM
Vinyl chloride	ND		1.0	µg/L	1	10/19/15 05:07 AM

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

ALS Group USA, Corp

Date: 27-Oct-15

Client: AMEC Foster Wheeler

Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

Work Order: 1510613

Sample ID: ATR-EB001-G100815

Lab ID: 1510613-19

Collection Date: 10/08/15 10:15 AM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Xylenes, Total	ND		3.0	µg/L	1	10/19/15 05:07 AM
<i>Surr: 1,2-Dichloroethane-d4</i>	99.0		75-120	%REC	1	10/19/15 05:07 AM
<i>Surr: 4-Bromofluorobenzene</i>	94.4		80-110	%REC	1	10/19/15 05:07 AM
<i>Surr: Dibromofluoromethane</i>	97.4		85-115	%REC	1	10/19/15 05:07 AM
<i>Surr: Toluene-d8</i>	104		85-110	%REC	1	10/19/15 05:07 AM
ALKALINITY			A2320 B-97			Analyst: ED
Alkalinity, Bicarbonate (as CaCO ₃)	ND		10	mg/L	1	10/15/15 12:20 PM
Alkalinity, Total (as CaCO ₃)	ND		10	mg/L	1	10/15/15 12:20 PM
ANIONS BY ION CHROMATOGRAPHY			SW9056A			Analyst: EE
Chloride	ND		1.0	mg/L	1	10/17/15 07:29 AM
Sulfate	ND		1.0	mg/L	1	10/17/15 07:29 AM
NITROGEN, NITRATE-NITRITE			E353.2 R2.0			Analyst: JJG
Nitrogen, Nitrate-Nitrite	ND		0.020	mg/L	1	10/15/15 10:16 AM
ORGANIC CARBON, TOTAL			SW9060A			Analyst: JJG
Organic Carbon, Total	0.54		0.50	mg/L	1	10/19/15 11:30 AM

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

ALS Group USA, Corp

Date: 27-Oct-15

Client: AMEC Foster Wheeler

Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

Work Order: 1510613

Sample ID: Trip Blank #1

Lab ID: 1510613-20

Collection Date: 10/07/15

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260B			Analyst: BG
1,1,1-Trichloroethane	ND		1.0	µg/L	1	10/18/15 01:57 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	10/18/15 01:57 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	10/18/15 01:57 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	10/18/15 01:57 PM
1,1-Dichloroethene	ND		1.0	µg/L	1	10/18/15 01:57 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	10/18/15 01:57 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	10/18/15 01:57 PM
2-Butanone	ND		5.0	µg/L	1	10/18/15 01:57 PM
2-Hexanone	ND		5.0	µg/L	1	10/18/15 01:57 PM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	10/18/15 01:57 PM
Acetone	ND		10	µg/L	1	10/18/15 01:57 PM
Benzene	ND		1.0	µg/L	1	10/18/15 01:57 PM
Bromodichloromethane	ND		1.0	µg/L	1	10/18/15 01:57 PM
Bromoform	ND		1.0	µg/L	1	10/18/15 01:57 PM
Bromomethane	ND		1.0	µg/L	1	10/18/15 01:57 PM
Carbon disulfide	ND		1.0	µg/L	1	10/18/15 01:57 PM
Carbon tetrachloride	ND		1.0	µg/L	1	10/18/15 01:57 PM
Chlorobenzene	ND		1.0	µg/L	1	10/18/15 01:57 PM
Chloroethane	ND		1.0	µg/L	1	10/18/15 01:57 PM
Chloroform	ND		1.0	µg/L	1	10/18/15 01:57 PM
Chloromethane	ND		1.0	µg/L	1	10/18/15 01:57 PM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	10/18/15 01:57 PM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	10/18/15 01:57 PM
Dibromochloromethane	ND		1.0	µg/L	1	10/18/15 01:57 PM
Ethylbenzene	ND		1.0	µg/L	1	10/18/15 01:57 PM
m,p-Xylene	ND		2.0	µg/L	1	10/18/15 01:57 PM
Methylene chloride	ND		5.0	µg/L	1	10/18/15 01:57 PM
o-Xylene	ND		1.0	µg/L	1	10/18/15 01:57 PM
Styrene	ND		1.0	µg/L	1	10/18/15 01:57 PM
Tetrachloroethene	ND		1.0	µg/L	1	10/18/15 01:57 PM
Toluene	ND		1.0	µg/L	1	10/18/15 01:57 PM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	10/18/15 01:57 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	10/18/15 01:57 PM
Trichloroethene	ND		1.0	µg/L	1	10/18/15 01:57 PM
Vinyl chloride	ND		1.0	µg/L	1	10/18/15 01:57 PM
Xylenes, Total	ND		3.0	µg/L	1	10/18/15 01:57 PM
Surr: 1,2-Dichloroethane-d4	96.3		75-120	%REC	1	10/18/15 01:57 PM
Surr: 4-Bromofluorobenzene	95.8		80-110	%REC	1	10/18/15 01:57 PM
Surr: Dibromofluoromethane	95.5		85-115	%REC	1	10/18/15 01:57 PM

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

ALS Group USA, Corp

Date: 27-Oct-15

Client: AMEC Foster Wheeler

Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

Work Order: 1510613

Sample ID: Trip Blank #1

Lab ID: 1510613-20

Collection Date: 10/07/15

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	107		85-110	%REC	1	10/18/15 01:57 PM

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

ALS Group USA, Corp

Date: 27-Oct-15

Client: AMEC Foster Wheeler

Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

Work Order: 1510613

Sample ID: Trip Blank #2

Lab ID: 1510613-21

Collection Date: 10/08/15

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
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VOLATILE ORGANIC COMPOUNDS

SW8260B

Analyst: **BG**

1,1,1-Trichloroethane	ND		1.0	µg/L	1	10/18/15 02:23 PM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	10/18/15 02:23 PM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	10/18/15 02:23 PM
1,1-Dichloroethane	ND		1.0	µg/L	1	10/18/15 02:23 PM
1,1-Dichloroethene	ND		1.0	µg/L	1	10/18/15 02:23 PM
1,2-Dichloroethane	ND		1.0	µg/L	1	10/18/15 02:23 PM
1,2-Dichloropropane	ND		1.0	µg/L	1	10/18/15 02:23 PM
2-Butanone	ND		5.0	µg/L	1	10/18/15 02:23 PM
2-Hexanone	ND		5.0	µg/L	1	10/18/15 02:23 PM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	10/18/15 02:23 PM
Acetone	ND		10	µg/L	1	10/18/15 02:23 PM
Benzene	ND		1.0	µg/L	1	10/18/15 02:23 PM
Bromodichloromethane	ND		1.0	µg/L	1	10/18/15 02:23 PM
Bromoform	ND		1.0	µg/L	1	10/18/15 02:23 PM
Bromomethane	ND		1.0	µg/L	1	10/18/15 02:23 PM
Carbon disulfide	ND		1.0	µg/L	1	10/18/15 02:23 PM
Carbon tetrachloride	ND		1.0	µg/L	1	10/18/15 02:23 PM
Chlorobenzene	ND		1.0	µg/L	1	10/18/15 02:23 PM
Chloroethane	ND		1.0	µg/L	1	10/18/15 02:23 PM
Chloroform	ND		1.0	µg/L	1	10/18/15 02:23 PM
Chloromethane	ND		1.0	µg/L	1	10/18/15 02:23 PM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	10/18/15 02:23 PM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	10/18/15 02:23 PM
Dibromochloromethane	ND		1.0	µg/L	1	10/18/15 02:23 PM
Ethylbenzene	ND		1.0	µg/L	1	10/18/15 02:23 PM
m,p-Xylene	ND		2.0	µg/L	1	10/18/15 02:23 PM
Methylene chloride	ND		5.0	µg/L	1	10/18/15 02:23 PM
o-Xylene	ND		1.0	µg/L	1	10/18/15 02:23 PM
Styrene	ND		1.0	µg/L	1	10/18/15 02:23 PM
Tetrachloroethene	ND		1.0	µg/L	1	10/18/15 02:23 PM
Toluene	ND		1.0	µg/L	1	10/18/15 02:23 PM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	10/18/15 02:23 PM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	10/18/15 02:23 PM
Trichloroethene	ND		1.0	µg/L	1	10/18/15 02:23 PM
Vinyl chloride	ND		1.0	µg/L	1	10/18/15 02:23 PM
Xylenes, Total	ND		3.0	µg/L	1	10/18/15 02:23 PM
Surr: 1,2-Dichloroethane-d4	97.5		75-120	%REC	1	10/18/15 02:23 PM
Surr: 4-Bromofluorobenzene	94.1		80-110	%REC	1	10/18/15 02:23 PM
Surr: Dibromofluoromethane	95.4		85-115	%REC	1	10/18/15 02:23 PM

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

ALS Group USA, Corp

Date: 27-Oct-15

Client: AMEC Foster Wheeler

Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

Work Order: 1510613

Sample ID: Trip Blank #2

Lab ID: 1510613-21

Collection Date: 10/08/15

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	105		85-110	%REC	1	10/18/15 02:23 PM

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

Client: AMEC Foster Wheeler

QC BATCH REPORT

Work Order: 1510613

Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

Batch ID: 77283

Instrument ID ICPMS2

Method: SW6020A

MBLK		Sample ID: MBLK-77283-77283				Units: mg/L		Analysis Date: 10/13/15 03:10 AM		
Client ID:		Run ID: ICPMS2_151012B			SeqNo: 3504566		Prep Date: 10/12/15		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Iron	ND	0.080								
Manganese	ND	0.0050								

LCS		Sample ID: LCS-77283-77283				Units: mg/L		Analysis Date: 10/13/15 03:15 AM		
Client ID:		Run ID: ICPMS2_151012B			SeqNo: 3504567		Prep Date: 10/12/15		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Iron	10.01	0.080	10	0	100	80-120	0			
Manganese	0.1028	0.0050	0.1	0	103	80-120	0			

MS		Sample ID: 1510613-02CMS				Units: mg/L		Analysis Date: 10/13/15 03:51 AM		
Client ID: ATR-MW24 (24.9)-G100815		Run ID: ICPMS2_151012B			SeqNo: 3504574		Prep Date: 10/12/15		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Iron	10.16	0.080	10	0.1317	100	75-125	0			
Manganese	0.3681	0.0050	0.1	0.2582	110	75-125	0			

MSD		Sample ID: 1510613-02CMSD				Units: mg/L		Analysis Date: 10/13/15 03:56 AM		
Client ID: ATR-MW24 (24.9)-G100815		Run ID: ICPMS2_151012B			SeqNo: 3504575		Prep Date: 10/12/15		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Iron	10.13	0.080	10	0.1317	100	75-125	10.16	0.296	20	
Manganese	0.3528	0.0050	0.1	0.2582	94.6	75-125	0.3681	4.24	20	

The following samples were analyzed in this batch:

1510613-01C	1510613-02C	1510613-03C
1510613-04C	1510613-05C	1510613-06C
1510613-07C	1510613-08C	1510613-09C
1510613-10C	1510613-11C	1510613-12C
1510613-13C	1510613-14C	1510613-15C
1510613-16C	1510613-17C	1510613-18C
1510613-19C		

Client: AMEC Foster Wheeler
 Work Order: 1510613
 Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

QC BATCH REPORT

Batch ID: **R174044** Instrument ID **VMS5** Method: **SW8260B**

MBLK		Sample ID: VBLKW1-151018-R174044				Units: µg/L		Analysis Date: 10/18/15 01:32 PM		
Client ID:		Run ID: VMS5_151018A			SeqNo: 3516885		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloroethane	ND	1.0								
1,2-Dichloropropane	ND	1.0								
2-Butanone	ND	5.0								
2-Hexanone	ND	5.0								
4-Methyl-2-pentanone	ND	1.0								
Acetone	ND	10								
Benzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	1.0								
Carbon disulfide	ND	1.0								
Carbon tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	1.0								
Chloroform	ND	1.0								
Chloromethane	ND	1.0								
cis-1,2-Dichloroethene	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
Dibromochloromethane	ND	1.0								
Ethylbenzene	ND	1.0								
m,p-Xylene	ND	2.0								
Methylene chloride	ND	5.0								
o-Xylene	ND	1.0								
Styrene	ND	1.0								
Tetrachloroethene	ND	1.0								
Toluene	ND	1.0								
trans-1,2-Dichloroethene	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
Trichloroethene	ND	1.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	3.0								
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>19.63</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>98.2</i>	<i>75-120</i>	<i>0</i>			
<i>Surr: 4-Bromofluorobenzene</i>	<i>19.04</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>19.08</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>95.4</i>	<i>85-115</i>	<i>0</i>			
<i>Surr: Toluene-d8</i>	<i>21.42</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>107</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: 1510613
 Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

QC BATCH REPORT

Batch ID: **R174044** Instrument ID **VMS5** Method: **SW8260B**

LCS		Sample ID: VLCSW1-151018-R174044				Units: µg/L		Analysis Date: 10/18/15 12:41 PM		
Client ID:		Run ID: VMS5_151018A			SeqNo: 3516884		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	19.43	1.0	20	0	97.2	75-130	0			
1,1,2,2-Tetrachloroethane	20.17	1.0	20	0	101	75-130	0			
1,1,2-Trichloroethane	19.13	1.0	20	0	95.6	75-125	0			
1,1-Dichloroethane	19.48	1.0	20	0	97.4	75-133	0			
1,1-Dichloroethene	20.05	1.0	20	0	100	70-145	0			
1,2-Dichloroethane	17.5	1.0	20	0	87.5	78-125	0			
1,2-Dichloropropane	18.57	1.0	20	0	92.8	75-125	0			
2-Butanone	20.86	5.0	20	0	104	55-150	0			
2-Hexanone	23.34	5.0	20	0	117	60-135	0			
4-Methyl-2-pentanone	28.73	1.0	20	0	144	77-178	0			
Acetone	23.44	10	20	0	117	60-160	0			
Benzene	19.82	1.0	20	0	99.1	85-125	0			
Bromodichloromethane	17.59	1.0	20	0	88	75-125	0			
Bromoform	15.98	1.0	20	0	79.9	60-125	0			
Bromomethane	17.15	1.0	20	0	85.8	30-185	0			
Carbon disulfide	23.13	1.0	20	0	116	60-165	0			
Carbon tetrachloride	19.53	1.0	20	0	97.6	65-140	0			
Chlorobenzene	20.24	1.0	20	0	101	80-120	0			
Chloroethane	17.97	1.0	20	0	89.8	50-140	0			
Chloroform	17.91	1.0	20	0	89.6	80-130	0			
Chloromethane	16.62	1.0	20	0	83.1	50-130	0			
cis-1,2-Dichloroethene	18.4	1.0	20	0	92	75-134	0			
cis-1,3-Dichloropropene	19.93	1.0	20	0	99.6	70-130	0			
Dibromochloromethane	17.47	1.0	20	0	87.4	60-115	0			
Ethylbenzene	20.84	1.0	20	0	104	85-125	0			
m,p-Xylene	43.79	2.0	40	0	109	75-130	0			
Methylene chloride	18.96	5.0	20	0	94.8	75-140	0			
o-Xylene	20.66	1.0	20	0	103	80-125	0			
Styrene	21.02	1.0	20	0	105	85-125	0			
Tetrachloroethene	21.72	1.0	20	0	109	77-138	0			
Toluene	20.79	1.0	20	0	104	85-125	0			
trans-1,2-Dichloroethene	19.96	1.0	20	0	99.8	80-140	0			
trans-1,3-Dichloropropene	21.23	1.0	20	0	106	81-123	0			
Trichloroethene	18.37	1.0	20	0	91.8	84-130	0			
Vinyl chloride	16.94	1.0	20	0	84.7	50-136	0			
Xylenes, Total	64.45	3.0	60	0	107	80-126	0			
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>19.62</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>98.1</i>	<i>75-120</i>	<i>0</i>			
<i>Surr: 4-Bromofluorobenzene</i>	<i>20.44</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>102</i>	<i>80-110</i>	<i>0</i>			
<i>Surr: Dibromofluoromethane</i>	<i>19.54</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>97.7</i>	<i>85-115</i>	<i>0</i>			
<i>Surr: Toluene-d8</i>	<i>20.97</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>105</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: 1510613
 Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

QC BATCH REPORT

Batch ID: R174044 Instrument ID VMS5 Method: SW8260B

MS		Sample ID: 1510613-04A MS				Units: µg/L		Analysis Date: 10/18/15 10:23 PM		
Client ID: ATR-OW2 (33)-G100815		Run ID: VMS5_151018A			SeqNo: 3516965		Prep Date:		DF: 5	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	85.05	5.0	100	0	85	75-130	0			
1,1,2,2-Tetrachloroethane	85.65	5.0	100	0	85.6	75-130	0			
1,1,2-Trichloroethane	84.2	5.0	100	0	84.2	75-125	0			
1,1-Dichloroethane	83.85	5.0	100	0	83.8	75-133	0			
1,1-Dichloroethene	94.75	5.0	100	5.3	89.4	70-145	0			
1,2-Dichloroethane	74.7	5.0	100	0	74.7	78-125	0			S
1,2-Dichloropropane	77.8	5.0	100	0	77.8	75-125	0			
2-Butanone	100	25	100	10	90	55-150	0			
2-Hexanone	94.6	25	100	0	94.6	60-135	0			
4-Methyl-2-pentanone	118.4	5.0	100	0	118	77-178	0			
Acetone	109	50	100	0	109	60-160	0			
Benzene	85.7	5.0	100	0	85.7	85-125	0			
Bromodichloromethane	76.3	5.0	100	0	76.3	75-125	0			
Bromoform	73.25	5.0	100	0	73.2	60-125	0			
Bromomethane	38.2	5.0	100	0	38.2	30-185	0			
Carbon disulfide	102.8	5.0	100	0	103	60-165	0			
Carbon tetrachloride	85.85	5.0	100	0	85.8	65-140	0			
Chlorobenzene	90.55	5.0	100	0	90.6	80-120	0			
Chloroethane	78.45	5.0	100	0	78.4	50-140	0			
Chloroform	77.45	5.0	100	0	77.4	80-130	0			S
Chloromethane	68.6	5.0	100	0	68.6	50-130	0			
cis-1,2-Dichloroethene	1938	5.0	100	1886	52.2	75-134	0			SEO
cis-1,3-Dichloropropene	82.5	5.0	100	0	82.5	70-130	0			
Dibromochloromethane	78.9	5.0	100	0	78.9	60-115	0			
Ethylbenzene	93.4	5.0	100	0	93.4	85-125	0			
m,p-Xylene	191.8	10	200	0	95.9	75-130	0			
Methylene chloride	81.75	25	100	0	81.8	75-140	0			
o-Xylene	89.95	5.0	100	0	90	80-125	0			
Styrene	90.2	5.0	100	0	90.2	85-125	0			
Tetrachloroethene	98.6	5.0	100	0	98.6	77-138	0			
Toluene	92.85	5.0	100	0	92.8	85-125	0			
trans-1,2-Dichloroethene	96.6	5.0	100	9.25	87.4	80-140	0			
trans-1,3-Dichloropropene	87.75	5.0	100	0	87.8	81-123	0			
Trichloroethene	81.4	5.0	100	0	81.4	84-130	0			S
Vinyl chloride	1514	5.0	100	1510	4.45	50-136	0			SEO
Xylenes, Total	281.7	15	300	0	93.9	80-126	0			
Surr: 1,2-Dichloroethane-d4	98.5	0	100	0	98.5	75-120	0			
Surr: 4-Bromofluorobenzene	97.2	0	100	0	97.2	80-110	0			
Surr: Dibromofluoromethane	96.9	0	100	0	96.9	85-115	0			
Surr: Toluene-d8	106.8	0	100	0	107	85-110	0			

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

Client: AMEC Foster Wheeler
 Work Order: 1510613
 Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

QC BATCH REPORT

Batch ID: R174044 Instrument ID VMS5 Method: SW8260B

MSD		Sample ID: 1510613-04A MSD				Units: µg/L		Analysis Date: 10/18/15 10:48 PM		
Client ID: ATR-OW2 (33)-G100815		Run ID: VMS5_151018A				SeqNo: 3516966		Prep Date:		DF: 5
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	89.9	5.0	100	0	89.9	75-130	85.05	5.54	30	
1,1,2,2-Tetrachloroethane	94.2	5.0	100	0	94.2	75-130	85.65	9.51	30	
1,1,2-Trichloroethane	91.6	5.0	100	0	91.6	75-125	84.2	8.42	30	
1,1-Dichloroethane	89.15	5.0	100	0	89.2	75-133	83.85	6.13	30	
1,1-Dichloroethene	101.3	5.0	100	5.3	96	70-145	94.75	6.68	30	
1,2-Dichloroethane	79.6	5.0	100	0	79.6	78-125	74.7	6.35	30	
1,2-Dichloropropane	85.35	5.0	100	0	85.4	75-125	77.8	9.26	30	
2-Butanone	106.2	25	100	10	96.2	55-150	100	5.97	30	
2-Hexanone	100.9	25	100	0	101	60-135	94.6	6.45	30	
4-Methyl-2-pentanone	128	5.0	100	0	128	77-178	118.4	7.83	30	
Acetone	118.8	50	100	0	119	60-160	109	8.69	30	
Benzene	91.55	5.0	100	0	91.6	85-125	85.7	6.6	30	
Bromodichloromethane	81.55	5.0	100	0	81.6	75-125	76.3	6.65	30	
Bromoform	81.25	5.0	100	0	81.2	60-125	73.25	10.4	30	
Bromomethane	44.45	5.0	100	0	44.4	30-185	38.2	15.1	30	
Carbon disulfide	111	5.0	100	0	111	60-165	102.8	7.67	30	
Carbon tetrachloride	92.15	5.0	100	0	92.2	65-140	85.85	7.08	30	
Chlorobenzene	95.85	5.0	100	0	95.8	80-120	90.55	5.69	30	
Chloroethane	84.9	5.0	100	0	84.9	50-140	78.45	7.9	30	
Chloroform	83.8	5.0	100	0	83.8	80-130	77.45	7.88	30	
Chloromethane	72.55	5.0	100	0	72.6	50-130	68.6	5.6	30	
cis-1,2-Dichloroethene	1997	5.0	100	1886	111	75-134	1938	2.99	30	EO
cis-1,3-Dichloropropene	88.95	5.0	100	0	89	70-130	82.5	7.52	30	
Dibromochloromethane	85.4	5.0	100	0	85.4	60-115	78.9	7.91	30	
Ethylbenzene	99.35	5.0	100	0	99.4	85-125	93.4	6.17	30	
m,p-Xylene	204.5	10	200	0	102	75-130	191.8	6.44	30	
Methylene chloride	86.2	25	100	0	86.2	75-140	81.75	5.3	30	
o-Xylene	95.9	5.0	100	0	95.9	80-125	89.95	6.4	30	
Styrene	97.35	5.0	100	0	97.4	85-125	90.2	7.62	30	
Tetrachloroethene	105.5	5.0	100	0	106	77-138	98.6	6.76	30	
Toluene	98.75	5.0	100	0	98.8	85-125	92.85	6.16	30	
trans-1,2-Dichloroethene	102.8	5.0	100	9.25	93.5	80-140	96.6	6.17	30	
trans-1,3-Dichloropropene	95.7	5.0	100	0	95.7	81-123	87.75	8.67	30	
Trichloroethene	87.85	5.0	100	0	87.8	84-130	81.4	7.62	30	
Vinyl chloride	1573	5.0	100	1510	63.4	50-136	1514	3.82	30	EO
Xylenes, Total	300.4	15	300	0	100	80-126	281.7	6.43	30	
Surr: 1,2-Dichloroethane-d4	98.95	0	100	0	99	75-120	98.5	0.456	30	
Surr: 4-Bromofluorobenzene	98.05	0	100	0	98	80-110	97.2	0.871	30	
Surr: Dibromofluoromethane	98.6	0	100	0	98.6	85-115	96.9	1.74	30	
Surr: Toluene-d8	106	0	100	0	106	85-110	106.8	0.658	30	

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

Client: AMEC Foster Wheeler
Work Order: 1510613
Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

QC BATCH REPORT

Batch ID: **R174044** Instrument ID **VMS5** Method: **SW8260B**

The following samples were analyzed in this batch:

1510613-04A	1510613-07A	1510613-08A
1510613-09A	1510613-11A	1510613-14A
1510613-15A	1510613-16A	1510613-17A
1510613-18A	1510613-20A	1510613-21A

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

Client: AMEC Foster Wheeler
 Work Order: 1510613
 Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

QC BATCH REPORT

Batch ID: **R174050** Instrument ID **VMS5** Method: **SW8260B**

MBLK		Sample ID: VBLKW2-151018-R174050				Units: µg/L		Analysis Date: 10/19/15 01:45 AM		
Client ID:		Run ID: VMS5_151018B			SeqNo: 3517223		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								
1,4-Dichlorobenzene	ND	1.0								
2-Butanone	ND	5.0								
2-Hexanone	ND	5.0								
4-Methyl-2-pentanone	ND	1.0								
Acetone	ND	10								
Benzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	1.0								
Carbon disulfide	ND	1.0								
Carbon tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	1.0								
Chloroform	ND	1.0								
Chloromethane	ND	1.0								
cis-1,2-Dichloroethene	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
Dibromochloromethane	ND	1.0								
Ethylbenzene	ND	1.0								
m,p-Xylene	ND	2.0								
Methylene chloride	ND	5.0								
o-Xylene	ND	1.0								
Styrene	ND	1.0								
Tetrachloroethene	ND	1.0								
Toluene	ND	1.0								
trans-1,2-Dichloroethene	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
Trichloroethene	ND	1.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	3.0								
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>20</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>100</i>	<i>75-120</i>	<i>0</i>			
<i>Surr: 4-Bromofluorobenzene</i>	<i>19.29</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>96.4</i>	<i>80-110</i>	<i>0</i>			
<i>Surr: Dibromofluoromethane</i>	<i>19.54</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>97.7</i>	<i>85-115</i>	<i>0</i>			
<i>Surr: Toluene-d8</i>	<i>21.63</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>108</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: 1510613
 Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

QC BATCH REPORT

Batch ID: **R174050** Instrument ID **VMS5** Method: **SW8260B**

LCS		Sample ID: VLCSW2-151018-R174050				Units: µg/L		Analysis Date: 10/19/15 12:55 PM		
Client ID:		Run ID: VMS5_151018B			SeqNo: 3517276		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	18.6	1.0	20	0	93	75-130	0			
1,1,2,2-Tetrachloroethane	20.51	1.0	20	0	103	75-130	0			
1,1,2-Trichloroethane	19.3	1.0	20	0	96.5	75-125	0			
1,1-Dichloroethane	18.6	1.0	20	0	93	75-133	0			
1,1-Dichloroethene	18.77	1.0	20	0	93.8	70-145	0			
1,2-Dichloroethane	17.17	1.0	20	0	85.8	78-125	0			
1,2-Dichloropropane	18.64	1.0	20	0	93.2	75-125	0			
1,4-Dichlorobenzene	19.84	1.0	20	0	99.2	75-130	0			
2-Butanone	20.56	5.0	20	0	103	55-150	0			
2-Hexanone	22.93	5.0	20	0	115	60-135	0			
4-Methyl-2-pentanone	29.45	1.0	20	0	147	77-178	0			
Acetone	25.61	10	20	0	128	60-160	0			
Benzene	19	1.0	20	0	95	85-125	0			
Bromodichloromethane	17.84	1.0	20	0	89.2	75-125	0			
Bromoform	17.52	1.0	20	0	87.6	60-125	0			
Bromomethane	15.19	1.0	20	0	76	30-185	0			
Carbon disulfide	22.18	1.0	20	0	111	60-165	0			
Carbon tetrachloride	18.7	1.0	20	0	93.5	65-140	0			
Chlorobenzene	19.9	1.0	20	0	99.5	80-120	0			
Chloroethane	16.52	1.0	20	0	82.6	50-140	0			
Chloroform	17.42	1.0	20	0	87.1	80-130	0			
Chloromethane	15.56	1.0	20	0	77.8	50-130	0			
cis-1,2-Dichloroethene	17.3	1.0	20	0	86.5	75-134	0			
cis-1,3-Dichloropropene	19.69	1.0	20	0	98.4	70-130	0			
Dibromochloromethane	18.6	1.0	20	0	93	60-115	0			
Ethylbenzene	20.25	1.0	20	0	101	85-125	0			
m,p-Xylene	42.23	2.0	40	0	106	75-130	0			
Methylene chloride	18.64	5.0	20	0	93.2	75-140	0			
o-Xylene	19.95	1.0	20	0	99.8	80-125	0			
Styrene	20.88	1.0	20	0	104	85-125	0			
Tetrachloroethene	20.86	1.0	20	0	104	77-138	0			
Toluene	20.27	1.0	20	0	101	85-125	0			
trans-1,2-Dichloroethene	18.99	1.0	20	0	95	80-140	0			
trans-1,3-Dichloropropene	20.7	1.0	20	0	104	81-123	0			
Trichloroethene	17.8	1.0	20	0	89	84-130	0			
Vinyl chloride	15.67	1.0	20	0	78.4	50-136	0			
Xylenes, Total	62.18	3.0	60	0	104	80-126	0			
<i>Surr: 1,2-Dichloroethane-d4</i>	19.77	0	20	0	98.8	75-120	0			
<i>Surr: 4-Bromofluorobenzene</i>	19.45	0	20	0	97.2	80-110	0			
<i>Surr: Dibromofluoromethane</i>	19.54	0	20	0	97.7	85-115	0			
<i>Surr: Toluene-d8</i>	21.02	0	20	0	105	85-110	0			

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

Client: AMEC Foster Wheeler
 Work Order: 1510613
 Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

QC BATCH REPORT

Batch ID: **R174050** Instrument ID **VMS5** Method: **SW8260B**

MS		Sample ID: 1510613-10A MS				Units: µg/L		Analysis Date: 10/19/15 10:36 AM		
Client ID: ATR-MW17-G100715		Run ID: VMS5_151018B			SeqNo: 3517271		Prep Date:		DF: 5	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	89.8	5.0	100	0	89.8	75-130	0			
1,1,2,2-Tetrachloroethane	93.35	5.0	100	0	93.4	75-130	0			
1,1,2-Trichloroethane	87.35	5.0	100	0	87.4	75-125	0			
1,1-Dichloroethane	90.35	5.0	100	0	90.4	75-133	0			
1,1-Dichloroethene	96.55	5.0	100	0	96.6	70-145	0			
1,2-Dichloroethane	78.8	5.0	100	0	78.8	78-125	0			
1,2-Dichloropropane	83.6	5.0	100	0	83.6	75-125	0			
1,4-Dichlorobenzene	89.45	5.0	100	0	89.4	75-130	0			
2-Butanone	93.6	25	100	0	93.6	55-150	0			
2-Hexanone	99.15	25	100	0	99.2	60-135	0			
4-Methyl-2-pentanone	128	5.0	100	0	128	77-178	0			
Acetone	120.2	50	100	0	120	60-160	0			
Benzene	90.9	5.0	100	0	90.9	85-125	0			
Bromodichloromethane	82	5.0	100	0	82	75-125	0			
Bromoform	80.55	5.0	100	0	80.6	60-125	0			
Bromomethane	52.75	5.0	100	0	52.8	30-185	0			
Carbon disulfide	114	5.0	100	0	114	60-165	0			
Carbon tetrachloride	92.75	5.0	100	0	92.8	65-140	0			
Chlorobenzene	93.75	5.0	100	0	93.8	80-120	0			
Chloroethane	84.35	5.0	100	0	84.4	50-140	0			
Chloroform	81.8	5.0	100	0	81.8	80-130	0			
Chloromethane	73.5	5.0	100	0	73.5	50-130	0			
cis-1,2-Dichloroethene	119	5.0	100	38.95	80	75-134	0			
cis-1,3-Dichloropropene	86.05	5.0	100	0	86	70-130	0			
Dibromochloromethane	84.4	5.0	100	0	84.4	60-115	0			
Ethylbenzene	97.4	5.0	100	0	97.4	85-125	0			
m,p-Xylene	200.6	10	200	0	100	75-130	0			
Methylene chloride	86.95	25	100	0	87	75-140	0			
o-Xylene	94.55	5.0	100	0	94.6	80-125	0			
Styrene	94.05	5.0	100	0	94	85-125	0			
Tetrachloroethene	100.4	5.0	100	0	100	77-138	0			
Toluene	96.55	5.0	100	0	96.6	85-125	0			
trans-1,2-Dichloroethene	94.5	5.0	100	1.8	92.7	80-140	0			
trans-1,3-Dichloropropene	90.35	5.0	100	0	90.4	81-123	0			
Trichloroethene	254	5.0	100	191.4	62.6	84-130	0			S
Vinyl chloride	77.85	5.0	100	0	77.8	50-136	0			
Xylenes, Total	295.1	15	300	0	98.4	80-126	0			
Surr: 1,2-Dichloroethane-d4	100.4	0	100	0	100	75-120	0			
Surr: 4-Bromofluorobenzene	98.05	0	100	0	98	80-110	0			
Surr: Dibromofluoromethane	97.8	0	100	0	97.8	85-115	0			
Surr: Toluene-d8	104.6	0	100	0	105	85-110	0			

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

Client: AMEC Foster Wheeler
 Work Order: 1510613
 Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

QC BATCH REPORT

Batch ID: R174050 Instrument ID VMS5 Method: SW8260B

MSD		Sample ID: 1510613-10A MSD				Units: µg/L		Analysis Date: 10/19/15 11:01 AM		
Client ID: ATR-MW17-G100715		Run ID: VMS5_151018B				SeqNo: 3517274		Prep Date:		DF: 5
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	90.2	5.0	100	0	90.2	75-130	89.8	0.444	30	
1,1,2,2-Tetrachloroethane	95	5.0	100	0	95	75-130	93.35	1.75	30	
1,1,2-Trichloroethane	89.7	5.0	100	0	89.7	75-125	87.35	2.65	30	
1,1-Dichloroethane	90.75	5.0	100	0	90.8	75-133	90.35	0.442	30	
1,1-Dichloroethene	98.15	5.0	100	0	98.2	70-145	96.55	1.64	30	
1,2-Dichloroethane	78.45	5.0	100	0	78.4	78-125	78.8	0.445	30	
1,2-Dichloropropane	85.95	5.0	100	0	86	75-125	83.6	2.77	30	
1,4-Dichlorobenzene	91.3	5.0	100	0	91.3	75-130	89.45	2.05	30	
2-Butanone	92.95	25	100	0	93	55-150	93.6	0.697	30	
2-Hexanone	104.2	25	100	0	104	60-135	99.15	4.92	30	
4-Methyl-2-pentanone	131.8	5.0	100	0	132	77-178	128	2.89	30	
Acetone	121.4	50	100	0	121	60-160	120.2	1.03	30	
Benzene	90.95	5.0	100	0	91	85-125	90.9	0.055	30	
Bromodichloromethane	82.35	5.0	100	0	82.4	75-125	82	0.426	30	
Bromoform	80.4	5.0	100	0	80.4	60-125	80.55	0.186	30	
Bromomethane	59.45	5.0	100	0	59.4	30-185	52.75	11.9	30	
Carbon disulfide	111.2	5.0	100	0	111	60-165	114	2.53	30	
Carbon tetrachloride	91.8	5.0	100	0	91.8	65-140	92.75	1.03	30	
Chlorobenzene	94.95	5.0	100	0	95	80-120	93.75	1.27	30	
Chloroethane	85.4	5.0	100	0	85.4	50-140	84.35	1.24	30	
Chloroform	83.45	5.0	100	0	83.4	80-130	81.8	2	30	
Chloromethane	74.8	5.0	100	0	74.8	50-130	73.5	1.75	30	
cis-1,2-Dichloroethene	121.3	5.0	100	38.95	82.4	75-134	119	1.96	30	
cis-1,3-Dichloropropene	86.2	5.0	100	0	86.2	70-130	86.05	0.174	30	
Dibromochloromethane	85.55	5.0	100	0	85.6	60-115	84.4	1.35	30	
Ethylbenzene	98.55	5.0	100	0	98.6	85-125	97.4	1.17	30	
m,p-Xylene	203.6	10	200	0	102	75-130	200.6	1.53	30	
Methylene chloride	87.55	25	100	0	87.6	75-140	86.95	0.688	30	
o-Xylene	95.75	5.0	100	0	95.8	80-125	94.55	1.26	30	
Styrene	94.25	5.0	100	0	94.2	85-125	94.05	0.212	30	
Tetrachloroethene	101.2	5.0	100	0	101	77-138	100.4	0.893	30	
Toluene	98.05	5.0	100	0	98	85-125	96.55	1.54	30	
trans-1,2-Dichloroethene	96.5	5.0	100	1.8	94.7	80-140	94.5	2.09	30	
trans-1,3-Dichloropropene	91.25	5.0	100	0	91.2	81-123	90.35	0.991	30	
Trichloroethene	260	5.0	100	191.4	68.6	84-130	254	2.33	30	S
Vinyl chloride	80	5.0	100	0	80	50-136	77.85	2.72	30	
Xylenes, Total	299.4	15	300	0	99.8	80-126	295.1	1.45	30	
Surr: 1,2-Dichloroethane-d4	97.95	0	100	0	98	75-120	100.4	2.42	30	
Surr: 4-Bromofluorobenzene	97.2	0	100	0	97.2	80-110	98.05	0.871	30	
Surr: Dibromofluoromethane	96.55	0	100	0	96.6	85-115	97.8	1.29	30	
Surr: Toluene-d8	105.2	0	100	0	105	85-110	104.6	0.524	30	

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

Client: AMEC Foster Wheeler
Work Order: 1510613
Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

QC BATCH REPORT

Batch ID: **R174050** Instrument ID **VMS5** Method: **SW8260B**

The following samples were analyzed in this batch:

1510613-01A	1510613-02A	1510613-03A
1510613-05A	1510613-06A	1510613-10A
1510613-12A	1510613-13A	1510613-16A
1510613-18A	1510613-19A	

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

Client: AMEC Foster Wheeler
 Work Order: 1510613
 Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

QC BATCH REPORT

Batch ID: **R174107A** Instrument ID **VMS5** Method: **SW8260B**

MBLK		Sample ID: VBLKW1-151019-R174107A				Units: µg/L		Analysis Date: 10/19/15 03:20 PM		
Client ID:		Run ID: VMS5_151019A			SeqNo: 3518620		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloroethane	ND	1.0								
1,2-Dichloropropane	ND	1.0								
2-Butanone	ND	5.0								
2-Hexanone	ND	5.0								
4-Methyl-2-pentanone	ND	1.0								
Acetone	ND	10								
Benzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	1.0								
Carbon disulfide	ND	1.0								
Carbon tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	1.0								
Chloroform	ND	1.0								
Chloromethane	ND	1.0								
cis-1,2-Dichloroethene	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
Dibromochloromethane	ND	1.0								
Ethylbenzene	ND	1.0								
m,p-Xylene	ND	2.0								
Methylene chloride	ND	5.0								
o-Xylene	ND	1.0								
Styrene	ND	1.0								
Tetrachloroethene	ND	1.0								
Toluene	ND	1.0								
trans-1,2-Dichloroethene	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
Trichloroethene	ND	1.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	3.0								
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>20.21</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>18.42</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>92.1</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>20.83</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>104</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: 1510613
 Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

QC BATCH REPORT

Batch ID: **R174107A** Instrument ID **VMS5** Method: **SW8260B**

LCS		Sample ID: VLCSW2-151019-R174107A				Units: µg/L		Analysis Date: 10/19/15 02:29 PM		
Client ID:		Run ID: VMS5_151019A			SeqNo: 3518619		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	18.98	1.0	20	0	94.9	75-130	0			
1,1,2,2-Tetrachloroethane	20.45	1.0	20	0	102	75-130	0			
1,1,2-Trichloroethane	18.91	1.0	20	0	94.6	75-125	0			
1,1-Dichloroethane	18.95	1.0	20	0	94.8	75-133	0			
1,1-Dichloroethene	20.23	1.0	20	0	101	70-145	0			
1,2-Dichloroethane	16.7	1.0	20	0	83.5	78-125	0			
1,2-Dichloropropane	18.56	1.0	20	0	92.8	75-125	0			
2-Butanone	19.58	5.0	20	0	97.9	55-150	0			
2-Hexanone	22.32	5.0	20	0	112	60-135	0			
4-Methyl-2-pentanone	28.29	1.0	20	0	141	77-178	0			
Acetone	22.62	10	20	0	113	60-160	0			
Benzene	19.4	1.0	20	0	97	85-125	0			
Bromodichloromethane	17.44	1.0	20	0	87.2	75-125	0			
Bromoform	16.68	1.0	20	0	83.4	60-125	0			
Bromomethane	14.96	1.0	20	0	74.8	30-185	0			
Carbon disulfide	23.72	1.0	20	0	119	60-165	0			
Carbon tetrachloride	19.22	1.0	20	0	96.1	65-140	0			
Chlorobenzene	19.86	1.0	20	0	99.3	80-120	0			
Chloroethane	18.19	1.0	20	0	91	50-140	0			
Chloroform	17.36	1.0	20	0	86.8	80-130	0			
Chloromethane	16.27	1.0	20	0	81.4	50-130	0			
cis-1,2-Dichloroethene	18.29	1.0	20	0	91.4	75-134	0			
cis-1,3-Dichloropropene	20.04	1.0	20	0	100	70-130	0			
Dibromochloromethane	17.93	1.0	20	0	89.6	60-115	0			
Ethylbenzene	20.41	1.0	20	0	102	85-125	0			
m,p-Xylene	42.21	2.0	40	0	106	75-130	0			
Methylene chloride	18.77	5.0	20	0	93.8	75-140	0			
o-Xylene	19.64	1.0	20	0	98.2	80-125	0			
Styrene	19.98	1.0	20	0	99.9	85-125	0			
Tetrachloroethene	21.07	1.0	20	0	105	77-138	0			
Toluene	20.75	1.0	20	0	104	85-125	0			
trans-1,2-Dichloroethene	19.67	1.0	20	0	98.4	80-140	0			
trans-1,3-Dichloropropene	20.96	1.0	20	0	105	81-123	0			
Trichloroethene	17.69	1.0	20	0	88.4	84-130	0			
Vinyl chloride	17.11	1.0	20	0	85.6	50-136	0			
Xylenes, Total	61.85	3.0	60	0	103	80-126	0			
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>20</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>100</i>	<i>75-120</i>	<i>0</i>			
<i>Surr: 4-Bromofluorobenzene</i>	<i>19.51</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>97.6</i>	<i>80-110</i>	<i>0</i>			
<i>Surr: Dibromofluoromethane</i>	<i>19.52</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>97.6</i>	<i>85-115</i>	<i>0</i>			
<i>Surr: Toluene-d8</i>	<i>21.21</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>106</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: 1510613
 Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

QC BATCH REPORT

Batch ID: **R174107A** Instrument ID **VMS5** Method: **SW8260B**

MS		Sample ID: 1510613-01A MS				Units: µg/L		Analysis Date: 10/19/15 11:23 PM		
Client ID: ATR-MW14-G100815		Run ID: VMS5_151019A				SeqNo: 3518627		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	179	10	200	0	89.5	75-130	0			
1,1,2,2-Tetrachloroethane	186.1	10	200	0	93	75-130	0			
1,1,2-Trichloroethane	181.4	10	200	0	90.7	75-125	0			
1,1-Dichloroethane	183.2	10	200	0	91.6	75-133	0			
1,1-Dichloroethene	191.5	10	200	0	95.8	70-145	0			
1,2-Dichloroethane	158.7	10	200	0	79.4	78-125	0			
1,2-Dichloropropane	176	10	200	0	88	75-125	0			
2-Butanone	200.4	50	200	0	100	55-150	0			
2-Hexanone	229.4	50	200	0	115	60-135	0			
4-Methyl-2-pentanone	260.1	10	200	0	130	77-178	0			
Acetone	220.2	100	200	0	110	60-160	0			
Benzene	185.8	10	200	2	91.9	85-125	0			
Bromodichloromethane	160.3	10	200	0	80.2	75-125	0			
Bromoform	154.4	10	200	0	77.2	60-125	0			
Bromomethane	53.1	10	200	0	26.6	30-185	0			S
Carbon disulfide	215.6	10	200	0	108	60-165	0			
Carbon tetrachloride	176.8	10	200	0	88.4	65-140	0			
Chlorobenzene	192.6	10	200	0	96.3	80-120	0			
Chloroethane	161.8	10	200	0	80.9	50-140	0			
Chloroform	164.1	10	200	0	82	80-130	0			
Chloromethane	146.2	10	200	0	73.1	50-130	0			
cis-1,2-Dichloroethene	298.1	10	200	128.8	84.6	75-134	0			
cis-1,3-Dichloropropene	184.8	10	200	0	92.4	70-130	0			
Dibromochloromethane	166.5	10	200	0	83.2	60-115	0			
Ethylbenzene	200.7	10	200	2.4	99.2	85-125	0			
m,p-Xylene	419	20	400	0	105	75-130	0			
Methylene chloride	180.8	50	200	3	88.9	75-140	0			
o-Xylene	197.1	10	200	0	98.6	80-125	0			
Styrene	198.9	10	200	0	99.4	85-125	0			
Tetrachloroethene	206.4	10	200	0	103	77-138	0			
Toluene	196.1	10	200	0	98	85-125	0			
trans-1,2-Dichloroethene	192.2	10	200	3.8	94.2	80-140	0			
trans-1,3-Dichloropropene	191.5	10	200	0	95.8	81-123	0			
Trichloroethene	714	10	200	571.6	71.2	84-130	0			S
Vinyl chloride	158.8	10	200	4.3	77.2	50-136	0			
Xylenes, Total	616.1	30	600	0	103	80-126	0			
Surr: 1,2-Dichloroethane-d4	193.2	0	200	0	96.6	75-120	0			
Surr: 4-Bromofluorobenzene	189.2	0	200	0	94.6	80-110	0			
Surr: Dibromofluoromethane	192.5	0	200	0	96.2	85-115	0			
Surr: Toluene-d8	210.1	0	200	0	105	85-110	0			

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

Client: AMEC Foster Wheeler
 Work Order: 1510613
 Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

QC BATCH REPORT

Batch ID: R174107A Instrument ID VMS5 Method: SW8260B

MSD		Sample ID: 1510613-01A MSD				Units: µg/L		Analysis Date: 10/19/15 11:48 PM		
Client ID: ATR-MW14-G100815		Run ID: VMS5_151019A				SeqNo: 3518628		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	187.5	10	200	0	93.8	75-130	179	4.64	30	
1,1,2,2-Tetrachloroethane	192.2	10	200	0	96.1	75-130	186.1	3.22	30	
1,1,2-Trichloroethane	183.9	10	200	0	92	75-125	181.4	1.37	30	
1,1-Dichloroethane	188	10	200	0	94	75-133	183.2	2.59	30	
1,1-Dichloroethene	195.6	10	200	0	97.8	70-145	191.5	2.12	30	
1,2-Dichloroethane	162.3	10	200	0	81.2	78-125	158.7	2.24	30	
1,2-Dichloropropane	178.2	10	200	0	89.1	75-125	176	1.24	30	
2-Butanone	198.7	50	200	0	99.4	55-150	200.4	0.852	30	
2-Hexanone	213	50	200	0	106	60-135	229.4	7.41	30	
4-Methyl-2-pentanone	264	10	200	0	132	77-178	260.1	1.49	30	
Acetone	217.5	100	200	0	109	60-160	220.2	1.23	30	
Benzene	190.1	10	200	2	94	85-125	185.8	2.29	30	
Bromodichloromethane	169.2	10	200	0	84.6	75-125	160.3	5.4	30	
Bromoform	160.4	10	200	0	80.2	60-125	154.4	3.81	30	
Bromomethane	74.8	10	200	0	37.4	30-185	53.1	33.9	30	R
Carbon disulfide	221.1	10	200	0	111	60-165	215.6	2.52	30	
Carbon tetrachloride	189.6	10	200	0	94.8	65-140	176.8	6.99	30	
Chlorobenzene	195.3	10	200	0	97.6	80-120	192.6	1.39	30	
Chloroethane	167.2	10	200	0	83.6	50-140	161.8	3.28	30	
Chloroform	168.9	10	200	0	84.4	80-130	164.1	2.88	30	
Chloromethane	144.9	10	200	0	72.4	50-130	146.2	0.893	30	
cis-1,2-Dichloroethene	288.8	10	200	128.8	80	75-134	298.1	3.17	30	
cis-1,3-Dichloropropene	191.4	10	200	0	95.7	70-130	184.8	3.51	30	
Dibromochloromethane	170.6	10	200	0	85.3	60-115	166.5	2.43	30	
Ethylbenzene	205.6	10	200	2.4	102	85-125	200.7	2.41	30	
m,p-Xylene	424.6	20	400	0	106	75-130	419	1.33	30	
Methylene chloride	182.5	50	200	3	89.8	75-140	180.8	0.936	30	
o-Xylene	197.7	10	200	0	98.8	80-125	197.1	0.304	30	
Styrene	203.1	10	200	0	102	85-125	198.9	2.09	30	
Tetrachloroethene	210.5	10	200	0	105	77-138	206.4	1.97	30	
Toluene	201.1	10	200	0	101	85-125	196.1	2.52	30	
trans-1,2-Dichloroethene	196.8	10	200	3.8	96.5	80-140	192.2	2.37	30	
trans-1,3-Dichloropropene	195.4	10	200	0	97.7	81-123	191.5	2.02	30	
Trichloroethene	688.7	10	200	571.6	58.6	84-130	714	3.61	30	S
Vinyl chloride	158.3	10	200	4.3	77	50-136	158.8	0.315	30	
Xylenes, Total	622.3	30	600	0	104	80-126	616.1	1	30	
Surr: 1,2-Dichloroethane-d4	195.1	0	200	0	97.6	75-120	193.2	0.979	30	
Surr: 4-Bromofluorobenzene	196.2	0	200	0	98.1	80-110	189.2	3.63	30	
Surr: Dibromofluoromethane	193.9	0	200	0	97	85-115	192.5	0.725	30	
Surr: Toluene-d8	208.6	0	200	0	104	85-110	210.1	0.717	30	

The following samples were analyzed in this batch: 1510613-01A 1510613-07A 1510613-09A

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

Client: AMEC Foster Wheeler
 Work Order: 1510613
 Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

QC BATCH REPORT

Batch ID: **R173849C** Instrument ID **TOC3** Method: **SW9060A**

MBLK	Sample ID: MBLK-R173849C				Units: mg/L			Analysis Date: 10/14/15 05:31 PM		
Client ID:	Run ID: TOC3_151014A			SeqNo: 3510921		Prep Date:		DF: 1		
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: LCS-R173849C				Units: mg/L			Analysis Date: 10/14/15 05:31 PM		
Client ID:	Run ID: TOC3_151014A			SeqNo: 3510923		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Organic Carbon, Total 4.65 0.50 5 0 93 91-110 0

The following samples were analyzed in this batch:

1510613-01B	1510613-02B	1510613-03B
1510613-04B	1510613-05B	1510613-06B
1510613-07B	1510613-08B	

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

Client: AMEC Foster Wheeler
 Work Order: 1510613
 Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

QC BATCH REPORT

Batch ID: R173882 Instrument ID LACHAT2 Method: E353.2 R2.0

MBLK		Sample ID: MBLK-R173882				Units: mg/L		Analysis Date: 10/15/15 10:16 AM		
Client ID:		Run ID: LACHAT2_151015D		SeqNo: 3511814		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Nitrogen, Nitrate-Nitrite ND 0.020

LCS		Sample ID: LCS-R173882				Units: mg/L		Analysis Date: 10/15/15 10:16 AM		
Client ID:		Run ID: LACHAT2_151015D		SeqNo: 3511815		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Nitrogen, Nitrate-Nitrite 4.786 0.020 5 0 95.7 80-120 0

MS		Sample ID: 1510542-02I MS				Units: mg/L		Analysis Date: 10/15/15 10:16 AM		
Client ID:		Run ID: LACHAT2_151015D		SeqNo: 3511817		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Nitrogen, Nitrate-Nitrite 5.084 0.020 5 0.2992 95.7 75-125 0

MS		Sample ID: 1510613-12B MS				Units: mg/L		Analysis Date: 10/15/15 10:16 AM		
Client ID: ATR-MW26 (28.8)-G100715		Run ID: LACHAT2_151015D		SeqNo: 3511853		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Nitrogen, Nitrate-Nitrite 4.645 0.020 5 0.00452 92.8 75-125 0

MSD		Sample ID: 1510542-02I MSD				Units: mg/L		Analysis Date: 10/15/15 10:16 AM		
Client ID:		Run ID: LACHAT2_151015D		SeqNo: 3511818		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Nitrogen, Nitrate-Nitrite 5.084 0.020 5 0.2992 95.7 75-125 5.084 0 20

MSD		Sample ID: 1510613-12B MSD				Units: mg/L		Analysis Date: 10/15/15 10:16 AM		
Client ID: ATR-MW26 (28.8)-G100715		Run ID: LACHAT2_151015D		SeqNo: 3511854		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Nitrogen, Nitrate-Nitrite 4.643 0.020 5 0.00452 92.8 75-125 4.645 0.0431 20

The following samples were analyzed in this batch:

1510613-01B	1510613-02B	1510613-03B
1510613-04B	1510613-05B	1510613-06B
1510613-07B	1510613-08B	1510613-09B
1510613-10B	1510613-11B	1510613-12B
1510613-13B	1510613-14B	1510613-15B
1510613-16B	1510613-17B	

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

Client: AMEC Foster Wheeler
 Work Order: 1510613
 Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

QC BATCH REPORT

Batch ID: **R173883** Instrument ID **LACHAT2** Method: **E353.2 R2.0**

MBLK	Sample ID: MBLK-R173883				Units: mg/L			Analysis Date: 10/15/15 10:16 AM		
Client ID:	Run ID: LACHAT2_151015E			SeqNo: 3511882		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Nitrogen, Nitrate-Nitrite ND 0.020

LCS	Sample ID: LCS-R173883				Units: mg/L			Analysis Date: 10/15/15 10:16 AM		
Client ID:	Run ID: LACHAT2_151015E			SeqNo: 3511883		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Nitrogen, Nitrate-Nitrite 5.116 0.020 5 0 102 80-120 0

MS	Sample ID: 1510765-01C MS				Units: mg/L			Analysis Date: 10/15/15 10:16 AM		
Client ID:	Run ID: LACHAT2_151015E			SeqNo: 3511890		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Nitrogen, Nitrate-Nitrite 5.378 0.020 5 0.5285 97 75-125 0

MSD	Sample ID: 1510765-01C MSD				Units: mg/L			Analysis Date: 10/15/15 10:16 AM		
Client ID:	Run ID: LACHAT2_151015E			SeqNo: 3511891		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Nitrogen, Nitrate-Nitrite 5.354 0.020 5 0.5285 96.5 75-125 5.378 0.447 20

The following samples were analyzed in this batch: 1510613-18B 1510613-19B

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

Client: AMEC Foster Wheeler
 Work Order: 1510613
 Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

QC BATCH REPORT

Batch ID: **R173901** Instrument ID **Titrator 1** Method: **A2320 B-97**

MBLK		Sample ID: WBLKW1-151015-R173901				Units: mg/L		Analysis Date: 10/15/15 12:20 PM		
Client ID:		Run ID: TITRATOR 1_151015A				SeqNo: 3512135		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Alkalinity, Bicarbonate (as CaCO3)	ND	10								
Alkalinity, Total (as CaCO3)	ND	10								

LCS		Sample ID: WLCSW1-151015-R173901				Units: mg/L		Analysis Date: 10/15/15 12:20 PM		
Client ID:		Run ID: TITRATOR 1_151015A				SeqNo: 3512136		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Alkalinity, Total (as CaCO3)	946.8	10	1000	0	94.7	90-106	0			
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DUP		Sample ID: 1510613-07D DUP				Units: mg/L		Analysis Date: 10/15/15 12:20 PM		
Client ID: ATR-OW3 (55)-G100715		Run ID: TITRATOR 1_151015A				SeqNo: 3512144		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Alkalinity, Bicarbonate (as CaCO3)	665.8	10	0	0	0		657.1	1.31	20	
Alkalinity, Total (as CaCO3)	665.8	10	0	0	0		657.1	1.31	20	

DUP		Sample ID: 1510613-17D DUP				Units: mg/L		Analysis Date: 10/15/15 12:20 PM		
Client ID: ATR-OW5 (35)-G100715		Run ID: TITRATOR 1_151015A				SeqNo: 3512155		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Alkalinity, Bicarbonate (as CaCO3)	511.7	10	0	0	0		516	0.852	20	
Alkalinity, Total (as CaCO3)	511.7	10	0	0	0		516	0.852	20	

The following samples were analyzed in this batch:

1510613-01D	1510613-02D	1510613-03D
1510613-04D	1510613-05D	1510613-06D
1510613-07D	1510613-08D	1510613-09D
1510613-10D	1510613-11D	1510613-12D
1510613-13D	1510613-14D	1510613-15D
1510613-16D	1510613-17D	1510613-18D
1510613-19D		

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

Client: AMEC Foster Wheeler
 Work Order: 1510613
 Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

QC BATCH REPORT

Batch ID: **R174063** Instrument ID **IC4** Method: **SW9056A**

MBLK		Sample ID: CCB/MBLK-R174063				Units: mg/L		Analysis Date: 10/16/15 11:43 PM		
Client ID:		Run ID: IC4_151016B				SeqNo: 3515620		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	0.3518	1.0								J
Sulfate	0.3938	1.0								J

LCS		Sample ID: LCS-R174063				Units: mg/L		Analysis Date: 10/17/15 12:03 AM		
Client ID:		Run ID: IC4_151016B				SeqNo: 3515621		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	9.461	1.0	10	0	94.6	88-110	0			
Sulfate	9.994	1.0	10	0	99.9	85-110	0			

MS		Sample ID: 1510613-03D MS				Units: mg/L		Analysis Date: 10/17/15 11:08 AM		
Client ID: ATR-MW24 (55.9)-G100815		Run ID: IC4_151016B				SeqNo: 3515650		Prep Date:		DF: 5
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	78.6	5.0	50	26.06	105	75-125	0			
Sulfate	74.44	5.0	50	24.08	101	75-125	0			

MSD		Sample ID: 1510613-03D MSD				Units: mg/L		Analysis Date: 10/17/15 11:28 AM		
Client ID: ATR-MW24 (55.9)-G100815		Run ID: IC4_151016B				SeqNo: 3515651		Prep Date:		DF: 5
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	78.94	5.0	50	26.06	106	75-125	78.6	0.427	20	
Sulfate	73.94	5.0	50	24.08	99.7	75-125	74.44	0.679	20	

The following samples were analyzed in this batch:

1510613-01D	1510613-02D	1510613-03D
1510613-04D	1510613-05D	1510613-06D
1510613-07D	1510613-08D	1510613-09D
1510613-10D	1510613-11D	1510613-12D
1510613-13D	1510613-14D	1510613-15D
1510613-16D	1510613-17D	1510613-18D
1510613-19D		

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

Client: AMEC Foster Wheeler
 Work Order: 1510613
 Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

QC BATCH REPORT

Batch ID: R174181 Instrument ID TOC3 Method: SW9060A

MBLK		Sample ID: MBLK-R174181				Units: mg/L		Analysis Date: 10/19/15 11:30 AM			
Client ID:		Run ID: TOC3_151019A				SeqNo: 3517989		Prep Date:		DF: 1	
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: LCS-R174181				Units: mg/L		Analysis Date: 10/19/15 11:30 AM			
Client ID:		Run ID: TOC3_151019A				SeqNo: 3517990		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	

Organic Carbon, Total 4.92 0.50 5 0 98.4 91-110 0

MS		Sample ID: 1510613-02B MS				Units: mg/L		Analysis Date: 10/19/15 11:30 AM			
Client ID: ATR-MW24 (24.9)-G100815		Run ID: TOC3_151019A				SeqNo: 3517994		Prep Date:		DF: 2	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	

Organic Carbon, Total 11.21 1.0 10 1.447 97.6 87-120 0

MSD		Sample ID: 1510613-02B MSD				Units: mg/L		Analysis Date: 10/19/15 11:30 AM			
Client ID: ATR-MW24 (24.9)-G100815		Run ID: TOC3_151019A				SeqNo: 3517995		Prep Date:		DF: 2	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	

Organic Carbon, Total 11.18 1.0 10 1.447 97.3 87-120 11.21 0.268 5

The following samples were analyzed in this batch:

1510613-02B	1510613-03B	1510613-05B
1510613-07B	1510613-08B	1510613-09B
1510613-10B	1510613-11B	1510613-12B
1510613-13B	1510613-14B	1510613-15B
1510613-16B	1510613-17B	1510613-18B
1510613-19B		

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



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Chain of Custody Form

Page 1 of 3

COC ID: 27663

Houston, TX
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+1 717 505 5280

ALS Project Manager:

ALS Work Order #: 1510613

Customer Information		Project Information		Parameter/Method Request for Analysis												
Purchase Order	<u>C012605142</u>	Project Name	<u>Textron Rochester, IN</u>	A	VOCs (8260B)											
Work Order		Project Number	<u>3359151040.09.01</u>	B	TOC, Nitrate-Nitrite											
Company Name	<u>AMEC Foster Wheeler</u>	Bill To Company	<u>AMEC Foster Wheeler</u>	C	Iron and Manganese											
Send Report To	<u>Paul Stork</u>	Invoice Attn	<u>Paul Stork</u>	D	Chloride, Sulfate, Alkalinity + Bicarb											
Address	<u>521 Byers Road, Suite 204</u>	Address	<u>521 Byers Road, Suite 204</u>	E												
City/State/Zip	<u>Miamisburg, OH 45342</u>	City/State/Zip	<u>Miamisburg, OH 45342</u>	F												
Phone	<u>(937) 859-3600</u>	Phone	<u>(937) 859-3600</u>	G												
Fax	<u>(937) 859-7951</u>	Fax	<u>(937) 859-7951</u>	H												
e-Mail Address	<u>paul.stork@amecfdw.com</u>	e-Mail Address	<u>Samuel.Partyka@amecfdw.com</u>	I												

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	ATR-MW14-G100815	10-8-15	1000	W		6	X	X	X	X							
2	ATR-MW24(24.9)-G100815	10-8-15	1050	W			X	X	X	X							
3	ATR-MW24(55.7)-G100815	10-8-15	0948	W			X	X	X	X							
4	ATR-OW2(33)-G100815	10-8-15	1210	W			X	X	X	X							
5	ATR-OW2(33)-G100815 MS/MSD	10-8-15	1210	W			X	X	X	X							
6	ATR-OW2(53)-G100815	10-8-15	1320	W			X	X	X	X							
7	ATR-OW3(35)-G100715	10-7-15	1533	W			X	X	X	X							
8	ATR-OW3(55)-G100715	10-7-15	1630	W			X	X	X	X							
9	ATR-OW3(55)-G100715 R	10-7-15	1630	W			X	X	X	X							
10	ATR-MW16-G100715	10-7-15	1325	W			X	X	X	X							

Sampler(s) Please Print & Sign <u>Sam Partyka</u>		Shipment Method		Turnaround Time in Business Days (BD) <input type="checkbox"/> Other _____				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: <u>[Signature]</u>	Date: <u>10/8/15</u> Time: <u>1512</u>	Received by: <u>[Signature]</u>		Notes:							
Relinquished by: <u>[Signature]</u>	Date: <u>10/9/15</u> Time: <u>1300</u>	Received by Laboratory:		Cooler ID	Cooler Temp	QC Package: (Check One Box Below)					
Logged by (Laboratory): <u>[Signature]</u>	Date: <u>10/9/15</u> Time: <u>1435</u>	Checked by (Laboratory):			<u>3.0°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 _____					



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COC ID: 27664

Environmental

Customer Information		Project Information		ALS Project Manager:		ALS Work Order #: 1510613	
Parameter/Method Request for Analysis							
Purchase Order	CO12605142	Project Name	Extron Rochester, IN	A	VOCs (8260B)		
Work Order		Project Number	3359151040.09.01	B	TOC, Nitrate-Nitrite		
Company Name	AMEC Foster Wheeler	Bill To Company	AMEC Foster Wheeler	C	Iron and Manganese		
Send Report To	Paul Stork	Invoice Attn	Paul Stork	D	Chloride, Sulfate, Alkalinity + Bicarb		
Address	521 Byers Road, Suite 204	Address	521 Byers Road, Suite 204	E			
				F			
City/State/Zip	Miamisburg, OH 45342	City/State/Zip	Miamisburg, OH 45342	G			
Phone	(937) 859-3600	Phone	(937) 859-3600	H			
Fax	(937) 859-7951	Fax	(937) 859-7951	I			
e-Mail Address	paul.stork@amecfw.com	e-Mail Address	Samuel.Partyka@amecfw.com	J			

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	ATR-MW17-G100715	10-7-15	1120	W		6	X	X	X	X							
2	ATR-MW26(17.5)-G100715	10-7-15	1130	W		6	X	X	X	X							
3	ATR-MW26(28.8)-G100715	10-7-15	1225	W		6	X	X	X	X							
4	ATR-MW26(58.9)-G100715	10-7-15	1040	W		6	X	X	X	X							
5	ATR-ZVI2(17.5)-G100715	10-7-15 10-7-15	1420 1130	W		6	X	X	X	X							
6	ATR-ZVI2(32.5)-G100715	10-7-15	1330	W		6	X	X	X	X							
7	ATR-OW5(16)-G100715	10-7-15	1500	W		6	X	X	X	X							
8	ATR-OW5(35)-G100715	10-7-15	1630	W		6	X	X	X	X							
9	ATR-OW5(54)-G100715	10-7-15	1720	W		6	X	X	X	X							
10	ATR- EW EBC01-G100815	10-8-15	1015	W		6	X	X	X	X							

Sampler(s) Please Print & Sign <i>Sam Partyka</i>		Shipment Method	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: 10/8/15	Time: 1512	Received by: <i>[Signature]</i>	Notes:	
Relinquished by: <i>[Signature]</i>	Date: 10/9/15	Time: 1300	Received by (Laboratory): <i>[Signature]</i>	Cooler ID	Cooler Temp
Logged by (Laboratory): <i>[Signature]</i>	Date: 10/9/15	Time: 1435	Checked by (Laboratory): <i>[Signature]</i>	QC Package: (Check One Box Below)	
Preservative Key: 1-HCl 2-HNO ₃ 3-H ₂ SO ₄ 4-NaOH 5-Na ₂ S ₂ O ₃ 6-NaHSO ₄ 7-Other 8-4°C 9-5035			<input type="checkbox"/> Level 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 _____		



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COC ID: 27665

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Salt Lake City, UT
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South Charleston, WV
+1 304 356 3168

York, PA
+1 717 505 5280

Customer Information		Project Information				ALS Project Manager: _____ ALS Work Order #: _____												
Customer Information		Project Information				Parameter/Method Request for Analysis												
Purchase Order	CO12605142	Project Name	Textron Rochester, IN			A	VOCs (8260B)											
Work Order		Project Number	3355151040.03.01			B	TOC, Nitrate-Nitrite											
Company Name	AMEC Foster Wheeler	Bill To Company	AMEC Foster Wheeler			C	Iron and Manganese											
Send Report To	Paul Stork	Invoice Attn	Paul Stork			D	Chloride, Sulfate, Alkalinity + Bicarb											
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	Paul.Stork@amecfw.com	e-Mail Address	Samuel.Park@amecfw.com			I												
					J													
No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold	
1	TRIP BLANK #1	10/7/15	-	W	1.8		X	X	X	X								
2	TRIP BLANK #2	10/6/15	-	W	1.8		X	X	X	X								
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		
Sampler(s) Please Print & Sign <i>Sam Park</i>		Shipment Method		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 <input type="checkbox"/> Other _____				Results Due Date:										
Relinquished by: <i>[Signature]</i>	Date: 10/8/15	Time: 1512	Received by: <i>[Signature]</i>				Notes:											
Relinquished by: <i>[Signature]</i>	Date: 10/9/15	Time: 1300	Received by (Laboratory): <i>[Signature]</i>				Cooler ID	Cooler Temp	QC Package: (Check One Box Below)									
Logged by (Laboratory): <i>[Signature]</i>	Date: 10/9/15	Time: 1435	Checked by (Laboratory): <i>[Signature]</i>						<input type="checkbox"/> Level II Std QC <input type="checkbox"/> TRRP Checklist									
Preservative Key: 1-HCl 2-HNO ₃ 3-H ₂ SO ₄ 4-NaOH 5-Na ₂ S ₂ O ₃ 6-NaHSO ₄ 7-Other 8-4°C 9-5035						<input type="checkbox"/> Level III Std QC/Raw 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.

Sample Receipt Checklist

Client Name: **AMEC - DAYTON**

Date/Time Received: **09-Oct-15 13:00**

Work Order: **1510613**

Received by: **KRW**

Checklist completed by Keith Wurenga 09-Oct-15
eSignature Date

Reviewed by: Joseph Ribar 10-Oct-15
eSignature Date

Matrices: Water

Carrier name: ALSHN

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample(s) received on ice?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Temperature(s)/Thermometer(s):	<u>3.0, 4.2, 4.6 C</u>		<u>SR2</u>
Cooler(s)/Kit(s):	<input type="text"/>		
Date/Time sample(s) sent to storage:	<u>10/9/2015 2:44:27 PM</u>		
Water - VOA vials have zero headspace?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
pH adjusted?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>
pH adjusted by:	<input type="text"/>		

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction:



26-Oct-2015

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

Re: **Textron/Torx Rochester, IN 3359-15-1040.09.01**

Work Order: **1510900**

Dear Paul,

ALS Environmental received 8 samples on 14-Oct-2015 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 38.

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: Tom Beamish

Joseph Ribar
Project Manager



Certificate No: MN 532786

Report of Laboratory Analysis

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

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RIGHT SOLUTIONS RIGHT PARTNER

Client: AMEC Foster Wheeler
Project: Textron/Torx Rochester, IN 3359-15-1040.09.01
Work Order: 1510900

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>
1510900-01	ATR-MW15-G101315	Water		10/13/15 08:50	10/14/15 12:40	<input type="checkbox"/>
1510900-02	ATR-MW25(16.4)-G101315	Water		10/13/15 09:55	10/14/15 12:40	<input type="checkbox"/>
1510900-03	ATR-MW25(32.6)-G101315	Water		10/13/15 10:55	10/14/15 12:40	<input type="checkbox"/>
1510900-04	ATR-MW25(45.2)-G101315	Water		10/13/15 11:50	10/14/15 12:40	<input type="checkbox"/>
1510900-05	ATR-OW4(35)-G101315	Water		10/13/15 13:05	10/14/15 12:40	<input type="checkbox"/>
1510900-06	ATR-OW4(54)-G101315	Water		10/13/15 14:05	10/14/15 12:40	<input type="checkbox"/>
1510900-07	ATR-EB001-G101315	Water		10/13/15 09:15	10/14/15 12:40	<input type="checkbox"/>
1510900-08	Trip Blank	Water		10/13/15	10/14/15 12:40	<input type="checkbox"/>

Client: AMEC Foster Wheeler
Project: Textron/Torx Rochester, IN 3359-15-1040.09.01
WorkOrder: 1510900

**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 PQL, 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
Project: Textron/Torx Rochester, IN 3359-15-1040.09.01
Work Order: 1510900

Case Narrative

Sample Comments:

Batch R174489A, Method VOC_8260_W, Sample 1510900-01A: Verification of sample preservation indicated a pH >2.

Batch R174489A, Method VOC_8260_W, Sample 1510900-02A: Verification of sample preservation indicated a pH >2.

ALS Group USA, Corp

Date: 26-Oct-15

Client: AMEC Foster Wheeler

Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

Work Order: 1510900

Sample ID: ATR-MW15-G101315

Lab ID: 1510900-01

Collection Date: 10/13/15 08:50 AM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A		Prep: SW3005A / 10/15/15	Analyst: RH
Iron	1.5		0.080	mg/L	1	10/15/15 02:42 PM
Manganese	1.1		0.0050	mg/L	1	10/15/15 02:42 PM
VOLATILE ORGANIC COMPOUNDS			SW8260B			Analyst: AK
1,1,1-Trichloroethane	ND		10	µg/L	10	10/24/15 02:27 AM
1,1,2,2-Tetrachloroethane	ND		10	µg/L	10	10/24/15 02:27 AM
1,1,2-Trichloroethane	ND		10	µg/L	10	10/24/15 02:27 AM
1,1-Dichloroethane	ND		10	µg/L	10	10/24/15 02:27 AM
1,1-Dichloroethene	55		10	µg/L	10	10/24/15 02:27 AM
1,2-Dichloroethane	ND		10	µg/L	10	10/24/15 02:27 AM
1,2-Dichloropropane	ND		10	µg/L	10	10/24/15 02:27 AM
2-Butanone	ND		50	µg/L	10	10/24/15 02:27 AM
2-Hexanone	ND		50	µg/L	10	10/24/15 02:27 AM
4-Methyl-2-pentanone	ND		10	µg/L	10	10/24/15 02:27 AM
Acetone	ND		100	µg/L	10	10/24/15 02:27 AM
Benzene	ND		10	µg/L	10	10/24/15 02:27 AM
Bromodichloromethane	ND		10	µg/L	10	10/24/15 02:27 AM
Bromoform	ND		10	µg/L	10	10/24/15 02:27 AM
Bromomethane	ND		10	µg/L	10	10/24/15 02:27 AM
Carbon disulfide	ND		10	µg/L	10	10/24/15 02:27 AM
Carbon tetrachloride	ND		10	µg/L	10	10/24/15 02:27 AM
Chlorobenzene	ND		10	µg/L	10	10/24/15 02:27 AM
Chloroethane	ND		10	µg/L	10	10/24/15 02:27 AM
Chloroform	ND		10	µg/L	10	10/24/15 02:27 AM
Chloromethane	ND		10	µg/L	10	10/24/15 02:27 AM
cis-1,2-Dichloroethene	4,600		50	µg/L	50	10/23/15 08:06 AM
cis-1,3-Dichloropropene	ND		10	µg/L	10	10/24/15 02:27 AM
Dibromochloromethane	ND		10	µg/L	10	10/24/15 02:27 AM
Ethylbenzene	ND		10	µg/L	10	10/24/15 02:27 AM
m,p-Xylene	ND		20	µg/L	10	10/24/15 02:27 AM
Methylene chloride	ND		50	µg/L	10	10/24/15 02:27 AM
o-Xylene	ND		10	µg/L	10	10/24/15 02:27 AM
Styrene	ND		10	µg/L	10	10/24/15 02:27 AM
Tetrachloroethene	ND		10	µg/L	10	10/24/15 02:27 AM
Toluene	ND		10	µg/L	10	10/24/15 02:27 AM
trans-1,2-Dichloroethene	350		10	µg/L	10	10/24/15 02:27 AM
trans-1,3-Dichloropropene	ND		10	µg/L	10	10/24/15 02:27 AM
Trichloroethene	690		10	µg/L	10	10/24/15 02:27 AM
Vinyl chloride	460		10	µg/L	10	10/24/15 02:27 AM

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

ALS Group USA, Corp

Date: 26-Oct-15

Client: AMEC Foster Wheeler

Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

Work Order: 1510900

Sample ID: ATR-MW15-G101315

Lab ID: 1510900-01

Collection Date: 10/13/15 08:50 AM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Xylenes, Total	ND		30	µg/L	10	10/24/15 02:27 AM
Surr: 1,2-Dichloroethane-d4	91.1		75-120	%REC	50	10/23/15 08:06 AM
Surr: 1,2-Dichloroethane-d4	95.1		75-120	%REC	10	10/24/15 02:27 AM
Surr: 4-Bromofluorobenzene	94.6		80-110	%REC	50	10/23/15 08:06 AM
Surr: 4-Bromofluorobenzene	92.8		80-110	%REC	10	10/24/15 02:27 AM
Surr: Dibromofluoromethane	99.7		85-115	%REC	50	10/23/15 08:06 AM
Surr: Dibromofluoromethane	98.0		85-115	%REC	10	10/24/15 02:27 AM
Surr: Toluene-d8	96.4		85-110	%REC	10	10/24/15 02:27 AM
Surr: Toluene-d8	90.6		85-110	%REC	50	10/23/15 08:06 AM
ALKALINITY			A2320 B-97			Analyst: ED
Alkalinity, Bicarbonate (as CaCO3)	440	x	10	mg/L	1	10/20/15 05:05 PM
Alkalinity, Total (as CaCO3)	440	x	10	mg/L	1	10/20/15 05:05 PM
ANIONS BY ION CHROMATOGRAPHY			SW9056A			Analyst: EE
Chloride	16		1.0	mg/L	1	10/21/15 07:35 PM
Sulfate	5.0		1.0	mg/L	1	10/21/15 07:35 PM
NITROGEN, NITRATE-NITRITE			E353.2 R2.0			Analyst: JJG
Nitrogen, Nitrate-Nitrite	ND		0.020	mg/L	1	10/15/15 10:16 AM
ORGANIC CARBON, TOTAL			SW9060A			Analyst: JJG
Organic Carbon, Total	540		50	mg/L	100	10/19/15 11:30 AM

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

ALS Group USA, Corp

Date: 26-Oct-15

Client: AMEC Foster Wheeler

Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

Work Order: 1510900

Sample ID: ATR-MW25(16.4)-G101315

Lab ID: 1510900-02

Collection Date: 10/13/15 09:55 AM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A		Prep: SW3005A / 10/15/15	Analyst: RH
Iron	0.40		0.080	mg/L	1	10/15/15 04:18 PM
Manganese	0.33		0.0050	mg/L	1	10/15/15 04:18 PM
VOLATILE ORGANIC COMPOUNDS			SW8260B			Analyst: AK
1,1,1-Trichloroethane	ND		10	µg/L	10	10/24/15 02:53 AM
1,1,2,2-Tetrachloroethane	ND		10	µg/L	10	10/24/15 02:53 AM
1,1,2-Trichloroethane	ND		10	µg/L	10	10/24/15 02:53 AM
1,1-Dichloroethane	ND		10	µg/L	10	10/24/15 02:53 AM
1,1-Dichloroethene	14		10	µg/L	10	10/24/15 02:53 AM
1,2-Dichloroethane	ND		10	µg/L	10	10/24/15 02:53 AM
1,2-Dichloropropane	ND		10	µg/L	10	10/24/15 02:53 AM
2-Butanone	ND		50	µg/L	10	10/24/15 02:53 AM
2-Hexanone	ND		50	µg/L	10	10/24/15 02:53 AM
4-Methyl-2-pentanone	ND		10	µg/L	10	10/24/15 02:53 AM
Acetone	ND		100	µg/L	10	10/24/15 02:53 AM
Benzene	ND		10	µg/L	10	10/24/15 02:53 AM
Bromodichloromethane	ND		10	µg/L	10	10/24/15 02:53 AM
Bromoform	ND		10	µg/L	10	10/24/15 02:53 AM
Bromomethane	ND		10	µg/L	10	10/24/15 02:53 AM
Carbon disulfide	ND		10	µg/L	10	10/24/15 02:53 AM
Carbon tetrachloride	ND		10	µg/L	10	10/24/15 02:53 AM
Chlorobenzene	ND		10	µg/L	10	10/24/15 02:53 AM
Chloroethane	ND		10	µg/L	10	10/24/15 02:53 AM
Chloroform	ND		10	µg/L	10	10/24/15 02:53 AM
Chloromethane	ND		10	µg/L	10	10/24/15 02:53 AM
cis-1,2-Dichloroethene	3,600		50	µg/L	50	10/23/15 08:33 AM
cis-1,3-Dichloropropene	ND		10	µg/L	10	10/24/15 02:53 AM
Dibromochloromethane	ND		10	µg/L	10	10/24/15 02:53 AM
Ethylbenzene	ND		10	µg/L	10	10/24/15 02:53 AM
m,p-Xylene	ND		20	µg/L	10	10/24/15 02:53 AM
Methylene chloride	ND		50	µg/L	10	10/24/15 02:53 AM
o-Xylene	ND		10	µg/L	10	10/24/15 02:53 AM
Styrene	ND		10	µg/L	10	10/24/15 02:53 AM
Tetrachloroethene	ND		10	µg/L	10	10/24/15 02:53 AM
Toluene	ND		10	µg/L	10	10/24/15 02:53 AM
trans-1,2-Dichloroethene	38		10	µg/L	10	10/24/15 02:53 AM
trans-1,3-Dichloropropene	ND		10	µg/L	10	10/24/15 02:53 AM
Trichloroethene	ND		10	µg/L	10	10/24/15 02:53 AM
Vinyl chloride	670		50	µg/L	50	10/23/15 08:33 AM

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

ALS Group USA, Corp

Date: 26-Oct-15

Client: AMEC Foster Wheeler

Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

Work Order: 1510900

Sample ID: ATR-MW25(16.4)-G101315

Lab ID: 1510900-02

Collection Date: 10/13/15 09:55 AM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Xylenes, Total	ND		30	µg/L	10	10/24/15 02:53 AM
Surr: 1,2-Dichloroethane-d4	92.7		75-120	%REC	50	10/23/15 08:33 AM
Surr: 1,2-Dichloroethane-d4	97.2		75-120	%REC	10	10/24/15 02:53 AM
Surr: 4-Bromofluorobenzene	94.0		80-110	%REC	50	10/23/15 08:33 AM
Surr: 4-Bromofluorobenzene	93.2		80-110	%REC	10	10/24/15 02:53 AM
Surr: Dibromofluoromethane	102		85-115	%REC	50	10/23/15 08:33 AM
Surr: Dibromofluoromethane	104		85-115	%REC	10	10/24/15 02:53 AM
Surr: Toluene-d8	97.3		85-110	%REC	10	10/24/15 02:53 AM
Surr: Toluene-d8	90.2		85-110	%REC	50	10/23/15 08:33 AM
ALKALINITY			A2320 B-97			Analyst: ED
Alkalinity, Bicarbonate (as CaCO3)	250	x	10	mg/L	1	10/20/15 05:05 PM
Alkalinity, Total (as CaCO3)	250	x	10	mg/L	1	10/20/15 05:05 PM
ANIONS BY ION CHROMATOGRAPHY			SW9056A			Analyst: EE
Chloride	28		5.0	mg/L	5	10/22/15 11:58 AM
Sulfate	19		5.0	mg/L	5	10/22/15 11:58 AM
NITROGEN, NITRATE-NITRITE			E353.2 R2.0			Analyst: JJG
Nitrogen, Nitrate-Nitrite	ND		0.020	mg/L	1	10/15/15 10:16 AM
ORGANIC CARBON, TOTAL			SW9060A			Analyst: JJG
Organic Carbon, Total	3.4		0.50	mg/L	1	10/20/15 12:54 PM

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

ALS Group USA, Corp

Date: 26-Oct-15

Client: AMEC Foster Wheeler

Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

Work Order: 1510900

Sample ID: ATR-MW25(32.6)-G101315

Lab ID: 1510900-03

Collection Date: 10/13/15 10:55 AM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A		Prep: SW3005A / 10/15/15	Analyst: RH
Iron	0.40		0.080	mg/L	1	10/15/15 04:23 PM
Manganese	0.29		0.0050	mg/L	1	10/15/15 04:23 PM
VOLATILE ORGANIC COMPOUNDS			SW8260B			Analyst: AK
1,1,1-Trichloroethane	ND		5.0	µg/L	5	10/24/15 03:19 AM
1,1,2,2-Tetrachloroethane	ND		5.0	µg/L	5	10/24/15 03:19 AM
1,1,2-Trichloroethane	ND		5.0	µg/L	5	10/24/15 03:19 AM
1,1-Dichloroethane	ND		5.0	µg/L	5	10/24/15 03:19 AM
1,1-Dichloroethene	ND		5.0	µg/L	5	10/24/15 03:19 AM
1,2-Dichloroethane	ND		5.0	µg/L	5	10/24/15 03:19 AM
1,2-Dichloropropane	ND		5.0	µg/L	5	10/24/15 03:19 AM
2-Butanone	ND		25	µg/L	5	10/24/15 03:19 AM
2-Hexanone	ND		25	µg/L	5	10/24/15 03:19 AM
4-Methyl-2-pentanone	ND		5.0	µg/L	5	10/24/15 03:19 AM
Acetone	ND		50	µg/L	5	10/24/15 03:19 AM
Benzene	ND		5.0	µg/L	5	10/24/15 03:19 AM
Bromodichloromethane	ND		5.0	µg/L	5	10/24/15 03:19 AM
Bromoform	ND		5.0	µg/L	5	10/24/15 03:19 AM
Bromomethane	ND		5.0	µg/L	5	10/24/15 03:19 AM
Carbon disulfide	ND		5.0	µg/L	5	10/24/15 03:19 AM
Carbon tetrachloride	ND		5.0	µg/L	5	10/24/15 03:19 AM
Chlorobenzene	ND		5.0	µg/L	5	10/24/15 03:19 AM
Chloroethane	ND		5.0	µg/L	5	10/24/15 03:19 AM
Chloroform	ND		5.0	µg/L	5	10/24/15 03:19 AM
Chloromethane	ND		5.0	µg/L	5	10/24/15 03:19 AM
cis-1,2-Dichloroethene	1,600		25	µg/L	25	10/23/15 08:59 AM
cis-1,3-Dichloropropene	ND		5.0	µg/L	5	10/24/15 03:19 AM
Dibromochloromethane	ND		5.0	µg/L	5	10/24/15 03:19 AM
Ethylbenzene	ND		5.0	µg/L	5	10/24/15 03:19 AM
m,p-Xylene	ND		10	µg/L	5	10/24/15 03:19 AM
Methylene chloride	ND		25	µg/L	5	10/24/15 03:19 AM
o-Xylene	ND		5.0	µg/L	5	10/24/15 03:19 AM
Styrene	ND		5.0	µg/L	5	10/24/15 03:19 AM
Tetrachloroethene	ND		5.0	µg/L	5	10/24/15 03:19 AM
Toluene	ND		5.0	µg/L	5	10/24/15 03:19 AM
trans-1,2-Dichloroethene	7.4		5.0	µg/L	5	10/24/15 03:19 AM
trans-1,3-Dichloropropene	ND		5.0	µg/L	5	10/24/15 03:19 AM
Trichloroethene	78		5.0	µg/L	5	10/24/15 03:19 AM
Vinyl chloride	980		25	µg/L	25	10/23/15 08:59 AM

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

ALS Group USA, Corp

Date: 26-Oct-15

Client: AMEC Foster Wheeler

Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

Work Order: 1510900

Sample ID: ATR-MW25(32.6)-G101315

Lab ID: 1510900-03

Collection Date: 10/13/15 10:55 AM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Xylenes, Total	ND		15	µg/L	5	10/24/15 03:19 AM
Surr: 1,2-Dichloroethane-d4	91.2		75-120	%REC	25	10/23/15 08:59 AM
Surr: 1,2-Dichloroethane-d4	97.2		75-120	%REC	5	10/24/15 03:19 AM
Surr: 4-Bromofluorobenzene	93.2		80-110	%REC	25	10/23/15 08:59 AM
Surr: 4-Bromofluorobenzene	93.4		80-110	%REC	5	10/24/15 03:19 AM
Surr: Dibromofluoromethane	101		85-115	%REC	25	10/23/15 08:59 AM
Surr: Dibromofluoromethane	99.8		85-115	%REC	5	10/24/15 03:19 AM
Surr: Toluene-d8	92.8		85-110	%REC	25	10/23/15 08:59 AM
Surr: Toluene-d8	95.2		85-110	%REC	5	10/24/15 03:19 AM
ALKALINITY			A2320 B-97			Analyst: ED
Alkalinity, Bicarbonate (as CaCO3)	220	x	10	mg/L	1	10/20/15 05:05 PM
Alkalinity, Total (as CaCO3)	220	x	10	mg/L	1	10/20/15 05:05 PM
ANIONS BY ION CHROMATOGRAPHY			SW9056A			Analyst: EE
Chloride	14		1.0	mg/L	1	10/21/15 08:15 PM
Sulfate	5.5		1.0	mg/L	1	10/21/15 08:15 PM
NITROGEN, NITRATE-NITRITE			E353.2 R2.0			Analyst: JJG
Nitrogen, Nitrate-Nitrite	ND		0.020	mg/L	1	10/15/15 10:16 AM
ORGANIC CARBON, TOTAL			SW9060A			Analyst: JJG
Organic Carbon, Total	5.4		0.50	mg/L	1	10/20/15 12:54 PM

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

ALS Group USA, Corp

Date: 26-Oct-15

Client: AMEC Foster Wheeler

Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

Work Order: 1510900

Sample ID: ATR-MW25(45.2)-G101315

Lab ID: 1510900-04

Collection Date: 10/13/15 11:50 AM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A		Prep: SW3005A / 10/15/15	Analyst: RH
Iron	0.16		0.080	mg/L	1	10/15/15 04:28 PM
Manganese	0.27		0.0050	mg/L	1	10/15/15 04:28 PM
VOLATILE ORGANIC COMPOUNDS			SW8260B			Analyst: AK
1,1,1-Trichloroethane	ND		10	µg/L	10	10/23/15 09:25 AM
1,1,2,2-Tetrachloroethane	ND		10	µg/L	10	10/23/15 09:25 AM
1,1,2-Trichloroethane	ND		10	µg/L	10	10/23/15 09:25 AM
1,1-Dichloroethane	ND		10	µg/L	10	10/23/15 09:25 AM
1,1-Dichloroethene	ND		10	µg/L	10	10/23/15 09:25 AM
1,2-Dichloroethane	ND		10	µg/L	10	10/23/15 09:25 AM
1,2-Dichloropropane	ND		10	µg/L	10	10/23/15 09:25 AM
2-Butanone	ND		50	µg/L	10	10/23/15 09:25 AM
2-Hexanone	ND		50	µg/L	10	10/23/15 09:25 AM
4-Methyl-2-pentanone	ND		10	µg/L	10	10/23/15 09:25 AM
Acetone	ND		100	µg/L	10	10/23/15 09:25 AM
Benzene	ND		10	µg/L	10	10/23/15 09:25 AM
Bromodichloromethane	ND		10	µg/L	10	10/23/15 09:25 AM
Bromoform	ND		10	µg/L	10	10/23/15 09:25 AM
Bromomethane	ND		10	µg/L	10	10/23/15 09:25 AM
Carbon disulfide	ND		10	µg/L	10	10/23/15 09:25 AM
Carbon tetrachloride	ND		10	µg/L	10	10/23/15 09:25 AM
Chlorobenzene	ND		10	µg/L	10	10/23/15 09:25 AM
Chloroethane	ND		10	µg/L	10	10/23/15 09:25 AM
Chloroform	ND		10	µg/L	10	10/23/15 09:25 AM
Chloromethane	ND		10	µg/L	10	10/23/15 09:25 AM
cis-1,2-Dichloroethene	1,800		50	µg/L	50	10/24/15 02:00 AM
cis-1,3-Dichloropropene	ND		10	µg/L	10	10/23/15 09:25 AM
Dibromochloromethane	ND		10	µg/L	10	10/23/15 09:25 AM
Ethylbenzene	ND		10	µg/L	10	10/23/15 09:25 AM
m,p-Xylene	ND		20	µg/L	10	10/23/15 09:25 AM
Methylene chloride	ND		50	µg/L	10	10/23/15 09:25 AM
o-Xylene	ND		10	µg/L	10	10/23/15 09:25 AM
Styrene	ND		10	µg/L	10	10/23/15 09:25 AM
Tetrachloroethene	ND		10	µg/L	10	10/23/15 09:25 AM
Toluene	ND		10	µg/L	10	10/23/15 09:25 AM
trans-1,2-Dichloroethene	200		10	µg/L	10	10/23/15 09:25 AM
trans-1,3-Dichloropropene	ND		10	µg/L	10	10/23/15 09:25 AM
Trichloroethene	15		10	µg/L	10	10/23/15 09:25 AM
Vinyl chloride	220		10	µg/L	10	10/23/15 09:25 AM

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

ALS Group USA, Corp

Date: 26-Oct-15

Client: AMEC Foster Wheeler

Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

Work Order: 1510900

Sample ID: ATR-MW25(45.2)-G101315

Lab ID: 1510900-04

Collection Date: 10/13/15 11:50 AM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Xylenes, Total	ND		30	µg/L	10	10/23/15 09:25 AM
Surr: 1,2-Dichloroethane-d4	92.2		75-120	%REC	10	10/23/15 09:25 AM
Surr: 1,2-Dichloroethane-d4	95.0		75-120	%REC	50	10/24/15 02:00 AM
Surr: 4-Bromofluorobenzene	95.2		80-110	%REC	10	10/23/15 09:25 AM
Surr: 4-Bromofluorobenzene	96.2		80-110	%REC	50	10/24/15 02:00 AM
Surr: Dibromofluoromethane	96.6		85-115	%REC	10	10/23/15 09:25 AM
Surr: Dibromofluoromethane	97.8		85-115	%REC	50	10/24/15 02:00 AM
Surr: Toluene-d8	93.5		85-110	%REC	50	10/24/15 02:00 AM
Surr: Toluene-d8	93.0		85-110	%REC	10	10/23/15 09:25 AM
ALKALINITY			A2320 B-97			Analyst: ED
Alkalinity, Bicarbonate (as CaCO3)	230	x	10	mg/L	1	10/20/15 05:05 PM
Alkalinity, Total (as CaCO3)	230	x	10	mg/L	1	10/20/15 05:05 PM
ANIONS BY ION CHROMATOGRAPHY			SW9056A			Analyst: EE
Chloride	8.9		1.0	mg/L	1	10/21/15 08:36 PM
Sulfate	13		1.0	mg/L	1	10/21/15 08:36 PM
NITROGEN, NITRATE-NITRITE			E353.2 R2.0			Analyst: JJG
Nitrogen, Nitrate-Nitrite	ND		0.020	mg/L	1	10/15/15 10:16 AM
ORGANIC CARBON, TOTAL			SW9060A			Analyst: JJG
Organic Carbon, Total	2.1		0.50	mg/L	1	10/20/15 12:54 PM

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

ALS Group USA, Corp

Date: 26-Oct-15

Client: AMEC Foster Wheeler

Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

Work Order: 1510900

Sample ID: ATR-OW4(35)-G101315

Lab ID: 1510900-05

Collection Date: 10/13/15 01:05 PM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A		Prep: SW3005A / 10/15/15	Analyst: RH
Iron	18		0.080	mg/L	1	10/15/15 04:33 PM
Manganese	2.1		0.050	mg/L	10	10/16/15 01:22 PM
VOLATILE ORGANIC COMPOUNDS			SW8260B			Analyst: AK
1,1,1-Trichloroethane	ND		5.0	µg/L	5	10/24/15 01:33 AM
1,1,2,2-Tetrachloroethane	ND		5.0	µg/L	5	10/24/15 01:33 AM
1,1,2-Trichloroethane	ND		5.0	µg/L	5	10/24/15 01:33 AM
1,1-Dichloroethane	ND		5.0	µg/L	5	10/24/15 01:33 AM
1,1-Dichloroethene	ND		5.0	µg/L	5	10/24/15 01:33 AM
1,2-Dichloroethane	ND		5.0	µg/L	5	10/24/15 01:33 AM
1,2-Dichloropropane	ND		5.0	µg/L	5	10/24/15 01:33 AM
2-Butanone	690		50	µg/L	10	10/23/15 09:51 AM
2-Hexanone	ND		25	µg/L	5	10/24/15 01:33 AM
4-Methyl-2-pentanone	ND		5.0	µg/L	5	10/24/15 01:33 AM
Acetone	ND		50	µg/L	5	10/24/15 01:33 AM
Benzene	ND		5.0	µg/L	5	10/24/15 01:33 AM
Bromodichloromethane	ND		5.0	µg/L	5	10/24/15 01:33 AM
Bromoform	ND		5.0	µg/L	5	10/24/15 01:33 AM
Bromomethane	ND		5.0	µg/L	5	10/24/15 01:33 AM
Carbon disulfide	ND		5.0	µg/L	5	10/24/15 01:33 AM
Carbon tetrachloride	ND		5.0	µg/L	5	10/24/15 01:33 AM
Chlorobenzene	ND		5.0	µg/L	5	10/24/15 01:33 AM
Chloroethane	ND		5.0	µg/L	5	10/24/15 01:33 AM
Chloroform	ND		5.0	µg/L	5	10/24/15 01:33 AM
Chloromethane	ND		5.0	µg/L	5	10/24/15 01:33 AM
cis-1,2-Dichloroethene	170		5.0	µg/L	5	10/24/15 01:33 AM
cis-1,3-Dichloropropene	ND		5.0	µg/L	5	10/24/15 01:33 AM
Dibromochloromethane	ND		5.0	µg/L	5	10/24/15 01:33 AM
Ethylbenzene	ND		5.0	µg/L	5	10/24/15 01:33 AM
m,p-Xylene	ND		10	µg/L	5	10/24/15 01:33 AM
Methylene chloride	ND		25	µg/L	5	10/24/15 01:33 AM
o-Xylene	ND		5.0	µg/L	5	10/24/15 01:33 AM
Styrene	ND		5.0	µg/L	5	10/24/15 01:33 AM
Tetrachloroethene	ND		5.0	µg/L	5	10/24/15 01:33 AM
Toluene	ND		5.0	µg/L	5	10/24/15 01:33 AM
trans-1,2-Dichloroethene	ND		5.0	µg/L	5	10/24/15 01:33 AM
trans-1,3-Dichloropropene	ND		5.0	µg/L	5	10/24/15 01:33 AM
Trichloroethene	ND		5.0	µg/L	5	10/24/15 01:33 AM
Vinyl chloride	230		5.0	µg/L	5	10/24/15 01:33 AM

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

ALS Group USA, Corp

Date: 26-Oct-15

Client: AMEC Foster Wheeler

Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

Work Order: 1510900

Sample ID: ATR-OW4(35)-G101315

Lab ID: 1510900-05

Collection Date: 10/13/15 01:05 PM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Xylenes, Total	ND		15	µg/L	5	10/24/15 01:33 AM
Surr: 1,2-Dichloroethane-d4	96.3		75-120	%REC	10	10/23/15 09:51 AM
Surr: 1,2-Dichloroethane-d4	98.1		75-120	%REC	5	10/24/15 01:33 AM
Surr: 4-Bromofluorobenzene	95.2		80-110	%REC	10	10/23/15 09:51 AM
Surr: 4-Bromofluorobenzene	96.0		80-110	%REC	5	10/24/15 01:33 AM
Surr: Dibromofluoromethane	100		85-115	%REC	10	10/23/15 09:51 AM
Surr: Dibromofluoromethane	97.6		85-115	%REC	5	10/24/15 01:33 AM
Surr: Toluene-d8	92.3		85-110	%REC	5	10/24/15 01:33 AM
Surr: Toluene-d8	91.3		85-110	%REC	10	10/23/15 09:51 AM
ALKALINITY			A2320 B-97			Analyst: ED
Alkalinity, Bicarbonate (as CaCO3)	670	x	10	mg/L	1	10/20/15 05:05 PM
Alkalinity, Total (as CaCO3)	670	x	10	mg/L	1	10/20/15 05:05 PM
ANIONS BY ION CHROMATOGRAPHY			SW9056A			Analyst: EE
Chloride	14		5.0	mg/L	5	10/21/15 08:56 PM
Sulfate	5.3		5.0	mg/L	5	10/21/15 08:56 PM
NITROGEN, NITRATE-NITRITE			E353.2 R2.0			Analyst: JJG
Nitrogen, Nitrate-Nitrite	0.057		0.020	mg/L	1	10/15/15 10:16 AM
ORGANIC CARBON, TOTAL			SW9060A			Analyst: JJG
Organic Carbon, Total	1,900		250	mg/L	500	10/20/15 12:54 PM

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

ALS Group USA, Corp

Date: 26-Oct-15

Client: AMEC Foster Wheeler

Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

Work Order: 1510900

Sample ID: ATR-OW4(54)-G101315

Lab ID: 1510900-06

Collection Date: 10/13/15 02:05 PM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A		Prep: SW3005A / 10/15/15	Analyst: RH
Iron	0.92		0.080	mg/L	1	10/15/15 12:58 PM
Manganese	0.044		0.0050	mg/L	1	10/15/15 12:58 PM
VOLATILE ORGANIC COMPOUNDS			SW8260B			Analyst: AK
1,1,1-Trichloroethane	ND		1.0	µg/L	1	10/23/15 10:17 AM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	10/23/15 10:17 AM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	10/23/15 10:17 AM
1,1-Dichloroethane	ND		1.0	µg/L	1	10/23/15 10:17 AM
1,1-Dichloroethene	ND		1.0	µg/L	1	10/23/15 10:17 AM
1,2-Dichloroethane	ND		1.0	µg/L	1	10/23/15 10:17 AM
1,2-Dichloropropane	ND		1.0	µg/L	1	10/23/15 10:17 AM
2-Butanone	ND		5.0	µg/L	1	10/23/15 10:17 AM
2-Hexanone	ND		5.0	µg/L	1	10/23/15 10:17 AM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	10/23/15 10:17 AM
Acetone	ND		10	µg/L	1	10/23/15 10:17 AM
Benzene	ND		1.0	µg/L	1	10/23/15 10:17 AM
Bromodichloromethane	ND		1.0	µg/L	1	10/23/15 10:17 AM
Bromoform	ND		1.0	µg/L	1	10/23/15 10:17 AM
Bromomethane	ND		1.0	µg/L	1	10/23/15 10:17 AM
Carbon disulfide	ND		1.0	µg/L	1	10/23/15 10:17 AM
Carbon tetrachloride	ND		1.0	µg/L	1	10/23/15 10:17 AM
Chlorobenzene	ND		1.0	µg/L	1	10/23/15 10:17 AM
Chloroethane	ND		1.0	µg/L	1	10/23/15 10:17 AM
Chloroform	ND		1.0	µg/L	1	10/23/15 10:17 AM
Chloromethane	ND		1.0	µg/L	1	10/23/15 10:17 AM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	10/23/15 10:17 AM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	10/23/15 10:17 AM
Dibromochloromethane	ND		1.0	µg/L	1	10/23/15 10:17 AM
Ethylbenzene	ND		1.0	µg/L	1	10/23/15 10:17 AM
m,p-Xylene	ND		2.0	µg/L	1	10/23/15 10:17 AM
Methylene chloride	ND		5.0	µg/L	1	10/23/15 10:17 AM
o-Xylene	ND		1.0	µg/L	1	10/23/15 10:17 AM
Styrene	ND		1.0	µg/L	1	10/23/15 10:17 AM
Tetrachloroethene	ND		1.0	µg/L	1	10/23/15 10:17 AM
Toluene	ND		1.0	µg/L	1	10/23/15 10:17 AM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	10/23/15 10:17 AM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	10/23/15 10:17 AM
Trichloroethene	ND		1.0	µg/L	1	10/23/15 10:17 AM
Vinyl chloride	ND		1.0	µg/L	1	10/23/15 10:17 AM

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

ALS Group USA, Corp

Date: 26-Oct-15

Client: AMEC Foster Wheeler

Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

Work Order: 1510900

Sample ID: ATR-OW4(54)-G101315

Lab ID: 1510900-06

Collection Date: 10/13/15 02:05 PM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Xylenes, Total	ND		3.0	µg/L	1	10/23/15 10:17 AM
Surr: 1,2-Dichloroethane-d4	99.2		75-120	%REC	1	10/23/15 10:17 AM
Surr: 4-Bromofluorobenzene	95.6		80-110	%REC	1	10/23/15 10:17 AM
Surr: Dibromofluoromethane	105		85-115	%REC	1	10/23/15 10:17 AM
Surr: Toluene-d8	90.8		85-110	%REC	1	10/23/15 10:17 AM
ALKALINITY			A2320 B-97			Analyst: ED
Alkalinity, Bicarbonate (as CaCO3)	240	x	10	mg/L	1	10/20/15 05:05 PM
Alkalinity, Total (as CaCO3)	240	x	10	mg/L	1	10/20/15 05:05 PM
ANIONS BY ION CHROMATOGRAPHY			SW9056A			Analyst: EE
Chloride	6.2		1.0	mg/L	1	10/21/15 09:16 PM
Sulfate	17		1.0	mg/L	1	10/21/15 09:16 PM
NITROGEN, NITRATE-NITRITE			E353.2 R2.0			Analyst: JJG
Nitrogen, Nitrate-Nitrite	ND		0.020	mg/L	1	10/15/15 10:16 AM
ORGANIC CARBON, TOTAL			SW9060A			Analyst: JJG
Organic Carbon, Total	2.1		0.50	mg/L	1	10/20/15 12:54 PM

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

ALS Group USA, Corp

Date: 26-Oct-15

Client: AMEC Foster Wheeler

Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

Work Order: 1510900

Sample ID: ATR-EB001-G101315

Lab ID: 1510900-07

Collection Date: 10/13/15 09:15 AM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
METALS BY ICP-MS			SW6020A		Prep: SW3005A / 10/15/15	Analyst: RH
Iron	ND		0.080	mg/L	1	10/15/15 04:38 PM
Manganese	ND		0.0050	mg/L	1	10/15/15 04:38 PM
VOLATILE ORGANIC COMPOUNDS			SW8260B			Analyst: AK
1,1,1-Trichloroethane	ND		1.0	µg/L	1	10/23/15 07:40 AM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	10/23/15 07:40 AM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	10/23/15 07:40 AM
1,1-Dichloroethane	ND		1.0	µg/L	1	10/23/15 07:40 AM
1,1-Dichloroethene	ND		1.0	µg/L	1	10/23/15 07:40 AM
1,2-Dichloroethane	ND		1.0	µg/L	1	10/23/15 07:40 AM
1,2-Dichloropropane	ND		1.0	µg/L	1	10/23/15 07:40 AM
2-Butanone	ND		5.0	µg/L	1	10/23/15 07:40 AM
2-Hexanone	ND		5.0	µg/L	1	10/23/15 07:40 AM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	10/23/15 07:40 AM
Acetone	ND		10	µg/L	1	10/23/15 07:40 AM
Benzene	ND		1.0	µg/L	1	10/23/15 07:40 AM
Bromodichloromethane	ND		1.0	µg/L	1	10/23/15 07:40 AM
Bromoform	ND		1.0	µg/L	1	10/23/15 07:40 AM
Bromomethane	ND		1.0	µg/L	1	10/23/15 07:40 AM
Carbon disulfide	ND		1.0	µg/L	1	10/23/15 07:40 AM
Carbon tetrachloride	ND		1.0	µg/L	1	10/23/15 07:40 AM
Chlorobenzene	ND		1.0	µg/L	1	10/23/15 07:40 AM
Chloroethane	ND		1.0	µg/L	1	10/23/15 07:40 AM
Chloroform	ND		1.0	µg/L	1	10/23/15 07:40 AM
Chloromethane	ND		1.0	µg/L	1	10/23/15 07:40 AM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	10/23/15 07:40 AM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	10/23/15 07:40 AM
Dibromochloromethane	ND		1.0	µg/L	1	10/23/15 07:40 AM
Ethylbenzene	ND		1.0	µg/L	1	10/23/15 07:40 AM
m,p-Xylene	ND		2.0	µg/L	1	10/23/15 07:40 AM
Methylene chloride	ND		5.0	µg/L	1	10/23/15 07:40 AM
o-Xylene	ND		1.0	µg/L	1	10/23/15 07:40 AM
Styrene	ND		1.0	µg/L	1	10/23/15 07:40 AM
Tetrachloroethene	ND		1.0	µg/L	1	10/23/15 07:40 AM
Toluene	ND		1.0	µg/L	1	10/23/15 07:40 AM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	10/23/15 07:40 AM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	10/23/15 07:40 AM
Trichloroethene	ND		1.0	µg/L	1	10/23/15 07:40 AM
Vinyl chloride	ND		1.0	µg/L	1	10/23/15 07:40 AM

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

ALS Group USA, Corp

Date: 26-Oct-15

Client: AMEC Foster Wheeler

Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

Work Order: 1510900

Sample ID: ATR-EB001-G101315

Lab ID: 1510900-07

Collection Date: 10/13/15 09:15 AM

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Xylenes, Total	ND		3.0	µg/L	1	10/23/15 07:40 AM
<i>Surr: 1,2-Dichloroethane-d4</i>	96.6		75-120	%REC	1	10/23/15 07:40 AM
<i>Surr: 4-Bromofluorobenzene</i>	93.9		80-110	%REC	1	10/23/15 07:40 AM
<i>Surr: Dibromofluoromethane</i>	103		85-115	%REC	1	10/23/15 07:40 AM
<i>Surr: Toluene-d8</i>	91.1		85-110	%REC	1	10/23/15 07:40 AM
ALKALINITY			A2320 B-97			Analyst: ED
Alkalinity, Bicarbonate (as CaCO3)	ND	x	10	mg/L	1	10/20/15 05:05 PM
Alkalinity, Total (as CaCO3)	ND	x	10	mg/L	1	10/20/15 05:05 PM
ANIONS BY ION CHROMATOGRAPHY			SW9056A			Analyst: EE
Chloride	ND		1.0	mg/L	1	10/21/15 09:36 PM
Sulfate	ND		1.0	mg/L	1	10/21/15 09:36 PM
NITROGEN, NITRATE-NITRITE			E353.2 R2.0			Analyst: JJG
Nitrogen, Nitrate-Nitrite	ND		0.020	mg/L	1	10/15/15 10:16 AM
ORGANIC CARBON, TOTAL			SW9060A			Analyst: JJG
Organic Carbon, Total	0.85		0.50	mg/L	1	10/20/15 12:54 PM

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

ALS Group USA, Corp

Date: 26-Oct-15

Client: AMEC Foster Wheeler

Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

Work Order: 1510900

Sample ID: Trip Blank

Lab ID: 1510900-08

Collection Date: 10/13/15

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			SW8260B			Analyst: AK
1,1,1-Trichloroethane	ND		1.0	µg/L	1	10/23/15 07:14 AM
1,1,2,2-Tetrachloroethane	ND		1.0	µg/L	1	10/23/15 07:14 AM
1,1,2-Trichloroethane	ND		1.0	µg/L	1	10/23/15 07:14 AM
1,1-Dichloroethane	ND		1.0	µg/L	1	10/23/15 07:14 AM
1,1-Dichloroethene	ND		1.0	µg/L	1	10/23/15 07:14 AM
1,2-Dichloroethane	ND		1.0	µg/L	1	10/23/15 07:14 AM
1,2-Dichloropropane	ND		1.0	µg/L	1	10/23/15 07:14 AM
2-Butanone	ND		5.0	µg/L	1	10/23/15 07:14 AM
2-Hexanone	ND		5.0	µg/L	1	10/23/15 07:14 AM
4-Methyl-2-pentanone	ND		1.0	µg/L	1	10/23/15 07:14 AM
Acetone	ND		10	µg/L	1	10/23/15 07:14 AM
Benzene	ND		1.0	µg/L	1	10/23/15 07:14 AM
Bromodichloromethane	ND		1.0	µg/L	1	10/23/15 07:14 AM
Bromoform	ND		1.0	µg/L	1	10/23/15 07:14 AM
Bromomethane	ND		1.0	µg/L	1	10/23/15 07:14 AM
Carbon disulfide	ND		1.0	µg/L	1	10/23/15 07:14 AM
Carbon tetrachloride	ND		1.0	µg/L	1	10/23/15 07:14 AM
Chlorobenzene	ND		1.0	µg/L	1	10/23/15 07:14 AM
Chloroethane	ND		1.0	µg/L	1	10/23/15 07:14 AM
Chloroform	ND		1.0	µg/L	1	10/23/15 07:14 AM
Chloromethane	ND		1.0	µg/L	1	10/23/15 07:14 AM
cis-1,2-Dichloroethene	ND		1.0	µg/L	1	10/23/15 07:14 AM
cis-1,3-Dichloropropene	ND		1.0	µg/L	1	10/23/15 07:14 AM
Dibromochloromethane	ND		1.0	µg/L	1	10/23/15 07:14 AM
Ethylbenzene	ND		1.0	µg/L	1	10/23/15 07:14 AM
m,p-Xylene	ND		2.0	µg/L	1	10/23/15 07:14 AM
Methylene chloride	ND		5.0	µg/L	1	10/23/15 07:14 AM
o-Xylene	ND		1.0	µg/L	1	10/23/15 07:14 AM
Styrene	ND		1.0	µg/L	1	10/23/15 07:14 AM
Tetrachloroethene	ND		1.0	µg/L	1	10/23/15 07:14 AM
Toluene	ND		1.0	µg/L	1	10/23/15 07:14 AM
trans-1,2-Dichloroethene	ND		1.0	µg/L	1	10/23/15 07:14 AM
trans-1,3-Dichloropropene	ND		1.0	µg/L	1	10/23/15 07:14 AM
Trichloroethene	ND		1.0	µg/L	1	10/23/15 07:14 AM
Vinyl chloride	ND		1.0	µg/L	1	10/23/15 07:14 AM
Xylenes, Total	ND		3.0	µg/L	1	10/23/15 07:14 AM
Surr: 1,2-Dichloroethane-d4	91.8		75-120	%REC	1	10/23/15 07:14 AM
Surr: 4-Bromofluorobenzene	95.4		80-110	%REC	1	10/23/15 07:14 AM
Surr: Dibromofluoromethane	100		85-115	%REC	1	10/23/15 07:14 AM

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

ALS Group USA, Corp

Date: 26-Oct-15

Client: AMEC Foster Wheeler

Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

Work Order: 1510900

Sample ID: Trip Blank

Lab ID: 1510900-08

Collection Date: 10/13/15

Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
<i>Surr: Toluene-d8</i>	91.8		85-110	%REC	1	10/23/15 07:14 AM

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

Client: AMEC Foster Wheeler

QC BATCH REPORT

Work Order: 1510900

Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

Batch ID: **77502** Instrument ID **ICPMS2** Method: **SW6020A**

MBLK		Sample ID: MBLK-77502-77502				Units: mg/L		Analysis Date: 10/15/15 12:38 PM		
Client ID:		Run ID: ICPMS2_151015A		SeqNo: 3511546		Prep Date: 10/15/15		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Iron	ND	0.080								
Manganese	ND	0.0050								

LCS		Sample ID: LCS-77502-77502				Units: mg/L		Analysis Date: 10/15/15 12:43 PM		
Client ID:		Run ID: ICPMS2_151015A		SeqNo: 3511547		Prep Date: 10/15/15		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Iron	9.478	0.080	10	0	94.8	80-120	0			
Manganese	0.09833	0.0050	0.1	0	98.3	80-120	0			

MS		Sample ID: 1510900-06CMS				Units: mg/L		Analysis Date: 10/15/15 01:04 PM		
Client ID: ATR-OW4(54)-G101315		Run ID: ICPMS2_151015A		SeqNo: 3511551		Prep Date: 10/15/15		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Iron	10.47	0.080	10	0.919	95.5	75-125	0			
Manganese	0.1456	0.0050	0.1	0.04411	101	75-125	0			

MSD		Sample ID: 1510900-06CMSD				Units: mg/L		Analysis Date: 10/15/15 01:09 PM		
Client ID: ATR-OW4(54)-G101315		Run ID: ICPMS2_151015A		SeqNo: 3511552		Prep Date: 10/15/15		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Iron	10.26	0.080	10	0.919	93.4	75-125	10.47	2.03	20	
Manganese	0.142	0.0050	0.1	0.04411	97.9	75-125	0.1456	2.5	20	

The following samples were analyzed in this batch:

1510900-01C	1510900-02C	1510900-03C
1510900-04C	1510900-05C	1510900-06C
1510900-07C		

Client: AMEC Foster Wheeler
 Work Order: 1510900
 Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

QC BATCH REPORT

Batch ID: **R174489A** Instrument ID **VMS6** Method: **SW8260B**

MBLK		Sample ID: VBLKW2-151022-R174489A				Units: µg/L		Analysis Date: 10/23/15 05:03 AM		
Client ID:		Run ID: VMS6_151022B			SeqNo: 3526706		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	19.32	0	20	0	96.6	75-120	0			
Surr: 4-Bromofluorobenzene	18.72	0	20	0	93.6	80-110	0			
Surr: Dibromofluoromethane	20.32	0	20	0	102	85-115	0			
Surr: Toluene-d8	18.37	0	20	0	91.8	85-110	0			

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

Client: AMEC Foster Wheeler
 Work Order: 1510900
 Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

QC BATCH REPORT

Batch ID: **R174489A** Instrument ID **VMS6** Method: **SW8260B**

LCS		Sample ID: VLCSW2-151022-R174489A				Units: µg/L		Analysis Date: 10/23/15 04:10 AM		
Client ID:		Run ID: VMS6_151022B			SeqNo: 3526701		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	22.07	1.0	20	0	110	75-130	0			
1,1,2,2-Tetrachloroethane	17.78	1.0	20	0	88.9	75-130	0			
1,1,2-Trichloroethane	18.41	1.0	20	0	92	75-125	0			
1,1-Dichloroethane	21.34	1.0	20	0	107	75-133	0			
1,1-Dichloroethene	22.68	1.0	20	0	113	70-145	0			
1,2-Dichloroethane	20.46	1.0	20	0	102	78-125	0			
1,2-Dichloropropane	22.62	1.0	20	0	113	75-125	0			
2-Butanone	20.1	5.0	20	0	100	55-150	0			
2-Hexanone	17.2	5.0	20	0	86	60-135	0			
4-Methyl-2-pentanone	21.07	1.0	20	0	105	77-178	0			
Acetone	22.5	10	20	0	112	60-160	0			
Benzene	21.93	1.0	20	0	110	85-125	0			
Bromodichloromethane	19.45	1.0	20	0	97.2	75-125	0			
Bromoform	18.71	1.0	20	0	93.6	60-125	0			
Bromomethane	20.61	1.0	20	0	103	30-185	0			
Carbon disulfide	26.88	1.0	20	0	134	60-165	0			
Carbon tetrachloride	22.52	1.0	20	0	113	65-140	0			
Chlorobenzene	19.68	1.0	20	0	98.4	80-120	0			
Chloroethane	18.93	1.0	20	0	94.6	50-140	0			
Chloroform	20.45	1.0	20	0	102	80-130	0			
Chloromethane	15.41	1.0	20	0	77	50-130	0			
cis-1,2-Dichloroethene	23.08	1.0	20	0	115	75-134	0			
cis-1,3-Dichloropropene	19.47	1.0	20	0	97.4	70-130	0			
Dibromochloromethane	18.61	1.0	20	0	93	60-115	0			
Ethylbenzene	20.09	1.0	20	0	100	85-125	0			
m,p-Xylene	41.43	2.0	40	0	104	75-130	0			
Methylene chloride	22.25	5.0	20	0	111	75-140	0			
o-Xylene	19.92	1.0	20	0	99.6	80-125	0			
Styrene	20.11	1.0	20	0	101	85-125	0			
Tetrachloroethene	21.35	1.0	20	0	107	77-138	0			
Toluene	20.17	1.0	20	0	101	85-125	0			
trans-1,2-Dichloroethene	22.19	1.0	20	0	111	80-140	0			
trans-1,3-Dichloropropene	17.33	1.0	20	0	86.6	81-123	0			
Trichloroethene	20.09	1.0	20	0	100	84-130	0			
Vinyl chloride	16.23	1.0	20	0	81.2	50-136	0			
Xylenes, Total	61.35	3.0	60	0	102	80-126	0			
Surr: 1,2-Dichloroethane-d4	18.09	0	20	0	90.4	75-120	0			
Surr: 4-Bromofluorobenzene	20.2	0	20	0	101	80-110	0			
Surr: Dibromofluoromethane	20.17	0	20	0	101	85-115	0			
Surr: Toluene-d8	18.64	0	20	0	93.2	85-110	0			

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

Client: AMEC Foster Wheeler
 Work Order: 1510900
 Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

QC BATCH REPORT

Batch ID: **R174489A** Instrument ID **VMS6** Method: **SW8260B**

MS		Sample ID: 1510900-01A MS			Units: µg/L		Analysis Date: 10/23/15 02:14 PM			
Client ID: ATR-MW15-G101315		Run ID: VMS6_151022B			SeqNo: 3526765		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	1118	50	1000	0	112	75-130	0			
1,1,2,2-Tetrachloroethane	853.5	50	1000	0	85.4	75-130	0			
1,1,2-Trichloroethane	911.5	50	1000	0	91.2	75-125	0			
1,1-Dichloroethane	1056	50	1000	0	106	75-133	0			
1,1-Dichloroethene	1178	50	1000	0	118	70-145	0			
1,2-Dichloroethane	1082	50	1000	0	108	78-125	0			
1,2-Dichloropropane	1137	50	1000	0	114	75-125	0			
2-Butanone	918.5	250	1000	0	91.8	55-150	0			
2-Hexanone	849	250	1000	0	84.9	60-135	0			
4-Methyl-2-pentanone	946	50	1000	0	94.6	77-178	0			
Acetone	1096	500	1000	0	110	60-160	0			
Benzene	1132	50	1000	0	113	85-125	0			
Bromodichloromethane	993	50	1000	0	99.3	75-125	0			
Bromoform	851.5	50	1000	0	85.2	60-125	0			
Bromomethane	691.5	50	1000	0	69.2	30-185	0			
Carbon disulfide	1312	50	1000	0	131	60-165	0			
Carbon tetrachloride	1184	50	1000	0	118	65-140	0			
Chlorobenzene	1020	50	1000	0	102	80-120	0			
Chloroethane	948.5	50	1000	0	94.8	50-140	0			
Chloroform	993	50	1000	0	99.3	80-130	0			
Chloromethane	677.5	50	1000	0	67.8	50-130	0			
cis-1,2-Dichloroethene	5690	50	1000	4640	105	75-134	0			EO
cis-1,3-Dichloropropene	973	50	1000	0	97.3	70-130	0			
Dibromochloromethane	897.5	50	1000	0	89.8	60-115	0			
Ethylbenzene	1006	50	1000	0	101	85-125	0			
m,p-Xylene	2038	100	2000	0	102	75-130	0			
Methylene chloride	1162	250	1000	0	116	75-140	0			
o-Xylene	986.5	50	1000	0	98.6	80-125	0			
Styrene	1000	50	1000	0	100	85-125	0			
Tetrachloroethene	1088	50	1000	0	109	77-138	0			
Toluene	1005	50	1000	0	100	85-125	0			
trans-1,2-Dichloroethene	1292	50	1000	199	109	80-140	0			
trans-1,3-Dichloropropene	813	50	1000	0	81.3	81-123	0			
Trichloroethene	1432	50	1000	361	107	84-130	0			
Vinyl chloride	1084	50	1000	295.5	78.8	50-136	0			
Xylenes, Total	3025	150	3000	0	101	80-126	0			
Surr: 1,2-Dichloroethane-d4	960	0	1000	0	96	75-120	0			
Surr: 4-Bromofluorobenzene	1016	0	1000	0	102	80-110	0			
Surr: Dibromofluoromethane	1022	0	1000	0	102	85-115	0			
Surr: Toluene-d8	918.5	0	1000	0	91.8	85-110	0			

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

Client: AMEC Foster Wheeler
 Work Order: 1510900
 Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

QC BATCH REPORT

Batch ID: **R174489A** Instrument ID **VMS6** Method: **SW8260B**

MSD		Sample ID: 1510900-01A MSD				Units: µg/L		Analysis Date: 10/23/15 02:40 PM		
Client ID: ATR-MW15-G101315		Run ID: VMS6_151022B				SeqNo: 3526766		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	1114	50	1000	0	111	75-130	1118	0.448	30	
1,1,2,2-Tetrachloroethane	899.5	50	1000	0	90	75-130	853.5	5.25	30	
1,1,2-Trichloroethane	922	50	1000	0	92.2	75-125	911.5	1.15	30	
1,1-Dichloroethane	1082	50	1000	0	108	75-133	1056	2.43	30	
1,1-Dichloroethene	1236	50	1000	0	124	70-145	1178	4.76	30	
1,2-Dichloroethane	1084	50	1000	0	108	78-125	1082	0.277	30	
1,2-Dichloropropane	1220	50	1000	0	122	75-125	1137	7	30	
2-Butanone	977.5	250	1000	0	97.8	55-150	918.5	6.22	30	
2-Hexanone	877	250	1000	0	87.7	60-135	849	3.24	30	
4-Methyl-2-pentanone	1049	50	1000	0	105	77-178	946	10.3	30	
Acetone	1282	500	1000	0	128	60-160	1096	15.6	30	
Benzene	1164	50	1000	0	116	85-125	1132	2.74	30	
Bromodichloromethane	1020	50	1000	0	102	75-125	993	2.73	30	
Bromoform	914.5	50	1000	0	91.4	60-125	851.5	7.13	30	
Bromomethane	823.5	50	1000	0	82.4	30-185	691.5	17.4	30	
Carbon disulfide	1396	50	1000	0	140	60-165	1312	6.24	30	
Carbon tetrachloride	1262	50	1000	0	126	65-140	1184	6.38	30	
Chlorobenzene	1013	50	1000	0	101	80-120	1020	0.64	30	
Chloroethane	997.5	50	1000	0	99.8	50-140	948.5	5.04	30	
Chloroform	1046	50	1000	0	105	80-130	993	5.15	30	
Chloromethane	689.5	50	1000	0	69	50-130	677.5	1.76	30	
cis-1,2-Dichloroethene	5750	50	1000	4640	111	75-134	5690	1.07	30	EO
cis-1,3-Dichloropropene	980	50	1000	0	98	70-130	973	0.717	30	
Dibromochloromethane	930	50	1000	0	93	60-115	897.5	3.56	30	
Ethylbenzene	1042	50	1000	0	104	85-125	1006	3.47	30	
m,p-Xylene	2128	100	2000	0	106	75-130	2038	4.27	30	
Methylene chloride	1160	250	1000	0	116	75-140	1162	0.172	30	
o-Xylene	1009	50	1000	0	101	80-125	986.5	2.26	30	
Styrene	1029	50	1000	0	103	85-125	1000	2.81	30	
Tetrachloroethene	1104	50	1000	0	110	77-138	1088	1.51	30	
Toluene	1047	50	1000	0	105	85-125	1005	4.09	30	
trans-1,2-Dichloroethene	1342	50	1000	199	114	80-140	1292	3.76	30	
trans-1,3-Dichloropropene	846.5	50	1000	0	84.6	81-123	813	4.04	30	
Trichloroethene	1464	50	1000	361	110	84-130	1432	2.18	30	
Vinyl chloride	1150	50	1000	295.5	85.5	50-136	1084	5.95	30	
Xylenes, Total	3136	150	3000	0	105	80-126	3025	3.62	30	
Surr: 1,2-Dichloroethane-d4	937	0	1000	0	93.7	75-120	960	2.42	30	
Surr: 4-Bromofluorobenzene	1030	0	1000	0	103	80-110	1016	1.32	30	
Surr: Dibromofluoromethane	1028	0	1000	0	103	85-115	1022	0.585	30	
Surr: Toluene-d8	934.5	0	1000	0	93.4	85-110	918.5	1.73	30	

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

Client: AMEC Foster Wheeler
Work Order: 1510900
Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

QC BATCH REPORT

Batch ID: **R174489A** Instrument ID **VMS6** Method: **SW8260B**

The following samples were analyzed in this batch:

1510900-01A	1510900-02A	1510900-03A
1510900-04A	1510900-05A	1510900-06A
1510900-07A	1510900-08A	

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

Client: AMEC Foster Wheeler
 Work Order: 1510900
 Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

QC BATCH REPORT

Batch ID: **R174574A** Instrument ID **VMS6** Method: **SW8260B**

MBLK		Sample ID: VBLKW1-151023-R174574A				Units: µg/L		Analysis Date: 10/23/15 07:50 PM		
Client ID:		Run ID: VMS6_151023A			SeqNo: 3527591		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	1.89	1.0								
Chloromethane	ND	1.0								
cis-1,2-Dichloroethene	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
Dibromochloromethane	ND	1.0								
Ethylbenzene	ND	1.0								
m,p-Xylene	ND	2.0								
Methylene chloride	ND	5.0								
o-Xylene	ND	1.0								
Styrene	ND	1.0								
Tetrachloroethene	ND	1.0								
Toluene	ND	1.0								
trans-1,2-Dichloroethene	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
Trichloroethene	ND	1.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	3.0								
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>18.71</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>93.6</i>	<i>75-120</i>	<i>0</i>			
<i>Surr: 4-Bromofluorobenzene</i>	<i>19.37</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>96.8</i>	<i>80-110</i>	<i>0</i>			
<i>Surr: Dibromofluoromethane</i>	<i>20.34</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>102</i>	<i>85-115</i>	<i>0</i>			
<i>Surr: Toluene-d8</i>	<i>18.28</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>91.4</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: 1510900
 Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

QC BATCH REPORT

Batch ID: **R174574A** Instrument ID **VMS6** Method: **SW8260B**

LCS		Sample ID: VLCSW1-151023-R174574A				Units: µg/L		Analysis Date: 10/23/15 06:31 PM		
Client ID:		Run ID: VMS6_151023A			SeqNo: 3527590		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	22.85	1.0	20	0	114	75-130	0			
1,1,2,2-Tetrachloroethane	17.72	1.0	20	0	88.6	75-130	0			
1,1,2-Trichloroethane	18.23	1.0	20	0	91.2	75-125	0			
1,1-Dichloroethane	21.85	1.0	20	0	109	75-133	0			
1,1-Dichloroethene	24.12	1.0	20	0	121	70-145	0			
1,2-Dichloroethane	21.55	1.0	20	0	108	78-125	0			
1,2-Dichloropropane	22.66	1.0	20	0	113	75-125	0			
2-Butanone	19.08	5.0	20	0	95.4	55-150	0			
2-Hexanone	17.43	5.0	20	0	87.2	60-135	0			
4-Methyl-2-pentanone	20.83	1.0	20	0	104	77-178	0			
Acetone	22.07	10	20	0	110	60-160	0			
Benzene	23.27	1.0	20	0	116	85-125	0			
Bromodichloromethane	20.19	1.0	20	0	101	75-125	0			
Bromoform	19.38	1.0	20	0	96.9	60-125	0			
Bromomethane	20.87	1.0	20	0	104	30-185	0			
Carbon disulfide	31.35	1.0	20	0	157	60-165	0			
Carbon tetrachloride	23.74	1.0	20	0	119	65-140	0			
Chlorobenzene	19.34	1.0	20	0	96.7	80-120	0			
Chloroethane	20.72	1.0	20	0	104	50-140	0			
Chloroform	20.54	1.0	20	0	103	80-130	0			B
Chloromethane	17.08	1.0	20	0	85.4	50-130	0			
cis-1,2-Dichloroethene	23.5	1.0	20	0	118	75-134	0			
cis-1,3-Dichloropropene	21.45	1.0	20	0	107	70-130	0			
Dibromochloromethane	19.1	1.0	20	0	95.5	60-115	0			
Ethylbenzene	19.39	1.0	20	0	97	85-125	0			
m,p-Xylene	39.41	2.0	40	0	98.5	75-130	0			
Methylene chloride	22.86	5.0	20	0	114	75-140	0			
o-Xylene	19.04	1.0	20	0	95.2	80-125	0			
Styrene	19.58	1.0	20	0	97.9	85-125	0			
Tetrachloroethene	20.74	1.0	20	0	104	77-138	0			
Toluene	20.33	1.0	20	0	102	85-125	0			
trans-1,2-Dichloroethene	23.35	1.0	20	0	117	80-140	0			
trans-1,3-Dichloropropene	18.79	1.0	20	0	94	81-123	0			
Trichloroethene	20.46	1.0	20	0	102	84-130	0			
Vinyl chloride	18.35	1.0	20	0	91.8	50-136	0			
Xylenes, Total	58.45	3.0	60	0	97.4	80-126	0			
Surr: 1,2-Dichloroethane-d4	17.88	0	20	0	89.4	75-120	0			
Surr: 4-Bromofluorobenzene	19.33	0	20	0	96.6	80-110	0			
Surr: Dibromofluoromethane	20.03	0	20	0	100	85-115	0			
Surr: Toluene-d8	17.9	0	20	0	89.5	85-110	0			

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

Client: AMEC Foster Wheeler
 Work Order: 1510900
 Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

QC BATCH REPORT

Batch ID: **R174574A** Instrument ID **VMS6** Method: **SW8260B**

MS		Sample ID: 1510993-03A MS				Units: µg/L		Analysis Date: 10/24/15 04:12 AM		
Client ID:		Run ID: VMS6_151023A			SeqNo: 3527602		Prep Date:		DF: 5	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	106.8	5.0	100	0	107	75-130	0			
1,1,2,2-Tetrachloroethane	82.85	5.0	100	0	82.8	75-130	0			
1,1,2-Trichloroethane	88.2	5.0	100	0	88.2	75-125	0			
1,1-Dichloroethane	104.2	5.0	100	0	104	75-133	0			
1,1-Dichloroethene	111.2	5.0	100	0	111	70-145	0			
1,2-Dichloroethane	98.55	5.0	100	0	98.6	78-125	0			
1,2-Dichloropropane	109.6	5.0	100	0	110	75-125	0			
2-Butanone	95.15	25	100	0	95.2	55-150	0			
2-Hexanone	77.4	25	100	0	77.4	60-135	0			
4-Methyl-2-pentanone	98	5.0	100	0	98	77-178	0			
Acetone	257.4	50	100	199.9	57.5	60-160	0			S
Benzene	110.6	5.0	100	0	111	85-125	0			
Bromodichloromethane	95.85	5.0	100	0	95.8	75-125	0			
Bromoform	85.1	5.0	100	0	85.1	60-125	0			
Bromomethane	50.9	5.0	100	0	50.9	30-185	0			
Carbon disulfide	126.4	5.0	100	0	126	60-165	0			
Carbon tetrachloride	112.6	5.0	100	0	113	65-140	0			
Chlorobenzene	100.2	5.0	100	0	100	80-120	0			
Chloroethane	91.7	5.0	100	0	91.7	50-140	0			
Chloroform	102.2	5.0	100	0	102	80-130	0			B
Chloromethane	46.6	5.0	100	0	46.6	50-130	0			S
cis-1,2-Dichloroethene	114.9	5.0	100	0	115	75-134	0			
cis-1,3-Dichloropropene	92.65	5.0	100	0	92.6	70-130	0			
Dibromochloromethane	89.5	5.0	100	0	89.5	60-115	0			
Ethylbenzene	103.4	5.0	100	0	103	85-125	0			
m,p-Xylene	213.6	10	200	0	107	75-130	0			
Methylene chloride	109.9	25	100	0	110	75-140	0			
o-Xylene	100.9	5.0	100	0	101	80-125	0			
Styrene	103	5.0	100	0	103	85-125	0			
Tetrachloroethene	110.7	5.0	100	0	111	77-138	0			
Toluene	104.9	5.0	100	0	105	85-125	0			
trans-1,2-Dichloroethene	107.8	5.0	100	0	108	80-140	0			
trans-1,3-Dichloropropene	85.8	5.0	100	0	85.8	81-123	0			
Trichloroethene	99.35	5.0	100	0	99.4	84-130	0			
Vinyl chloride	71.95	5.0	100	0	72	50-136	0			
Xylenes, Total	314.5	15	300	0	105	80-126	0			
Surr: 1,2-Dichloroethane-d4	96.3	0	100	0	96.3	75-120	0			
Surr: 4-Bromofluorobenzene	100.2	0	100	0	100	80-110	0			
Surr: Dibromofluoromethane	101.2	0	100	0	101	85-115	0			
Surr: Toluene-d8	95.05	0	100	0	95	85-110	0			

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

Client: AMEC Foster Wheeler
 Work Order: 1510900
 Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

QC BATCH REPORT

Batch ID: **R174574A** Instrument ID **VMS6** Method: **SW8260B**

MSD		Sample ID: 1510993-03A MSD				Units: µg/L		Analysis Date: 10/24/15 04:39 AM		
Client ID:		Run ID: VMS6_151023A			SeqNo: 3527603		Prep Date:		DF: 5	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	110.8	5.0	100	0	111	75-130	106.8	3.63	30	
1,1,2,2-Tetrachloroethane	91.3	5.0	100	0	91.3	75-130	82.85	9.7	30	
1,1,2-Trichloroethane	95.45	5.0	100	0	95.4	75-125	88.2	7.9	30	
1,1-Dichloroethane	107.6	5.0	100	0	108	75-133	104.2	3.26	30	
1,1-Dichloroethene	118.1	5.0	100	0	118	70-145	111.2	6.02	30	
1,2-Dichloroethane	102	5.0	100	0	102	78-125	98.55	3.44	30	
1,2-Dichloropropane	114.1	5.0	100	0	114	75-125	109.6	4.02	30	
2-Butanone	99.4	25	100	0	99.4	55-150	95.15	4.37	30	
2-Hexanone	92.5	25	100	0	92.5	60-135	77.4	17.8	30	
4-Methyl-2-pentanone	108.2	5.0	100	0	108	77-178	98	9.94	30	
Acetone	260.3	50	100	199.9	60.4	60-160	257.4	1.12	30	
Benzene	112.6	5.0	100	0	113	85-125	110.6	1.79	30	
Bromodichloromethane	94.3	5.0	100	0	94.3	75-125	95.85	1.63	30	
Bromoform	92	5.0	100	0	92	60-125	85.1	7.79	30	
Bromomethane	62.95	5.0	100	0	63	30-185	50.9	21.2	30	
Carbon disulfide	135.7	5.0	100	0	136	60-165	126.4	7.14	30	
Carbon tetrachloride	120.2	5.0	100	0	120	65-140	112.6	6.57	30	
Chlorobenzene	104.8	5.0	100	0	105	80-120	100.2	4.49	30	
Chloroethane	95.35	5.0	100	0	95.4	50-140	91.7	3.9	30	
Chloroform	103.4	5.0	100	0	103	80-130	102.2	1.22	30	B
Chloromethane	55.75	5.0	100	0	55.8	50-130	46.6	17.9	30	
cis-1,2-Dichloroethene	118	5.0	100	0	118	75-134	114.9	2.7	30	
cis-1,3-Dichloropropene	97.6	5.0	100	0	97.6	70-130	92.65	5.2	30	
Dibromochloromethane	95.45	5.0	100	0	95.4	60-115	89.5	6.43	30	
Ethylbenzene	106.6	5.0	100	0	107	85-125	103.4	3.05	30	
m,p-Xylene	219.4	10	200	0	110	75-130	213.6	2.7	30	
Methylene chloride	116.3	25	100	0	116	75-140	109.9	5.66	30	
o-Xylene	104.4	5.0	100	0	104	80-125	100.9	3.41	30	
Styrene	105.2	5.0	100	0	105	85-125	103	2.06	30	
Tetrachloroethene	115.8	5.0	100	0	116	77-138	110.7	4.55	30	
Toluene	107.8	5.0	100	0	108	85-125	104.9	2.68	30	
trans-1,2-Dichloroethene	117.1	5.0	100	0	117	80-140	107.8	8.32	30	
trans-1,3-Dichloropropene	89.5	5.0	100	0	89.5	81-123	85.8	4.22	30	
Trichloroethene	101.4	5.0	100	0	101	84-130	99.35	1.99	30	
Vinyl chloride	74.25	5.0	100	0	74.2	50-136	71.95	3.15	30	
Xylenes, Total	323.8	15	300	0	108	80-126	314.5	2.93	30	
Surr: 1,2-Dichloroethane-d4	96.4	0	100	0	96.4	75-120	96.3	0.104	30	
Surr: 4-Bromofluorobenzene	98.85	0	100	0	98.8	80-110	100.2	1.36	30	
Surr: Dibromofluoromethane	102.9	0	100	0	103	85-115	101.2	1.62	30	
Surr: Toluene-d8	97.8	0	100	0	97.8	85-110	95.05	2.85	30	

The following samples were analyzed in this batch:

1510900-01A	1510900-02A	1510900-03A
1510900-04A	1510900-05A	

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

Client: AMEC Foster Wheeler
 Work Order: 1510900
 Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

QC BATCH REPORT

Batch ID: **R173883** Instrument ID **LACHAT2** Method: **E353.2 R2.0**

MBLK	Sample ID: MBLK-R173883		Units: mg/L		Analysis Date: 10/15/15 10:16 AM					
Client ID:	Run ID: LACHAT2_151015E		SeqNo: 3511882		Prep Date:					
					DF: 1					
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Nitrogen, Nitrate-Nitrite ND 0.020

LCS	Sample ID: LCS-R173883		Units: mg/L		Analysis Date: 10/15/15 10:16 AM					
Client ID:	Run ID: LACHAT2_151015E		SeqNo: 3511883		Prep Date:					
					DF: 1					
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Nitrogen, Nitrate-Nitrite 5.116 0.020 5 0 102 80-120 0

MS	Sample ID: 1510765-01C MS		Units: mg/L		Analysis Date: 10/15/15 10:16 AM					
Client ID:	Run ID: LACHAT2_151015E		SeqNo: 3511890		Prep Date:					
					DF: 1					
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Nitrogen, Nitrate-Nitrite 5.378 0.020 5 0.5285 97 75-125 0

MSD	Sample ID: 1510765-01C MSD		Units: mg/L		Analysis Date: 10/15/15 10:16 AM					
Client ID:	Run ID: LACHAT2_151015E		SeqNo: 3511891		Prep Date:					
					DF: 1					
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Nitrogen, Nitrate-Nitrite 5.354 0.020 5 0.5285 96.5 75-125 5.378 0.447 20

The following samples were analyzed in this batch:

1510900-01B	1510900-02B	1510900-03B
1510900-04B	1510900-05B	1510900-06B
1510900-07B		

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

Client: AMEC Foster Wheeler
 Work Order: 1510900
 Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

QC BATCH REPORT

Batch ID: **R174181** Instrument ID **TOC3** Method: **SW9060A**

MBLK	Sample ID: MBLK-R174181		Units: mg/L		Analysis Date: 10/19/15 11:30 AM					
Client ID:	Run ID: TOC3_151019A		SeqNo: 3517989		Prep Date:		DF: 1			
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: LCS-R174181		Units: mg/L		Analysis Date: 10/19/15 11:30 AM					
Client ID:	Run ID: TOC3_151019A		SeqNo: 3517990		Prep Date:		DF: 1			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Organic Carbon, Total 4.92 0.50 5 0 98.4 91-110 0

MS	Sample ID: 1510613-02B MS		Units: mg/L		Analysis Date: 10/19/15 11:30 AM					
Client ID:	Run ID: TOC3_151019A		SeqNo: 3517994		Prep Date:		DF: 2			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Organic Carbon, Total 11.21 1.0 10 1.447 97.6 87-120 0

MSD	Sample ID: 1510613-02B MSD		Units: mg/L		Analysis Date: 10/19/15 11:30 AM					
Client ID:	Run ID: TOC3_151019A		SeqNo: 3517995		Prep Date:		DF: 2			
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Organic Carbon, Total 11.18 1.0 10 1.447 97.3 87-120 11.21 0.268 5

The following samples were analyzed in this batch: 1510900-01B 1510900-02B

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

Client: AMEC Foster Wheeler
 Work Order: 1510900
 Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

QC BATCH REPORT

Batch ID: **R174265b** Instrument ID **Titrator 1** Method: **A2320 B-97**

MBLK		Sample ID: WBLKW1-151020-R174265b				Units: mg/L		Analysis Date: 10/20/15 05:05 PM		
Client ID:		Run ID: TITRATOR 1_151020D				SeqNo: 3520062		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Alkalinity, Bicarbonate (as CaCO3)	4.4	10								Jx
Alkalinity, Total (as CaCO3)	4.4	10								Jx

LCS		Sample ID: WLCSW1-151020-R174265b				Units: mg/L		Analysis Date: 10/20/15 05:05 PM		
Client ID:		Run ID: TITRATOR 1_151020D				SeqNo: 3520063		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Alkalinity, Total (as CaCO3)	976	10	1000	0	97.6	90-106	0			x

DUP		Sample ID: 1510908-06A DUP				Units: mg/L		Analysis Date: 10/20/15 05:05 PM		
Client ID:		Run ID: TITRATOR 1_151020D				SeqNo: 3520071		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Alkalinity, Bicarbonate (as CaCO3)	287.6	10	0	0	0		285.9	0.582	20	x
Alkalinity, Total (as CaCO3)	306.5	10	0	0	0		303	1.16	20	x

DUP		Sample ID: 1510900-04D DUP				Units: mg/L		Analysis Date: 10/20/15 05:05 PM		
Client ID: ATR-MW25(45.2)-G101315		Run ID: TITRATOR 1_151020D				SeqNo: 3520077		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Alkalinity, Bicarbonate (as CaCO3)	225	10	0	0	0		226.3	0.576	20	x
Alkalinity, Total (as CaCO3)	225	10	0	0	0		226.3	0.576	20	x

The following samples were analyzed in this batch:

1510900-01D	1510900-02D	1510900-03D
1510900-04D	1510900-05D	1510900-06D
1510900-07D		

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

Client: AMEC Foster Wheeler
Work Order: 1510900
Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

QC BATCH REPORT

Batch ID: **R174266C** Instrument ID **TOC3** Method: **SW9060A**

MBLK	Sample ID: MBLK-R174266C			Units: mg/L		Analysis Date: 10/20/15 12:54 PM				
Client ID:	Run ID: TOC3_151020A			SeqNo: 3520136		Prep Date:		DF: 1		
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: LCS-R174266C			Units: mg/L		Analysis Date: 10/20/15 12:54 PM				
Client ID:	Run ID: TOC3_151020A			SeqNo: 3520137		Prep Date:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual

Organic Carbon, Total 4.816 0.50 5 0 96.3 91-110 0

The following samples were analyzed in this batch:

1510900-02B	1510900-03B	1510900-04B
1510900-05B	1510900-06B	1510900-07B

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

Client: AMEC Foster Wheeler
 Work Order: 1510900
 Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

QC BATCH REPORT

Batch ID: **R174407** Instrument ID **IC3** Method: **SW9056A**

MBLK		Sample ID: CCB/MBLK-R174407				Units: mg/L		Analysis Date: 10/21/15 10:29 AM			
Client ID:		Run ID: IC3_151021A				SeqNo: 3522850		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Chloride	ND	1.0									
Sulfate	ND	1.0									

LCS		Sample ID: LCS-R174407				Units: mg/L		Analysis Date: 10/21/15 10:49 AM			
Client ID:		Run ID: IC3_151021A				SeqNo: 3522851		Prep Date:		DF: 1	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Chloride	9.488	1.0	10	0	94.9	88-110	0				
Sulfate	9.949	1.0	10	0	99.5	85-110	0				

MS		Sample ID: 15101005-01C MS				Units: mg/L		Analysis Date: 10/21/15 01:51 PM			
Client ID:		Run ID: IC3_151021A				SeqNo: 3522866		Prep Date:		DF: 20	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Chloride	256	20	200	57.94	99	75-125	0				
Sulfate	348	20	200	134.5	107	75-125	0				

MSD		Sample ID: 15101005-01C MSD				Units: mg/L		Analysis Date: 10/21/15 02:11 PM			
Client ID:		Run ID: IC3_151021A				SeqNo: 3522868		Prep Date:		DF: 20	
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual	
Chloride	255.1	20	200	57.94	98.6	75-125	256	0.345	20		
Sulfate	341	20	200	134.5	103	75-125	348	2.04	20		

The following samples were analyzed in this batch:

1510900-01D	1510900-02D	1510900-03D
1510900-04D	1510900-05D	1510900-06D
1510900-07D		

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

Client: AMEC Foster Wheeler
 Work Order: 1510900
 Project: Textron/Torx Rochester, IN 3359-15-1040.09.01

QC BATCH REPORT

Batch ID: **R174497** Instrument ID **IC3** Method: **SW9056A**

MBLK		Sample ID: CCB/MBLK-R174497				Units: mg/L		Analysis Date: 10/22/15 02:15 AM		
Client ID:		Run ID: IC3_151022A				SeqNo: 3525296		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	ND	1.0								
Sulfate	ND	1.0								

LCS		Sample ID: LCS-R174497				Units: mg/L		Analysis Date: 10/22/15 02:36 AM		
Client ID:		Run ID: IC3_151022A				SeqNo: 3525299		Prep Date:		DF: 1
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	9.529	1.0	10	0	95.3	88-110	0			
Sulfate	9.947	1.0	10	0	99.5	85-110	0			

MS		Sample ID: 1510900-02D MS				Units: mg/L		Analysis Date: 10/22/15 12:18 PM		
Client ID: ATR-MW25(16.4)-G101315		Run ID: IC3_151022A				SeqNo: 3525322		Prep Date:		DF: 5
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	79.68	5.0	50	28.06	103	75-125	0			
Sulfate	71.07	5.0	50	19.43	103	75-125	0			

MSD		Sample ID: 1510900-02D MSD				Units: mg/L		Analysis Date: 10/22/15 12:38 PM		
Client ID: ATR-MW25(16.4)-G101315		Run ID: IC3_151022A				SeqNo: 3525324		Prep Date:		DF: 5
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	79.44	5.0	50	28.06	103	75-125	79.68	0.302	20	
Sulfate	70.18	5.0	50	19.43	102	75-125	71.07	1.25	20	

The following samples were analyzed in this batch:

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



Cincinnati, OH
+1 513 733 5336

Fort Collins, CO
+1 970 490 1511

Everett, WA
+1 425 356 2600

Holland, MI
+1 616 399 6070

Chain of Custody Form

Houston, TX
+1 281 530 5656

Spring City, PA
+1 610 948 4903

South Charleston, WV
+1 304 356 3168

Middletown, PA
+1 717 944 5541

Salt Lake City, UT
+1 801 266 7700

York, PA
+1 717 505 5280

Page 1 of 1

COC ID: 27660

Environmental

ALS Project Manager:

ALS Work Order #: 1510900

Customer Information		Project Information		Parameter/Method Request for Analysis											
Purchase Order	CO12605142	Project Name	TFS Rochester	A	VOCs (8260B)										
Work Order		Project Number	3359151040	B	TOC, Nitrate-Nitrite										
Company Name	AMEC Foster Wheeler	Bill To Company	AMEC Foster Wheeler	C	Iron and Manganese										
Send Report To	Paul Stork	Invoice Attn	Paul Stork	D	Chloride, Sulfate, Alkalinity + Bicarb										
Address	521 Byers Road, Suite 204	Address	521 Byers Road, Suite 204	E											
				F											
City/State/Zip	Miamisburg, OH 45342	City/State/Zip	Miamisburg, OH 45342	G											
Phone	(937) 859-3600	Phone	(937) 859-3600	H											
Fax	(937) 859-7951	Fax	(937) 859-7951	I											
e-Mail Address	Paul.Stork@amec.fw.com	e-Mail Address		J											

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	ATR-MW15 - G101315	10-13-15	0950	GW		6	X	X	X	X							
2	ATR-MW25 (16.4) - G101315	10-13-15	0955	GW		6	X	X	X	X							
3	ATR-MW25 (32.6) - G101315	10-13-15	1055	GW		6	X	X	X	X							
4	ATR-MW25 (45.2) - G101315	10-13-15	1150	GW		6	X	X	X	X							
5	ATR-OW4 (35) - G101315	10-13-15	1305	GW		6	X	X	X	X							
6	ATR-OW4 (54) - G101315	10-13-15	1405	GW		6	X	X	X	X							
7	ATR-EB001 - G101315	10-13-15	0915	GW		6	X	X	X	X							
8	TRIP-BLANK	10-13-15	-	W		1	X										
9																	
10																	

Sampler(s) Please Print & Sign <i>Sam Portyler</i>		Shipment Method		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>Sam Portyler</i>	Date: 10-13-15	Time: 1430	Received by: <i>[Signature]</i>	Notes:							
Relinquished by: <i>[Signature]</i>	Date: 10-14-15	Time: 1240	Received by (Laboratory): <i>[Signature]</i>	Cooler ID	Cooler Temp	GC Package: (Check One Box Below)					
Logged by (Laboratory): DPS	Date: 10/14/15	Time: 1300	Checked by (Laboratory): <i>[Signature]</i>		9.0°C	<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		
Preservative Key: 1-HCl 2-HNO ₃ 3-H ₂ SO ₄ 4-NaOH 5-Na ₂ S ₂ O ₅ 6-NaHSO ₄ 7-Other 8-4°C 9-5035											

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

Sample Receipt Checklist

Client Name: **AMEC - DAYTON**

Date/Time Received: **14-Oct-15 12:40**

Work Order: **1510900**

Received by: **DS**

Checklist completed by Diane Shaw 14-Oct-15
eSignature Date

Reviewed by: Joseph Ribar 15-Oct-15
eSignature Date

Matrices: Groundwater

Carrier name: ALSHN

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

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

Custody seals intact on sample bottles? Yes No Not Present

Chain of custody present? Yes No

Chain of custody signed when relinquished and received? Yes No

Chain of custody agrees with sample labels? Yes No

Samples in proper container/bottle? Yes No

Sample containers intact? Yes No

Sufficient sample volume for indicated test? Yes No

All samples received within holding time? Yes No

Container/Temp Blank temperature in compliance? Yes No

Sample(s) received on ice? Yes No

Temperature(s)/Thermometer(s): 4.0/4.0 c SR2

Cooler(s)/Kit(s):

Date/Time sample(s) sent to storage: 10/14/2015 1:39:01 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

September 16, 2015

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

RE: **TORX ROTCHESTER**

Pace Workorder: 16557

Dear Paul Stork:

Enclosed are the analytical results for sample(s) received by the laboratory on Tuesday, September 01, 2015. 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 09/16/2015
RW 9/16/15

Customer Service Representative

Enclosures

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

Total Number of Pages 34

Report ID: 16557 - 704050

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LABORATORY ACCREDITATIONS & CERTIFICATIONS

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



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SAMPLE SUMMARY

Workorder: 16557 TORX ROTCHESTER

Lab ID	Sample ID	Matrix	Date Collected	Date Received
165570001	ATR-MW13-G082615	Water	8/26/2015 13:50	9/1/2015 11:00
165570002	ATR-MW12-G082615	Water	8/26/2015 14:40	9/1/2015 11:00
165570003	ATR-MW6C-G082615	Water	8/26/2015 16:12	9/1/2015 11:00
165570004	ATR-MW82-G082615	Water	8/26/2015 17:50	9/1/2015 11:00
165570005	ATR-EB001-G082615	Water	8/26/2015 18:10	9/1/2015 11:00
165570006	ATR-MW20(51)-G082715	Water	8/27/2015 11:38	9/1/2015 11:00
165570007	ATR-MW20(35)-G082715	Water	8/27/2015 12:40	9/1/2015 11:00
165570008	ATR-MW20(35)-G082715R	Water	8/27/2015 12:40	9/1/2015 11:00
165570009	ATR-MW62-G082715	Water	8/27/2015 13:55	9/1/2015 11:00
165570010	ATR-OW1D-G082715	Water	8/27/2015 15:49	9/1/2015 11:00
165570011	ATR-OW1S-G082715	Water	8/27/2015 16:00	9/1/2015 11:00
165570012	ATR-MW81(27)-G082715	Water	8/27/2015 17:25	9/1/2015 11:00
165570013	ATR-PM3-G082715	Water	8/27/2015 17:50	9/1/2015 11:00
165570014	ATR-MW59(29)-G082715	Water	8/27/2015 17:20	9/1/2015 11:00
165570015	ATR-PM2-G082715	Water	8/27/2015 19:25	9/1/2015 11:00
165570016	ATR-EB001-G082715	Water	8/27/2015 18:45	9/1/2015 11:00
165570017	ATR-FB001-G082715	Water	8/27/2015 19:00	9/1/2015 11:00



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PROJECT SUMMARY

Workorder: 16557 TORX ROTCHESTER

Workorder Comments

The container pH for samples 16557 (0004, 0006, 0013) were measured as below the expected pH range (< 10) for those samples preserved with trisodium phosphate, as assigned to PAES method AM20GAX.

The percent recovery on the MS/MSD for Acetic Acid, Lactic Acid and Propionic Acid were outside the acceptance criteria due to the high sample concentration.

All samples were originally analyzed within holding time, however some dilutions were analyzed outside the holding time date.

This report has been revised to correct the sample identification for 165570012 to read ATR-MW81(27)-G082715.

Batch Comments

Batch: DISG/4816 - AM20GAX Water QC

The matrix spike and/or spike duplicate, recovery or relative percent difference; accuracy influenced by the concentration of the reference sample 165550011. Analyte Methane. Batch acceptance based on laboratory control sample recovery.



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ANALYTICAL RESULTS

Workorder: 16557 TORX ROTCHESTER

Lab ID: 165570001 Date Received: 9/1/2015 11:00 Matrix: Water
 Sample ID: ATR-MW13-G082615 Date Collected: 8/26/2015 13:50

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
EDonors - MICR								
Analysis Desc: AM23G			Analytical Method: AM23G					
Lactic Acid	1.0	mg/l	1.0	0.12	10	9/11/2015 03:01	KB	d
Acetic Acid	46	mg/l	0.70	0.080	10	9/11/2015 03:01	KB	d,B
Propionic Acid	49	mg/l	0.50	0.11	10	9/11/2015 03:01	KB	d
Formic Acid	0.18	mg/l	0.10	0.0070	1	9/6/2015 04:44	KB	B
Butyric Acid	0.32	mg/l	0.050	0.0070	1	9/6/2015 04:44	KB	B
Pyruvic Acid	0.39	mg/l	0.15	0.0090	1	9/6/2015 04:44	KB	
i-Pentanoic Acid	0.054J	mg/l	0.15	0.0080	1	9/6/2015 04:44	KB	
Pentanoic Acid	0.070 U	mg/l	0.070	0.014	1	9/6/2015 04:44	KB	
i-Hexanoic Acid	0.20 U	mg/l	0.20	0.10	1	9/6/2015 04:44	KB	
Hexanoic Acid	0.50 U	mg/l	0.50	0.12	1	9/6/2015 04:44	KB	
RISK - MICR								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	850	ug/l	0.50	0.042	1	9/3/2015 12:08	BW	M3,D3,n,M5
Ethane	28	ug/l	0.10	0.0020	1	9/3/2015 12:08	BW	n
Ethene	220	ug/l	0.10	0.0030	1	9/3/2015 12:08	BW	n



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ANALYTICAL RESULTS

Workorder: 16557 TORX ROTCHESTER

Lab ID: 165570002 Date Received: 9/1/2015 11:00 Matrix: Water
 Sample ID: ATR-MW12-G082615 Date Collected: 8/26/2015 14:40

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

Analysis Desc: AM23G		Analytical Method: AM23G						
Lactic Acid	0.35J	mg/l	1.0	0.12	10	9/11/2015 04:38	KB	d
Acetic Acid	48	mg/l	0.70	0.080	10	9/11/2015 04:38	KB	d,B
Propionic Acid	27	mg/l	0.50	0.11	10	9/11/2015 04:38	KB	d
Formic Acid	0.35	mg/l	0.10	0.0070	1	9/6/2015 07:10	KB	B
Butyric Acid	4.0	mg/l	0.050	0.0070	1	9/6/2015 07:10	KB	B
Pyruvic Acid	0.28	mg/l	0.15	0.0090	1	9/6/2015 07:10	KB	
i-Pentanoic Acid	0.19	mg/l	0.15	0.0080	1	9/6/2015 07:10	KB	
Pentanoic Acid	0.094	mg/l	0.070	0.014	1	9/6/2015 07:10	KB	
i-Hexanoic Acid	0.20 U	mg/l	0.20	0.10	1	9/6/2015 07:10	KB	
Hexanoic Acid	0.50 U	mg/l	0.50	0.12	1	9/6/2015 07:10	KB	

RISK - MICR

Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	1400	ug/l	0.50	0.042	1	9/3/2015 12:20	BW	M3,D3,n,M5
Ethane	19	ug/l	0.10	0.0020	1	9/3/2015 12:20	BW	n
Ethene	520	ug/l	0.10	0.0030	1	9/3/2015 12:20	BW	n



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ANALYTICAL RESULTS

Workorder: 16557 TORX ROTCHESTER

Lab ID: 165570003 Date Received: 9/1/2015 11:00 Matrix: Water
 Sample ID: ATR-MW6C-G082615 Date Collected: 8/26/2015 16:12

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

Analysis Desc: AM23G		Analytical Method: AM23G						
Lactic Acid	0.10 U	mg/l	0.10	0.012	1	9/6/2015 07:58	KB	M3,D3,M5
Acetic Acid	3.2	mg/l	0.070	0.0080	1	9/6/2015 07:58	KB	M3,D3,B,M5
Propionic Acid	3.5	mg/l	0.050	0.011	1	9/6/2015 07:58	KB	M3,D3,M5
Formic Acid	0.049J	mg/l	0.10	0.0070	1	9/6/2015 07:58	KB	B
Butyric Acid	0.043J	mg/l	0.050	0.0070	1	9/6/2015 07:58	KB	B
Pyruvic Acid	0.015J	mg/l	0.15	0.0090	1	9/6/2015 07:58	KB	
i-Pentanoic Acid	0.015J	mg/l	0.15	0.0080	1	9/6/2015 07:58	KB	
Pentanoic Acid	0.070 U	mg/l	0.070	0.014	1	9/6/2015 07:58	KB	
i-Hexanoic Acid	0.20 U	mg/l	0.20	0.10	1	9/6/2015 07:58	KB	
Hexanoic Acid	0.50 U	mg/l	0.50	0.12	1	9/6/2015 07:58	KB	

RISK - MICR

Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	1500	ug/l	0.50	0.042	1	9/3/2015 12:30	BW	M3,D3,n,M5
Ethane	18	ug/l	0.10	0.0020	1	9/3/2015 12:30	BW	n
Ethene	39	ug/l	0.10	0.0030	1	9/3/2015 12:30	BW	n



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ANALYTICAL RESULTS

Workorder: 16557 TORX ROTCHESTER

Lab ID: 165570004 Date Received: 9/1/2015 11:00 Matrix: Water
 Sample ID: ATR-MW82-G082615 Date Collected: 8/26/2015 17:50

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

Analysis Desc: AM23G Analytical Method: AM23G

Lactic Acid	160	mg/l	10	1.2	100	9/11/2015 07:04	KB	d
Acetic Acid	670	mg/l	7.0	0.80	100	9/11/2015 07:04	KB	d,B
Propionic Acid	520	mg/l	5.0	1.1	100	9/11/2015 07:04	KB	d
Formic Acid	4.5J	mg/l	10	0.70	100	9/11/2015 07:04	KB	d,B
Butyric Acid	270	mg/l	5.0	0.70	100	9/11/2015 07:04	KB	d
Pyruvic Acid	5.9	mg/l	1.5	0.090	10	9/11/2015 06:15	KB	d
i-Pentanoic Acid	1.6	mg/l	1.5	0.080	10	9/11/2015 06:15	KB	d
Pentanoic Acid	3.1	mg/l	0.70	0.14	10	9/11/2015 06:15	KB	d
i-Hexanoic Acid	0.25	mg/l	0.20	0.10	1	9/6/2015 08:47	KB	
Hexanoic Acid	0.50 U	mg/l	0.50	0.12	1	9/6/2015 08:47	KB	

RISK - MICR

Analysis Desc: AM20GAX Analytical Method: AM20GAX

Methane	1400	ug/l	0.50	0.042	1	9/8/2015 07:41	BW	n
Ethane	1.4	ug/l	0.10	0.0020	1	9/8/2015 07:41	BW	n
Ethene	26	ug/l	0.10	0.0030	1	9/8/2015 07:41	BW	n



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ANALYTICAL RESULTS

Workorder: 16557 TORX ROTCHESTER

Lab ID: 165570005 Date Received: 9/1/2015 11:00 Matrix: Water
 Sample ID: ATR-EB001-G082615 Date Collected: 8/26/2015 18:10

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
EDonors - MICR								
Analysis Desc: AM23G			Analytical Method: AM23G					
Lactic Acid	0.019J	mg/l	0.10	0.012	1	9/6/2015 09:35	KB	M3,D3,M5
Acetic Acid	0.067J	mg/l	0.070	0.0080	1	9/6/2015 09:35	KB	M3,D3,B,M5
Propionic Acid	0.029J	mg/l	0.050	0.011	1	9/6/2015 09:35	KB	M3,D3,M5
Formic Acid	0.042J	mg/l	0.10	0.0070	1	9/6/2015 09:35	KB	B
Butyric Acid	0.030J	mg/l	0.050	0.0070	1	9/6/2015 09:35	KB	B
Pyruvic Acid	0.15 U	mg/l	0.15	0.0090	1	9/6/2015 09:35	KB	
i-Pentanoic Acid	0.15 U	mg/l	0.15	0.0080	1	9/6/2015 09:35	KB	
Pentanoic Acid	0.070 U	mg/l	0.070	0.014	1	9/6/2015 09:35	KB	
i-Hexanoic Acid	0.20 U	mg/l	0.20	0.10	1	9/6/2015 09:35	KB	
Hexanoic Acid	0.50 U	mg/l	0.50	0.12	1	9/6/2015 09:35	KB	

RISK - MICR								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	0.15J	ug/l	0.50	0.042	1	9/8/2015 07:52	BW	n
Ethane	0.0032J	ug/l	0.10	0.0020	1	9/8/2015 07:52	BW	n
Ethene	0.0043J	ug/l	0.10	0.0030	1	9/8/2015 07:52	BW	n



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ANALYTICAL RESULTS

Workorder: 16557 TORX ROTCHESTER

Lab ID: 165570006 Date Received: 9/1/2015 11:00 Matrix: Water
 Sample ID: ATR-MW20(51)-G082715 Date Collected: 8/27/2015 11:38

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

Analysis Desc: AM23G		Analytical Method: AM23G						
Lactic Acid	4.3	mg/l	1.0	0.12	10	9/11/2015 07:52	KB	d
Acetic Acid	600	mg/l	7.0	0.80	100	9/11/2015 08:41	KB	d,B
Propionic Acid	470	mg/l	5.0	1.1	100	9/11/2015 08:41	KB	d
Formic Acid	3.2J	mg/l	10	0.70	100	9/11/2015 08:41	KB	d,B
Butyric Acid	64	mg/l	5.0	0.70	100	9/11/2015 08:41	KB	d
Pyruvic Acid	2.6	mg/l	1.5	0.090	10	9/11/2015 07:52	KB	d
i-Pentanoic Acid	1.5	mg/l	1.5	0.080	10	9/11/2015 07:52	KB	d
Pentanoic Acid	0.39J	mg/l	0.70	0.14	10	9/11/2015 07:52	KB	d
i-Hexanoic Acid	0.20 U	mg/l	0.20	0.10	1	9/6/2015 10:24	KB	
Hexanoic Acid	0.48J	mg/l	0.50	0.12	1	9/6/2015 10:24	KB	

RISK - MICR

Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	1500	ug/l	0.50	0.042	1	9/8/2015 08:01	BW	n
Ethane	44	ug/l	0.10	0.0020	1	9/8/2015 08:01	BW	n
Ethene	270	ug/l	0.10	0.0030	1	9/8/2015 08:01	BW	n



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ANALYTICAL RESULTS

Workorder: 16557 TORX ROTCHESTER

Lab ID: 165570007 Date Received: 9/1/2015 11:00 Matrix: Water
 Sample ID: ATR-MW20(35)-G082715 Date Collected: 8/27/2015 12:40

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
EDonors - MICR								
Analysis Desc: AM23G			Analytical Method: AM23G					
Lactic Acid	0.028J	mg/l	0.10	0.012	1	9/6/2015 11:13	KB	M3,D3,M5
Acetic Acid	13	mg/l	0.70	0.080	10	9/11/2015 09:30	KB	d,B
Propionic Acid	1.1	mg/l	0.050	0.011	1	9/6/2015 11:13	KB	M3,D3,M5
Formic Acid	0.10	mg/l	0.10	0.0070	1	9/6/2015 11:13	KB	B
Butyric Acid	0.080	mg/l	0.050	0.0070	1	9/6/2015 11:13	KB	B
Pyruvic Acid	0.028J	mg/l	0.15	0.0090	1	9/6/2015 11:13	KB	
i-Pentanoic Acid	0.072J	mg/l	0.15	0.0080	1	9/6/2015 11:13	KB	
Pentanoic Acid	0.023J	mg/l	0.070	0.014	1	9/6/2015 11:13	KB	
i-Hexanoic Acid	0.20	U mg/l	0.20	0.10	1	9/6/2015 11:13	KB	
Hexanoic Acid	0.50	U mg/l	0.50	0.12	1	9/6/2015 11:13	KB	

RISK - MICR								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	1900	ug/l	0.50	0.042	1	9/8/2015 08:12	BW	n
Ethane	30	ug/l	0.10	0.0020	1	9/8/2015 08:12	BW	n
Ethene	110	ug/l	0.10	0.0030	1	9/8/2015 08:12	BW	n



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ANALYTICAL RESULTS

Workorder: 16557 TORX ROTCHESTER

Lab ID: 165570008 Date Received: 9/1/2015 11:00 Matrix: Water
 Sample ID: ATR-MW20(35)-G082715R Date Collected: 8/27/2015 12:40

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

Analysis Desc: AM23G		Analytical Method: AM23G						
Lactic Acid	0.053J	mg/l	0.10	0.012	1	9/6/2015 12:01	KB	M3,D3,M5
Acetic Acid	12	mg/l	0.70	0.080	10	9/11/2015 10:18	KB	d,B
Propionic Acid	0.86	mg/l	0.50	0.11	10	9/11/2015 10:18	KB	d
Formic Acid	0.11	mg/l	0.10	0.0070	1	9/6/2015 12:01	KB	B
Butyric Acid	0.056	mg/l	0.050	0.0070	1	9/6/2015 12:01	KB	B
Pyruvic Acid	0.029J	mg/l	0.15	0.0090	1	9/6/2015 12:01	KB	
i-Pentanoic Acid	0.073J	mg/l	0.15	0.0080	1	9/6/2015 12:01	KB	
Pentanoic Acid	0.022J	mg/l	0.070	0.014	1	9/6/2015 12:01	KB	
i-Hexanoic Acid	0.20	U mg/l	0.20	0.10	1	9/6/2015 12:01	KB	
Hexanoic Acid	0.50	U mg/l	0.50	0.12	1	9/6/2015 12:01	KB	

RISK - MICR

Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	2000	ug/l	0.50	0.042	1	9/8/2015 08:22	BW	n
Ethane	31	ug/l	0.10	0.0020	1	9/8/2015 08:22	BW	n
Ethene	120	ug/l	0.10	0.0030	1	9/8/2015 08:22	BW	n



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ANALYTICAL RESULTS

Workorder: 16557 TORX ROTCHESTER

Lab ID: 165570009 Date Received: 9/1/2015 11:00 Matrix: Water
 Sample ID: ATR-MW62-G082715 Date Collected: 8/27/2015 13:55

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

Analysis Desc: AM23G		Analytical Method: AM23G						
Lactic Acid	0.51	mg/l	0.10	0.012	1	9/6/2015 12:50	KB	M3,D3,M5
Acetic Acid	21	mg/l	0.70	0.080	10	9/11/2015 11:07	KB	d,B
Propionic Acid	3.8	mg/l	0.050	0.011	1	9/6/2015 12:50	KB	M3,D3,M5
Formic Acid	0.20	mg/l	0.10	0.0070	1	9/6/2015 12:50	KB	B
Butyric Acid	2.4	mg/l	0.050	0.0070	1	9/6/2015 12:50	KB	B
Pyruvic Acid	0.042J	mg/l	0.15	0.0090	1	9/6/2015 12:50	KB	
i-Pentanoic Acid	0.15 U	mg/l	0.15	0.0080	1	9/6/2015 12:50	KB	
Pentanoic Acid	0.047J	mg/l	0.070	0.014	1	9/6/2015 12:50	KB	
i-Hexanoic Acid	0.20 U	mg/l	0.20	0.10	1	9/6/2015 12:50	KB	
Hexanoic Acid	0.50 U	mg/l	0.50	0.12	1	9/6/2015 12:50	KB	

RISK - MICR

Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	2000	ug/l	0.50	0.042	1	9/8/2015 08:33	BW	n
Ethane	60	ug/l	0.10	0.0020	1	9/8/2015 08:33	BW	n
Ethene	420	ug/l	0.10	0.0030	1	9/8/2015 08:33	BW	n



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ANALYTICAL RESULTS

Workorder: 16557 TORX ROTCHESTER

Lab ID: 165570010 Date Received: 9/1/2015 11:00 Matrix: Water
 Sample ID: ATR-OW1D-G082715 Date Collected: 8/27/2015 15:49

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
EDonors - MICR								
Analysis Desc: AM23G			Analytical Method: AM23G					
Lactic Acid	1.0 U	mg/l	1.0	0.12	10	9/11/2015 11:55	KB	d
Acetic Acid	280	mg/l	7.0	0.80	100	9/11/2015 12:44	KB	d,B
Propionic Acid	460	mg/l	5.0	1.1	100	9/11/2015 12:44	KB	d
Formic Acid	2.1	mg/l	1.0	0.070	10	9/11/2015 11:55	KB	d,B
Butyric Acid	26	mg/l	0.50	0.070	10	9/11/2015 11:55	KB	d
Pyruvic Acid	1.6	mg/l	1.5	0.090	10	9/11/2015 11:55	KB	d
i-Pentanoic Acid	0.50J	mg/l	1.5	0.080	10	9/11/2015 11:55	KB	d
Pentanoic Acid	0.85	mg/l	0.070	0.014	1	9/6/2015 13:38	KB	
i-Hexanoic Acid	0.20 U	mg/l	0.20	0.10	1	9/6/2015 13:38	KB	
Hexanoic Acid	0.21J	mg/l	0.50	0.12	1	9/6/2015 13:38	KB	

RISK - MICR								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	1400	ug/l	0.50	0.042	1	9/8/2015 08:46	BW	n
Ethane	5.1	ug/l	0.10	0.0020	1	9/8/2015 08:46	BW	n
Ethene	150	ug/l	0.10	0.0030	1	9/8/2015 08:46	BW	n



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ANALYTICAL RESULTS

Workorder: 16557 TORX ROTCHESTER

Lab ID: 165570011 Date Received: 9/1/2015 11:00 Matrix: Water
 Sample ID: ATR-OW1S-G082715 Date Collected: 8/27/2015 16:00

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
EDonors - MICR								
Analysis Desc: AM23G			Analytical Method: AM23G					
Lactic Acid	0.10 U	mg/l	0.10	0.012	1	9/6/2015 14:27	KB	M3,D3,M5
Acetic Acid	2.2	mg/l	0.070	0.0080	1	9/6/2015 14:27	KB	M3,D3,B,M5
Propionic Acid	0.040J	mg/l	0.050	0.011	1	9/6/2015 14:27	KB	M3,D3,M5
Formic Acid	0.047J	mg/l	0.10	0.0070	1	9/6/2015 14:27	KB	B
Butyric Acid	0.089	mg/l	0.050	0.0070	1	9/6/2015 14:27	KB	B
Pyruvic Acid	0.15 U	mg/l	0.15	0.0090	1	9/6/2015 14:27	KB	
i-Pentanoic Acid	0.15 U	mg/l	0.15	0.0080	1	9/6/2015 14:27	KB	
Pentanoic Acid	0.070 U	mg/l	0.070	0.014	1	9/6/2015 14:27	KB	
i-Hexanoic Acid	0.20 U	mg/l	0.20	0.10	1	9/6/2015 14:27	KB	
Hexanoic Acid	0.50 U	mg/l	0.50	0.12	1	9/6/2015 14:27	KB	

RISK - MICR								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	2800	ug/l	0.50	0.042	1	9/8/2015 08:57	BW	n
Ethane	18	ug/l	0.10	0.0020	1	9/8/2015 08:57	BW	n
Ethene	83	ug/l	0.10	0.0030	1	9/8/2015 08:57	BW	n



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ANALYTICAL RESULTS

Workorder: 16557 TORX ROTCHESTER

Lab ID: 165570012 Date Received: 9/1/2015 11:00 Matrix: Water
 Sample ID: ATR-MW81(27)-G082715 Date Collected: 8/27/2015 17:25

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
EDonors - MICR								
Analysis Desc: AM23G			Analytical Method: AM23G					
Lactic Acid	0.38J	mg/l	1.0	0.12	10	9/11/2015 13:33	KB	d
Acetic Acid	270	mg/l	7.0	0.80	100	9/11/2015 14:21	KB	d,B
Propionic Acid	93	mg/l	5.0	1.1	100	9/11/2015 14:21	KB	d
Formic Acid	3.1J	mg/l	10	0.70	100	9/11/2015 14:21	KB	d,B
Butyric Acid	150	mg/l	5.0	0.70	100	9/11/2015 14:21	KB	d
Pyruvic Acid	0.59J	mg/l	1.5	0.090	10	9/11/2015 13:33	KB	d
i-Pentanoic Acid	0.58J	mg/l	1.5	0.080	10	9/11/2015 13:33	KB	d
Pentanoic Acid	3.5	mg/l	0.070	0.014	1	9/6/2015 15:16	KB	
i-Hexanoic Acid	0.29	mg/l	0.20	0.10	1	9/6/2015 15:16	KB	
Hexanoic Acid	1.4	mg/l	0.50	0.12	1	9/6/2015 15:16	KB	

RISK - MICR								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	8500	ug/l	0.50	0.042	1	9/8/2015 09:06	BW	n
Ethane	150	ug/l	0.10	0.0020	1	9/8/2015 09:06	BW	n
Ethene	520	ug/l	0.10	0.0030	1	9/8/2015 09:06	BW	n



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ANALYTICAL RESULTS

Workorder: 16557 TORX ROTCHESTER

Lab ID: 165570013 Date Received: 9/1/2015 11:00 Matrix: Water
 Sample ID: ATR-PM3-G082715 Date Collected: 8/27/2015 17:50

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

Analysis Desc: AM23G		Analytical Method: AM23G						
Lactic Acid	360	mg/l	10	1.2	100	9/11/2015 15:59	KB	d
Acetic Acid	260	mg/l	7.0	0.80	100	9/11/2015 15:59	KB	d,B
Propionic Acid	53	mg/l	5.0	1.1	100	9/11/2015 15:59	KB	d
Formic Acid	31	mg/l	10	0.70	100	9/11/2015 15:59	KB	d,B
Butyric Acid	180	mg/l	5.0	0.70	100	9/11/2015 15:59	KB	d
Pyruvic Acid	23	mg/l	1.5	0.090	10	9/11/2015 15:10	KB	d
i-Pentanoic Acid	1.5	U mg/l	1.5	0.080	10	9/11/2015 15:10	KB	d
Pentanoic Acid	0.72	mg/l	0.070	0.014	1	9/6/2015 16:04	KB	
i-Hexanoic Acid	0.20	U mg/l	0.20	0.10	1	9/6/2015 16:04	KB	
Hexanoic Acid	0.75	mg/l	0.50	0.12	1	9/6/2015 16:04	KB	

RISK - MICR

Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	4000	ug/l	0.50	0.042	1	9/8/2015 09:17	BW	n
Ethane	23	ug/l	0.10	0.0020	1	9/8/2015 09:17	BW	n
Ethene	800	ug/l	0.10	0.0030	1	9/8/2015 09:17	BW	n



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ANALYTICAL RESULTS

Workorder: 16557 TORX ROTCHESTER

Lab ID: 165570014 Date Received: 9/1/2015 11:00 Matrix: Water
 Sample ID: ATR-MW59(29)-G082715 Date Collected: 8/27/2015 17:20

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
EDonors - MICR								
Analysis Desc: AM23G			Analytical Method: AM23G					
Lactic Acid	0.26J	mg/l	1.0	0.12	10	9/11/2015 16:47	KB	d
Acetic Acid	98	mg/l	7.0	0.80	100	9/11/2015 17:38	KB	d,B
Propionic Acid	110	mg/l	5.0	1.1	100	9/11/2015 17:38	KB	d
Formic Acid	0.53J	mg/l	1.0	0.070	10	9/11/2015 16:47	KB	d,B
Butyric Acid	24	mg/l	0.50	0.070	10	9/11/2015 16:47	KB	d
Pyruvic Acid	0.31J	mg/l	1.5	0.090	10	9/11/2015 16:47	KB	d
i-Pentanoic Acid	0.085J	mg/l	1.5	0.080	10	9/11/2015 16:47	KB	d
Pentanoic Acid	0.50	mg/l	0.070	0.014	1	9/6/2015 16:53	KB	
i-Hexanoic Acid	0.20 U	mg/l	0.20	0.10	1	9/6/2015 16:53	KB	
Hexanoic Acid	0.50 U	mg/l	0.50	0.12	1	9/6/2015 16:53	KB	

RISK - MICR								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	18000	ug/l	0.50	0.042	1	9/8/2015 09:28	BW	n
Ethane	400	ug/l	0.10	0.0020	1	9/8/2015 09:28	BW	n
Ethene	4300	ug/l	0.10	0.0030	1	9/8/2015 09:28	BW	n



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ANALYTICAL RESULTS

Workorder: 16557 TORX ROTCHESTER

Lab ID: 165570015 Date Received: 9/1/2015 11:00 Matrix: Water
 Sample ID: ATR-PM2-G082715 Date Collected: 8/27/2015 19:25

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
EDonors - MICR								
Analysis Desc: AM23G			Analytical Method: AM23G					
Lactic Acid	0.11	mg/l	0.10	0.012	1	9/6/2015 17:41	KB	M3,D3,M5
Acetic Acid	39	mg/l	0.70	0.080	10	9/11/2015 18:27	KB	d,B
Propionic Acid	19	mg/l	0.50	0.11	10	9/11/2015 18:27	KB	d
Formic Acid	0.25	mg/l	0.10	0.0070	1	9/6/2015 17:41	KB	B
Butyric Acid	1.3	mg/l	0.050	0.0070	1	9/6/2015 17:41	KB	B
Pyruvic Acid	0.20	mg/l	0.15	0.0090	1	9/6/2015 17:41	KB	
i-Pentanoic Acid	0.056J	mg/l	0.15	0.0080	1	9/6/2015 17:41	KB	
Pentanoic Acid	0.15	mg/l	0.070	0.014	1	9/6/2015 17:41	KB	
i-Hexanoic Acid	0.20 U	mg/l	0.20	0.10	1	9/6/2015 17:41	KB	
Hexanoic Acid	0.50 U	mg/l	0.50	0.12	1	9/6/2015 17:41	KB	

RISK - MICR								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	15000	ug/l	0.50	0.042	1	9/8/2015 09:37	BW	n
Ethane	300	ug/l	0.10	0.0020	1	9/8/2015 09:37	BW	n
Ethene	2900	ug/l	0.10	0.0030	1	9/8/2015 09:37	BW	n



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ANALYTICAL RESULTS

Workorder: 16557 TORX ROTCHESTER

Lab ID: 165570016 Date Received: 9/1/2015 11:00 Matrix: Water
 Sample ID: ATR-EB001-G082715 Date Collected: 8/27/2015 18:45

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
EDonors - MICR								
Analysis Desc: AM23G			Analytical Method: AM23G					
Lactic Acid	0.018J	mg/l	0.10	0.012	1	9/6/2015 18:30	KB	M3,D3,M5
Acetic Acid	0.052J	mg/l	0.070	0.0080	1	9/6/2015 18:30	KB	M3,D3,B,M5
Propionic Acid	0.050 U	mg/l	0.050	0.011	1	9/6/2015 18:30	KB	M3,D3,M5
Formic Acid	0.058J	mg/l	0.10	0.0070	1	9/6/2015 18:30	KB	B
Butyric Acid	0.020J	mg/l	0.050	0.0070	1	9/6/2015 18:30	KB	B
Pyruvic Acid	0.15 U	mg/l	0.15	0.0090	1	9/6/2015 18:30	KB	
i-Pentanoic Acid	0.15 U	mg/l	0.15	0.0080	1	9/6/2015 18:30	KB	
Pentanoic Acid	0.070 U	mg/l	0.070	0.014	1	9/6/2015 18:30	KB	
i-Hexanoic Acid	0.20 U	mg/l	0.20	0.10	1	9/6/2015 18:30	KB	
Hexanoic Acid	0.50 U	mg/l	0.50	0.12	1	9/6/2015 18:30	KB	

RISK - MICR								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	0.19J	ug/l	0.50	0.042	1	9/8/2015 10:37	BW	n
Ethane	0.0074J	ug/l	0.10	0.0020	1	9/8/2015 10:37	BW	n
Ethene	0.013J	ug/l	0.10	0.0030	1	9/8/2015 10:37	BW	n



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ANALYTICAL RESULTS

Workorder: 16557 TORX ROTCHESTER

Lab ID: 165570017 Date Received: 9/1/2015 11:00 Matrix: Water
 Sample ID: ATR-FB001-G082715 Date Collected: 8/27/2015 19:00

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
EDonors - MICR								
Analysis Desc: AM23G			Analytical Method: AM23G					
Lactic Acid	0.015J	mg/l	0.10	0.012	1	9/6/2015 19:19	KB	M3,D3,M5
Acetic Acid	0.045J	mg/l	0.070	0.0080	1	9/6/2015 19:19	KB	M3,D3,B,M5
Propionic Acid	0.050 U	mg/l	0.050	0.011	1	9/6/2015 19:19	KB	M3,D3,M5
Formic Acid	0.090J	mg/l	0.10	0.0070	1	9/6/2015 19:19	KB	B
Butyric Acid	0.014J	mg/l	0.050	0.0070	1	9/6/2015 19:19	KB	B
Pyruvic Acid	0.15 U	mg/l	0.15	0.0090	1	9/6/2015 19:19	KB	
i-Pentanoic Acid	0.15 U	mg/l	0.15	0.0080	1	9/6/2015 19:19	KB	
Pentanoic Acid	0.070 U	mg/l	0.070	0.014	1	9/6/2015 19:19	KB	
i-Hexanoic Acid	0.20 U	mg/l	0.20	0.10	1	9/6/2015 19:19	KB	
Hexanoic Acid	0.50 U	mg/l	0.50	0.12	1	9/6/2015 19:19	KB	
RISK - MICR								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	0.22J	ug/l	0.50	0.042	1	9/8/2015 10:48	BW	n
Ethane	0.018J	ug/l	0.10	0.0020	1	9/8/2015 10:48	BW	n
Ethene	0.014J	ug/l	0.10	0.0030	1	9/8/2015 10:48	BW	n



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ANALYTICAL RESULTS QUALIFIERS

Workorder: 16557 TORX ROTCHESTER

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.
- B** The analyte was detected in the associated blank.
- D3** The matrix spike duplicate relative percent difference (RPD) exceeded laboratory control limits.
- d** The analyte concentration was determined from a dilution.
- M5** The matrix spike duplicate sample recovery was outside laboratory control limits.
- M3** The matrix spike sample recovery was outside laboratory control limits.



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QUALITY CONTROL DATA

Workorder: 16557 TORX ROTCHESTER

QC Batch: DISG/4816 Analysis Method: AM20GAX
 QC Batch Method: AM20GAX
 Associated Lab Samples: 165570001, 165570002, 165570003

METHOD BLANK: 36954

Parameter	Units	Blank Result	Reporting Limit Qualifiers
RISK			
Methane	ug/l	0.50 U	0.50 M3,D3,n,M5
Ethane	ug/l	0.10 U	0.10 n
Ethene	ug/l	0.10 U	0.10 n

LABORATORY CONTROL SAMPLE & LCSD: 36955 36956

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
RISK										
Methane	ug/l	750	730	730	98	98	80-120	0	20	M3,M5,D3,n
Ethane	ug/l	38	36	36	94	94	80-120	0	20	n
Ethene	ug/l	35	33	33	94	94	80-120	0	20	n

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 36973 36974 Original: 165550011

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
RISK											
Methane	ug/l	4800	750	4500	4600	-33	-25	70-130	-28	20	M3,D3,n,M5
Ethane	ug/l	18	38	50	48	84	79	70-130	6.1	20	n
Ethene	ug/l	3.9	35	34	33	85	83	70-130	2.4	20	n



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QUALITY CONTROL DATA

Workorder: 16557 TORX ROTCHESTER

QC Batch: DISG/4819 Analysis Method: AM20GAX
 QC Batch Method: AM20GAX
 Associated Lab Samples: 165570004, 165570005, 165570006, 165570007, 165570008, 165570009, 165570010, 165570011, 165570012,
 165570013, 165570014, 165570015, 165570016, 165570017

METHOD BLANK: 36977

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: 36978 36979

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
RISK										
Methane	ug/l	750	700	720	94	96	80-120	2.1	20	n
Ethane	ug/l	38	36	37	96	98	80-120	2.1	20	n
Ethene	ug/l	35	34	34	96	98	80-120	2.1	20	n



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QUALITY CONTROL DATA

Workorder: 16557 TORX ROTCHESTER

QC Batch: EDON/2628 Analysis Method: AM23G
 QC Batch Method: AM23G
 Associated Lab Samples: 165570001, 165570002, 165570003, 165570004, 165570005, 165570006, 165570007, 165570008, 165570009,
 165570010, 165570011, 165570012, 165570013, 165570014, 165570015, 165570016, 165570017

METHOD BLANK: 37022

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
EDonors				
Lactic Acid	mg/l	0.10 U	0.10	M3,D3,M5
Acetic Acid	mg/l	0.039J	0.070	M3,D3,B,M5
Propionic Acid	mg/l	0.050 U	0.050	M3,D3,M5
Formic Acid	mg/l	0.015J	0.10	B
Butyric Acid	mg/l	0.020J	0.050	B
Pyruvic Acid	mg/l	0.15 U	0.15	
i-Pentanoic Acid	mg/l	0.15 U	0.15	
Pentanoic Acid	mg/l	0.070 U	0.070	
i-Hexanoic Acid	mg/l	0.20 U	0.20	
Hexanoic Acid	mg/l	0.50 U	0.50	

LABORATORY CONTROL SAMPLE: 37023

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
EDonors						
Lactic Acid	mg/l	2	2.0	101	70-130	M3,D3,M5
Acetic Acid	mg/l	2	2.1	105	70-130	M3,D3,B,M5
Propionic Acid	mg/l	2	2.1	107	70-130	M3,D3,M5
Formic Acid	mg/l	2	1.9	95	70-130	B
Butyric Acid	mg/l	2	2.2	108	70-130	B
Pyruvic Acid	mg/l	2	2.0	101	70-130	
i-Pentanoic Acid	mg/l	2	2.1	106	70-130	
Pentanoic Acid	mg/l	2	2.1	106	70-130	
i-Hexanoic Acid	mg/l	2	2.2	109	70-130	
Hexanoic Acid	mg/l	2	2.2	108	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 37024 37025 Original: 165570001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	Max RPD	Qualifiers
EDonors										



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QUALITY CONTROL DATA

Workorder: 16557 TORX ROTCHESTER

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 37024 37025 Original: 165570001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	Max RPD	RPD	Qualifiers
Lactic Acid	mg/l	1	2	2.2	2.1	59	53	70-130	11	30	M3,D3,M5
Acetic Acid	mg/l	46	2	0.070 U	0.070 U	-2300	-2300	70-130	0	30	M3,D3,B,M5
Propionic Acid	mg/l	49	2	0.050 U	0.050 U	-2450	-2450	70-130	0	30	M3,D3,M5
Formic Acid	mg/l	0.18	2	2.4	2.4	112	112	70-130	0	30	B
Butyric Acid	mg/l	0.32	2	2.6	2.5	116	110	70-130	5.3	30	B
Pyruvic Acid	mg/l	0.39	2	2.2	2.1	89	87	70-130	2.3	30	
i-Pentanoic Acid	mg/l	0.054	2	2.3	2.2	112	105	70-130	6.5	30	
Pentanoic Acid	mg/l	0.01	2	2.2	2.1	112	106	70-130	5.5	30	
i-Hexanoic Acid	mg/l	0	2	2.4	2.2	120	110	70-130	8.7	30	
Hexanoic Acid	mg/l	0.019	2	2.4	2.2	119	112	70-130	6.1	30	



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QUALITY CONTROL DATA

Workorder: 16557 TORX ROTCHESTER

QC Batch: EDON/2637 Analysis Method: AM23G
 QC Batch Method: AM23G
 Associated Lab Samples: 165570001, 165570002, 165570004, 165570006, 165570007, 165570008, 165570009, 165570010, 165570012, 165570013, 165570014, 165570015

METHOD BLANK: 37156

Parameter	Units	Blank Result	Reporting Limit Qualifiers
EDonors			
Lactic Acid	mg/l	0.10 U	0.10
Acetic Acid	mg/l	0.036J	0.070 B
Propionic Acid	mg/l	0.050 U	0.050
Formic Acid	mg/l	0.015J	0.10 B
Butyric Acid	mg/l	0.050 U	0.050
Pyruvic Acid	mg/l	0.15 U	0.15
i-Pentanoic Acid	mg/l	0.15 U	0.15
Pentanoic Acid	mg/l	0.070 U	0.070

LABORATORY CONTROL SAMPLE: 37157

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
EDonors						
Lactic Acid	mg/l	2	2.0	99	70-130	
Acetic Acid	mg/l	2	2.1	105	70-130	B
Propionic Acid	mg/l	2	2.1	106	70-130	
Formic Acid	mg/l	2	1.9	94	70-130	B
Butyric Acid	mg/l	2	2.1	107	70-130	
Pyruvic Acid	mg/l	2	1.9	97	70-130	
i-Pentanoic Acid	mg/l	2	2.1	103	70-130	
Pentanoic Acid	mg/l	2	2.0	102	70-130	



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QUALITY CONTROL DATA QUALIFIERS

Workorder: 16557 TORX ROTCHESTER

QUALITY CONTROL PARAMETER QUALIFIERS

- B The analyte was detected in the associated blank.
- D3 The matrix spike duplicate relative percent difference (RPD) exceeded laboratory control limits.
- M3 The matrix spike sample recovery was outside laboratory control limits.
- M5 The matrix spike duplicate sample recovery was outside laboratory control limits.
- n The laboratory does not hold NELAP/TNI accreditation for this method or analyte.



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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: 16557 TORX ROTCHESTER

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
165570001	ATR-MW13-G082615			AM20GAX	DISG/4816
165570002	ATR-MW12-G082615			AM20GAX	DISG/4816
165570003	ATR-MW6C-G082615			AM20GAX	DISG/4816
165570004	ATR-MW82-G082615			AM20GAX	DISG/4819
165570005	ATR-EB001-G082615			AM20GAX	DISG/4819
165570006	ATR-MW20(51)-G082715			AM20GAX	DISG/4819
165570007	ATR-MW20(35)-G082715			AM20GAX	DISG/4819
165570008	ATR-MW20(35)-G082715R			AM20GAX	DISG/4819
165570009	ATR-MW62-G082715			AM20GAX	DISG/4819
165570010	ATR-OW1D-G082715			AM20GAX	DISG/4819
165570011	ATR-OW1S-G082715			AM20GAX	DISG/4819
165570012	ATR-MW81(27)-G082715			AM20GAX	DISG/4819
165570013	ATR-PM3-G082715			AM20GAX	DISG/4819
165570014	ATR-MW59(29)-G082715			AM20GAX	DISG/4819
165570015	ATR-PM2-G082715			AM20GAX	DISG/4819
165570016	ATR-EB001-G082715			AM20GAX	DISG/4819
165570017	ATR-FB001-G082715			AM20GAX	DISG/4819
165570001	ATR-MW13-G082615			AM23G	EDON/2628
165570002	ATR-MW12-G082615			AM23G	EDON/2628
165570003	ATR-MW6C-G082615			AM23G	EDON/2628
165570004	ATR-MW82-G082615			AM23G	EDON/2628
165570005	ATR-EB001-G082615			AM23G	EDON/2628
165570006	ATR-MW20(51)-G082715			AM23G	EDON/2628
165570007	ATR-MW20(35)-G082715			AM23G	EDON/2628
165570008	ATR-MW20(35)-G082715R			AM23G	EDON/2628
165570009	ATR-MW62-G082715			AM23G	EDON/2628
165570010	ATR-OW1D-G082715			AM23G	EDON/2628
165570011	ATR-OW1S-G082715			AM23G	EDON/2628
165570012	ATR-MW81(27)-G082715			AM23G	EDON/2628
165570013	ATR-PM3-G082715			AM23G	EDON/2628
165570014	ATR-MW59(29)-G082715			AM23G	EDON/2628
165570015	ATR-PM2-G082715			AM23G	EDON/2628



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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: 16557 TORX ROTCHESTER

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
165570016	ATR-EB001-G082715			AM23G	EDON/2628
165570017	ATR-FB001-G082715			AM23G	EDON/2628
165570001	ATR-MW13-G082615			AM23G	EDON/2637
165570002	ATR-MW12-G082615			AM23G	EDON/2637
165570004	ATR-MW82-G082615			AM23G	EDON/2637
165570006	ATR-MW20(51)-G082715			AM23G	EDON/2637
165570007	ATR-MW20(35)-G082715			AM23G	EDON/2637
165570008	ATR-MW20(35)-G082715R			AM23G	EDON/2637
165570009	ATR-MW62-G082715			AM23G	EDON/2637
165570010	ATR-OW1D-G082715			AM23G	EDON/2637
165570012	ATR-MW81(27)-G082715			AM23G	EDON/2637
165570013	ATR-PM3-G082715			AM23G	EDON/2637
165570014	ATR-MW59(29)-G082715			AM23G	EDON/2637
165570015	ATR-PM2-G082715			AM23G	EDON/2637



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CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

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Page: 1 of 2
005058

Section A
Required Client Information:
Company: APC Foster Wreck
Address: 591 Bakers Rd
Report To: Paul Stark
Copy To:
Purchase Order No.: 2012605143
Project Name: 10rx Potchester
Requested Due Date/TAI: ASAP

Section B
Required Project Information:
Company Name: 10rx Potchester
Address: 10rx Potchester
Pace Quote Reference:
Pace Project Manager:
Pace Profile #:

Section C
Invoice Information:
Attention:
Company Name:
Address:
Pace Quote Reference:
Pace Project Manager:
Pace Profile #:

Section D
Required Client Information:
Site Location: IA
STATE:
NPDES GROUND WATER DRINKING WATER
UST RCRA OTHER

ITEM #	Section D Required Client Information	Matrix Codes MATRIX / CODE Drinking Water DW Waste Water WW Product P Soil/Solid SL Oil OL Wipes WIP Air AR Tissue TS Other OT	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		# OF CONTAINERS	PRESERVATIVES	Analysis Test (Y/N)	Requested Analysis Filtered (Y/N)	Temp in °C	Received on Ice (Y/N)	Sealed Cooler (Y/N)	Custody (Y/N)	Samples Intact (Y/N)
				COMPOSITE START	COMPOSITE END									
1	ATR - MW13 - 6082615			COMPOSITE START Grab	COMPOSITE END	2015								
2	ATR - MW12 - 6082615			8-26 1350		8-26 1440								
3	ATR - MW11 - 6082615			8-26 1612		8-26 1750								
4	ATR - MW10 - 6082615			8-26 1710		8-26 1838								
5	ATR - MW09 - 6082615			8-27 1240		8-27 1355								
6	ATR - MW08 - 6082615			8-27 1549		8-27 1600								
7	ATR - MW07 - 6082615			8-27 1705										
8	ATR - MW06 - 6082615													
9	ATR - MW05 - 6082615													
10	ATR - MW04 - 6082615													
11	ATR - MW03 - 6082615													
12	ATR - MW02 - 6082615													

ADDITIONAL COMMENTS
RELINQUISHED BY / AFFILIATION: VCS/PAAS DATE: 9/15/10 TIME: 1100
ACCEPTED BY / AFFILIATION: VCS/PAAS DATE: 9/15/10 TIME: 4:2
SAMPLE CONDITIONS: Y N Y

SAMPLER NAME AND SIGNATURE: G. Schenck
PRINT Name of SAMPLER: G. Schenck
SIGNATURE of SAMPLER: G. Schenck
DATE Signed (MM/DD/YY): 8/28/15

Temp in °C: 4.2
Received on Ice (Y/N): Y
Sealed Cooler (Y/N): N
Custody (Y/N): Y
Samples Intact (Y/N): Y

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

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Section C

Invoice Information:

Attention:

Company Name:

Address:

Pace Quote Reference:

Pace Project Manager:

Pace Profile #:

Section B

Required Project Information:

Report To:

Copy To:

Purchase Order No.:

Project Name:

Project Number:

Section A

Required Client Information:

Company:

Address:

Phone:

Requested Due Date/TAT:

Company: Almas Forklift Rental
Address: 521 Byers Rd
Phone: 724-851-2600
Requested Due Date/TAT: ASAP

Report To: Paul Stark
Copy To: Paul Stark
Purchase Order No.: COL3605143
Project Name: Tork Batcher
Project Number:

REGULATORY AGENCY

NPDES GROUND WATER DRINKING WATER

UST RCRA OTHER

Site Location:

STATE: IA

ITEM #	Section D Required Client Information	Matrix Codes MATRIX / CODE	SAMPLE CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED		# OF CONTAINERS	Preservatives							Analysis Test Y/N	Requested Analysis Filtered (Y/N)	Pace Project No./ Lab ID.
					COMPOSITE START	COMPOSITE END/GRAB		Unpreserved	H ₂ SO ₄	HNO ₃	HCl	TSP	BAK	Zinc Acetate & NaOH			
1	ATK-0113-608215	Drinking Water	ATK-0113-608215	G	8-27	1750	6										
2	ATK-MW596A-608215	Water	ATK-MW596A-608215	G	8-27	1720	6										
3	ATK-0113-608215	Waste Water	ATK-0113-608215	G	8-27	1905	6										
4	ATK-ES001-08215	Product	ATK-ES001-08215	G	8-27	1845	6										
5	ATK-FB001-08215	Soil/Solid	ATK-FB001-08215	G	8-27	1900	6										
6	ATK-0113-608215	Oil	ATK-0113-608215	G			6										
7	ATK-0113-608215	Wipe	ATK-0113-608215	G			6										
8	ATK-0113-608215	Air	ATK-0113-608215	G			6										
9	ATK-0113-608215	Other	ATK-0113-608215	G			6										
10																	
11																	
12																	

ADDITIONAL COMMENTS: NOVA PAES 9.1.15 1100

RELINQUISHED BY / AFFILIATION: NOVA PAES DATE: 9.1.15 TIME: 1100

ACCEPTED BY / AFFILIATION: NOVA PAES DATE: 9.1.15 TIME: 1100

RECEIVED ON: 9/1/15 TEMP IN °C:

SEALING COOLER: CUSTODY: SAMPLES INTACT:

SAMPLER NAME AND SIGNATURE: Paul Stark

PRINT NAME OF SAMPLER: Paul Stark DATE SIGNED: 9/1/15

SIGNATURE OF SAMPLER: [Signature]

Cooler Receipt Form

Client Name: Amec Project: Torx Rochester Lab Work Order: 16557

A. Shipping/Container Information (circle appropriate response)

Courier: FedEx UPS USPS Client Other: _____ Air bill Present: Yes No

Tracking Number: 8409 7674 1254

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: 4.2°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: LY Date: 9.1.15

Project Manager Review: PK Date: 9/1/15

NON-CONFORMANCE FORM

PAES Work Order #: _____

16557

Date: 9.1.15

Time of Receipt: 1100

Receiver: LY

Client: _____

Amec

REASON FOR NON-CONFORMANCE:

ATR-MW59(29) - G 082715: Vials time was 18:20.

ACTION TAKEN:

Client name: Paul ~~Stork~~ Dwayne Gross

Date: 9/1/15

Time: email

Logged in using CWC time

Customer Service Initials: GW

Date: 9-9-15



Pace Analytical Energy Services, LLC
220 William Pitt Way
Pittsburgh, PA 15238
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October 27, 2015

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

RE: **TFS ROCHESTER / 3359151040**

Pace Workorder: 16983

Dear Paul Stork:

Enclosed are the analytical results for sample(s) received by the laboratory on Wednesday, October 14, 2015. 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 10/27/2015

*RW
10-28-15*

Customer Service Representative

Enclosures

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

Total Number of Pages 20

Report ID: 16983 - 722067

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LABORATORY ACCREDITATIONS & CERTIFICATIONS

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



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SAMPLE SUMMARY

Workorder: 16983 TFS ROCHESTER / 3359151040

Lab ID	Sample ID	Matrix	Date Collected	Date Received
169830001	ATR-MW15-G101315	Water	10/13/2015 08:50	10/14/2015 11:00
169830002	ATR-MW25(16.4)-G101315	Water	10/13/2015 09:55	10/14/2015 11:00
169830003	ATR-MW25(32.6)-G101315	Water	10/13/2015 10:55	10/14/2015 11:00
169830004	ATR-MW25(45.2)-G101315	Water	10/13/2015 11:50	10/14/2015 11:00
169830005	ATR-OW4(35)-G101315	Water	10/13/2015 13:05	10/14/2015 11:00
169830006	ATR-OW4(54)-G101315	Water	10/13/2015 14:05	10/14/2015 11:00
169830007	ATR-EB001-G101315	Water	10/13/2015 09:15	10/14/2015 11:00



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PROJECT SUMMARY

Workorder: 16983 TFS ROCHESTER / 3359151040

Workorder Comments

The container pH for samples 16983 (0005) were measured as below the expected pH range (< 10) for those samples preserved with trisodium phosphate, as assigned to PAES method AM20GAX.

Batch Comments

Batch: EDON/2671 - Low Level Volatile Fatty Acids

The matrix spike and/or spike duplicate, recovery or relative percent difference; accuracy influenced by the concentration of the reference sample 169790001. Analyte Acetic acid. Batch acceptance based on laboratory control sample recovery.



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ANALYTICAL RESULTS

Workorder: 16983 TFS ROCHESTER / 3359151040

Lab ID: **169830001** Date Received: 10/14/2015 11:00 Matrix: Water
 Sample ID: **ATR-MW15-G101315** Date Collected: 10/13/2015 08:50

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
EDonors - MICR								
Analysis Desc: AM23G			Analytical Method: AM23G					
Lactic Acid	26	mg/l	2.0	0.12	10	10/22/2015 15:46	KB	d
Acetic Acid	180	mg/l	10	0.80	100	10/22/2015 16:34	KB	d,B
Propionic Acid	55	mg/l	1.0	0.11	10	10/22/2015 15:46	KB	d
Formic Acid	56	mg/l	1.0	0.070	10	10/22/2015 15:46	KB	d,B
Butyric Acid	0.62J	mg/l	1.0	0.070	10	10/22/2015 15:46	KB	d,B
Pyruvic Acid	1.5	mg/l	1.0	0.090	10	10/22/2015 15:46	KB	d
i-Pentanoic Acid	0.10	mg/l	0.10	0.0080	1	10/21/2015 20:25	KB	
Pentanoic Acid	0.18	mg/l	0.10	0.014	1	10/21/2015 20:25	KB	
i-Hexanoic Acid	0.20 U	mg/l	0.20	0.10	1	10/21/2015 20:25	KB	
Hexanoic Acid	0.20 U	mg/l	0.20	0.12	1	10/21/2015 20:25	KB	
RISK - MICR								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	2400	ug/l	0.50	0.037	1	10/20/2015 11:05	BW	n
Ethane	5.2	ug/l	0.10	0.0020	1	10/20/2015 11:05	BW	n
Ethene	260	ug/l	0.10	0.0040	1	10/20/2015 11:05	BW	n



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ANALYTICAL RESULTS

Workorder: 16983 TFS ROCHESTER / 3359151040

Lab ID: **169830002** Date Received: 10/14/2015 11:00 Matrix: Water
 Sample ID: **ATR-MW25(16.4)-G101315** Date Collected: 10/13/2015 09:55

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

EDonors - MICR

Analysis Desc: AM23G		Analytical Method: AM23G						
Lactic Acid	0.027J	mg/l	0.20	0.012	1	10/21/2015 21:14	KB	
Acetic Acid	0.035J	mg/l	0.10	0.0080	1	10/21/2015 21:14	KB	M3,B,M5
Propionic Acid	0.10 U	mg/l	0.10	0.011	1	10/21/2015 21:14	KB	
Formic Acid	0.036J	mg/l	0.10	0.0070	1	10/21/2015 21:14	KB	B
Butyric Acid	0.020J	mg/l	0.10	0.0070	1	10/21/2015 21:14	KB	B
Pyruvic Acid	0.10 U	mg/l	0.10	0.0090	1	10/21/2015 21:14	KB	
i-Pentanoic Acid	0.10 U	mg/l	0.10	0.0080	1	10/21/2015 21:14	KB	
Pentanoic Acid	0.10 U	mg/l	0.10	0.014	1	10/21/2015 21:14	KB	
i-Hexanoic Acid	0.20 U	mg/l	0.20	0.10	1	10/21/2015 21:14	KB	
Hexanoic Acid	0.20 U	mg/l	0.20	0.12	1	10/21/2015 21:14	KB	

RISK - MICR

Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	1200	ug/l	0.50	0.037	1	10/20/2015 11:16	BW	n
Ethane	13	ug/l	0.10	0.0020	1	10/20/2015 11:16	BW	n
Ethene	40	ug/l	0.10	0.0040	1	10/20/2015 11:16	BW	n



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ANALYTICAL RESULTS

Workorder: 16983 TFS ROCHESTER / 3359151040

Lab ID: **169830003** Date Received: 10/14/2015 11:00 Matrix: Water
 Sample ID: **ATR-MW25(32.6)-G101315** Date Collected: 10/13/2015 10:55

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

EDonors - MICR

Analysis Desc: AM23G		Analytical Method: AM23G						
Lactic Acid	0.020J	mg/l	0.20	0.012	1	10/21/2015 22:03	KB	
Acetic Acid	1.4	mg/l	0.10	0.0080	1	10/21/2015 22:03	KB	M3,B,M5
Propionic Acid	0.15	mg/l	0.10	0.011	1	10/21/2015 22:03	KB	
Formic Acid	1.5	mg/l	0.10	0.0070	1	10/21/2015 22:03	KB	B
Butyric Acid	0.023J	mg/l	0.10	0.0070	1	10/21/2015 22:03	KB	B
Pyruvic Acid	0.10 U	mg/l	0.10	0.0090	1	10/21/2015 22:03	KB	
i-Pentanoic Acid	0.10 U	mg/l	0.10	0.0080	1	10/21/2015 22:03	KB	
Pentanoic Acid	0.10 U	mg/l	0.10	0.014	1	10/21/2015 22:03	KB	
i-Hexanoic Acid	0.20 U	mg/l	0.20	0.10	1	10/21/2015 22:03	KB	
Hexanoic Acid	0.20 U	mg/l	0.20	0.12	1	10/21/2015 22:03	KB	

RISK - MICR

Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	3100	ug/l	0.50	0.037	1	10/20/2015 11:26	BW	n
Ethane	18	ug/l	0.10	0.0020	1	10/20/2015 11:26	BW	n
Ethene	370	ug/l	0.10	0.0040	1	10/20/2015 11:26	BW	n



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ANALYTICAL RESULTS

Workorder: 16983 TFS ROCHESTER / 3359151040

Lab ID: **169830004** Date Received: 10/14/2015 11:00 Matrix: Water
 Sample ID: **ATR-MW25(45.2)-G101315** Date Collected: 10/13/2015 11:50

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
EDonors - MICR								
Analysis Desc: AM23G			Analytical Method: AM23G					
Lactic Acid	0.017J	mg/l	0.20	0.012	1	10/21/2015 22:51	KB	
Acetic Acid	0.024J	mg/l	0.10	0.0080	1	10/21/2015 22:51	KB	M3,B,M5
Propionic Acid	0.10	U mg/l	0.10	0.011	1	10/21/2015 22:51	KB	
Formic Acid	0.056J	mg/l	0.10	0.0070	1	10/21/2015 22:51	KB	B
Butyric Acid	0.0091J	mg/l	0.10	0.0070	1	10/21/2015 22:51	KB	B
Pyruvic Acid	0.10	U mg/l	0.10	0.0090	1	10/21/2015 22:51	KB	
i-Pentanoic Acid	0.10	U mg/l	0.10	0.0080	1	10/21/2015 22:51	KB	
Pentanoic Acid	0.10	U mg/l	0.10	0.014	1	10/21/2015 22:51	KB	
i-Hexanoic Acid	0.20	U mg/l	0.20	0.10	1	10/21/2015 22:51	KB	
Hexanoic Acid	0.20	U mg/l	0.20	0.12	1	10/21/2015 22:51	KB	

RISK - MICR								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	600	ug/l	0.50	0.037	1	10/20/2015 11:41	BW	n
Ethane	4.5	ug/l	0.10	0.0020	1	10/20/2015 11:41	BW	n
Ethene	12	ug/l	0.10	0.0040	1	10/20/2015 11:41	BW	n



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ANALYTICAL RESULTS

Workorder: 16983 TFS ROCHESTER / 3359151040

Lab ID: **169830005** Date Received: 10/14/2015 11:00 Matrix: Water
 Sample ID: **ATR-OW4(35)-G101315** Date Collected: 10/13/2015 13:05

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

Analysis Desc: AM23G

Analytical Method: AM23G

Lactic Acid	55	mg/l	2.0	0.12	10	10/22/2015 17:23	KB	d
Acetic Acid	400	mg/l	10	0.80	100	10/22/2015 18:11	KB	d,B
Propionic Acid	94	mg/l	10	1.1	100	10/22/2015 18:11	KB	d
Formic Acid	350	mg/l	10	0.70	100	10/22/2015 18:11	KB	d,B
Butyric Acid	6.1	mg/l	1.0	0.070	10	10/22/2015 17:23	KB	d,B
Pyruvic Acid	11	mg/l	1.0	0.090	10	10/22/2015 17:23	KB	d
i-Pentanoic Acid	0.064J	mg/l	0.10	0.0080	1	10/21/2015 23:40	KB	
Pentanoic Acid	1.6	mg/l	0.10	0.014	1	10/21/2015 23:40	KB	
i-Hexanoic Acid	0.20 U	mg/l	0.20	0.10	1	10/21/2015 23:40	KB	
Hexanoic Acid	0.66	mg/l	0.20	0.12	1	10/21/2015 23:40	KB	

RISK - MICR

Analysis Desc: AM20GAX

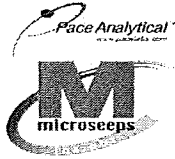
Analytical Method: AM20GAX

Methane	380	ug/l	0.50	0.037	1	10/20/2015 11:53	BW	n
Ethane	22	ug/l	0.10	0.0020	1	10/20/2015 11:53	BW	n
Ethene	6.5	ug/l	0.10	0.0040	1	10/20/2015 11:53	BW	n



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ANALYTICAL RESULTS

Workorder: 16983 TFS ROCHESTER / 3359151040

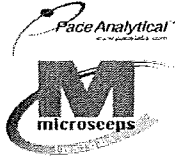
Lab ID: 169830006 Date Received: 10/14/2015 11:00 Matrix: Water
 Sample ID: ATR-OW4(54)-G101315 Date Collected: 10/13/2015 14:05

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
EDonors - MICR								
Analysis Desc: AM23G			Analytical Method: AM23G					
Lactic Acid	0.20 U	mg/l	0.20	0.012	1	10/22/2015 00:28	KB	
Acetic Acid	1.3	mg/l	0.10	0.0080	1	10/22/2015 00:28	KB	M3,B,M5
Propionic Acid	0.36	mg/l	0.10	0.011	1	10/22/2015 00:28	KB	
Formic Acid	0.034J	mg/l	0.10	0.0070	1	10/22/2015 00:28	KB	B
Butyric Acid	0.031J	mg/l	0.10	0.0070	1	10/22/2015 00:28	KB	B
Pyruvic Acid	0.10 U	mg/l	0.10	0.0090	1	10/22/2015 00:28	KB	
i-Pentanoic Acid	0.10 U	mg/l	0.10	0.0080	1	10/22/2015 00:28	KB	
Pentanoic Acid	0.10 U	mg/l	0.10	0.014	1	10/22/2015 00:28	KB	
i-Hexanoic Acid	0.20 U	mg/l	0.20	0.10	1	10/22/2015 00:28	KB	
Hexanoic Acid	0.20 U	mg/l	0.20	0.12	1	10/22/2015 00:28	KB	
RISK - MICR								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	120	ug/l	0.50	0.037	1	10/20/2015 12:04	BW	n
Ethane	0.22	ug/l	0.10	0.0020	1	10/20/2015 12:04	BW	n
Ethene	0.052J	ug/l	0.10	0.0040	1	10/20/2015 12:04	BW	n



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ANALYTICAL RESULTS

Workorder: 16983 TFS ROCHESTER / 3359151040

Lab ID: 169830007 Date Received: 10/14/2015 11:00 Matrix: Water
 Sample ID: ATR-EB001-G101315 Date Collected: 10/13/2015 09:15

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
EDonors - MICR								
Analysis Desc: AM23G			Analytical Method: AM23G					
Lactic Acid	0.016J	mg/l	0.20	0.012	1	10/22/2015 01:17	KB	
Acetic Acid	0.029J	mg/l	0.10	0.0080	1	10/22/2015 01:17	KB	M3,B,M5
Propionic Acid	0.10	U mg/l	0.10	0.011	1	10/22/2015 01:17	KB	
Formic Acid	0.12	mg/l	0.10	0.0070	1	10/22/2015 01:17	KB	B
Butyric Acid	0.10	U mg/l	0.10	0.0070	1	10/22/2015 01:17	KB	B
Pyruvic Acid	0.10	U mg/l	0.10	0.0090	1	10/22/2015 01:17	KB	
i-Pentanoic Acid	0.10	U mg/l	0.10	0.0080	1	10/22/2015 01:17	KB	
Pentanoic Acid	0.10	U mg/l	0.10	0.014	1	10/22/2015 01:17	KB	
i-Hexanoic Acid	0.20	U mg/l	0.20	0.10	1	10/22/2015 01:17	KB	
Hexanoic Acid	0.20	U mg/l	0.20	0.12	1	10/22/2015 01:17	KB	
RISK - MICR								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	0.18J	ug/l	0.50	0.037	1	10/20/2015 12:14	BW	n
Ethane	0.0078J	ug/l	0.10	0.0020	1	10/20/2015 12:14	BW	n
Ethene	0.014J	ug/l	0.10	0.0040	1	10/20/2015 12:14	BW	n



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ANALYTICAL RESULTS QUALIFIERS

Workorder: 16983 TFS ROCHESTER / 3359151040

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.
- B The analyte was detected in the associated blank.
- d The analyte concentration was determined from a dilution.
- M5 The matrix spike duplicate sample recovery was outside laboratory control limits.
- M3 The matrix spike sample recovery was outside laboratory control limits.



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QUALITY CONTROL DATA

Workorder: 16983 TFS ROCHESTER / 3359151040

QC Batch: DISG/4911 Analysis Method: AM20GAX
 QC Batch Method: AM20GAX
 Associated Lab Samples: 169830001, 169830002, 169830003, 169830004, 169830005, 169830006, 169830007

METHOD BLANK: 37798

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: 37799 37800

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
RISK										
Methane	ug/l	750	720	730	97	98	80-120	1	20	n
Ethane	ug/l	38	39	40	103	104	80-120	0.97	20	n
Ethene	ug/l	35	37	37	104	105	80-120	0.96	20	n



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QUALITY CONTROL DATA

Workorder: 16983 TFS ROCHESTER / 3359151040

QC Batch: EDON/2671 Analysis Method: AM23G
 QC Batch Method: AM23G
 Associated Lab Samples: 169830001, 169830002, 169830003, 169830004, 169830005, 169830006, 169830007

METHOD BLANK: 37838

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
EDonors				
Lactic Acid	mg/l	0.20 U	0.20	
Acetic Acid	mg/l	0.023J	0.10	M3,B,M5
Propionic Acid	mg/l	0.10 U	0.10	
Formic Acid	mg/l	0.021J	0.10	B
Butyric Acid	mg/l	0.013J	0.10	B
Pyruvic Acid	mg/l	0.10 U	0.10	
i-Pentanoic Acid	mg/l	0.10 U	0.10	
Pentanoic Acid	mg/l	0.10 U	0.10	
i-Hexanoic Acid	mg/l	0.20 U	0.20	
Hexanoic Acid	mg/l	0.20 U	0.20	

LABORATORY CONTROL SAMPLE: 37839

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
EDonors						
Lactic Acid	mg/l	2	2.0	101	70-130	
Acetic Acid	mg/l	2	2.0	101	70-130	M3,B,M5
Propionic Acid	mg/l	2	2.1	104	70-130	
Formic Acid	mg/l	2	1.8	92	70-130	B
Butyric Acid	mg/l	2	2.1	103	70-130	B
Pyruvic Acid	mg/l	2	1.9	96	70-130	
i-Pentanoic Acid	mg/l	2	2.0	100	70-130	
Pentanoic Acid	mg/l	2	2.0	99	70-130	
i-Hexanoic Acid	mg/l	2	2.0	101	70-130	
Hexanoic Acid	mg/l	2	2.0	99	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 37840 37841 Original: 169790001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	Max RPD	Qualifiers
EDonors										
Lactic Acid	mg/l	0.079	2	1.6	1.5	74	71	70-130	4.1 30	





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QUALITY CONTROL DATA

Workorder: 16983 TFS ROCHESTER / 3359151040

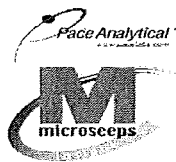
MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 37840 37841 Original: 169790001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	Max RPD	RPD	Qualifiers
Acetic Acid	mg/l	41	2	0.10 U	0.10 U	-2070	-2070	70-130	0	30	M3,B,M5
Propionic Acid	mg/l	6.2	2	8.2	8.4	100	112	70-130	11	30	
Formic Acid	mg/l	0.62	2	2.5	2.5	93	95	70-130	2.1	30	B
Butyric Acid	mg/l	2.9	2	4.8	5.0	95	105	70-130	10	30	B
Pyruvic Acid	mg/l	0.96	2	2.9	2.9	96	96	70-130	0	30	
i-Pentanoic Acid	mg/l	0.11	2	2.2	2.3	106	112	70-130	5.5	30	
Pentanoic Acid	mg/l	0.88	2	3.0	3.1	104	112	70-130	7.4	30	
i-Hexanoic Acid	mg/l	0.018	2	2.2	2.4	108	118	70-130	8.8	30	
Hexanoic Acid	mg/l	1.1	2	3.2	3.5	107	119	70-130	11	30	



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QUALITY CONTROL DATA

Workorder: 16983 TFS ROCHESTER / 3359151040

QC Batch: EDON/2686 Analysis Method: AM23G
 QC Batch Method: AM23G
 Associated Lab Samples: 169830001, 169830005

METHOD BLANK: 38094

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
EDonors				
Lactic Acid	mg/l	0.20 U	0.20	
Acetic Acid	mg/l	0.025J	0.10 B	
Propionic Acid	mg/l	0.10 U	0.10	
Formic Acid	mg/l	0.022J	0.10 B	
Butyric Acid	mg/l	0.012J	0.10 B	
Pyruvic Acid	mg/l	0.10 U	0.10	

LABORATORY CONTROL SAMPLE: 38095

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
EDonors						
Lactic Acid	mg/l	2	2.0	101	70-130	
Acetic Acid	mg/l	2	2.0	102	70-130	B
Propionic Acid	mg/l	2	2.1	104	70-130	
Formic Acid	mg/l	2	1.8	92	70-130	B
Butyric Acid	mg/l	2	2.1	104	70-130	B
Pyruvic Acid	mg/l	2	1.9	97	70-130	



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QUALITY CONTROL DATA QUALIFIERS

Workorder: 16983 TFS ROCHESTER / 3359151040

QUALITY CONTROL PARAMETER QUALIFIERS

- B The analyte was detected in the associated blank.
- M3 The matrix spike sample recovery was outside laboratory control limits.
- M5 The matrix spike duplicate sample recovery was outside laboratory control limits.
- d The analyte concentration was determined from a dilution.
- 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: 16983 TFS ROCHESTER / 3359151040

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
169830001	ATR-MW15-G101315			AM20GAX	DISG/4911
169830002	ATR-MW25(16.4)-G101315			AM20GAX	DISG/4911
169830003	ATR-MW25(32.6)-G101315			AM20GAX	DISG/4911
169830004	ATR-MW25(45.2)-G101315			AM20GAX	DISG/4911
169830005	ATR-OW4(35)-G101315			AM20GAX	DISG/4911
169830006	ATR-OW4(54)-G101315			AM20GAX	DISG/4911
169830007	ATR-EB001-G101315			AM20GAX	DISG/4911
169830001	ATR-MW15-G101315			AM23G	EDON/2671
169830002	ATR-MW25(16.4)-G101315			AM23G	EDON/2671
169830003	ATR-MW25(32.6)-G101315			AM23G	EDON/2671
169830004	ATR-MW25(45.2)-G101315			AM23G	EDON/2671
169830005	ATR-OW4(35)-G101315			AM23G	EDON/2671
169830006	ATR-OW4(54)-G101315			AM23G	EDON/2671
169830007	ATR-EB001-G101315			AM23G	EDON/2671
169830001	ATR-MW15-G101315			AM23G	EDON/2686
169830005	ATR-OW4(35)-G101315			AM23G	EDON/2686



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CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

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412-826-5245



16983

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: <i>Amc Foster Wheeler</i>	Report To: <i>Paul Stork paul.stork@amech.com</i>	Attention: <i>Paul Stork</i>
Address: <i>231 Rivers Rd. S.W. 204</i>	Copy To:	Company Name:
<i>Miamisburg, OH 45342</i>	Purchase Order No.: <i>6012605143</i>	Address:
Email To: <i>Paul.Stork@amech.com</i>	Project Name: <i>TFS Rochester</i>	NPDES <input type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER
Phone: <i>513-859-3601</i> Fax:	Project Number: <i>3359151040</i>	UST <input type="checkbox"/> RCRA <input type="checkbox"/> OTHER <input type="checkbox"/>
Requested Due Date/TAT:		Site Location STATE: <i>IN</i>

ITEM #	Section D Required Client Information	Section E Matrix Codes	Section F Matrix I Code	Section G Matrix Code	Section H Sample ID (A-Z, 0-9 / -)	Section I COLLECTED		Section J SAMPLE TEMP AT COLLECTION	Section K # OF CONTAINERS	Section L Preservatives	Section M Analysis Test	Section N Requested Analysis Filtered (Y/N)	Section O Residual Chlorine (Y/N)	Section P Pace Project No. / Lab I.D.
						Section I.1 COMPOSITE START	Section I.2 COMPOSITE END/GRAB							
1		Drinking Water	DW	WT	WT	10-13	0850	15						
2		Water	WT	WT	WT	10-13	0955	5						
3		Waste Water	WW	WT	WT	10-13	1055	5						
4		Product	P	WT	WT	10-13	1150	5						
5		Soil/Solid	SL	WT	WT	10-13	1305	5						
6		Oil	OL	WT	WT	10-12	1405	5						
7		Wipe	WP	WT	WT	10-13	0915	5						
8		Air	AR											
9		Tissue	TS											
10		Other	OT											
11														
12														

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION			ACCEPTED BY / AFFILIATION			SAMPLE CONDITIONS				
	DATE	TIME	SIGNATURE	DATE	TIME	SIGNATURE	Temp in °C	Received on	Sealed Cooler	Custody	Samples Intact
	10-13-15	1500	<i>Sam Partynka</i>	10-14-15	1100	<i>Sam Partynka</i>	4	Y	N	N	N

SAMPLER NAME AND SIGNATURE
 PRINT Name of SAMPLER: *Sam Partynka*
 SIGNATURE of SAMPLER: *[Signature]*
 DATE Signed (MM/DD/YY): *10/13/15*

Cooler Receipt Form

Client Name: Amece Project: TFS Rochester Lab Work Order: 16983

A. Shipping/Container Information (circle appropriate response)

Courier: FedEx UPS USPS Client Other: _____ Air bill Present: Yes No

Tracking Number: 8409 7674 1232

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: 4°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: VQA'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: LY Date: 10-14-15

Project Manager Review: rw Date: 10-15-15



Pace Analytical Energy Services, LLC
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Pittsburgh, PA 15238
Phone: (412) 826-5245
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October 21, 2015

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

RE: **TEXTRON / 3359151040.09.01**

Pace Workorder: 16932

Dear Paul Stork:

Enclosed are the analytical results for sample(s) received by the laboratory on Friday, October 09, 2015. 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 10/21/2015

*RW
10-22-15*

Customer Service Representative

Enclosures .

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

Total Number of Pages 35

Report ID: 16932 - 718647

Page 1 of 31



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LABORATORY ACCREDITATIONS & CERTIFICATIONS

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



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SAMPLE SUMMARY

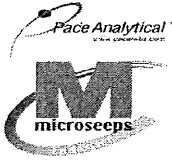
Workorder: 16932 TEXTRON / 3359151040.09.01

Lab ID	Sample ID	Matrix	Date Collected	Date Received
169320001	ATR-MW14-G100815	Water	10/8/2015 10:00	10/9/2015 10:30
169320002	ATR-MW24(24.9)-G100815	Water	10/8/2015 10:50	10/9/2015 10:30
169320003	ATR-MW24(55.9)-G100815	Water	10/8/2015 09:48	10/9/2015 10:30
169320004	ATR-OW2(33)-G100815	Water	10/8/2015 12:10	10/9/2015 10:30
169320005	ATR-OW2(53)-G100815	Water	10/8/2015 13:20	10/9/2015 10:30
169320006	ATR-OW3(35)-G100715	Water	10/7/2015 15:33	10/9/2015 10:30
169320007	ATR-OW3(55)-G100715	Water	10/7/2015 16:30	10/9/2015 10:30
169320008	ATR-OW3(55)-G100715 R	Water	10/7/2015 16:30	10/9/2015 10:30
169320009	ATR-MW16-G100715	Water	10/7/2015 13:25	10/9/2015 10:30
169320010	ATR-MW17-G100715	Water	10/7/2015 11:20	10/9/2015 10:30
169320011	ATR-MW26(17.5)-G100715	Water	10/7/2015 11:30	10/9/2015 10:30
169320012	ATR-MW26(28.8)-G100715	Water	10/7/2015 12:25	10/9/2015 10:30
169320013	ATR-MW26(58.8)-G100715	Water	10/7/2015 10:40	10/9/2015 10:30
169320014	ATR-ZVI2(17.5)-G100715	Water	10/7/2015 14:20	10/9/2015 10:30
169320015	ATR-ZVI2(32.5)-G100715	Water	10/7/2015 13:28	10/9/2015 10:30
169320016	ATR-OW5(16)-G100715	Water	10/7/2015 15:00	10/9/2015 10:30
169320017	ATR-OW5(35)-G100715	Water	10/7/2015 16:30	10/9/2015 10:30
169320018	ATR-OW5(54)-G100715	Water	10/7/2015 17:20	10/9/2015 10:30
169320019	ATR-EB001-G100815	Water	10/8/2015 10:15	10/9/2015 10:30



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PROJECT SUMMARY

Workorder: 16932 TEXTRON / 3359151040.09.01

Workorder Comments

The container pH for samples 16932 (0005, 0007-0008) were measured as below the expected pH range (< 10) for those samples preserved with trisodium phosphate, as assigned to PAES method AM20GAX.



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ANALYTICAL RESULTS

Workorder: 16932 TEXTRON / 3359151040.09.01

Lab ID: **169320001** Date Received: 10/9/2015 10:30 Matrix: Water
 Sample ID: **ATR-MW14-G100815** Date Collected: 10/8/2015 10:00

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
EDonors - MICR								
Analysis Desc: AM23G			Analytical Method: AM23G					
Lactic Acid	1.8	mg/l	0.20	0.012	1	10/15/2015 22:19	KB	
Acetic Acid	9.4	mg/l	1.0	0.080	10	10/20/2015 00:13	KB	d,B
Propionic Acid	14	mg/l	1.0	0.11	10	10/20/2015 00:13	KB	d
Formic Acid	0.79	mg/l	0.10	0.0070	1	10/15/2015 22:19	KB	B
Butyric Acid	0.18	mg/l	0.10	0.0070	1	10/15/2015 22:19	KB	B
Pyruvic Acid	0.26	mg/l	0.10	0.0090	1	10/15/2015 22:19	KB	
i-Pentanoic Acid	0.10 U	mg/l	0.10	0.0080	1	10/15/2015 22:19	KB	
Pentanoic Acid	0.10 U	mg/l	0.10	0.014	1	10/15/2015 22:19	KB	
i-Hexanoic Acid	0.20 U	mg/l	0.20	0.10	1	10/15/2015 22:19	KB	
Hexanoic Acid	0.20 U	mg/l	0.20	0.12	1	10/15/2015 22:19	KB	

RISK - MICR								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	43	ug/l	0.50	0.037	1	10/14/2015 08:08	BW	n
Ethane	0.20	ug/l	0.10	0.0020	1	10/14/2015 08:08	BW	n
Ethene	0.090J	ug/l	0.10	0.0040	1	10/14/2015 08:08	BW	n



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ANALYTICAL RESULTS

Workorder: 16932 TEXTRON / 3359151040.09.01

Lab ID: **169320002** Date Received: 10/9/2015 10:30 Matrix: Water
 Sample ID: **ATR-MW24(24.9)-G100815** Date Collected: 10/8/2015 10:50

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

Analysis Desc: AM23G		Analytical Method: AM23G						
Lactic Acid	0.021J	mg/l	0.20	0.012	1	10/15/2015 23:08	KB	
Acetic Acid	0.034J	mg/l	0.10	0.0080	1	10/15/2015 23:08	KB	B
Propionic Acid	0.10 U	mg/l	0.10	0.011	1	10/15/2015 23:08	KB	
Formic Acid	0.019J	mg/l	0.10	0.0070	1	10/15/2015 23:08	KB	B
Butyric Acid	0.017J	mg/l	0.10	0.0070	1	10/15/2015 23:08	KB	B
Pyruvic Acid	0.10 U	mg/l	0.10	0.0090	1	10/15/2015 23:08	KB	
i-Pentanoic Acid	0.10 U	mg/l	0.10	0.0080	1	10/15/2015 23:08	KB	
Pentanoic Acid	0.10 U	mg/l	0.10	0.014	1	10/15/2015 23:08	KB	
i-Hexanoic Acid	0.20 U	mg/l	0.20	0.10	1	10/15/2015 23:08	KB	
Hexanoic Acid	0.20 U	mg/l	0.20	0.12	1	10/15/2015 23:08	KB	

RISK - MICR

Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	1.4	ug/l	0.50	0.037	1	10/14/2015 08:18	BW	n
Ethane	0.0039J	ug/l	0.10	0.0020	1	10/14/2015 08:18	BW	n
Ethene	0.0074J	ug/l	0.10	0.0040	1	10/14/2015 08:18	BW	n



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ANALYTICAL RESULTS

Workorder: 16932 TEXTRON / 3359151040.09.01

Lab ID: **169320003** Date Received: 10/9/2015 10:30 Matrix: Water
 Sample ID: **ATR-MW24(55.9)-G100815** Date Collected: 10/8/2015 09:48

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

Analysis Desc: AM23G		Analytical Method: AM23G						
Lactic Acid	0.025J	mg/l	0.20	0.012	1	10/15/2015 23:57	KB	
Acetic Acid	0.030J	mg/l	0.10	0.0080	1	10/15/2015 23:57	KB	B
Propionic Acid	0.10 U	mg/l	0.10	0.011	1	10/15/2015 23:57	KB	
Formic Acid	0.031J	mg/l	0.10	0.0070	1	10/15/2015 23:57	KB	B
Butyric Acid	0.014J	mg/l	0.10	0.0070	1	10/15/2015 23:57	KB	B
Pyruvic Acid	0.10 U	mg/l	0.10	0.0090	1	10/15/2015 23:57	KB	
i-Pentanoic Acid	0.10 U	mg/l	0.10	0.0080	1	10/15/2015 23:57	KB	
Pentanoic Acid	0.10 U	mg/l	0.10	0.014	1	10/15/2015 23:57	KB	
i-Hexanoic Acid	0.20 U	mg/l	0.20	0.10	1	10/15/2015 23:57	KB	
Hexanoic Acid	0.20 U	mg/l	0.20	0.12	1	10/15/2015 23:57	KB	

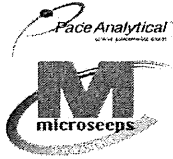
RISK - MICR

Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	27	ug/l	0.50	0.037	1	10/14/2015 08:30	BW	n
Ethane	0.19	ug/l	0.10	0.0020	1	10/14/2015 08:30	BW	n
Ethene	0.10	ug/l	0.10	0.0040	1	10/14/2015 08:30	BW	n



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ANALYTICAL RESULTS

Workorder: 16932 TEXTRON / 3359151040.09.01

Lab ID: **169320004** Date Received: 10/9/2015 10:30 Matrix: Water
 Sample ID: **ATR-OW2(33)-G100815** Date Collected: 10/8/2015 12:10

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

Analysis Desc: AM23G		Analytical Method: AM23G						
Lactic Acid	2.0 U	mg/l	2.0	0.12	10	10/20/2015 01:01	KB	d,B
Acetic Acid	64	mg/l	1.0	0.080	10	10/20/2015 01:01	KB	d,B
Propionic Acid	52	mg/l	1.0	0.11	10	10/20/2015 01:01	KB	d
Formic Acid	0.30	mg/l	0.10	0.0070	1	10/16/2015 00:45	KB	B
Butyric Acid	6.0	mg/l	0.10	0.0070	1	10/16/2015 00:45	KB	B
Pyruvic Acid	0.50	mg/l	0.10	0.0090	1	10/16/2015 00:45	KB	
i-Pentanoic Acid	0.23	mg/l	0.10	0.0080	1	10/16/2015 00:45	KB	
Pentanoic Acid	0.40	mg/l	0.10	0.014	1	10/16/2015 00:45	KB	
i-Hexanoic Acid	0.20 U	mg/l	0.20	0.10	1	10/16/2015 00:45	KB	
Hexanoic Acid	0.20 U	mg/l	0.20	0.12	1	10/16/2015 00:45	KB	

RISK - MICR

Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	1800	ug/l	0.50	0.037	1	10/14/2015 08:41	BW	n
Ethane	24	ug/l	0.10	0.0020	1	10/14/2015 08:41	BW	n
Ethene	370	ug/l	0.10	0.0040	1	10/14/2015 08:41	BW	n



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ANALYTICAL RESULTS

Workorder: 16932 TEXTRON / 3359151040.09.01

Lab ID: **169320005** Date Received: 10/9/2015 10:30 Matrix: Water
 Sample ID: **ATR-OW2(53)-G100815** Date Collected: 10/8/2015 13:20

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

Analysis Desc: AM23G		Analytical Method: AM23G						
Lactic Acid	1.3J	mg/l	2.0	0.12	10	10/20/2015 01:50	KB	d,B
Acetic Acid	250	mg/l	10	0.80	100	10/20/2015 02:38	KB	d,B
Propionic Acid	650	mg/l	10	1.1	100	10/20/2015 02:38	KB	d
Formic Acid	2.5	mg/l	1.0	0.070	10	10/20/2015 01:50	KB	d,B
Butyric Acid	15	mg/l	1.0	0.070	10	10/20/2015 01:50	KB	d,B
Pyruvic Acid	5.2	mg/l	1.0	0.090	10	10/20/2015 01:50	KB	d
i-Pentanoic Acid	0.44J	mg/l	1.0	0.080	10	10/20/2015 01:50	KB	d
Pentanoic Acid	1.4	mg/l	0.10	0.014	1	10/16/2015 01:34	KB	
i-Hexanoic Acid	0.20 U	mg/l	0.20	0.10	1	10/16/2015 01:34	KB	
Hexanoic Acid	0.20 U	mg/l	0.20	0.12	1	10/16/2015 01:34	KB	

RISK - MICR

Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	770	ug/l	0.50	0.037	1	10/14/2015 08:50	BW	n
Ethane	1.3	ug/l	0.10	0.0020	1	10/14/2015 08:50	BW	n
Ethene	16	ug/l	0.10	0.0040	1	10/14/2015 08:50	BW	n



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ANALYTICAL RESULTS

Workorder: 16932 TEXTRON / 3359151040.09.01

Lab ID: **169320006** Date Received: 10/9/2015 10:30 Matrix: Water
 Sample ID: **ATR-OW3(35)-G100715** Date Collected: 10/7/2015 15:33

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
EDonors - MICR								
Analysis Desc: AM23G			Analytical Method: AM23G					
Lactic Acid	2.0 U	mg/l	2.0	0.12	10	10/20/2015 03:27	KB	d,B
Acetic Acid	110	mg/l	10	0.80	100	10/20/2015 04:16	KB	d,B
Propionic Acid	170	mg/l	10	1.1	100	10/20/2015 04:16	KB	d
Formic Acid	0.50J	mg/l	1.0	0.070	10	10/20/2015 03:27	KB	d,B
Butyric Acid	1.2	mg/l	1.0	0.070	10	10/20/2015 03:27	KB	d,B
Pyruvic Acid	1.2	mg/l	0.10	0.0090	1	10/16/2015 02:23	KB	
i-Pentanoic Acid	0.56	mg/l	0.10	0.0080	1	10/16/2015 02:23	KB	
Pentanoic Acid	0.55	mg/l	0.10	0.014	1	10/16/2015 02:23	KB	
i-Hexanoic Acid	0.20 U	mg/l	0.20	0.10	1	10/16/2015 02:23	KB	
Hexanoic Acid	0.43	mg/l	0.20	0.12	1	10/16/2015 02:23	KB	

RISK - MICR								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	1500	ug/l	0.50	0.037	1	10/14/2015 09:00	BW	n
Ethane	1.8	ug/l	0.10	0.0020	1	10/14/2015 09:00	BW	n
Ethene	6.2	ug/l	0.10	0.0040	1	10/14/2015 09:00	BW	n



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ANALYTICAL RESULTS

Workorder: 16932 TEXTRON / 3359151040.09.01

Lab ID: **169320007** Date Received: 10/9/2015 10:30 Matrix: Water
 Sample ID: **ATR-OW3(55)-G100715** Date Collected: 10/7/2015 16:30

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

Analysis Desc: AM23G		Analytical Method: AM23G						
Lactic Acid	80	mg/l	20	1.2	100	10/20/2015 05:53	KB	d,B
Acetic Acid	330	mg/l	10	0.80	100	10/20/2015 05:53	KB	d,B
Propionic Acid	34	mg/l	10	1.1	100	10/20/2015 05:53	KB	d
Formic Acid	120	mg/l	10	0.70	100	10/20/2015 05:53	KB	d,B
Butyric Acid	8.7	mg/l	1.0	0.070	10	10/20/2015 05:04	KB	d,B
Pyruvic Acid	24	mg/l	1.0	0.090	10	10/20/2015 05:04	KB	d
i-Pentanoic Acid	0.38	mg/l	0.10	0.0080	1	10/16/2015 03:11	KB	
Pentanoic Acid	0.10 U	mg/l	0.10	0.014	1	10/16/2015 03:11	KB	
i-Hexanoic Acid	0.20 U	mg/l	0.20	0.10	1	10/16/2015 03:11	KB	
Hexanoic Acid	0.29	mg/l	0.20	0.12	1	10/16/2015 03:11	KB	

RISK - MICR

Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	44	ug/l	0.50	0.037	1	10/14/2015 09:11	BW	n
Ethane	2.7	ug/l	0.10	0.0020	1	10/14/2015 09:11	BW	n
Ethene	0.54	ug/l	0.10	0.0040	1	10/14/2015 09:11	BW	n



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ANALYTICAL RESULTS

Workorder: 16932 TEXTRON / 3359151040.09.01

Lab ID: **169320008** Date Received: 10/9/2015 10:30 Matrix: Water
 Sample ID: **ATR-OW3(55)-G100715 R** Date Collected: 10/7/2015 16:30

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

Analysis Desc: AM23G		Analytical Method: AM23G						
Lactic Acid	83	mg/l	20	1.2	100	10/20/2015 07:30	KB	d,B
Acetic Acid	340	mg/l	10	0.80	100	10/20/2015 07:30	KB	d,B
Propionic Acid	36	mg/l	10	1.1	100	10/20/2015 07:30	KB	d
Formic Acid	120	mg/l	10	0.70	100	10/20/2015 07:30	KB	d,B
Butyric Acid	8.6	mg/l	1.0	0.070	10	10/20/2015 06:41	KB	d,B
Pyruvic Acid	24	mg/l	1.0	0.090	10	10/20/2015 06:41	KB	d
i-Pentanoic Acid	0.38	mg/l	0.10	0.0080	1	10/16/2015 04:00	KB	
Pentanoic Acid	0.10 U	mg/l	0.10	0.014	1	10/16/2015 04:00	KB	
i-Hexanoic Acid	0.20 U	mg/l	0.20	0.10	1	10/16/2015 04:00	KB	
Hexanoic Acid	0.28	mg/l	0.20	0.12	1	10/16/2015 04:00	KB	

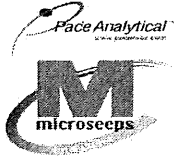
RISK - MICR

Analysis Desc: AM20GAX		Analytical Method: AM20GAX						
Methane	57	ug/l	0.50	0.037	1	10/14/2015 09:20	BW	n
Ethane	2.6	ug/l	0.10	0.0020	1	10/14/2015 09:20	BW	n
Ethene	0.53	ug/l	0.10	0.0040	1	10/14/2015 09:20	BW	n



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ANALYTICAL RESULTS

Workorder: 16932 TEXTRON / 3359151040.09.01

Lab ID: **169320009** Date Received: 10/9/2015 10:30 Matrix: Water
 Sample ID: **ATR-MW16-G100715** Date Collected: 10/7/2015 13:25

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
EDonors - MICR								
Analysis Desc: AM23G			Analytical Method: AM23G					
Lactic Acid	0.026J	mg/l	0.20	0.012	1	10/16/2015 04:48	KB	
Acetic Acid	0.21	mg/l	0.10	0.0080	1	10/16/2015 04:48	KB	B
Propionic Acid	0.012J	mg/l	0.10	0.011	1	10/16/2015 04:48	KB	
Formic Acid	0.042J	mg/l	0.10	0.0070	1	10/16/2015 04:48	KB	B
Butyric Acid	0.020J	mg/l	0.10	0.0070	1	10/16/2015 04:48	KB	B
Pyruvic Acid	0.10 U	mg/l	0.10	0.0090	1	10/16/2015 04:48	KB	
i-Pentanoic Acid	0.10 U	mg/l	0.10	0.0080	1	10/16/2015 04:48	KB	
Pentanoic Acid	0.10 U	mg/l	0.10	0.014	1	10/16/2015 04:48	KB	
i-Hexanoic Acid	0.20 U	mg/l	0.20	0.10	1	10/16/2015 04:48	KB	
Hexanoic Acid	0.20 U	mg/l	0.20	0.12	1	10/16/2015 04:48	KB	

RISK - MICR								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	8400	ug/l	0.50	0.037	1	10/14/2015 09:30	BW	n
Ethane	45	ug/l	0.10	0.0020	1	10/14/2015 09:30	BW	n
Ethene	18	ug/l	0.10	0.0040	1	10/14/2015 09:30	BW	n



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ANALYTICAL RESULTS

Workorder: 16932 TEXTRON / 3359151040.09.01

Lab ID: **169320010** Date Received: 10/9/2015 10:30 Matrix: Water
 Sample ID: **ATR-MW17-G100715** Date Collected: 10/7/2015 11:20

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

Analysis Desc: AM23G	Analytical Method: AM23G							
Lactic Acid	0.026J	mg/l	0.20	0.012	1	10/16/2015 05:37	KB	
Acetic Acid	0.037J	mg/l	0.10	0.0080	1	10/16/2015 05:37	KB	B
Propionic Acid	0.10 U	mg/l	0.10	0.011	1	10/16/2015 05:37	KB	
Formic Acid	0.033J	mg/l	0.10	0.0070	1	10/16/2015 05:37	KB	B
Butyric Acid	0.017J	mg/l	0.10	0.0070	1	10/16/2015 05:37	KB	B
Pyruvic Acid	0.10 U	mg/l	0.10	0.0090	1	10/16/2015 05:37	KB	
i-Pentanoic Acid	0.10 U	mg/l	0.10	0.0080	1	10/16/2015 05:37	KB	
Pentanoic Acid	0.10 U	mg/l	0.10	0.014	1	10/16/2015 05:37	KB	
i-Hexanoic Acid	0.20 U	mg/l	0.20	0.10	1	10/16/2015 05:37	KB	
Hexanoic Acid	0.20 U	mg/l	0.20	0.12	1	10/16/2015 05:37	KB	

RISK - MICR

Analysis Desc: AM20GAX	Analytical Method: AM20GAX							
Methane	3.8	ug/l	0.50	0.037	1	10/14/2015 09:40	BW	n
Ethane	0.041J	ug/l	0.10	0.0020	1	10/14/2015 09:40	BW	n
Ethene	0.016J	ug/l	0.10	0.0040	1	10/14/2015 09:40	BW	n



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ANALYTICAL RESULTS

Workorder: 16932 TEXTRON / 3359151040.09.01

Lab ID: **169320011** Date Received: 10/9/2015 10:30 Matrix: Water
 Sample ID: **ATR-MW26(17.5)-G100715** Date Collected: 10/7/2015 11:30

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
EDonors - MICR								
Analysis Desc: AM23G			Analytical Method: AM23G					
Lactic Acid	2.0 U	mg/l	2.0	0.12	10	10/20/2015 08:19	KB	d,B
Acetic Acid	64	mg/l	1.0	0.080	10	10/20/2015 08:19	KB	d,B
Propionic Acid	31	mg/l	1.0	0.11	10	10/20/2015 08:19	KB	d
Formic Acid	0.40	mg/l	0.10	0.0070	1	10/16/2015 06:26	KB	B
Butyric Acid	1.3	mg/l	0.10	0.0070	1	10/16/2015 06:26	KB	B
Pyruvic Acid	0.22	mg/l	0.10	0.0090	1	10/16/2015 06:26	KB	
i-Pentanoic Acid	0.18	mg/l	0.10	0.0080	1	10/16/2015 06:26	KB	
Pentanoic Acid	0.20	mg/l	0.10	0.014	1	10/16/2015 06:26	KB	
i-Hexanoic Acid	0.20 U	mg/l	0.20	0.10	1	10/16/2015 06:26	KB	
Hexanoic Acid	0.30	mg/l	0.20	0.12	1	10/16/2015 06:26	KB	

RISK - MICR								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	4100	ug/l	0.50	0.037	1	10/14/2015 09:49	BW	n
Ethane	27	ug/l	0.10	0.0020	1	10/14/2015 09:49	BW	n
Ethene	260	ug/l	0.10	0.0040	1	10/14/2015 09:49	BW	n



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ANALYTICAL RESULTS

Workorder: 16932 TEXTRON / 3359151040.09.01

Lab ID: **169320012** Date Received: 10/9/2015 10:30 Matrix: Water
 Sample ID: **ATR-MW26(28.8)-G100715** Date Collected: 10/7/2015 12:25

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
EDonors - MICR								
Analysis Desc: AM23G			Analytical Method: AM23G					
Lactic Acid	2.0 U	mg/l	2.0	0.12	10	10/20/2015 09:07	KB	d,B
Acetic Acid	25	mg/l	1.0	0.080	10	10/20/2015 09:07	KB	d,B
Propionic Acid	48	mg/l	1.0	0.11	10	10/20/2015 09:07	KB	d
Formic Acid	0.21	mg/l	0.10	0.0070	1	10/16/2015 07:14	KB	B
Butyric Acid	0.79	mg/l	0.10	0.0070	1	10/16/2015 07:14	KB	B
Pyruvic Acid	0.24	mg/l	0.10	0.0090	1	10/16/2015 07:14	KB	
i-Pentanoic Acid	0.098J	mg/l	0.10	0.0080	1	10/16/2015 07:14	KB	
Pentanoic Acid	0.20	mg/l	0.10	0.014	1	10/16/2015 07:14	KB	
i-Hexanoic Acid	0.20 U	mg/l	0.20	0.10	1	10/16/2015 07:14	KB	
Hexanoic Acid	0.20 U	mg/l	0.20	0.12	1	10/16/2015 07:14	KB	

RISK - MICR								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	15000	ug/l	0.50	0.037	1	10/14/2015 10:35	BW	n
Ethane	62	ug/l	0.10	0.0020	1	10/14/2015 10:35	BW	n
Ethene	8.6	ug/l	0.10	0.0040	1	10/14/2015 10:35	BW	n



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ANALYTICAL RESULTS

Workorder: 16932 TEXTRON / 3359151040.09.01

Lab ID: **169320013** Date Received: 10/9/2015 10:30 Matrix: Water
 Sample ID: **ATR-MW26(58.8)-G100715** Date Collected: 10/7/2015 10:40

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
EDonors - MICR								
Analysis Desc: AM23G			Analytical Method: AM23G					
Lactic Acid	0.017J	mg/l	0.20	0.012	1	10/16/2015 08:03	KB	
Acetic Acid	0.026J	mg/l	0.10	0.0080	1	10/16/2015 08:03	KB	B
Propionic Acid	0.10 U	mg/l	0.10	0.011	1	10/16/2015 08:03	KB	
Formic Acid	0.023J	mg/l	0.10	0.0070	1	10/16/2015 08:03	KB	B
Butyric Acid	0.0074J	mg/l	0.10	0.0070	1	10/16/2015 08:03	KB	B
Pyruvic Acid	0.10 U	mg/l	0.10	0.0090	1	10/16/2015 08:03	KB	
i-Pentanoic Acid	0.10 U	mg/l	0.10	0.0080	1	10/16/2015 08:03	KB	
Pentanoic Acid	0.10 U	mg/l	0.10	0.014	1	10/16/2015 08:03	KB	
i-Hexanoic Acid	0.20 U	mg/l	0.20	0.10	1	10/16/2015 08:03	KB	
Hexanoic Acid	0.20 U	mg/l	0.20	0.12	1	10/16/2015 08:03	KB	

RISK - MICR								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	77	ug/l	0.50	0.037	1	10/14/2015 10:47	BW	n
Ethane	1.3	ug/l	0.10	0.0020	1	10/14/2015 10:47	BW	n
Ethene	0.66	ug/l	0.10	0.0040	1	10/14/2015 10:47	BW	n



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ANALYTICAL RESULTS

Workorder: 16932 TEXTRON / 3359151040.09.01

Lab ID: **169320014** Date Received: 10/9/2015 10:30 Matrix: Water
 Sample ID: **ATR-ZVI2(17.5)-G100715** Date Collected: 10/7/2015 14:20

Parameters	Results Units	PQL	MDL DF	Analyzed	By	Qualifiers
EDonors - MICR						
Analysis Desc: AM23G		Analytical Method: AM23G				
Lactic Acid	2.0 U mg/l	2.0	0.12 10	10/20/2015 09:56	KB	d,B
Acetic Acid	34 mg/l	1.0	0.080 10	10/20/2015 09:56	KB	d,B
Propionic Acid	15 mg/l	1.0	0.11 10	10/20/2015 09:56	KB	d
Formic Acid	0.22 mg/l	0.10	0.0070 1	10/16/2015 08:51	KB	B
Butyric Acid	0.36 mg/l	0.10	0.0070 1	10/16/2015 08:51	KB	B
Pyruvic Acid	0.086J mg/l	0.10	0.0090 1	10/16/2015 08:51	KB	
i-Pentanoic Acid	0.11 mg/l	0.10	0.0080 1	10/16/2015 08:51	KB	
Pentanoic Acid	0.090J mg/l	0.10	0.014 1	10/16/2015 08:51	KB	
i-Hexanoic Acid	0.20 U mg/l	0.20	0.10 1	10/16/2015 08:51	KB	
Hexanoic Acid	0.20 U mg/l	0.20	0.12 1	10/16/2015 08:51	KB	

RISK - MICR						
Analysis Desc: AM20GAX		Analytical Method: AM20GAX				
Methane	3200 ug/l	0.50	0.037 1	10/14/2015 10:57	BW	n
Ethane	38 ug/l	0.10	0.0020 1	10/14/2015 10:57	BW	n
Ethene	320 ug/l	0.10	0.0040 1	10/14/2015 10:57	BW	n



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ANALYTICAL RESULTS

Workorder: 16932 TEXTRON / 3359151040.09.01

Lab ID: **169320015** Date Received: 10/9/2015 10:30 Matrix: Water
 Sample ID: **ATR-ZVI2(32.5)-G100715** Date Collected: 10/7/2015 13:28

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
EDonors - MICR								
Analysis Desc: AM23G			Analytical Method: AM23G					
Lactic Acid	0.091J	mg/l	0.20	0.012	1	10/16/2015 09:40	KB	
Acetic Acid	2.4	mg/l	0.10	0.0080	1	10/16/2015 09:40	KB	B
Propionic Acid	1.6	mg/l	0.10	0.011	1	10/16/2015 09:40	KB	
Formic Acid	0.043J	mg/l	0.10	0.0070	1	10/16/2015 09:40	KB	B
Butyric Acid	0.020J	mg/l	0.10	0.0070	1	10/16/2015 09:40	KB	B
Pyruvic Acid	0.10 U	mg/l	0.10	0.0090	1	10/16/2015 09:40	KB	
i-Pentanoic Acid	0.10 U	mg/l	0.10	0.0080	1	10/16/2015 09:40	KB	
Pentanoic Acid	0.10 U	mg/l	0.10	0.014	1	10/16/2015 09:40	KB	
i-Hexanoic Acid	0.20 U	mg/l	0.20	0.10	1	10/16/2015 09:40	KB	
Hexanoic Acid	0.20 U	mg/l	0.20	0.12	1	10/16/2015 09:40	KB	

RISK - MICR								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	1000	ug/l	0.50	0.037	1	10/14/2015 11:16	BW	n
Ethane	6.0	ug/l	0.10	0.0020	1	10/14/2015 11:16	BW	n
Ethene	14	ug/l	0.10	0.0040	1	10/14/2015 11:16	BW	n



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ANALYTICAL RESULTS

Workorder: 16932 TEXTRON / 3359151040.09.01

Lab ID: **169320016** Date Received: 10/9/2015 10:30 Matrix: Water
 Sample ID: **ATR-OW5(16)-G100715** Date Collected: 10/7/2015 15:00

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
EDonors - MICR								
Analysis Desc: AM23G			Analytical Method: AM23G					
Lactic Acid	2.0 U	mg/l	2.0	0.12	10	10/20/2015 10:44	KB	d,B
Acetic Acid	120	mg/l	10	0.80	100	10/20/2015 11:33	KB	d,B
Propionic Acid	180	mg/l	10	1.1	100	10/20/2015 11:33	KB	d
Formic Acid	0.90	mg/l	0.10	0.0070	1	10/16/2015 10:29	KB	B
Butyric Acid	2.3	mg/l	0.10	0.0070	1	10/16/2015 10:29	KB	B
Pyruvic Acid	1.0	mg/l	0.10	0.0090	1	10/16/2015 10:29	KB	
i-Pentanoic Acid	0.75	mg/l	0.10	0.0080	1	10/16/2015 10:29	KB	
Pentanoic Acid	0.066J	mg/l	0.10	0.014	1	10/16/2015 10:29	KB	
i-Hexanoic Acid	0.20 U	mg/l	0.20	0.10	1	10/16/2015 10:29	KB	
Hexanoic Acid	0.20 U	mg/l	0.20	0.12	1	10/16/2015 10:29	KB	

RISK - MICR								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	350	ug/l	0.50	0.037	1	10/14/2015 11:26	BW	n
Ethane	4.0	ug/l	0.10	0.0020	1	10/14/2015 11:26	BW	n
Ethene	9.8	ug/l	0.10	0.0040	1	10/14/2015 11:26	BW	n



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ANALYTICAL RESULTS

Workorder: 16932 TEXTRON / 3359151040.09.01

Lab ID: **169320017** Date Received: 10/9/2015 10:30 Matrix: Water
 Sample ID: **ATR-OW5(35)-G100715** Date Collected: 10/7/2015 16:30

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
EDonors - MICR								
Analysis Desc: AM23G			Analytical Method: AM23G					
Lactic Acid	2.0 U	mg/l	2.0	0.12	10	10/20/2015 12:22	KB	d,B
Acetic Acid	85	mg/l	10	0.80	100	10/20/2015 13:10	KB	d,B
Propionic Acid	330	mg/l	10	1.1	100	10/20/2015 13:10	KB	d
Formic Acid	0.83J	mg/l	1.0	0.070	10	10/20/2015 12:22	KB	d,B
Butyric Acid	1.2	mg/l	1.0	0.070	10	10/20/2015 12:22	KB	d,B
Pyruvic Acid	0.72J	mg/l	1.0	0.090	10	10/20/2015 12:22	KB	d
i-Pentanoic Acid	0.081J	mg/l	1.0	0.080	10	10/20/2015 12:22	KB	d
Pentanoic Acid	0.075J	mg/l	0.10	0.014	1	10/16/2015 11:17	KB	
i-Hexanoic Acid	0.20 U	mg/l	0.20	0.10	1	10/16/2015 11:17	KB	
Hexanoic Acid	0.20 U	mg/l	0.20	0.12	1	10/16/2015 11:17	KB	
RISK - MICR								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	1200	ug/l	0.50	0.037	1	10/14/2015 11:35	BW	n
Ethane	3.4	ug/l	0.10	0.0020	1	10/14/2015 11:35	BW	n
Ethene	56	ug/l	0.10	0.0040	1	10/14/2015 11:35	BW	n



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ANALYTICAL RESULTS

Workorder: 16932 TEXTRON / 3359151040.09.01

Lab ID: **169320018** Date Received: 10/9/2015 10:30 Matrix: Water
 Sample ID: **ATR-OW5(54)-G100715** Date Collected: 10/7/2015 17:20

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

Analysis Desc: AM23G

Analytical Method: AM23G

Lactic Acid	0.031J	mg/l	0.20	0.012	1	10/16/2015 12:06	KB	
Acetic Acid	0.056J	mg/l	0.10	0.0080	1	10/16/2015 12:06	KB	B
Propionic Acid	0.047J	mg/l	0.10	0.011	1	10/16/2015 12:06	KB	
Formic Acid	0.028J	mg/l	0.10	0.0070	1	10/16/2015 12:06	KB	B
Butyric Acid	0.012J	mg/l	0.10	0.0070	1	10/16/2015 12:06	KB	B
Pyruvic Acid	0.10 U	mg/l	0.10	0.0090	1	10/16/2015 12:06	KB	
i-Pentanoic Acid	0.10 U	mg/l	0.10	0.0080	1	10/16/2015 12:06	KB	
Pentanoic Acid	0.10 U	mg/l	0.10	0.014	1	10/16/2015 12:06	KB	
i-Hexanoic Acid	0.20 U	mg/l	0.20	0.10	1	10/16/2015 12:06	KB	
Hexanoic Acid	0.20 U	mg/l	0.20	0.12	1	10/16/2015 12:06	KB	

RISK - MICR

Analysis Desc: AM20GAX

Analytical Method: AM20GAX

Methane	610	ug/l	0.50	0.037	1	10/14/2015 11:54	BW	n
Ethane	2.7	ug/l	0.10	0.0020	1	10/14/2015 11:54	BW	n
Ethene	11	ug/l	0.10	0.0040	1	10/14/2015 11:54	BW	n



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ANALYTICAL RESULTS

Workorder: 16932 TEXTRON / 3359151040.09.01

Lab ID: **169320019** Date Received: 10/9/2015 10:30 Matrix: Water
 Sample ID: **ATR-EB001-G100815** Date Collected: 10/8/2015 10:15

Parameters	Results	Units	PQL	MDL	DF	Analyzed	By	Qualifiers
EDonors - MICR								
Analysis Desc: AM23G			Analytical Method: AM23G					
Lactic Acid	0.017J	mg/l	0.20	0.012	1	10/16/2015 12:54	KB	
Acetic Acid	0.046J	mg/l	0.10	0.0080	1	10/16/2015 12:54	KB	B
Propionic Acid	0.10 U	mg/l	0.10	0.011	1	10/16/2015 12:54	KB	
Formic Acid	0.045J	mg/l	0.10	0.0070	1	10/16/2015 12:54	KB	B
Butyric Acid	0.017J	mg/l	0.10	0.0070	1	10/16/2015 12:54	KB	B
Pyruvic Acid	0.10 U	mg/l	0.10	0.0090	1	10/16/2015 12:54	KB	
i-Pentanoic Acid	0.10 U	mg/l	0.10	0.0080	1	10/16/2015 12:54	KB	
Pentanoic Acid	0.10 U	mg/l	0.10	0.014	1	10/16/2015 12:54	KB	
i-Hexanoic Acid	0.20 U	mg/l	0.20	0.10	1	10/16/2015 12:54	KB	
Hexanoic Acid	0.20 U	mg/l	0.20	0.12	1	10/16/2015 12:54	KB	

RISK - MICR								
Analysis Desc: AM20GAX			Analytical Method: AM20GAX					
Methane	0.080J	ug/l	0.50	0.037	1	10/14/2015 12:13	BW	n
Ethane	0.0030J	ug/l	0.10	0.0020	1	10/14/2015 12:13	BW	n
Ethene	0.0058J	ug/l	0.10	0.0040	1	10/14/2015 12:13	BW	n



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ANALYTICAL RESULTS QUALIFIERS

Workorder: 16932 TEXTRON / 3359151040.09.01

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.
- B** The analyte was detected in the associated blank.
- d** The analyte concentration was determined from a dilution.



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QUALITY CONTROL DATA

Workorder: 16932 TEXTRON / 3359151040.09.01

QC Batch: DISG/4896 Analysis Method: AM20GAX
 QC Batch Method: AM20GAX
 Associated Lab Samples: 169320001, 169320002, 169320003, 169320004, 169320005, 169320006, 169320007, 169320008, 169320009,
 169320010, 169320011, 169320012, 169320013, 169320014, 169320015, 169320016, 169320017, 169320018,
 169320019

METHOD BLANK: 37679

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

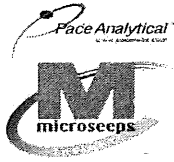
LABORATORY CONTROL SAMPLE & LCSD: 37680 37681

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
RISK										
Methane	ug/l	750	730	740	97	99	80-120	2	20	n
Ethane	ug/l	38	39	40	104	105	80-120	0.96	20	n
Ethene	ug/l	35	36	37	103	104	80-120	0.97	20	n



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QUALITY CONTROL DATA

Workorder: 16932 TEXTRON / 3359151040.09.01

QC Batch: EDON/2669 Analysis Method: AM23G
 QC Batch Method: AM23G
 Associated Lab Samples: 169320001, 169320002, 169320003, 169320004, 169320005, 169320006, 169320007, 169320008, 169320009,
 169320010, 169320011, 169320012, 169320013, 169320014, 169320015, 169320016, 169320017, 169320018,
 169320019

METHOD BLANK: 37713

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
EDonors				
Lactic Acid	mg/l	0.20 U	0.20	
Acetic Acid	mg/l	0.027J	0.10 B	
Propionic Acid	mg/l	0.10 U	0.10	
Formic Acid	mg/l	0.014J	0.10 B	
Butyric Acid	mg/l	0.013J	0.10 B	
Pyruvic Acid	mg/l	0.10 U	0.10	
i-Pentanoic Acid	mg/l	0.10 U	0.10	
Pentanoic Acid	mg/l	0.10 U	0.10	
i-Hexanoic Acid	mg/l	0.20 U	0.20	
Hexanoic Acid	mg/l	0.20 U	0.20	

LABORATORY CONTROL SAMPLE: 37714

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
EDonors						
Lactic Acid	mg/l	2	2.1	104	70-130	
Acetic Acid	mg/l	2	2.1	105	70-130	B
Propionic Acid	mg/l	2	2.1	105	70-130	
Formic Acid	mg/l	2	1.9	93	70-130	B
Butyric Acid	mg/l	2	2.1	105	70-130	B
Pyruvic Acid	mg/l	2	1.9	96	70-130	
i-Pentanoic Acid	mg/l	2	2.0	103	70-130	
Pentanoic Acid	mg/l	2	2.0	100	70-130	
i-Hexanoic Acid	mg/l	2	2.1	104	70-130	
Hexanoic Acid	mg/l	2	2.0	103	70-130	

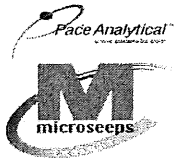
MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 37715 37716 Original: 169310001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	Max RPD	Qualifiers
EDonors										



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 220 William Pitt Way
 Pittsburgh, PA 15238
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 Fax: (412) 826-3433

QUALITY CONTROL DATA

Workorder: 16932 TEXTRON / 3359151040.09.01

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 37715 37716 Original: 169310001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
Lactic Acid	mg/l	0.021	2	2.0	2.0	99	99	70-130	0	30	
Acetic Acid	mg/l	0.045	2	2.1	2.1	103	102	70-130	0.98	30	B
Propionic Acid	mg/l	0.0057	2	2.1	2.1	105	104	70-130	0.96	30	
Formic Acid	mg/l	0.033	2	1.9	1.9	94	93	70-130	1.1	30	B
Butyric Acid	mg/l	0.017	2	2.1	2.1	104	104	70-130	0	30	B
Pyruvic Acid	mg/l	0	2	1.9	1.9	95	95	70-130	0	30	
i-Pentanoic Acid	mg/l	0	2	2.0	2.0	101	100	70-130	1	30	
Pentanoic Acid	mg/l	0	2	2.0	2.0	99	98	70-130	1	30	
i-Hexanoic Acid	mg/l	0	2	2.1	2.0	103	100	70-130	3	30	
Hexanoic Acid	mg/l	0.0068	2	2.0	2.0	101	98	70-130	3	30	



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QUALITY CONTROL DATA

Workorder: 16932 TEXTRON / 3359151040.09.01

QC Batch: EDON/2673 Analysis Method: AM23G
 QC Batch Method: AM23G
 Associated Lab Samples: 169320001, 169320004, 169320005, 169320006, 169320007, 169320008, 169320011, 169320012, 169320014, 169320016, 169320017

METHOD BLANK: 37877

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
EDonors				
Lactic Acid	mg/l	0.023J	0.20	B
Acetic Acid	mg/l	0.043J	0.10	B
Propionic Acid	mg/l	0.10 U	0.10	
Formic Acid	mg/l	0.022J	0.10	B
Butyric Acid	mg/l	0.023J	0.10	B
Pyruvic Acid	mg/l	0.10 U	0.10	
i-Pentanoic Acid	mg/l	0.10 U	0.10	

LABORATORY CONTROL SAMPLE: 37878

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
EDonors						
Lactic Acid	mg/l	2	2.1	105	70-130	B
Acetic Acid	mg/l	2	2.1	104	70-130	B
Propionic Acid	mg/l	2	2.1	105	70-130	
Formic Acid	mg/l	2	1.9	93	70-130	B
Butyric Acid	mg/l	2	2.1	105	70-130	B
Pyruvic Acid	mg/l	2	1.9	97	70-130	
i-Pentanoic Acid	mg/l	2	2.0	102	70-130	



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QUALITY CONTROL DATA QUALIFIERS

Workorder: 16932 TEXTRON / 3359151040.09.01

QUALITY CONTROL PARAMETER QUALIFIERS

- B The analyte was detected in the associated blank.
- 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: 16932 TEXTRON / 3359151040.09.01

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
169320001	ATR-MW14-G100815			AM20GAX	DISG/4896
169320002	ATR-MW24(24.9)-G100815			AM20GAX	DISG/4896
169320003	ATR-MW24(55.9)-G100815			AM20GAX	DISG/4896
169320004	ATR-OW2(33)-G100815			AM20GAX	DISG/4896
169320005	ATR-OW2(53)-G100815			AM20GAX	DISG/4896
169320006	ATR-OW3(35)-G100715			AM20GAX	DISG/4896
169320007	ATR-OW3(55)-G100715			AM20GAX	DISG/4896
169320008	ATR-OW3(55)-G100715 R			AM20GAX	DISG/4896
169320009	ATR-MW16-G100715			AM20GAX	DISG/4896
169320010	ATR-MW17-G100715			AM20GAX	DISG/4896
169320011	ATR-MW26(17.5)-G100715			AM20GAX	DISG/4896
169320012	ATR-MW26(28.8)-G100715			AM20GAX	DISG/4896
169320013	ATR-MW26(58.8)-G100715			AM20GAX	DISG/4896
169320014	ATR-ZVI2(17.5)-G100715			AM20GAX	DISG/4896
169320015	ATR-ZVI2(32.5)-G100715			AM20GAX	DISG/4896
169320016	ATR-OW5(16)-G100715			AM20GAX	DISG/4896
169320017	ATR-OW5(35)-G100715			AM20GAX	DISG/4896
169320018	ATR-OW5(54)-G100715			AM20GAX	DISG/4896
169320019	ATR-EB001-G100815			AM20GAX	DISG/4896
169320001	ATR-MW14-G100815			AM23G	EDON/2669
169320002	ATR-MW24(24.9)-G100815			AM23G	EDON/2669
169320003	ATR-MW24(55.9)-G100815			AM23G	EDON/2669
169320004	ATR-OW2(33)-G100815			AM23G	EDON/2669
169320005	ATR-OW2(53)-G100815			AM23G	EDON/2669
169320006	ATR-OW3(35)-G100715			AM23G	EDON/2669
169320007	ATR-OW3(55)-G100715			AM23G	EDON/2669
169320008	ATR-OW3(55)-G100715 R			AM23G	EDON/2669
169320009	ATR-MW16-G100715			AM23G	EDON/2669
169320010	ATR-MW17-G100715			AM23G	EDON/2669
169320011	ATR-MW26(17.5)-G100715			AM23G	EDON/2669
169320012	ATR-MW26(28.8)-G100715			AM23G	EDON/2669
169320013	ATR-MW26(58.8)-G100715			AM23G	EDON/2669
169320014	ATR-ZVI2(17.5)-G100715			AM23G	EDON/2669



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Fax: (412) 826-3433

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: 16932 TEXTRON / 3359151040.09.01

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
169320015	ATR-ZVI2(32.5)-G100715			AM23G	EDON/2669
169320016	ATR-OW5(16)-G100715			AM23G	EDON/2669
169320017	ATR-OW5(35)-G100715			AM23G	EDON/2669
169320018	ATR-OW5(54)-G100715			AM23G	EDON/2669
169320019	ATR-EB001-G100815			AM23G	EDON/2669
169320001	ATR-MW14-G100815			AM23G	EDON/2673
169320004	ATR-OW2(33)-G100815			AM23G	EDON/2673
169320005	ATR-OW2(53)-G100815			AM23G	EDON/2673
169320006	ATR-OW3(35)-G100715			AM23G	EDON/2673
169320007	ATR-OW3(55)-G100715			AM23G	EDON/2673
169320008	ATR-OW3(55)-G100715 R			AM23G	EDON/2673
169320011	ATR-MW26(17.5)-G100715			AM23G	EDON/2673
169320012	ATR-MW26(28.8)-G100715			AM23G	EDON/2673
169320014	ATR-ZVI2(17.5)-G100715			AM23G	EDON/2673
169320016	ATR-OW5(16)-G100715			AM23G	EDON/2673
169320017	ATR-OW5(35)-G100715			AM23G	EDON/2673



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CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

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Pittsburgh, PA 15238
412-826-5245

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Microseeps

16932

Page: 1 of 2
005379

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company: <u>Anee Foster Wheeler</u>		Report To: <u>Samuel.park@gnenergy.com</u>		Attention:	
Address: <u>521 Byers Rd. Suite 204</u>		Copy To:		Company Name:	
<u>Miamisburg, OH, 45342</u>		Purchase Order No.: <u>C012 005143</u>		Address:	
Email To: <u>Paul.Stork@gnenergy.com</u>		Project Name: <u>Texton, Rochester, IN</u>		Pace Quote References:	
Phone: <u>513-853-3600</u>		Project Number: <u>3359151040.09.01</u>		Pace Project Manager:	
Requested Due Date/TAT:				Pace Profile #:	

REGULATORY AGENCY

NPDES GROUND WATER DRINKING WATER

UST RCRA OTHER

Site Location: IN

STATE: IN

ITEM #	Section D Required Client Information	Matrix Codes MATRIX / CODE	COLLECTED		SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives		Analysis Test ↑ Y/N	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
			COMPOSITE START	COMPOSITE END/GRAB			Unpreserved	H ₂ SO ₄				
1	ATR-MWH-6100815	DW	DATE	TIME		5						
2	ATR-MWH(24.9)-6100815	WT	10-8	1000								
3	ATR-MWH(55.9)-6100815	WT	10-8	1050								
4	ATR-OW2(33)-6100815	WT	10-8	0948								
5	ATR-OW2(53)-6100815	WT	10-8	1210								
6	ATR-OW3(35)-6100715	WT	10-8	1320								
7	ATR-OW3(55)-6100715	WT	10-7	1533								
8	ATR-OW3(55)-6100715	R	10-7	1630								
9	ATR-MW16-6100715	WT	10-7	1525								
10	ATR-MW17-6100715	WT	10-7	1120								
11	ATR-MW26(17.5)-6100715	WT	10-7	1130								
12	ATR-MW26(28.9)-6100715	WT	10-7	1225								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
				<u>KASSEL PARS</u>	<u>10.9.15</u>	<u>10:30</u>	Received on Ice (Y/N) <input type="checkbox"/> Custody Sealed Cooler (Y/N) <input type="checkbox"/> Samples Intact (Y/N) <input type="checkbox"/>

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Symon Parkes

SIGNATURE of SAMPLER: [Signature]

DATE Signed (MM/DD/YY): 10/08/15

ORIGINAL

16932 CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

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Pittsburgh, PA 15238
412-826-5245

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Invoice Information:
Attention: 005380

Section C
Company Name:
Address:
Pace Quote Reference:
Pace Project Manager:
Pace Profile #:

Section B
Report To:
Copy To:
Purchase Order No.:
Project Name:
Project Number:

Section A
Company:
Address:
Email To:
Phone:
Requested Due Date/TAT:

REGULATORY AGENCY
NPDES GROUND WATER DRINKING WATER
UST RCRA OTHER
Site Location
STATE: IN

Requested Analysis Filtered (Y/N)

ITEM #	Section D Required Client Information	Section B COLLECTED	Section C PRESERVATIVES	Section A ANALYSIS TEST	Y/N	Residual Chlorine (Y/N)	Pace Project No. / Lab I.D.	
								Matrix Codes
1	ATR - MW 26 (58.8) - G100715	DW WT P SL OL WP AR TS OT	DW WT WW P SL OL WP AR TS OT	WT G	WT G	10-7 1040		
2	ATR - ZVFA (17.5) - G100715	Drinking Water	Drinking Water	WT G	WT G	10-7 1430		
3	ATR - ZVIA (32.5) - G100715	Waste Water Product	Waste Water Product	WT G	WT G	10-7 1328		
4	ATR - OW 5 (16) - G100715	Soil/Solid	Soil/Solid	WT G	WT G	10-7 1500		
5	ATR - OW 5 (35) - G100715	Oil	Oil	WT G	WT G	10-7 1630		
6	ATR - OW 5 (54) - G100715	Wipe	Wipe	WT G	WT G	10-7 1720		
7	ATR - EB001 - G100815	Air Tissue	Air Tissue	WT G	WT G	10-8 1015		
8		Other	Other	WT G	WT G			
9				WT G	WT G			
10				WT G	WT G			
11				WT G	WT G			
12				WT G	WT G			

Additional Comments

RELINQUISHED BY / AFFILIATION: NOEL PAES
DATE: 10.9.15 TIME: 10:30
ACCEPTED BY / AFFILIATION: NOEL PAES
DATE: 10.9.15 TIME: 10:30
SAMPLE CONDITIONS:
Received on Ice (Y/N) Y
Custody Sealed Cooler (Y/N) Y
Samples Intact (Y/N) Y

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Sam Parola
SIGNATURE of SAMPLER: [Signature]
DATE Signed (MM/DD/YY): 10/06/15

NON-CONFORMANCE FORM

PAES Work Order #: 16932

Date: 10.9.15 Time of Receipt: 1030 Receiver: LJ

Client: Amec

REASON FOR NON-CONFORMANCE:

Samples No. 1, 2, 4, 5 and 19: VFA vials
were unpreserved.

ACTION TAKEN:

Client name: _____ Date: _____ Time: _____

OK to proceed

Customer Service Initials RW

Date 10-13-15

Cooler Receipt Form

Client Name: Amec FW Project: Textron Lab Work Order: 16932

A. Shipping/Container Information (circle appropriate response)

Courier: FedEx UPS USPS Client Other: _____ Air bill Present: Yes No

Tracking Number: 840976741221

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: 2°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: LY Date: 10-9-15

Project Manager Review: EW Date: 10-13-15



10515 Research Drive
Knoxville, TN 37932
Phone: (865) 573-8188
Fax: (865) 573-8133

Client: Russell Dornbusch
Amec Foster Wheeler plc
521 Byers Road, Suite 204
Miamisburg, OH 45342

Phone: +1 (937) 859-3600

Fax:

Identifier: 083MH

Date Rec: 08/29/2015

Report Date: 09/01/2015

Client Project #:

Client Project Name: Torx Rotchester

Purchase Order #: C012605141

Analysis Requested: CENSUS

Reviewed By:

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Client: Amec Foster Wheeler plc
Project: Torx Rotchester

MI Project Number: 083MH
Date Received: 08/29/2015

Sample Information

Client Sample ID:	ATR-MW13-G08	ATR-MW12-G0	ATR-MW6C-G0	ATR-MW82-G08	ATR-EB001-082
	2615	82615	82615	2615	615
Sample Date:	08/26/2015	08/26/2015	08/26/2015	08/26/2015	08/26/2015
Units:	cells/mL	cells/mL	cells/mL	cells/mL	cells/mL
Analyst:	JS	JS	JS	JS	JS

Dechlorinating Bacteria

		ATR-MW13-G08	ATR-MW12-G0	ATR-MW6C-G0	ATR-MW82-G08	ATR-EB001-082
<i>Dehalococcoides</i>	DHC	1.32E+06	5.42E+02	5.67E+04	5.85E+03	<5.00E-01
tceA Reductase	TCE	3.90E+00	<2.50E+00	2.66E+01	<3.30E+00	<5.00E-01
BAV1 Vinyl Chloride Reductase	BVC	4.41E+05	1.62E+01	2.47E+04	1.63E+02	<5.00E-01
Vinyl Chloride Reductase	VCR	1.87E+05	1.64E+01	9.77E+03	8.77E+01	<5.00E-01

Legend:

NA = Not Analyzed NS = Not Sampled J = Estimated gene copies below PQL but above LQL I = Inhibited
 < = Result not detected

Client: Amec Foster Wheeler plc
Project: Torx Rotchester

MI Project Number: 083MH
Date Received: 08/29/2015

Sample Information

Client Sample ID:	ATR-MW20(57) -G082715	ATR-MW20(35) -G082715	ATR-MW20(35) -G082715R	ATR-MW62-G08 2715	ATR-OW1(D) -G082715
Sample Date:	08/27/2015	08/27/2015	08/27/2015	08/27/2015	08/27/2015
Units:	cells/mL	cells/mL	cells/mL	cells/mL	cells/mL
Analyst:	JS	JS	JS	JS	JS

Dechlorinating Bacteria

<i>Dehalococcoides</i>	DHC	1.05E+02	7.82E+03	9.06E+03	4.93E+04	1.22E+06
tceA Reductase	TCE	<1.90E+00	2.08E+02	2.40E+02	2.86E+02	<5.00E-01
BAV1 Vinyl Chloride Reductase	BVC	1.78E+01	5.36E+03	6.69E+03	1.82E+04	6.04E+05
Vinyl Chloride Reductase	VCR	2.80E+00	6.76E+01	8.04E+01	9.99E+03	3.44E+05

Legend:

NA = Not Analyzed NS = Not Sampled J = Estimated gene copies below PQL but above LQL I = Inhibited
 < = Result not detected

Client: Amec Foster Wheeler plc
Project: Torx Rotchester

MI Project Number: 083MH
Date Received: 08/29/2015

Sample Information

Client Sample ID:	ATR-OW1(S) -G082715	ATR-MW81(27) -G082715	ATR-PM3-G082 715	ATR-MW59(29) -G082715	ATR-PM2-G082 715
Sample Date:	08/27/2015	08/27/2015	08/27/2015	08/27/2015	08/27/2015
Units:	cells/mL	cells/mL	cells/mL	cells/mL	cells/mL
Analyst:	JS	JS	JS	JS	JS

Dechlorinating Bacteria

		3.56E+05	2.54E+05	1.06E+04	2.46E+05	8.92E+05
<i>Dehalococcoides</i>	DHC					
tceA Reductase	TCE	<5.00E-01	<1.00E+00	<1.85E+01	<5.00E-01	<5.00E-01
BAV1 Vinyl Chloride Reductase	BVC	6.74E+03	9.78E+04	5.91E+03	1.15E+05	5.71E+05
Vinyl Chloride Reductase	VCR	1.48E+05	4.74E+03	7.24E+02	7.08E+04	2.84E+05

Legend:

NA = Not Analyzed NS = Not Sampled J = Estimated gene copies below PQL but above LQL I = Inhibited
 < = Result not detected

10515 Research Dr., Knoxville, TN 37932
 Tel. (865) 573-8188 Fax. (865) 573-8133

Client: Amec Foster Wheeler plc
Project: Torx Rotchester

MI Project Number: 083MH
Date Received: 08/29/2015

Sample Information

Client Sample ID:	ATR-EB001-082	ATR-FB001-082
	715	715
Sample Date:	08/27/2015	08/27/2015
Units:	cells/mL	cells/mL
Analyst:	JS	JS

Dechlorinating Bacteria

<i>Dehalococcoides</i>	DHC	2.19E+02	4.52E+01
tceA Reductase	TCE	<5.00E-01	<5.00E-01
BAV1 Vinyl Chloride Reductase	BVC	1.02E+02	3.56E+01
Vinyl Chloride Reductase	VCR	1.20E+01	1.40E+00

Legend:

NA = Not Analyzed NS = Not Sampled J = Estimated gene copies below PQL but above LQL I = Inhibited
 < = Result not detected

REPORT TO:

Name: AMEC Foster Wheeler
 Company: _____
 Address: 501 BUCK RD
Midwinstery Off 45342
 email: Paul.Stok@amecfw.com
 Phone: 937-789-7040
 Fax: _____
 Project Manager: Paul Stok
 Project Name: Torx Batchester
 Project No.: _____

INVOICE TO: (For Invoices paid by a third party it is imperative that all information be provided)

Name: _____
 Company: _____
 Address: _____
 email: _____
 Phone: _____
 Fax: _____
 Purchase Order No. C012605141
 Subcontract No. _____
 MI Quote No. _____



10515 Research Dr
 Knoxville, TN 37932
 865-573-8188

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Please Check One:

- More samples to follow
- No Additional Samples

Report Type: Standard (default) Microbial Insights Level III raw data(15% surcharge) Microbial Insights Level IV (25% surcharge) Comprehensive Interpretive(15%) Historical Interpretive (35%)
 EDD type: Microbial Insights Standard (default) All other available EDDs (5% surcharge) Specify EDD Type: _____

Please contact us with any questions about the analyses or filling out the COC at (865) 573-8188 (9:00 am to 5:00 pm EST, M-F). After hours email: customerservice@microbe.com

Sample Information					Analyses			CENSUS: Please select the target organism/gene																									
MI ID (Laboratory Use Only)	Sample Name	Date Sampled	Time Sampled	Matrix	PLFA	NGS	QuantArray Chlor	QuantArray Petro	DHC (Dehalococcoides) (qPCR)	DHC Functional genes (bvc, bza, vcr)	DHB (Dehalobacter)	DSM (Desulfuromonas)	DSB (Desulfobacterium)	EBAC (Total)	SRB (Sulfate Reducing Bacteria-APS)	MGN (Methanogens)	MOB (Methanotrophs)	SMMO	DNF (Denitrifiers-nitS and nitK)	AOB (ammonia oxidizing bacteria)	PM1 (MTBE aerobic)	RMO (Toluene Monooxygenase)	RDEG (Toluene Monooxygenase)	PHE (Phenol Hydroxylase)	NAH (Naphthalene-aerobic)	BSSA (Toluene/Xylene-Anaerobic)	add. qPCR:	add. qPCR:	RNA (Expression Option)	Other:	Other:	Other:	
083MH 1	KTR-MW13-6082615	8/20/15	1350	GW					X																								
2	ATR-MW12-6082615	8/20/15	1440	GW					X																								
3	ATR-MW14-6082615	8/20/15	1612	GW					X																								
4	ATR-MW28-6082615	8/20/15	1750	GW					X																								
5	ATR-ER001-082615	8/20/15	1810	GW					X																								
6	ATR-MW20(51)-6082715	8-27	1138	GW					X																								
7	ATR-MW20(35)-6082715	8-27	1240	GW					X																								
8	ATR-MW20(35)-6082715R	8-27	1240	GW					X																								
9	ATR-MW62-6082715	8-27	1355	GW					X																								
10	ATR-OW160-6082715	8-27	1549	GW					X																								

Relinquished by: James G. Schwenberger

Received by: _____ Date 8/25/15 8/29/15

It is vital that chain of custody is filled out correctly & that all relative information is provided. Failure to provide sufficient and/or correct information regarding reporting, invoicing & analyses requested information may result in delays for which MI will not be liable.

REPORT TO:

Name: AMEC Foster Wheeler
 Company: _____
 Address: 521 Byers Rd
Miamisburg Ohio 45343
 email: Paul.Stork@amec.fwi.com
 Phone: 937-859-3600
 Fax: _____
 Project Manager: Paul Stork
 Project Name: Torx - Rochester
 Project No.: _____

INVOICE TO: (For Invoices paid by a third party it is imperative that all information be provided)

Name: _____
 Company: _____
 Address: _____
 email: _____
 Phone: _____
 Fax: _____
 Purchase Order No. CO12605141
 Subcontract No. _____
 MI Quote No. _____



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 Knoxville, TN 37932
 865-573-8188

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Please Check One:
 More samples to follow
 No Additional Samples

Report Type: Standard (default) Microbial Insights Level III raw data(15% surcharge) Microbial Insights Level IV (25% surcharge) Comprehensive Interpretive(15%) Historical Interpretive (35%)
 EDD type: Microbial Insights Standard (default) All other available EDDs (5% surcharge) Specify EDD Type: _____

Please contact us with any questions about the analyses or filling out the COC at (865) 573-8188 (9:00 am to 5:00 pm EST, M-F). After hours email: customerservice@microbe.com

Sample Information					Analyses		CENSUS: Please select the target organism/gene																										
MI ID (Laboratory Use Only)	Sample Name	Date Sampled	Time Sampled	Matrix	PLFA	NGS	QuantArray Chlor	QuantArray Petro	DHC (Dehalococoides) (qPCR)	DHC Functional genes (bvc, lse, vcr)	DHBK (Dehalobacter)	DSM (Desulfuromonas)	DSB (Desulfobacterium)	EBAC (Total)	SRB (Sulfate Reducing Bacteria-APS)	MGN (Methanogens)	MOB (Methanotrophs)	SMMO	DNF (Denitrifiers-nitS and nirk)	AOB (ammonia oxidizing bacteria)	PM1 (MTBE aerobic)	RMO (Toluene Monooxygenase)	RDEG (Toluene Monooxygenase)	PHE (Phenol Hydroxylase)	NAH (Naphthalene-aerobic)	BSSA (TolueneXylene-Anaerobic)	add. qPCR: <u>BVC/FCBA</u>	add. qPCR: <u>NLR</u>	RNA (Expression Option)*	Other:	Other:	Other:	
063M11B	ATR-OW1(S)-G082715	8-27	1600	W					X																			X					
12	ATR-MW81(21)-G082715	8-27	1725	W					X																			X					
13	ATR-PM3-G082715	8-27	1750	W					X																			X					
14	ATR-MW59(25)-G082715	8-27	1720	W					X																			X					
15	ATR-PM2-G082715	8-27	1725	W					X																			X					
16	ATR-EB001-082715	8-27	1845	W					X																			X					
17	ATR-FB001-082715	8-27	1500	W					X																			X					

Relinquished by: g.s. Schlegel

Received by: [Signature] Date 8/28/15 4/29/15

It is vital that chain of custody is filled out correctly & that all relative information is provided. Failure to provide sufficient and/or correct information regarding reporting, invoicing & analyses requested information may result in delays for which MI will not be liable.

Client: Paul Stork
AMEC Foster Wheeler
521 Byers Rd
Suite 204
Miamisburg, OH 45342

Phone: 937-859-3900

Fax:

Identifier: 025MJ

Date Rec: 10/08/2015

Report Date: 12/11/2015

Client Project #: 3359151040.09.01

Client Project Name: TFS Rochester Performance GWM

Purchase Order #: C012605141

Analysis Requested: CENSUS

Reviewed By:



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Client: AMEC Foster Wheeler
Project: TFS Rochester Performance GWM

MI Project Number: 025MJ
Date Received: 10/08/2015

Sample Information

Client Sample ID:	ATR-MW26 (17.5)-100715	ATR-MW26 (28.8)-100715	ATR-MW26 (58.8)-100715	ATR-ZVI2 (17.5) - 100715	ATR-ZVI2 (32.5) -100715
Sample Date:	10/07/2015	10/07/2015	10/07/2015	10/07/2015	10/07/2015
Units:	cells/mL	cells/mL	cells/mL	cells/mL	cells/mL
Analyst:	CB	CB	CB	CB	CB

Dechlorinating Bacteria

<i>Dehalococcoides</i>	DHC	5.77E+05	2.88E+04	1.74E+02	3.45E+05	1.05E+05
tceA Reductase	TCE	2.30E+02	1.05E+02	<5.00E-01	6.91E+02	2.70E+02
BAV1 Vinyl Chloride Reductase	BVC	1.64E+05	2.56E+03	9.00E-01	3.74E+04	1.43E+01
Vinyl Chloride Reductase	VCR	2.45E+05	7.06E+03	3.00E-01 (J)	9.92E+04	3.23E+04

Legend:

NA = Not Analyzed NS = Not Sampled J = Estimated gene copies below PQL but above LQL I = Inhibited
 < = Result not detected

Client: AMEC Foster Wheeler
Project: TFS Rochester Performance GWM

MI Project Number: 025MJ
Date Received: 10/08/2015

Sample Information

Client Sample ID:	atr-ow5 (16)	ATR-OW5 (35)	ATR-OW5 (54)	ATR-OW3 (35)	ATR-OW3 (55)
	-100715	-100715	-100715	-100715	-100715
Sample Date:	10/07/2015	10/07/2015	10/07/2015	10/07/2015	10/07/2015
Units:	cells/mL	cells/mL	cells/mL	cells/mL	cells/mL
Analyst:	CB	CB	CB	CB	CB

Dechlorinating Bacteria

		1.01E+03	2.60E+03	7.36E+02	4.38E+02	1.14E+01
<i>Dehalococcoides</i>	DHC					
tceA Reductase	TCE	1.30E+00	2.00E-01 (J)	<5.00E-01	<5.00E-01	<1.30E+00
BAV1 Vinyl Chloride Reductase	BVC	6.00E+00	1.30E+00	4.00E-01 (J)	3.00E-01 (J)	<1.30E+00
Vinyl Chloride Reductase	VCR	2.02E+01	3.60E+00	5.39E+01	4.00E-01 (J)	<1.30E+00

Legend:

NA = Not Analyzed NS = Not Sampled J = Estimated gene copies below PQL but above LQL I = Inhibited
 < = Result not detected

Client: AMEC Foster Wheeler
Project: TFS Rochester Performance GWM

MI Project Number: 025MJ
Date Received: 10/08/2015

Sample Information

Client Sample ID:	ATR-OW3 (55) -100715R	ATR-MW17-100 715	ATR-MW16-100 715	ATR-MW14-100 815	ATR-EB001-100 815
Sample Date:	10/07/2015	10/07/2015	10/07/2015	10/08/2015	10/08/2015
Units:	cells/mL	cells/mL	cells/mL	cells/mL	cells/mL
Analyst:	CB	CB	CB	CB	CB

Dechlorinating Bacteria

<i>Dehalococcoides</i>	DHC	1.13E+01	<5.00E-01	1.62E+04	1.92E+02	<5.00E-01
tceA Reductase	TCE	<2.00E+00	<5.00E-01	3.71E+01	3.00E-01 (J)	<5.00E-01
BAV1 Vinyl Chloride Reductase	BVC	<2.00E+00	<5.00E-01	9.62E+02	<5.00E-01	<5.00E-01
Vinyl Chloride Reductase	VCR	<2.00E+00	<5.00E-01	5.56E+03	5.00E+00	<5.00E-01

Legend:

NA = Not Analyzed NS = Not Sampled J = Estimated gene copies below PQL but above LQL I = Inhibited
 < = Result not detected

Client: AMEC Foster Wheeler
Project: TFS Rochester Performance GWM

MI Project Number: 025MJ
Date Received: 10/08/2015

Sample Information

Client Sample ID:	ATR-MW84 (24.8)-100815	ATR-MW24 (55.8)-100815	ATR-OW2 (53) -100815	ATR-OW2 (33) -100815
Sample Date:	10/08/2015	10/08/2015	10/08/2015	10/08/2015
Units:	cells/mL	cells/mL	cells/mL	cells/mL
Analyst:	CB	CB	CB	CB

Dechlorinating Bacteria

<i>Dehalococcoides</i>	DHC	2.13E+02	3.40E+02	3.45E+03	7.40E+05
tceA Reductase	TCE	<5.00E-01	4.00E-01 (J)	<5.00E-01	<5.00E-01
BAV1 Vinyl Chloride Reductase	BVC	<5.00E-01	1.87E+01	1.20E+00	1.76E+05
Vinyl Chloride Reductase	VCR	<5.00E-01	<5.00E-01	1.92E+03	1.60E+05

Legend:

NA = Not Analyzed NS = Not Sampled J = Estimated gene copies below PQL but above LQL I = Inhibited
 < = Result not detected

Quality Assurance/Quality Control Data

Samples Received 10/8/2015

Component	Date Prepared	Date Analyzed	Arrival Temperature	Positive Control	Extraction Blank	Negative Control
DHC	10/08/2015	12/11/2015	0 °C	101%	non-detect	non-detect
BVC	10/08/2015	12/11/2015	0 °C	109%	non-detect	non-detect
TCE	10/08/2015	12/11/2015	0 °C	108%	non-detect	non-detect
VCR	10/08/2015	12/11/2015	0 °C	101%	non-detect	non-detect

Samples Received 10/9/2015

Component	Date Prepared	Date Analyzed	Arrival Temperature	Positive Control	Extraction Blank	Negative Control
DHC	10/09/2015	12/11/2015	0 °C	101%	non-detect	non-detect
BVC	10/09/2015	12/11/2015	0 °C	109%	non-detect	non-detect
TCE	10/09/2015	12/11/2015	0 °C	108%	non-detect	non-detect
VCR	10/09/2015	12/11/2015	0 °C	101%	non-detect	non-detect

REPORT TO:

Name: Paul Stork
 Company: AmeC Foster Wheeler
 Address: 581 Ryers Rd. Suite 204
Miamisburg, OH, 45342

email: paul.stork@amecdw.com
 Phone: (937)-859-3600
 Fax: _____

Project Manager: Paul Stork
 Project Name: TFS Rochester Performance GWM
 Project No.: 3359151040.09.01

INVOICE TO: (For Invoices paid by a third party it is imperative that all information be provided)

Name: _____
 Company: _____
 Address: _____
 email: _____
 Phone: _____
 Fax: _____

Purchase Order No. CO12605141
 Subcontract No. _____
 MI Quote No. _____



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- More samples to follow
- No Additional Samples

Report Type: Standard (default) Microbial Insights Level III raw data(15% surcharge) Microbial Insights Level IV (25% surcharge) Comprehensive Interpretive(15%) Historical Interpretive (35%)
 EDD type: Microbial Insights Standard (default) All other available EDDs (5% surcharge) Specify EDD Type: _____

Please contact us with any questions about the analyses or filling out the COC at (865) 573-8188 (9:00 am to 5:00 pm EST, M-F). After hours email: customerservice@microbe.com

Sample Information					Analyses		CENSUS: Please select the target organism/gene																												
MI ID (Laboratory Use Only)	Sample Name	Date Sampled	Time Sampled	Matrix	PLFA	NGS	QuantArray Chlor	QuantArray Petro	DHC (Dehalococoides)	DHC Functional genes (bvc, lba, vcr)	DHBt (Dehalobacter)	DHG (Dehalogenimonas)	DSM (Desulfuromonas)	DSB (Desulfobacterium)	EBAC (Total)	SRB (Sulfate Reducing Bacteria-APS)	MGN (Methanogens)	MOB (Methanotrophs)	SMMO	DNF (Denitrifiers-nirS and nirK)	AOB (ammonia oxidizing bacteria)	PM1 (MTBE aerobic)	RMO (Toluene Monooxygenase)	RDEG (Toluene Monooxygenase)	PHE (Phenol Hydroxylase)	NAH (Naphthalene-aerobic)	BSSA (Toluene/Xylene-Aerobic)	add. qPCR:	RNA (Expression Option)*	Other:	Other:	Other:			
025MS1	ATR-MW26(17.5)-G100715	10/7/15	1130	GW					X																										
2	ATR-MW26(28.8)-G100715	10/7/15	1225	GW					X																										
3	ATR-MW26(58.8)-G100715	10/7/15	1040	GW					X																										
4	ATR-ZVJ2(7.5)-G100715	10/7/15	1420	GW					X																										
5	ATR-ZVJ2(32.5)-G100715	10/7/15	1328	GW					X																										
6	ATR-OW5(16)-G100715	10/7/15	1500	GW					X																										
7	ATR-OW5(35)-G100715	10/7/15	1630	GW					X																										
8	ATR-OW5(54)-G100715	10/7/15	1720	GW					X																										
									X																										
									X																										
Relinquished by:	<u>G.D. Scholze</u>				Received by:					Date	<u>10/7/15</u>				<u>[Signature]</u>				<u>10/8/15</u>																

It is vital that chain of custody is filled out correctly & that all relative information is provided.
 Failure to provide sufficient and/or correct information regarding reporting, invoicing & analyses requested information may result in delays for which MI will not be liable.

REPORT TO:

Name: Paul Stark
 Company: Amec Foster Wheeler
 Address: 521 Byers Rd, Suite 204
Miamisburg, OH, 45342

email: paul.stark@amecfdw.com
 Phone: (937)-859-3600
 Fax: _____

Project Manager: Paul Stark
 Project Name: TES Rochester Performance GWM
 Project No.: 3359151040.09.01

INVOICE TO: (For Invoices paid by a third party it is imperative that all information be provided)

Name: _____
 Company: _____
 Address: _____

email: _____
 Phone: _____
 Fax: _____

Purchase Order No. CO12605141
 Subcontract No. _____
 MI Quote No. _____



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Please Check One:

- More samples to follow
- No Additional Samples

Report Type: Standard (default) Microbial Insights Level III raw data(15% surcharge) Microbial Insights Level IV (25% surcharge) Comprehensive Interpretive(15%) Historical Interpretive (35%)
 EDD type: Microbial Insights Standard (default) All other available EDDs (5% surcharge) Specify EDD Type: _____

Please contact us with any questions about the analyses or filling out the COC at (865) 573-8188 (9:00 am to 5:00 pm EST, M-F). After hours email: customerservice@microbe.com

Sample Information					Analyses		CENSUS: Please select the target organism/gene																												
MI ID (Laboratory Use Only)	Sample Name	Date Sampled	Time Sampled	Matrix	PLFA	NGS	QuantArray Chlor	QuantArray Petro	DHC (Dehalococcoides)	DHC Functional genes (bvc, tca, vcr)	DHB (Dehalobacter)	DHG (Dehalogenimonas)	DSM (Desulfuromonas)	DSB (Desulfobacterium)	EBAC (Total)	SRB (Sulfate Reducing Bacteria-APS)	MGN (Methanogens)	MOB (Methanotrophs)	SMMO	DNF (Denitrifiers-nirS and nirK)	AOB (ammonia oxidizing bacteria)	PM1 (MTBE aerobic)	RMO (Toluene Monooxygenase)	RDEG (Toluene Monooxygenase)	PHE (Phenol Hydroxylase)	NAH (Naphthalene-aerobic)	BSSA (Toluene/Xylene-Anaerobic)	add. qPCR:	RNA (Expression Option)*	Other:	Other:	Other:			
	XXXXXXXXXX								X																										
	ATR-MW16(44)-G100715								X																										
	ATR-MW16(55)-G100715								X																										
	ATR-MW16(72)-G100715								X																										
	ATR-MW16(72)-G100715								X																										
025M13	ATR-OW3(35)-G100715	10/7/15	1533	GW					X																										
10	ATR-OW3(55)-G100715	10/7/15	1030	GW					X																										
11	ATR-OW3(55)-G100715	10/7/15	1030	GW					X																										
	ATR-MW17-G100715								X																										
	12 ATR-MW17-G100715	10/7/15	1120	GW					X																										

Relinquished by: [Signature] 10/7/15

Received by: [Signature] Date: 10/9/15

025M13 ATR-MW16-G100715 T: 10/7/15
 It is vital that chain of custody is filled out correctly & that all relative information is provided.
 Failure to provide sufficient and/or correct information regarding reporting, invoicing & analyses requested information may result in delays for which MI will not be liable.
 Date 10/7/15

REPORT TO:

Name: Paul Stork
 Company: AME C Foster Wheeler
 Address: 521 Byard Suite 204

email: Paul.Stork@amc.fw.com
 Phone: 937-859-3600
 Fax:

Project Manager: Paul Stork
 Project Name: TFS Rochester performance
 Project No.: 3359.151040.09.01 GWM

Report Type: Standard (default) Microbial Insights Level III raw data(15% surcharge) Microbial Insights Level IV (25% surcharge) Comprehensive Interpretive(15%) Historical Interpretive (35%)
 EDD type: Microbial Insights Standard (default) All other available EDDs (5% surcharge) Specify EDD Type: _____

Please contact us with any questions about the analyses or filling out the COC at (865) 573-8188 (9:00 am to 5:00 pm EST, M-F). After hours email: customerservice@microbe.com

INVOICE TO: (For Invoices paid by a third party it is imperative that all information be provided)

Name: _____
 Company: _____
 Address: _____

email: _____
 Phone: _____
 Fax: _____

Purchase Order No. CO12605141
 Subcontract No. _____
 MI Quote No. _____



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Please Check One:
 More samples to follow
 No Additional Samples

Sample Information					Analyses			CENSUS: Please select the target organism/gene																										
MI ID (Laboratory Use Only)	Sample Name	Date Sampled	Time Sampled	Matrix	PLFA	NGS	QuantArray Chlor	QuantArray Petro	DHC (Dehalococcoides) <u>qPCR</u>	DHC Functional genes (bvc, bvc, vcz)	DHB: (Dehalobacter)	DHG (Dehalogenimonas)	DSM (Desulfuromonas)	DSS (Desulfobacterium)	EBAC (Total)	SRB (Sulfate Reducing Bacteria-APS)	MGN (Methanogens)	MOB (Methanotrophs)	SMMO	DNF (Dentriifere-nis and nitK)	AOB (ammonia oxidizing bacteria)	PM1 (MTBE aerobic)	RMO (Toluene Monooxygenase)	RDEG (Toluene Monooxygenase)	PHE (Phenol Hydroxylase)	NAH (Naphthalene-aerobic)	BSSA (Toluene/Xylene-Anaerobic)	add. qPCR:	RNA (Expression Option)*	Other:	Other:	Other:		
025 NJ14	ATR-MW14-610015	10/8/15	1000	GW					X																									
15	ATR-EB001-400815	10/8/15	1015	GW					X																									
16	ATR-MW04(24.7)-610015	10/8/15	1050	GW					X																									
17	ATR-MW04(55.8)-610015	10/8/15	0948	GW					X																									
18	ATR-0W2(53)-610015	10/8/15	1320	GW					X																									
19	ATR-0W2(33)-610015	10/8/15	1210	GW					X																									

Relinquished by: J.D. Schlegel

Received by: _____ Date: 10/8/15 [Signature] 10/9/15

It is vital that chain of custody is filled out correctly & that all relative information is provided.
 Failure to provide sufficient and/or correct information regarding reporting, invoicing & analyses requested information may result in delays for which MI will not be liable.

Client: Paul Stork
AMEC Foster Wheeler
521 Byers Rd
Suite 204
Miamisburg, OH 45342

Phone: 937-859-3900

Fax:

Identifier: 050MJ

Date Rec: 10/14/2015

Report Date: 12/11/2015

Client Project #: 3359151040

Client Project Name: TFS Rochester

Purchase Order #: C012605141

Analysis Requested: CENSUS

Reviewed By:



NOTICE: This report is intended only for the addressee shown above and may contain confidential or privileged information. If the recipient of this material is not the intended recipient or if you have received this in error, please notify Microbial Insights, Inc. immediately. The data and other information in this report represent only the sample(s) analyzed and are rendered upon condition that it is not to be reproduced without approval from Microbial Insights, Inc. Thank you for your cooperation.

Client: AMEC Foster Wheeler
Project: TFS Rochester

MI Project Number: 050MJ
Date Received: 10/14/2015

Sample Information

Client Sample ID:	ATR-MW15-101 315	ATR-MW25(16. 4)-101315	ATR-MW25(32. 6)-101315	ATR-MW25(45. 2)-101315	ATR-OW4(35) -101315
Sample Date:	10/13/2015	10/13/2015	10/13/2015	10/13/2015	10/13/2015
Units:	cells/mL	cells/mL	cells/mL	cells/mL	cells/mL
Analyst:	CB	CB	CB	CB	CB

Dechlorinating Bacteria

		9.09E+02	1.09E+04	5.10E+02	3.14E+02	1.14E+01
<i>Dehalococcoides</i>	DHC					
tceA Reductase	TCE	2.00E-01 (J)	4.90E+00	8.00E-01	<5.00E-01	<2.30E+00
BAV1 Vinyl Chloride Reductase	BVC	7.30E+00	2.83E+03	1.34E+01	6.00E-01	<2.30E+00
Vinyl Chloride Reductase	VCR	1.50E+00	7.42E+02	4.50E+00	<5.00E-01	<2.30E+00

Legend:

NA = Not Analyzed NS = Not Sampled J = Estimated gene copies below PQL but above LQL I = Inhibited
 < = Result not detected

Client: AMEC Foster Wheeler
Project: TFS Rochester

MI Project Number: 050MJ
Date Received: 10/14/2015

Sample Information

Client Sample ID:	ATR-OW4(54)	ATR-EB001-101
	-101315	315
Sample Date:	10/13/2015	10/13/2015
Units:	cells/mL	cells/mL
Analyst:	CB	CB

Dechlorinating Bacteria

<i>Dehalococcoides</i>	DHC	2.44E+02	<5.00E-01
tceA Reductase	TCE	<5.00E-01	<5.00E-01
BAV1 Vinyl Chloride Reductase	BVC	<5.00E-01	<5.00E-01
Vinyl Chloride Reductase	VCR	<5.00E-01	<5.00E-01

Legend:

NA = Not Analyzed NS = Not Sampled J = Estimated gene copies below PQL but above LQL I = Inhibited
 < = Result not detected

Quality Assurance/Quality Control Data

Samples Received 10/14/2015

Component	Date Prepared	Date Analyzed	Arrival Temperature	Positive Control	Extraction Blank	Negative Control
DHC	10/14/2015	12/11/2015	1 °C	101%	non-detect	non-detect
BVC	10/14/2015	12/11/2015	1 °C	109%	non-detect	non-detect
TCE	10/14/2015	12/11/2015	1 °C	108%	non-detect	non-detect
VCR	10/14/2015	12/11/2015	1 °C	101%	non-detect	non-detect

REPORT TO:

Name: Paul Stark
 Company: Amec Foster Wheeler
 Address: 521 Byers Rd. Suite 204
Marietta OH, 45752
 email: paul.stark@amec.fw.com
 Phone: 937-859-3600
 Fax: _____
 Project Manager: Paul Stark
 Project Name: TFS Rochester
 Project No.: 3359151640

INVOICE TO: (For Invoices paid by a third party it is imperative that all information be provided)

Name: _____
 Company: _____
 Address: _____
 email: _____
 Phone: _____
 Fax: _____
 Purchase Order No. CO12605141
 Subcontract No. _____
 MI Quote No. _____



10515 Research Dr
 Knoxville, TN 37932
 865-573-8188
 www.microbe.com

Please Check One:

- More samples to follow
- No Additional Samples

Report Type: Standard (default) Microbial Insights Level III raw data(15% surcharge) Microbial Insights Level IV (25% surcharge) Comprehensive Interpretive(15%) Historical Interpretive (35%)
 EDD type: Microbial Insights Standard (default) All other available EDDs (5% surcharge) Specify EDD Type: _____

Please contact us with any questions about the analyses or filling out the COC at (865) 573-8188 (9:00 am to 5:00 pm EST, M-F). After hours email: customerservice@microbe.com

Sample Information					Analyses		CENSUS: Please select the target organism/gene																										
MI ID <small>(Laboratory Use Only)</small>	Sample Name	Date Sampled	Time Sampled	Matrix	PLFA	NGS	QuantArray Chlor	QuantArray Petro	DHC (Dehalococcoides)	DHC Functional genes <small>(bvc, bza, vcr)</small>	DHBt (Dehalobacter)	DSM (Desulfuromonas)	DSB (Desulfobacterium)	EBAC (Total)	SRB <small>(Sulfate Reducing Bacteria-APS)</small>	MGN (Methanogens)	MOB (Methanotrophs)	SMMO	DNF (Denitrifiers-nitS and nitK)	AOB <small>(ammonia oxidizing bacteria)</small>	PM1 (MTBE aerobic)	RMO (Toluene Monooxygenase)	RDEG (Toluene Monooxygenase)	PHE (Phenol Hydroxylase)	NAH (Naphthalene-aerobic)	BSSA <small>(Toluene/Xylene-Anaerobic)</small>	add. qPCR:	add. qPCR:	RNA <small>(Expression Option)*</small>	Other:	Other:	Other:	
050MI	ATR-MW15-G101315	10-13	0950	W					X																								
2	ATR-MW25(16.4)-G101315	10-13	0955	W					X																								
3	ATR-MW25(32.6)-G101315	10-13	1055	W					X																								
4	ATR-MW25(45.2)-G101315	10-13	1150	W					X																								
5	ATR-OW4(35)-G101315	10-13	1305	W					X																								
6	ATR-OW4(54)-G101315	10-13	1405	W					X																								
7	ATR-EB001-G101315	10-13	0915	W					X																								

Relinquished by: Sam Partee Received by: Jeff Bar Date: 10/13/15

It is vital that chain of custody is filled out correctly & that all relative information is provided. Failure to provide sufficient and/or correct information regarding reporting, invoicing & analyses requested information may result in delays for which MI will not be liable.

**DATA VALIDATION REPORT
AUGUST AND OCTOBER 2015 GROUNDWATER SAMPLING
TEXTRON FORMER TORX FACILITY
ROCHESTER, INDIANA**

1.0 INTRODUCTION

Groundwater samples were collected during monitoring well sampling completed in August and October 2015 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 ten percent of the samples analyzed. Full validation was completed on a subset of samples in SDGs 15081601 and 1510613. Full validation includes review of raw instrument data, lab notebook records, and calculation checks in addition to the following parameters:

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

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

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

- surrogate recovery
- internal standard recovery and retention times
- field 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 II review the data quality indicators listed below were reviewed. Checks that included validation actions are marked with an asterisk (*) and discussed in the following sections.

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

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

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

Sample Chain of Custody/Sample Receipt Records

SDG 15081601

Sample ATR-MW6C-G082615 was incorrectly logged into the laboratory as ATR-MW6C-G082815. The sample ID was corrected in the project database during data validation.

Sample Preservation and Holding Times

All SDGs

Laboratory sample receipt documentation indicated conflicting information regarding sample preservation. The chain of custody documents indicated that samples were not acid preserved; however, the laboratory Sample Receipt Checklists stated that all sample pH measurements were acceptable upon receipt. Upon request, laboratory personnel reviewed the pH records for all samples and found that samples had been pre-preserved with hydrochloric acid. Based on this information a 14 day holding time was used for evaluation and all samples were analyzed within the holding time.

QC Blanks

SDG 15081601

The field blank (FB001-G082715) associated with samples of SDG 15081601 had a detection of acetone (34 µg/L). An action level was calculated at ten times the blank concentration and then compared to associated samples. The low level detection of acetone in sample MW20(51)-G082715 was qualified non-detect (U). The qualified result is included in Table 3 and was assigned reason code BL2.

Laboratory Control Sample Results

SDG 15081601

In the laboratory control samples analyzed September 2, 2015 (10:38) and September 4, 2015 (01:14) percent recoveries for acetone (68, 67) were below the 70-130 control limits indicating potential low bias. Acetone was not detected in associated samples ATR-MW81(27)-G082715 and ATR-MW59(29)-G082715, and reporting limits were qualified estimated (UJ) and assigned 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.

- acetone
- bromomethane

- chloromethane
- trichloroethene

SDG 15081601

In the MSD associated with sample ATR-MW59(29)-G082715 percent recovery for chloromethane (66) was below the 70-130 control limits indicating potential low bias. Chloromethane was not detected in associated sample ATR-MW59(29)-G082715, and the reporting limit was qualified estimated (UJ).

In the MS/MSD associated with sample ATR-MW81(27)-G082715 percent recoveries for acetone (68, 69) were below the 70-130 control limits indicating potential low bias. Acetone was not detected in associated sample ATR-MW81(27)-G082715, and the reporting limit was qualified estimated (UJ).

SDG 1510613

In the MS/MSD associated with sample ATR-OW2(33)-G100815 percent recoveries for bromomethane (38, 44) and chloromethane (69) were below the 70-130 control limits indicating potential low bias. Bromoethane and chloromethane were not detected in associated sample ATR-OW2(33)-G100815, and the reporting limits were qualified estimated (UJ).

In the MS/MSD associated with sample ATR-MW17-G100715, percent recoveries for bromomethane (53, 59) and trichloroethene (63, 69) were below 70-130 control limits indicating potential low bias. Bromomethane was not detected in sample ATR-MW17-G100715 and the reporting limit was qualified estimated (UJ). The positive detection of trichloroethene was qualified estimated (J).

In the MS/MSD associated with sample ATR-MW14-G100815, percent recoveries for bromomethane (37, 27) and trichloroethene (59) were below 70-130 control limits indicating potential low bias. The RPD between recoveries for bromoethane (34) was also above the control limit of 20. Bromomethane was not detected in sample ATR-MW14-G100815 and the reporting limit was qualified estimated (UJ). The positive detection of trichloroethene was qualified estimated (J).

SDG 1510900

In the MS/MSD associated with sample ATR-MW15-G101315 percent recoveries for bromomethane (69) and chloromethane (68, 69) were below the 70-130 control limits indicating potential low bias. Bromoethane and chloromethane were not detected in associated sample ATR-MW15-G101315, and the reporting limits were qualified estimated (UJ).

Field Duplicate Results

SDG 1510613

Field duplicates were collected and analyzed in association with samples ATR-MW20(35)-G082715R and ATR-OW3(55)-G100715. Good agreement of results was observed for sample ATR-MW20(35)-G082715R. For sample ATR-OW3(55)-G100715 the relative percent differences (RPDs) between detection of the following analytes were above the control limit of 25:

- cis-1,2-DCE (47)
- trans-1,2-DCE (79)
- vinyl chloride (82)

In addition, inconsistent results were reported for 1,1-dichloroethene. 1,1-Dichloroethene was reported at 1.1 µg/L in the field duplicate ATR-OW3(55)-G100715R but was not detected in the parent sample. Positive and non-detected results for these analytes in ATR-OW3(55)-G100715 and ATR-OW3(55)-G100715R were qualified estimated (J/UJ). Qualified results are summarized on Table 3 with reason code FD.

Continuing Calibration

In samples selected for Level IV data validation, a subset of results for the following compounds was qualified as estimated values (J/UJ) due to continuing calibration responses outside method goals. Calibration data are described in the following paragraphs for affected samples. Qualified results are summarized in Table 3 and were assigned reason code CCV%D.

- acetone
- 4-methyl-2-pentanone
- 2-hexanone
- Styrene
- 1,1,2,2-tetrachloroethane

SDG 15081601

In the continuing calibration analyzed September 1, 2015 (17:21), percent differences (%Ds) for acetone (-22), 4-methyl-2-pentanone (-30), 2-hexanone (-37), styrene (-20.1), and 1,1,2,2-tetrachloroethane (-21) were outside the control limit of 20. These analytes were not detected in associated Level IV samples ATR-OW1(D)-G082715 and ATR-OW1(S)-G082715, and reporting limits were qualified estimated (UJ).

SDG 1510613

In the continuing calibration analyzed October 18, 2015 (12:06) the %D for acetone (-24) was outside the control limit of 20. Acetone was not detected in associated Level IV samples ATR-ZVI2(17.5)-G100715 and ATR-OW5(35)-G100715, and reporting limits were qualified estimated (UJ).

Analyte Identification and Quantitation

SDG 15081601

During review of the mass spectra for positive detections in the Level IV samples, it was noted that the spectra associated with the dilution analysis of sample ATR-OW1(D)-G082715 were not located with the sample quantitation report and chromatogram. Review of the package found that several samples had mass spectra that were incorrectly located in the data package. The laboratory was contacted and corrected data package pages were provided by the lab.

Sample Result Reporting/Verification of Electronic Database Results

All SDGs

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.

Data Validator: Julie Ricardi



Date: January 13, 2016

Report Reviewed by: Christian Ricardi, NRCC-EAC



Date: January 27, 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
 AUGUST AND OCTOBER 2015 GROUNDWATER SAMPLING
 TEXTRON FORMER TORX FACILITY
 ROCHESTER, INDIANA

SDG	Location	Field Sample ID	Sample Date	Matrix	Lab Sample ID	Parameter	
						Method	VOCs
15081601	MW-12	ATR-MW12-G082615	08/26/15	GW	15081601-02A	FS	36
15081601	MW-13	ATR-MW13-G082615	08/26/15	GW	15081601-01A	FS	36
15081601	MW-20	ATR-MW20(35)-G082715	08/27/15	GW	15081601-07A	FS	36
15081601	MW-20	ATR-MW20(35)-G082715R	08/27/15	GW	15081601-08A	FD	36
15081601	MW-20	ATR-MW20(51)-G082715	08/27/15	GW	15081601-06A	FS	36
15081601	MW-59	ATR-MW59(29)-G082715	08/27/15	GW	15081601-14A	FS	36
15081601	MW-62	ATR-MW62-G082715	08/27/15	GW	15081601-09A	FS	36
15081601	MW-6C	ATR-MW6C-G082615	08/26/15	GW	15081601-03A	FS	36
15081601	MW-81	ATR-MW81(27)-G082715	08/27/15	GW	15081601-12A	FS	36
15081601	MW-82	ATR-MW82-G082615	08/26/15	GW	15081601-04A	FS	36
15081601	OW-01D	ATR-OW1(D)-G082715	08/27/15	GW	15081601-10A	FS	36
15081601	OW-01S	ATR-OW1(S)-G082715	08/27/15	GW	15081601-11A	FS	36
15081601	PM-2	ATR-PM2-G082715	08/27/15	GW	15081601-15A	FS	36
15081601	PM-3	ATR-PM3-G082715	08/27/15	GW	15081601-13A	FS	36
15081601	QC	ATR-EB001-G082615	08/26/15	BW	15081601-05A	EB	36
15081601	QC	ATR-EB001-G082715	08/27/15	BW	15081601-16A	EB	36
15081601	QC	ATR-FB001-G082715	08/27/15	BW	15081601-17A	FB	36
15081601	QC	Trip Blank	08/27/15	BW	15081601-18A	TB	36
1510613	MW-14	ATR-MW14-G100815	10/08/15	GW	1510613-01A	FS	36
1510613	MW-16	ATR-MW16-G100715	10/07/15	GW	1510613-09A	FS	36
1510613	MW-17	ATR-MW17-G100715	10/07/15	GW	1510613-10A	FS	36
1510613	MW-24	ATR-MW24 (24.9)-G100815	10/08/15	GW	1510613-02A	FS	36
1510613	MW-24	ATR-MW24 (55.9)-G100815	10/08/15	GW	1510613-03A	FS	36
1510613	MW-26	ATR-MW26 (17.5)-G100715	10/07/15	GW	1510613-11A	FS	36
1510613	MW-26	ATR-MW26 (28.8)-G100715	10/07/15	GW	1510613-12A	FS	36
1510613	MW-26	ATR-MW26 (58.8)-G100715	10/07/15	GW	1510613-13A	FS	36
1510613	OW-02	ATR-OW2 (33)-G100815	10/08/15	GW	1510613-04A	FS	36
1510613	OW-02	ATR-OW2 (53)-G100815	10/08/15	GW	1510613-05A	FS	36

TABLE 1 - SUMMARY OF SAMPLES AND ANALYTICAL METHODS
 DATA VALIDATION REPORT
 AUGUST AND OCTOBER 2015 GROUNDWATER SAMPLING
 TEXTRON FORMER TORX FACILITY
 ROCHESTER, INDIANA

SDG	Location	Field Sample ID	Sample Date	Matrix	Lab Sample ID	Parameter	
						Method	VOCs
1510613	OW-03	ATR-OW3 (35)-G100715	10/07/15	GW	1510613-06A	FS	SW8260B Param_Count 36
1510613	OW-03	ATR-OW3 (55)-G100715	10/07/15	GW	1510613-07A	FS	36
1510613	OW-03	ATR-OW3 (55)-G100715 R	10/07/15	GW	1510613-08A	FD	36
1510613	OW-05	ATR-OW5 (16)-G100715	10/07/15	GW	1510613-16A	FS	36
1510613	OW-05	ATR-OW5 (35)-G100715	10/07/15	GW	1510613-17A	FS	36
1510613	OW-05	ATR-OW5 (54)-G100715	10/07/15	GW	1510613-18A	FS	36
1510613	QC	ATR-EB001-G100815	10/08/15	BW	1510613-19A	EB	36
1510613	QC	Trip Blank #1	10/07/15	BW	1510613-20A	TB	36
1510613	QC	Trip Blank #2	10/08/15	BW	1510613-21A	TB	36
1510613	ZVI-2	ATR-ZVI2 (17.5)-G100715	10/07/15	GW	1510613-14A	FS	36
1510613	ZVI-2	ATR-ZVI2 (32.5)-G100715	10/07/15	GW	1510613-15A	FS	36
1510900	MW-15	ATR-MW15-G101315	10/13/15	GW	1510900-01A	FS	36
1510900	MW-25	ATR-MW25(16.4)-G101315	10/13/15	GW	1510900-02A	FS	36
1510900	MW-25	ATR-MW25(32.6)-G101315	10/13/15	GW	1510900-03A	FS	36
1510900	MW-25	ATR-MW25(45.2)-G101315	10/13/15	GW	1510900-04A	FS	36
1510900	OW-04	ATR-OW4(35)-G101315	10/13/15	GW	1510900-05A	FS	36
1510900	OW-04	ATR-OW4(54)-G101315	10/13/15	GW	1510900-06A	FS	36
1510900	QC	ATR-EB001-G101315	10/13/15	BW	1510900-07A	EB	36
1510900	QC	Trip Blank	10/13/15	BW	1510900-08A	TB	36

GW = groundwater, BW = blank water

FS = field sample, FD = field duplicate, TB = trip blank, EB = equipment blank, FB = field blank

Param_Count refers to number of target analytes reported

**TABLE 2 - QC LIMITS
DATA VALIDATION REPORT
AUGUST-OCTOBER 2015 GROUNDWATER SAMPLING
TEXTRON FORMER TORX FACILITY
ROCHESTER, INDIANA**

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

Notes:

LCS - Laboratory Control Sample

MS/MSD - Matrix Spike/ Matrix Spike Duplicate

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

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

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

TABLE 3 - SUMMARY OF QUALIFICATION ACTIONS
 DATA VALIDATION REPORT
 AUGUST AND OCTOBER 2015 GROUNDWATER SAMPLING
 TEXTRON FORMER TORX FACILITY
 ROCHESTER, INDIANA

Location	Field Sample Id	Sample Date	Lab SDG	Lab Sample Id	Analysis Method	Param Name	Units	Lab Result	Final Result	Lab Qualifier	Final Qualifier	Val Reason Code	Lab Id
MW-14	ATR-MW14-G100815	10/08/15	1510613	1510613-01A	SW8260B	Bromomethane	UG/L	2	2	U	U	MS-L, MS-RPD	ALSHN
MW-14	ATR-MW14-G100815	10/08/15	1510613	1510613-01A	SW8260B	Trichloroethene	UG/L	570	570	U	J	MS-L	ALSHN
MW-15	ATR-MW15-G101315	10/13/15	1510900	1510900-01A	SW8260B	Bromomethane	UG/L	10	10	U	U	MS-L	ALSHN
MW-15	ATR-MW15-G101315	10/13/15	1510900	1510900-01A	SW8260B	Chloromethane	UG/L	10	10	U	U	MS-L	ALSHN
MW-17	ATR-MW17-G100715	10/07/15	1510613	1510613-10A	SW8260B	Bromomethane	UG/L	1	1	U	U	MS-L	ALSHN
MW-17	ATR-MW17-G100715	10/07/15	1510613	1510613-10A	SW8260B	Trichloroethene	UG/L	190	190	J	J	MS-L	ALSHN
MW-20	ATR-MW20(51)-G082715	08/27/15	15081601	15081601-06A	SW8260	Acetone	UG/L	11	11	U	U	BL2	ALSHN
MW-59	ATR-MW59(29)-G082715	08/27/15	15081601	15081601-14A	SW8260	Acetone	UG/L	1000	1,000	U	U	LCS-L	ALSHN
MW-59	ATR-MW59(29)-G082715	08/27/15	15081601	15081601-14A	SW8260	Chloromethane	UG/L	100	100	U	U	MS-L	ALSHN
MW-81	ATR-MW81(27)-G082715	08/27/15	15081601	15081601-12A	SW8260	Acetone	UG/L	2000	2,000	U	U	LCS-L, MS-L	ALSHN
OW-01D	ATR-OW1(D)-G082715	08/27/15	15081601	15081601-10A	SW8260	1,1,2,2-Tetrachloroethane	UG/L	1	1	U	U	CCV%D	ALSHN
OW-01D	ATR-OW1(D)-G082715	08/27/15	15081601	15081601-10A	SW8260	2-Hexanone	UG/L	5	5	U	U	CCV%D	ALSHN
OW-01D	ATR-OW1(D)-G082715	08/27/15	15081601	15081601-10A	SW8260	4-Methyl-2-pentanone	UG/L	1	1	U	U	CCV%D	ALSHN
OW-01D	ATR-OW1(D)-G082715	08/27/15	15081601	15081601-10A	SW8260	Acetone	UG/L	10	10	U	U	CCV%D	ALSHN
OW-01D	ATR-OW1(D)-G082715	08/27/15	15081601	15081601-10A	SW8260	Styrene	UG/L	1	1	U	U	CCV%D	ALSHN
OW-01S	ATR-OW1(S)-G082715	08/27/15	15081601	15081601-11A	SW8260	1,1,2,2-Tetrachloroethane	UG/L	2	2	U	U	CCV%D	ALSHN
OW-01S	ATR-OW1(S)-G082715	08/27/15	15081601	15081601-11A	SW8260	2-Hexanone	UG/L	10	10	U	U	CCV%D	ALSHN
OW-01S	ATR-OW1(S)-G082715	08/27/15	15081601	15081601-11A	SW8260	4-Methyl-2-pentanone	UG/L	2	2	U	U	CCV%D	ALSHN
OW-01S	ATR-OW1(S)-G082715	08/27/15	15081601	15081601-11A	SW8260	Acetone	UG/L	20	20	U	U	CCV%D	ALSHN
OW-01S	ATR-OW1(S)-G082715	08/27/15	15081601	15081601-11A	SW8260	Styrene	UG/L	2	2	U	U	CCV%D	ALSHN
OW-02	ATR-OW2(33)-G100815	10/08/15	1510613	1510613-04A	SW8260B	Bromomethane	UG/L	5	5	U	U	MS-L	ALSHN
OW-02	ATR-OW2(33)-G100815	10/08/15	1510613	1510613-04A	SW8260B	Chloromethane	UG/L	5	5	U	U	MS-L	ALSHN
OW-03	ATR-OW3(55)-G100715	10/07/15	1510613	1510613-07A	SW8260B	1,1-Dichloroethene	UG/L	1	1	U	U	FD	ALSHN
OW-03	ATR-OW3(55)-G100715	10/07/15	1510613	1510613-07A	SW8260B	Cis-1,2-Dichloroethene	UG/L	55	55	J	J	FD	ALSHN
OW-03	ATR-OW3(55)-G100715	10/07/15	1510613	1510613-07A	SW8260B	trans-1,2-Dichloroethene	UG/L	9.1	9.1	J	J	FD	ALSHN
OW-03	ATR-OW3(55)-G100715	10/07/15	1510613	1510613-07A	SW8260B	Vinyl chloride	UG/L	1	1	J	J	FD	ALSHN
OW-03	ATR-OW3(55)-G100715 R	10/07/15	1510613	1510613-08A	SW8260B	1,1-Dichloroethene	UG/L	1.1	1.1	J	J	FD	ALSHN
OW-03	ATR-OW3(55)-G100715 R	10/07/15	1510613	1510613-08A	SW8260B	Cis-1,2-Dichloroethene	UG/L	89	89	J	J	FD	ALSHN
OW-03	ATR-OW3(55)-G100715 R	10/07/15	1510613	1510613-08A	SW8260B	trans-1,2-Dichloroethene	UG/L	21	21	J	J	FD	ALSHN
OW-03	ATR-OW3(55)-G100715 R	10/07/15	1510613	1510613-08A	SW8260B	Vinyl chloride	UG/L	2.4	2.4	J	J	FD	ALSHN
OW-05	ATR-OW5(35)-G100715	10/07/15	1510613	1510613-17A	SW8260B	Acetone	UG/L	50	50	U	U	CCV%D	ALSHN
ZVI-2	ATR-ZVI2(17.5)-G100715	10/07/15	1510613	1510613-14A	SW8260B	Acetone	UG/L	10	10	U	U	CCV%D	ALSHN

Units --

UG/L = microgram per liter

Validation Reason Codes --

CCV%D = Continuing calibration %D

LCS-L = LCS recovery/low

MS-L = MS and/or MSD recovery below control limits

MS-RPD = MS/MSD RPD above control limits

BL2 = field or trip blank contamination

FD = RPD between field duplicate results exceeds control limit

Qualifiers --

U = not detected, value is the reporting limit

J = value is estimated

TABLE 4 - SUMMARY OF ANALYTICAL RESULTS - AUGUST 2015
 DATA VALIDATION REPORT
 AUGUST-OCTOBER 2015 GROUNDWATER SAMPLING
 ROCHESTER, INDIANA

Method	Units	Parameter	Sample Location		MW-12		MW-13		MW-20		MW-20			
			Sample Date	Field Sample ID	QC Code	Sample Date	Field Sample ID	QC Code	Sample Date	Field Sample ID	QC Code	Sample Date	Field Sample ID	QC Code
SW8260	UG/L	1,1,1-Trichloroethane	08/26/15	ATR-MW12-G082615	FS	10 U	08/26/15	ATR-MW13-G082615	FS	1 U	08/27/15	ATR-MW20(35)-G082715R	FD	1 U
SW8260	UG/L	1,1,2,2-Tetrachloroethane	08/26/15	ATR-MW12-G082615	FS	10 U	08/26/15	ATR-MW13-G082615	FS	1 U	08/27/15	ATR-MW20(35)-G082715	FS	1 U
SW8260	UG/L	1,1,2-Trichloroethane	08/26/15	ATR-MW12-G082615	FS	10 U	08/26/15	ATR-MW13-G082615	FS	1 U	08/27/15	ATR-MW20(35)-G082715	FS	1 U
SW8260	UG/L	1,1-Dichloroethane	08/26/15	ATR-MW12-G082615	FS	10 U	08/26/15	ATR-MW13-G082615	FS	1 U	08/27/15	ATR-MW20(35)-G082715	FS	1 U
SW8260	UG/L	1,1-Dichloroethane	08/26/15	ATR-MW12-G082615	FS	10 U	08/26/15	ATR-MW13-G082615	FS	1 U	08/27/15	ATR-MW20(35)-G082715	FS	1 U
SW8260	UG/L	1,2-Dichloroethane	08/26/15	ATR-MW12-G082615	FS	10 U	08/26/15	ATR-MW13-G082615	FS	1 U	08/27/15	ATR-MW20(35)-G082715	FS	1 U
SW8260	UG/L	1,2-Dichloropropane	08/26/15	ATR-MW12-G082615	FS	10 U	08/26/15	ATR-MW13-G082615	FS	1 U	08/27/15	ATR-MW20(35)-G082715	FS	1 U
SW8260	UG/L	2-Butanone	08/26/15	ATR-MW12-G082615	FS	50 U	08/26/15	ATR-MW13-G082615	FS	3600	08/27/15	ATR-MW20(35)-G082715	FS	5 U
SW8260	UG/L	2-Hexanone	08/26/15	ATR-MW12-G082615	FS	50 U	08/26/15	ATR-MW13-G082615	FS	5 U	08/27/15	ATR-MW20(35)-G082715	FS	5 U
SW8260	UG/L	4-Methyl-2-pentanone	08/26/15	ATR-MW12-G082615	FS	10 U	08/26/15	ATR-MW13-G082615	FS	1 U	08/27/15	ATR-MW20(35)-G082715	FS	1 U
SW8260	UG/L	Acetone	08/26/15	ATR-MW12-G082615	FS	100 U	08/26/15	ATR-MW13-G082615	FS	11 U	08/27/15	ATR-MW20(35)-G082715	FS	10 U
SW8260	UG/L	Benzene	08/26/15	ATR-MW12-G082615	FS	10 U	08/26/15	ATR-MW13-G082615	FS	1 U	08/27/15	ATR-MW20(35)-G082715	FS	1 U
SW8260	UG/L	Bromodichloromethane	08/26/15	ATR-MW12-G082615	FS	10 U	08/26/15	ATR-MW13-G082615	FS	1 U	08/27/15	ATR-MW20(35)-G082715	FS	1 U
SW8260	UG/L	Bromoform	08/26/15	ATR-MW12-G082615	FS	10 U	08/26/15	ATR-MW13-G082615	FS	1 U	08/27/15	ATR-MW20(35)-G082715	FS	1 U
SW8260	UG/L	Bromomethane	08/26/15	ATR-MW12-G082615	FS	10 U	08/26/15	ATR-MW13-G082615	FS	1 U	08/27/15	ATR-MW20(35)-G082715	FS	1 U
SW8260	UG/L	Carbon disulfide	08/26/15	ATR-MW12-G082615	FS	10 U	08/26/15	ATR-MW13-G082615	FS	1 U	08/27/15	ATR-MW20(35)-G082715	FS	1 U
SW8260	UG/L	Carbon tetrachloride	08/26/15	ATR-MW12-G082615	FS	10 U	08/26/15	ATR-MW13-G082615	FS	1 U	08/27/15	ATR-MW20(35)-G082715	FS	1 U
SW8260	UG/L	Chlorobenzene	08/26/15	ATR-MW12-G082615	FS	10 U	08/26/15	ATR-MW13-G082615	FS	1 U	08/27/15	ATR-MW20(35)-G082715	FS	1 U
SW8260	UG/L	Chloroethane	08/26/15	ATR-MW12-G082615	FS	10 U	08/26/15	ATR-MW13-G082615	FS	1 U	08/27/15	ATR-MW20(35)-G082715	FS	1 U
SW8260	UG/L	Chloroform	08/26/15	ATR-MW12-G082615	FS	10 U	08/26/15	ATR-MW13-G082615	FS	1 U	08/27/15	ATR-MW20(35)-G082715	FS	1 U
SW8260	UG/L	Chloromethane	08/26/15	ATR-MW12-G082615	FS	10 U	08/26/15	ATR-MW13-G082615	FS	1 U	08/27/15	ATR-MW20(35)-G082715	FS	1 U
SW8260	UG/L	Cis-1,2-Dichloroethene	08/26/15	ATR-MW12-G082615	FS	2,900	08/26/15	ATR-MW13-G082615	FS	350	08/27/15	ATR-MW20(35)-G082715	FS	180
SW8260	UG/L	Cis-1,3-Dichloropropene	08/26/15	ATR-MW12-G082615	FS	10 U	08/26/15	ATR-MW13-G082615	FS	1 U	08/27/15	ATR-MW20(35)-G082715	FS	1 U
SW8260	UG/L	Dibromochloromethane	08/26/15	ATR-MW12-G082615	FS	10 U	08/26/15	ATR-MW13-G082615	FS	1 U	08/27/15	ATR-MW20(35)-G082715	FS	1 U
SW8260	UG/L	Ethylbenzene	08/26/15	ATR-MW12-G082615	FS	10 U	08/26/15	ATR-MW13-G082615	FS	1 U	08/27/15	ATR-MW20(35)-G082715	FS	1 U
SW8260	UG/L	Methylene chloride	08/26/15	ATR-MW12-G082615	FS	50 U	08/26/15	ATR-MW13-G082615	FS	5 U	08/27/15	ATR-MW20(35)-G082715	FS	5 U
SW8260	UG/L	Styrene	08/26/15	ATR-MW12-G082615	FS	10 U	08/26/15	ATR-MW13-G082615	FS	1 U	08/27/15	ATR-MW20(35)-G082715	FS	1 U
SW8260	UG/L	Tetrachloroethene	08/26/15	ATR-MW12-G082615	FS	10 U	08/26/15	ATR-MW13-G082615	FS	1 U	08/27/15	ATR-MW20(35)-G082715	FS	1.8
SW8260	UG/L	Toluene	08/26/15	ATR-MW12-G082615	FS	10 U	08/26/15	ATR-MW13-G082615	FS	1 U	08/27/15	ATR-MW20(35)-G082715	FS	1 U
SW8260	UG/L	trans-1,2-Dichloroethene	08/26/15	ATR-MW12-G082615	FS	14	08/26/15	ATR-MW13-G082615	FS	1.7	08/27/15	ATR-MW20(35)-G082715	FS	1.2
SW8260	UG/L	trans-1,3-Dichloropropene	08/26/15	ATR-MW12-G082615	FS	10 U	08/26/15	ATR-MW13-G082615	FS	1 U	08/27/15	ATR-MW20(35)-G082715	FS	1 U
SW8260	UG/L	Trichloroethene	08/26/15	ATR-MW12-G082615	FS	10 U	08/26/15	ATR-MW13-G082615	FS	1 U	08/27/15	ATR-MW20(35)-G082715	FS	3.5
SW8260	UG/L	Vinyl chloride	08/26/15	ATR-MW12-G082615	FS	560	08/26/15	ATR-MW13-G082615	FS	210	08/27/15	ATR-MW20(35)-G082715	FS	250

TABLE 4 - SUMMARY OF ANALYTICAL RESULTS - AUGUST 2015
 DATA VALIDATION REPORT
 AUGUST-OCTOBER 2015 GROUNDWATER SAMPLING
 ROCHESTER, INDIANA

Method	Units	Parameter	Sample Location		MW-12		MW-13		MW-20		MW-20		MW-20		
			Sample Date	Field Sample ID	Sample Date	Field Sample ID	Sample Date	Field Sample ID	Sample Date	Field Sample ID	Sample Date	Field Sample ID	Sample Date	Field Sample ID	
			QC Code	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier
SW8260	UG/L	Xylene, o		10 U		10 U		1 U		1 U		1 U		1 U	
SW8260	UG/L	Xylenes (m&p)		20 U		20 U		2 U		2 U		2 U		2 U	
SW8260	UG/L	Xylenes, Total		30 U		30 U		3 U		3 U		3 U		3 U	

U = not detected, value is the detection limit

J = value is estimated

ug/L = microgram per liter

FS = Field Sample

FD = Field Duplicate

TB = Trip-Blank

EB = Equipment Blank

TABLE 4 - SUMMARY OF ANALYTICAL RESULTS - AUGUST 2015
 DATA VALIDATION REPORT
 AUGUST-OCTOBER 2015 GROUNDWATER SAMPLING
 ROCHESTER, INDIANA

Method	Units	Parameter	Sample Location		MW-59		MW-62		MW-6C		MW-81		MW-82	
			Sample Date	Field Sample ID	QC Code	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result
SW8260	UG/L	1,1,1-Trichloroethane	08/27/15	ATR-MW59(29)-G082715		100 U	20 U	2 U	2 U	200 U	1 U	08/26/15	ATR-MW82-G082615	FS
SW8260	UG/L	1,1,2,2-Tetrachloroethane				100 U	20 U	2 U	2 U	200 U	1 U			FS
SW8260	UG/L	1,1,2-Trichloroethane				100 U	20 U	2 U	2 U	200 U	1 U			FS
SW8260	UG/L	1,1-Dichloroethane				100 U	20 U	2 U	2 U	200 U	1 U			FS
SW8260	UG/L	1,1-Dichloroethene				130	20 U	2 U	2 U	290	1 U			FS
SW8260	UG/L	1,2-Dichloroethane				100 U	20 U	2 U	2 U	200 U	1 U			FS
SW8260	UG/L	1,2-Dichloropropane				100 U	20 U	2 U	2 U	200 U	1 U			FS
SW8260	UG/L	2-Butanone				500 U	100 U	10 U	10 U	1000 U	18			FS
SW8260	UG/L	2-Hexanone				500 U	100 U	10 U	10 U	1000 U	5 U			FS
SW8260	UG/L	4-Methyl-2-pentanone				100 U	20 U	2 U	2 U	200 U	1 U			FS
SW8260	UG/L	Acetone				1000 UJ	200 U	20 U	20 U	2000 UJ	10 U			FS
SW8260	UG/L	Benzene				100 U	20 U	2 U	2 U	200 U	1 U			FS
SW8260	UG/L	Bromodichloromethane				100 U	20 U	2 U	2 U	200 U	1 U			FS
SW8260	UG/L	Bromoform				100 U	20 U	2 U	2 U	200 U	1 U			FS
SW8260	UG/L	Bromomethane				100 U	20 U	2 U	2 U	200 U	1 U			FS
SW8260	UG/L	Carbon disulfide				100 U	20 U	2 U	2 U	200 U	1.1			FS
SW8260	UG/L	Carbon tetrachloride				100 U	20 U	2 U	2 U	200 U	1 U			FS
SW8260	UG/L	Chlorobenzene				100 U	20 U	2 U	2 U	200 U	1 U			FS
SW8260	UG/L	Chloroethane				100 U	20 U	2 U	2 U	200 U	1 U			FS
SW8260	UG/L	Chloroform				100 U	20 U	2 U	2 U	200 U	1 U			FS
SW8260	UG/L	Chloromethane				100 UJ	20 U	2 U	2 U	200 U	1 U			FS
SW8260	UG/L	Cis-1,2-Dichloroethene				30,000	5,600	410	410	53,000	21			FS
SW8260	UG/L	Cis-1,3-Dichloropropene				100 U	20 U	2 U	2 U	200 U	1 U			FS
SW8260	UG/L	Dibromochloromethane				100 U	20 U	2 U	2 U	200 U	1 U			FS
SW8260	UG/L	Ethylbenzene				100 U	20 U	2 U	2 U	200 U	1 U			FS
SW8260	UG/L	Methylene chloride				500 U	100 U	10 U	10 U	1000 U	5 U			FS
SW8260	UG/L	Styrene				100 U	20 U	2 U	2 U	200 U	1 U			FS
SW8260	UG/L	Tetrachloroethene				100 U	20 U	2 U	2 U	200 U	1 U			FS
SW8260	UG/L	Toluene				100 U	20 U	2 U	2 U	200 U	1 U			FS
SW8260	UG/L	trans-1,2-Dichloroethene				130	21	2 U	2 U	260	1.8			FS
SW8260	UG/L	trans-1,3-Dichloropropene				100 U	20 U	2 U	2 U	200 U	1 U			FS
SW8260	UG/L	Trichloroethene				100 U	20 U	2 U	2 U	4700	8.3			FS
SW8260	UG/L	Vinyl chloride				23000	1600	66	66	7500	15			FS

TABLE 4 - SUMMARY OF ANALYTICAL RESULTS - AUGUST 2015
 DATA VALIDATION REPORT
 AUGUST-OCTOBER 2015 GROUNDWATER SAMPLING
 ROCHESTER, INDIANA

Method	Units	Parameter	Sample Location		Final Result	Final Qualifier	Final Result	Final Qualifier
			Sample Date	Field Sample ID				
SW8260	UG/L	Xylene, o	MW-59	MW-62	MW-6C	MW-81	MW-82	
SW8260	UG/L	Xylenes (m&p)	08/27/15	08/27/15	08/26/15	08/27/15	08/26/15	
SW8260	UG/L	Xylenes, Total	ATR-MW59(29)-G082715	ATR-MW62-G082715	ATR-MW6C-G082615	ATR-MW81(27)-G082715	ATR-MW82-G082615	
			FS	FS	FS	FS	FS	
			100 U	20 U	2 U	200 U	1 U	
			200 U	40 U	4 U	400 U	2 U	
			300 U	60 U	6 U	600 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 - AUGUST 2015
 DATA VALIDATION REPORT
 AUGUST-OCTOBER 2015 GROUNDWATER SAMPLING
 ROCHESTER, INDIANA

Method	Units	Parameter	Sample Location		OW-01D		OW-01S		PM-2		PM-3		QC	
			Sample Date	Field Sample ID	QC Code	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result
SW8260	UG/L	1,1,1-Trichloroethane	08/27/15	ATR-OW1(D)-G082715	FS	1 U	2 U	5 U	100 U	08/26/15	EB	1 U	08/26/15	ATR-EB001-G082615
SW8260	UG/L	1,1,2,2-Tetrachloroethane				1 UJ	2 UJ	5 U	100 U			1 U		
SW8260	UG/L	1,1,2-Trichloroethane				1 U	2 U	5 U	100 U			1 U		
SW8260	UG/L	1,1-Dichloroethane				1 U	2 U	5 U	100 U			1 U		
SW8260	UG/L	1,1-Dichloroethene				1 U	2 U	5 U	100 U			1 U		
SW8260	UG/L	1,2-Dichloroethane				1 U	2 U	5 U	100 U			1 U		
SW8260	UG/L	1,2-Dichloropropane				1 U	2 U	5 U	100 U			1 U		
SW8260	UG/L	2-Butanone				34	10 U	25 U	500 U			5 U		
SW8260	UG/L	2-Hexanone				5 UJ	10 UJ	25 U	500 U			5 U		
SW8260	UG/L	4-Methyl-2-pentanone				1 UJ	2 UJ	5 U	100 U			1 U		
SW8260	UG/L	Acetone				10 UJ	20 UJ	50 U	1000 U			10 U		
SW8260	UG/L	Benzene				1 U	2 U	5 U	100 U			1 U		
SW8260	UG/L	Bromodichloromethane				1 U	2 U	5 U	100 U			1 U		
SW8260	UG/L	Bromoform				1 U	2 U	5 U	100 U			1 U		
SW8260	UG/L	Bromomethane				1 U	2 U	5 U	100 U			1 U		
SW8260	UG/L	Carbon disulfide				1.6	2 U	5 U	100 U			1 U		
SW8260	UG/L	Carbon tetrachloride				1 U	2 U	5 U	100 U			1 U		
SW8260	UG/L	Chlorobenzene				1 U	2 U	5 U	100 U			1 U		
SW8260	UG/L	Chloroethane				1 U	2 U	5 U	100 U			1 U		
SW8260	UG/L	Chloroform				1 U	2 U	5 U	100 U			1 U		
SW8260	UG/L	Chloromethane				1 U	2 U	5 U	100 U			1 U		
SW8260	UG/L	Cis-1,2-Dichloroethene				180	270	380	200			1 U		
SW8260	UG/L	Cis-1,3-Dichloropropene				1 U	2 U	5 U	100 U			1 U		
SW8260	UG/L	Dibromochloromethane				1 U	2 U	5 U	100 U			1 U		
SW8260	UG/L	Ethylbenzene				1 U	2 U	6	100 U			1 U		
SW8260	UG/L	Methylene chloride				5 U	10 U	25 U	500 U			5 U		
SW8260	UG/L	Styrene				1 UJ	2 UJ	5 U	100 U			1 U		
SW8260	UG/L	Tetrachloroethene				1 U	2 U	5 U	100 U			1 U		
SW8260	UG/L	Toluene				1 U	2 U	5 U	100 U			1 U		
SW8260	UG/L	trans-1,2-Dichloroethene				1 U	2 U	5 U	100 U			1 U		
SW8260	UG/L	trans-1,3-Dichloropropene				1 U	2 U	5 U	100 U			1 U		
SW8260	UG/L	Trichloroethene				1 U	2 U	5 U	100 U			1 U		
SW8260	UG/L	Vinyl chloride				370	240	1200	200			1 U		

TABLE 4 - SUMMARY OF ANALYTICAL RESULTS - AUGUST 2015
 DATA VALIDATION REPORT
 AUGUST-OCTOBER 2015 GROUNDWATER SAMPLING
 ROCHESTER, INDIANA

Method	Units	Parameter	Sample Location		OW-01S		PM-2		PM-3		QC	
			Sample Date	Field Sample ID	Sample Date	Field Sample ID	Sample Date	Field Sample ID	Sample Date	Field Sample ID	Sample Date	Field Sample ID
SW8260	UG/L	Xylene, o	08/27/15	ATR-OW1(D)-G082715	08/27/15	ATR-OW1(S)-G082715	08/27/15	ATR-PM2-G082715	08/27/15	ATR-PM3-G082715	08/26/15	ATR-EB001-G082615
SW8260	UG/L	Xylenes (m&p)	FS	Final Result	FS	Final Result	FS	Final Result	FS	Final Result	EB	Final Result
SW8260	UG/L	Xylenes, Total	1 U	2 U	2 U	4 U	5 U	10 U	100 U	200 U	1 U	2 U
			2 U	4 U	4 U	6 U	10 U	15 U	200 U	300 U	2 U	3 U
			3 U	6 U	6 U				300 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 - AUGUST 2015
 DATA VALIDATION REPORT
 AUGUST-OCTOBER 2015 GROUNDWATER SAMPLING
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Method	Units	Parameter	Sample Location		QC		QC		QC	
			Sample Date	Field Sample ID	QC Code	QC	QC	QC	QC	QC
			08/27/15	08/27/15	08/27/15	08/27/15	08/27/15	08/27/15	08/27/15	08/27/15
			Trip Blank	Trip Blank	Trip Blank	Trip Blank	Trip Blank	Trip Blank	Trip Blank	Trip Blank
			TB	TB	TB	TB	TB	TB	TB	TB
			Final Result	Final Result	Final Result	Final Result	Final Result	Final Result	Final Result	Final Result
			Final Qualifier	Final Qualifier	Final Qualifier	Final Qualifier	Final Qualifier	Final Qualifier	Final Qualifier	Final Qualifier
SW8260	UG/L	1,1,1-Trichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	UG/L	1,1,2,2-Tetrachloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	UG/L	1,1,2-Trichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	UG/L	1,1-Dichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	UG/L	1,1-Dichloroethene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	UG/L	1,2-Dichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	UG/L	1,2-Dichloropropane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	UG/L	2-Butanone	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
SW8260	UG/L	2-Hexanone	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
SW8260	UG/L	4-Methyl-2-pentanone	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	UG/L	Acetone	10 U	10 U	10 U	10 U	10 U	10 U	10 U	34
SW8260	UG/L	Benzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	UG/L	Bromodichloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	UG/L	Bromoform	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	UG/L	Bromomethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	UG/L	Carbon disulfide	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	UG/L	Carbon tetrachloride	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	UG/L	Chlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	UG/L	Chloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	UG/L	Chloroform	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	UG/L	Chloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	UG/L	Cis-1,2-Dichloroethene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	UG/L	Cis-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	UG/L	Dibromochloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	UG/L	Ethylbenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	UG/L	Methylene chloride	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
SW8260	UG/L	Styrene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	UG/L	Tetrachloroethene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	UG/L	Toluene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	UG/L	trans-1,2-Dichloroethene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	UG/L	trans-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	UG/L	Trichloroethene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	UG/L	Vinyl chloride	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

TABLE 4 - SUMMARY OF ANALYTICAL RESULTS - AUGUST 2015
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Method	Units	Parameter	Sample Location		QC		QC		QC	
			Sample Date	Field Sample ID	QC Code	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result
SW8260	UG/L	Xylene, o	08/27/15	Trip Blank	TB	1 U	1 U	08/27/15	1 U	1 U
SW8260	UG/L	Xylenes (m&p)				2 U	2 U		2 U	2 U
SW8260	UG/L	Xylenes, Total				3 U	3 U		3 U	3 U
								ATR-FB001-G082715	FB	

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 - AUGUST 2015
 DATA VALIDATION REPORT
 AUGUST-OCTOBER 2015 GROUNDWATER SAMPLING
 ROCHESTER, INDIANA

Method	Units	Parameter	Sample Location		MW-12		MW-13		MW-20		MW-20		MW-20									
			Sample Date	Field Sample ID	QC Code	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier							
SW8260	UG/L	1,1,1-Trichloroethane	08/26/15	ATR-MW12-G082615	FS	10 U		08/26/15	ATR-MW13-G082615	FS	10 U		08/27/15	ATR-MW20(51)-G082715	FS	1 U		08/27/15	ATR-MW20(35)-G082715R	FD	1 U	
SW8260	UG/L	1,1,2,2-Tetrachloroethane	08/26/15	ATR-MW12-G082615	FS	10 U		08/26/15	ATR-MW13-G082615	FS	10 U		08/27/15	ATR-MW20(51)-G082715	FS	1 U		08/27/15	ATR-MW20(35)-G082715R	FD	1 U	
SW8260	UG/L	1,1,2-Trichloroethane	08/26/15	ATR-MW12-G082615	FS	10 U		08/26/15	ATR-MW13-G082615	FS	10 U		08/27/15	ATR-MW20(51)-G082715	FS	1 U		08/27/15	ATR-MW20(35)-G082715R	FD	1 U	
SW8260	UG/L	1,1-Dichloroethane	08/26/15	ATR-MW12-G082615	FS	10 U		08/26/15	ATR-MW13-G082615	FS	10 U		08/27/15	ATR-MW20(51)-G082715	FS	1 U		08/27/15	ATR-MW20(35)-G082715R	FD	1 U	
SW8260	UG/L	1,1-Dichloroethene	08/26/15	ATR-MW12-G082615	FS	10 U		08/26/15	ATR-MW13-G082615	FS	10 U		08/27/15	ATR-MW20(51)-G082715	FS	1 U		08/27/15	ATR-MW20(35)-G082715R	FD	1 U	
SW8260	UG/L	1,2-Dichloroethane	08/26/15	ATR-MW12-G082615	FS	10 U		08/26/15	ATR-MW13-G082615	FS	10 U		08/27/15	ATR-MW20(51)-G082715	FS	1 U		08/27/15	ATR-MW20(35)-G082715R	FD	1 U	
SW8260	UG/L	1,2-Dichloropropane	08/26/15	ATR-MW12-G082615	FS	10 U		08/26/15	ATR-MW13-G082615	FS	10 U		08/27/15	ATR-MW20(51)-G082715	FS	1 U		08/27/15	ATR-MW20(35)-G082715R	FD	1 U	
SW8260	UG/L	2-Butanone	08/26/15	ATR-MW12-G082615	FS	50 U		08/26/15	ATR-MW13-G082615	FS	50 U		08/27/15	ATR-MW20(51)-G082715	FS	3600		08/27/15	ATR-MW20(35)-G082715R	FD	5 U	
SW8260	UG/L	2-Hexanone	08/26/15	ATR-MW12-G082615	FS	50 U		08/26/15	ATR-MW13-G082615	FS	50 U		08/27/15	ATR-MW20(51)-G082715	FS	5 U		08/27/15	ATR-MW20(35)-G082715R	FD	5 U	
SW8260	UG/L	4-Methyl-2-pentanone	08/26/15	ATR-MW12-G082615	FS	10 U		08/26/15	ATR-MW13-G082615	FS	10 U		08/27/15	ATR-MW20(51)-G082715	FS	1 U		08/27/15	ATR-MW20(35)-G082715R	FD	1 U	
SW8260	UG/L	Acetone	08/26/15	ATR-MW12-G082615	FS	100 U		08/26/15	ATR-MW13-G082615	FS	100 U		08/27/15	ATR-MW20(51)-G082715	FS	11 U		08/27/15	ATR-MW20(35)-G082715R	FD	10 U	
SW8260	UG/L	Benzene	08/26/15	ATR-MW12-G082615	FS	10 U		08/26/15	ATR-MW13-G082615	FS	10 U		08/27/15	ATR-MW20(51)-G082715	FS	1 U		08/27/15	ATR-MW20(35)-G082715R	FD	1 U	
SW8260	UG/L	Bromodichloromethane	08/26/15	ATR-MW12-G082615	FS	10 U		08/26/15	ATR-MW13-G082615	FS	10 U		08/27/15	ATR-MW20(51)-G082715	FS	1 U		08/27/15	ATR-MW20(35)-G082715R	FD	1 U	
SW8260	UG/L	Bromoform	08/26/15	ATR-MW12-G082615	FS	10 U		08/26/15	ATR-MW13-G082615	FS	10 U		08/27/15	ATR-MW20(51)-G082715	FS	1 U		08/27/15	ATR-MW20(35)-G082715R	FD	1 U	
SW8260	UG/L	Bromomethane	08/26/15	ATR-MW12-G082615	FS	10 U		08/26/15	ATR-MW13-G082615	FS	10 U		08/27/15	ATR-MW20(51)-G082715	FS	1 U		08/27/15	ATR-MW20(35)-G082715R	FD	1 U	
SW8260	UG/L	Carbon disulfide	08/26/15	ATR-MW12-G082615	FS	10 U		08/26/15	ATR-MW13-G082615	FS	10 U		08/27/15	ATR-MW20(51)-G082715	FS	1 U		08/27/15	ATR-MW20(35)-G082715R	FD	1 U	
SW8260	UG/L	Carbon tetrachloride	08/26/15	ATR-MW12-G082615	FS	10 U		08/26/15	ATR-MW13-G082615	FS	10 U		08/27/15	ATR-MW20(51)-G082715	FS	1 U		08/27/15	ATR-MW20(35)-G082715R	FD	1 U	
SW8260	UG/L	Chlorobenzene	08/26/15	ATR-MW12-G082615	FS	10 U		08/26/15	ATR-MW13-G082615	FS	10 U		08/27/15	ATR-MW20(51)-G082715	FS	1 U		08/27/15	ATR-MW20(35)-G082715R	FD	1 U	
SW8260	UG/L	Chloroethane	08/26/15	ATR-MW12-G082615	FS	10 U		08/26/15	ATR-MW13-G082615	FS	10 U		08/27/15	ATR-MW20(51)-G082715	FS	1 U		08/27/15	ATR-MW20(35)-G082715R	FD	1 U	
SW8260	UG/L	Chloroform	08/26/15	ATR-MW12-G082615	FS	10 U		08/26/15	ATR-MW13-G082615	FS	10 U		08/27/15	ATR-MW20(51)-G082715	FS	1 U		08/27/15	ATR-MW20(35)-G082715R	FD	1 U	
SW8260	UG/L	Chloromethane	08/26/15	ATR-MW12-G082615	FS	10 U		08/26/15	ATR-MW13-G082615	FS	10 U		08/27/15	ATR-MW20(51)-G082715	FS	1 U		08/27/15	ATR-MW20(35)-G082715R	FD	1 U	
SW8260	UG/L	Cis-1,2-Dichloroethene	08/26/15	ATR-MW12-G082615	FS	2,900		08/26/15	ATR-MW13-G082615	FS	3,400		08/27/15	ATR-MW20(51)-G082715	FS	350		08/27/15	ATR-MW20(35)-G082715R	FD	180	
SW8260	UG/L	Cis-1,3-Dichloropropene	08/26/15	ATR-MW12-G082615	FS	10 U		08/26/15	ATR-MW13-G082615	FS	10 U		08/27/15	ATR-MW20(51)-G082715	FS	1 U		08/27/15	ATR-MW20(35)-G082715R	FD	1 U	
SW8260	UG/L	Dibromochloromethane	08/26/15	ATR-MW12-G082615	FS	10 U		08/26/15	ATR-MW13-G082615	FS	10 U		08/27/15	ATR-MW20(51)-G082715	FS	1 U		08/27/15	ATR-MW20(35)-G082715R	FD	1 U	
SW8260	UG/L	Ethylbenzene	08/26/15	ATR-MW12-G082615	FS	10 U		08/26/15	ATR-MW13-G082615	FS	10 U		08/27/15	ATR-MW20(51)-G082715	FS	1 U		08/27/15	ATR-MW20(35)-G082715R	FD	1 U	
SW8260	UG/L	Methylene chloride	08/26/15	ATR-MW12-G082615	FS	50 U		08/26/15	ATR-MW13-G082615	FS	50 U		08/27/15	ATR-MW20(51)-G082715	FS	5 U		08/27/15	ATR-MW20(35)-G082715R	FD	5 U	
SW8260	UG/L	Styrene	08/26/15	ATR-MW12-G082615	FS	10 U		08/26/15	ATR-MW13-G082615	FS	10 U		08/27/15	ATR-MW20(51)-G082715	FS	1 U		08/27/15	ATR-MW20(35)-G082715R	FD	1 U	
SW8260	UG/L	Tetrachloroethene	08/26/15	ATR-MW12-G082615	FS	10 U		08/26/15	ATR-MW13-G082615	FS	10 U		08/27/15	ATR-MW20(51)-G082715	FS	1 U		08/27/15	ATR-MW20(35)-G082715R	FD	1.8	
SW8260	UG/L	Toluene	08/26/15	ATR-MW12-G082615	FS	10 U		08/26/15	ATR-MW13-G082615	FS	10 U		08/27/15	ATR-MW20(51)-G082715	FS	1 U		08/27/15	ATR-MW20(35)-G082715R	FD	1 U	
SW8260	UG/L	trans-1,2-Dichloroethene	08/26/15	ATR-MW12-G082615	FS	14		08/26/15	ATR-MW13-G082615	FS	16		08/27/15	ATR-MW20(51)-G082715	FS	1.7		08/27/15	ATR-MW20(35)-G082715R	FD	1.2	
SW8260	UG/L	trans-1,3-Dichloropropene	08/26/15	ATR-MW12-G082615	FS	10 U		08/26/15	ATR-MW13-G082615	FS	10 U		08/27/15	ATR-MW20(51)-G082715	FS	1 U		08/27/15	ATR-MW20(35)-G082715R	FD	1 U	
SW8260	UG/L	Trichloroethene	08/26/15	ATR-MW12-G082615	FS	10 U		08/26/15	ATR-MW13-G082615	FS	10 U		08/27/15	ATR-MW20(51)-G082715	FS	1 U		08/27/15	ATR-MW20(35)-G082715R	FD	3.5	
SW8260	UG/L	Vinyl chloride	08/26/15	ATR-MW12-G082615	FS	560		08/26/15	ATR-MW13-G082615	FS	870		08/27/15	ATR-MW20(51)-G082715	FS	210		08/27/15	ATR-MW20(35)-G082715R	FD	250	

TABLE 4 - SUMMARY OF ANALYTICAL RESULTS - AUGUST 2015
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Method	Units	Parameter	Sample Location		MW-12		MW-13		MW-20		MW-20											
			Sample Date	Field Sample ID	QC Code	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier									
SW8260	UG/L	Xylene, o	08/26/15	ATR-MW12-G082615	FS	10 U		08/26/15	ATR-MW13-G082615	FS	10 U		08/27/15	ATR-MW20(51)-G082715	FS	1 U		08/27/15	ATR-MW20(35)-G082715	FS	1 U	
SW8260	UG/L	Xylenes (m&p)				20 U					20 U										2 U	
SW8260	UG/L	Xylenes, Total				30 U					30 U										3 U	
																					Final Result	Final Qualifier
																					Final Result	Final Qualifier

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 - AUGUST 2015
 DATA VALIDATION REPORT
 AUGUST-OCTOBER 2015 GROUNDWATER SAMPLING
 ROCHESTER, INDIANA

Method	Units	Parameter	Sample Location		MW-59		MW-62		MW-6C		MW-81		MW-82				
			Sample Date	Field Sample ID	QC Code	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier		
SW8260	UG/L	1,1,1-Trichloroethane	08/27/15	ATR-MW59(29)-G082715	FS	100 U	20 U	2 U	2 U	200 U	1 U	08/26/15	MW-82	08/26/15	ATR-MW82-G082615	FS	1 U
SW8260	UG/L	1,1,2,2-Tetrachloroethane	08/27/15	ATR-MW59(29)-G082715	FS	100 U	20 U	2 U	2 U	200 U	1 U	08/27/15	MW-81	08/27/15	ATR-MW81(27)-G082715	FS	1 U
SW8260	UG/L	1,1,2-Trichloroethane	08/27/15	ATR-MW59(29)-G082715	FS	100 U	20 U	2 U	2 U	200 U	1 U	08/26/15	MW-6C	08/26/15	ATR-MW6C-G082615	FS	1 U
SW8260	UG/L	1,1-Dichloroethane	08/27/15	ATR-MW59(29)-G082715	FS	100 U	20 U	2 U	2 U	200 U	1 U	08/26/15	MW-6C	08/26/15	ATR-MW6C-G082615	FS	1 U
SW8260	UG/L	1,1-Dichloroethane	08/27/15	ATR-MW59(29)-G082715	FS	130	20 U	2 U	2 U	290	1 U	08/27/15	MW-81	08/27/15	ATR-MW81(27)-G082715	FS	1 U
SW8260	UG/L	1,2-Dichloroethane	08/27/15	ATR-MW59(29)-G082715	FS	100 U	20 U	2 U	2 U	200 U	1 U	08/26/15	MW-6C	08/26/15	ATR-MW6C-G082615	FS	1 U
SW8260	UG/L	1,2-Dichloropropane	08/27/15	ATR-MW59(29)-G082715	FS	100 U	20 U	2 U	2 U	200 U	1 U	08/26/15	MW-6C	08/26/15	ATR-MW6C-G082615	FS	1 U
SW8260	UG/L	2-Butanone	08/27/15	ATR-MW59(29)-G082715	FS	500 U	100 U	10 U	10 U	1000 U	18	08/27/15	MW-81	08/27/15	ATR-MW81(27)-G082715	FS	18
SW8260	UG/L	2-Hexanone	08/27/15	ATR-MW59(29)-G082715	FS	500 U	100 U	10 U	10 U	1000 U	5 U	08/27/15	MW-81	08/27/15	ATR-MW81(27)-G082715	FS	5 U
SW8260	UG/L	4-Methyl-2-pentanone	08/27/15	ATR-MW59(29)-G082715	FS	100 U	20 U	2 U	2 U	200 U	1 U	08/26/15	MW-6C	08/26/15	ATR-MW6C-G082615	FS	1 U
SW8260	UG/L	Acetone	08/27/15	ATR-MW59(29)-G082715	FS	1000 UJ	200 U	20 U	20 U	2000 UJ	10 U	08/27/15	MW-81	08/27/15	ATR-MW81(27)-G082715	FS	10 U
SW8260	UG/L	Benzene	08/27/15	ATR-MW59(29)-G082715	FS	100 U	20 U	2 U	2 U	200 U	1 U	08/26/15	MW-6C	08/26/15	ATR-MW6C-G082615	FS	1 U
SW8260	UG/L	Bromodichloromethane	08/27/15	ATR-MW59(29)-G082715	FS	100 U	20 U	2 U	2 U	200 U	1 U	08/26/15	MW-6C	08/26/15	ATR-MW6C-G082615	FS	1 U
SW8260	UG/L	Bromoform	08/27/15	ATR-MW59(29)-G082715	FS	100 U	20 U	2 U	2 U	200 U	1 U	08/26/15	MW-6C	08/26/15	ATR-MW6C-G082615	FS	1 U
SW8260	UG/L	Bromomethane	08/27/15	ATR-MW59(29)-G082715	FS	100 U	20 U	2 U	2 U	200 U	1 U	08/27/15	MW-81	08/27/15	ATR-MW81(27)-G082715	FS	1 U
SW8260	UG/L	Carbon disulfide	08/27/15	ATR-MW59(29)-G082715	FS	100 U	20 U	2 U	2 U	200 U	1.1	08/27/15	MW-81	08/27/15	ATR-MW81(27)-G082715	FS	1.1
SW8260	UG/L	Carbon tetrachloride	08/27/15	ATR-MW59(29)-G082715	FS	100 U	20 U	2 U	2 U	200 U	1 U	08/26/15	MW-6C	08/26/15	ATR-MW6C-G082615	FS	1 U
SW8260	UG/L	Chlorobenzene	08/27/15	ATR-MW59(29)-G082715	FS	100 U	20 U	2 U	2 U	200 U	1 U	08/26/15	MW-6C	08/26/15	ATR-MW6C-G082615	FS	1 U
SW8260	UG/L	Chloroethane	08/27/15	ATR-MW59(29)-G082715	FS	100 U	20 U	2 U	2 U	200 U	1 U	08/26/15	MW-6C	08/26/15	ATR-MW6C-G082615	FS	1 U
SW8260	UG/L	Chloroform	08/27/15	ATR-MW59(29)-G082715	FS	100 U	20 U	2 U	2 U	200 U	1 U	08/26/15	MW-6C	08/26/15	ATR-MW6C-G082615	FS	1 U
SW8260	UG/L	Chloromethane	08/27/15	ATR-MW59(29)-G082715	FS	100 UJ	20 U	2 U	2 U	200 U	1 U	08/26/15	MW-6C	08/26/15	ATR-MW6C-G082615	FS	1 U
SW8260	UG/L	Cis-1,2-Dichloroethene	08/27/15	ATR-MW59(29)-G082715	FS	30,000	5,600	410	410	53,000	21	08/27/15	MW-81	08/27/15	ATR-MW81(27)-G082715	FS	21
SW8260	UG/L	Cis-1,3-Dichloropropene	08/27/15	ATR-MW59(29)-G082715	FS	100 U	20 U	2 U	2 U	200 U	1 U	08/26/15	MW-6C	08/26/15	ATR-MW6C-G082615	FS	1 U
SW8260	UG/L	Dibromochloromethane	08/27/15	ATR-MW59(29)-G082715	FS	100 U	20 U	2 U	2 U	200 U	1 U	08/26/15	MW-6C	08/26/15	ATR-MW6C-G082615	FS	1 U
SW8260	UG/L	Ethylbenzene	08/27/15	ATR-MW59(29)-G082715	FS	100 U	20 U	2 U	2 U	200 U	1 U	08/26/15	MW-6C	08/26/15	ATR-MW6C-G082615	FS	1 U
SW8260	UG/L	Methylene chloride	08/27/15	ATR-MW59(29)-G082715	FS	500 U	100 U	10 U	10 U	1000 U	5 U	08/27/15	MW-81	08/27/15	ATR-MW81(27)-G082715	FS	5 U
SW8260	UG/L	Styrene	08/27/15	ATR-MW59(29)-G082715	FS	100 U	20 U	2 U	2 U	200 U	1 U	08/26/15	MW-6C	08/26/15	ATR-MW6C-G082615	FS	1 U
SW8260	UG/L	Tetrachloroethene	08/27/15	ATR-MW59(29)-G082715	FS	100 U	20 U	2 U	2 U	200 U	1 U	08/26/15	MW-6C	08/26/15	ATR-MW6C-G082615	FS	1 U
SW8260	UG/L	Toluene	08/27/15	ATR-MW59(29)-G082715	FS	100 U	20 U	2 U	2 U	200 U	1 U	08/26/15	MW-6C	08/26/15	ATR-MW6C-G082615	FS	1 U
SW8260	UG/L	trans-1,2-Dichloroethene	08/27/15	ATR-MW59(29)-G082715	FS	130	21	2 U	2 U	260	1.8	08/27/15	MW-81	08/27/15	ATR-MW81(27)-G082715	FS	1.8
SW8260	UG/L	trans-1,3-Dichloropropene	08/27/15	ATR-MW59(29)-G082715	FS	100 U	20 U	2 U	2 U	200 U	1 U	08/26/15	MW-6C	08/26/15	ATR-MW6C-G082615	FS	1 U
SW8260	UG/L	Trichloroethene	08/27/15	ATR-MW59(29)-G082715	FS	100 U	20 U	2 U	2 U	200 U	1 U	08/26/15	MW-6C	08/26/15	ATR-MW6C-G082615	FS	1 U
SW8260	UG/L	Vinyl chloride	08/27/15	ATR-MW59(29)-G082715	FS	23000	1600	66	66	7500	8.3	08/27/15	MW-81	08/27/15	ATR-MW81(27)-G082715	FS	8.3

TABLE 4 - SUMMARY OF ANALYTICAL RESULTS - AUGUST 2015
 DATA VALIDATION REPORT
 AUGUST-OCTOBER 2015 GROUNDWATER SAMPLING
 ROCHESTER, INDIANA

Method	Units	Parameter	Sample Location		MW-59 08/27/15 ATR-MW59(29)-G082715 FS	MW-62 08/27/15 ATR-MW62-G082715 FS	MW-6C 08/26/15 ATR-MW6C-G082615 FS	MW-81 08/27/15 ATR-MW81(27)-G082715 FS	MW-82 08/26/15 ATR-MW82-G082615 FS
			Sample Date	Field Sample ID QC Code					
SW8260	UG/L	Xy/ene, o	100 U		20 U	2 U	200 U	1 U	
SW8260	UG/L	Xy/enes (m&p)	200 U		40 U	4 U	400 U	2 U	
SW8260	UG/L	Xy/enes, Total	300 U		60 U	6 U	600 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 - AUGUST 2015
 DATA VALIDATION REPORT
 AUGUST-OCTOBER 2015 GROUNDWATER SAMPLING
 ROCHESTER, INDIANA

Method	Units	Parameter	Sample Location		OW-01D		OW-01S		PM-2		PM-3		QC	
			Sample Date	Field Sample ID	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier
SW8260	UG/L	1,1,1-Trichloroethane	08/27/15	ATR-OW1(D)-G082715	1 U	FS	2 U	FS	5 U	FS	100 U	FS	1 U	EB
SW8260	UG/L	1,1,1,2,2-Tetrachloroethane	08/27/15	ATR-OW1(D)-G082715	1 UJ	FS	2 UJ	FS	5 U	FS	100 U	FS	1 U	EB
SW8260	UG/L	1,1,1,2-Trichloroethane	08/27/15	ATR-OW1(D)-G082715	1 U	FS	2 U	FS	5 U	FS	100 U	FS	1 U	EB
SW8260	UG/L	1,1-Dichloroethane	08/27/15	ATR-OW1(D)-G082715	1 U	FS	2 U	FS	5 U	FS	100 U	FS	1 U	EB
SW8260	UG/L	1,1-Dichloroethene	08/27/15	ATR-OW1(D)-G082715	1 U	FS	2 U	FS	5 U	FS	100 U	FS	1 U	EB
SW8260	UG/L	1,2-Dichloroethane	08/27/15	ATR-OW1(D)-G082715	1 U	FS	2 U	FS	5 U	FS	100 U	FS	1 U	EB
SW8260	UG/L	1,2-Dichloropropane	08/27/15	ATR-OW1(D)-G082715	1 U	FS	2 U	FS	5 U	FS	100 U	FS	1 U	EB
SW8260	UG/L	2-Butanone	08/27/15	ATR-OW1(D)-G082715	34	FS	10 U	FS	25 U	FS	500 U	FS	5 U	EB
SW8260	UG/L	2-Hexanone	08/27/15	ATR-OW1(D)-G082715	5 UJ	FS	10 UJ	FS	25 U	FS	500 U	FS	5 U	EB
SW8260	UG/L	4-Methyl-2-pentanone	08/27/15	ATR-OW1(D)-G082715	1 UJ	FS	2 UJ	FS	5 U	FS	100 U	FS	1 U	EB
SW8260	UG/L	Acetone	08/27/15	ATR-OW1(D)-G082715	10 UJ	FS	20 UJ	FS	50 U	FS	1000 U	FS	10 U	EB
SW8260	UG/L	Benzene	08/27/15	ATR-OW1(D)-G082715	1 U	FS	2 U	FS	5 U	FS	100 U	FS	1 U	EB
SW8260	UG/L	Bromodichloromethane	08/27/15	ATR-OW1(D)-G082715	1 U	FS	2 U	FS	5 U	FS	100 U	FS	1 U	EB
SW8260	UG/L	Bromoform	08/27/15	ATR-OW1(D)-G082715	1 U	FS	2 U	FS	5 U	FS	100 U	FS	1 U	EB
SW8260	UG/L	Bromomethane	08/27/15	ATR-OW1(D)-G082715	1 U	FS	2 U	FS	5 U	FS	100 U	FS	1 U	EB
SW8260	UG/L	Carbon disulfide	08/27/15	ATR-OW1(D)-G082715	1.6	FS	2 U	FS	5 U	FS	100 U	FS	1 U	EB
SW8260	UG/L	Carbon tetrachloride	08/27/15	ATR-OW1(D)-G082715	1 U	FS	2 U	FS	5 U	FS	100 U	FS	1 U	EB
SW8260	UG/L	Chlorobenzene	08/27/15	ATR-OW1(D)-G082715	1 U	FS	2 U	FS	5 U	FS	100 U	FS	1 U	EB
SW8260	UG/L	Chloroethane	08/27/15	ATR-OW1(D)-G082715	1 U	FS	2 U	FS	5 U	FS	100 U	FS	1 U	EB
SW8260	UG/L	Chloroform	08/27/15	ATR-OW1(D)-G082715	1 U	FS	2 U	FS	5 U	FS	100 U	FS	1 U	EB
SW8260	UG/L	Chloromethane	08/27/15	ATR-OW1(D)-G082715	1 U	FS	2 U	FS	5 U	FS	100 U	FS	1 U	EB
SW8260	UG/L	Cis-1,2-Dichloroethene	08/27/15	ATR-OW1(D)-G082715	180	FS	270	FS	380	FS	200	FS	1 U	EB
SW8260	UG/L	Cis-1,3-Dichloropropene	08/27/15	ATR-OW1(D)-G082715	1 U	FS	2 U	FS	5 U	FS	100 U	FS	1 U	EB
SW8260	UG/L	Dibromochloromethane	08/27/15	ATR-OW1(D)-G082715	1 U	FS	2 U	FS	5 U	FS	100 U	FS	1 U	EB
SW8260	UG/L	Ethylbenzene	08/27/15	ATR-OW1(D)-G082715	1 U	FS	2 U	FS	6	FS	100 U	FS	1 U	EB
SW8260	UG/L	Methylene chloride	08/27/15	ATR-OW1(D)-G082715	5 U	FS	10 U	FS	25 U	FS	500 U	FS	5 U	EB
SW8260	UG/L	Styrene	08/27/15	ATR-OW1(D)-G082715	1 UJ	FS	2 UJ	FS	5 U	FS	100 U	FS	1 U	EB
SW8260	UG/L	Tetrachloroethene	08/27/15	ATR-OW1(D)-G082715	1 U	FS	2 U	FS	5 U	FS	100 U	FS	1 U	EB
SW8260	UG/L	Toluene	08/27/15	ATR-OW1(D)-G082715	1 U	FS	2 U	FS	5 U	FS	100 U	FS	1 U	EB
SW8260	UG/L	trans-1,2-Dichloroethene	08/27/15	ATR-OW1(D)-G082715	1 U	FS	2 U	FS	5 U	FS	100 U	FS	1 U	EB
SW8260	UG/L	trans-1,3-Dichloropropene	08/27/15	ATR-OW1(D)-G082715	1 U	FS	2 U	FS	5 U	FS	100 U	FS	1 U	EB
SW8260	UG/L	Trichloroethene	08/27/15	ATR-OW1(D)-G082715	1 U	FS	2 U	FS	5 U	FS	100 U	FS	1 U	EB
SW8260	UG/L	Vinyl chloride	08/27/15	ATR-OW1(D)-G082715	370	FS	240	FS	1200	FS	200	FS	1 U	EB

TABLE 4 - SUMMARY OF ANALYTICAL RESULTS - AUGUST 2015
 DATA VALIDATION REPORT
 AUGUST-OCTOBER 2015 GROUNDWATER SAMPLING
 ROCHESTER, INDIANA

Method	Units	Parameter	Sample Location		OW-01S		PM-2		PM-3		QC	
			Sample Date	Field Sample ID	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier
SW8260	UG/L	Xylene, o	08/27/15	ATR-OW1(D)-G082715	2 U	FS	08/27/15	5 U	08/27/15	100 U	08/26/15	1 U
SW8260	UG/L	Xylenes (m&p)			4 U			10 U		200 U		2 U
SW8260	UG/L	Xylenes, Total			6 U			15 U		300 U		3 U
												EB
												ATR-EB001-G082615

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 - AUGUST 2015
 DATA VALIDATION REPORT
 AUGUST-OCTOBER 2015 GROUNDWATER SAMPLING
 ROCHESTER, INDIANA

Method	Units	Parameter	Sample Location		QC		QC		QC	
			Sample Date	Field Sample ID	QC Code	QC	QC	QC	QC	QC
			08/27/15	08/27/15	08/27/15	08/27/15	08/27/15	08/27/15	08/27/15	08/27/15
			Trip Blank	Trip Blank	Trip Blank	Trip Blank	Trip Blank	Trip Blank	Trip Blank	Trip Blank
			TB	TB	TB	TB	TB	TB	TB	TB
			Final Result	Final Result	Final Result	Final Result	Final Result	Final Result	Final Result	Final Result
			Final Qualifier	Final Qualifier	Final Qualifier	Final Qualifier	Final Qualifier	Final Qualifier	Final Qualifier	Final Qualifier
SW8260	UG/L	1,1,1-Trichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	UG/L	1,1,2,2-Tetrachloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	UG/L	1,1,2-Trichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	UG/L	1,1-Dichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	UG/L	1,1-Dichloroethene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	UG/L	1,2-Dichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	UG/L	1,2-Dichloropropane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	UG/L	2-Butanone	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
SW8260	UG/L	2-Hexanone	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
SW8260	UG/L	4-Methyl-2-pentanone	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	UG/L	Acetone	10 U	10 U	10 U	10 U	10 U	10 U	10 U	34
SW8260	UG/L	Benzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	UG/L	Bromodichloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	UG/L	Bromoform	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	UG/L	Bromomethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	UG/L	Carbon disulfide	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	UG/L	Carbon tetrachloride	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	UG/L	Chlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	UG/L	Chloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	UG/L	Chloroform	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	UG/L	Chloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	UG/L	Cis-1,2-Dichloroethene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	UG/L	Cis-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	UG/L	Dibromochloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	UG/L	Ethylbenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	UG/L	Methylene chloride	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
SW8260	UG/L	Styrene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	UG/L	Tetrachloroethene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	UG/L	Toluene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	UG/L	trans-1,2-Dichloroethene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	UG/L	trans-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	UG/L	Trichloroethene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260	UG/L	Vinyl chloride	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

TABLE 4 - SUMMARY OF ANALYTICAL RESULTS - AUGUST 2015
 DATA VALIDATION REPORT
 AUGUST-OCTOBER 2015 GROUNDWATER SAMPLING
 ROCHESTER, INDIANA

Method	Units	Parameter	Sample Location		QC		QC	
			Sample Date	Field Sample ID	QC Code	Final Result	Final Qualifier	Final Result
SW8260	UG/L	Xylene, o	08/27/15	Trip Blank	1 U	1 U	08/27/15	1 U
SW8260	UG/L	Xylenes (m&p)		TB	2 U	2 U	ATR-EB001-G082715	2 U
SW8260	UG/L	Xylenes, Total			3 U	3 U	FB	3 U
							ATR-FB001-G082715	

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 - OCTOBER 2015
 DATA VALIDATION REPORT
 AUGUST-OCTOBER 2015 GROUNDWATER SAMPLING
 TEXTRON FORMER TORX FACILITY
 ROCHESTER, INDIANA

Method	Units	Parameter	Sample Location Sample Date Field Sample ID QC Code	MW-14 10/08/15 ATR-MW14-G100815 FS	MW-15 10/13/15 ATR-MW15-G101315 FS	MW-16 10/07/15 ATR-MW16-G100715 FS	MW-17 10/07/15 ATR-MW17-G100715 FS	MW-24 10/08/15 ATR-MW24 (55.9)-G100815 FS	
				Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier
SW8260B	UG/L	1,1,1-Trichloroethane		2 U	10 U	1 U	1 U	1 U	
SW8260B	UG/L	1,1,2,2-Tetrachloroethane		2 U	10 U	1 U	1 U	1 U	
SW8260B	UG/L	1,1,2-Trichloroethane		2 U	10 U	1 U	1 U	1 U	
SW8260B	UG/L	1,1-Dichloroethane		2 U	10 U	1 U	1 U	1 U	
SW8260B	UG/L	1,1-Dichloroethene		2 U	55	1.7	1 U	1 U	
SW8260B	UG/L	1,2-Dichloroethane		2 U	10 U	1 U	1 U	1 U	
SW8260B	UG/L	1,2-Dichloropropane		2 U	10 U	1 U	1 U	1 U	
SW8260B	UG/L	2-Butanone		10 U	50 U	5 U	5 U	5 U	
SW8260B	UG/L	2-Hexanone		10 U	50 U	5 U	5 U	5 U	
SW8260B	UG/L	4-Methyl-2-pentanone		2 U	10 U	1 U	1 U	1 U	
SW8260B	UG/L	Acetone		20 U	100 U	10 U	10 U	10 U	
SW8260B	UG/L	Benzene		2 U	10 U	1 U	1 U	1 U	
SW8260B	UG/L	Bromodichloromethane		2 U	10 U	1 U	1 U	1 U	
SW8260B	UG/L	Bromoform		2 U	10 U	1 U	1 U	1 U	
SW8260B	UG/L	Bromomethane		2 UJ	10 UJ	1 U	1 UJ	1 U	
SW8260B	UG/L	Carbon disulfide		2 U	10 U	1 U	1 U	1 U	
SW8260B	UG/L	Carbon tetrachloride		2 U	10 U	1 U	1 U	1 U	
SW8260B	UG/L	Chlorobenzene		2 U	10 U	1 U	1 U	1 U	
SW8260B	UG/L	Chloroethane		2 U	10 U	1 U	1 U	1 U	
SW8260B	UG/L	Chloroform		2 U	10 U	1 U	1 U	1 U	
SW8260B	UG/L	Chloromethane		2 U	10 UJ	1 U	1 U	1 U	
SW8260B	UG/L	Cis-1,2-Dichloroethene		110	4600	480	41	49	
SW8260B	UG/L	Cis-1,3-Dichloropropene		2 U	10 U	1 U	1 U	1 U	
SW8260B	UG/L	Dibromochloromethane		2 U	10 U	1 U	1 U	1 U	
SW8260B	UG/L	Ethylbenzene		2 U	10 U	1 U	1 U	1 U	
SW8260B	UG/L	Methylene chloride		10 U	50 U	5 U	5 U	5 U	
SW8260B	UG/L	Styrene		2 U	10 U	1 U	1 U	1 U	
SW8260B	UG/L	Tetrachloroethene		2 U	10 U	1 U	1 U	1 U	
SW8260B	UG/L	Toluene		2 U	10 U	1 U	1 U	1 U	
SW8260B	UG/L	trans-1,2-Dichloroethene		3	350	10	1.6	2.5	
SW8260B	UG/L	trans-1,3-Dichloropropene		2 U	10 U	1 U	1 U	1 U	
SW8260B	UG/L	Trichloroethene		570 J	690	2.2	190 J	110	
SW8260B	UG/L	Vinyl chloride		3.6	460	170	1 U	1	

TABLE 4 - SUMMARY OF ANALYTICAL RESULTS - OCTOBER 2015
 DATA VALIDATION REPORT
 AUGUST-OCTOBER 2015 GROUNDWATER SAMPLING
 TETRON FORMER TORX FACILITY
 ROCHESTER, INDIANA

Method	Units	Parameter	Sample Location Sample Date Field Sample ID QC Code	MW-14 10/08/15 ATR-MW14-G100815 FS	MW-15 10/13/15 ATR-MW15-G101315 FS	MW-16 10/07/15 ATR-MW16-G100715 FS	MW-17 10/07/15 ATR-MW17-G100715 FS	MW-24 10/08/15 ATR-MW24 (55.9)-G100815 FS
			Final Result	Final Result	Final Result	Final Result	Final Result	Final Result
SW8260B	UG/L	Xylene, o	2 U	10 U	1 U	1 U	1 U	1 U
SW8260B	UG/L	Xylenes (m&p)	4 U	20 U	2 U	2 U	2 U	2 U
SW8260B	UG/L	Xylenes, Total	6 U	30 U	3 U	3 U	3 U	3 U

U = not detected, value is the detection limit

J = value is estimated

ug/L = microgram per liter

FS = Field Sample

FD = Field Duplicate

TB = Trip Blank

EB = Equipment Blank

TABLE 4 - SUMMARY OF ANALYTICAL RESULTS - OCTOBER 2015
 DATA VALIDATION REPORT
 AUGUST-OCTOBER 2015 GROUNDWATER SAMPLING
 TEXTRON FORMER TORX FACILITY
 ROCHESTER, INDIANA

Method	Units	Parameter	Sample Location Sample Date Field Sample ID QC Code	MW-24		MW-25		MW-25		MW-25		MW-26	
				Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier
SW8260B	UG/L	1,1,1-Trichloroethane		1 U		10 U		5 U		10 U		1 U	
SW8260B	UG/L	1,1,2,2-Tetrachloroethane		1 U		10 U		5 U		10 U		1 U	
SW8260B	UG/L	1,1,2-Trichloroethane		1 U		10 U		5 U		10 U		1 U	
SW8260B	UG/L	1,1-Dichloroethane		1 U		10 U		5 U		10 U		1 U	
SW8260B	UG/L	1,1-Dichloroethene		1 U		14		5 U		10 U		1 U	
SW8260B	UG/L	1,2-Dichloroethane		1 U		10 U		5 U		10 U		1 U	
SW8260B	UG/L	1,2-Dichloropropane		1 U		10 U		5 U		10 U		1 U	
SW8260B	UG/L	2-Butanone		5 U		50 U		25 U		50 U		5 U	
SW8260B	UG/L	2-Hexanone		5 U		50 U		25 U		50 U		5 U	
SW8260B	UG/L	4-Methyl-2-pentanone		1 U		10 U		5 U		10 U		1 U	
SW8260B	UG/L	Acetone		10 U		100 U		50 U		100 U		10 U	
SW8260B	UG/L	Benzene		1 U		10 U		5 U		10 U		1 U	
SW8260B	UG/L	Bromodichloromethane		1 U		10 U		5 U		10 U		1 U	
SW8260B	UG/L	Bromoform		1 U		10 U		5 U		10 U		1 U	
SW8260B	UG/L	Bromomethane		1 U		10 U		5 U		10 U		1 U	
SW8260B	UG/L	Carbon disulfide		1 U		10 U		5 U		10 U		1 U	
SW8260B	UG/L	Carbon tetrachloride		1 U		10 U		5 U		10 U		1 U	
SW8260B	UG/L	Chlorobenzene		1 U		10 U		5 U		10 U		1 U	
SW8260B	UG/L	Chloroethane		1 U		10 U		5 U		10 U		1 U	
SW8260B	UG/L	Chloroform		1 U		10 U		5 U		10 U		1 U	
SW8260B	UG/L	Chloromethane		1 U		10 U		5 U		10 U		1 U	
SW8260B	UG/L	Cis-1,2-Dichloroethene		1 U		3600		1600		1800		8.3	
SW8260B	UG/L	Cis-1,3-Dichloropropene		1 U		10 U		5 U		10 U		1 U	
SW8260B	UG/L	Dibromochloromethane		1 U		10 U		5 U		10 U		1 U	
SW8260B	UG/L	Ethylbenzene		1 U		10 U		5 U		10 U		1 U	
SW8260B	UG/L	Methylene chloride		5 U		50 U		25 U		50 U		5 U	
SW8260B	UG/L	Styrene		1 U		10 U		5 U		10 U		1 U	
SW8260B	UG/L	Tetrachloroethene		1 U		10 U		5 U		10 U		1 U	
SW8260B	UG/L	Toluene		1 U		10 U		5 U		10 U		1 U	
SW8260B	UG/L	trans-1,2-Dichloroethene		1 U		38		7.4		200		1 U	
SW8260B	UG/L	trans-1,3-Dichloropropene		1 U		10 U		5 U		10 U		1 U	
SW8260B	UG/L	Trichloroethene		1 U		10 U		78		15		1 U	
SW8260B	UG/L	Vinyl chloride		1 U		670		980		220		3.1	

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 DATA VALIDATION REPORT
 AUGUST-OCTOBER 2015 GROUNDWATER SAMPLING
 TEXTRON FORMER TORX FACILITY
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Method	Units	Parameter	Sample Location Sample Date Field Sample ID QC Code	MW-24 10/08/15 ATR-MW24 (24.9)-G100815 FS	MW-25 10/13/15 ATR-MW25(16.4)-G101315 FS	MW-25 10/13/15 ATR-MW25(32.6)-G101315 FS	MW-25 10/13/15 ATR-MW25(45.2)-G101315 FS	MW-26 10/07/15 ATR-MW26 (58.8)-G100715 FS
			Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier
SW8260B	UG/L	Xylene, o	1 U		10 U	5 U	10 U	1 U
SW8260B	UG/L	Xylenes (m&p)	2 U		20 U	10 U	20 U	2 U
SW8260B	UG/L	Xylenes, Total	3 U		30 U	15 U	30 U	3 U

U = not detected, value is the detection limit

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ug/L = microgram per liter

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EB = Equipment Blank

TABLE 4 - SUMMARY OF ANALYTICAL RESULTS - OCTOBER 2015
 DATA VALIDATION REPORT
 AUGUST-OCTOBER 2015 GROUNDWATER SAMPLING
 TEXTRON FORMER TORX FACILITY
 ROCHESTER, INDIANA

Method	Units	Parameter	MW-26		MW-26		MW-26		OW-02		OW-02		OW-03	
			Sample Location Sample Date Field Sample ID QC Code	Final Result	Final Qualifier	Sample Location Sample Date Field Sample ID QC Code	Final Result	Final Qualifier	Sample Location Sample Date Field Sample ID QC Code	Final Result	Final Qualifier	Sample Location Sample Date Field Sample ID QC Code	Final Result	Final Qualifier
SW8260B	UG/L	1,1,1-Trichloroethane	10/07/15 ATR-MW26 (17.5)-G100715 FS	1 U		10/07/15 MW-26 ATR-MW26 (28.8)-G100715 FS	1 U		10/08/15 OW-02 ATR-OW2 (33)-G100815 FS	5 U		10/07/15 OW-03 ATR-OW3 (35)-G100715 FS	1 U	
SW8260B	UG/L	1,1,2,2-Tetrachloroethane		1 U			1 U			5 U			1 U	
SW8260B	UG/L	1,1,2-Trichloroethane		1 U			1 U			5 U			1 U	
SW8260B	UG/L	1,1-Dichloroethane		1 U			1 U			5 U			1 U	
SW8260B	UG/L	1,1-Dichloroethene		1 U			1 U			5.3			1 U	
SW8260B	UG/L	1,2-Dichloroethane		1 U			1 U			5 U			1 U	
SW8260B	UG/L	1,2-Dichloropropane		1 U			1 U			5 U			1 U	
SW8260B	UG/L	2-Butanone		26			58			25 U			94	
SW8260B	UG/L	2-Hexanone		5 U			5 U			25 U			5 U	
SW8260B	UG/L	4-Methyl-2-pentanone		1 U			1 U			5 U			1 U	
SW8260B	UG/L	Acetone		10 U			10 U			50 U			10 U	
SW8260B	UG/L	Benzene		1 U			1 U			5 U			1 U	
SW8260B	UG/L	Bromodichloromethane		1 U			1 U			5 U			1 U	
SW8260B	UG/L	Bromoform		1 U			1 U			5 U			1 U	
SW8260B	UG/L	Bromomethane		1 U			1 U			5 UJ			1 U	
SW8260B	UG/L	Carbon disulfide		1 U			1 U			5 U			1 U	
SW8260B	UG/L	Carbon tetrachloride		1 U			1 U			5 U			1 U	
SW8260B	UG/L	Chlorobenzene		1 U			1 U			5 U			1 U	
SW8260B	UG/L	Chloroethane		1 U			1 U			5 U			1 U	
SW8260B	UG/L	Chloroform		1 U			1 U			5 U			1 U	
SW8260B	UG/L	Chloromethane		1 U			1 U			5 UJ			1 U	
SW8260B	UG/L	Cis-1,2-Dichloroethene		510			1 U			2000			150	
SW8260B	UG/L	Cis-1,3-Dichloropropene		1 U			1 U			5 U			1 U	
SW8260B	UG/L	Dibromochloromethane		1 U			1 U			5 U			1 U	
SW8260B	UG/L	Ethylbenzene		1 U			1 U			5 U			1 U	
SW8260B	UG/L	Methylene chloride		5 U			5 U			25 U			5 U	
SW8260B	UG/L	Styrene		1 U			1 U			5 U			1 U	
SW8260B	UG/L	Tetrachloroethene		1 U			1 U			5 U			1 U	
SW8260B	UG/L	Toluene		1 U			1 U			5 U			1 U	
SW8260B	UG/L	trans-1,2-Dichloroethene		3.2			1 U			9.2			1.3	
SW8260B	UG/L	trans-1,3-Dichloropropene		1 U			1 U			5 U			1 U	
SW8260B	UG/L	Trichloroethene		1 U			1 U			5 U			1 U	
SW8260B	UG/L	Vinyl chloride		170			1 U			1600			84	

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 DATA VALIDATION REPORT
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 TEXTRON FORMER TORX FACILITY
 ROCHESTER, INDIANA

Method	Units	Parameter	Sample Location Sample Date Field Sample ID QC Code	MW-26 10/07/15 ATR-MW26 (17.5)-G100715 FS	MW-26 10/07/15 ATR-MW26 (28.8)-G100715 FS	OW-02 10/08/15 ATR-OW2 (33)-G100815 FS	OW-02 10/08/15 ATR-OW2 (53)-G100815 FS	OW-03 10/07/15 ATR-OW3 (35)-G100715 FS
			Final Result	Final Result	Final Result	Final Result	Final Result	Final Result
SW8260B	UG/L	Xylene, o	1 U	1 U	5 U	1 U	1 U	1 U
SW8260B	UG/L	Xylenes (m&p)	2 U	2 U	10 U	2 U	2 U	2 U
SW8260B	UG/L	Xylenes, Total	3 U	3 U	15 U	3 U	3 U	3 U

U = not detected, value is the detection limit

J = value is estimated

ug/L = microgram per liter

FS = Field Sample

FD = Field Duplicate

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EB = Equipment Blank

TABLE 4 - SUMMARY OF ANALYTICAL RESULTS - OCTOBER 2015
 DATA VALIDATION REPORT
 AUGUST-OCTOBER 2015 GROUNDWATER SAMPLING
 TEXTRON FORMER TORX FACILITY
 ROCHESTER, INDIANA

Method	Units	Parameter	Sample Location		OW-03		OW-03		OW-04		OW-04		OW-05			
			Sample Date	Field Sample ID	QC Code	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier	
SW8260B	UG/L	1,1,1-Trichloroethane	10/07/15	ATR-OW3 (55)-G100715	FS	1 U		10/07/15	ATR-OW3 (55)-G100715 R	FD	1 U		10/13/15	ATR-OW4(54)-G101315	FS	2 U
SW8260B	UG/L	1,1,2,2-Tetrachloroethane	10/07/15	ATR-OW3 (55)-G100715	FS	1 U		10/07/15	ATR-OW3 (55)-G100715 R	FD	1 U		10/13/15	ATR-OW4(54)-G101315	FS	2 U
SW8260B	UG/L	1,1,2-Trichloroethane	10/07/15	ATR-OW3 (55)-G100715	FS	1 U		10/07/15	ATR-OW3 (55)-G100715 R	FD	1 U		10/13/15	ATR-OW4(54)-G101315	FS	2 U
SW8260B	UG/L	1,1-Dichloroethane	10/07/15	ATR-OW3 (55)-G100715	FS	1 U		10/07/15	ATR-OW3 (55)-G100715 R	FD	1 U		10/13/15	ATR-OW4(54)-G101315	FS	2 U
SW8260B	UG/L	1,1-Dichloroethene	10/07/15	ATR-OW3 (55)-G100715	FS	1 U		10/07/15	ATR-OW3 (55)-G100715 R	FD	1.1 J		10/13/15	ATR-OW4(54)-G101315	FS	2 U
SW8260B	UG/L	1,2-Dichloroethane	10/07/15	ATR-OW3 (55)-G100715	FS	1 U		10/07/15	ATR-OW3 (55)-G100715 R	FD	1 U		10/13/15	ATR-OW4(54)-G101315	FS	2 U
SW8260B	UG/L	1,2-Dichloropropane	10/07/15	ATR-OW3 (55)-G100715	FS	1 U		10/07/15	ATR-OW3 (55)-G100715 R	FD	1 U		10/13/15	ATR-OW4(54)-G101315	FS	2 U
SW8260B	UG/L	2-Butanone	10/07/15	ATR-OW3 (55)-G100715	FS	50		10/07/15	ATR-OW3 (55)-G100715 R	FD	43		10/13/15	ATR-OW4(54)-G101315	FS	74
SW8260B	UG/L	2-Hexanone	10/07/15	ATR-OW3 (55)-G100715	FS	5 U		10/07/15	ATR-OW3 (55)-G100715 R	FD	5 U		10/13/15	ATR-OW4(54)-G101315	FS	10 U
SW8260B	UG/L	4-Methyl-2-pentanone	10/07/15	ATR-OW3 (55)-G100715	FS	1 U		10/07/15	ATR-OW3 (55)-G100715 R	FD	1 U		10/13/15	ATR-OW4(54)-G101315	FS	2 U
SW8260B	UG/L	Acetone	10/07/15	ATR-OW3 (55)-G100715	FS	10 U		10/07/15	ATR-OW3 (55)-G100715 R	FD	10 U		10/13/15	ATR-OW4(54)-G101315	FS	20 U
SW8260B	UG/L	Benzene	10/07/15	ATR-OW3 (55)-G100715	FS	1 U		10/07/15	ATR-OW3 (55)-G100715 R	FD	1 U		10/13/15	ATR-OW4(54)-G101315	FS	2 U
SW8260B	UG/L	Bromodichloromethane	10/07/15	ATR-OW3 (55)-G100715	FS	1 U		10/07/15	ATR-OW3 (55)-G100715 R	FD	1 U		10/13/15	ATR-OW4(54)-G101315	FS	2 U
SW8260B	UG/L	Bromoform	10/07/15	ATR-OW3 (55)-G100715	FS	1 U		10/07/15	ATR-OW3 (55)-G100715 R	FD	1 U		10/13/15	ATR-OW4(54)-G101315	FS	2 U
SW8260B	UG/L	Bromomethane	10/07/15	ATR-OW3 (55)-G100715	FS	1 U		10/07/15	ATR-OW3 (55)-G100715 R	FD	1 U		10/13/15	ATR-OW4(54)-G101315	FS	2 U
SW8260B	UG/L	Carbon disulfide	10/07/15	ATR-OW3 (55)-G100715	FS	1 U		10/07/15	ATR-OW3 (55)-G100715 R	FD	1 U		10/13/15	ATR-OW4(54)-G101315	FS	2 U
SW8260B	UG/L	Carbon tetrachloride	10/07/15	ATR-OW3 (55)-G100715	FS	1 U		10/07/15	ATR-OW3 (55)-G100715 R	FD	1 U		10/13/15	ATR-OW4(54)-G101315	FS	2 U
SW8260B	UG/L	Chlorobenzene	10/07/15	ATR-OW3 (55)-G100715	FS	1 U		10/07/15	ATR-OW3 (55)-G100715 R	FD	1 U		10/13/15	ATR-OW4(54)-G101315	FS	2 U
SW8260B	UG/L	Chloroethane	10/07/15	ATR-OW3 (55)-G100715	FS	1 U		10/07/15	ATR-OW3 (55)-G100715 R	FD	1 U		10/13/15	ATR-OW4(54)-G101315	FS	2 U
SW8260B	UG/L	Chloroform	10/07/15	ATR-OW3 (55)-G100715	FS	1 U		10/07/15	ATR-OW3 (55)-G100715 R	FD	1 U		10/13/15	ATR-OW4(54)-G101315	FS	2 U
SW8260B	UG/L	Chloromethane	10/07/15	ATR-OW3 (55)-G100715	FS	1 U		10/07/15	ATR-OW3 (55)-G100715 R	FD	1 U		10/13/15	ATR-OW4(54)-G101315	FS	2 U
SW8260B	UG/L	Cis-1,2-Dichloroethene	10/07/15	ATR-OW3 (55)-G100715	FS	55 J		10/07/15	ATR-OW3 (55)-G100715 R	FD	89 J		10/13/15	ATR-OW4(54)-G101315	FS	720
SW8260B	UG/L	Cis-1,3-Dichloropropene	10/07/15	ATR-OW3 (55)-G100715	FS	1 U		10/07/15	ATR-OW3 (55)-G100715 R	FD	1 U		10/13/15	ATR-OW4(54)-G101315	FS	2 U
SW8260B	UG/L	Dibromochloromethane	10/07/15	ATR-OW3 (55)-G100715	FS	1 U		10/07/15	ATR-OW3 (55)-G100715 R	FD	1 U		10/13/15	ATR-OW4(54)-G101315	FS	2 U
SW8260B	UG/L	Ethylbenzene	10/07/15	ATR-OW3 (55)-G100715	FS	1 U		10/07/15	ATR-OW3 (55)-G100715 R	FD	1 U		10/13/15	ATR-OW4(54)-G101315	FS	2 U
SW8260B	UG/L	Methylene chloride	10/07/15	ATR-OW3 (55)-G100715	FS	5 U		10/07/15	ATR-OW3 (55)-G100715 R	FD	5 U		10/13/15	ATR-OW4(54)-G101315	FS	10 U
SW8260B	UG/L	Styrene	10/07/15	ATR-OW3 (55)-G100715	FS	1 U		10/07/15	ATR-OW3 (55)-G100715 R	FD	1 U		10/13/15	ATR-OW4(54)-G101315	FS	2 U
SW8260B	UG/L	Tetrachloroethene	10/07/15	ATR-OW3 (55)-G100715	FS	1 U		10/07/15	ATR-OW3 (55)-G100715 R	FD	1 U		10/13/15	ATR-OW4(54)-G101315	FS	2 U
SW8260B	UG/L	Toluene	10/07/15	ATR-OW3 (55)-G100715	FS	1 U		10/07/15	ATR-OW3 (55)-G100715 R	FD	1 U		10/13/15	ATR-OW4(54)-G101315	FS	2 U
SW8260B	UG/L	trans-1,2-Dichloroethene	10/07/15	ATR-OW3 (55)-G100715	FS	9.1 J		10/07/15	ATR-OW3 (55)-G100715 R	FD	21 J		10/13/15	ATR-OW4(54)-G101315	FS	6.1
SW8260B	UG/L	trans-1,3-Dichloropropene	10/07/15	ATR-OW3 (55)-G100715	FS	1 U		10/07/15	ATR-OW3 (55)-G100715 R	FD	1 U		10/13/15	ATR-OW4(54)-G101315	FS	2 U
SW8260B	UG/L	Trichloroethene	10/07/15	ATR-OW3 (55)-G100715	FS	430		10/07/15	ATR-OW3 (55)-G100715 R	FD	430		10/13/15	ATR-OW4(54)-G101315	FS	2 U
SW8260B	UG/L	Vinyl chloride	10/07/15	ATR-OW3 (55)-G100715	FS	1 J		10/07/15	ATR-OW3 (55)-G100715 R	FD	2.4 J		10/13/15	ATR-OW4(54)-G101315	FS	190

TABLE 4 - SUMMARY OF ANALYTICAL RESULTS - OCTOBER 2015
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 AUGUST-OCTOBER 2015 GROUNDWATER SAMPLING
 TETRON FORMER TORX FACILITY
 ROCHESTER, INDIANA

Method	Units	Parameter	Sample Location Sample Date Field Sample ID QC Code	OW-03 10/07/15 ATR-OW3 (55)-G100715 FS	OW-03 10/07/15 ATR-OW3 (55)-G100715 R FD	OW-04 10/13/15 ATR-OW4(35)-G101315 FS	OW-04 10/13/15 ATR-OW4(54)-G101315 FS	OW-05 10/07/15 ATR-OW5 (16)-G100715 FS
Final Result	Final Result	Final Result	Final Result	Final Result	Final Result	Final Result	Final Result	Final Result
Final Qualifier	Final Qualifier	Final Qualifier	Final Qualifier	Final Qualifier	Final Qualifier	Final Qualifier	Final Qualifier	Final Qualifier
SW8260B	UG/L	Xylene, o	1 U	1 U	5 U	1 U	2 U	2 U
SW8260B	UG/L	Xylenes (m&p)	2 U	2 U	10 U	2 U	4 U	4 U
SW8260B	UG/L	Xylenes, Total	3 U	3 U	15 U	3 U	6 U	6 U

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FD = Field Duplicate

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TABLE 4 - SUMMARY OF ANALYTICAL RESULTS - OCTOBER 2015
 DATA VALIDATION REPORT
 AUGUST-OCTOBER 2015 GROUNDWATER SAMPLING
 TEXTRON FORMER TORX FACILITY
 ROCHESTER, INDIANA

Method	Units	Parameter	Sample Location Sample Date Field Sample ID QC Code	OW-05 10/07/15 ATR-OW5 (35)-G100715 FS	Final Result	Final Qualifier	OW-05 10/07/15 ATR-OW5 (54)-G100715 FS	Final Result	Final Qualifier	QC 10/07/15 Trip Blank #1 TB	Final Result	Final Qualifier	QC 10/08/15 Trip Blank #2 TB	Final Result	Final Qualifier	QC 10/08/15 ATR-EB001-G100815 EB
SW8260B	UG/L	1,1,1-Trichloroethane		5 U			5 U			1 U			1 U			1 U
SW8260B	UG/L	1,1,2,2-Tetrachloroethane		5 U			5 U			1 U			1 U			1 U
SW8260B	UG/L	1,1,2-Trichloroethane		5 U			5 U			1 U			1 U			1 U
SW8260B	UG/L	1,1-Dichloroethane		5 U			5 U			1 U			1 U			1 U
SW8260B	UG/L	1,1-Dichloroethane		5			7			1 U			1 U			1 U
SW8260B	UG/L	1,2-Dichloroethane		5 U			5 U			1 U			1 U			1 U
SW8260B	UG/L	1,2-Dichloropropane		5 U			5 U			1 U			1 U			1 U
SW8260B	UG/L	2-Butanone		29			25 U			5 U			5 U			5 U
SW8260B	UG/L	2-Hexanone		25 U			25 U			5 U			5 U			5 U
SW8260B	UG/L	4-Methyl-2-pentanone		5 U			5 U			1 U			1 U			1 U
SW8260B	UG/L	Acetone		50 UJ			50 U			10 U			10 U			10 U
SW8260B	UG/L	Benzene		5 U			5 U			1 U			1 U			1 U
SW8260B	UG/L	Bromodichloromethane		5 U			5 U			1 U			1 U			1 U
SW8260B	UG/L	Bromoform		5 U			5 U			1 U			1 U			1 U
SW8260B	UG/L	Bromomethane		5 U			5 U			1 U			1 U			1 U
SW8260B	UG/L	Carbon disulfide		5 U			5 U			1 U			1 U			1 U
SW8260B	UG/L	Carbon tetrachloride		5 U			5 U			1 U			1 U			1 U
SW8260B	UG/L	Chlorobenzene		5 U			5 U			1 U			1 U			1 U
SW8260B	UG/L	Chloroethane		5 U			5 U			1 U			1 U			1 U
SW8260B	UG/L	Chloroform		5 U			5 U			1 U			1 U			1 U
SW8260B	UG/L	Chloromethane		5 U			5 U			1 U			1 U			1 U
SW8260B	UG/L	Cis-1,2-Dichloroethene		1100			2000			1 U			1 U			1 U
SW8260B	UG/L	Cis-1,3-Dichloropropene		5 U			5 U			1 U			1 U			1 U
SW8260B	UG/L	Dibromochloromethane		5 U			5 U			1 U			1 U			1 U
SW8260B	UG/L	Ethylbenzene		5 U			5 U			1 U			1 U			1 U
SW8260B	UG/L	Methylene chloride		25 U			25 U			5 U			5 U			5 U
SW8260B	UG/L	Styrene		5 U			5 U			1 U			1 U			1 U
SW8260B	UG/L	Tetrachloroethene		5 U			5 U			1 U			1 U			1 U
SW8260B	UG/L	Toluene		5 U			5 U			1 U			1 U			1 U
SW8260B	UG/L	trans-1,2-Dichloroethene		5.4			14			1 U			1 U			1 U
SW8260B	UG/L	trans-1,3-Dichloropropene		5 U			5 U			1 U			1 U			1 U
SW8260B	UG/L	Trichloroethene		5 U			5 U			1 U			1 U			1 U
SW8260B	UG/L	Vinyl chloride		170			300			1 U			1 U			1 U

TABLE 4 - SUMMARY OF ANALYTICAL RESULTS - OCTOBER 2015
 DATA VALIDATION REPORT
 AUGUST-OCTOBER 2015 GROUNDWATER SAMPLING
 TEXTRON FORMER TORX FACILITY
 ROCHESTER, INDIANA

Method	Units	Parameter	Sample Location Sample Date Field Sample ID QC Code	OW-05 10/07/15 ATR-OW5 (35)-G100715 FS	OW-05 10/07/15 ATR-OW5 (54)-G100715 FS	QC 10/07/15 Trip Blank #1 TB	QC 10/08/15 Trip Blank #2 TB	QC 10/08/15 ATR-EB001-G100815 EB
			Final Result	Final Qualifier	Final Result	Final Qualifier	Final Result	Final Qualifier
SW8260B	UG/L	Xylene, o	5 U	5 U	1 U	1 U	1 U	1 U
SW8260B	UG/L	Xylenes (m&p)	10 U	10 U	2 U	2 U	2 U	2 U
SW8260B	UG/L	Xylenes, Total	15 U	15 U	3 U	3 U	3 U	3 U

U = not detected, value is the detection limit

J = value is estimated

ug/L = microgram per liter

FS = Field Sample

FD = Field Duplicate

TB = Trip Blank

EB = Equipment Blank

TABLE 4 - SUMMARY OF ANALYTICAL RESULTS - OCTOBER 2015
 DATA VALIDATION REPORT
 AUGUST-OCTOBER 2015 GROUNDWATER SAMPLING
 TEXTRON FORMER TORX FACILITY
 ROCHESTER, INDIANA

Method	Units	Parameter	Sample Location		QC		QC		ZVI-2		ZVI-2	
			Sample Date	Field Sample ID	QC Code	QC	QC	QC	QC	QC	QC	QC
			10/13/15	10/13/15	10/13/15	10/13/15	10/07/15	10/07/15	10/07/15	10/07/15	10/07/15	10/07/15
			Trip Blank	Trip Blank	ATR-EB001-G101315	ATR-ZVI2 (32.5)-G100715	ATR-ZVI2 (17.5)-G100715					
			Final Result	Final Result	Final Result	Final Result	Final Result	Final Result	Final Result	Final Result	Final Result	Final Result
			Final Qualifier	Final Qualifier	Final Qualifier	Final Qualifier	Final Qualifier	Final Qualifier	Final Qualifier	Final Qualifier	Final Qualifier	Final Qualifier
SW8260B	UG/L	1,1,1-Trichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260B	UG/L	1,1,2,2-Tetrachloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260B	UG/L	1,1,2-Trichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260B	UG/L	1,1-Dichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260B	UG/L	1,1-Dichloroethene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260B	UG/L	1,2-Dichloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260B	UG/L	1,2-Dichloropropane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260B	UG/L	2-Butanone	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
SW8260B	UG/L	2-Hexanone	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
SW8260B	UG/L	4-Methyl-2-pentanone	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260B	UG/L	Acetone	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
SW8260B	UG/L	Benzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260B	UG/L	Bromodichloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260B	UG/L	Bromoform	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260B	UG/L	Bromomethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260B	UG/L	Carbon disulfide	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260B	UG/L	Carbon tetrachloride	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260B	UG/L	Chlorobenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260B	UG/L	Chloroethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260B	UG/L	Chloroform	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260B	UG/L	Chloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260B	UG/L	Cis-1,2-Dichloroethene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260B	UG/L	Cis-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260B	UG/L	Dibromochloromethane	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260B	UG/L	Ethylbenzene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260B	UG/L	Methylene chloride	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
SW8260B	UG/L	Styrene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260B	UG/L	Tetrachloroethene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260B	UG/L	Toluene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260B	UG/L	trans-1,2-Dichloroethene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260B	UG/L	trans-1,3-Dichloropropene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260B	UG/L	Trichloroethene	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
SW8260B	UG/L	Vinyl chloride	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

TABLE 4 - SUMMARY OF ANALYTICAL RESULTS - OCTOBER 2015
 DATA VALIDATION REPORT
 AUGUST-OCTOBER 2015 GROUNDWATER SAMPLING
 TEXTRON FORMER TORX FACILITY
 ROCHESTER, INDIANA

Method	Units	Parameter	Sample Location		QC		QC		ZVI-2		ZVI-2	
			Sample Date	Field Sample ID	QC Code	QC Code	QC Code	QC Code	QC Code	QC Code	QC Code	QC Code
SW8260B	UG/L	Xylene, o	10/13/15	Trip Blank	10/13/15	ATR-EB001-G101315	10/07/15	ATR-ZVI2 (32.5)-G100715	10/07/15	ATR-ZVI2 (17.5)-G100715	Final Result	Final Qualifier
SW8260B	UG/L	Xylenes (m&p)	1 U	TB	1 U	EB	1 U	FS	1 U	FS	1 U	
SW8260B	UG/L	Xylenes, Total	2 U		2 U		2 U		2 U		2 U	
			3 U		3 U		3 U		3 U		3 U	

U = not detected, value is the detection limit

J = value is estimated

ug/L = microgram per liter

FS = Field Sample

FD = Field Duplicate

TB = Trip Blank

EB = Equipment Blank